

# International Journal of Heritage and Sustainable Development

ISSN: 1647-4112  
eISSN: 2182-2751

Volume 4  
Number 1 - 2015



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IJHSD is a non-political and non-religious scientific Journal, independent and dedicated solely to academic work and scientific research.

IJHSD aims at publishing original scientific contributions in the field of heritage and sustainable development, making these two sometimes separated subjects a common object of analysis and research. There is already a number of highly prestigious Journals and similar publications on heritage and on sustainability - nevertheless, IJHSD core and innovative subject is the deep relationship between the two. The conceptual basis upon which this Journal stands is precisely that: heritage is/will not be relevant without sustainability. There is no such thing as "sustainability" without proper care and proper use of heritage, reason why IJHSD seeks for original contributions from academics, scholars and researchers who pursue a broad perspective on the subject, placing heritage and sustainability as the focus of their research. Normally the IJHSD will publish one issue each year but special issues may also be published as a result of workshops or seminars organised in the specific field of heritage and sustainable development. Thematic issues may also be published, under a focused editorial orientation. All research articles in the Journal will undergo peer review, based on initial Editor's screening and anonymous refereeing by two members of the Editorial Board.



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ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable Development

Vol. 4, No. 1, 2015, pp. 5



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## Editorial

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After the first issues of the IJHSD, Green Lines Institute now publishes a new issue of the Journal, thus continuing a consistent path in the publication of original scientific contributes in the field of heritage and sustainable development. The main objective originally presented - "making these two sometimes separated subjects [heritage and sustainable development] a common object of analysis and research" - remains and is reinforced with this new contributions. This issue gathers some of the most significant contributions presented at some of Green Lines last Conferences (namely the international conferences on intangible heritage and building rehabilitation). After assessment by the scientific committee in order to identify the most significant contributions for the purposes of this issue, authors were invited to rewrite their papers into Journal articles that were then submitted to peer-review. In reading throughout these articles the relationship between sustainable development and heritage regains a new strength and the interdependence between both is proven even more tightly. Furthermore, this issue also includes some original contributions submitted directly by Authors with relevant research in the field.

Yet, the main areas of research and discussion covered by the Journal remained the same as originally proposed, for their research worthiness and thematic coherence: a) heritage and sustainable economics, b) heritage and governance for sustainable development, c) sustainable preservation of natural heritage, d) sustainable preservation of cultural heritage, e) heritage and communities development, f) heritage and sustainable tourism and g) sustainable preservation of built heritage, this issue covering a vast area of research. Because of unforeseen reasons the Journal delayed the publication of this issue that should have been ready in 2014. Consequently the number of articles increased and a total of twenty texts is being now published. The sequence of the papers was organised in author's last name alphabetic order.

The Editor wishes to thank all Authors who contributed to the issue and patiently waited for its publication and hopes that it will contribute to foster the discussion on heritage and sustainable development, given the relevance of the contributions being published. The Editor also wishes to thank all members of the Editorial Board for their kind and permanent contribution.

The IJHSD is as previously announced published in electronic format (under e-ISSN) and open access via the web-site [<http://ijhsd.greenlines-institute.org>]. A printed version (under ISSN) will also be available as "print-on-demand" option, for all those wishing to purchase a hard copy. The call for papers for future issues of the IJHSD remains open and the Journal very much welcomes further original contributions to the theme.





ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable

Development Vol. 4, No. 1, 2015, pp. 7-21

## Ancient theatres as landscape elements: a classification of modern implementations in Roman theatres of Iberian Peninsula

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In this paper, Roman theatre buildings in Iberian Peninsula are classified by their state of preservation as part of the larger physical and socio-cultural context. The result is a range from written record and trace in the rural and urban landscape to physical remains in various states of preservation within rural archaeological sites, near modern settlements and in modern towns. This typology forms a basis to test correspondence, with the resulting distribution, of the variety observed in intervention types and scales ranging from excavation and publication to consolidation, conservation, restoration, and reconstruction. As elsewhere in the Mediterranean, the latter two intervention types would seem to parallel the establishment of local festivals in rural locations and near modern towns while the middle two accompany site-scale museumification in both urban and rural contexts. As such, the proposed contextual classification aims to contribute in a more comprehensive assessment of modern interventions in ancient performance buildings.

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### Introduction: ancient theatres as landscape elements

Up to the introduction of the idea of cultural landscapes, definitions in *Operational Guidelines for the Implementation of the World Heritage Convention* (1977) were based on a distinction between natural and cultural heritage. Social anthropologist Tim Ingold (2005: 41) is among scholars who recognize the deep embeddedness, within the tradition of Western thought, 'the basic contrast between physical substance and conceptual form, of which the dichotomy between nature and culture is one expression.' Ingold criticizes, from an ontological point of view, the commonly adopted alternative position within recent social and cultural anthropology that is expressed in the claim that nature is culturally constructed. A deeper inquiry into definitions in *Operational Guidelines* would reveal a similar, culturally perceived definition of nature, which distinguishes natural heritage from a 'really natural' nature that denotes an external world of matter and substance (studied by natural scientists) 'waiting to be given meaningful shape and content by the mind of man' (Sahlén 1976 quoted in Ingold 2005: 41). This reveals both categories, of natural and cultural heritage, to be cultural constructs.

While there is no mention of physical human involvement in the distinction of natural heritage from 'really natural' nature; cultural heritage includes not only individual works of architecture or fine arts, groups of buildings and sites of Outstanding Universal Value from the point of view of history, art or science; but also 'cave dwellings', 'groups of separate or connected buildings that are of Outstanding Universal Value because of their architecture, their homogeneity or their place in the landscape' and sites that are 'works of man or the combined works of nature and of man' which renders them valuable ethnologically or anthropologically. In the current revised version of *Operational Guidelines* (2013), this last group is designated as cultural landscapes that 'are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal'. Cultural landscapes may be designed and created intentionally or organically evolved in time through human activity, may be actively used or abandoned, and may involve natural elements with

powerful associations of meaning. In this way, the dichotomy between nature and culture is in a way resolved, through combining the two in a culturally perceived category of landscape as 'a consequence of a collective human transformation of nature' (Sargin 2000).

Five 'kinds of materiality' Ingold (2005) critically reports after Maurice Godelier (1986) are informative on the nature of the transformation:

'First is that part of nature which is wholly untouched by human activity; secondly there is the part that has been changed on account of the presence of humans, but indirectly and unintentionally; the third is the part that has been intentionally transformed by human beings and that depends upon their attention and energy for its reproduction; the fourth part comprises materials that have been fashioned into instruments such as tools and weapons, and the fifth may be identified with what we would conventionally call the "built environment" – houses, shelters, monuments and the like.'

Ancient theatre buildings obviously correspond to the last category. From seating over natural slopes in the earliest examples (such as the early Theatre of Dionysos in Athens) to totally built structures free-standing on flat land in some urban centers of the Roman Empire (including the three examples in the city of Rome), installation of theatres changed the natural environment physically, in a range revealing a cultural transformation in human society over time and space. Preservation state of ancient theatres, on their part, reveal the influence, over human settlement, of physical constraints and/or opportunities presented by the natural environment, and of successive external and internal social, economic and cultural forces.

Ingold observes a critical division between second and third kinds in Godelier's above classification of materiality, as marking the distinction between the wild and the domestic. Similarly critical is the appearance and disappearance of an urban way of living, which changes part of the nature intentionally, into an urban landscape, and then unintentionally, into an abandoned cultural landscape wherein past human activity is documented by material remains. In a way, this second process transforms the fifth category of materiality back into the second, occasionally rendering rock-cut theatre seats almost undistinguishable from natural rock formations. At the other extreme, older settlements may have served as foundations for successive ones in an urban landscape, leaving scanty ancient theatre remains beneath urban blocks in whose outline the curved form of the theatre may or may not have been preserved.

This paper explores the range between these two extremes to classify ancient theatres by their persistence in the landscape to seek correlation between type and scale of modern interventions and their state of preservation. This is done using data from Iberian Peninsula due to the manageable number of theatre remains and the wide range in their preservation state (Table 1). Classification is made under the categories of rural, peri-urban and urban archaeological landscapes, cautious of the warning by Valentina Russo (2014) that these are selections among various adjectives of some predominant characteristics of the landscape while the real strength of the concept is precisely its capacity to express the essentially complex and mostly unbalanced interpenetration between environmental and human factors. The proposed categories are not aimed, by any means, at imposing order on history despite itself through the forms of structural analysis, against which Michel Foucault (1994) has warned us decades ago.

Table 1. Location and conservation state of remains from Roman theatres in Iberian Peninsula.

Ancient name	Modern location	Conservation state of remains
Acci	Guadix (GRANADA)	under research in an urban area
Acinipo	Ronda la Vieja (MÁLAGA)	restored in an extra-urban archaeological site
Arcobriga	Monreal de Ariza (ZARAGOZA)	traced in an extra-urban archaeological site
Augusta Firma	Ecija (SEVILLE)	hypothesized on the basis of urban morphology
Aurgi	Jaen (JAEN)	epigraphically documented
Baelo Claudia	Bolonia (Tarifa, CADIZ)	restored for festivals in an extra-urban
Baetulo	Badalona (BARCELONA)	trace and remains in urban morphology
Barcino	Barcelona (BARCELONA)	hypothesized on the basis of urban morphology
Bigastrum	Alicante (MURCIA)	hypothesized on the basis of urban morphology
Bilbilis Augusta	Calatayud (ZARAGOZA)	consolidated in an extra-urban archaeological site
BRACARA AUGUSTA	Braga (PORTUGAL)	under research in an urban area
Caesar Augusta	Zaragoza (ZARAGOZA)	museumified in a multi-period urban area
Canama	Villanueva del Rio (SEVILLE)	epigraphically documented
Capera	Caparra (CACERES)	later identified as amphitheatre
Carmo	Carmona (SEVILLE)	hypothesized on the basis of urban morphology

Table 1. Location and conservation state of remains from Roman theatres in Iberian Peninsula (continued).

Carthago Nova	Cartagena (MURCIA)	museumified in a multi-period urban area
Carteia	Guadarranque (San Roque, Cádiz)	abandoned in an extra-urban archaeological/epigraphic and foundation remains
Castulo	Linares (JAEN)	
Celsa	Velilla de Ebro (ZARAGOZA)	below later building
Clunia	Coruña de los Condes (BURGOS)	restored for festivals in an extra-urban
Corduba	Córdoba (CORDOBA)	museumified in a multi-period urban area
Ebora	Evora (PORTUGAL)	hypothesized on the basis of urban morphology
Emerita Augusta	Mérida (BADAJOZ)	restored for festivals in an archaeological next to consolidated for performances in a multi-period
Gades	Cádiz (CADIZ)	hypothesized on the basis of urban morphology
Hispalis	Seville (SEVILLE)	
Isturgi	los Villares (JAÉN)	epigraphically documented
Itálica	Santiponce (SEVILLE)	restored for festivals in a multi-period urban area
Licurgentum	Moron (SEVILLE)	epigraphically documented
Mago	Mahon (Minorca, BALEARES)	trace and remains in urban morphology
Malaca	Málaga (MALAGA)	museumified for festivals in a multi-period urban
Metellinum	Medellín (BADAJOZ)	restored in a multi-period extra-urban area near
Olisipo	Lisbon (PORTUGAL)	museumified in a multi-period urban area
Osca	Huesca (HUESCA)	trace and remains in urban morphology
Osset	Salteras (SEVILLE)	epigraphically documented
Palma	Palma de Mallorca (BALEARES)	trace and remains in urban morphology
Pollentia	Acudia (Mallorca, BALEARES)	free-standing near modern settlement
Regina	Casas de la Reina (CACERES)	restored for festivals in an extra-urban
Saguntum	Sagunto (VALENCIA)	restored for festivals in a multi-period urban area
Segobriga	Cabeza de Griego (Saelices, Salamanca)	restored for festivals in an extra-urban
Sexi	Almuñécar (GRANADA)	trace and remains in urban morphology
Singilia Barba	Antequera (MALAGA)	abandoned remains near modern settlement
Tarraco	Tarragona (TARRAGONA)	legally contested in a multi-period urban area
Termes	Tiermes (BURGOS)	abandoned remains in an extra-urban
Toletum	Toledo (TOLEDO)	hypothesized on the basis of urban morphology
Tucci	Martos (JAEN)	epigraphically documented
Urso	Osuna (SEVILLE)	abandoned remains near modern settlement
Uxama	Osma (SORIA)	traced in extra-urban archaeological site

### Data: Roman theatre interventions in Iberian Peninsula

Some compilations cite 20-25 Roman theatres in Iberian Peninsula (e.g. Francisco et al., 2011-2012; Sear, 2006) while catalogues document around 40 (e.g. Rossetto & Sartorio, 1994/95/96; Rupprecht, n.d.; Pedersoli & Paronuzzi, 2010). The difference is due to the fact that some in the latter group—*Aurgi* (Jaén), *Canama* (Villanueva del Río, Seville), *Isturgi* (Los Villares, Jaén), *Licurgentum* (Morón de Frontera, Seville), *Osset* (Salteras, Seville) and *Tucci* (Martos, Jaén)—are evidenced only epigraphically (Ianiro, 1994/95/96). These examples were all in the territory of modern Andalusia which has an overriding urban population living in the largest number of towns in Spain. Record of Roman theatres is valuable in revealing continuity from high-ranking settlements with an urban life featuring theatres in Andalusia which finds its opposite in the scarcity of theatres in northern Spain and Portugal. There is difference also in the available data on each example, partly proportional to their state of preservation and partly to the rank of the ancient settlement in which they were located, as a factor shaping modern interest.

### Ancient theatre remains part of rural archaeological landscapes

For abandoned cultural landscapes wherein ancient theatres are almost undistinguishable from natural elements, observers are usually uninformed about the process that transformed their urban landscapes back into a rural archaeological one. As an example, in addition to epigraphic evidence of a theatre in *Castulo* (Linares, Jaén), there also exist scattered pieces of construction but they are so integrated with the natural landscape that it is no longer possible to perceive them as a single Roman public building (Cepas, 1997).

Another example is the rock-cut remains pertaining to Theatre of *Arcóbriga* (Monreal de Ariza, Zaragoza) on the south part of Villar Hill overlooking the Jalón, taking advantage of a profound ravine (Beltran, 1987). There was no archaeological study on the monument due to the poor state of the remains

and their remote location, as is the case also with a similar-looking ravine hypothesized as the *cavea* of Theatre of *Uxama* (Osma, Soria).

In *Tiermes* (Tiermes, Burgos) slightly more visible traces on a slope to the northeast of the site have been identified as a *cavea* taking advantage of an inlet in the rock (*Tiermes*, 1990). Due to their poor preservation state, a performance with an audience of 1,500 over steps carved in another location to the southeast of the fortifications marked the start of annual performances of classical drama at the site in 1991, under the organization of the Tiermes Region Cultural Association (Asociación Cultural Comarca de Tiermes) (*Tiermes*, 1991).

### **Ancient theatre remains conserved in industrial landscapes**

The deterioration process is also unknown for Theatre of *Carteia* (San Roque, Cádiz), which was in a ruinous state already in the eighteenth century when British traveler Francis Carter (c.1741-1783) described it in his *Viaje de Gibraltar a Málaga* (1772). After occasional partial excavations in 1953 and 1970 by University of Seville, an elemental restoration introduced brick supports to sustain concrete pillars in upper tiers. Despite thorough cleaning in 1990 by the Autonomous University of Madrid, these were under thick vegetative growth again in late 1990s (Roldán *et al.*, 1998: 63). This lack of regular maintenance is due to the location of the building amid a large industrial zone that developed in the 1960s, and to absence of local initiative. This is the singular example of an ancient theatre in an industrial landscape in Iberian Peninsula.

### **Ancient theatre remains conserved in archaeological sites**

Ancient theatres in a comparatively poor state of preservation are generally better researched and maintained if they are part of a larger archaeological landscape, as exemplified by Theatre of *Bilbilis Augusta* (Calatayud, Zaragoza). The building was cited since sixteenth century by travelers including Portuguese cosmographer Juan Bautista Labaña (1555–1624) (Lostal Pros, 1980). Vincente de la Fuente (1817-1889) from local intelligentsia showed some interest in the theatre ruins (Martín-Bueno 1982) but its excavation did not start before 1917. Since 1975 systematic research under the direction of Manuel Martín-Bueno from University of Zaragoza led to a theoretical restitution using the Vitruvian layout for the Latin theatre (Martín-Bueno 1975). Despite consolidation efforts, the deteriorated theatre remains in *Bilbilis Augusta* are overshadowed by the reconstructed retaining walls of the adjacent forum area which is, likewise, argued to have been shaped according to Vitruvian proportions.

Restitution especially of deteriorated theatres using Vitruvian descriptions would appear as a favoured method in Spain (Aktüre, 2006), since the early adoption of the Vitruvian treatise in the intellectual context of Iberian Peninsula through *Medidas del Romano* (1526 in Spanish, 1541/2 in Portuguese; Rykwert, 1996) by Diego de Sagredo (c.1490-c.1528). Earliest-known written description of an ancient theatre in Iberian Peninsula dates to a century later. In a letter written in 1650, Macario Fariña de Corral (1608-1663), lawyer and antiquarian, native and citizen of Ronda (Seville), described nearby Theatre of *Acinipo* (Ronda la Vieja, Málaga) as 'constructed impending on the steep slope of the hill' and with niches over its stage doors for bronze sounding vessels, 'similar to that described by Vitruvius' (del Amo, 1982a). Luis José Velázquez de Velasco (1722-1772), Marquis of Valdeflores, described the stage building of the same edifice, in another letter dated 1750, as constructed out of large granite blocks joined by iron claps and lead without mortar, following the Vitruvian rule.

Theatre of *Acinipo* is one of the oldest-dating and rock-cut Roman theatres with one of the best-preserved stage buildings in the Peninsula. After excavations under the direction of Mariano del Amo y De la Hera (1933-2012), director of Archaeology Museum of Huelva Province (Museo Arqueológico Provincial de Huelva), a restoration project prepared in 1980 (Román Fernández-Baca Casares & Alafont, 1993) was implemented through a restoration programme in the geographic area of Expo '92 Seville (Martínez & Espinosa, 2000). Yet, the monument has never been densely visited nor used for modern performances despite its good preservation state, apparently due to its location off the main transportation routes amid naturally-protected environment, without other visible remains from the ancient settlement.

Also included in the Expo '92 Seville programme was Theatre of *Baelo Claudia* (Tarifa, Cádiz), whose remains had been always visible in a well-preserved archaeological site. Results of their first excavation in 1917 were published in 1923, and a first expert investigation in 1969 was followed by an unfortunate hasty restoration (Charles-Picard, 1970). A detailed study of the monument by a French team of experts affiliated with Casa de Velázquez started in 1978 in the framework of a socio-cultural action initiated by the provincial government to benefit from the tourism and cultural potential of the site (Ponsich & Sancha, 1979). Later restorations aimed at preserving and presenting the monument while allowing limited use for modern performances.

### **Ancient theatre remains restored for local festivals in archaeological sites**

Ancient theatres in Iberian Peninsula have been used for modern performances since the first quarter of twentieth century. Gluck's opera *Ifigenia in Tauride* was famously staged in Theatre of *Pollentia* (Alcudia, Mallorca) for Goethe's centenary in 1931 (Gaudens, 1994/95/96). References to the building date back to the sixteenth century (Francisco *et al.*, 2011-2012), with notice of eleven *in situ* seating rows in 1803, and of seven in 1878, the latter by Catalan architect Francisco Martorell y Peña (1822-1878) (Arribas *et al.*, 1973). Physical interventions started in 1923 when Gabriel Llabrés y Quintana (1858-1928), an intellectual from Mallorca, demolished a wall across the visible rock-cut tiers of the *cavea* (Almagro, 1982). Systematic

excavations under Martín Almagro Basch (1911-1984) from University of Barcelona, director of the Archaeology Museum of Barcelona and of Ampurias Excavations, started with finance from William L. Bryant Foundation, also for expropriation of the site in 1952 when it was occupied by an agricultural estate (Almagro, 1982). Since 1998, Theatre of *Pollentia* has been used during the Greco-Latin Theatre Festival of the Balearic Islands.

Also occupied by a farm house in a modern agricultural landscape was the stage of the 800-seat Theatre of *Regina* (Casas de Reina, Cáceres), before material especially from its *scenae frons* was used in a motorway construction in 1941-45 (Álvarez *et al.*, 2004). Trial digs by Mariano del Amo that revealed lower seating rows in a good state of preservation in 1978 were followed by comprehensive excavation in 1980-92 under José María Álvarez Martínez, director of National Museum of Roman Art in Mérida (MNAR for Museo Nacional de Arte Romano) since 1985. Collins (1998) reports the seating of the building as 'tastelessly restored with modern steps', facing a rather coarse restoration in the rear façade of the stage building. More recently, an elegant timber floor was introduced for modern performances in Mérida Festival since 2003, and also for protecting remains of the *pulpitum*, while protective measures including consolidations were taken for visitors in a gradually unearthing archaeological site.

Another annual local festival in the rural archaeological landscape is the Youth Festival of Greco-Latin Theatre, whose start was given by Aurelio Bermejo Fernández, a local professor of Latin who took his students to Theatre of *Segóbriga* (Cabeza de Griego in Saelices, Cuenca) in 1979 for a performance of excerpts from classical works (Bermejo, 2006). Now part of a well-maintained archaeological park, theatre remains at *Segóbriga* were referenced since sixteenth century, and first identified as belonging to an amphitheatre by Ambrosio de Morales (1513-1591). Excavation of the theatre in 1953-55 and 1962-69 went parallel to restorations especially in 1966-72 under the direction of restoration architect José Luis Menéndez-Pidal y Álvarez (1896-1975) who collaborated with the excavation director Martín Almagro Basch (Almagro, 1985). Resumption of excavations in 1976 necessitated parallel consolidations for resistance to the harsh regional climate and for use during representations of classical drama. While the *pulpitum* was reconstructed for the festival on the basis of surviving elements, consolidations and reinforcements for improved intelligibility respected the original work by rendering modern additions readable (Humanes, 1990).

Another minimum intervention strategy initially shaped Theatre of *Clunia* (Coruna de los Condes, Burgos), which was among the always visible and rock-cut Roman theatres of Iberian Peninsula that is now part of a well-investigated archaeological site. The building was excavated in 1775 by Juan Bautista Loperráez Corvalán (1736-1804), a clergy in Santa Iglesia de Cuenca and a member of Spanish Royal Academy of History (Loperráez Corvalán, 1788); and again in 1915 by Father Ignacio Calvo of nearby Peñalba de Castro Church. After more comprehensive research in 1931-34, Theatre of *Clunia* was systematically excavated in 1965-72 under the direction of Pedro de Palol y Salellas (1982) from University of Barcelona. Restorations followed the inclusion of *Clunia* in European Youth Festival of Greco-Latin Theatre in 2000. These proceeded from temporary seating over the *cavea* towards the permanent arrangement of our day, which won the Restoration-and-Rehabilitation Award of Castilla y León in 2004-2005 (Francisco *et al.*, 2011-2012).

### **Ancient theatre remains part of peri-Urban archaeological landscapes**

All ancient theatres mentioned up to here are located in abandoned ancient settlements that have become part of the rural archaeological landscape, due to changes in the settlement networks in Iberian Peninsula from the Roman period onwards. In some other locations, continuity of settlement with or without interruptions is attested by archaeological remains above and/or below the current settlement level, and those from ancient theatres at the edge of modern settlements are at the interface of rural and urban landscapes. They are either part of Roman period archaeological sites and enhanced for festivals, or stand alone in a highly deteriorated state among later buildings without comprehensive interventions.

### **Ancient theatres restored for international festivals**

Located in an archaeological site at the edge of modern Mérida, Theatre of *Emerita Augusta* (Mérida, Extremadura) was painted by Anton van der Wingaerde (1525-1571) in 1567 and sporadically excavated as early as 1597. Highly deteriorated upper tiers of the building were referred to as The Seven Seats (*Las Siete Sillas*), in allusion to mythical Moorish kings defining Mérida's destiny; and used as a bullring in 1778-1843, with trial digs in 1794-95 (Francisco *et al.*, 2011-2012). The monument could be systematically excavated only in 1910-14, under José Ramon Mérida y Alinari (1856-1933), among pioneers of classical archaeology in Spain, with Maximiliano Macías (1867-1934). Mérida and Macías prepared the first intervention project in 1916 and restorations in the first order of the stage building proceeded in 1921 and 1923-25.

In 1924, a group of students from Badajoz staged *Captives* of Plautus in Theatre of *Emerita Augusta*, as the first modern representation of ancient drama in a Roman theatre in Iberian Peninsula (Monleón, 1998). This was followed by an official debut in 1933 with *Medea* of Séneca during the local festival that attained regularity in 1953 as Mérida Classical Theatre Festival (Monleón, 1998). In 1996, the building was included in European Youth Festival of Greco-Latin Theatre (Festival Juvenil de Teatro Grecolatino), and in a Network of Greco-Latin Theatrical Spaces constituted in Mérida by the International

Institute of Mediterranean Theatre (IITM for Instituto Internacional de Teatro del Mediterraneo) in February 2000.

These festivals apparently encouraged restoration of a second order to the stage building in 1967, during a comprehensive intervention under Menéndez-Pidal y Álvarez, whose work also in *Segóbriga* has been evaluated as exemplary in implementing modern scientific criteria, if necessary by de-restoring earlier mistakes in interpretation and anastylosis. A final restoration completed in 1979 has been maintained up to our day, under José María Álvarez Martínez as excavation director before he became the director of MNAR in 1985, through cleaning and protection in 1990s (Francisco *et al.*, 2011-2012). These interventions set an example for later implementations, such as those in Theatre of *Itálica* (Santiponce, Seville).

Known from ancient sources, exact location of Theatre of *Itálica* was published in 1886 by Father Fernando Straton Zevallos y Pérez de Mier (1732-1802) from nearby Monastery of San Isidoro del Campo (Caballos *et al.*, 1999). Trial digs in 1890s and 1930s revealed the upper tiers in good preservation state; but only in 1971-75, excavations could be expanded towards overlapping houses at the edge of Santiponce (Jiménez, 1989). Implementation of the following first restoration project of 1979 was in 1980-83, while that of a second one for the stage building by Francisco Javier Montero Fernández was in 1987-91 with Expo '92 Seville funding; working with the principle of *anaparástasis* to approximate an original state of the building at a certain period on the basis of archaeological and historical data (Montero, 1993). By that time, International Dance Festival of *Itálica* had started in 1988, to be followed in 1997 by the Greco-Latin Theatre Festival organized by a group that would found Andalucía Greco-Latin Theatre Institute (ITGLA for Instituto de Teatro Grecolatino de Andalucía) two years later. In view of festival use, stage implementations at *Itálica* aimed also to screen noise from the neighboring motorway (Jiménez, 1989), which isolated the monument from its rural landscape.

#### **Ancient theatre ruins at the edge of modern towns**

Yet, not all ancient theatres similarly located at an interface of rural and urban landscapes have been refurbished parallel to local festivals. As an example, Theatre of *Urso* (Osuna, Seville) was referenced since the manuscripts of Juan de Dios de la Rada y Delgado (1827-1901), a minister of Carlos III who realized limited digs at the outskirts of Osuna in 1784-85 before he became the director of National Museum of Archaeology in Madrid (MAN for Museo Arqueológico Nacional). The building was excavated more systematically in 1876 by the State, in 1903 by the local Archaeology Society for Osuna Excavations (Sociedad Arqueológica de Excavaciones de Osuna), and in 1910s by George Edward Bonsor (1855-1930) (Ruiz & Pachón, 2012). Although documented by photograph in 1954 and by measured drawing in 1984 with the initiative of the Autonomous Government of Andalusia (Ruiz, 2008), Theatre of *Urso* was never subject to any restoration due to its poor preservation state, especially after use as a stone quarry throughout the twentieth century (Ruiz, 2007). Theatre of *Urso* is unique in Iberian Peninsula in having private ownership and also in lacking any presentation effort despite its location near a historic town with high tourism potential (Ruiz & Pachón, 2012). As a result, it is not easy to perceive ancient theatre remains as part of a larger archaeological site in this example, unlike the cases of *Emerita Augusta* and to a degree *Itálica*.

Similar to Theatre of *Urso* in this respect is Theatre of *Singilia Barba* (Antequera, Málaga) references to which are abundant since sixteenth century, with a specific one by Marquis of Valdeflores describing demolition of the building by San Juan de Dios Monastery of Antequera, to the degree that only tiers at two ends of the cavea survived up to the point where they unite with the *scaena* (Atencia, 1988). Located at a site curiously called the Slaughterhouse (Carnicerías) by the natives, these were cleaned and delimited in 1991, under the direction of Rafael Atencia Páez from the University of Málaga, but were never popularly visited and nor used for modern performances (Atencia, 1988; Serrano & Atencia, 1993).

Theatre of *Celsa* (Velilla de Ebro, Zaragoza) is likewise below San José sanctuary 'with traces of the walls of the stage and of the tiers of seats of the cavea.' (Beltrán, 1976).

#### **Ancient theatre remains in urban archaeological landscapes**

Fortified castle hills that once were acropolises also act like edges within modern settlements, with their recreational and tourism potential resulting in comprehensive modern interventions in ancient theatre remains at their skirts, while those in urban blocks elsewhere in the city centre may have been museumified as part of multi-period building ensembles, investigated or just hypothesized, depending on their state of preservation. Majority of ancient theatres in the urban archaeological landscape would seem to be isolated from other Roman period remains.

#### **Ancient theatres integrated into the skirts of fortified castle hills**

A well-known example of comprehensive modern interventions at the skirts of a castle hill is Theatre of *Saguntum* (Sagunto, Valencia), among the earliest documented theatres in Iberian Peninsula, by a 1563 drawing of Wingaerde and a description in a 1702 letter of Manuel Martí y Zaragoza (1663-1737), Dean of Alicante (Aranegui Gascó *et al.*, 1994). A (now lost) wooden and cork model of the monument was made between 1796 and 1801, followed by a thorough cleaning and some restorations in its upper portico and elsewhere (Lara, 1991). In 1811, necessity aroused for blasting the theatre to prevent its use by invading

French troops to ascend the citadel above; and to prevent blasting, state protection was declared by the Court of Cadiz, as the first of its kind in Spain (Fletcher, 1959). Yet, this could not save the monument from bombardment that destroyed all circulation and substructure vaults, with material from the theatre later used for stabilizing the citadel above and rebuilding in town (Lara, 1991).

In 1860, attempts at conservation started with an enclosing wall financed by the local Town Council, and in 1896 Theatre of *Saguntum* became the first registered Spanish national heritage monument. A restoration project in 1917 by Luis Ferreres Soler (1852-1926) was not implemented as it intended at a complete restoration through truthful reconstruction (Repullés & Mérida, 1917). A comprehensive intervention by Jerónimo Martorell (1876-1951) in 1930 avoided such mimicry by distinguishing the original through modern consolidation materials and techniques, including a special concrete (Lara, 1991). By 1952, part of seating subconstructions were reconstructed to serve as an archaeology museum, and later an enlarged stage was set for *Sagunt a Escena* festival organized by the local Town Council. These triggered further consolidations in 1955, maintaining external aspects of the ancient fabric (Fletcher, 1959); while in 1956-74, 4,000 cubic meters of concrete reconstruction by Alejandro Ferrant Vázquez (1897-1976) focused on the bombarded seating area and vaulted passages (Lara, 1991). The eventual result was described as an 'artificial ruin' by Giorgio Grassi (1985) in his project with Manuel Portaceli for Theatre of *Saguntum* as a functioning theatre and museum.

The project was initiated by the local Spanish Socialist Workers' Party (PSOE for Partido Socialista Obrero Español) government that conceived of historic heritage both as a source for great enjoyment, richness, and intellectual production, and as an economic resource creating job opportunities through tourism (Leguina & Baquedano, 2000). In 1990, Grassi-Portaceli project for Sagunto was carried to court by the rivaling People's Party (PP for Partido Popular) for overruling the ban on reconstruction in Law 16/1985 on Spanish Historical Heritage. In 1993, Valencian Superior Court of Justice declared the implementation as illegal on this basis, ordering its reversal. After sixteen years of appeals for and against its execution, the same Superior Court accepted in 2009 the practical impossibility of enforcing its sentence, mainly due to inconsistencies in earlier interventions, as underlined in expert reports. Ratification of this decision by the Supreme Court put an end to a long and exemplary court case for following implementations.

Although Theatre of *Saguntum* is integrated into the slope of a hill crowned by a citadel, its enhancement has always been undertaken as building restoration rather than urban conservation. As an example for the latter from a similar context, Theatre of *Malacca* (Málaga) was discovered in 1951, during gardening for a newly-completed House of Culture designed by Luis Moya Blanco (1904-1990) (Camacho & Morente, 1989). An excavation campaign in 1980s with the initiative of Rafael Puertas Tricas (1943-2008), director of Museum of Málaga, and J.M.J. Gran Aymerich, researcher in the National Scientific Research Centre of France (CNRS for Centre National de la Recherche Scientifique), revealed the importance of remains not only from the theatre but also from the Fenicio-Punic settlement at the site (Gran Aymerich, 1983). Although Moya's building is evaluated as a work of unquestionable value, its demolition started in 1994 to reveal the theatre, following the excavation (1956-62) and consolidation of the then open part of the *cavea* (Rodríguez, 1993). Although the initial intention may well have been using the monument as venue for Málaga Classical Theatre Festival organized since 1959, the number of performances was limited in 2005 to six per year (Ramírez, 2005). Instead, modern uses of the site were enhanced by a visitor centre that opened in 2010 as part of a competition-winner project. Introducing a cultural axis connecting to other cultural nodes downtown, both making use and overcoming disadvantages of a location at a natural edge in the city, the centre presents and archives archaeological material recovered from the site, and provides support for ongoing archeological works (Fernández-Baca Casares & Tejedor Cabrera, 2007).

A similar urban design approach has been adopted in Medellín (Badajoz) where limited excavations in 1969-70 had suggested heavy pillage for the construction of the castle above during Arab conquest; and later for a church behind the stage of the theatre (del Amo, 1982). Yet, excavations from 2007 onwards revealed the 2000-seat Theatre of *Metellinum* in a good preservation state. Autonomous Ministry of Culture invested 4 million € for its museumification in an archaeology park and use for theatrical performances since 2011, on a timber platform under which remains from the stage building are preserved. In this way, a neglected area was transformed into a recognizable and attractive archaeological site, which won the prestigious Europa Nostra Prize in 2013 (Spain – Medellín..., 2013).

Another Europe Nostra Prize was received in 2010 by the implementation at Theatre of *Cartago Nova* (Cartagena, Valencia) for the similarly well-executed integration of the building into the existing urban layout, in an archaeological park incorporating monuments from various periods in the history of Cartagena, to secure the timely regeneration of a depressed area (Spain – Cartagena..., 2010). The theatre was discovered accidentally, with the demolition of the palace-house of Countess Peralta in 1988, on the north-western slope of medieval Concepción Castle that was the traditional acropolis and fortress of the urban nucleus (Ramallo & Ruiz, 1998). After continuous habitation from fifth century BC, the area was abandoned, for which reason the house-palace had been expropriated by the Town Council for establishing a regional artisanal centre (Ramallo & Ruiz, 1998). Unearthing of the 6,000-seat theatre in a good preservation state by University of Murcia excavations created expectations for economic development in the city. The theatre's declaration as cultural heritage monument in 1997 in the earlier-registered historic urban quarter of Cartagena accelerated appropriation of 185 houses on the site for its museumification (Ramallo & Ruiz, 1998) as part of an archaeology park.

Roman Theatre Museum of Cartagena (Museo Teatromano de Cartagena) has its entrance in the eighteenth-century Pascual de Riquelma Palace facing the Town Hall and connects through an underground tunnel to a new building on the street behind the Palace that provides passage to Church of Santa María Coviesa on an upper level, and from there to the theatre remains inside the archaeology park. The complex was designed by Rafael Moneo, whose name is promoted in the official webpages of the Museum (*Museo del Teatro...*, 2014) that became the most visited monument in Murcia Autonomous Region whose government invested 43 million € in the project that opened in 2008, receiving some 145,000 (i.e. more than 450 daily) visitors in 2010 (Sánchez Galián, 2011).

A small ancient theatre in a similar location revealed in 1999 during archaeological research for the definition of the limit of the *palaestra* of the Roman baths on the slope of Cividade Hill in the northern Portuguese city of Braga (*Bracara Augusta*), which made it the most northeasterly located Roman theatre in Iberian Peninsula. Decision for the future of the monument awaits the completion of its archaeological research (Manuela Martins *et al.*, 2008).

### Ancient Theatre Museums in Urban Blocks

Incorporating remains from ancient theatres into museums has been a strategy adopted also in other cities of Iberian Peninsula. As an example from Portugal, Roman Theatre Museum (Museu do Teatro Romano) in Lisbon consists of a protective roof over remains from Theatre of *Olisipo* facing a seventeenth century building that was converted into a theatre museum that inaugurated in 2001 (Câmara Municipal de Lisboa, 2008). The theatre was first discovered after the great earthquake of 1755 and later covered by new buildings up to 1960 when it was re-discovered thanks to the demolition of a house over it (Cepas, 1997). Located in the Alfama district of Lisbon, along a busy tourist route climbing from Sé Cathedral to Castle of São Jorge, building is still largely below later blocks and roads.

Theatre of *Caesaraugusta* (Zaragoza) was discovered in 1972, after evacuation of the lot of old Church of San Andrés for novel construction (Beltrán Martínez, 1982). As a curious perpetuation of traditions, there once stood a comedy theatre on the site, up to its destruction in a fire famously painted by Goya; and the Principal Theatre (Teatro Principal) of Zaragoza was later built on the same spot (Beltrán Martínez, 1982). Excavations directed by Antonio Beltrán Martínez (1916-2006) from University of Zaragoza revealed theatre remains also beneath Church of the Sacred Heart of Christ around the same block, which is known as Crystal Rosary (Rosario de Cristal) wherein are exhibited the crystal and stained glass floats carried in the famous rosary recitation procession of the city. Finding support in this history of the site, Caesaraugusta Theatre Museum (Museo del Teatro Caesaraugusta), consisting of a protective roof over the lower rows of the 6000-seat theatre and a new building with museum functions, took until 2003 to complete, due to complications involved in such a historic location (Ayuntamiento de Zaragoza, n.d.). Unofficial sources suggest 12 million € investment for the museum (Museo del Teatro de Caesaraugusta, n.d.) that had some 13,000 visitors in ten days after its opening in 2003 (Más de 40.000..., 2003).

Remains from Theatre of *Corduba* (Córdoba) have also been annexed to Provincial Archaeology and Ethnology Museum of Córdoba, which was founded in 1867 and inaugurated in 1962 in its current location in the sixteenth-century Jerónimo Páez Palace (Baena Alcántara, 2008). Already known from the epigraphic record, the earliest remain that was attributed to the Theatre of *Corduba* were stairs unearthed in 1946 when the museum was moving to its current location (Borrego, 2012). Now preserved *in situ* in the epigraphy hall of the museum, the stairs actually belonged to an exterior terrace of a monumental entertainment building complex that included the theatre, which was itself unearthed during digs for an extension of the museum to adjacent plots in 1980s. Partiality of discoveries prevented their identification as belonging to a theatre until 1992 but, from 1994 on, research by the Archaeology Seminar of Córdoba University proceeded parallel to museum extension, whose first section that inaugurated in January 2011 reveals the complexity of constructing over ancient ruins. The architectural project for the 3,800 square meter annex was obtained through an international competition opened by the Autonomous Ministry of Culture in 1998 which was won by Pau Soler Serratosa, Joaquín Lizasoain and Jesús María Susperregui; and the first stage of construction was completed in 2008, at a cost of 16 million € to the Autonomous Government (Caravaca, 2011).

### Ancient theatre ruins in urban blocks

Not all ancient theatre remains unearthed in urban blocks of Iberian Peninsula have been incorporated into museums—or this is the case so far for a very small theatre discovered in 2008 during construction of a parking in Guadix (*Acci*, Granada) in southern Spain where excavations continue, revealing a *porticus post scaenam* (López, 2014).

In a similar pending state is the future of remains from the 6000-seat Theatre of *Tarraco* (Tarragona) which were discovered in 1885 and first excavated in 1892-1906 (Mar *et al.*, 2010). Although excavations were resumed in 1919, producing remains notable enough to put the site under custody of the Provincial Archaeology Museum; private ownership enabled building an olive oil factory over the theatre remains in 1940s, which moved out when the lot was sold to a construction company in 1974 (Mar *et al.*, 2010). Destruction of the factory for housing investment was allowed on condition of subsequent archaeological excavation, which produced in 1975-77 such spectacular finds that managed to halt construction work through a strong public campaign. In 1978, Theatre of *Tarraco* was declared a national monument and also public property, which rendered applicable the Law for Compulsory Expropriation from

a group of 63 owners. However, payment of the required sum had to wait for the Supreme Court to designate Catalan Autonomous Government as the legal owner of the site in 1999, with a final and definite sentence after objections no earlier than 2007. In the meantime, the Archaeological Ensemble of Tàrraco is listed in UNESCO WHL since 2000 while museumification of the theatre remains in pending since a preliminary project of 1983 (Mar *et al.*, 1992).

An opposite case in terms of ownership is Theatre of *Gades* (Cádiz) in an urban block along the waterfront in Pópulo district where the medieval town was once located. Memory of the theatre survived in Islamic references to the area where stood the Christian castle as Theatre Castle (Qars-al-Ma'ab) while its vaulted galleries survived in legends (Corzo, 1989). An attempt for restoring the castle in 1972 eventually led to the theatre's discovery in 1980, under buildings from many periods and in different preservation states in a low-income area (Corzo, 1993). As in Cartagena, a critical decision in Cádiz was to raise living standards in the area while discovering and preserving theatre remains through consolidations, as a bridge between legends and reality of the town. Cádiz Pópulo district project was included in the Andalucía 92 Programme that aimed at financing cultural projects of Andalusian provincial capitals from the accumulation in Seville for Expo '92 and 5<sup>th</sup> centenary of the discovery of America (Martínez & Espinosa, 2000). In May 2000, Cádiz Town Council decided to host a Greco-Latin Theatre Festival in the partially unearthed cavea of the theatre, with part of the orchestra serving as a stage.

### Ancient theatres traced in urban blocks

Majority of these ancient theatres in the urban archaeological landscape had been completely lost beneath later buildings without a trace, to be discovered mostly by chance. Elsewhere in Iberian Peninsula, a closer inspection of land registry maps and actual housing configurations led to the discovery of remains from Roman theatres beneath, in Almuñécar (*Sexi*, Andalucía), Badalona (*Baetulo*, Catalonia), Mahon (*Mago*, Minorca) and Palma de Mallorca (*Palma*, Balearic Islands). A more recent discovery of this type is in the historic center of Huesca where a curved configuration in the urban morphology was confirmed to indicate the location of Theatre of *Oscá* when physical remains revealed during infrastructure works in the courtyard of a dwelling in 2006 (Puértolas, 2006) and during drinking water pipe and pavement renovations in 2013. Among these examples, a restitution hypothesis has been proposed only for Theatres of *Baetulo* and *Palma*, the latter using the Vitruvian description for the Latin Theatre (Moranta, n.d.). These examples from the urban archaeological landscape also support the hypothesis on the adoption of the Vitruvian method especially for highly deteriorated examples.

Even less is known about examples that are hypothesized from actual urban morphology, in a context of archaeologically attested spatial continuity with Roman period settlement, but without any remains securely identified as belonging to a theatre. Examples are Barcelona (*Barcino*, Catalonia), Bigastro (*Bigastrum* near Alicante, Murcia), Carmona (*Carmona*, Seville), Ecija (*Astigi* or *Augusta Firma*, Seville), and Seville (*Hispalis*) itself, as well as UNESCO World Heritage Cities of Toledo (*Toletum*) in Spain and Evora (*Ebora*) in Portugal.

### As a conclusion: some observations on intervention variation

This data reveals extreme heterogeneity in the preservation state of ancient theatres in Iberian Peninsula. Nevertheless, it has been possible to classify the majority by their location either in rural or in urban archaeological landscapes, with some at the interface of the two. The first category consists of ancient theatre remains conserved in industrial landscapes (*Carteia*) and in archaeological sites (*Acinipo*, *Baelo Claudia*, *Bilbilis Augusta*, *Termes*), including those restored for local festivals (*Clunia*, *Pollentia*, *Regina*, *Segóbriga*). The second category consists of ancient theatres on fortified castle hill slopes (*Bracara Augusta*, *Cartago Nova*, *Malacca*, *Metellinum*, *Saguntum*) some of which are used for modern performances while others in urban blocks have been either integrated into museums (*Caesaraugusta*, *Corduba*, *Olisipo*) or laying in ruins (*Acci*, *Gades*, *Tarraco*) in urban blocks that may also evidence traces of ancient theatres in their morphology, with (*Baetulo*, *Mago*, *Oscá*, *Palma*, *Sexi*) or without (*Astigi* or *Augusta Firma*, *Barcino*, *Bigastrum*, *Carmona*, *Ebora*, *Hispalis*, *Toletum*) physical remains. At their interface are the ancient theatre remains that were either restored for international festivals (*Emerita Augusta*, *Itálica*) or left in ruins at the edge of modern towns (*Celsa*, *Singilia Barba*, *Urso*).

Following observations will attempt to illustrate the potential of this classification to reveal some trends in the variety observed in modern intervention types and scales, in a range from excavation and publication to consolidation, conservation, restoration, and reconstruction. Complementarily, these observations would demonstrate the validity, for their afterlife as well, of the conclusive observation by Oliva Rodríguez Gutiérrez (2011) for Roman Theatres of *Baetica* that each is a token of a type but, moreover, a singular example of a unique project.

### Early references to and excavations of ancient theatres as landscape elements

The presented data would support Raffaele Milani (2000) in that origins and development of the aesthetics of landscape were conditioned by the fashion of travelling, the figure of the connoisseur, and the aesthetic category of the picturesque as experienced by the painter and observer through an aesthetic perception of details and particulars. Indeed, Iberian Peninsula has centuries-long record of travelers (e.g. Labaña, Wingaerde, Carter) who documented details and particulars of ancient theatre remains (i.e. *Bilbilis*

*Augusta, Emerita Augusta and Saguntum, Carteia*) importantly in the rural archaeological landscape since those in urban archaeological sites were mostly unearthed during urban renovation projects of the past decades.

Other early records come from local men of religion (e.g. Zevallos on *Itálica*, Calvo on *Clunia*), who also realized limited excavations; and from men of letters who have professed a number of disciplines (e.g. Marquis of Valdeflores) who refer to the Vitruvian treatise (i.e. for *Acinipo*), as an indication of their wide erudition as well as of popularity of the Vitruvian edifice in Iberian Peninsula. Occasional reports (e.g. of the Court of Cádiz, Valdeflores, Martorell y Peña) also document the demolition process of ancient theatre buildings (i.e. *Saguntum*, *Singilia Barba*, *Pollentia*) in the rural landscape.

Inclusion of ancient theatres in compilations prepared by these men (e.g. Valdeflores, Ambrosio de Morales) for the Spanish crown (i.e. Ferdinand VI, Felipe II) reveal an early acknowledgement of this building type as national heritage at least from the sixteenth century onwards since when they have also been considered as an integral part of the cultural landscape, as attested best in the traditions and legends referring to ancient theatres (e.g. *Emerita Augusta, Gades*). The first building even taken under state protection to become later the first monument registered as national heritage of Spain was also an ancient theatre (i.e. *Saguntum*).

### Systematic ancient theatre excavations in Iberian Peninsula

Institutional differences in the organization of archaeological excavations in ancient theatres reveal structural differences between administrations in Iberian Peninsula, through the involvement of provincial and local museum, universities, local and autonomous governments. MNAR appears to be the centre for research on ancient theatres in Estremadura, directing two excavations (i.e. *Emerita Augusta, Regina*) and hosting events with following publications (e.g. *Actas...*, 1982). Provincial Archaeology Museum of Huelva was similarly involved in three excavations (i.e. *Acinipo, Metellinum, Regina*) in Andalusia, while Provincial Archaeology and Ethnology Museum of Córdoba and Museum of Málaga have been involved in the archaeological research and museumification of ancient theatre remains in respective cities in Andalusia.

Also in Tarragona, theatre remains have been under custody of the Provincial Archaeology Museum while elsewhere in northern Iberian Peninsula, excavations were conducted by local universities (e.g. of Zaragoza at *Caesaraugusta, Bilbilis Augusta*), like the exceptional University of Málaga excavations at *Singilia Barba*. Differently, University of Barcelona was active at sites remote from its location (*Clunia* in Castilla and León, *Pollentia* in Balear Islands, *Segóbriga*, Castilla and Mancha and *Segóbriga*), as was the Autonomous University of Madrid (*Carteia* in Andalusia) which may indicate absence of an institutionalized centre for ancient theatre research in those locations. Foreign finance from William L. Bryant Foundation for *Pollentia* Theatre excavations may support this observation if taken to indicate insufficiency of government support. Notably, all these are rural-archaeological sites at a distance from modern settlements.

Other excavations supported by foreign (i.e. French) finance are those of Theatres of *Baelo Claudia* and *Malacca*, both located in Andalusia where the autonomous government (i.e. Junta de Andalucía) appears as the conductor (e.g. *Gades*) and main investor in excavations and restorations of ancient theatre buildings, as in Andalusia 92 Programme involving *Acinipo, Gades, Itálica* and *Malacca*. These monuments are now in the Network of Cultural Spaces of Andalusia (RECA for Red de Espacios Culturales de Andalusia) together with Theatres of *Carteia* and *Baelo Claudia* (<http://www.juntadeandalucia.es/culturaydeporte/rutasteatro/>). A parallel tourism and culture route involves various municipalities of Andalusia organized under an association (Asociación de ciudades de la Ruta Bética Romana) over the region that once formed the Roman senatorial province of *Baetica* (<http://beticaromana.org/>). These networks reveal the strategy of the autonomous government to handle the region as an integrated cultural landscape consisting of a variety of human activity, ancient and modern. When we move from major cities towards lesser towns, local initiative may come to fore even in Andalusia (e.g. Archaeology Society for Osuna Excavations at *Urso*; Llabrés y Quintana's interventions at *Pollentia*).

### Modern uses of ancient theatres in rural, peri-urban, and urban landscapes

Ancient theatres that have not received any physical intervention for their preservation and modern use, as tourism destinations and for festivals, are the more deteriorated examples (of *Arcóbriga, Castulo, Celsa, Singilia Barba, Termes, Urso*) that are almost lost in rural and peri-urban archaeological landscapes. Local initiative was remarkably active in initiation of festivals of classical drama and dance in comparatively better preserved ones (e.g. *Emerita Augusta, Itálica, Pollentia, Saguntum, Segóbriga*) in rural and peri-urban archaeological landscapes that also serve as tourism destinations with more or less visitors depending on their accessibility.

These events enrich the already varied festival tradition in Iberian Peninsula, from the Crystal Rosary in Zaragoza that starts and ends near Caesaraugusta Theatre Museum to Carthaginians and Romans in Cartagena (<http://www.cartaginesyromanos.es/>). Recent research has focused on the agency of festival traditions in constructing nationalisms (Cofino, 1997), ethnicities (Aykan, 2014), and localities (Vozikas, 2012; Chalcraft & Magaouda, 2011) through an attachment of people to particular

places that Jorge Perez Falconi (2011) and others refer to as 'festivalscapes' in allusion to Arjun Appadurai's definitions with the suffix 'scape' indicating relations dependent on perspective. In Iberian Peninsula, landscapes with ancient theatre remains have converted into such 'festivalscapes', which resulted in physical interventions to enhance building performance during use.

Mérida is perhaps the most popular site in this respect, also due to its accessibility from Portugal. The large-scale intervention that transformed the legendary Seven Seats into a festival theatre apparently involved a considerable amount of reconstruction that, nevertheless, managed to produce a result generally evaluated as scientific restoration (e.g. Francisco *et al.*, 2011-2012), setting an example (e.g. for *Itálica, Segóbriga*) in the implementation of modern scientific criteria by rendering readable modern additions for consolidation and reinforcement for improved intelligibility of surviving elements. The same approach is adopted also in implementations aiming at presenting ancient theatre remains to visitors with minor (e.g. *Acinipo, Baelo Claudia*) or no (e.g. *Acinipo*) festival use. References for all these implementations had generally come from the building scale instead of their larger contexts.

For ancient theatres in urban archaeological landscapes, integrating them into museums (e.g. Cartagena, Córdoba, Lisbon, Zaragoza) and visitor centres (e.g. Málaga) has been an often preferred strategy both for ensuring their protection and for increasing their visitors year round. While the Cartagena project was entrusted to a team headed by Moneo, in Córdoba and Málaga, implementation projects were obtained through competitions and applied with finance from the autonomous government after major changes and delays, until a decade when urban renovation have become key all around the Mediterranean in rehabilitating physically and socio-economically deteriorated urban areas. Archaeological research and protection of the ancient theatre in Cádiz is an early example in this respect, in becoming part of a social responsibility project to enhance Pópulo district above remains with its low income profile. Impossibility of such integral handling of its remains as part of the urban landscape resulted in Theatre of *Tarraco's* laying unprotected in an urban block surrounded by high-income housing.

In this framework, Roman theatre museums in Iberian Peninsula would reveal as important sustainable urban investments, rather than heritage conservation projects; whose success has been measured by the number of visitors in return (e.g. Cartagena, *Clunia*, Zaragoza) and by their positive impact over a wider physical environment, community and economy. The latter had the lion's share in the Europa Nostra prizes awarded to the implementations in Cartagena and Medellín archaeology parks integrating remains from ancient theatres (*Cartago Nova, Metellinum*). Success of these urban and peri-urban examples of sustainable urban regeneration through heritage protection in the past decade are gradually upgrading the controversial image set by the Sagunto Theatre project of Grassi-Portaceli for ancient theatre implementations in Iberian Peninsula.

## References

- Aktüre, Z. (2014) Permanencies: a contextual typology of Roman theatre interventions in Iberian Peninsula. In R. Amoëda, S. Lira & C. Pinheiro (eds.), *REHAB 2014 Proceedings of the International Conference on Preservation, Maintenance and Rehabilitation of Historical Buildings and Structures. 19-21 March, Tomar, Portugal*. Barcelos, Portugal: Green Lines Institute for Sustainable Development, v. 3, pp. 1215-29.
- Aktüre, Z. (2007) Geographic distribution and architectural characteristics of ancient theatres in modern Spain – a structuralist interpretation. In B. Croxford, N. Ray, R. Roth & N. White (eds.), *TRAC 16 – Proceedings of the Sixteenth Annual Theoretical Roman Archaeology Conference, Cambridge 2006*, Cambridge University, UK (March 24–25, 2006). Oxford: Oxbow Books, pp. 17-33.
- Aktüre, Z. (2006) On the bridging powers of geometry in the study of ancient theatre architecture. In R. Sarhangi & J. Sharp (eds.), *Bridges London – Bridges: Mathematical Connections in Art, Music, and Science; Conference Proceedings, 2006*. London: University of London Institute of Education & London Knowledge Lab, pp. 387-394. Available at <http://archive.bridgesmathart.org/2006/bridges2006-387.pdf> [Accessed on December 20, 2014].
- Almagro, M. (1985) Vicisitudes de las ruinas de Segóbriga y problemas de su estudio y conservación. In *Arqueología de las ciudades modernas superpuestas a las antiguas*. Zaragoza: Institución Fernando el Católico (CSIC), pp. 15-33.
- Almagro Basch, M. (1982) El teatro romano de Pollentia. Alcudia (Baleares). In *Actas del Simposio "El Teatro en la Hispania Romana" – Mérida, 13-15 de Noviembre de 1980; Organizado por Junta Regional de Extremadura, Excelentísima Diputación Provincial de Badajoz y Caja de Ahorros de Badajoz*. Coloquios Científicos de la Institución Pedro de Valencia, Badajoz, pp. 99-110.
- Álvarez Martínez, J. M., Rodríguez Martín, G. & Saquete Chamizo, J. C. (2004) La ciudad romana de *Regina*. Nuevas perspectivas sobre su configuración urbana. *Anas*, 17, 11-45.
- Atencia Páez, R. (1988) *La Ciudad Romana de Singilia Barba (Antequera, Málaga)*. Málaga: Servicio de Publicaciones, Diputación Provincial de Málaga.
- Aranegui Gascó, C., Hernández Hervás, E., López Piñol, M. & Pascual Buyé, I. (1994) Nuevas excavaciones arqueológicas en el Teatro Romano de Sagunto. *Revista de Arqueología*, 153, 6-9.
- Arribas, A., Tarradell, M. & Wood, D. (1973) *Pollentia I: Excavaciones en su Portella, Alcudia (Mallorca)*. Excavaciones Arqueológicas en España 75, Ministerio de Educación y Ciencia. Dirección General de Bellas Artes. Madrid: Comisaría General de Excavaciones Arqueológicas.

- Aykan, B. (2014) Whose tradition, whose identity? The politics of constructing "Nevruz" as intangible heritage in Turkey. *European Journal of Turkish Studies*, 19: Heritage Production in Turkey. Actors, Issues, and Scales – Part I: Producing an Official Heritage in a Time of "Neo-Ottomanism": Critical Approaches. Available at <http://ejts.revues.org/5000> [Accessed on December 28, 2014].
- Ayuntamiento de Cartagena (n.d.) Museo y Teatro Romano de Cartagena. Available at [http://www.cartagena.es/frontend/ayuntamiento/Detalle\\_Obras/\\_us2maeQyxpPSGZxqrg3aSHuROKv467he2lazil7j\\_o5Kml2u8pNrw](http://www.cartagena.es/frontend/ayuntamiento/Detalle_Obras/_us2maeQyxpPSGZxqrg3aSHuROKv467he2lazil7j_o5Kml2u8pNrw) [Accessed on December 24, 2014].
- Ayuntamiento de Zaragoza (n.d.) *Renovación del Plan Integral del Casco Histórico de Zaragoza 2005-2012*. Available at [http://www.zaragoza.es/contenidos/urbanismo/Pich\\_informa.pdf](http://www.zaragoza.es/contenidos/urbanismo/Pich_informa.pdf) [Accessed on December 24, 2014].
- Baena Alcántara, M. D. (2008) Museo Arqueológico y Etnológico de Córdoba, un museo para el futuro. XI Jornadas de Museología. Hacer un Museo, *Museo*, 13, 209-215.
- Barroso Martínez, Y. & Morgado Portero, F. (1998) Las obras de restauración. In *Desde las Siete Sillas ... La recuperación del Teatro Romano de Mérida*. Mérida: Consorcio de la Ciudad Monumental, Histórico-Artística y Arqueológica de Mérida, pp. 51-83.
- Beltrán Lloris, M. (ed.) (1987) *Arcobriga (Monreal de Ariza, Zaragoza)*. Zaragoza: Institución Fernando el Católico (C.S.I.C.).
- Beltrán Martínez, A. (1982) El teatro romano de Zaragoza. In *Actas del Simposio "El Teatro en la Hispania Romana" – Mérida, 13-15 de Noviembre de 1980; Organizado por Junta Regional de Extremadura, Excelentísima Diputación Provincial de Badajoz y Caja de Ahorros de Badajoz*. Coloquios Científicos de la Institución Pedro de Valencia, Badajoz, pp. 41-64.
- Bermejo, A. (2006) Historia. In *Festival Juvenil Europeo de Teatro Grecolatino*. Available at [http://www.teatrogrecolatino.com/index.php?option=com\\_content&view=article&id=24&Itemid=37](http://www.teatrogrecolatino.com/index.php?option=com_content&view=article&id=24&Itemid=37) [Accessed on December 20, 2014].
- Borrego de la Paz, J. de D. (2012) El teatro romano de Córdoba. *Córdoba. Reflejo de Roma*. Catálogo de la exposición en Museo Arqueológico del 4 de enero al 16 de febrero de 2012, pp. 3-17.
- Caballeros Rufino, A., Marín Fatuarte, J. & Rodríguez Hidalgo, J. M. (1999) *Itálica Arqueológica*. Ediciones Especiales, 25, Sevilla: Universidad de Sevilla.
- Camacho Martínez, R. & Morente del Monte, M. (1989) El Palacio de Archivos, Bibliotecas y Museos. *Boletín de Arte* (Departamento de Historia del Arte, Universidad de Málaga, Málaga) 10, 329-44.
- Câmara Municipal de Lisboa (2008) *Museu teatro romano*. Available at <http://www.museuteatroromano.pt> [Accessed on December 24, 2014].
- Caravaca, T. (2011) Una década de espera para la ampliación del Museo Arqueológico de Córdoba. Available at <http://www.elmundo.es/elmundo/2011/01/31/andalucia/1296497485.html> [Accessed on December 24, 2014].
- Carrero, R. (2011) Anfiteatro romano de Cáparra. Available at <http://caminosdecultura.blogspot.com.tr/2011/11/anfiteatro-romano-de-caparra.html> [Accessed on December 17, 2014].
- Cepas Palanca, A. (1997) *Crisis y Continuidad en la Hispania del Siglo III*. Anejos de Archivo Español de Arqueología XVII. Madrid: Consejo Superior de Investigaciones Científicas.
- Chalcraft, J. & Magaudda, P. (2011) 11. Space in the place. In L. Giorgi, M. Sassatelli, G. Delanty (eds.), *Festivals and the Cultural Public Sphere*. Oxon: Routledge, pp. 173-189.
- Charles-Picard, G. (1970) Note sur le théâtre romain de Belo. *Mélanges de la Casa de Velázquez* VI, 43-51.
- Ciancio Rossetto, P. & Pisani Sartorio, G. (1994/95/96) *Teatri Greci e Romani – Alle Origini del Linguaggio Rappresentato*. Roma: Edizioni Seat.
- Clunia contará con una nueva guía y un Plan Director que reoriente las investigaciones. Available at <https://paleorama.wordpress.com/2012/04/23/clunia-contara-con-una-nueva-guia-y-un-plan-director-que-reoriente-las-investigaciones/> [Accessed on December 20, 2014].
- Cofino, A. (1997) *The Nation as a Local Metaphor: Württemberg, Imperial Germany, and National Memory, 1871-1918*. US: The University of North Carolina Press.
- Collins, R. (1998) *Spain - An Oxford Archaeological Guide*. Oxford & New York: Oxford University Press.
- Corzo Sánchez, R. (1993) El Teatro Romano de Cádiz. In S. F. Ramallo Asensio & F. Santiuste de Pablos (eds.), *Teatros Romanos de Hispania*, Cuadernos de Arquitectura Romana, 2. Murcia: Universidad de Murcia y Colegio de Arquitectos de Murcia, pp. 133-40.
- Corzo Sánchez, R. (1989) El teatro romano de Cádiz. In *Homenaje al Profesor Antonio Blanco Freijeiro*. Estudios de Geografía e Historia, Facultad de Geografía y Historia. Madrid: Universidad Complutense de Madrid, pp. 197-213.
- del Amo y de la Hera, M. (1982a) El teatro romano de Acinipo. In *Actas del Simposio "El Teatro en la Hispania Romana" – Mérida, 13-15 de Noviembre de 1980; Organizado por Junta Regional de Extremadura, Excelentísima Diputación Provincial de Badajoz y Caja de Ahorros de Badajoz*. Coloquios Científicos de la Institución Pedro de Valencia, Badajoz, pp. 215-251.
- del Amo y de la Hera, M. (1982b) El teatro romano de Medellín. In *Actas del Simposio "El Teatro en la Hispania Romana" – Mérida, 13-15 de Noviembre de 1980; Organizado por Junta Regional de Extremadura,*

*Excelentísima Diputación Provincial de Badajoz y Caja de Ahorros de Badajoz. Coloquios Científicos de la Institución Pedro de Valencia, Badajoz*, pp. 317-36.

- Fernández-Baca Casares, R. & Tejedor Cabrera, A. (2007) Conservación y uso de los teatros romanos: el caso del teatro romano de Málaga. *Mainake*, 29:77-101.
- Fernández-Baca Casares, R. & Martín Alafont, F. *et al.* (1993) La consolidación y restauración del teatro romano de Acinipo. Ronda (Málaga). 1980. In S.F. Ramallo Asensio & F. Santiuste de Pablos (eds.), *Teatros Romanos de Hispania*, Cuadernos de Arquitectura Romana, 2. Murcia: Universidad de Murcia y Colegio de Arquitectos de Murcia, pp. 199-205.
- Fletcher Valls, D. (1959) Las obras de restauración en el Teatro Romano de Sagunto. *Notas sobre el Teatro Romano de Sagunto, Arse*, IV, 5-14.
- Foucault, M. (1994) *The Order of Things: An Archaeology of the Human Sciences*. New York: Vintage Books.
- Francisco Noguera G. J., Guimaraens Igual, G., Lara Ortega, S. & Noguera Mayén, M. (2011-12) Teatros romanos de Hispania: introducción a su estado de conservación y criterios de restauración. *Arché. Publicación del Instituto Universitario de Restauración del Patrimonio de la UPV*, 6-7, 383-390.
- Gaudens Cross, V. (1994/95/96) Spagna/Alcudia (la) /Pollentia/Hispania Tarraconensis'. In P. Ciancio Rossetto & G. Pisani Sartorio (eds.), *Teatri Greci e Romani – Alle Origini del Linguaggio Rappresentata*. Roma: Edizioni Seat, v.3, p. 225.
- Godelier, M. (1986) *The Mental and the Material*. London: Verso.
- Gran Aymerich, J. M. (1983) Málaga romana. Excavación en el area del Teatro romano. *Revista de Arqueología*, 31: 58-61.
- Grassi, G. (1985) Fixed stage - Project for the Roman Theatre of Sagunto. *Lotus Internacional*, 46/2, 7-21.
- Humanes Bustamante, A. (ed.) (1990) 9 - Teatro romano de Segóbriga. In *Intervenciones en el Patrimonio Arquitectónico (1980-1985)*, Ministerio de Cultura, Dirección General de Bellas Artes y Archivos. Madrid: Instituto de Conservación y Restauración de Bienes Culturales, pp. 410.
- Ianiro, A. (1994/95/96) Spagna/Barcelona/Barcino/Hispania Tarraconensis, Spagna/Jaen/Aurgi /Hispania Baetica, Spagna/Martos/Tucci/Hispania Baetica, Spagna/Moron/Licurgentum/Hispania Baetica, Spagna/Salteras/Osset/Hispania Baetica, Spagna/Villanueva del Rio/Canama/Hispania Baetica, Spagna/Villares (los)/Isturgi/Hispania Baetica. In P. Ciancio Rossetto & G. Pisani Sartorio (eds.), *Teatri Greci e Romani – Alle Origini del Linguaggio Rappresentata*. Roma: Edizioni Seat, v.3, p. 226, 244, 248, 254, 264, 274, 275.
- Ingold, T. (2005) *The Perception of The Environment: Essays in Livelihood, Dwelling and Skill*. London & New York: Routledge.
- Jiménez Martín, A. (1989) Las columnas del Teatro de Itálica. In *Homenaje al Profesor Antonio Blanco Freijeiro*. Estudios de Geografía e Historia, Facultad de Geografía y Historia. Madrid: Universidad Complutense de Madrid, pp. 277-318.
- Lara Ortega, S. (1991) *El Teatro Romano de Sagunto: Génesis y Construcción*. Valencia: Universidad Politécnica de Valencia.
- Leguina, J. & Baquedano, E. (2000) Introducción: El Patrimonio Histórico como fuente de placer y de riqueza. In *Un Futuro para la Memoria - Sobre la Administración y el disfrute del Patrimonio Histórico Español*. Madrid: PSOE.
- Loperráez Corvalán, J. (1788) *Descripción histórica del Obispado de Osma*, vol. II. Madrid, pp. 368-78.
- López, L.J. (2014) Aparece un pórtico en las excavaciones del teatro romano de Guadix. *ABCandalucía.es*. Available at <http://sevilla.abc.es/andalucia/granada/20140716/sevi-aparece-portico-excavaciones-teatro-201407161906.html> [Accessed on December 24, 2014].
- Lostal Pros, J. (1980) *Arqueología de Aragón Romano*. Zaragoza: Diputación Provincial, Institución Fernando el Católico, pp. 193-198.
- Manuela Martins, M., Mar Medina, R., Ribeiro, J., Magalhães, F. (2008) O teatro romano de Bracara Augusta: resumo. *Férvedes: Revista de investigação*, 5: 385.
- Mar, R., Ruiz de Arbuló, J., Vivó, D., Domingo, J. & Lamud, M. (2010) La *scaene frons* del Teatro de Tarraco, una propuesta de restitución. In S. F. Ramallo Asensio & N. Röring (eds.), *La scaenae frons el la arquitectura teatral romana. Actas del Symposium Internacional celebrado en Cartagena los días 12 al 14 de marzo de 2009 en el Museo del Teatro Romano*. Universidad de Murcia. Cartagena: Fundación Teatro Romano de Cartagena, pp. 173-201.
- Mar, R., Roca, M. & Ruiz de Arbuló, J. (1992) El teatro romano de Tarragona: un problema pendiente. In S. F. Ramallo Asensio & F. Santiuste de Pablos (eds.), *Teatros Romanos de Hispania*, Cuadernos de Arquitectura Romana, 2. Murcia: Universidad de Murcia y Colegio de Arquitectos de Murcia, pp. 11-24.
- Martin-Bueno, M. (1982) 'Teatro Romano de Bilbilis (Calatayud, Zaragoza)'. In *Actas del Simposio "El Teatro en la Hispania Romana" – Mérida, 13-15 de Noviembre de 1980; Organizado por Junta Regional de Extremadura, Excelentísima Diputación Provincial de Badajoz y Caja de Ahorros de Badajoz*, Coloquios Científicos de la Institución Pedro de Valencia, Badajoz, pp. 79-93.
- Martín-Bueno, M. (1975) *Bilbilis. Estudio Histórico-Arqueológico*. Zaragoza: Universidad de Zaragoza.

- Martínez Martín, A. & Espinosa de los Monteros Choza, L. M. (2000) Conjunto arqueológico teatro romano. In *Conservación y Restauración de Bienes Culturales en Andalucía – Primeras Experiencias*, Consejería de Cultura. Sevilla: Junta de Andalucía, pp. 352-353.
- Milani, R. (2000) The birth of the aesthetic landscape. In G.A. Sargin (ed.), *Nature as Space: (re)Understanding Nature and Natural Environments*. Ankara: METU Faculty of Architecture Press, pp. 135-146.
- Moliné Escalona, M. (n.d.) *El Teatro Romano*. Available at <http://www.almendron.com/artehistoria/historia-de-espana/edad-antigua/el-teatro-romano/> [Accessed on December 24, 2014].
- Montero Fernández, F. J. (1993) Continente para un contenido II: la restauración del teatro romano de Itálica. In S. F. Ramallo Asensio & F. Santiuste de Pablos (eds.), *Teatros Romanos de Hispania*, Cuadernos de Arquitectura Romana, 2. Murcia: Universidad de Murcia y Colegio de Arquitectos de Murcia, pp. 173-181.
- Moranta Jaume, L. (n.d.) *Hipótesis de la Existencia de un Teatro Romano en Palma de Mallorca*. Available at <http://palma.infotelecom.es/~moranta/> [Accessed on December 24, 2014].
- Museo del Teatro del Caesaraugusta (n.d.) [online]. Available at [http://es.wikipedia.org/wiki/Museo\\_del\\_Teatro\\_de\\_Caesaraugusta](http://es.wikipedia.org/wiki/Museo_del_Teatro_de_Caesaraugusta) [Accessed on December 29, 2014].
- Museo del Teatro Romano de Cartagena (2014) [online]. Available at <http://www.teatoromanocartagena.org/> [Accessed on December 24, 2014].
- Pedersoli, A. & Paronuzzi, M. (2010) Teatri greci e romani censiti: Elenco e mappe. *Engramma* 77. Available at [http://www.engramma.it/eOS/index.php?id\\_articolo=385](http://www.engramma.it/eOS/index.php?id_articolo=385) [Accessed on February 7, 2015].
- Perez Falconi, J. (2011) Space and festivalscapes. *Platform*, 5(2), 12-27 [1].
- Ponsich, M. & Sancha, S. (1979) Le théâtre de Belo, 1<sup>ere</sup> campagne de fouilles de juin 1978. *Mélanges de la Casa de Velázquez* XV, 559-580.
- Puértolas, E. (2006) *Huesca: Hallados restos del teatro romano*. Available at <http://suetoniusvagioletvm.blogspot.com.tr/2006/05/huesca-hallados-restos-del-teatro.html> [Accessed on December 24, 2014].
- Ramallo Asensio, S. F. & Ruiz Valderas, E. L. (1998) *El Teatro Romano de Cartagena*. Murcia: Editorial KR.
- Ramírez, M. (2005) El Teatro Romano se limitará a espectáculos ocasionales. *20 Minutos Málaga*, 1256, 2.
- Repullés y Vargas, E. M. & Mérida y Alinari, J. R. (1917) Proyecto de obras de reparación y consolidación de los restos del Teatro Romano de Sagunto (Valencia). *Boletín de la Real Academia de Bellas Artes de San Fernando*, 42-43, 91-93.
- Rodríguez Gutiérrez, O. (2011) XI. Algunas reflexiones en torno a los teatros romanos de la Bética. In D. Bernal & A. Arévalo (eds.), *El Theatrum Balbi de Gades*, Monografías de Historia y Arte. Cádiz: Servicio de Publicaciones, Universidad de Cádiz, pp. 335-447.
- Rodríguez Oliva, P. (1993) Nuevas investigaciones sobre el teatro romano de Málaga. In S. F. Ramallo Asensio & F. Santiuste de Pablos (eds.), *Teatros Romanos de Hispania*, Cuadernos de Arquitectura Romana, 2. Murcia: Universidad de Murcia y Colegio de Arquitectos de Murcia, pp. 183-94.
- Roldán Gómez, L., Bendala Galán, M., Blánquez Pérez, J. & Martínez Lillo, S. (1998) *Carteia*. Consejería de Cultura. Madrid: Junta de Andalucía and CEPESA Refinería Gibraltar.
- Ruiz Cecilia, J. I. & Pachón Romero, J. A. (2012) Jorge Bonsor y el teatro romano de Osuna. *Cuadernos de los Amigos de los Museos de Osuna*, 14, 47-54.
- Ruiz Cecilia, J. I. (2008) El teatro romano de Osuna: una revisión historiográfica. In João Pedro Bernardes (ed.), *Hispania Romana. Actas do IV Congresso de Arqueologia Peninsular (Faro, 14 a 19 de Setembro de 2004)*, Promontoria Monográfica 10, Centro de Estudos de Património, Departamento de História, Arqueologia e Património. Braga: Universidade do Algarve, pp. 253-259.
- Ruiz Cecilia, J. I. (2007) *Testimonios arqueológicos de la antigua Osuna*. Seville: Spal Monografías VIII.
- Rupprecht, G. (ed.) (n.d.) *Theatrum*. Generaldirektion Kulturelles Erbe Rheinland-Pfalz, Direktion Landesarchäologie Mainz. Available at <http://www.theatrum.de/> [Accessed on February 7, 2015].
- Russo, V. (2014) Apollo's landscape. Risk, interpretation, conservation. In V. Russo (ed.), *Landscape as Architecture. Identity and Conservation of Crapolla Cultural Site*. Firenze: Nardini Editore, pp. 13-32.
- Rykwert, J. (1996) *The Dancing Column - On Order in Architecture*. Cambridge, Massachusetts: The MIT Press; London, England.
- Sahlins, M. (1976) *Culture and Practical Reason*. Chicago: University of Chicago Press.
- Sánchez Galián, D. M. J. (2011) *Análisis del perfil del turista del Teatro Romano de Cartagena*. Master's Thesis in Management of Tourism Enterprises. Cartagena: Universidad Politécnica de Cartagena (UPCT). Available at <http://repositorio.bib.upct.es/dspace/bitstream/10317/1871/1/1fsm29.pdf> [Accessed on December 24, 2014].
- Sargin, G. A. (2000) Nature of resistance and counter-hegemony in post-structural society. In G. A. Sargin (ed.), *Nature as Space: (re)Understanding Nature and Natural Environments*. Ankara: METU Faculty of Architecture Press, pp. 59-79.
- Sear, F. (2006) *Roman Theatres. An Architectural Study*. Oxford: Oxford University Press.

- Serrano Ramos, E. & Atencia Páez, R. (1993) Notas sobre el teatro de Singilia Barba. In S. F. Ramallo Asensio & F. Santiuste de Pablos (eds.), *Teatros Romanos de Hispania*, Cuadernos de Arquitectura Romana, 2. Murcia: Universidad de Murcia y Colegio de Arquitectos de Murcia, pp 207-215.
- Spain – Cartagena, Conservation, The Roman Theatre (2010) *Grand Prix*. Available at <http://www.europanostra.org/awards/19/?pagename=projects&id=19/> [Accessed on February 8, 2015].
- Spain – Medellin, Conservation, Roman Theatre (2013) *Europa Nostra*. Available at <http://www.europanostra.org/awards/106/> [Accessed on February 8, 2015].
- Tiermes – Guía del Yacimiento y Museo* (1990) Soria: Junta de Castilla y León.
- Tiermes – Excavaciones Arqueológicas – Campaña 1991* (1991) Soria: Junta de Castilla y León, Consejería de Cultura y Turismo.
- UNESCO (2013) *Operational Guidelines for the Implementation of the World Heritage Convention*. Available at <http://whc.unesco.org/en/guidelines/> [Accessed on December 9, 2014].
- Vozikas, G. (2012) 5. Rural immigrants and official religion in an urban religious festival in Greece. In R. Pinxten & L. Dikomitis (eds.), *When God Comes to Town: Religious Traditions in Urban Contexts*. US: Berghahn Books, pp. 65-78.
- (n.d.) *Más de 40.000 personas han visitado los museos del Teatro Romano de Caesaraugusta y el Centro de Historia*. Available at <http://www.noticias.info/2003-05-20/news-3600-source-2-mas-de-40-000-personas-han-visitado-los-museos-del-teatro-romano-de-caesaraugusta-y-el-centro-de-historia?redirected=true> [Accessed on December 24, 2014].

### Acknowledgements

This research was accomplished within the framework of Spanish Ministry of Exterior Affairs and Cooperation and Spanish Agency of International Cooperation for Development (MAEC-AECID) Summer 2001 and 2008/9 Scholarship Programmes. Part of the accompanying visual material comes from the blog Amphitheatrum: Edificios Romanos en España published by Carlos Sánchez-Montaña who has kindly allowed their inclusion in this publication.





ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable Development

Vol. 4, No. 1, 2015, pp. 23-34

## Using sustainability indicators for Urban Heritage management: a review of 25 case studies

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In this paper, we analyze 25 case studies that specifically discuss and propose sustainability indicators. We look at how the indicators are used across these practices and identify differences and commonalities that will lead to the development of key indicators. On the one hand, our analysis reveals the existence of three dichotomies, respectively between: i) scientific and policy-led approaches to select indicators; ii) anthropocentric and environmental-oriented vision of sustainability and iii) quantitative and qualitative orientation of the indicators. On the other hand, we identify 20 common indicators based on their widespread use and their ability to cover the environmental, economic, and sociocultural dimensions of urban heritage. Finally, these observations underline the common characteristics of sustainability indicators in urban heritage beyond the differences in context.

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**Keywords:** Sustainability Assessment, Urban Heritage, Indicators.

### Introduction

Current research on the management of urban heritage following its conservation process is characterized by a growing number of studies that aim to provide an overview of how to assess the sustainability of existing practices. This dominant focus of the research has contributed to the development of indicators and approaches to sustainable development (SD) in this field. In addition, it has assisted with the implementation of policies and development strategies based on the assessment of the indicators.

However, given the multiple definitions of SD and the different interpretations of heritage at the urban scale, the approaches to sustainable heritage management have grown significantly. The growth of such approaches is often associated with the fact that each building, site, and urban area has its own characteristics, requiring the use of customized indicators. When the latter become too specific however, issues of credibility may arise as the indicators could be manipulated to serve a political purpose. For instance, one can assess their sustainability performance by using only indicators that display good results.

In addition, issues of comparability become problematic, as the diversity of indicators that are used do not allow for comparison across different location and size of buildings or sites. Such issues are challenging for governments, as it becomes difficult to establish a systematical diagnosis of local needs for future investments and policy purposes.

This variety of case studies calls for the development of a research agenda in this field dedicated to the search for optimal indicators to capture the multidimensionality of sustainability. In this context, our paper presents an analysis of an inventory of recent case studies in this field proposing the use of indicators.

We look at how the indicators are used across these studies. Thus, we identify for differences and commonalities, which leads to the development of an optimal set of indicators that policy makers and local authorities could use to assess sustainability in the management of urban heritage.

The remainder of the paper is divided as follows. In Section 2, we present the general conceptions underpinning sustainable heritage management and the challenges presented by its evaluation using indicators. In Section 3, we present the issues in bridging urban heritage management and sustainability indicators, which is the basis of our analysis. Section 4 describes our methodology. Section 5 reports the results of our approach and discusses the main implications. We demonstrate that despite the variety of case studies, it is still possible to identify general patterns and commonalities that lead to the development of key indicators. The conclusion follows.

### **Urban heritage management and sustainability indicators**

There are various conceptions of urban heritage and its conservation, and a variety of definitions have succeeded one another (Giovannoni, 1998). In general, urban heritage conservation is defined as the conservation and development of public spaces and the monumental heritage of the public domain. In addition, it likely encompasses private property, if the latter is subject to conservation process. For example, Berthold and Mercier (2013) conducted a study for the Old Town district in the city of Quebec. They reveal how real estate speculation can become the subject of discursive construction through which the conservation of the heritage successfully occurs via the conservation of private property within a historic district.

Urban heritage management follows the conservation process, which is generally carried out based on potential costs of preservation and projected level of tourist attraction (Rocher, 2003) as well as ideologies (Berthold, 2012). In this latter case, the heritage is inserted into a system of values based on factors such as knowledge and disciplinary specializations that underlies political action. Research in this field have also shown that several categories of participants are likely to be involved in a conservation and management process, including public authorities, interest groups, and citizens (Drouin, 2005). Such diversity of actors often increases social interactions and conflicts. As a result, conservation and management processes are likely to favor certain groups and exclude others based on the interactions between the stakeholders (Graham, Ashworth and Tunbridge, 2000).

More recently, new parameters have been added to urban heritage management given the growing importance assigned to SD or sustainability in contemporary urban policies (Tweed and Sutherland, 2007). Therefore, economic, ideological and normative parameters have been progressively complemented with environmental and sociocultural considerations. As a result, sustainability has become increasingly more challenging for both researchers and policy makers. A growing number of studies are addressing conceptual and methodological issues related to the integration of economic, sociocultural and environmental assessment (Agyekum-Mensah et al., 2012) as well as issues related to the pragmatic use of such assessments as input in policies and urban development strategies (Zancheti and Hidaka, 2012). As we argue in the next section, part of the challenge, which raises these issues, stems from the measurement of SD by using indicators.

The concept of sustainable development took root in the 1970s with the growth of the environmentalist movement. However, it is mainly because of the Brundtland report, which was published by the World Commission on Environment and Development (WCED) that the concept is found at the heart of international political agendas. In this report, sustainable development is defined as "development that meets the need of the present generation without compromising the ability of future generations to meet their own needs" (WCED, 1990: 43). Its implementation is reflected by harmonious development, with respect to environmental, economic, and sociocultural dimensions, over time (Tweed and Sutherland, 2007). However, in 30 years of research and application, its interpretations have multiplied due to its broad and ambitious definition. Two years after the publication of the Brundtland report, there were more than 60 definitions and in 1996, more than 300 definitions were identified (Rajaonson and Tanguay, 2009). Despite such a vast array of interpretations of the concept, certain common principles emerged and were developed over the years. For instance, poverty reduction, abandonment of unsustainable mode of consumption, and protection and management of natural resources have been pointed out as the main objectives of sustainable development (Boutaud, 2004). Furthermore, according to Boutaud (2004), nothing is done in the policy arena without the label of sustainable development. It is therefore no wonder that the concept has been repeatedly questioned and redefined.

Given the lack of consensus surrounding the concept of sustainability, especially at the urban scale, research in this field proposed its transposition into dimensions and measurable indicators in order to allow for a more transparent definition and interpretation (McLaren, 1996; Tanguay et al., 2010). In this perspective, the Venn diagrams are widely used to represent and introduce the concept of sustainable development (Connolly, 2007). The latter is schematized in Figure 1 as an overlap of three circles representing economic, sociocultural and environmental concerns, respectively. Compared to other

approaches (e.g., in terms of resources and capital), this representation has the advantage of expressing the concept as a form of balance between the developments of each dimension. It also reflects the interdisciplinarity required in its implementation (Boulanger, 2004).

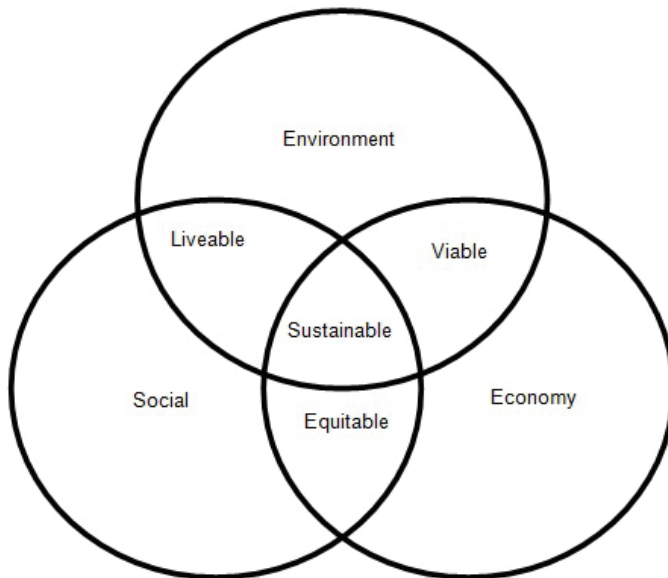


Figure 1. Conceptualization of SD.

Each dimension is generally broken down into several domains or themes and each theme in turn, is associated with different indicators. The passage from dimensions to indicators raises several issues, one of which is the question of usefulness. It is generally acknowledged that the choice of one or several indicators to inform on a theme, must take into account their usefulness (Holman, 2009). As informational tools, the indicators are used to quantify and synthesize complex phenomena falling under the three traditional dimensions of SD and to organize the information in order to give it a political meaning (e.g., benchmarking) (Bouni, 1998). The indicators are designed to allow for environmental and socio-economic assessment in order to support projected urban SD strategies. At the same time, key indicators appear to be a system of information with a political character. Therefore, the information vehicle is likely to be organized in such a way that it crosses the "world of research and science to be integrated with that of the policy" (Bouni, 1998: 21). In this perspective, subjectivity is inevitably introduced in view of the fact that the indicators chosen depend on, despite the use of relevant selection criteria, the targeted users and objectives related to the analysis process. As a result, the procedure for the production of indicators is closely linked to the need for information in policy elaboration.

Indicators however, are not the only tools used to assess sustainability (Ness et al., 2007 provides a discussion of and a comparison between the different families of tools to assess sustainability). Also, like any tools, indicators have both limitations and advantages. For instance, they do not allow to account for the impact of a change in policy or the impact of the implementation of a specific project, unless they are designed to assess actions and government programs (Ness et al., 2007). Additionally, they may not replace essential tools such as cost-benefit analysis, risk and vulnerability assessment, or dynamic analysis of a system (Ness et al., 2007), which are all essential and complementary to one another from a sustainable development assessment point of view. However, indicators are generally recognized for their simple character and their analytical effectiveness in that quantitative data generally fall within the three pillars of sustainable development (Ness et al., 2007). A grid of common indicators can play an important role in information systems in ensuring that the assessment truly reflects the values and concerns identified at a local level or municipal level, as well as at a higher level (Tanguay et al., 2010). Unlike statistics held by the public administration (i.e., local or municipal), the indicators are an instrument of democratic evaluation rather than a management tool in the hands of only the authorities. In this regard, they generally perform two functions: They constitute a basis of information for political decision-making (internal use for municipalities); as well as contribute to the development of a common language covering the concept of SD and of its constituent dimensions (external use for all categories of potential users). In some themes reflected by the indicators, the authorities may have the power to perform changes, while in others it does not.

Together with the challenges of usefulness, the development of sustainability indicators also depends on the constraints of observations and measurements. In fact, several inevitable compromises limit the effectiveness of the indicators and lead to changes in objectivity. For example, we must take into account the request for concise information by users while simultaneously using a consistent methodological approach and considering the supply of data. From a scientific viewpoint, this compromise is often reflected by the use of fewer indicators that are less explicit; the data is then used to calculate information for the scale of the desired analysis (Singh et al., 2009). For example, poverty is commonly measured with the aid of economic indicators such as income distribution and household expenses, since the statistical data referring to these indicators are easily accessible (Rajaonson and Tanguay, 2009). Yet, poverty also has social and cultural dimensions (e.g., related to issues of exclusion and education). For these dimensions, there are several other indicators that are just as relevant, whose measures, if they are available, sometimes require calculations or more complex adjustments (Boulanger, 2004). As we will see in the next section, such adjustments are often necessary, especially in the context of our approach, which aims to bridge the use of sustainability indicators into urban heritage management.

### **Bridging urban heritage management and sustainability indicators**

In the field of urban heritage, sustainability is a relatively recent issue. The growing interest it raises amongst academics is rooted to: i) the political pressures resulting from the adoption of new frameworks based on SD in contemporary urban planning, and ii) the pressures from communities claiming the environmental and cultural needs of the society together with the economic interests (Garatet al., 2005).

The research toward a more sustainable urban heritage management and conservation is still in an exploratory phase (Faddy, 2010; Roders and Van Oers, 2014). It requires a prior step, which is to develop assessment tools, like SD indicators, and specify a general framework, which will enable to bridge the use of sustainability indicators and urban heritage management. The literature on sustainable management of urban heritage often focus on one or two dimensions of sustainable development, rather than proposing a holistic approach covering the three pillars (i.e., environment, sociocultural, economic). For instance, focusing on the environmental dimension, Liao and Jones (2010) have stressed the need to situate the problem of sustainable conservation in the context of climate change. Judson et al. (2010) have compiled a review of studies that have tried to measure the environmental performance of ancient buildings from a qualitative perspective (based upon established certifications, such as LEED) and a quantitative perspective (e.g., Life Cycle Assessment). From another perspective, focusing on the built environment, Faddy recalled the central problem posed by urban housing density to the sustainable conservation of urban heritage: "Conventional wisdom is that sustainability equals an acronym densities (...) some historic suburbs are under threat from a push to accommodate dramatically an acronym densities" (Faddy, 2010: 402). He particularly highlighted the environmental costs (e.g., CO<sub>2</sub> emission impacts) that resulted in the demolition of buildings for the rejuvenation of park real estate from a perspective of densification of central neighborhoods. Su (2010) has proposed a few indicators to measure residential density. Some directly relate to buildings (number of floors, number of residents per building), and others relate to the surrounding environment (number of outdoor public areas, amount of parking). Many other examples exist that focus on other dimensions of sustainable development, such as the economic dimension (Greffé, 2003) and the sociocultural dimension (Volpiano, 2011).

In sum, consideration of the three dimensions of sustainability for a holistic approach has yet to be achieved, as the environmental, economic and sociocultural aspects of sustainability are often analyzed separately. The use of indicators of sustainability is a good starting point to achieve this, considering their flexibility and their ability to translate such complex concepts into measurable information. Further details of our analysis are provided in the following section.

### **Methodology**

Our research is divided into two parts. The first part focuses on the differences between a selection of recent studies related to the assessment of sustainability in urban heritage management using indicators. Complementarily to this, the second part focuses on the search for commonalities in order to develop a set of indicators, which allow for the different trade-off implied by the assessment of sustainability in urban heritage management.

In the first part, using a computer-based research engine, we identify 25 scholarly papers that focused on the use of indicators to bridge sustainability and urban heritage conservation. The selected papers propose indicators for assessing the sustainability of urban heritage conservation. The 25 studies are presented in Table 1, where the main features include aspects such as their geographical context, the frameworks they adopted to organize the indicators (if any), the purpose of the indicators (either conceptual or practical purpose), and their level of application (either to buildings or urban areas). Following this inventory, we extracted the indicators used in these studies and analyzed their characteristics, including their number, choice, and nature. We followed this with a discussion of the results by bringing to light dichotomies between: i) scientific and policy oriented indicators; ii) anthropocentric and environmental perceptions of SD in urban heritage management, and iii) quantitative and qualitative approaches to sustainability assessment.

Table 1. List of the 25 case studies.

References	# of indicators	Framework	Purpose of Indicators	Application	Approach
Rosado Corela&Walliman (2012)	29	Explicit/Implicit criteria	Criteria for intervention	Earthen sites	Experts interviews
Farhanah& Mohamed (2012)	5	-	Assess public perception	Buildings	Public interviews
Yung & Chan (2012)	24	Economic, sociocultural, environmental, political	Adaptive reuse criteria	Buildings	Experts interviews
Suntikul&Jachna (2013)	5	Universal value and significance	Selection of cultural sites	Town center	Experts evaluation
Pendleburyet al. (2009)	10	Universal value and significance	Selection of cultural sites	World Heritage sites	Experts evaluation
Tweed & Sutherland (2007)	8	-	Assess public perception	Built heritage sets	Public interviews
Wang & Zeng (2010)	13	Economic, sociocultural, environmental, political	Evaluation of reuse alternatives	Buildings	Fuzzy Delphi
Volpiano (2011)	8	Characterization, transformation, enhancement	Assessment of historic landscape	Landscape	Experts analysis
Peanoet al. (2011)	23	Ecological, historical, visual, land uses, economical	Assessment of landscape transformation	Regional and local scale	Case studies
Phillips & Stein (2013)	8	Gauging, protecting, enhancing, interfacing	Historic resources preservation	Buildings	Literature review
Bullen& Love (2011)	43	Affecting factors, barriers, benefits, negative and positive effects of reuse	Adaptive reuse and conservation	Buildings	Experts interviews
Pons & Roders (2011)	3	Universal value and significance	World heritage nomination	Old town	Stakeholder interviews
Agyekum-Mensahet al. (2012)	8	Project management model and sustainability dimensions	Achieving sustainability in built environment	Built heritage	Experts analysis
Bullen& Love (2009)	10	-	Adaptive reuse and residential regeneration	Commercial buildings	Case study
Lorenz & Lützkendorf (2008)	10	-	Integrating sustainability in property valuation	Properties and assets	Literature review
De Silva & Henderson (2011)	8	Environmental sustainability	Conservation benchmarking	Built heritage	Experts analysis
Judson & Iywe-Raniga (2010)	7	Integrated life cycle framework	Assessing operational performance	Buildings	Case studies
Brooks et al. (2010)	3	-	Retrofit of existing and historic buildings	Buildings	Comparative study
Stubbs(2004)	16	Environmental, social/cultural, economic, generic	Assessing historic sustainability	Historic areas	Case studies
Elsorady (2012)	22	Maintenance, economics, quality of life, change process	Measuring success of heritage conservation	Building	Case study
Mendes Zanchetti& Hidaka (2012)	3	Key performance indicators	Assessing the state of conservation of heritage	Heritage sites	Weighting from Delphi
Dalmaset al. (2012)	16	Economic, cultural, social and natural capital	Assessing the state of urban heritage	Built heritage	Experts analysis
WTO (2004)	24	Tourism sustainability	Assessing tourism-related heritage	Heritage sites	Experts analysis
Vehbi&Hoskara (2009)	16	Revitalization features	Measuring sustainability level	Urban quarters	Literature review
Landorf (2009)	35	Situation analysis, strategic orientation, community values, stakeholder participation	Site management plan coding	Heritage sites	Content analysis

Based on the search for a trade-off between these dichotomies, the second part of our approach consist of identifying key indicators by applying two selection criteria to the indicators proposed in the 25 case studies: i) their frequency of use and ii) their systematic coverage of the main rationales of sustainable heritage conservation. The first criterion involved selecting the indicators that were most frequently used among those that were present in the 25 studies. This was done to identify those that were most often mentioned and for which relevance and reliability are recognized within the scientific literature. Additionally, our goal was to include only those that were most frequently used, as those mentioned only by one study were considered specific to a particular context. Since our paper focuses on core indicators, such context specificity was beyond the scope of the present study.

The second criterion, applied to the most frequently used indicators, involved ensuring that the selected indicators covered five aspects of urban heritage management following its conservation, which emerged from the interpretation of two frameworks of indicators respectively developed by Volpiano (2011) and Phillips and Stein (2013): i) characteristics; ii) protection motives; iii) enhancement opportunities; iv) use and impacts and v) policy and regulations. To ensure such consistency, we organized the indicators into a framework consisting of these five categories. In this step, we aimed for an equal number of indicators in each category to prevent weighting issues when the indicators will be measured. Such concern is also thought to contribute to the comprehensiveness of the indicators and to appeal to a broader range of involved stakeholders. Consequently, in order to reach an equal number of indicators in each of the five categories, the list of identified key indicators is likely to be further shortened by applying two sub-selection criteria. First, we retained the most frequently used indicators in each category. Second, to discriminate between indicators with the same frequency of use, we chose one that was able to cover at least two of the environmental, sociocultural, and economic dimensions of sustainability. This was to account for the main characteristics of the indicators in the 25 studies, as it was found that most of the indicators covered at least two of the three pillars of sustainability. Because subjectivity is inevitable in the development of such a set of indicators, we discuss some of the limits of this approach in the concluding section.

## Results and discussion

The results of our analysis are twofold. First, we observe a lack of consensus concerning the number of indicators used the choice of indicators and their respective nature. Second, the selection criteria we proposed allows for identifying commonalities in the indicators proposed in the case studies, yet allowing necessary trade-offs between the reported dichotomies. Further details on these two main results are provided in the following sub-sections.

### Lack of consensus in the number, choice, and the Nature of indicators

First, a lack of consensus emerged concerning the number of the indicators used. In total, 117 indicators were identified, and each study used between 3 and 29 indicators at a time. Generally, cases that involved various stakeholders used a limited number of indicators. Conversely, studies that were theoretically or conceptually more oriented toward a specific goal, tended to use a larger number of indicators due to their concern with accuracy. In fact, the elaboration of indicators opposed academics and policy makers on the number of indicators to use. The former prefer using a set of numerous yet precise indicators in order to capture the complexity of the assessment process in a sustainability perspective. This often results in sets of indicators that are scientifically valid, but unpopular with policymakers because of their complexity. On the other hand, policy makers recognize a shorter list of indicators. Such consideration allows for the accessibility and comprehensiveness of indicators for a wide range of public and private users. The resulting indicators are often obtained by consensus among stakeholders at the expense of finding neutral, credible, and reproducible assessment tools. These problems exemplify the need for an alternative set of indicators that are both scientifically valid and operational.

Second, our analysis revealed a lack of consensus as to which indicators to use. In fact, given the specificity of each case study, indicators may vary considerably. However, a minimum consistency amongst the case studies was expected, considering the fact that all cases is about assessing heritage sustainability. Thus, 70% of the indicators only appeared in one study, 21% were used in two and 10% were used in three studies. Many indicators were not commonly used because they were very specific to a given building, site, or urban area. In fact, the number of indicators commonly used in more than four studies was quite low (7.6%). These few indicators are the ones whose pertinence and value have been mostly recognized and explained in the case studies.

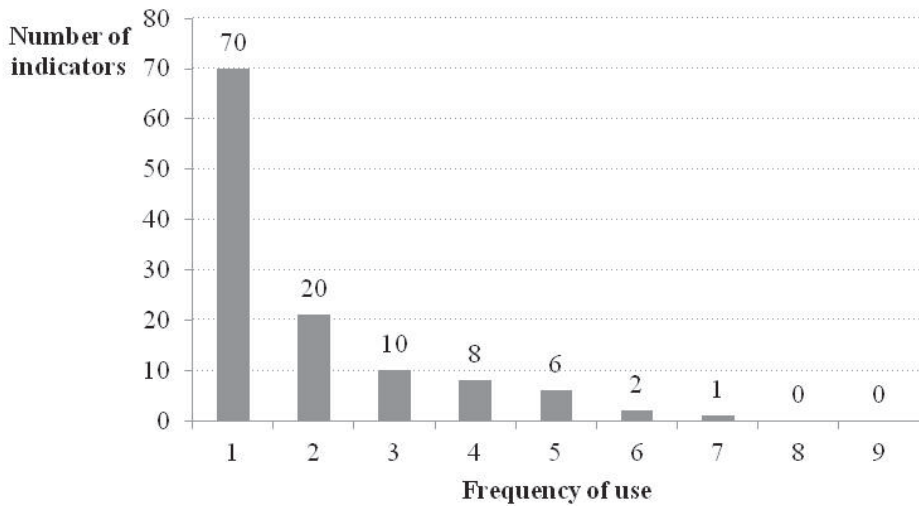


Figure 2. Frequency of use of the 117 indicators.

Additionally, we classified the indicators across the three integrated dimensions of SD. Although we recognize the subjective nature of such an approach, it provides a good idea of the nature and type of indicators that are generally used to assess sustainability in urban heritage conservation. Not surprisingly, the results show that most of the indicators across the case studies overlapped the environmental, sociocultural, and economic dimensions of SD. The results show that 34.74% of the indicators cover the overlapping of the three dimensions, 28.81% cover the overlapping of the sociocultural and the economic dimensions, and 8.47% cover the overlapping of the economic and the environmental dimensions. Such results show that multi-dimensional indicators, which can encompass two to three aspects of sustainability at once, must also be complemented with one-dimensional indicators (e.g. CO<sub>2</sub> emissions).

Furthermore, we made a key finding concerning indicator choice across the case studies. The choice of indicators opposed those with an anthropocentric vision of SD to those that associate sustainability to only environmental concerns. In the first case, authors like Volpiano (2011) emphasize the importance of the perception of visitors and the residents relatively to the impacts of the management of urban heritage on their quality of life. In the second case, environmental issues are placed at the center of sustainable heritage management (e.g., Liano and Jones, 2010). Sustainability is then reduced to only environmental interests (e.g., energy consumption). In both cases the conception of SD is insufficient, yet the gap of each vision can be completed through their integration. Additionally, qualitative indicators are often used within anthropocentric perspective of SD, while quantitative indicators are prominent within environmentalist perspective. Furthermore, we observed differences concerning scientific and policy-led approaches. Thus, as scientific approaches tend to use more indicators, while policy-led approaches often adopt less indicators to assess SD. These observations have implications in the development of a set of key indicators in sustainable heritage management. Thus, an optimal number of indicators are desirable to allow the trade-off between academic interests in analytical precision and the need of policy makers for practical and synthetic tools. It is also important to maximize the coverage of the different dimensions of sustainable heritage conservation as well as the environmental, sociocultural, and economic concerns of sustainability. Finally, quantitative and qualitative approaches are both relevant. Taking into account all these parameters resulted in the need to take a closer look at the common indicators.

### Common indicators

There are not only differences amongst the cases studies; there are also commonalities in the proposed indicators. Such indicators are identified using the selection strategy described in the previous section. The first criterion applied to the indicators is the frequency of use. Amongst the 117 indicators, 48 are common to at least two studies. They are listed in Table 2. Hence, these have the most recognized and demonstrated pertinence and value.

Table 2. Most frequently used indicators.

Indicators	Dimension(s)
<b>Characterization (17 indicators)</b>	
Cultural context	Social
Sense of place and identity	Social
Sensitivity to change	Social
Attachment to place	Social
CO2 emissions	Environment
Educational value or perceived	Soc-Econ
Historical value or perceived	Soc-Econ
Traditional value or perceived	Soc-Econ
Artistic, aesthetical and harmonious value or perceived	Soc-Econ
Symbolic value	Soc-Econ
Sense of ease and happiness	Soc-Econ
Risks situation	Soc-Econ-Env
Life safety	Soc-Econ-Env
Fragility	Soc-Econ-Env
Accessibility and location	Soc-Econ-Env
Building age	Soc-Econ-Env
Building fabrics, insulation and ability to adapt	Soc-Econ-Env
<b>Protection (9 indicators)</b>	
Public's sensitivity to change	Social
Cost-efficiency	Economic
Viability of recycling existing materials	Econ-Env
Resources and materials consumption reduction	Econ-Env
Authenticity	Soc-Econ
Integrity	Soc-Econ
Uniqueness	Soc-Econ
Spatial compatibility	Soc-Econ
Life span of existing building extension	Soc-Econ-Env
<b>Enhancement (8 indicators)</b>	
Maintenance capabilities	Economic
Opportunity for technical innovation	Economic
Environmental and ecological awareness	Environment
Opportunity for implementing low pollution and energy consumption infrastructure	Econ-Env
Buildings and sites conditions awareness	Soc-Econ
Promotion of actions for further knowledge of historical-cultural heritage	Soc-Econ
Improvement of living conditions and quality of life	Soc-Econ-Env
Benefit of re-use versus re-development	Soc-Econ-Env
<b>Use and Impacts (6 indicators)</b>	
Locals and visitors interests and involvement in conservation	Social
Enhancing the role of communities	Social
Business and functional use	Economic
Investments and tourists appeal	Economic
Potential environmental quality of the surroundings	Econ-Env
Increased urban density	Soc-Econ-Env
<b>Policy and Regulations (5 indicators)</b>	
Social cohesion and inclusiveness	Social
Public perceived consideration of their opinion	Social
Adequate protection and management system	Soc-Econ
Compliance with regulations and building codes	Soc-Econ
Stakeholder inclusiveness and partnership	Soc-Econ-Env

The next criterion consists of insuring that these 48 indicators covers adequately and are equally distributed across the five aspects of sustainable urban heritage management: i) characteristics; ii) protection drives; iii) enhancement opportunities; iv) use and impacts and v) policy, incentives, and regulations.

Thus, 17 indicators relate to the characteristics of heritage buildings and sites, nine cover the protection aspect, eight address the enhancement aspect, six relate to the use and impacts of the heritage buildings and sites, and five cover the policy and regulations matters.

For methodological purpose in future applications of these indicators, the list is shortened in order to reach an equal number of indicators across the five aspects of urban heritage conservation. First, we retain the five most frequently used indicators of each dimension. Five were picked because it is the maximum number of indicators that we could retain for the policy and regulation dimension, which has five indicators. Second, to choose between indicators that have the same frequency of use, we chose the ones

that are able to cover at least two of the environmental, sociocultural, and economic dimensions of sustainability. This was to respect the main characteristics of the indicators in the studies, which are mostly covering at least two of the three dimensions of sustainability. At the end of this exercise, 20 indicators were retained—they are listed in Table 3.

Table 3. Key indicators of sustainable urban heritage conservation.

Indicators	Covered Dimension	Quantitative vs Qualitative	Threshold
<b>Characterization</b>			
Attachment to place	Social	Qualitative	5
Traditional value or perceived	Social-Econ.	Qualitative	5
Artistic, aesthetical and harmonious value or perceived	Social-Econ.	Qualitative	6
Building fabrics, insulation and ability to adapt	Soc-Econ-Env.	Quantitative	5
<b>Protection</b>			
Viability of recycling existing materials	Econ.-Env.	Quantitative	4
Authenticity	Social-Econ.	Qualitative	7
Integrity	Social-Econ.	Qualitative	6
Spatial compatibility	Social-Econ.-Env.	Quant-Qual	5
<b>Enhancement</b>			
Environmental and ecological awareness	Env.	Quantitative	5
Promotion of actions for further knowledge of historical-cultural heritage	Social-Econ.	Qualitative	2
Improvement of living conditions and quality of life	Soc-Econ.-Env.	Qualitative	5
Benefit of re-use versus re-development	Soc-Econ.-Env.	Quant-Qual	3
<b>Use and Impacts</b>			
Locals and visitors interests and involvement to conservation	Social	Quant-Qual	4
Business and functional use	Econ.	Quantitative	3
Investments and tourists appeal	Econ.	Quantitative	2
Increase urban density	Soc-Econ.-Env.	Quantitative	2
<b>Policy and Regulations</b>			
Public perceived consideration of their opinion	Social	Qualitative	3
Adequate protection and management system	Social-Econ.	Qualitative	4
Compliance with regulations and building codes	Social-Econ.	Qualitative	4
Stakeholder inclusiveness and partnership	Soc-Econ.-Env.	Quant-Qual	2

Accordingly, they have four fundamental characteristics. First, they represent the commonly used indicators and whose relevance is recognized and supported by current literature. Thus, they were selected from specific case studies in both academic and policy scope on SD indicators in the field of heritage conservation. Second, they include fairly common environmental, sociocultural and economic aspects. Third, indicators used include seven quantitative indicators and thirteen qualitative ones. These two types of indicators necessary in the assessment of sustainable heritage conservation are well represented in our approach. Finally, they address the major rationale behind heritage management following the conservation process. In fact, they relate to: i) the characteristics of the buildings; ii) their protection; iii) their improvement; iv) their usage and impacts and v) the corresponding policies and regulations, with four indicators each.

## Conclusion

This paper builds on the existing literature on sustainability indicators to propose a set of key indicators. From the 117 different indicators we surveyed our approach lead to identify 20 key indicators that are reliable and recognized among academics and policymakers, and are also consistent with the diverse aspects of urban heritage management. Additionally, given the mixture of case studies analyzed, our approach allows obtaining key indicators that merge both quantitative and qualitative information as well as integrate economic, sociocultural, and environmental indicators. In this respect, the research we conducted is contributing to the existing literature in two ways: On the one hand, we exposed some features that divide the growing literature in sustainable heritage management assessment; and on the other hand, we proposed an approach to identify key indicators based on a rationale guided by the search for commonalities and trade-offs across the diversity of the case studies.

For policy makers and local authorities, the development of such indicators presents some advantages. First, it allows minimizing the risk of using indicators that are exclusive, which is often viewed as hiding political intentions (Rametsteiner et al., 2010). In addition, local authorities tend to use indicators for which statistics are already available. The adoption of key indicators will encourage them to put more effort into developing data collection methods to provide information that is of higher quality, current, and that allows comparison amongst existing practices and experiences. Such comparison will help support local authorities in sharing their experience and learning from others. For provincial and national

governments, such comparison allows for a more systematic diagnosis of urban heritage issues that affect local areas. As a result, it will become easier to develop general policy strategies.

Nonetheless, such an approach to sustainability indicators has its limits, especially because subjectivity is unavoidable in the choice of indicators, frameworks, and the methods of data analysis (Singh et al., 2009). First, the selection of key indicators is based on a non-exhaustive list of indicators that have been identified through a limited number of case studies. The indicators may not be exhaustive, but they are those of which the relevance has been recognized and advocated for in relevant case studies. Second, different frameworks (e.g., goal-oriented, resources-oriented, capital-oriented) exist through which to organize the indicators (McLaren, 1996). In this study, the choice of the framework was guided by the intention to ensure that the indicators were consistent with the main aspects to be covered when addressing urban heritage conservation. Third, as a result of the existence of so many methods of data analysis, it is important to ensure that the selection of a method is justified and transparent. This study did not include an empirical section where choosing a method appeared to be problematic. In fact, this study was only conceptual and sought to identify key indicators that could serve as an assessment tool for the SD of urban heritage conservation. Nonetheless, it provides a starting point for further research with an empirical basis through which indicators are computed and their usefulness and limits are further discussed.

The integration of SD principles within urban heritage management has only recently gained importance. In fact, municipal authorities and their partners have only begun to integrate the principles of SD in their practices and in their policies of territorial development within the last two decades. However, much information has now been gathered, policies have been implemented and realized, and planning has led to action. At this point, it is time to assess and evaluate empirically the effectiveness of these policies and initiatives that are aimed at SD and heritage conservation.

## References

- Agyekum-Mensah, G., Knight, A. & Coffey, C. (2012) "4Es and 4 Poles Model of Sustainability: Redefining Sustainability in the Built Environment". *Structural Survey*, Vol. 30 No. 5, pp. 426-442.
- Berthold, E. & Mercier, G. (in press) (n.d.) "La spéculation immobilière : moteur méconnu de la patrimonialisation. Quelques réflexions sur le cas du Vieux-Québec". In L. K. Morisset & L. Noppen (ed.), *S'approprier la ville. Le devenir-ensemble, du patrimoine urbain aux paysages culturels*. Quebec: Presses de l'Université du Québec.
- Berthold, E. (2012) *Patrimoine, culture et récit. L'île d'Orléans et la place Royale de Québec*. Quebec: Les Presses de l'Université Laval. Collection «Monde culturel».
- Boulanger, P. M. (2004) "Les indicateurs du développement durable : un défi scientifique, un enjeu démocratique". Les séminaires de l'Iddri, No. 2, pp. 1-24.
- Bouni, C. (1998) "L'enjeu des indicateurs de développement durable. Mobiliser des besoins pour concrétiser des principes". *Nature, Sciences et Société*, Vol. 6 No. 3, pp. 18-26.
- Boutaud, A. (2004) "Le développement durable : penser le changement ou changer le pansement?". Unpublished thesis (PhD). Lyon, France: University of Jean Monnet.
- Brooks, E., Law, A. & Lingjiang, H. A. (2014) "Comparative Study on Historic Building Regeneration Between the UK and China: A Perspective of Energy Efficiency". *Urban Planning International*, Vol. 2 No. 139, pp. 29-35.
- Bullen, P. A. & Love, P. E. D. (2011) "Adaptive Reuse of Heritage Buildings". *Structural Survey*, Vol. 29 No. 5, pp. 411-421.
- Connelly, S. (2007) "Mapping Sustainable Development as a Contested Concept", *Local Environment*, Vol. 12 No. 3, pp. 259-278.
- Dalmas, L., Geronimi, V., Noël, J. F. & Sang, J. T. K. (2012) "Methods for the Economic Valuation of Urban Heritage: a Sustainability-Based Approach", [workin paper]. Centre d'études sur la mondialisation, les conflits, les territoires et les vulnérabilités, January.
- De Silva, M. & Henderson, J. (2011) "Sustainability in Conservation Practice". *Journal of the Institute of Conservation*, Vol. 34 No. 1, pp. 5-15.
- Ness, B., Urbel-Piirsalu, E., Anderberg, S. & Olsson, L. (2007) "Categorising Tools for Sustainability Assessment". *Ecological Economics*, Vol. 60, pp. 498-508.
- Rajaonson, J., Tanquay, G. A. (2009) "Le développement durable au Québec: un classement des 25 plus grandes municipalités". *Canadian Journal of Urban Research*, Vol. 18 No. 2, pp. 40-77.
- Drouin, M. (2005) *Le combat du patrimoine à Montréal (1973-2003)*. Quebec: Les Presses de l'Université du Québec.
- Elsorady, D. A. (2012) "Heritage conservation in Rosetta (Rashid): A tool for community improvement and development". *Cities*, Vol. 29 No. 6, pp. 379-388.
- Faddy, J. A. (2010) "The impact of Sustainability Rating Tools and Legislation on the Conservation of the 20<sup>th</sup> Century Urban Fabric in NSW, Australia", In S. Lira, R. Amoêda & C. Pinheiro (ed.) *Heritage and Sustainable Development: Proceedings of the 2<sup>nd</sup> ICHSD*, Green Lines Institute, Barcelos, pp. 395-404.

- Farhanah, N. & Mohamed, E. (2012) "Public Perception: Heritage Building Conservation in Kuala". *Procedia - Social and Behavioral Sciences* No. 50, pp. 271-279.
- Garat, I., Gravari-Barbas, M. & Veschambre, V. (2005) "Préservation du patrimoine bâti et développement durable: une tautologie? Les cas de Nantes et Angers". *Développement durable et territoires. Economie, géographie, politique, droit, sociologie*, (Dossier 4).
- Giovannoni, G. (1998) *L'urbanisme face aux villes anciennes*. Paris: Seuil.
- Graham, B., Ashworth, G. J. & Tunbridge, J. E. (2000). *A Geography of Heritage: Power, Culture and Economy*. London/New York: Arnold/Oxford University Press.
- Greffé, X. (2003) *La valorisation économique du patrimoine*, Ministère de la Culture et de la Communication, Paris.
- Judson, P. & Iyer-Raniga, U. (2010) "Reinterpreting the Value of Built Heritage for Sustainable Development". In S. Lira, R. Amoêda & C. Pinheiro (ed.) *Heritage and Sustainable Development: Proceedings of the 2<sup>nd</sup> ICHSD*, Green Lines Institute, Barcelos, pp. 535-545.
- Landorf, C. (2009) "Managing for sustainable tourism: a review of six cultural World Heritage Sites". *Journal of Sustainable Tourism*, Vol. 17 No. 1, pp. 53-70.
- Liao, H. & Jones, K. (2010) "Adaptation of the Historic Built Environment to Climate Change". In S. Lira, R. Amoêda & C. Pinheiro (ed.) *Heritage and Sustainable Development: Proceedings of the 2<sup>nd</sup> ICHSD*, Green Lines Institute, Barcelos, pp. 547-556.
- Lorenzo, D. & Lützkendorf, T. (2011) "Sustainability and Property Valuation: Systematisation of Existing Approaches and Recommendations for Future Action". *Journal of Property Investment and Finance*, Vol. 29 No. 6, pp. 644-676.
- Love, P. E. D. & Bullen, P. A. (2009) "Toward the Sustainable Adaptation of Existing Facilities". *Facilities* Vol. 27 No. 9/10, pp. 357-367.
- Maclaren, V. W. (1996) *Developing Indicators of Urban Sustainability: A Focus on the Canadian Experience*. Toronto: Intergovernmental Committee on Urban and Regional Research Press.
- Mendes Zanchetti, S. & Ferreira Hidaka, L. T. (2012) "Measuring Urban Heritage Conservation: Theory and Structure (part 2)". *Journal of Cultural Heritage Management and Sustainable Development*, Vol. 2 No. 1, pp. 15-26.
- Peano, A., Bottero, M. & Cassatella, C. (2011) "Proposal for a Set of Indicators". In C. Cassatella, and A. Peano (ed.) *Landscape Indicators*, Springer, pp. 193-215.
- Pendlebury, J., Short, M. & While, A. (2009) "Urban World Heritage Sites and the Problem of Authenticity". *Cities* Vol. 26 No. 6, pp. 349-358.
- Phillips, R. G. & Stein, J. M. (2013) "An Indicator Framework for Linking Historic Preservation and Community Economic Development". *Social Indicators Research* No. 113, pp. 1-15.
- Pons, A. & Pereira Roders, A. P. (2011) "The Sustainability of Management Practices in the Old City of Salamanca". *Facilities*, Vol. 29 No. 7/8, pp. 326-338.
- Rocher, G. (2003) *Introduction à la sociologie générale*. Lassale: HMH.
- Roders, A. P. & Van Oers, R. (2014) "Wedding cultural heritage and sustainable development: three years after". *Journal of Cultural Heritage Management and Sustainable Development*, Vol. 4 No. 1, pp. 2-15.
- Rosado Correla, M. R. A., Walliman, N. S. R. (2012) "Defining Criteria for Intervention in Earthen Built Heritage Conservation". *International Journal of Architectural Heritage: Conservation, Analysis and Restoration*. [doi:10.1080/15583058.2012.704478].
- Singh, R. K., Murty, H. R., Gupta, S. K. & Dikshit, A. K. (2009) An Overview of Sustainability Assessment Methodologies. *Ecological Indicators*, No. 9, pp. 189-212.
- Su, B. (2010) "Dense Housing and Urban Sustainable Development". In C.A. Brebbia, S. Hernandez & E. Tiezzi (ed.) *The Sustainable City VI: Urban Regeneration and Sustainability*, WIT Press, pp. 443-454.
- Stubbs, M. (2004) "Heritage-sustainability: developing a methodology for the sustainable appraisal of the historic environment". *Planning Practice and Research*, Vol. 19 No. 3, pp. 285-305.
- Suntikul, W. & Jachna, T. (2013) "Contestation and Negotiation of Heritage Conservation in Luang Prabang, Laos". *Tourism Management*, No. 38, pp. 57-68.
- Tanguay, G. A., Rajaonson, J. & Therrien, M. C. (2013) "Sustainable Tourism Indicators: Selection Criteria for Policy Implementation and Scientific Recognition". *Journal of Sustainable Tourism*, Vol. 21 No. 1, pp. 1-18.
- Tweed, C. & Sutherland, M. (2007) "Built cultural heritage and sustainable urban development". *Landscape and Urban Planning*, Vol. 83 No. 1, pp. 62-69.
- Vehbi, B. O. & Hoşkara, Ş. Ö. (2009) "A model for measuring the sustainability level of historic urban quarters". *European Planning Studies*, Vol. 17 No. 5, pp. 715-739.
- Volpiano, M. (2011) "Indicators for the Assessment of Historic Landscape Features". In C. Cassatella & A. Peano (ed.) *Landscape Indicators*, Springer, pp. 77-104.
- Wang, H. J. & Zeng, Z. T. (2010) "A Multi-objective Decision-making Process for Reuse Selection of Historic Buildings". *Expert Systems with Applications*, Vol. 37 No. 2, pp. 1241-1249.

- WCED (World Commission on Environment and Development) (1990) *Our Common Future*. Oxford: Oxford University Press.
- Wong, J. P. C., Iyer-Raniga, U. & Sivaraman, D. (2010) "Energy Efficiency and Environmental Impacts of Buildings with Heritage Values in Australia". In S. Lira, R. Amoêda & C. Pinheiro (ed.) *Heritage and Sustainable Development: Proceedings of the 2<sup>nd</sup> ICHSD*, Green Lines Institute, Barcelos, pp. 661-670.
- WTO (World Tourism Organization) (2004) *Indicators of Sustainable Development for tourism destinations: A guidebook*. Madrid: UN-WTO.
- Yung, E. H. K. & Chan, E. H. W. (2012) "Implementation Challenges to the Adaptive Reuse of Heritage Buildings: Towards the Goals of Sustainable, Low Carbon Cities". *Habitat International*, Vol. 36 No. 3, pp. 352-361.



ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable

Development Vol. 4, No. 1, 2015, pp. 35-42

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## Recollecting the past in historic mines: Guido and the Big Pit

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This paper draws on a comparative case study of the Big Pit National Coal Museum in Blaenavon, Wales and the Historic 'Guido' Coal Mine in Zabrze, Poland. I consider the role which mining museums play in the process of memory-work in terms of the recollection of past industry and also in the post-industrial restructuring process of mining regions. By discussing models of museological theory applied to the sites, I conceptualize mining museums as a potential resource where the industrial past meets its future and argue that the heritage interpretation and communication practice of these historic mines is remarkably people-based and therefore mining museums have a unique character in the contemporary 'museumscape' and 'memoryscape'.

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### Introduction

In the Big Pit: National Coal Museum in South Wales I met an underground tour guide who was passionately explaining the role of mining lamps to a group of visitors. Before each shift, miners had to collect a safety lamp from the Lamp Room in exchange for a check, a small metal object with an inscription of the colliery's name and worker's number. In the case of an accident, the checks identified which miners were still underground.

The guide was presenting his own collection of lamp checks; over recent years these objects have become collectable and are distributed through hobbyist networks and online auctions. As of 17 March 2010, the National Mining Memorabilia Association listed on its website the most popular memorabilia from the industry: mining lamps; postcards; commemorative china and glassware; blasting and rescue equipment; tools; books, prints, photographs and documents; miner's artwork; and additionally, colliery tokens, medals, awards, checks, tallies and badges (which are related to union membership, mining schools and colleges, and rescue services).

When asked about his interest in collecting, the guide, himself an ex-miner, responded that lamp checks symbolised hard work and a lifetime's dedication to the mine. In his opinion, these objects represented the identities of individuals who had made the pits their second home, as well as the families and communities that were 'built' on coal. These collectables also evoked memories of dangerous shifts, where the gas-detecting and light-providing lamp proved to be a priceless 'treasure' which saved many lives. Lastly, the guide expressed a sense of nostalgia; after the Big Pit closed in 1982 the token symbolised for him the loss of an industrial lifestyle.

Such private collecting practices, as well as the development of public sites, have contributed to the growth of European industrial heritage. This article will consider two coal mine museums – Guido Mine located in Zabrze, Poland and the Big Pit - in order to investigate the ways in which historic mines are constructed as museums, including meaning-making processes in the mines. I argue that just as mining memorabilia links significantly to collectors sense of identity, mining heritage sites likewise relate strongly to a collective sense of belonging built on a lost industry.

### Memory and community: museological perspectives

Before introducing Guido and Bit Pit it is important to consider museological ideas and theories are applicable to the development of mining heritage. Of particular pertinence here is the way that memory has been reconceptualised within museum studies including new modes of curatorship, collecting practices, and techniques of display and communication with the public.

According to Elsner, 'the museum is a kind of entombment, a display of once lived activity' (1994: 155) created through the act of collecting. For Elsner, the desire to collect material remains conjoins the past with the present and heritage becomes a mechanism of nostalgic 'entombment of change'. The final stage of the process is the constitution of a museum - mausoleum where the change process is 'frozen'. This creates a stable perspective from which to look back at past activity (1994: 6) and, in consequence, form a repository of public memory. Misztal argues that as a meaning-making device, collective memory has an influence on the present by reproducing identities, as well as social and political orders. Often framed around places and objects, memory can, of course, be mediated institutionally, mostly through models of education, legislation, museums and mass media (2007: 382).

Aside from revisiting the topic of memory critical museology has revealed over the last two decades that the traditional model of the modern museum was a disciplinary institution with encyclopaedic claims for the classification of culture, knowledge, artefacts and social groups (Bennett, 1995; Cohn, 1996; Hooper-Greenhill, 1992; Pomian, 1990; Sandell, 2007; Vergo, 1989). Moreover, post-colonial critiques of heritage – drawing largely from the fields of social anthropology and material culture studies – have highlighted the unequal nature of identity representation in museums. This includes low public participation in heritage interpretation, a lack of source community 'voices', and the problematic character of curatorial authorship (Ames, 1991; Anderson, 2003; Clifford, 1999; Henare, 2005; Karp and Lavine, 1991; Henare, 2005). As such museums have been criticised as institutions of power which project a politicised model of the past. The main implication of such museology debates was the need to re-examine the social role of the institution. Beyond the didactic model of knowledge transmission, museum practitioners were called on to incorporate negotiated interpretation and to embrace aesthetic and political issues related to accumulated material cultures (Karp, 2006; Stam, 2005; Watson, 2007). At the same time, they were required to re-evaluate institutional authority and their relationship to audiences and source communities, thereby facilitating co-ownership of knowledge, community-based control mechanisms and social advocacy (Heijnen, 2010; Janes and Conaty, 2005; Kreps, 2003; Sandell, 1998; Watson, 2007).

One of the responses to the challenge of developing a 'new museology' was the concept of the ecomuseum: a community museology proposal that originated in France in the 1970s. Following an 'ecological approach' the ecomuseum was conceptualised as an institutional organism that performs complex functions, beyond collecting and stewarding heritage. According to this approach, museums should evoke a community-based 'sense of place' by extending beyond the traditional boundaries of the institution to create an integrated form of heritage protection: a thread that holds together a number of sites and aspects of local heritage including: the conservation of natural resources; the transmission of intangible heritage and cultural memory; the protection of buildings; and celebration of the production of local material culture (Davis, 2008: 404). Managed by the local population, ecomuseums in effect become 'a community-driven museum or heritage project that aids sustainable development' (Davis, 2007:199). In short, the ecomuseum model aims to re-imagine the position of the institution by introducing notions of dialogue, cooperation and interpretive feedback from surrounding communities.

According to Hooper-Greenhill, museums need to modify their agenda and relationships with various stakeholders and move away from the formula of the historical museum (a socially divisive institution) towards a 'post museum' (one that acknowledges various interpretive communities). With a semiotic focus in mind, Hooper-Greenhill adopted the notion of the 'meaning-making community', arguing that subjects form interpretative communities sharing meaning-making strategies, common frameworks of knowledge, intellectual skill, and understanding. In order to accommodate a wide range of interpretative communities, exhibitions should be a medium within a broader communication mix, to be constructed in relation to the needs of diverse audience practices (2001: 30).

Within the post-museum model interpretation techniques should incorporate various perspectives, promoting a model of fragmented and multi-vocal knowledge, representing surrounding views, experiences and values. In this sense, as the key feature of the post-museum is the reconstruction of the institution through more direct links with meaning-making communities. Post-museums therefore focus on the representation of diverse views of the material culture on display and the performance of educational and conciliatory roles. The interactive and experiential characteristics of the post-museum bring to the fore the idea of 'tailored', audience-focused practice with a strong ethical stance, responsiveness and multi-vocality.

Meanwhile, for Martin, the act of private collecting is essential to our sense of self (1994: 66). Indeed, it is the arrangement of personal collections that:

... enables us to partially or fully construct an identity. Objects and material thus used can be said to constitute a kind of material language. The narrative they relate depends on what we want them to say to us and others (Martin, 1994: 66).

In contrast, Martin suggests, museum-based collecting tends to be dispassionate and embedded in policies of display, conservation and collection management, resulting in the taxonomical and chronicle-like setup of the collection. In Martin's view, for the museum to reflect a wider understanding of the material world, the institution needs to reintegrate with private collecting practices including collector markets, public shows and auction houses. As 'popular' and private collections mirror the identities' of their creators, bringing them into the museum sector also has the potential to bring new relevance to museum interpretation thereby renewing the relationship between institutions and individuals. In Martin's model the museum would therefore carry the responsibility for generating a formal platform of exchange of information. At the same time, private collectors could play the role of 'a complementary collecting agency for the museum' (1994: 128). Reconsidering the relationship between the institution and surrounding 'identities' would then result in a fuller representation of views and 'voices' related to the subjects covered by the institution.

In summary, the idea of ecomuseums remodelled the logic of the museum's relationship with the surrounding population by assigning various stakeholders with a managerial role and bringing together different spheres of activity into the museum domain to reflect the local 'sense of place'. Secondly, the concept of the post-museum reconsidered curatorial models of authority and advocated a problematized, dynamic, multi-vocal model for site interpretation (Hooper-Greenhill, 2007). Finally, following Martin's reflections, a reconsideration of the role of non-professional actors and practices involved in collecting leads to a more relevant institution that represents a 'popular' perspective and more nuanced interpretation of the material culture presented in museums (1994).

In the rest of this chapter I will draw on the ecomuseum, post-museum and collector-linked museum models in order to demonstrate how interpretation is structured in Guido and Big Pit and the different ways in which these two institutions try to make the industrial past 'matter' to their visitors.

## **Historic Guido Coal Mine, Zabrze, Poland**

### **The setting and historical context**

Established in 1855, Historic Guido Coal Mine was a nineteenth century development led by Prussian industrial magnates. Named after its founder, Prince Guido Henckel von Donnersmarck (1830-1916), the colliery was established to provide energy for a mill serving the growing city of Zabrze, therefore a significant element of the local urbanisation process. As a result of a takeover by the Prussian Mining Treasury in 1889, the mine was systematically modernised and in 1904 connected with the newly built Delbrueck Mine. In the inter-war period, amalgamation with the Berlin-based mining company Preussag Concern resulted in technological innovations in the mine's underground transport and tunnel support, transforming Guido into a draining mine. Post-war territorial changes - the incorporation of Zabrze into Poland - led to further structural changes within the policy of nationalisation under communist rule.

From 1967, after the exploitation of the coalfield, the mine operated as a testing site for mining machinery. In 1982, the state authorities decided that Guido should become a skansen (open air museum) of coal mining, offering a historical overview of technological process by means of underground tours. In the 1990s, the local government decided to disassemble the museum exhibitions, leading to public protest and a campaign to place Guido on the Statutory List of Buildings of Special Architectural or Historic Interest. Czwartynska has noted a strong regional identification with mining (2008: 85) and the significance of this attachment was evident in the form of local campaigns. Following multiple interventions from residents and organisations the historic mine reopened in 2007 as a listed cultural institution; illustrating how mining sites can capitalise on local connections and facilitate community control of local resources (Czwartynska, 2008: 85).

After reopening Guido became a key player in the cultural and social scene of the city; a hybrid of museum and community centre with a strong agenda of dynamic cultural programmes including conferences, folk festivals, trade union meetings, traditional mining games tournaments, and musical shows. Emphasis was placed on 'feedback' from residents' and the cultivation of miners' traditions and consequently museum policy shifted to partnership building, local networking, urban regeneration and the reconstruction of the city's public image.

Among Polish miners, Malgorzata Czwartynska suggested, there is a strong regional identification with mining (Czwartynska, 2008: 85). The significance of this attachment was evident when the museum faced closure. For Czwartynska, the reopening of Guido Mine as a result of a local campaign illustrates how mining sites can capitalise on local connections and facilitates the community to take control of its resources. The mine became a hybrid of museum and community centre with a strong agenda of dynamic cultural programmes such as those described above.

### **Collections and resources**

While the majority of the collections within the new museum came from the former site, a number of historical items, documents and archival material, were donated by the Zabrze Coal Mining Museum. There is a considerable collection of machinery, from the period 1967-1982, when Guido operated as a research unit. In addition, miners and their families donated a significant portion of personal objects, archival photos and uniforms.

### **The tour**

A key part of a visit to Guido is the underground tour where exhibition spaces are spread over two levels: Level 170 (170 metres underground) tells the story of nineteenth century coal production and the history of the mining industry whilst Level 320 contains a reconstruction of a miner's workplace from 1970s until now. Former miners act as guides and interpreters in the galleries and lead the tours on both levels.

Equipped with mining lamps and security masks, visitors are transported underground to the section of Level 170 dedicated to historical interpretation. After displays about the prehistory and formation of the Upper Silesian coalfield, illustrated by geological artefacts, the exhibition continues in a narrow corridor with the story of mining in the local area. This area details the construction of the first collieries in Silesia, including technological developments, and an overview of the impact of socio-political changes on the industry and local population.

The tour then leads to the dimly lit, restored underground stables where the theme of working animals in the collieries is explored. Here, the guide's interpretation was based on historical data, miners' life stories, legends and characters from Polish literature. The next part of the display is the Commemorative Gallery where personal objects of the miners and their families serve to provide an overview of miners' engagements with national and regional politics. Through interpretation panels, models, documents, archival photographs, personal portraits and memorabilia, this display focuses on the involvement of miners in the World Wars, trade unionism, political repression and participation in the strikes during Martial Law in 1981. As a former employee of the mine, the guide brought his own memories of the 1989 anti-communist revolution. He evoked the atmosphere and mood among the workers at the time and told stories of his family's experience of the Second World War: illustrating the complexity of Polish-German relations in the mines during this period.

The tour continues through a dark roadway: this part of the tour was heavily reliant on the guide's explanations of tunnelling techniques, underground transportation and extraction methods. From the roadway, visitors are then led into the Pump Room, a space to reflect on the occupational hazards of the industry, as the guide mixed technical descriptions of the displays with stories of mining explosions and accidents.

On leaving the Pump Room, the tour continues down a dusty corridor with a display of historical collections of mining lamps, and blasting and tunnelling tools. There is an atmospheric simulation of blasting with recorded voices of miners, accompanied by the guide's explanation of the process. This simulation serves to make visitors aware of the noise levels involved in underground work. From the blasting display, the group is taken to a calmer location, an underground chapel built by miners. Silesian miners, believed (Catholic) Saint Barbara (Barbarka) to be their protector from occupational hazards, and hence rich, local folklore developed around her relationship with mining in Poland. Most operating Polish collieries have similar underground chapels and the 4 of December, St. Barbara Day, is still the most significant celebration of the industry in the country. Along with Saint Barbara, the mine was also guarded by the 'Treasurer' (Skarbnik). This bearded spirit, shown on display, was an ambivalent character that helped miners in need and caused trouble for those who did not do their work properly. According to the guide, low-rise corridors in the mines were 'created' by the 'Treasurer' for miners to bow in front of the spirit and remember the forces of nature that made mining possible. The Level 170 tour finishes with a reflexive account on the sudden death of 'men' and the slow 'death of the industry'

On entering Level 320, visitors descend down a dark shaft into the tunnel, which simulates conditions within a contemporary, operating mine. Realistic displays of machinery and tools are organised as a set of reconstructed scenes of the shift, supplemented with models, short demonstrations of operating machinery, oral history; and the guide's anecdotal experiences. Finally, the guide led visitors to a large shaft with a photo gallery of European mining heritage sites where he narrated the story of industrial change across the continent.

### **Big Pit: National Coal Museum, Blaenavon, South Wales**

#### **The setting and historical context**

Big Pit colliery, sunk around 1860 to support the local ironworks, was part of a complex of mines in the Rhondda Valley, an important coal mining area in South Wales. By 1908, with increasing coal production, the workforce of the colliery had risen to 1,145 workers with production focused on the extraction of gas, 'house' and steam coal. On nationalisation, in 1947, the colliery underwent a process of mechanisation and

in 1973 was renamed Bleanavon New Mine with 500 employees. On 2 February 1980 - at the time the oldest working colliery in Wales - Big Pit closed due to the exhaustion of the coal reserves. Three years later, the mine reopened as a living history museum; becoming a monument to the industrial past. In 2000, the valley surrounding Big Pit, including the town of Blaenavon, was designated a UNESCO World Heritage Site. In 2001 the Big Pit was incorporated into the structure of the National Museum Wales and two years later redeveloped its existing displays and created new Mining Galleries. In 2003, during redevelopment of the museum, the local community was significantly involved in collection policy through the development of built interpretive resources and the donation of workers' memorabilia, family photographs, amateur artworks, personal objects and oral histories.

### **Collections and resources**

Big Pit's collections consist of tools and elements of mechanical equipment from the period of operation and the collections of the National Museums Wales obtained from other pits and residents of the mining valleys. Moreover, collections are being developed by curator's field trips in the region and through private donations, mainly in the areas of mine worker-related art, the heraldry of strike badges and photography.

### **The tour**

Big Pit's displays are structured in four parts: the historic buildings around the site; the underground tour; exhibitions located in the Pithead Baths; interactive mining galleries; and the historic colliery buildings. Around the open space surrounding the building complex, one can also find single objects, for example, a historical water balance and a trailer from the 1980s pickets. All explanatory panels of the buildings and around the site are bilingual, in English and Welsh.

Again, the underground tour is a key attraction. According to Peter Walker, Keeper of the Big Pit, the goal is to provide, 'personal interpretation in an authentic setting ... Primarily the underground tour is based on their (the guides) own personal experiences...' (pers. comm., 9 July 2010). However, each tour's interpretive focus is tailored to the visitors' level of knowledge and preferences. For instance, during a school group visit, the guide framed the tour around the historical content, adding oriented stories towards the children and anecdotes about the miner's day at work, child and animal labour. With a group of mining engineers, the same guide explored in detail the technological particularities of local production processes and unionism in South Wales. Visitors also, of course, provide feedback and information, and the tour has been instrumental in guiding site interpretation (above and below ground) as Peter Walker explained:

(We) Learned the lessons from that (the tour) and tried to apply them to the rest of the site (...). This site is about people, about people who worked in the mining industry and lived in these mining communities. The first layer is the people. People are the message, but also the media. (pers. comm. 9 July 2010).

According to Walker, interpretation of the mine developed in relation to the tour, as the interpreters:

Learned the lessons from that and tried to apply them to the rest of the site (...). This site is about people, about people who worked in the mining industry and lived in these mining communities. The first layer is the people. People are the message, but also the media. (Peter Walker, Interviewed by the author on the 9th July 2010).

During the tour, visitors are equipped with a helmet, lamp, battery and self-rescuer (a portable respiratory device which protects against smoke and carbon monoxide inhalation) used by the Welsh miners. In a similar way to Guido, visitors descend to the coalface to explore a section of historic underground workings, stables and machinery rooms, including haulage engines, and other objects and machinery. Another part of the tour takes place in the Mining Gallery, the newest part of the mine interpretation. Here, an audio-visual display narrated by a miner (with characteristic Welsh accent) presents a film on the history of Big Pit and leads visitors on a virtual tour of the galleries. Multimedia is also used within the galleries themselves to present modern coal production, including tunnelling techniques, the use of explosives, the operations of transport belts; and other aspects of a working-day in a mine. The galleries offer a multi-sensory mixed-media simulation, using sound and light to generate a better understanding of the processes involved in coal extraction as well as a more realistic 'sense' of the working conditions.

The last element of the Big Pit tour is a visit to Pithead Baths. Its eastern side consists of reconstructed medical rooms with an atmospheric voice recording of the memories of a former nurse. The

rest of the building is adapted as exhibition space and divided into four exhibition areas, focusing on the following themes:

'The Mineworker from 1850 to 2000' presents uniforms, equipment and personal objects, supplemented by portraits and memories of the workers. This room is divided into two parts: photographs of former miners and profession-based descriptions are presented in metal lockers adapted for display whilst 'People of the Coal' illustrates the daily life of the mining community, including family life, community structure, education system and the role of Mining Federation. This section also explores other social issues such as health, occupational hazards, child labour and the role of women, provoking a sense of involvement of the whole community in the mining process and its effects. Within the display, personal possessions are displayed with boutique-style lighting accompanied by voices of mining families.

The 'Story of Coal' covers a number of themes: local geology; the uses of coal; surveying; the construction of the mine; and underground transport and lighting. 'Heroes or Villains' presents public perceptions of mining through the juxtaposition of positive and negative images of miners. The ambivalent understandings of the industry are presented by a thought-provoking composition of information on miners' heroism (through material on disasters and rescue actions), juxtaposed with negative public views about strikes and riots. In this composition, the interpretive material ranges from rescue services equipment, press excerpts, awards, picket objects to documentary film. The last display cases in this section illustrate historical change in relation to three main themes - nationalisation, the formation of Federations, and the process of de-industrialisation - discussing the causes and consequences of post-industrial transformation and reflecting on the ambivalent character of the resulting changes. These themes are explored through an accumulation of mining memorabilia and quotations on the closure of the Welsh pits. This section, accompanied by emotive labels, tells a story of crisis, local and national political agendas, economic catastrophe, differing historical narratives, and the impact of change on the local community.

### **Discussion: interpreting mining histories at Guido and Bit Pit**

Both Guido and Big Pit focused their interpretation on underground tours led by guides who have first-hand experience in mining. This strategy, coupling expertise with a living-history style of presentation, creates a more personalised form of heritage interpretation. Through conversational, informal, and the often humorous discussions below ground engaging, reflective and often complex messages about miners' lives and the reality of work (including social dimensions and historical transformations) are communicated.

### **The ecomuseum model**

The positioning of former miners at the centre of interpretation who narrate their 'own' past activities whilst moving between memory and history and the use of 'operating collections' in the workplace setting, mirrors key features of the ecomuseum model. Both historic mines advocated the notion of the interpretive 'sense of place', evoking the ecomuseum's philosophy and priorities (Davis, 2005: 372). For instance, the flexible reactivation of work routines for educational purposes and the provision of space for the facilitation of mining traditions builds on a model of the museum that brings together 'elements that make places special' (Davis, 2005: 373). Furthermore, as both sites are being managed and curated by former miners, they relate strongly to the ecomuseum agenda of community empowerment and holistic site interpretation policy based on local partnerships (Davis, 1999: 228).

### **The post-museum**

At Guido and Big Pit tour guides worked dynamically with the content of the tour, acknowledging the demographic profile and preferences of different visitors. This audience-based interpretation and on-going re-contextualisation of content reflects the postulate of institutional responsibility towards various types of public. By working with audience references, knowledge and intellectual skills, the guides realised the concept of the post-museum: to actively interpret and dynamically respond to the needs of diverse communities (Hooper-Greenhill, 1999: 10). In relying heavily on oral history and conversations with visitors, the post-museum's idea of incorporating various perspectives and multi-voicedness found its realisation. At both mines there was minimal labelling; reducing the curator's authority in shaping visitors' understanding of the displays and encouraging forms of interactive meaning-making and individual and guide-led evaluations of the objects presented.

In both museums, visitor engagement was linked to a strong focus on 'content responsibility' (ref), as interpretation was managed, designed and executed by the miners themselves, thereby equipping the community with a curatorial authority. Such a strategy relates to the post-museum's reconceptualisation of

knowledge and communication management. For example, in Big Pit tours were designed to communicate local stories; allowing the public to meet and engage with individuals who represent the living history of the industry. In the Pithead Bath galleries, ambivalence and 'controversy' became key communicative devices. Indeed, the coexistence of opposite views was presented through a range of interpretive media, including extensive use of direct quotations, oral history recordings, documentary film and personal objects from the popular collections of mining memorabilia. Through the thought-provoking instrument of 'controversy interpretation' I would argue that the Big Pit exemplifies a strong post-museum agenda in the presentation of a diversity of opinions, values and experiences.

Throughout the Big Pit tour, in both audio-visual and textual forms of information, oral history and direct quotation was frequently employed. This served two purposes, to present the operational use of dialect and to illustrate the significance of storytelling and lived history, which in turn contributed to the representation of local perspectives on mining. In this sense, the structure of the tour appeared as a composition of fragmented meanings; combining nostalgic 'pride in the mining past' with problematic issues such as vanishing employment, concerns of industrial pollution and the tragedies wrought by occupational hazards. At both sites, controversial themes were addressed by the use of personal objects; from mining tools and, memorabilia, to objects used in the 1980s pickets.

According to Paul Martin, museums need to foster symbiotic relationships with private collectors and acknowledge their role as a complementary collecting agency (Martin, 1994: 128).

Collecting (...) is intrinsic to our sense of self. How we arrange what we collect enables us to partially or fully construct an identity. Objects and material thus used can be said to constitute a kind of material language. The narrative they relate depends on what we want them to say to us and others, in which sense the collector herself or himself becomes the centre of the collection (Martin, 1994: 66).

By incorporating a large number of personal artefacts into the displays, both Guido and Big Pit acted as formal platforms of exchange of information fostering museum – collector networks. That strategy generated a wider framework for communication of meanings associated with local senses of value of the material culture associated with mining and allowed an open-ended interpretation inclusive towards private networks of mining memorabilia.

In summary, the core features of the interpretation strategies at both museums include key characteristics of the ecomuseum, post-museum and collector-related institutional models. Ecomuseum features can be illustrated by the grass – roots, miner-based 'sense of place' within interpretation and site management. Key characteristics of the post-museum model can be identified in the ways that both museums addressed ambivalence in the interpretive content and the use of open means of communication with audiences. One of the key features of both Blaenavon and Zabrze sites was interpretative openness towards the complexities of microstories, controversy related to industrial and social history and nuances of local and 'personal' evaluations of mining material culture achieved through the incorporation of objects obtained from local residents and personal collectors. By mirroring the postulates of museological theory, both mines have enabled their communities to become significant actors in heritage management and curatorship; defining the practice of museum communication and exercising autonomy over the interpretation of their post-industrial legacy and local history.

### **Conclusion: recollecting the past and memory – work in mining heritage practice**

By collecting memorabilia of their lost industry, these mining communities reassemble their lost 'sense of place' and reinvest objects with new understandings and sentiments. According to Buchli and Lucas, the process of such 'archaeological excavations' in contemporary material culture, opens up hidden elements of the present, on what constitutes as one's position in the world. Specifically, with the unique temporary proximity and 'ordinary' character of industrial heritage, industrial archaeology becomes essentially an archaeology of the contemporary past, engaging 'our' notions of 'self' (2001: 10).

The historic Guido Mine and the Big Pit both stand as public forms of 'archaeology of the contemporary past': representing regional history as seen from local perspective, becoming a resource for the present and engaging identities facing change. Guido and Big Pit facilitate dynamic and interactive interpretation, resembling the uncertain position of the mining regions they grew out of. Rather than accumulating material remains for a ready-made story located in a specific 'historic place', these mining museums became unique assemblages, and thought-provoking centres of gathered recollections. They maintain the status of 'a collection' - taken as an accumulation of meanings - without institutional aspirations for generalising narrative or interpretive authority. Therefore, they play a significant role in the process of the recollection of the mining past in its most human dimension, in a remarkable people-based and 'people-oriented' way and play an important part in the process of community self-definition in the aftermath of social and economic flux.

## References

- Barré, H.2000). The Cultural Policies for Development. In *Tourism and Environment: The Natural, Cultural and Socio-Economic Challenges of Sustainable Tourism*. Strasbourg: Council of Europe Publishing, 25-28.
- Alfrey, J & Putnam, T. (1992) *The industrial heritage: managing resources and uses*. London, New York: Routledge.
- Anderson, B. (2003 [1991]) Census, Map, Museum. In *Imagined communities: reflection on the origin and spread of nationalism*. London, New York: Verso.
- Ames, M. M. (1992) *Cannibal Tours and Glass Boxes: The Anthropology of Museums*. Vancouver: University of British Columbia Press.
- Bennett, T. (1995) *The birth of the museum: history, theory, politics*. London: Routledge.
- Buchli V. & Lucas, G. (2001) *Archaeologies of the contemporary past*. London: Routledge.
- Clifford, J. (1986) On Collecting Art and Culture. In *The Predicament of Culture: Twentieth-Century Ethnography, Literature, and Art*. Cambridge, MA: Harvard University Press, pp.215-250.
- Cohn, B. S. (1996) *Colonialism and its Forms of Knowledge: The British in India*. Princeton, NJ: Princeton University Press.
- Crooke, E. M. (2007) *Museums and Community: Ideas, Issues and Challenges*. Abingdon: Routledge.
- Czwartynska, M. (2008) Obszary Pogornicze w Postindustrialnej Transformacji Gornego Slaska. In Z. Ziolo & T. Rachwal (eds.) *Prace Komisji Geografii Przemyslu PTG Nr 10*. Komisja Geografii Przemyslu PTG i Zaklad Przedsiębiorczości i Gospodarki Przestrzennej. Kraków: Wydawnictwo Akademii Pedagogicznej w Krakowie, pp.76-85.
- Davis, P. (1999) *Ecomuseums: a sense of place*. London and New York: Continuum.
- Davis, P. (2005) Places, 'Cultural Touchstones' and the Ecomuseum. In B. Graham & P. Howard (eds.), in G. Corsane (ed.) *Heritage, museums and galleries: an introductory reader*. Abingdon: Routledge, pp.365 - 377.
- Davis, P. (2007) Ecomuseums and sustainability in Italy, Japan and China: adaptation through implementation. In S. J. Knell, S. MacLeod & S. E. R. Watson (eds.) *Museum Revolutions: How Museums Change and are Changed*. London and New York: Routledge.
- Davis, P. (2008) New Museologies and the Ecomuseum. In B. Graham & P. Howard (eds.), in B. Graham & P. Howard (eds.) *The Ashgate research companion to heritage and identity*. Aldershot: Ashgate, pp.397- 415.
- Hooper-Greenhill, E. (1992) *Museums and the shaping of knowledge*. London: Routledge.
- Henare, A. (2005) *Museums, Anthropology and Imperial Exchange*. Cambridge: Cambridge University Press.
- Heijnen, W. (2010) The new professional: Underdog or Expert? New Museology in the 21<sup>st</sup> century. *Cadernos de Sociomuseologia Centro de Estudos de Sociomuseologia* [Online], pp.37.37.
- Hooper - Greenhill, E. (2007) Interpretive Communities, Strategies and Repertoires. In S. Watson (ed.) *Museums and their communities*. London: Routledge, pp.76 - 95.
- Hooper - Greenhill, E. (2001) *Educational role of the museum*. London: Routledge.
- Janes, R. R. & Conaty, G. T. (eds.) (2005) *Looking Reality in the Eye: Museums and Social Responsibility*. Calgary, Alberta: University of Calgary Press.
- Kreps, C. (2003) *Liberating culture: cross-cultural perspectives on museums, curation, and heritage preservation*. London: Routledge.
- Karp, I. & Lavine, S. D. (eds.) (1991) *Exhibiting Cultures: the Poetics and Politics of Museum Display*. Washington, DC.: Smithsonian Institution Press.
- Martin, P. (1994) *Popular collecting and the everyday self: the reinvention of museums*. London: Leicester University Press.
- Misztal, B. (2007) Museum Experience. The Forms and Functions of Memory. In S. Watson, *Museums and their communities*. London: Routledge, pp. 379 – 393.
- National Mining Memorabilia Association (n.d.) "An Introduction to Commonly Collected and Researched Types of Mining Memorabilia" [Accessed 30 May 2010].
- Pomian, K. (1990) *Collectors and curiosities: Paris and Venice, 1500-1800*. Cambridge: Polity Press.
- Sandell, R. (1998) 'Museums as Agents of Social Inclusion'. *International Journal of Museum Management & Curatorship* 17(4), pp.401-418.
- Sandell, R. (2007) *Museums, Prejudice and the Reframing of Difference*. London: Routledge.
- Stam, D. (2005) The Informed Muse. The Implications of the 'New Museology' for the Museum Practice. In G. Corsane (ed.) *Heritage, museums and galleries: an introductory reader*. Abingdon: Routledge, pp.54-71.
- Vergo, P. (1989) *The New Museology*. London: Reaktion.
- Watson, S. (2007) *Museums and their communities*. London: Routledge.



ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable Development

Vol. 4, No. 1, 2015, pp. 43-55

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## Rethinking the geographical concepts of “post”modern (eco)museology: Spatial trends and challenges for the Brazilian ecomuseums and community museums

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This paper presents the hypothesis that ecomuseums and community museums, at least within the Brazilian context, make a mistaken use of the geographical concepts (territory, region, landscape, place and space) in their endeavour of planning and management of collections, cultural heritage and of the “territory-heritage” as a whole. Accordingly, it is possible to notice a depletion of (eco) museological and spatial theories, when the geographical concepts have their meanings changed and mixed up with one another. Therefore, there is a risk, yet apparent, of reifying, stifling memories, identities, knowledge, works and local artifacts, because the speech, which should be a facilitating factor in the (eco) museological mediation, often ends up becoming a State control tool and of power struggles in other political arenas.

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**Keywords:** Brazil ecomuseums, post-modern Sociomuseology, geographical concepts, spatial and cultural turn, museological planning.

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### Introduction

It is often believed that the world has become both globalised and localised in all life spheres and backgrounds. In this conception, the process revolves around two poles: a) major economic and financial undertakings and an urbanisation linchpin that promotes, at least in the western realm, societies with post-industrial, post-modern and cyborg profile; 2) reactions against intrusion and theft of “Others”, all on behalf of preserving the place, the people or group that feels neglected. Usually in these latter cases, the outcome is the creation of exclusion clusters (Haesbaert, 1997), localist communities or globalised tourist (Bauman, 1999), residential segregation (Ribeiro, s/d), territorial distinctions (Barbosa, 2010), power micro-spaces (Foucault, 1979), bio-political spaces of exception (Agamben, 2002), in short, territorial restraints (Haesbaert, 2007) of every kind that engenders territories with (extremely) problematic geographic feelings. Upon quoting territory, as a provocation, a topic will focus its analysis in order to point out the problems arising from the current trivialisation of the concept, exposed to every type of use and abuse. The proposal is to place it again where it has always been and has a greater semantics strength: in power relations, in institutional hierarchies, everywhere else, in negotiations and bargaining. The approach through which territory has been conceptually emptied from any political and economic meaning deserves a thorough review. And for socio-eco-museum purposes, the approach is similar.

In many cases of territorial localism/exclusivity, even those with strong global appeal – which Nigel Thrift very cleverly referred to as globalised localism (Thrift, 1996) – there is a clear and resigned denial of the relational dimension of the place, in other words, the spatiality of social life. Without those three assumptions advocated by geographer Doreen Massey (2008), space (and its production) becomes a mere abstract clipping, full of ideologies and thus its connection to other contexts and networks becomes delicate, and in several cases, it is adjoined in the name of originality, good morals and the maintenance

of "local" interests. By taking such action, we build a vision of place as a crystal, a lump of which only the established ones have the right of usufruct. But since the postmodern spatiality is so practical – the dimension it simultaneously harbours, "traditionalises", translates and transforms into flow technical objects, the know-how, institutions and relationships – such exclusivist and pseudo-authentic speech no longer fits to our contemporaneity. And to our enthusiasm, ecomuseums and community museums are already to some extent, aware of this new socio-political, cultural and space scenario shaped by urban societies (Westernised?).

There is a need – urgently raised by post-colonial studies and the very recent Latin American decolonial movement (although some of its mainstream mentors are hosted in U.S. and European universities...) – to overcome Eurocentrism and the arrogant scientific knowledge that insist on framing the social aspect within the ideas and ordinances planning. What is needed is the opposite: Science being framed by social groups from their experiences, interests and urgency for empowerment and development.

The space and its conceptual variants (territory, region, landscape, place) should be understood, recorded and conducted in order to clarify what, according to Sack (1997), defines the human being as a geographical creature: memory, imagination, culture, tradition, identification processes, rituality, intertextuality, negotiation, conflict ... Therefore, memory and imagination tend to occupy a prominent "place" in our space representation systems. Accordingly, it is through memory and imagination that the act becomes inventive, fluid and (in)tense. This more generous view allows us not to make the fatal mistake of the Western modernity, namely: the reduction of "deviant," "exotic" and non-Western cultures to billiard-balls (Massey, 2008), essentialised entities (Clifford, 2002), spatially isolated groups<sup>1</sup> (Gupta & Ferguson, 2002) that are not included in the Western civilisational landmarks.

This early dialogue serves to show that, if within the scope of international relations and urban phenomena, there is clear uncertainty over how to think and spatially act, the sociomuseum scene does not escape this situation either. It is a social dilemma of modern societies that annihilated the space for the sake of time. From Marx to Hegel and Henri Bergson, and then, from Lucien Febvre to Richard O'Brien, theorists have devised a Cartesian, and modernist and non-social space to be subdued by time, this rather is a crucial dimension of change, vitality of the socius. Space would only be a support, the stage of events driven by the flow of time. Space would be taken as clipping of time (Hegel's idea) to reveal the strength and elasticity of the duration. There is no need to elaborate on the disastrous consequences of this thinking concerning social theory and social movements in general, for a long "time," they held up to the famous idea: "the revolution will come one day," "sometime the change will happen", "if things will really change, only time will tell". Regarding this last phrase, it is undeniable that behind it there is metaphysical-like solution, because it is the space that shows how well a social process takes place, it materialises the production of inter-relationships and also dictates the pace of change. Massey (2008) considers in detail all perniciousness contained in the modern (non) geographic thought, and which prevented the advancement of the critical social theory. Therefore, besides the cultural turn, the spatial/geographical turn of social sciences in the late twentieth century were so much celebrated (Cook, 2000).

For ecomuseology and community museology, space is important not only for its strategic value in speech and museum territorialisation, but also as it settles in scalar mode the relations and injects processivity to the socio-environmental dynamics. Accordingly, a community museum is not focused only in local relations: it can reach actors, resources and experiences from other contexts, outside the sphere of its scope of immediate action. This implies a situation in which the museum territory and its performance area together form a plant of local production of the global. Memory and imagination, two prominent elements in any production and museum communication, are inherently global in their capacity to give meaning and significance to the past, present or future events. The global is not in essence a usurper of the place, but with it the global can maintain continuities and point horizons of undertaking/intermediation.

The central purpose of this paper is to establish a bridge between geography and museology. Only thus can we understand the geographical bases of action of museum institutions and government spheres that promote/finance Brazilian museums (IBRAM, museum state systems, research and consulting companies in cultural resources). Preference will be given to ecomuseums and community museums because these institutionalities are trying to arrange society/community/regional/local network into a dialogue with the territorial and cultural heritage. This is the scope of the text: think "museum post-modernity" that anchored on the community/eco-social bias of the museum process, outlines spatial strategies consistent with trends and demands of globalised societies. These, even intricate in relations of economic and cultural domination and exploitation are more attentive to peripheral voices (albeit in an action that aestheticises or even folklorises popular expressions) and to issues such as justice and social equality, human rights, environmental conservation, protection of historical-cultural heritage and democratisation of access to culture (cultural citizenship).

Arrange geographers, museologists and other museum actors in interaction. This is a challenge that shall come into being when bridges are established between the branches, and the geographical space is fully highlighted in the museum and museographic processes. Regarding the bridge meaning, I refer to the Simmelian thinking style like a continuous exchange, which generates, in specific events, the completion of uniqueness (Simmel, 1996, p. 21). *É na construção de pontes que se realiza a paisagem, vista numa perspectiva simmel-raffestiniana*<sup>2</sup> standpoint as the *stimmung*<sup>3</sup> that works as the interface

between the human side and the exterior side, the ecological and symbolic aspects, the corporeal and the representation aspects. In other words, the landscape, and in foreseeing a discussion about the next topic, is an "instrumental image" that allows the human intervention in a "multiplicity of domains" in life (Raffestin, 2007, p. 5).

In the following topics, I will give a brief explanation concerning the major geographic concepts: landscape, region, territory and place; at some occasions, I will quote examples of ecomuseums institutions incorporating geographic concepts as a discursive (Foucault, 1979), strategic (Werlen, 1993) or existential resource (Tuan, 1983) in order to procure things, recognition and status before the local population and in other contexts, spheres and political, cultural and heritage institutions.

## **Landscape**

It is through the landscape that society and individuals are realised, namely, nature takes shape and manifests itself in the image/representation/speech of social subjects. I use the word "realisation" not in the Heideggerian sense, but as a form of attention to the central role of representation in shaping what we call landscape. It is commonly claimed that the representation is the other end of the Real, a symbolic form that has at its heart the masking of the Real by the transmutation of perception in a diffuse and ambivalent arrangement of forms of expression and content (Gumbrecht, 1998). These forms of expression and forms of content are the materialisation of processes transposing the universe of memory, imagination, image and meaning in worlds of intermediations from the language, the positioning of subjects, use of materials and media, etc.

Consequently, an idea of landscape as "instrumental image" (Raffestin, 2007) is important in the museum and museographic domains for two reasons: 1) it provides an imagistic-discursive content that enhances the museum space, leading the public to meet and interact with memories and events of the past – and in many cases, with its present and future projections of the local community; 2) it provides the basis for fracturing images that it helps to create, because images are culturally and environmentally constructed and, as in any process involving the cultural environment and the environmental culture are likely to be contested, reworked and re-semantised; therefore, the landscape is fully and consistently activated in virtually all museum communication processes (Santana, 2011), leading the public to experience the atmosphere of the period that the museum space intends to emphasise. Ecomuseums and community museums are the museum instances most impacted by the way local inhabitants present and represent the local heritage and their experiences of living and place.

Under such a landscape point of view, the territorial image provided in a landscape way establishes the exchange system between the practical-sensitive world and the symbolic world. In ecomuseology and community museology, the landscape should act as a spatial analysis method of the ways to intervene in the empirical reality spread out between the material and the symbolic, but especially under the scrutiny of the images and representations. The idea of landscape as a material-apparent result of societies hinders more than helps to clarify the actual conditions of production of place (Massey, 2008), of regional consciousness (Bezzi, 2004) and groups territorialisation (Haesbaert, 2004). Unfortunately, through the trends seen today in the world museology and museum examples of the landscape seen in Europe and Brazil<sup>4</sup>, we see that the landscape sociomuseum discussion is just at its start.

## **Region**

Anthropologist Gilberto Freyre in the middle of last century introduced the proposal of "regional museum" as an institution to preserve the folk memory. This idea, advocated in some museum sectors and in the third sector, has been gradually treated harshly in some musealisation processes in which the phenomenon has a clear regional "feature". This is the case of Museu do Homem do Nordeste<sup>5</sup>, (Museum of Man of Northeast, Museu Regional de Olinda (PE) (Regional Museum of Olinda (state of Pernambuco) and Museu Regional de São João del Rei (MG) (Regional Museum of São João del Rei (state of Minas Gerais)).



Figure 1. Museum for Northeast Men. Source: <http://museuhomemdonordeste.blogspot.com.br/>.

Many authors mean the region as the domain space, control and administration, like the connotation given in the Roman Empire (*regio*). However, the region can also be read with a sense of direction, spatial orientation (Haesbaert, 2010, p. 3)<sup>6</sup>. At this point, region is a continuous process of regionalisation, and the marks of the process leads to a regional issue that is never empty, always needs the identity (Bezzi, 2004, 2002) to both mobilise the “regional subjects” and accomplish the ever required cohesion and territorial integration.

There are several examples of regional processes with global impact, as in Spain (Basque, Catalan), Eastern Europe and Southeast Asia. In such cases, it is regionalisms, a narrower dimension of the region where politics takes the reins, leaving culture of “between equals” or in the background.

But after all, what is region? Meri Bezzi sums it up brilliantly:

(...) region is defined as a specific set of cultural relationships between a group and a specific place. The region is a symbolic appropriation of a portion of space by a certain group, which is also a constitutive element of regional identity. The region, with a focus on cultural identity, is again seen as a real product. It is concrete. It exists. It is proper and experienced by its inhabitants, differing from the others mainly by the identity the social group gives to it (Bezzi, 2002, p. 17).

As to museum policy and management, the ontological and practical dimension of the region and regional identity should be taken into consideration when determining the scope and territorial strategies. Since ecomuseums and community museums are likely to be created in both urban and rural environments, the diversity of tactics, plans and actions will largely depend on the context to be territorialised by the museum institution. It is not the same thing to foster ecomuseums in global cities-regions (Scott et al., 2001) or in rural areas, as in the case of ecomuseums of Maranguape (state of Pernambuco) and Ribeirão da Ilha (state of Santa Catarina).

In any case, region is the prominent geographical concept of identification and articulation of groups, places and political-economic processes that are gathered in one place. The region is always under a process: this is its generic condition. And because it is eminently cultural (Hissa, 2004), the regional spatiality unavoidably involves issues such as negotiation, conflict, reproduction and social dispute. Besides intermediations, region refers to an imaginary, or rather, an imagined community (Anderson, 1987). Its dynamicity is embedded within vibrations of power ontologically engendering the regional issue (herein in accordance with Francisco Oliveira’s phrasing [1977]).

In general, (eco) museum institutions play an important role in valuing a region and/or a regional identity: their mission is to authenticate and disseminate memories, events and know-how of the regional society. All the region dimensions may be subject to musealisation (politics, economy, culture, art, religion), as they should merely be claimed by local groups and supported by museum management. The museum, as well as any cultural institution undertaking the task, is apt to recognise, enhance, invest and convey a regionality atmosphere that nourishes and rules the regional society. In any case, in musealisation situations of the "regional", culture will always be the geographical bulwark.

## Territory

Today territory is the key concept of the Brazilian Human Geography, the great driver of speeches and actions on the dynamics of places and human intermediations, always determined by the trio des-re-territorialisation (Haesbaert, 2004), following in the footsteps of the Deleuze-Guattarian thinking.

A hypothesis for the preference of the concept of territory by Brazilian geographers, social movements and the cultural initiatives is given by Haesbaert:

Perhaps the hegemony of place revealed in Doreen Massey's works [and in the English geography] is due in part to the strength of the cultural-identity dimension within the English geographical context, as well as "territory" in our midst may be due to the strength of territorial disputes in an environment where "land-territory" is still a resource (and a shelter, would claim Milton Santos) to be appropriated and enjoyed by an increasingly larger society (Haesbaert, 2008, p. 13).

Territory is a geographical phenomenon of power manifestation, a concrete and symbolic expression of ownership or possession of the space by a person or any kind of social grouping. It is through territory that politics takes place by means of material conditions and instrumental means (and mediations) of heritage acquisition or solidarity occupation, of mutual usufruct or strict control of space. It can be noted that I am working on both the territories that are born out of solidary action and those that are a direct product, for example, of the Western modernist order, which rationalises all and marks the "correct" places of actions of social subjects (children in schools, adults in the companies, the elderly in asylums, mad people in mental hospitals, women in purified places, etc.). The French geography comprehensively discusses framing techniques (Taillard, 2004) and concept (and technique) that best describes how the capitalist west conceives space and think about its applicability in hegemonic processes.

Under a materialistic view point, Robert Sack (1986) believes that territoriality, a dynamic condition of formation and territory qualification, establishes a border, an area classification and a form of communication. But as the author explains, each group/person has their own territorial dynamics, and it takes its form and content from the social history, geographic conditions and policy of meaning of the group/person. Territoriality leads groups and people to adopt a position (Marcus, 1994) and location policy (Hall, 1992).

Nowadays, the mistake concerning the approaches of territory focuses on the trivialisation of the concept to such an extent that its operation is ambiguous, that is, totally inaccurate in its political-ideological content and established power relations. What was then the operational role of the territory, namely, the investigation of political relations, negotiations, hierarchies etc., has been used to treat all facets and situations of life, in a movement that tends to produce a reverse effect: to empty the political meaning of or uncritical approach to the culture of the social group being studied.

Some geographers argue that territory should retrieve its "original" semantic load, that is to say, where the emphasis is on the concrete and/or symbolic uptake of space. Centred in this approach, territory emerges as a dimension where the conflict, negotiation, interest and physical, symbolic and visual demands make up the analytical and defining scope of social existence of the territory. The territory should be focused on the dimension of the struggle, the social conflict. The territory embodies events requiring a decision making that, in most cases, takes harsh proportions of calculated risk and physical and/or symbolic violence. As Carlos Walter Porto-Gonçalves<sup>7</sup>, ironically asserts, territory is the place of the back alley, the tête-à-tête with the Other. And the Other is not always so outlying: it may be your neighbour, an adjacent suburb, a street of a socially lower group, as points out Norbert Elias (2000) upon studying the little town fictitiously called Winston Parva, and the conflicts arising from the division and stigmatisation between the established ones (early dwellers) and the two other newly-installed territory groups.

At the Ecomuseum de Santa Cruz, along with other cultural actors, ways to understand the dynamics of segments territorialisation and local groups, and one of the rich examples of cultural territorial dispute existing in the region is that of "Clóvis bate-bola," groups which appear in the carnival period and set up a symbolic and "friendly" atmosphere of rivalry and joy, with the right to contest for the best clothing and performance in "cruzas" and "roda-baiana"<sup>8</sup>. This phenomenon has gained such popular reputation that has been recently recognised as a cultural heritage in the State of Rio de Janeiro.

The criticism of human geographers is that territory has fallen into such a vulgar concept that, regardless of the topic that is under discussion, territory has become a kind of "Joker playing card" that can replace the remaining geographical concepts: where earlier it was spoken of as landscape, it is now spoken of as territory; where a space would be of a regional type, now it is treated as territory; in place situations (the convergence of social paths and nature), the vocabulary strength of territory stands out as a dimension of the human interaction by power; and finally, in environmental approaches, territory would be a cycle that articulates and enriches acclimatised elements, taking out of the environment its major concept richness: that of the *amb + ere = to be related*, "go-along" (Yazigi, 2006).

In line with this reasoning, how can we define territoriality and the territory of an ecomuseum or community museum? Certainly, it will not be possible along the lines today prescribed by the intellectual "whim" and social movements, including several Brazilian ecomuseums that have confounded territory with place, landscape, region, environment/ambience...

## Place

Place habitually is the concept that draws attention to the affective, experiential and lived side (or even playfulness) of spatialised social relations. Place is the meeting space, connecting social and natural trajectories that make up a unique and particular space. Unlike the readings made by some "territorialologists" geographers (Sahr, 2009), the concept of place does not ignore the power relations, and much less tapers the political aspect, which is part of the processes of recognition, organisation and reproduction of places. Place is connected to the conformation of geographical identity shared by the subjects enjoying that meeting space of stories/social paths and nature (Massey, 2008).

However, place does not seem to be a concept very much requested by museum experts and other cultural agents. This is due to the naive, parsimonious and incomplete nature conveyed by the concept. As a result, Anthony Giddens adopts *locale*; in France, *landscape* is the main concept used both by geographers (Roger Brunet, Augustin Berque, Paul Claval) and by sociologists and philosophers (Michel Maffesoli, Gilles Lipovetsky, Alain Roger, Pierre Sansot); in Britain and in Southern U.S., *region* has been rebuilding as a concept-matrix of geographical human-cultural disciplines (Cardoso, 2011); whereas in Brazil, territory emerged with full force in recent years (Haesbaert, 2010, 2007, 2004)<sup>9</sup>.

Region, often seen as a concept situated in the limbo between the local and the national, is now confronted with the contemporary requirements for valuing of the place sphere, the senses of place, the practiced place<sup>10</sup>. And with that review of the place, museology finds fertile ground to expand its ideas and intermediations. Seeing regions in the interstices of the cities and in other space instances is still a new path in the Brazilian Geography.

By way of introduction, place is the network of relationships instituted in a particular space-time. It is upon (dis) articulation and (dis) integration of social phenomena on a locatable network of relationships that place is produced. People, art groups, merchants, institutions, streets, sub-districts, public agencies, hospitals, religious communities, events and entertainment, these are the hallmarks and nuances of a place that establishes landscapes relating to local processes.

Ontologically speaking, geographers deal with referrals of the place... These are built in the daily reproduction of material activities and memories, imaginations, feelings and loyalties that mobilize, educate and expand the sensibilities of local residents and supporters. Here, we are going deeper into the breeding ground of the sense of place, a concept hardly explored by British and American geographers.

When the sense of place is developed, practiced, and perhaps the greatest of all, ritualised, people incorporate a geography of emotion, a spatially marked structure of feeling, but that at any time can expand or contract through the processes involved. The geography of the place of emotions has its apex at the moment in which people, groups and institutions state, with all zeal, that "this place is mine," "we cannot live without this place," "we love this place," "we miss our place to death." Again focusing Rio de Janeiro, this city is an important area to study the causes and effects of a sense of place continuously developed (Wonderful Town, Land of Samba, place of cunning and happy people) and disclosed in a speech by the media, hegemonic institutions and popular segments, making up a dense web of meanings to be debated and processed in the daily life.

Peter Davis (1999) notes that the sense of place is one of the basic pillars of the ecomuseum action, and it should be enhanced in all senses and situations. And indeed, in recent years the main focus of the ecomuseums has been the pursuit and protection of meaning, or rather the "spirit of place" (Corsane, s/d). From East to West, the ecomuseum action has been summarised to pace in the best possible way the equation "territory + heritage + memory + population" (Corsane, 2008, p. 3), whose result is to Peter Davis, the ecomuseum, an institution to serve the conservation and interpretation of "all elements of the environment in a way that it ensures a continuity with the past and a sense of belonging" (1999, cited in Pérez, 2009, p. 194), regardless of the socio-political context.

An overview of ecomuseums and Brazilian community museums makes us understand that place is the dimension that is implied in the theoretical and labour developments of each one of these institutions. Place is not elevated to the category of crucial theoretical action both due to the conditions described above (naive vision of the concept) and the fact that territory has taken over the reins in museum speech,

being used in an indiscriminate and uncritical manner. The question is whether the place will follow its course or if new perspectives will open "space" for debate on how ecomuseums and the community museums can participate in the production of place, using memory (basic concept of museology) as an organizing element of affections and imaginations that gives local community powers to understand, appropriate, labour and reframe its Space-World (Sahr, 2007) as a cultural heritage to be enjoyed in a conscientious, fair and caring way by all identifying with it.

### **A quick look at the context and debates of the Brazilian community (Eco) Museology**

In concrete terms, IBRAM (Instituto Brasileiro de Museus) [Brazilian Institute of Museums] is one of the records of the new State cultural policy implemented early this century – initiated by Lula's administration (2003-2010) –, headed by scholars, politicians and other left-wing activists who erected the cultural heritage as an action priority for the sectors related to the culture. Safeguarding, registration, restoration, promotion and funding actions have augmented in the last ten years. IBRAM as well as other public and non-governmental institutions affiliated to it or to the Ministry of Culture (MinC), marks a historic moment of re-conceptualisation for the cultural heritage (now encompassing intangible culture), enhancement of vernacular know-how (Master Griô, point of culture, recognition of specific segments such as gypsies, quilombolas, ribeirinhos, lace workers, babacu coconut breakers, popular luthiers and hip hop, funk, "forró pé de serra," dirty music groups, etc.).

The museum and the museum knowledge also stand out in the current Brazilian cultural scene: they have become protagonists in a moment of re-appreciation and re-narration of the Brazilian history, where stories of cultural diversity are to be told and safeguarded. This diversity needs to be documented, preserved, promoted and, if possible and necessary, museumified for new generations. They are creating new ways to generate employment, income and cultural creation through the formalization, professionalization and mercantilisation of history and cultures. Urry (1996) remarks on the outbreak of the "tradition industry", this being a recent vector for the expansion of profits regarding the consumer's sovereignty and the new demands for a popular taste. Although it is not based on the action of ecomuseums and community museums, which have a less auratic and mercantilist scope than conventional museums, Urry manages to generalise with a relative accuracy the current role of the different types of museum:

It is not so much a matter of incorporating a high culture, devoid of ambiguity, which the vast majority of the population is excluded of. Museums have become more accessible, especially for service providers classes and the middle class (...). In terms of leisure of these classes, suggests Merriman (1989), visits to museums, with their associations, with their associations to a previously very high culture, enables the acquisition of a certain cultural capital, acquisition made possible thanks to the degree whereby people today have the ability to "read" museums (Urry, 1996, p. 178).

And he makes a critical quotation, and that goes for the community (eco) museology, rushed readings that see the tradition industry as a sea of inauthenticity and lack of commitment to the "history as such":

Indeed, it is not clear, in any way, which history most people have. In the absence of a tradition industry, how is the past usually appropriated? (...) For many people the past, at best, will be recovered by reading biographies and historical novels. It is not obvious that the account of the heritage industry is more misleading than such readings.

What needs to be emphasised is that the history of the tradition is distorted due to the prevailing emphasis on visualisation, the fact that they present to visitors a series of artifacts, including buildings ("real" or "manufactured" artifacts) and then try to visualise the pattern of life that would have been built around them. This is essentially "artifactual" history, in which a variety of social experiences are necessarily ignored or trivialised, such as war, exploitation, hunger, disease, law, etc. (Ibid., p. 153).

The museum, museology and the agents who are indirectly involved in Brazil constitute a field where memory, identity and cultural economy become part of safeguarding, promotion, sponsorship and broadcast actions. Museums and similar institutions began to fight for shares of public funds (and private as well) via notices, incentive laws, etc. Everything should be devoted on behalf of an excellent museum management, prioritising the qualification of the actors and beautification of the museum space. Within this scenario of attempts to democratise public resources, from the Museu Imperial de Petrópolis (Imperial Museum of Petrópolis) to the Ecomuseu de Ouro Preto (Ecomuseum of Ouro Preto) – and all those pertaining to federal and state museums systems, all are in the struggle for institutional consolidation.

The National Sector Museum Plan (PNMS, term 2010-2020)<sup>11</sup> is a leading document in the Brazilian cultural field. It features the consolidation of a far-reaching policy for the multifaceted museological segment, comprising from the training of managers to the use of the most sophisticated media and marketing strategies in order to compose audiences, unlike previous management approaches, which gave precedence only to conventional museums<sup>12</sup> and the "petty politics" concentrating all resources and privileges on the hands of only a few museum actors, the tactics of IBRAM and its allies perpetrating the museological activity within novel parameters of democratisation of resources and access to culture.

If PMSM is able to accomplish all goals set within the deadline prescribed, socio-museology as a whole will achieve another projection and relevance in the national socio-cultural scenario. As "guardian" entities of know-how, ways of life and local-community territoriality, the community ecomuseological action is linked to a geographical view in which "territory" is the actual address of the museumised phenomenon. There are no museums that are more related to the place, the geographical region, and the symbolic territoriality than ecomuseums and community museums, except for museums of landscapes and territories, which gradually gain "space" in the sector policy of IBRAM and similar.

The goal of the Plan is to provide ecomuseums and community museums with an objective cultural and political purpose, that is, ability to train and empower community actors for the full exercise of cultural production and citizenship. Inserted as a sector pole, ecomuseums and community museums have as its political most attraction its easy insertion with communities with a low museum potential. Regarding ecomuseums, these can anywhere and under any circumstances, museumises a space: it is enough to have a community willing to receive new ideas and agencies, and a "technical" body who face the problems and challenges of the community consensus, heritage and environmental demands, and the risk of reification of space in the eco-musealisation process. Barreto (2000) says that until the 1980s, ecomuseums had their pinnacle in Europe, notably those endorsed by mentor Hugues de Varine. However, by 1980, ecomuseology starts to lose theoretical (and political) strength for a number of reasons that are not answered solely by the internal structure of ecomuseums. It involves a closer look at the cultural flows and socio-spatial mobility of post-modern capitalist societies.

Among the reasons for the crisis and transformation of the ecomuseological sector, are the social changes after 1973, which have provided companies with a global, post-industrial and spectacularised (cultural industry) content. In this scenario, societies and nations begin to leverage some isms peculiar to a system that became flexibilised, relaxed, liberalised and spectacularised in all social spheres. Therefore, individualism, pragmatism, managerialism and entrepreneurialism make up the political landscape of the Western industrial democracies. As to individualism, in Brazil, the trend of new ecomuseum and museum-community institutions in Brazil has been to have their names linked to an important person of the past, placing the community on a secondary level.

In light of the foregoing, we see that initiatives such as Ecomuseu Dr. Agobar Fagundes, located in Nova Russiá, Blumenau (SC), and Ecomuseu Nega Vilma, resided in Dona Marta slum, Botafogo (RJ), comprise the new ideas of museum and cultural producers and managers. The proposal is simple: immersed by an entrepreneurial view, such producers and managers of the culture turn one or more distinguished persons into symbolic baits, and based on a "rescue" of their personal narratives, habits, skills and political and cultural significance, the community musealisation is triggered, summoning a pool of people who are interested in sharing the symbolic and concrete appropriation of their place by means of virtuosities and peculiarities of the renowned subject(s). Closing this brief comment, we can realize that based on one or more people (that were) locally influential, the cementation of the social and patrimonialising of the place become fully feasible. The unique requirement is that the museological plan is convincing and beneficial for dwellers and collaborators. And the community empowerment becomes a matter of time and resources.

In pragmatic terms, ecomuseums, as well as museology in its entirety, cannot escape the structural imperative of radical contemporaneity embracing us; a world where the struggle to maintain the aura and physical integrity of the cultural heritage has become as important as the fighting against hunger, poverty, war and social and environmental injustices. Culture is the anchorage for novel social demands and struggles in pursuit of recognition and protagonism. Culture, far from the romantic appeal of anthropologists, is the new centre of social battle; of the symbolic war for (re) taking of spaces and activities subject to the cultural industries or groups featuring other sustainability parameters (solidarity economic, cooperativism, financing for crowdfunding).

Turning back to ecomuseums... These demand a good amount of financial and human resources to support their projects, and establishing alliances and agreements with private actors (company, research institute, patronage) become inevitable. In most cases, these are disjointed actors and not in the least used to ecomuseological design, and by so doing, one runs the risk of breaking the original design of the museological project.

The community museum phenomenon has obtained interesting results in Brazil. In almost all places where a community museum is installed, reports are that the initiative derived from the "inside" of the horizontal networks that make up the community and its externality (university, technicians, and patrons). These were either the result of the militancy of residents associations or other institutions hankering for restoration of the stories and identity (ies) of the place, or local intellectuals committed to the situation. Accordingly, the community museum has been moving in this direction: providing tools so that dwellers

themselves mobilize their feelings, membership and activities, forming a localized economy of goods and symbolic exchanges.

Among the community museums, one that draws attention is Lomba do Pinheiro (stated of Rio Grande do Sul). The building housing the museum-community actions, which is situated on the outskirts of Porto Alegre, in the past, served as a shelter (flood of 1965) and space for popular education. This story provided the guidelines for implementation of the museum, which has in the heritage education its main philosophical and political-educational foundation. UFRGS has an interesting outreach programme with neighbourhood schools, besides the exchange made with other institutions and groups<sup>13</sup>. The goal is to break the gap between academic knowledge and popular knowledge, providing a multiple interaction cultural and diffuse environment, including indigeneous children, youth, adults and elderly. The inclusion of all participants within the network of relationships of museumized place turns the museum into an effective mediating space between the collective memory (speech) and the actions of the local basis. As stated by the mediators of the museum<sup>14</sup>:

(...) the educational process is conducted towards local knowledge and an enhancement of memory, history, environment, in the various aspects that it may contribute to self-esteem (sic) of the neighbourhood residents. In this territory, under the guidance of Professor Zita Possamai, the work is developed through group meetings, reading, texts studying and writing, debates and discussions. Besides the theoretical and practical preparation, students work at least once a week in the territory. These projects involve the qualification of basic-level teachers and students, through visits to the museum spaces. It is intended to establish a dialogue between theory and practice, providing a reflection on the action that will be constantly reviewed and evaluated by the group.



Figure 2. Community ecomuseum of Santa Cruz – Source: personal file.

As in all museum institutions committed to the museumized neighbourhood, media and virtual environments are the best way to reach and serve stakeholders. In an era when heritage education is as necessary as environmental education and other basic subjects, the community museum of Lomba do Pinheiro is an excellent laboratory of trends of socio-spatial insertion through museological processes. The locale of Lomba do Pinheiro is the location of the communities that make up the neighbourhood, similar to the scope followed by the ecomuseums of Santa Cruz and of (still is in its planning stages) Sepetiba, both located in the West Zone of Rio de Janeiro, and believe it or not: Sepetiba is a sub-district of Santa Cruz! In this situation, as in others, it is seen that the delimitation of a neighbourhood does not necessarily coincide with the boundaries and limits of an eco-museum agency.

Other community museums with a good territorial accountability and representation are: Museu Comunitário Almiro Theobaldo Muller de Itaparinga (state of Santa Catarina), Museu da Maré (state of Rio de Janeiro), Museu da Favela (state of Rio de Janeiro) and Museu Didático-Comunitário de Itapoã (state of Bahia). A quick visit to ABREMC's website, link "Ecomuseus e Museus Comunitários no Brasil",<sup>15</sup> reveals how much failure and inequality exists concerning the distribution of ecomuseums and community museums in Brazil. Certainly it is a medium-and long-term process in view of the fact that these museum modalities do not have a strong media appeal, much less the generation of employment and income. The southern region has the largest concentration of community museums, something presumable due to the cultural, scientific and economical asset available there, and the strong identity appeal of the regional groups and other segments – Museu Comunitário dos Trabalhadores de Limpeza Urbana (state of Rio de Janeiro), Museu Treze de Maio (state of Rio Grande do Sul), the latter with an emphasis on black culture and expressions. In Southeast pole, ecomuseums are given some emphasis, even though their exhibits are devoid of personal and financial resources in artistic and cultural events and promotion of conservation initiative of the memory and heritage of the place.

### Final remarks and a research agenda

The symbolic production of social museums is dynamic, relational, and intuitive. The museum is a system of (in) formation, a privileged spatial structure that works memory, imagination, collections and training of individuals to schedule commitment to cultural heritage. Under the community museum standpoint, it becomes more evident, since its aim is to be

(...) a cultural management centre with meetings and dialogues, as a promoter of the surrounding community, and the instance where different cultural actors converge and encourage exploration, discovery, intellectual exchanges and renewals (Santana, 2011, p. 2).

Endowed with a specific form of communication, the museum communication, the museum gains notoriety when its scope of geographical action encompasses all forms of contents worthy of being appropriated, catalogued and presented to the public. In these situations, creating ambience is crucial to assert the interactive aspect of the collection and heritage, inviting people to create an aesthetic relationship with the museumized product. I refer to aesthetics as "the experience of feeling for the potentialisation of the form", in which "derives the important phenomenon of the enchantment of the senses" (YAZIGI, 2006, p. 70). Aesthetic makes it possible, through in-formation, the creation of worlds via production of sensibilities, affiliations, memberships and more.

Many of the geographic dilemmas occurring in the Brazilian museum management derive from attitudes and ideological positions already taken in the first steps of musealisation of a space. The planning and implementation phase of the museum is very important in order to know what kind of geographicity/spatiality the musealisation is intended to. Among the errors are:

1. A lack of criteria concerning the spatial ontological basis of ecomuseums, community museums and other alternative museums, and this greatly affects the documentation, patrimonial and conservation process of cultural goods, the moment the museum, community and territory become instruments of cultural, political and educational action;
2. The spatial strategies of the institution that, in general, remain in the background or are not given due attention;
3. And carelessness regarding the vertical and horizontal stresses that are not suited to the hard core of meaning that the concept of territory conveys, for instance. I mention a hard core of meaning because, due to the postmodern condition that undermined all that was said to be stable, authentic and unproblematic, sciences, arts and other know-how are in front of the trap, as advised by many authors, to extend the concepts to the point that the meaning is fully compromised. Something is spoken of, when in fact the other case is being referred to, which linguistically speaking, is already recorded in another concept. In geography, territory has gone through this process.

Finally, we must wonder if ecomuseums and community museums – and I also quote the recent program "memory points" – an IBRAM's initiative, which aims to stimulate local-community initiatives for the registration of collective memory and differentiated know-how – are heterotopias, evoking here the classical Foucault's grammar (2006), or comprise other topological natures. By so doing, then we can think of endotopic situations (endo = internal + topos = space = interpenetration spaces of strategic seclusion), ritotopic (rite = ceremony topos = space = ritualisation spaces) or "oligotopic" (oligos = few + topos = space = space to/for a few, the insiders) in the ecomuseology and community museology.

Such a debate based on museum topologies places socio-museology in another plan of action: as a catalyst for creation processes of cultural conservatories (Warnier, 2000). Thinking ecomuseums and community museums as authentic cultural conservatories is understanding, on the one side, that ecomuseums stands out for total cultural environmental heritage by involving everyone in the defence of

the ordinary space (Santos, 1996), but now museumized and made meaningful to all; and on the other side, that the community museum acquires responsibility and leadership in the communitisation process and territory-heritage management, returning to the collective the political voice and relevance in the local production of culture, memory, identity...

Differences between these two socio-museological facts fork, as we might expect in a two-way path: 1) the strengthening of memories, traditions, membership and manners of use of cultural heritage; 2) the possibility to access externalities, promoting socio-cultural exchange, making up differentiating rituals and use the museum institution as an ideological instrument of power to negotiate conflicts and propose solutions. In short, these are issues and questions of geographical matrix still in a germination state (at least in the Brazilian scenario), which should be urgently reviewed in the light of new contributions made by the Human Geography currents (cultural, humanistic, Marxist, media).

## Endnotes

<sup>1</sup> It concerns the configuration of European anthropological representations over several decades. Such a view contextualised non-western societies (exotic) as isolated groups, without possibilities of civilisational advancement.

<sup>2</sup> I quote two academic scholars from distinct professions and temporalities: Simmel was a German sociologist who lived until early last century and produced outstanding diagnosis about the psycho-geographic condition of people in big European cities. A fact that spread to other Western urban contexts and stresses the generalisation of specific processes configured in the capitalist urban areas (monetarisation of the economy, impersonality of relationships, blasé attitude, privatisation of the religious aspect); Raffestin is a Swiss franc geographer who is at work, preparing excellent reviews based on the concepts of territory/territoriality and the implication in landscape, that is, the representation people envisage of perceived/conceived/lived territory.

<sup>3</sup> These are the three possible meanings for the term in the Portuguese language: "atmosphere", "objectively perceived sensibility" or "engendered atmosphere". All of them elicit the spatiality of the phenomenon concerned and its setting over a certain period of time. The *stimmung* relations with the concept of event are very productive, particularly if the geographers advanced the geographic theory of the event discretely proposed by Santos (1996).

<sup>4</sup> In the city of Rio de Janeiro, there is the revitalisation project of Largo do Botafário, in Cosme Velho, Zona Sul, which comprises the creation of a landscape museum to consolidate the neoclassic and bucolic atmosphere of the district. Available at: <<http://solucoesurbanas.com.br/projetos-em-curso/museu-da-paisagem.html>> - Accessed on: April 20<sup>th</sup> 2010.

<sup>5</sup> An example is Museu do Homem do Nordeste, located in Recife (state of Pernambuco), that, despite not being related to the community ecomuseological perspective, and not taking into consideration the mistakes of interpretation that might arise upon essentialising the phenomenon of the "northeastern man", the institution plays an important role in broadcasting the know-how of the northeastern popular groups. Further details, refer to Santana et al. (2011)

<sup>6</sup> Meaning also derived from the Roman Empire, but unlike the first definition (that mentions chiefs and bureaucrats of the empire), the meaning of "orientate", "direct" relates to the Roman diviners who tried to foresee events through "regions" traced in the sky.

<sup>7</sup> A sentence uttered in his lesson "Geography and Social Movements", given in a Geography graduation course at UFF (2/2008).

<sup>8</sup> See: <<http://textosdetherezapires.blogspot.com.br/2012/02/o-blog-entra-em-ritmo-de-carnaval.html>> Accessed on: May 5<sup>th</sup> 2012. NT: Typical folkloric costumes and dances in the state of Rio de Janeiro.

<sup>9</sup> Despite the power of the territory, the region follows as a protagonist in interurban and mesoscale reviews.

<sup>10</sup> To have a clear picture of the ambivalence of both concepts, as far as the British Geography is concerned, region is nearly always a synonym for place; in USA, as well. But in other countries, the discussion assumes different forms.

<sup>11</sup> PNSM available at: <<http://www.museus.gov.br/wp-content/uploads/2012/03/PSNM-Versao-Web.pdf>> Accessed on: February 2<sup>nd</sup> 2012.

<sup>12</sup> In regard to this, some remarks must be raised, such as in the instance of Rio de Janeiro, where ecomuseology had its most prominent status (prematurely, so as to speak) in early 1990s, with the creation during Eco-92 (agenda 21) of Ecomuseu of Santa Cruz, which became recognized only in 1995 by means of a municipal decree. However, the current management has systematically neglected both this ecomuseum as other cultural institutions with a large profit margin.

<sup>13</sup> For measurements of exchanges, see: <<http://conexlomba.blogspot.com.br/>> Accessed on: May 19<sup>th</sup> 2012.

<sup>14</sup> Available at: <<http://conexoesufrgs.blogspot.com.br/2009/05/museu-comunitario-da-lomba-do-pinheiro.html>> - Accessed on: May 19<sup>th</sup> 2012.

<sup>15</sup> <<http://www.abremc.com.br/ecomuseus.asp>> Accessed on: May 19<sup>th</sup> 2012.

## References

Agamben, G. (2002) *Homo Sacer: O poder soberano e a vida nua I*. Belo Horizonte: UDFMG.

- Anderson, B. (1987) *Comunidades imaginadas*. São Paulo: Companhia das Letras.
- Barbosa, J. L. (2010) Rio 2016: Jogos olímpicos, favelas e justiça territorial urbana, Biblio 3W. *Revista Bibliográfica de Geografía y Ciencias Sociales*, v. 15. n. 895 (23), Barcelona. Available at <http://www.ub.edu/geocrit/b3w-895/b3w-895-23.htm>.
- Bezzi, M. L. (2002) Região como foco de identidade cultural. *GEOGRAFIA*, v. 27. n. 1. April, Rio Claro. Available at [www.periodicos.rc.biblioteca.unesp.br/index.php/agetecol/.../1732](http://www.periodicos.rc.biblioteca.unesp.br/index.php/agetecol/.../1732) [Accessed 10 March 2011].
- Bezzi, M. L. (2004) *Região: uma (re)visão historiográfica – da gênese aos novos paradigmas*. Santa Maria: EDUFMS.
- Bauman, Z. (1999) *Globalização: as consequências humanas*. Rio de Janeiro: Jorge Zahar Ed..
- Cardoso, D. S. (2011) Sobre/justaposições territoriais, multi-escalaridade e hibridações: Repesando o conceito de região cultural. In *Anais do IX Encontro Nacional da Associação de Pós-Graduação e Pesquisa em Geografia*. Goiânia: UFG.
- Claval, P. (2007) *A Geografia Cultural*. Florianópolis: EDUFSC.
- Claval, P. (2010) *Terra dos Homens: a geografia*. São Paulo: Contexto.
- Cook, I. et al. (Orgs.) (2000) *Cultural Turns, Geographical Turns*. Harlow: Prentice-Hall.
- Corsane, G. E. et al. (2008) Ecomuseology: a holistic and integrated model for safeguarding 'spirit of place' in the North East of England. In XVI ICOMOS: "Finding the spirit of place – between the tangible and the intangible". 29/09-04/10, Quebec. Available at [http://www.international.icomos.org/quebec2008/cd/toindex/77\\_pdf/77-7kft-231.pdf](http://www.international.icomos.org/quebec2008/cd/toindex/77_pdf/77-7kft-231.pdf) [Accessed 5 January 2012].
- Davis, P. (1999) *Ecomuseums: a sense of place*. Leicester: Leicester University Press.
- Elias, N. & Scotson, J. L. (2000) *Os estabelecidos e os outsiders: sociologia das relações de poder a partir de uma comunidade*. Rio de Janeiro: Jorge Zahar Ed..
- Foucault, M. (1979) *Microfísica do poder*. Rio de Janeiro: Graal.
- Gumbrecht, H. U. (1998) *Corpo e forma: ensaios para uma campo não-hermenêutica*. Rio de Janeiro: EDUERJ.
- Gupta, A. & Ferguson, J. (2000) *Mais além da "cultura": espaço, identidade e política da diferença*. In A. A. Arantes, (Org.) *O espaço da diferença*. São Paulo: Papirus.
- Haesbaert, R. (2007) Território e multiterritorialidade: um debate. *GEOgraphia*, v. 9. n. 17, Niterói. Available at <http://www.uff.br/geographia/ojs/index.php/geographia/article/viewArticle/213> [Accessed 12 June 2009].
- Haesbaert, R. (2008) Apresentação à edição brasileira. In MASSEY, Doreen, *Pelo espaço: Uma nova política da espacialidade*. Rio de Janeiro: Bertrand Brasil.
- Haesbaert, R. (2010) Região, regionalização e regionalidade: questões contemporâneas. *ANTARES*, n. 3. Available at [www.uces.br/etc/revistas/index.php/antares/article/download/.../360](http://www.uces.br/etc/revistas/index.php/antares/article/download/.../360) [Accessed 3 March 2011].
- Hall, S. (1992) *A identidade cultural na pós-modernidade*. Rio de Janeiro: DP&A.
- Marcus, G. (1994) O que vem (logo) depois do "PÓS": o caso da etnografia. *Revista de Antropologia*, v. 37, pp. 7-34.
- Hissa, C. V. (2004) *Mobilidade das fronteiras: Inserções da geografia na crise da modernidade*. Belo Horizonte: EDUFMG.
- Massey, D. (2008) *Pelo espaço: Uma nova política da espacialidade*. Rio de Janeiro: Bertrand Brasil.
- Oliveira, F. (1977) *Elegia para uma Re(l)igião: Sudene, Nordeste. Planejamento e conflito de classes*. Rio de Janeiro: Paz e Terra.
- Oliveira, J. C. A. (2007) O Patrimônio Total: dos museus comunitários aos ecomuseus. *Revista Museu*. Available at <http://www.abremc.com.br/artigos2.asp?id=14> [Accessed 3 January 2012].
- Xérez, X. P. (2009) *Turismo Cultural: Uma visão antropológica*. Tenerife: PASOS. Available at <http://www.pasosonline.org/Publicados/pasosoeedita/PSEedita2.pdf> [Accessed 20 April 2012].
- Raffestin, C. (2010) *Revista Formação* [Interview]. n. 15, v. 1. Available at [http://www4.fct.unesp.br/pos/geo/revista/artigos/1\\_raffestin.pdf](http://www4.fct.unesp.br/pos/geo/revista/artigos/1_raffestin.pdf) [Accessed 20 May 2010].
- Ribeiro, L. C. Q. (2012) *Segregação residencial e políticas públicas: análise do espaço social da cidade na gestão do território*. Available at [http://www.observatoriodasmetroplites.ufrj.br/download/Segregacao\\_residencial\\_e\\_politicas\\_publicas.pdf](http://www.observatoriodasmetroplites.ufrj.br/download/Segregacao_residencial_e_politicas_publicas.pdf) [Accessed 15 March 2012].
- Sack, R. (1986) *Human Territoriality: it's theory and History*. Cambridge: Cambridge University Press.
- Sack, R. (1997) *Homo Geographicus*. Baltimore & Nova York: John Hopkins University Press.
- Sähr, W. D. (2008) Ação e espaçoMUNDOS – a concretização de espacialidades na Geografia Cultural. In A. Serpa (Org.) *Espaços Culturais: Vivências, imaginações e representações*. Salvador: EDUFBA, pp. 33-58.
- Sähr, W. D. & Sähr, W. D. (2009) Territórios-faxinais-espaço. A problemática "espaço/território" na formação social brasileira. In M. A. Saquet & E. S. Spósito (Orgs.) *Territórios e territorialidades: Teorias, processos e conflitos*. São Paulo: Expressão Popular, pp. 143-173.

- Santana, G. A. et al. (2011) Análise do processo comunicacional de uma instituição museológica de Pernambuco, MAST. *Revista Eletrônica do Programa de Pós-Graduação em Museologia e Patrimônio*, v. 4, n. 1. UNIRIO. Available at <<http://revistamuseologiaepatrimonio.mast.br/index.php/ppgpmus/article/viewFile/142/156>> [Accessed 20 April 2012].
- Santos, M. A (1996) *Natureza do espaço: técnica e tempo, razão e emoção*. São Paulo: Hucitec.
- Simmel, G. (1996) A ponte e a porta, *Política e Trabalho*. n. 12 pp. 10-14, September. Available at <<http://www.oocities.org/collegetpark/library/8429/12-simmel-1.html>> [Accessed 12 March 2010].
- Taillard, C. (2002) Diversidade de definições e diferenciação das práticas geográficas: contribuição para o debate sobre a cultura. *Espaço & Cultura*. Rio de Janeiro, n. 14, pp. 23-32.
- Thrift, N. (1996) Visando o Âmagô da região. In D. Gregory, R. Martin & G. Smith, *Geografia Humana: sociedade, espaço e ciência social*. Rio de Janeiro: Jorge Zahar Ed..
- Tuan, Y. (1980) *Topofilia: um estudo da percepção, atitudes e valores do meio ambiente*. São Paulo: DIFEL.
- Tuan, Y. (1983) *Espaço e Lugar: a perspectiva da experiência*. São Paulo: DIFEL.
- Urry, J. (1996) *O olhar do turista: lazer e viagens nas sociedades contemporâneas*. São Paulo: Nobel.
- Werlen, B. (1993) *Society, action and Space: an alternative Human Geography*. Londres: Routledge.
- Yázigi, E. (2006) A Conceituação de Patrimônio Ambiental Urbano em Países Emergentes. *GeoInova. Revista do Departamento de Geografia e Planejamento Regional*, n. 12, Lisboa.





ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable

Development Vol. 4, No. 1, 2015, pp. 57-65

## Owning memories: a tale of two cities

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In 1894 Queen Victoria opened the Salford Docks, now known as Salford Quays, home of MediaCityUK. At the time, Salford Docks were considered a masterpiece of engineering, allowing Manchester to circumvent the route through Liverpool and have access to international trade. The area was an ambitious hub for commerce, industrial activity and job prospects. Although more than 100 years have passed, Salford Quays is again under the spotlight and has the ambition to be a contemporary contender in the cultural industries market – this time focussing, through MediacityUK, on moving the media industry away from London. In order to attract such a prestigious focus, the developers have responded by building waterside apartments, luxury housing and speedy infrastructure and by promoting a successful professional lifestyle, with cultural and cutting-edge designer events. However, the local community seems to be more than ever alienated from this process, the sense of cultural collective memory being diluted. Throughout this paper, we are considering issues relating both to the historical significance of Salford Quays as well as to its cultural legacy within the local community. In order to do so, we are addressing the following research questions: How can the past be brought to into the present to support a sense of identity cohesion? Can Salford shake off the image of a derelict area and become the innovative creative quarter, through the (living) memories of its community? We will argue that the re-invention of Salford Quays as a new cutting-edge creative quarter happens at the expense of the historical memory of the place. In this way, local people and local memories do not become an integral part of the regeneration strategy, but are almost erased from the whole process.

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**Keywords:** local heritage, collective memories, regeneration, identity cohesion.

### Introduction

In 2011, the British Broadcasting Corporation (BBC) relocated, in part, from London to Salford, one of the most economically deprived areas of the United Kingdom (Fitzgerald, 2012) At a national level, the relocation was an 'endeavour to shape a BBC [...], less focused on London and more representative of, and engaged with, the rest of the country' (Christophers, 2008: 2313). At a regional level, the move was yet another attempt of the local government to foster Salford's urban development agenda that, through a creative growth, should have also opened up opportunities for local, economical and cultural growth. Indeed, as a representative of the Central Salford Urban Regeneration Company stated, it was hoped that Salford would be made into 'a beautiful, vibrant and prosperous city, where people will want to live, work and study for generations to come' (Salford City Council, 2005). However, three years since the BBC's relocation and almost twenty years since the start of the urban regeneration strategy, Salford still is an area dominated by urban inequalities and with only a restricted group of individuals involved in and benefiting from the creative growth.

Some of the regeneration strategies involve gentrification of the area. The term 'gentrification' – coined by Ruth Glass (1964) in the mid-twentieth century- entails, first of all, class inequalities. It also unjustly prioritises the capitalist interest on profitable land markets with policies that do not benefit the original population (Slater, 2011). Whilst Anna Minton's research on various waterfront sites around Britain talks of 'regeneration' primarily in terms of 'renaissance', this seems also to be a politically-loaded term,

using Urban Development Corporations to revitalise docklands so that the sites can attract and benefit from a more affluent, professional class (Minton, 2009).

Accordingly, Saskia Sassen adds that gentrification,

'was initially understood as the rehabilitation of decaying and low income housing by middle-class outsiders.[However] by the 1980's new scholarship had developed a far broader meaning of gentrification, linking it with processes of spatial, economic and social restructuring' (1991; 255).

In Salford Docklands, regeneration obliterated any connotation of the site's original use. It renamed and publicised its identity, through the branding and marketing of Salford Quays. When the site successfully attracted the BBC (and later the Granada Studios), the area was further promoted with the additional brand of 'MediaCityUK' onto the site. With this research, we wanted to investigate how this was felt by local residents; at the same time we aimed to demonstrate the importance of the (cultural) contestation taking place, when previously ignored ex-industrial sites are revitalised according to prescriptive and marketed sterilization of the previously redundant post-industrial phase (Doron, 2000). The drive to build over an immensely engrained historical past - which could be uncovered in our older subjects' memories - denies their importance, and points to their powerlessness from the process of gentrification by transforming the area into a place of consumption for a far wealthier clientele.

This paper looks at the Salfordian cultural identity and at the hidden discourse of local, collective memory. It aims to make a set of critical observations towards the urban regeneration strategy implemented in Salford. We believe that this (almost aggressive) regeneration strategy risks to obliterate the local history and memory, by reducing Salford Quay to a site of corporate dictatorship and by further rendering impotent the working class in the part they played in the success of their city's history.

We have structured the paper into three main parts: in the first part, we define the historical and social context of Salford Quays, starting from its formal opening in 1894 until its recent development as a media and creative quarter; in the second part, we consider the cultural and social impact the these changes have had on the local community. In the final section, we argue that ignoring Salford's local history and heritage in such a push to promote a shiny new venture, not only does not lead to social cohesion, but also erases the local sense of historical and collective memory.

### **Salford Quays: a short historical and social overview**

More than any other city in England, Salford has both benefited and suffered of the Industrial Revolution. A typical city of rural England (at least until the 18th century, before changing its status to industrial city), throughout the centuries, Salford had developed under the shadow of Manchester and was granted the city status only in 1926. Salford grew out from the amalgamation of other three smaller towns (Broughton, Pendleton and Salford), all of Anglo-Saxon origins. Salford's name itself is most probably Anglo-Saxon, meaning 'the ford by the willow'<sup>1</sup>.

Before the rise of the cotton industry, which saw Manchester overshadowing Salford as the 'commercial capital of the textile region' (Tomlinson 1974: 19), the city of Salford had its fair share of businesses, trading wools and flax, through London. However, the opening of the Ship Canal on the 21<sup>st</sup> May 1894 by Queen Victoria was a turning point for Salford. The Ship Canal was a 58km long inland waterway connecting Liverpool to Manchester. Its purpose was to provide coastal and ocean-going boats with direct access to Manchester. The Ship Canal included nine upper docks, four of which (numbered 9,8,7 and 6) were based in Salford. After a slow start, the Ship Canal Company began to prosper and by the late 19<sup>th</sup> century, 'there were 35 steamship companies with regular services to Salford docks and with agencies in the city' (Bergin, et al. 1975: 72). This commercial prosperity lasted until the late 1970s, when unfortunately the docks began to decline rapidly, due to the increasing size of boats navigating the canal, as well as due to the increased trading activities with Europe and the East. In 1982, Salford docks were officially closed and the area became derelict, until the entrepreneurial turn of the late 1990s, with the regeneration project of the Quays.

Views from Central Government during the 1980's were that Salford was ready to work with the private sector - in comparison to Manchester who, they felt, proved more 'socialist' in outlook. Thus, Salford had been successful in attracting city council grants, which helped development of Salford Quays (Robson, 2002). In 1981, a substantial part of Salford docklands was declared an Enterprise Zone (Gray, 2000). In 1983 Peel Holdings plc acquired Bridgewater Estates: their portfolio included 12,000 acres of land in Manchester and Salford, covering the area of Salford Docklands (Peel Holdings Group, 2014; North West Tourist Board, 1993)<sup>2</sup>. By 1985, there was a full 'Salford Quays Development Plan', which was to improve infrastructures and the environment including, water, roads, public access and landscape of the docklands area. With this completed by 1990, it was flagship architecture that hailed the new site.

Initially, in 1988 the area was conceived as the home for new and cutting-edge art centres. Salford City Council commissioned internationally renowned architects James Stirling and Michael Wilford to work

on the project. However, Stirling died in 1992, leaving Wilford to complete the commission in 2000. The Lowry Museum and Gallery opened in 2000, moving the Lowry Collection out of Salford Museum and Art Gallery into the multi-cultural, art venue in the new Salford Quays<sup>3</sup>. A few years later, in 2007, Holdings plc was granted planning permission for MediaCityUK, the largest purpose-built media community in Europe.

Sitting behind The Lowry on the Manchester Ship Canal, the Imperial War Museum North (designed by Daniel Libeskind and opened in 2001) dominates the contemporary scenery (Fig. 1).



Figure 1. View of the Imperial War Museum (author's own image).

Conceptually designed to represent the world shattered by conflict, the building's disorientating form is made up of shards – 'a globe shattered', in the words of Libeskind (Wheeler and Carson, 2005; Shaw et al., 2008). Visitors can climb the 'Air Shard' (a jagged shaped viewing platform on the top floor of the museum) to view the districts of Trafford and Salford or look through the mesh floor to see how far the ground below lies. From there, they are privileged to experience the spectacular views of MediaCityUK, the Quays and Manchester and at the same time, they are reminded of the incredible transformations that the area has gone through during the last century (Manchester City Council, 1994; Marketing Manchester, 2003).

This cultural and social transformation of the area continued until very recently, with the opening in 2001 of the Lowry Outlet Mall (known as 'The Quays'). However, Peel Holdings Group purchased the Lowry Outlet Mall in 2012 hoping to bring the dismal and frequently failing retail units into their more successfully media orientated scheme. The Group's website also publicises and stresses their strong relationship with the 'community', by having donated £12.5 million to the Imperial War Museum North (Peel Holdings Group, 2014; Hough, 2012). In 2011 amongst much publicity there was the move of the University of Salford in the MediaCityUK's premises. What were once the docks of one of the most important British ship canals, a symbol of industrial revolution, have now become impressive architectural buildings and shopping hubs (Figs. 2, 3), which visually induce one to forget the cultural history and memory of the place. As the sociologist Paul Connerton explains, this 'culturally induced forgetting is reinforced by the temporality of consumption' (2009: 53), which almost annihilates what was and had taken place. However, in this paper, we are interested in investigating this forgotten and hidden discourse of the local Salfordian, collective memory: we intend (or at least we attempt) to unravel the 'historical' experiences and memories of contemporary Salfordians that could only enrich and shape this cultural and creative transformation.



Figure 2. View of MediacityUK premises (author's own image).



Figure 3. Entrance of The Studios, MediacityUK (author's own image).

Nowadays Salford's demographic is rather assorted. Together with local working class people - who have been living in the area for a long time - there is also a new group of wealthier and business-like individuals who - thanks to the cultural and economical regeneration - have only just relocated to Salford (particularly to Salford Quays) and are now part of the local life as well as of the social dynamics. The encounter of these different groups, with often antithetical perceptions of the area, is very interesting especially in terms of local heritage and memory construction (Benson and Jackson, 2013). Local Salfordian heritage (being the Victorian docks, the 19<sup>th</sup> century mills or Cross Lane with its many ale-houses or the factories destroyed by the Second World War blitz) has developed in Salford Quays throughout the past 200 years. It has come to represent a 'specific human condition [e.g. the dockland workers, the industrial power or even the recession and job losses] rather than as a single movement or personal project' or a site (Harvey, 2001: 320). However, because of this association with a specific human condition, this heritage bears different understandings, according to the cultural and social group.

As previous studies show, of all social groups, the working class has a very strong emotional reaction associated with heritage sites and local buildings (Watson, 2005; Wedgwood, 2009). This is probably because working class feels that they need to prove themselves as people with a long history and a web of traditions connected with local places/heritage and that there is more to them than just hard labour, job insecurity and low-wage workers. Particularly, within the context of this emotional relation, certain landmarks and (by-gone) buildings may be the symbols of endurance of the local group against social problems as well as the symbol of ancestors' daily lives, and community cohesion. In the next section of the paper, we are going to look more in detail into these now disappeared/ing symbols of endurance and by gone community life.

### **'Docks, boats, fishing club': the Salford Quays that do not exist anymore**

In order to start to understand the impact that these cultural and social changes have had on the local community, as well as the kind of collective memories and sense of collective identity that had been lost in name of this creative regeneration, 16 semi-structured, short interviews were carried out between October and November 2013 in the area of Salford Quays and at a community café near a university campus in Salford M3 district. Research participants were chosen primarily on the basis of their geographical provenance: they should have been born in Salford or be local people who had been living or should have lived in the area around Salford Quays for the past 30 years, at least. This was a key requirement because we wanted individuals who were, or had been, experiencing the area throughout time and had somehow been affected by the transformation that had taken place.

The age of the interviewees ranged from 30 to 82 years old, with seven of the participants being male and nine female<sup>4</sup>. The interview questions were organised around three main points: the understanding of Salford Docks (and the difference from Salford Quays); the changes and the perception of the transformation that had taken place in the area during the past 30 years and finally the memories associated with the docks (or with the area pre-transformation). From the interviews, two main themes emerged: 'Different ages, different Quays' and 'Family and bygone trades'.

### **Different ages, different Quays**

The first theme identified was the one of 'Different ages, different Quays'. Due to the wide age spectrum, it was evident that the area was defined (and remembered) differently by different participants. Particularly, older interviewees were unanimous in knowing and calling the area by its original name ('The Docks'), which was strongly associated with the heritage of the area, the worrying years of the 80s recession and with the type of trades taking place before the regeneration (Bergin et al., 1975). Indeed, as one of the interviewees explained, 'I call it the docks, where the Manchester liners used to go in, also ships unloading goods' (F69 M44); this was echoed by another participant who explained: 'Quays. It sounds nicer. Docks sounds worrying. It conjures up thoughts of industrial area, wasteland and pubs that are not nice' (M50 M6). However, interviewees also (almost nostalgically) acknowledged the scale of changes that had happened during the past 40 years and which had not only renovated Salford Docks, but also transformed it. For example, F62 BL3 said: 'I call it Salford Quays because it does not resemble the Docks I knew'. Similarly F68 M27 stated that he calls it 'the Quays, because it is updated and it becomes a different place'.

The group of the six older residents interviewed in the community café still retained a weekly lunch meeting where memories and bonds were upheld and in each interviewee the reminiscences were quickly recalled and with passion for living through the hard life during wartime with their immediate close knit families. In part, they did occasionally visit the Quays but expressed dismay that it was too expensive for them to go regularly and that the Lowry Outlet Mall did not sell things they would want to buy. The Lowry Museum offered more of a sense of community and one interviewee (F68 M27) explained that she was going to join the Quay Club Scheme because she could get membership at a reduced price and then it was free entry.

Conversely, younger participants seemed to know very little about the area and refer to it only as 'Salford Quays'. From the replies gathered, indeed, there was no awareness of the heritage and of the past (cultural and economical) struggle of this part of Salford. To quote the theorist Frederic Jameson, it

appeared that the local 'contemporary social system ha[d] little by little begun to lose its capacity to retain its own past' (1985: 125). For instance, two participants in their 30s, explained 'This is Salford Quays, I never heard it called Docks before' (F33 M29) and again: 'I know it only as Salford Quays; this is how it is referred to in the media and it is signposted in this way' (M39 M27).

David Harvey (1989; 1997) examines the relationship (or lack of it) between the institutions (e.g. developers, bankers, governments, transport interests) and the surrounding city's inhabitants: he argues that there should be more consideration and linkage between the involved parts, in order to recuperate a sense of local history, traditions, collective memory and identity. This is particularly true in the case of Salford Quays, where the privatised, homogenised, corporate layer has obliterated the older Salfordians lived experiences. On the other hand, a more organic, holistic engagement with the local population could liberate 'an interest in the street and civic architecture as arenas of sociality [and it could permit] new ways of thinking about the relationship between work and living' (Harvey, 1997:2). This, unfortunately, has not happened in the Quays area and affordable housing is beyond the reach of most locals. Nowadays, neighbourhood and community values (which were once at the heart of Salford Docklands) are unknown concepts. When the district first began to be developed in the late 1980s the developers were quick to erect high walls demarking the area and blocking out the relatively close estate of social housing of the 1970's ilk, containing local Salfordians. Salford Quays particularly was being built under the postmodern penchant for fragmentation and ignored the region surrounding it. It became a part of planned design, aiming at professional/business classes and focusing on a strong desire to attract the BBC.

### Family and bygone trades

The second identified theme was 'Family and bygone trades'. From the interviews, in fact, it was possible to understand what made Salford Quays/Docks an effective carrier of cultural memory. Victor Morgan has appropriately pointed out that 'we tend to think of memory as retrospective, as recollection. But [memory is] also prospective' (1999:185). Memories associated with a place, can actually be both the symbols of events and of the achievements (social, economical, cultural) of the place, in a specific historical context. This was evident through our research: when asked about the memories associated with Salford Quays/Docks, participants referred both to personal, family events (both happy and more stressful) as well as to more everyday, general ones (e.g. small boats at the docks, men loading and unloading cargos). They depicted very specific past scenarios, which offered colourful snapshots into the life they used to have in Salford Docks, the trades that used to take place in the area and the local characters that use to populate Salford and its streets.

For example, F69 M44 shared memories about her happy childhood:

'I have a lots of good memories: trips to the park, Saturday mornings at Weaste Picture house; playing games in the street, May Day, dancing around the pole, Whit Walk [...] being in the Rose Queen procession, I was a petal girl'.

F58M3 remembered her teenager's years, when she

'was warned not to go down there and certainly not to go in the pubs. It was where characters like 'Vinegar Vera' plied her trade. My parents occasionally went to pubs down the dock road (Trafford Road) and Broadway on a Saturday night and always had stories to tell of the characters they met. Most of my knowledge of the area was from stories my father told.'

On the other hand, M75 M35 could associate Salford Quays and his early years there only with the war and the displaced way of living of the time. He explained that he could remember:

'living on Middlewood Street [from where] we were blitzed out, three families. We lived the rest of the war in 'Rest Centres' meaning when kids went home from school we could stay in school, otherwise we walked the streets'.

These detailed, personal anecdotes allow the cultural and collective memories of a group of local people to become living stories, which tells of a bygone, 'handmade world, [...] a slow world' (Connerton, 2009: 30); a world made by 'docks, boats, fishing clubs [...] rough and tough, where people [had] to fight to work, [where they had to queue] twice a day [...] and hoped to be picked, just like in the film 'On the Waterfront' (M75 M35).

From the interviews, indeed, it was possible to picture a very different scenario than the one we are presented with today. Most of the interviewees referred to local places that do not exist anymore (i.e. the pubs down the dock road; 'thousands of 2-up-2-down houses, rows and rows of terraced houses' F67 M3) but also to local characters, which have disappeared with the transformation ('the sailors and the ladies of the evening' F82 M3). The people interviewed have seen the Docks changing greatly throughout the time: from a booming, economically important site, to a post-industrial derelict space and then again into a creative and buzzing cultural quarter.

### **From cultural narratives to the creative oblivion**

It is unquestionable that our social and cultural environment 'influences the way we mentally process the present [and also] affects the way we remember the past' (Zerubavel, 1999: 81). We tend, in fact, to remember what is familiar to us and what fits with the social context/social group we are and/or were part of. Similarly, we tend to make sense of the present, on the basis of what we know, remember and have experienced (Connerton, 2009; Zerubavel, 1999).

Furthermore, as human beings and in relation to memory construction, we 'mark' the world we have experienced, with landmarks of the past everyday life, tasks or even jobs that have disappeared. Through these landmarks, a social and cultural framework of individual recollections is formed, as well as the signposts for multiple, often nostalgic narratives (Boym, 2002). These signposts (and multiple narratives) become evident only when we are not part anymore of that cultural scenario. Indeed, as Svetlana Boym states: 'one becomes aware of the collective frameworks of memories when one distances oneself from one's community or when that community itself enters the moment of twilight' (2002:54). Within this phenomenon, the act of remembering – in this this paper, understood both as the interpretation of the past and as the selection of the signposts to be remembered – plays an active part. Remembering is a concrete process: 'it is enacted in situations' [...] it is 'the day to day process of how persons create and appropriate stories' (Boym, 2002:253).

Bearing this in mind, we have considered the area of Salford Quays as the cultural and social framework for this study and the hidden collective memories associated with it, as its cultural and social signposts. Although further and more extensive study is needed regarding our subject, the research conducted with the individuals from Salford showed that their present understanding of the Salford Quays area is mediated by a set of experiences (or lack of experiences) and memories. These experiences and memories are part of their individual biographies (e.g. individual Salfordians) but at the same time, they are also part of the history of a group (e.g. age group) or a community (e.g. Salford Quays' residents in the 1970s; Salford Quays' younger professionals) they belong(ed) to. As such, these experiences and memories contribute to defining and shaping a sense of social identity. In this endeavour, the sense of place (and the materiality that goes with it) is very important. This is because ideas, memories and cultural narratives are not context-less but they all need a historical and social framework to be developed and transmitted. However, as our research has shown, the sense of place, even if at a local level and across long established residents, can be fluctuating or even lacking concept.

Our participants (belonging to different age, educational groups and yet all Salfordians) denounced a lack of sense of place and belonging in relation to Salford Quays. People, in fact, tend to remember best only 'what is coloured by emotion'. In the landscape of cultural memory, both personal and community-shared events (like, for example, historical events) can become entangled and therefore meaningful (Boym, 2002); or can become events or places without memory attached to them, hence, insignificant. This is most likely because the contemporary Salford Quays is an aseptic, rather impersonal area, which neither portrays a common local past nor encapsulates local collective and cultural memories (Assmann, 1995). The regeneration strategy, in fact, while aiming at transforming

'Salford Quays and the waterfront [in] a focus of water-related recreation, culture, commerce and living options, [whose] successes will be leveraged to provide benefits and opportunities for neighbouring communities and residents' (Central Salford Board, 2006: 48).

has managed primarily to extinguish both the communicative memories (memories characterized by the everyday rituals and elements of the local residents) and the cultural memories (the ones characterized by its distance from the everyday, which make a place a 'remembrance environment') (Assmann, 1995). Salford Docks, with the little trades and tough living, do not exist anymore. Salford Quays is a working environment, as well as shopping hubs, full of contemporary tall office buildings and waterside apartments (Minton, 2009). However, because of the impersonal feeling of the area, there is almost no willingness, on behalf of the locals, to engage with the dynamic and performative process of recognition, belonging and memory: the narratives of the collective and cultural memories of the industrial past of Salford Docks are being left to the oblivion and new collective and cultural memories of the creative Salford Quays are started being created.

The publicity both online and in the press continuously reinforce the opportunities available for local people in terms of jobs, entertainment and consumption, but they have the notion that 'one size fits all' and their job opportunities cited for local people generally are in the building trades, which may be of temporary contracts or in servicing the professionals in restaurants, bars and shops. They still do not recognise the importance of community in a holistic sense of a whole range and strata of gender, age and class divides.

## Conclusions

This paper has been dealing with Salford Quays, local cultural identity and at the hidden discourse of local, collective memory. Throughout it, we wanted to make a set of critical observations towards the cultural regeneration strategy implemented in Salford, which we believe is obliterating the local collective and cultural memories. We have been, indeed, trying to question how can the past be brought to the present to support a sense of identity cohesion. Our research has shown that Salford Quays is nowadays a place with little collective and cultural memory. The richness of the local cultural and collective memories has been, in fact, erased and absorbed by a narrative of creative regeneration, which, however, ignores the importance of the local histories.

The older generation surveyed, who understand their important part played in forging an industrial success for Britain, generally had strong memories of the site and the numerous businesses that contributed to both the wealth of the area and of the nation. Having lived through WWII's devastation of the area, due to the canals guiding bombers directly to the site and beyond into Manchester, they also experienced the traumatic decline in employment of the late 20<sup>th</sup> Century, (Harvey, 1989). Their strong emotional ties are not reflected or given any prominence within the external landscape. The Imperial War Museum North does resonate with their experiences but expresses them through a simulated entertaining experience for parties of schoolchildren, repetitively reproduced at 11am and 2pm daily. This ignores the value of lived experience of the local community, post-war and resonating in a great division of cultural experiences within the newly developed Salford Quays site, where prominence is overwritten by the retail businesses serving the professional elite with food and leisure activities (Shaw et al., 2008).

Throughout this paper we have considered issues relating to both the historical significance of Salford Quays as well as its cultural legacy within the local community, questioning whether the past can be brought into the present to support a sense of identity cohesion. It currently seems that priority has been given to reinventing Salford Quays as an innovative creative quarter at the expense of the historical memory of the site. Planners and urban developers are slowly beginning to recognise the obliteration of historical, communal memory that does have importance and we would welcome more acknowledgement of living collective memory being evidenced in the site of Salford Quays.

## Endnotes

<sup>1</sup> 'Sal' is the old English word for 'Sahl' or 'Sealh', the linguistic root of the modern 'sallow' and 'willow' (Bergin et al., 1975).

<sup>2</sup> In addition, the local regeneration and development strategy for the 21st Century has scope for the area of Manchester and Salford to compete internationally for more investment, and jobs, which they claimed should have secured substantial benefits for local residents (Manchester City Council 1994; Marketing Manchester, 2003).

<sup>3</sup> Until then the collection (bequeathed by Laurence Stephen Lowry to the townspeople of Salford) had been kept at Salford Museum and Art Gallery. The Lowry houses two main theatres and a studio space, together with two exhibition areas: the Lowry is considered 'an architectural flagship with a unique and dynamic identity, [which is] rising from the regenerated docklands, [and which has been] designed to reflect the surrounding landscapes and flourishing waterways, in its glass and metallic surfaces' (The Lowry, 2013).

<sup>4</sup> In order to keep the anonymity of the interviewees we have coded them according to their gender, age and postcode.

## References

- Assmann, J. & Czaplicka, J. (1995) Collective Memory and Cultural Identity. *New German Critique* 65, pp.125-133.
- Benson, M. & Jackson, E. (2013) Place-making and Place Maintenance: Performativity, Place and Belonging among the Middle Classes. *Sociology*, 47(4), pp. 793-809.
- Bergin, T., Pearce, D. N., & Shaw, S. (eds.) (1975) *Salford, A city and its past*. Salford: City of Salford Cultural Services Department.
- Boym, S. (2002) *Future of Nostalgia*. New York: Basic Books.
- Central Salford Board (2006) *The Vision and Regeneration Framework for Central Salford*, Salford.
- Christophers, B. (2008). The BBC, the creative class, and neoliberal urbanism in the north of England. *Environment and Planning A*, 40, pp.2313- 2329.
- Connerton, P. (2009). *How modernity forgets*. Cambridge: Cambridge University Press.

- Doron, G. (2000) The Dead Zone and the Architecture of Transgression. *City*, 4, (2), pp. 246-63.
- Fitzgerald, T. (2012) *A different kettle of fish in Salford? BBC MediaCityUK row rumbles on as scandal and complaining staff continue*. Available at <http://mancunianmatters.co.uk/content/31053733-different-kettle-fish-salford-bbc-mediacityuk-row-rumbles-scandals-and-complaining> [Accessed 19 December 2013].
- Glass, R. (1964) *London: aspects of change*. London: MacGibbon & Key.
- Gray, E. (2000) *Salford Quays: the story of the Manchester Docks*. Manchester: Memories.
- Harvey, D. (2001) Heritage pasts and heritage presents: temporality, meaning and the scope of heritage studies. *International Journal of Heritage Studies*, 7 (4), pp. 319-338.
- Harvey, D. (1989) *The Condition of Postmodernity: An enquiry into the origins of cultural change*. Oxford: Blackwell Publishers.
- Harvey, D. (1997) The New Urbanism and the Communitarian Trap. *Harvard Design Magazine*, 1, 2.
- Hough, A. (2012) *The BBC's £2m London-to-Salford travel bill*. Available at <http://www.telegraph.co.uk/culture/tvandradio/bbc/9194099/The-BBCs-2m-London-to-Salford-travel-bill.html> [Accessed December 16, 2013].
- Jameson, F. (1985) *The Political Unconscious: narrative as a socially symbolic act*. Oxon: Routledge.
- Manchester City Council (1994) *City pride: a focus for the future. Manchester, Salford & Trafford from the present into the twenty-first century*. Manchester: Manchester City Council.
- Marketing Manchester (2003) *Destination Manchester: a five year tourism strategy 2003-2008*. Manchester: Marketing Manchester.
- Minton, A. (2009) *Ground Control, Fear and happiness in the twenty-first century city*. London: Penguin Books Ltd..
- Morgan, V. (1999) The construction of civic memory in early modern Norwich, in M. Kwint, C. Beward & A. Jeremy (eds.) *Material Memories. Design and Evocation*, New York: Berg Oxford, pp.183-98.
- North West Tourist Board: LDR International (1993) *Manchester, Salford and Trafford tourism development initiative: a framework for economic development*. LDR International, Wigan, North West Tourist Board.
- Peel Group (2014) *Timeline*. Available at <http://www.peel.co.uk/aboutus/timeline> [Accessed 5 August 2014].
- Robson, B. (2002) Mancunian ways: the politics of regeneration. In J. Peck & K. Ward (eds.) *City of Revolution: Restructuring Manchester*. Manchester: Manchester University Press, pp. 34-49.
- Salford City Council (2005) *Salford Education Vision*. Available at [www.salford.gov.uk/salfordeducationvision.pdf](http://www.salford.gov.uk/salfordeducationvision.pdf) [Accessed 16 December 2013].
- Sassen, S. (1991) *The Global City: New York, London, Tokyo*. Princeton: Princeton University Press.
- Shaw, J., Squire-Scholes, B., & Thurgood, C. (2008) Space and Place – Imperial War Museum North. *Journal of Place, Management and Development*, 1 (2), pp. 227-231.
- Slater, T. (2011) 'Gentrification of the city'. In G. Bridge & S. Watson (eds.) *The New Companion to the City*, Malden. Oxford: Blackwell Publishing Ltd., pp:571-585.
- The Lowry. (2013) *Welcome to the Lowry*. Available at <http://www.thelowry.com/about-the-lowry/introduction/> [Accessed 16 December 2013].
- Tomlinson, V. I. (1974) *Salford: an outline of the growth of an industrial town in pictures* Didsbury: Morten.
- Watson, S. (2007) History Museums, Community Identity, and a Sense of Place. In S. K. Knell, S. McLeod & S. Watson (eds.) *Museum Revolutions*. London: Routledge.
- Wedgwood, T. (2009) History in Two Dimensions or Three? Working Class Responses to History. *International Journal of Heritage Studies*, 15 (4), pp. 277-297.
- Wheeler, V. & Carson, J. (2005) *A haunting: an interdisciplinary event*. Manchester: The Land.
- Zerubavel, E. (1999) *Social Mindscapes. An invitation to Cognitive Sociology*. New York: Harvard University Press.

## Acknowledgements

The authors would like to thank Angie McVeigh, Invigilator at The Lowry, and all the people of Salford who took part to this research shared their memories and views and completed our questionnaires.





ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable

Development Vol. 4, No. 1, 2015, pp. 67-74

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## The rented bride: Puccini's *Madama Butterfly* and the commoditization of women in Opera

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Opera's core repertory includes a number of female characters who are regarded as if they, or at least sexual access to them, were items of commerce. Some are given in marriages as prizes at contests. Others offer their bodies in trade. The most prominent of these is the title character of Puccini's *Madama Butterfly*, a Japanese geisha rented by a visiting American sailor in a temporary marriage. The depiction of these "bartered brides" conforms to Bateman's Principle, whereby the gender with greater reproductive potential will become the object of competition by the other. This especially applies to women perceived to be of high reproductive potential, such as *Butterfly*. Combined with the problem of paternal uncertainty, however, this higher valuation leads not to improved status but rather to greater subjugation of women. In many popular operas women characters are subjected to exposure, constraint and mistreatment, often resulting in their undeserved demise.

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**Keywords:** Opera, Puccini, Bateman's Principle, women, sexism.

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### Butterfly's Vigil

The aesthetic success of Giacomo Puccini's *Madama Butterfly* is all the more remarkable when we consider the paucity of incident in this extremely popular opera. The plot can be summarized in only a few sentences.

Pinkerton, a naval officer temporarily stationed in Nagasaki, brokers from Goro a lease for a house and a marriage contract to the 15-year-old Cio-Cio-San, both of which he can easily annul. He tells the American consul Sharpless he later intends to find an American wife. Their wedding is interrupted by her uncle the Bonze, a Buddhist priest irate at her conversion to Pinkerton's Christianity. Pinkerton insults her family and ushers them away. He then escorts her into their bridal chamber.

Act II takes place three years later. Cio-Cio-San and her servant Suzuki continue to wait for the long absent Pinkerton. When Sharpless tells her Pinkerton will not return, she presents their young son. A cannon shot in the harbor announces the return of the USS Lincoln. Cio-Cio-San decorates the house for his arrival. They watch all night long. Pinkerton, however, escorts his American wife, Kate; they have come to claim the boy. Cio-Cio-San sends word that he must come alone; when he does so, she commits ritual suicide.

This slim plot derives from David Belasco's one act play of the same title, yet it suffices to motivate almost two and a half hours of music. Whether there are one or two intermissions—this depends on the division of the second act into two scenes—*Butterfly* easily constitutes a full evening's entertainment. And it does so everywhere operas are staged, including in Japan—an issue we shall return to. From 2008 to

2013 *Butterfly* was the sixth most produced opera in the world ([www.operabase.com](http://www.operabase.com), August 7, 2013). Obviously a wide range of people like to watch it, again and again.

Our problem only waxes when we take note of the lack of incident and variety in the opera. There is only one set, Cio-Cio-San and Pinkerton's house, albeit some productions will revolve the stage in order to give different perspectives. Termed "a very simple story" by Jan van Rij, there are no complicating subplots (van Rij, 2001, 17). Like the Japanese art Puccini and his librettists, Giuseppe Giacosa and Luigi Illica, tried to imitate, *Butterfly* is confident in its simple theme and the means of presenting it. Their several revisions generally pared it down to its core. Puccini wrote at the time that the opera is "a little drama which, once begun, must proceed without interruption to the end" (Puccini, 1974, 158).

A particular case in point is one of the most unusual passages in all of opera, the twelve minute orchestral intermezzo between the two scenes of Act II. Accompanied by a wordless and unique humming chorus, Cio-Cio-San, Suzuki, and the boy watch in the distance for Pinkerton's approach. Their nightlong vigil is often staged with their sitting *tatami*-style facing the back of the stage. If there is a second intermission, it interrupts this passage, which in effect adds to the perceived length of *Butterfly*'s night-long vigil.

Some of the opera's remarkable prominence can be attributed to its beautiful music—*Butterfly* is Puccini's most acclaimed score and there are many recordings. Nevertheless excerpts from the opera, especially its instrumental intermezzo, are rarely performed at concerts or separately recorded. Its attraction relies on its carefully selected dramatic situation. Our question is how this single incident elicits such nearly universal attention. Puccini was especially careful in his selection of material: "I shall never be able to work on a subject, if I am not fully convinced about it first" (Puccini, 1974, 177). Once selected, he and his librettists strived to maintain the dramatic continuity of the developing work. In the case of *Butterfly*, there were three stages of revision after the Milan premiere in 1904. The fourth version, first staged in Paris in 1906, is the basis of most productions today.

Apparently the opera is ultimately based on an actual case, where a Western man contracted a temporary marriage to a Japanese woman in Nagasaki sometime during the last third of the nineteenth century. In 1897 Jennie Conrad related this to her brother, John Luther Long, who used it as the basis for a popular novella the following year<sup>1</sup>. Also drawing on the writings of Pierre Loti, including his novel *Madame Chrysantheme* (1887), David Belasco adapted the story in 1900 for the London stage—where Puccini encountered it<sup>2</sup>. Although the composer's English, by all accounts, was rudimentary, he immediately requested the right to set the play to music. And his favorite moment was that same silent vigil. This is also reflected on the cover of the Ricordi score of the opera.

How can it be that a motionless, indeed, wordless, scene can hold our attention for so long? Nothing in its course changes the dramatic situation. Indeed, the same could be said for the preceding fifty minutes of Act II's first scene. Her faith in his affection, in the protection of women per American divorce law, and all her demonstration of her commitment to him, will all be betrayed: Pinkerton never intends to return to *Butterfly*. Despite the attempts of all who surround her, especially the humane Sharpless, to get her to face this likelihood, she continues to believe in Pinkerton's fidelity—until she sees his American wife.

So the situation barely, if at all, changes. Indeed, the much-watched *Butterfly* repeats a common theme that had fascinated readers of Loti and Long, and Belasco's audiences: only a few steps above a prostitute, *Butterfly* is a rented bride—and that seems to account for much of her enormous fascination.

### Interest and adaptiveness

Attention is somatically expensive, if only due to the costs of evolving and growing the necessary nervous tissue to maintain it. Notably, in one fashion or another, it shared by an enormous range of species; given that this may take many forms, it is difficult to conceive of an exception. The rationale is obvious: if a threat or an opportunity is likely to exert a strong influence on one's inclusive fitness—the prospects for transmitting one's genetic patterns into the next generation—then it would seem wise to at least turn one's mind or nervous system to it. However, because there is such a multitude of phenomena present or pending in most environments, the mind has to choose amongst sensory inputs, focusing on likely threats/opportunities, at the expense of others which are "tuned out." Static input usually leads to habituation.

Whether or not the arts provide adaptive benefit for their consumers, their primary "intent" is to attract and hold attention, even if at some cost to the consumer. Operas provide a convenient test for such positions, inasmuch as the same thirty or so works, including *Butterfly*, are repeatedly staged throughout Europe and the European settled world, while making inroads into Asia. Consequently, in the course of a normal lifespan an operagoer is likely to watch *Butterfly* more than just several times. And happily so. One of the marks of a great classic is that, instead of engendering tedium, it will elicit ever deepened appreciation. This is even the case when the outcome is known in advance—opera programs typically include synopses and the denouement is often forecast in the thematic and harmonic structure. *Butterfly* is no exception.

Few will be surprised that *Butterfly* does not have a happy ending. In her infamous *Opera or the Undoing of Women* Catherine Clément noted all the “signs of death” in the opera; with her eye fixed on *Butterfly*, she complained, with slight exaggeration, “all the women in opera die a death prepared for them by a slow plot, woven by furtive, fleeting heroes, up to their glorious moment: a sung death” (Clément, 1988, 45). Perhaps it should concern us that this formula works so well. John Bell Young is hardly alone in calling *Butterfly* “one of the most moving, communicative, and emotionally cathartic inventions in the history of music and, I dare say, theater, as well” (Young, 2008, 100). Indeed, Young terms it “the most innovative of grand operas,” citing the humming chorus as unique in the art form (Young, 2008, 96, 119).

Opera directors typically count on Puccini’s operas to attract audiences and benefactors; it is a rare season that does not include one of his masterpieces. They expect that *Butterfly*, *La Bohème*, *Tosca*, and *Turandot* will assure them the packed houses and ticket sales that will enable them to stage other works. Furthermore, opera is an expensive medium—whether to attend or to produce—but it is also one that enjoys superior cultural prestige. Lastly, opera is also a limited art; due to its costs opera directors have to choose carefully which works they can afford to produce. Performance of one opera usually means neglect of another. Thus widely recognized successes like *Butterfly* beg for close scrutiny.

As a means of attracting widespread attention, opera narratives typically focus on major threats and opportunities, especially including death and marriage—both of which occur in *Butterfly*. In other words, the stakes have to be substantial. It is a rare crime in opera that does not rise to the level of homicide. Admittedly, mere robbery is depicted in Puccini’s next opera, *Girl of the Golden West*, while the title character of his earlier *Manon Lescaut* is exiled for being a card shark. Closer to the norm for the repertory as a whole, two of the three central characters in *Tosca* are murdered and the third leaps to her death.

The premiere of *Butterfly* at Milan’s La Scala was a nearly complete failure. Much of this can be attributed to local opera politics inasmuch as the composer’s enemies apparently engineered a hostile reaction. Puccini and his librettists withdrew the work after that disastrous first night and subjected it to substantial revisions before relaunching *Butterfly* in Brescia and, after yet more revisions, in London and then Paris. The Paris version was a triumph and has stayed so ever since. It is interesting to think that in this process he reduced references to West-Asia relations, themselves an emotionally fraught frame, so as to focus on the more stereotypical issue of male-female relations. Arthur Groos observes, “the early conception of the opera [was] as a tragedy of East-West relations, in which the principal characters are agents of impersonal cultural forces that determine their actions” (Groos, 1994, 185). He says the Paris version omitted much of the Japanese local color and Pinkerton’s cultural slurs (Groos, 1994, 171). Now generally viewed as the canonical version, it reflects the “revised emphasis of the opera on individual differences rather than on national stereotypes” (Groos, 1994, 189).

We do better to examine *Butterfly* and Pinkerton as representatives not of their cultures, but rather of their genders, especially the tactics men and women pursue in all patriarchal societies to assure themselves reproductive success (Buss, 1995). Consider the reason for *Butterfly*’s long vigil, whether we have in mind just the final night or all three years of Pinkerton’s absence. If he returns to her, *Butterfly* will be, as she says, “the happiest girl in Japan” (Puccini et al., 1987, 87). If like all the other foreign “husbands” who never returned—so we are informed by Suzuki—he fails to continue their marriage, she will be in a situation she regards as worse than death.

An additional means of increasing dramatic interest is to counterpoise conflicting adaptation strategies. *Butterfly* and Pinkerton constitute a representative clash of typical male and female sexual ambitions. She seeks a dependable source of emotional and material support in her American husband. As the gender with the more limited reproductive potential, it follows that she would seek a safe investment. Men, who enjoy virtually unlimited potential, have the option of “spreading their seed.” Pinkerton, like the prototypical sailor, dreams of having “a girl in every port.” Indeed, Pinkerton openly sings of this aim in the first act, adding to this his ambition to then marry a fellow American. Clearly these trajectories are incompatible, as is the stuff of so many narratives that concern “the battle of the sexes.”

Opera, however, like most narratives does not focus on the typical and normal, but rather on extremes of behavior. One vehicle for attracting and holding attention is to depict lifestyles at or just beyond the fringe of viability. Certainly we have a morbid interest in marginal, even counterintuitive, tactics, if only as a check on our own actions. According to Joseph Carroll, “the life history of every species forms a reproductive cycle” (Carroll, 2008, 242). As a result we carry an internal model of expectations per species typical behavior, especially with regard to behaviors which pertain to mortality and reproductive success. We use this as a benchmark for evaluating other people, including fictional characters; this is, of course, a model that is conditioned by cultural context and individual experience. We construct expectations as to how people typically pursue inclusive fitness and we quickly calculate, often in a subconscious manner, the degree by which they deviate from those standards. We thus immediately notice, indeed are fascinated by, any deviations to species typical behavior. As Brian Boyd recently argued, this standard is what makes stories possible (Boyd, 2009, 28). For example, *Butterfly* sells her reproductive potential to Pinkerton for a mere 100 Yen. She is cheap in the literal sense. Notably her cousin refused the same deal from Goro. Given Pinkerton’s inclination for philandering, it is obvious to all that their “marriage” is misbegotten and provides a poor basis for raising children. *Butterfly* thus foolishly sacrifices her inclusive fitness, a goal believed by evolutionary psychologists to be the prime motive for everyone’s action. As with prostitutes, one asks: why would she willingly do this?

## Bartered brides

One part of that model for all species-typical behavior is expressed by Bateman's Principle. In 1948 the British geneticist A. J. Bateman observed much greater variance in reproduction in fruit flies amongst males than females. Since, as he theorized, females have much less than males to gain from having multiple sexual partners, he deduced that the gender with the more limited reproductive potential will more likely be the object of competition by the other sex. Thus in most species, including our own, males will contend, even fight, over reproductively promising females, while the reverse relationship is relatively rare<sup>3</sup>. This pattern so underlies our expectations that we take it for granted. Male sexual competition appears in innumerable narratives, including most operas.

There is no such competition represented in *Butterfly*, but Bateman's Principle helps explain the special attention paid to the title character's reproductive potential, as compared to Pinkerton's. That a sailor may attempt to "spread his seed" generates little anxiety, given that his potential is virtually infinite. But *Butterfly*, like any woman, has only a very limited possible number of offspring; she is constrained by her supply of gametes and, moreover, yet more by her capacity to care for and raise them to maturity. Thus it matters to us that she squanders it on so unworthy a man. Audiences thus typically tolerate such great asymmetries in the depiction of gender. A similar, no doubt related, asymmetry is witnessed in the common practice of trading brides between social groups, whereas the exchange of grooms is rarely, if ever, encountered.

Since potential female reproductivity is very limited, compared to the vast potential of men, it bears inherent value. This is not necessarily correlated with social status: on the contrary, this increased valuation may motivate their subjugation. Women are often treated as property to be won and held, as we often see in the operas of Richard Wagner, much admired by Puccini. In *Der fliegende Holländer* Daland trades his daughter Senta for the Dutchman's treasure. In *Götterdämmerung* Siegfried wins Brünnhilde for Gunther in exchange for the latter's sister, Gutrune. Wotan pays for the building of Valhalla with Freia; because she grows the "golden apples" of eternal youth—a convenient expression of Bateman's Principle—he later buys her back with *Das Rheingold*. Some are given out as prizes. Viet Pogner offers his daughter Eva in marriage to the winner of a singing contest in Wagner's *Die Meistersinger von Nürnberg*. There is a similar outcome in his *Tannhäuser*, where the title character wins Elisabeth's hand in a singing contest at the Wartburg. We see similar patterns with other composers, Baba the Turk is auctioned with the rest of Tom Rakewell's possessions in Igor Stravinsky's *The Rake's Progress*. Puccini used the prize device in *Turandot* where Princess *Turandot* offers herself to any man of noble rank who can answer her three riddles, all undertaken at the possible price of their heads. That opera begins with the beheading of a failed suitor. We should also mention Carl Maria von Weber's *Der Freischütz*, wherein Max wins Agathe at a shooting contest.

Similar, albeit less direct, transactions are depicted in other operas. The heroine of Puccini's *Tosca* offers her body to Scarpia in a vain attempt to save her lover Cavaradossi. Of course, she never intends to go through with this obscene agreement; rather she uses it as a means to kill the evil baron. A similar deal fails in Umberto Giordano's *Andrea Chenier*. Puccini played the same hand in his next opera, where Minnie, his *Fanciulla del West* (*Girl of the Golden West*), makes a similar bet with Sheriff Jack Rance for the life of Dick Johnson. The title character in Mozart's *Le nozze di Figaro* (*The Marriage of Figaro*) puts himself up as collateral for a loan from Marcellina. *Figaro* is one of the few exceptions where a male is equated with capital. Another is Smetana's *The Bartered Bride*, where Jenik barbers himself as a means of having his cake (getting money) and eating it (marrying his beloved). Meanwhile, the central theme of *Figaro* is yet more obscene: the Count Almaviva demands his *right of the first night* from his servant Suzanna, *Figaro's* bride. Of course, we are relieved to see that all of these are unholy alliances which do not come to pass. Not so *Butterfly*.

*Butterfly* is an extreme case of this pattern of commoditization for at least two reasons. First of all, Cio-Cio-San literally is a rented wife. In the opening scene we note that Goro brokers both the lease on Pinkerton's house and the arrangement of his marriage to *Butterfly*. Per the laws of Japan extant at the time, as represented in the opera, both contracts are easily annulled. As a result, *Butterfly* has no assurance of material aid should she bear a child, an eventuality which comes to pass in the second act where she is running out of money. Had she not gotten pregnant by Pinkerton, his desertion would not be so costly, but now she is burdened with a son. Notably she names him "Dolore" ("Sorrow"), planning to rename him "Goia" ("Joy") when his father returns.

Secondly, *Butterfly* willingly enters into the bond. Most of the bartered unions mentioned above are viewed as an evil which threatens the positive heroes but usually do not come to pass. In *Das Rheingold* Freia is reclaimed by her family, but not before provoking fatal violence between her captors: the giant Fasolt kills his brother Fafner to claim the gold for himself. Unable to pay off his loan, *Figaro* is obligated to marry Marcellina, but at the last minute he is discovered to be her long lost son, a most fortuitous and unlikely turn of events. In the case of the contests for women, there is the prospect that someone other than the prize's beloved will prevail and that she will be forced into an unhappy marriage. Fortunately, Walter von Stoltzing wins the singing competition and Eva in *Die Meistersinger* and Elisabeth is gratified to see her beloved Tannhäuser prevail at the Wartburg. Princess *Turandot* is vexed to see Prince Calaf correctly answer her riddles, but he soon solves her heart and the ending of Puccini's last opera is a happy one, as it is in *Fanciulla* where Minnie holds the winning cards. Suzanna and *Figaro* outwit Count Almaviva,

thus ending *Figaro* with their marriage. The major exception is Brünnhilde, who plots the murder of her erstwhile lover Siegfried, bringing about the "Twilight of the Gods."

### Female mate value

Butterfly is also a willing, even enthusiastic participant in her union. She repeatedly insists on being addressed as "Mrs. B. F. Pinkerton"<sup>4</sup>. We are told that the day prior to her wedding, Cio-Cio-San visited an American mission to convert to Christianity and thereby share Pinkerton's religion—at the cost of her family disowning her, thus further isolating her. She tries to learn American ways, albeit in a faulty manner. During the ceremony she bows down to kiss Pinkerton's hand, thinking this to be a common Western form of showing respect. When Sharpless visits her in the second act, she appears to mix American and Japanese customs with her polite but strange question, "Are your forefathers and ancestors all well?" (Puccini et al., 1987, 175) Despite her shrinking savings, she offers him American cigarettes. More seriously, she plights her troth to American culture. She debates the consul's assertion that she, due to desertion, is effectively divorced from Pinkerton. Butterfly maintains that in the United States it is more difficult for a man to dispose of his wife. Whereas in Japan, as she puts it, a husband merely has to order his wife to leave, she claims that in America he may be jailed for filing for divorce.

At fifteen and by most accounts beautiful, Butterfly represents a nearly ideal image of female reproductive value. Her alienated relatives claim that her beauty already is failing, but this seems more a case of sour grapes. Nevertheless, now past puberty, her biological clock already is ticking. Nevertheless she is healthy and has all of her childbearing years ahead of her. Pinkerton repeatedly expresses his passion for her. On the other hand, their union borders on pedophilia. Sharpless first guesses that she is ten, then twenty. When he hears the correct answer, fifteen, he remarks, "the age for games," in other words, she is still a child (Puccini et al., 1987, 99). Moreover, she has the diminutive stature of a child. Pinkerton sings to her as "child" and "little plaything" (Puccini et al., 1987, 97, 151).

Many of her qualities are conveyed by her strong, clear, and, as we shall see, tireless soprano singing. Generally speaking, higher voices are associated with youth. Most romantic leads are sopranos (and tenors), with mezzo-sopranos and altos usually representing older, often postmenopausal women. Furthermore, Cio-Cio-San's beauty attracts offers of marriage from Japanese men. Like Penelope, the archetypal faithful wife in Homer's *The Odyssey*, she steadfastly refuses all suitors. Rather than contract a wealthy marriage with a rich suitor like Prince Yamadori, who presses his suit in Act II, she prefers to suffer penury out of loyalty to her wayward American husband.

Another factor, less evident to modern and non-Japanese viewers, is Butterfly's social status. Although her family has fallen into poverty to the point that she briefly worked as a geisha—one source of her considerable grace—she has a servant, the ever-faithful Suzuki. It is with some pride that she cherishes the memory that her samurai father committed suicide upon command of the Mikado. Notably, the ritual sword is the one thing she denies Pinkerton when she displays her meager assets at their wedding. Later, faced with the likelihood of his desertion, she briefly considers returning to being a geisha, singing and dancing for men—what else is unspecified—but immediately prefers death to such a prospect. She knows her own value and respects herself, especially after their wedding.

Butterfly soon proves her reproductive capability by bearing Pinkerton a son. Indeed, it beggars genetic credulity that a blonde-hair, blue-eyed boy is born to a Japanese woman<sup>5</sup>. We should wonder why Puccini's team cheated probability in this respect; evidently they required stronger indicators that Dolore has a Western father. Butterfly thinks these features will endear Pinkerton to his son, obviously because they will increase his confidence in the lad's paternity. Trying to broker her in marriage again, Goro spreads doubt that Pinkerton is the father and points out the social disadvantages of being a bastard son. Nevertheless, Pinkerton comes to their house in the final scene to collect their son to raise him in America. Inasmuch as other characters function as foils to Butterfly's qualities, it is interesting to see how eager Kate Pinkerton is to adopt Butterfly's son; she promises the former geisha, "I shall care for him like a son" (Puccini et al., 1987, 241). This suggests that the American woman so far has been unable to bear children of her own.

Much of the mismatch of Butterfly and Pinkerton derives from the asymmetry of their commitment to their marriage. She makes every effort to show her devotion to him, sitting in wait for him each day of the three years he has been gone. As we have already seen, she gives up her family and her faith for him. When his ship is sighted in Nagasaki harbor, she spends the last of her dwindling resources on decorating their house, then putting on her wedding dress for his arrival. John DiGaetani cites her "complete commitment" to the man she thinks is her husband for life (DiGaetani, 2001, 123). He, meanwhile, sings "I can free myself every month" (Puccini et al., 1987, 79). Although it is possible that Pinkerton pays the rent on their house—the sympathetic Sharpless is a more likely source—he otherwise entirely neglects to see to her welfare. He makes no effort to contact or hear from her. Three years after his departure he only writes to her to inform her that he now has an American wife. Although he asks Sharpless to break the news gently, Pinkerton is afraid to face her himself. He only does so to meet her conditions for giving Dolore up for adoption.

It is interesting to note how *Butterfly's* many creators fine-tuned a careful balance somewhere between true marriage (the lasting union of two people) and prostitution. For her part, Butterfly feels no shame at having been a geisha, although that role and inevitably, to some extent, her marriage to

Pinkerton were forced on her by her family falling into poverty. Notably, Puccini and his librettists quashed Belasco's notion that she expressly accepted Goro's offer for money (Belasco, 1935, 16). Besides Pinkerton's remarks regarding how such contracts can readily be annulled, there is no religious ceremony such as might strengthen the moral force on both parties to stay together. Rather, as in virtually every other opera where a marriage is depicted, a civil procedure takes place<sup>5</sup>. Nevertheless, the official registrar wishes them many descendants, as does the usually sanguine Goro. And her family is present; so, although such marriages with foreigners had been contracted in Nagasaki since 1630, the family is nevertheless emotionally invested (van Rij, 2001, 18). Butterfly asks them to bow to her groom. However, when they learn that Butterfly secretly converted to Christianity and renounced the cult of her ancestors, they disown her. It does not help that Pinkerton, who clearly wants to hurry on to later stages of their wedding night, insults them and ushers them on their way. The very indefiniteness of the situation in *Butterfly* helps to maintain narrative indecision and therefore tension.

While Cio-Cio-San's every thought is for her husband, he selfishly thinks only of himself. DiGaetani notes that his first question in the opera concerns the location of the marital bed (DiGaetani, 2001, 118). During the love duet he sings of "the fever of a sudden desire" (Puccini et al., 1987, 153). Arthur Groos reacts to the "crassness" of the sailor's initial ambition to enjoy a multitude of women (Groos, 1994, 189). John Bell Young says he is rendered "unmistakably as a sociopath" (Young, 2008, 104). Iris J. Arnesen notes that he never tells Butterfly that he loves her, and this in a fifteen minute long love duet. (Arnesen, 2009, 139) On the other hand, the opera prospers partly because it fosters some hope for Pinkerton. He genuinely seems smitten with Butterfly during their duet. While the opera is replete with dramatic irony, nothing else but some affection on his part could motivate such an outpouring of sentiment. Since that is the last we see of him for more than an hour, the audience remains almost as much in the dark as she is. Questioned about his fidelity, Butterfly cites the fact that, contrary to Japanese practice, he had locks placed on their house; evidently this indicates he thought there was something there worth protecting. Although we hear his intentions when Sharpless reads the letter to her, hope is only abandoned when he brings Kate onto the stage after the Act II intermezzo. He concludes, "I am contemptible" (Puccini et al., 1987, 239). His cry of despair, "Butterfly, Butterfly!" at the final curtain is as much for himself as it is for her.

### Butterfly's exposure

Could it be that mistreatment of women contributes to the continuing popularity of the most commonly performed operas? Susan McClary denounces opera as "an art form that demands the submission or death of the woman for the sake of narrative closure" (McClary 1988, xi). Little happens, for example, in *Butterfly* other than the heroine's marriage, desertion, and suicide, but its thin plot nevertheless suffices to pack opera houses, almost inevitably displacing works with more palatable plotlines. Love matches, female infidelity, and female suicide are the most common themes, greatly outnumbering motifs unrelated to gender. The death of an attractive young woman, usually a soprano, is the subject of many operas. Their prominence poses a reverse image to the patriarchal societies that produce them. In one seventh of these works, the heroine kills herself at the final curtain (Cooke, 2010, 79). Why do audiences prefer these operas?

Opera is designed in order to access the highly emotional reactions of the victims; this may require mistreatment in some cases. Catherine Clément complains, "on the stage women perpetually sing their eternal undoing. The emotion is never more poignant than at the moment when the voice is lifted to die" (Clément, 1988, 5). Opera provides a uniquely intimate perspective on how people feel, especially in extreme psychological states. Vocal music can transcend words in gesturing, indeed, imparting hard to describe subjective experiences. Women, like the title character of Donizetti's *Lucia de Lammermoor*, dominate most "mad scenes." Indeed, Butterfly is only one of numerous operas during the "long nineteenth century" (from the French Revolution to World War I) that prominently featured an attractive and highly emotional woman singing on the edge of disaster. We need only cite the titles that bear their names and/or their gender: besides *Lucia* and *Butterfly*, there are *Carmen*, *Elektra*, *Norma*, *Salome*, *La traviata*, *Aida*, *Rusalka*, *Ariadne auf Naxos*, *Manon*, *Manon Lescaut*, *Die Walküre*, *Fanciulla del West*—all repertory favorites. In the twentieth century they were followed by yet more lurid sisters in *Lady Macbeth of the Mtsensk District*, *The Makropoulos Case*, and *Lulu*.

The century from *Lucia* (1835) to *Lady Macbeth* (1934) was the era of the prima donna, a period which gave unprecedented prominence to independent women—both the fictional characters and the real life women who were their singers Daniel Snowman says that opera "provided perhaps the most spectacular route of all to any [women] who wished to fly out of the traditional gilded cage of domesticated womanhood" (Snowman, 2009, 233). Clément boasts that they became the "jewels... the ornament indispensable for every festival. No prima donna, no opera" (Clément, 1988, 5). On the other hand, they do this largely by exploiting egregious gender and, indeed, sexist stereotypes. Snowman notes that in "many well-loved operas, the principal woman is killed off at the end in a kind of expiation of sexual guilt" (Snowman, 2009, 235).

Butterfly certainly meets all of the qualifications for such a prima donna during her vigil. On stage for the entire first scene of the second act, more than fifty minutes long, she is exposed to an unprecedented extent. Whereas in earlier operas opportunities to sing were shared amongst the major performers more or less equally, here the female soloist risks exhaustion. Puccini was pressed to provide

more music for his lead tenor, whereupon he added Pinkerton's aria, "*Addio fiorito asil'*", to the last scene. Her vigil bears comparison with that of Tristan during the long last act of *Tristan und Isolde*. There is no doubt that Puccini had Wagner in mind. The premiere of *Madama Butterfly* kept Milan's La Scala Theatre from staging *Tristan*--and this contributed to the scandalous reception for his new opera. Like Tristan, who waits for Isolde to come and heal his wound, Butterfly constantly peruses the harbor for sight of Pinkerton's ship. Often cited as the most moving passage in the opera, she imagines the joy of his return: "*Un bel dì*" ("One beautiful day"), which bears comparison with Tristan's delusion that Isolde has finally come to him. However, her vigil epitomizes her nearly consistent passivity. She neither seeks out Pinkerton nor tries to get in touch with him. Instead she meekly waits, when prior to her wedding she actively researched American culture. Only her final action is truly assertive, albeit also reflexive: she stabs herself to death.

Besides the extreme length and exposure of her role, Butterfly expresses a wide variety of emotions. Despite the sheer lyric beauty of her actions and singing, and the devotion she shows to her husband, Butterfly on separate occasions threatens to kill both Goro and Suzuki. These moments, no doubt, give air to the tension she vainly strives to repress, worried whether Pinkerton will ever return. A further example is her abrupt expulsion of Sharpless from her house when he presses his suggestion that she take another husband. She cries in despair at the prospect of losing her son, "They want to take everything from me!" (Puccini et al., 1987, 245) Nevertheless, when Kate approaches in contrition, Butterfly is magnanimous: "May you always be happy" (Puccini et al., 1987, 247). Finally there is the utter devastation that prompts her to take her life in a bloody, but honorable fashion<sup>7</sup>.

Joseph Budden observes how Puccini took Belasco's "pathetic but ridiculous puppet" and developed her into "the apotheosis of the frail suffering heroine" (Budden, 2000, 50). The soprano who performs the role has to possess an enormous dramatic range. As DiGaetani argues, "the development of her character from the naive girl to the trusting wife to the bitter woman becomes the core of the opera's dramatic development" (DiGaetani, 2001, 122). She is the most developed characterization in Puccini's operas.

Furthermore, it is a vulnerable creature who has to undergo all this trajectory. We have already noted her youth and puny stature. At the height of their love duet, Pinkerton sings, "To think that little plaything is my wife" (Puccini et al., 1987, 151). While there is some dispute amongst scholars regarding her independence and assertion, her evident naïveté plays a large role in her demise. Although her given name is Cio-Cio-San, Pinkerton calls her Butterfly, no doubt paying tribute her beauty and grace, but also alluding to her fragility and impermanence. At first she objects to this appellation, having heard that in the United States butterflies are caught and pinned. Similar thinking goes for her association with flowers: both are short-lived.

According to Jan van Rij, Japanese audiences receive her with some embarrassment; notably the first performances of the opera in Japan were abridged; especially those passages that conveyed racist stereotypes. But the core of the opera nevertheless was unsettling to them. As van Rij puts it, "To believe that a woman's love can become a force that will save her from her fate is a totally alien notion in Japan, and to think that this can be done on the basis of a prostitution contract with a foreigner is foolhardy" (van Rij, 2001, 149). The point of all this is clear: despite the efforts by the composer and the librettists to imbue the opera with local color, Butterfly is only superficially Japanese, much as Carmen is hardly a true Gypsy (Clément, 1988, 49)<sup>8</sup>. *Madame Butterfly* is more an expression of Western illusions, indeed fantasies, than it is valid ethnography.

## Conclusions

McClary and Clément have a point: opera provides a venue for morally suspect fantasies we would normally repress, all at the expense of the women depicted, possibly of women in general. McClary surmises that music causes listeners to suspend their proper moral judgment (McClary, 1988, xiv). Snowman chimes in, saying that the "opera stage was one of the few public locations when normally repressed feelings could be extravagantly and legitimately displayed" (Snowman, 2009, 237).

What is demanded of Butterfly and many of her sisters is rarely, if ever, asked of men. Accepting McClary and Snowman's argument regarding the nullification of repression, we wonder what are the forces driving the sexist structures expressed in classic works such as *Butterfly*. For example, "paternal uncertainty" readily could be argued to be one of the sources for the constraint of women in patriarchal societies. Unable to trace the fatherhood of a woman's offspring with confidence, one option for male domination was to control their behavior with varying degrees of severity, especially with regard to relationships with other men. Notably, many of the prominent roles for prima donnas involve some element of sexual licentiousness, or at least disobedience of male authority. One manifestation this took was the *femme fatale*, a prominent figure especially during the era of the prima donna, including many of the operas we listed above. Threatening male control with the independent behavior of the women they depict, as Snowman observes, these works required "a cathartic sense of moral rectitude to prevail as the frail, pale sinner reaches her deeply romanticized end" (Snowman, 2009, 236). However, this does not explain why the female characters we have described are (mis)treated as items of trade. Here Bateman's Principle helps us to account for the peculiar objectivization, valuation, and consequently commoditization of women in opera.

## Endnotes

- <sup>1</sup> Long envisaged an American sailor as Butterfly's husband, but van Rij narrowed down the search for Pinkerton's prototype to one of the English merchant Thomas Glover's two brothers (Long, 1972; van Rij, 2001).
- <sup>2</sup> André Messager set Loti's *Madame Chrysanthème* as an operetta by the same title (1893).
- <sup>3</sup> There are some exceptions where males constitute a reproductive bottleneck, usually in those species where they provide most parental care, mostly birds and seahorses.
- <sup>4</sup> There is, of course, a particularly American ring to Pinkerton's given names, Benjamin Franklin, much as he sails on the USS Abraham Lincoln.
- <sup>5</sup> It also stretches credulity that Kate Pinkerton is able to sail to Japan with her husband on an American warship.
- <sup>6</sup> Local censorship and church sanctions may well have constrained most composers from depicting religious ceremonies.
- <sup>7</sup> Significantly Butterfly's suicide begins with Belasco's play. She is about to kill herself in Long's story, but Pinkerton's American wife finds her house empty; apparently Cio-Cio-San fled with her child (Long, 1972, 86). According to van Rij, the actual prototype, one Ko-Ko-San, survived her suicide attempt (van Rij, 2001, 118).
- <sup>8</sup> Cf. Young, 2008, who details the many traditional Japanese melodies weaved into Puccini's score.

## References

- Arnesen, I. J. (2009) *The Romantic World of Puccini: A New Critical Appraisal of the Operas*. Jefferson NC: McFarland & Co.
- Belasco, D. 1935 (1900) *Madame Butterfly: A Tragedy of Japan in One Act*. London & New York: Samuel French.
- Boyd, B. (2009) The Purpose-Driven Life. *The American Scholar* 78(2): pp.24-34.
- Budden, J. (2000) *Madama Butterfly*. In S. Sadie (ed.) *Puccini's and His Operas*, pp. 44-51. London: St. Martin's Press.
- Buss, D. M. (1995) *The Evolution of Desire: Strategies of Human Mating*. New York: Basic Books.
- Carroll, J. (2008) The Cuckoo's History: Human Nature in Wuthering Heights. *Philosophy and Literature* 32: pp.241-57.
- Clément, C. (1988 [1979]) *Opera: The Undoing of Women*, Betsy Wing (trans.). Minneapolis: University of Minnesota Press.
- Cooke, B. (2010) Clichés Worth Singing: Narrative Commonplaces in Opera. *The Evolutionary Review*, 1, pp.76-81.
- DiGaetani, J. L. (2001) *Puccini the Thinker: The Composer's Intellectual and Dramatic Development*, 2<sup>nd</sup> ed.. New York: Peter Lang.
- Groos, A. (1994) Lieutenant F. B. Pinkerton: Problems in the Genesis and Performance of *Madama Butterfly*. In W. Weaver & S. Puccini (eds.) *The Puccini Companion*, pp.169-227. New York & London: W. W. Norton.
- Long, J. L. (1972 [1898]) *Madame Butterfly, Purple Eyes, etc.*. (The American Short Story Series, 25): 1-86. New York: MSS Information Corp.
- McClary, S. (1988) Forward, The Undoing of Opera: Toward a Feminist Criticism of Music. In C. Clément (1988 [1979]) *Opera: The Undoing of Women: ix-xviii*. Minneapolis: University of Minnesota Press.
- Puccini, G. (1974) *Letters of Giacomo Puccini: Mainly Connected with the Composition and Production of his Operas*. G. Adami & M. Carner (eds.) Ena Martin (trans.). London: Harrap.
- Puccini, G. Giacosa, G. & Illica, L. (1987 [1905]) *Madama Butterfly*. London: Decca Records.
- Snowman, D. (2009) *The Gilded Stage: A Social History of Opera*. London: Atlantic.
- van Rij, J. (2001) *Madame Butterfly: Japonisme, Puccini & the Search for the Real Cho-Cho-San*. Berkeley: Stone Bridge.
- Young, J. B. (2008) *Puccini: A Listener's Guide*. New York: Amadeus Press.
- [webpage] [www.operabase.com](http://www.operabase.com).

## Acknowledgements

Support by the College of Liberal Arts and the Academy for Visual and Performing Arts, Texas A&M University, made this paper possible. I would like thank Kelly Markgraf for his many keen and helpful suggestions on drafts of this study.



ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable Development

Vol. 4, No. 1, 2015, pp. 75-87

## The “restitution” of the castle of Colloredo di Monte Albano (Udine, Italy)

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The Castle of Colloredo di Monte Albano was almost completely destroyed by two earthquakes in 1976. After the reconstruction of the main tower and the left wing, the project for the reconstruction of the remnant parts is now being implemented. The aim is the restitution of the buildings as they were before 1976, through the conservation and recovery of the surviving structures and the reconstruction of what has been lost. The recovery will require the inclusion of new public functions and the allocation of private residential units in the buildings. The restoration project has the aim to preserve any trace of what is still existing and to integrate the lacunae or gaps with a technique similar to the original one. Where the original parts or fittings are completely lost, the elements will be reconstructed also using contemporary technologies in renewed parts.

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### Introduction

The two earthquakes of May and September 1976 in Italian region of Friuli Venezia Giulia heavily damaged the castle of Colloredo di Monte Albano, destroying the towers and large parts of the buildings. As it was one of the most important castles in the region from the architectural, historical and cultural point of view, it was decided to “restitute” it to the community, through the conservation of the surviving parts of the buildings and the philological reconstruction of what had been lost. In the eighties the main tower and the left wing were reconstructed and the project for the restoration of the remnant parts is now being implemented. The aim is the restitution of the buildings as they were before 1976, through the conservation and recovery of the surviving structures and the reconstruction of what has been lost. The recovery of the entire complex will require the inclusion of new public functions and the allocation of private residential units in the buildings.

### The Castle: general description and history

The Castle of Colloredo di Monte Albano is one of the largest feudal castles in the Italian region of Friuli and one of the most important from the point of view of history and culture, in relation to the literary and historical memories bound to the manor. There lived the Friulan poet Ermes di Colloredo (1622-1692) and Ippolito Nievo (1831-1861), the author of *Le confessioni di un ottuagenario*, and their bedrooms were conserved with the original furniture and decorations until 1976 (Custoza & di Colloredo Mels, 2003).

The site of the castle consists of a complex of buildings built over the centuries within a fortified enclosure on the top of a morainic hill (Miotti, 1978; Custoza, 1993). Starting from the west, the first building is the so-called West wing, now the seat of the offices of the Comunità Collinare del Friuli. Beside it there is the Nievo wing, also called the guard building because it is probably one of the oldest of the

castle, built next to the main entrance tower. The latter, located in the center of the southern front, was rebuilt in the Eighties after the almost total destruction of 1976. To the east of the tower is a curtain of crenellated walls and then the Red house, so called because in the sixteenth century was painted in that colour probably as a challenge against the opponent feudal family of Savorgnan.

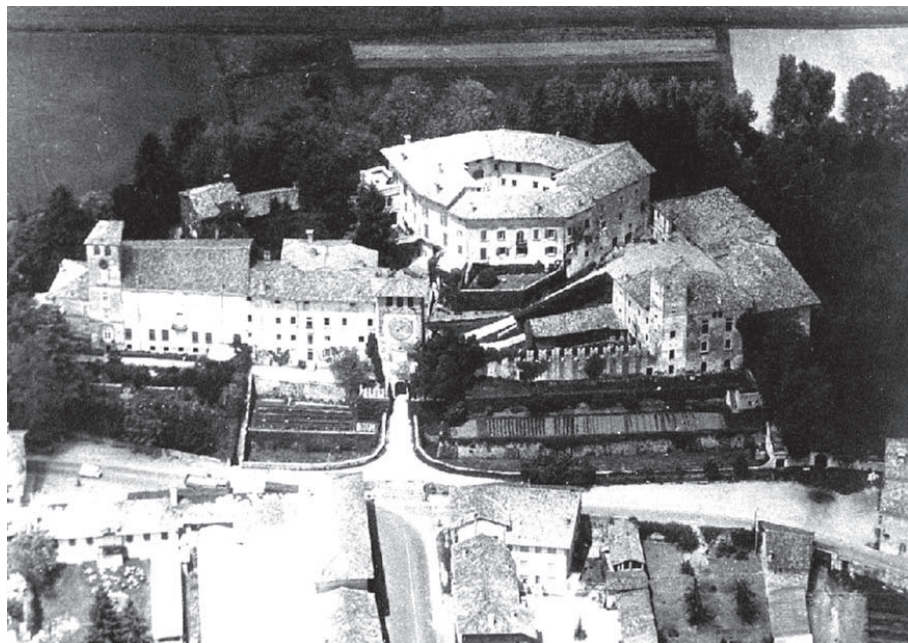


Figure 1. Aerial view from the south of the castle of Colloredo di Monte Albano before 1976.

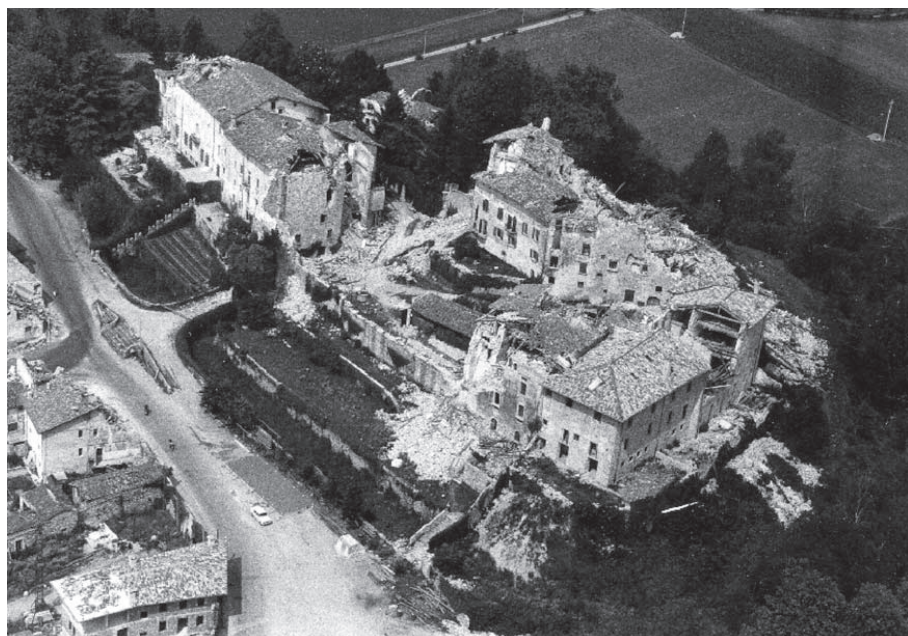


Figure 2. The castle after the earthquake of May 1976.

The East wing concludes the southern front and defines the eastern side of the complex. This wing is clearly divided into two parts: the southern, with more rural characteristics, and the northern, which was similarly used for rural functions but was adorned with a rustic architectural order and two series of arches on the first and second floor.

In the middle of the site and on the north side of the hill there is the Keep, an annular building that encloses a courtyard. It is the oldest part of the castle, whose construction goes back to the beginning of the fourteenth century. It was constantly modified and enlarged with new buildings along the walls over the centuries.

To the west of the Keep, within a walled courtyard, there is the so-called Nievo house, a small three-storey building which could have been one of the ancient towers of the outer wall.

The construction of the Castle of Colloredo began in 1302. It was probably initially formed by a stone wall that formed the enclosure of the Keep with the first manor house in the north-east corner. At the same time, or shortly after its foundation, the outer enclosure was built, maybe a fence, with towers and a central tower door.

In 1315 the castle was conquered and destroyed, but it was immediately rebuilt by the noble owners. During the fourteenth and fifteenth centuries was completed the construction of the buildings inside the Keep, the most ancient parts of the Nievo wing (the part near the tower, called the guard building) and the Red house. In 1511 the castle was attacked and partially burned during a peasant uprising and was also damaged by an earthquake.

Although in 1567 the castle was still described as a ruin, the reconstruction must have begun soon after 1511 and new buildings were built in the site. In the sixteenth century were probably built or completed the West wing, which was decorated by Giovanni da Udine, and was later built the East wing, the southern part of which was called "new house", while the northern, built later, was called the "white house".

Over the centuries there have been many additions and interventions in the castle complex, including the modification of the façades with new wider windows, the interior restructuring of many buildings also modifying the floors height, the interior decoration with *stucco*, *marmorino* and mural paintings in the eighteenth and nineteenth century.

The two earthquakes of May and September 1976 have almost completely destroyed the castle and, to date, only the west wing and the main tower have been restored. The rest is still in the condition of a ruin. The only interventions were the shoring up of the damaged structures and the detachment of the frescoes of the Nievo wing, which are actually stored.



Figure 3. The south front of the castle before the earthquake.



Figure 4. Present view of the South front of the castle.



Figure 5. Project elevation of the South front.

### The aims of the project

The project for the reconstruction of the largest portion of the castle was concluded in 2010 and is now being implemented. The aim of the project is the restitution of the building as it was before the earthquake of 1976, through the conservation and recovery of the surviving structures and the reconstruction of what has been lost, on the basis of the surveys and photographic documentation made in the years before the earthquake.

The recovery of the entire complex will require the inclusion of new public functions and the allocation of private residential units in the buildings. Large portions of the complex will be assigned to museal, exhibition and congressional uses.

The whole project involves a volume of nearly 40,000 cubic meters. After the intervention, the interior area of the buildings will be of 7,207 square meters, 3,722 of which will be publicly owned, 3,132 privately for twenty flats and two units for craftsmanship uses. The remaining 353 square meters will be for mixed use. The total cost of the projected works amounts to almost twenty million Euros.



Figure 6. One of the rooms of the Nievo wing before 1976.



Figure 7. A living room in the Keep before 1976.

With the intervention the castle will be returned to the community in a integrated conservation approach, as it will be used for a set of functions suited to contemporary needs and to guarantee the constant maintenance of the asset.

The purpose of restoring the Castle of Colloredo also through a defined philological reconstruction is based on the most recent international cultural approaches on the matter of restoration and conservation. These approaches are based on the assumption that the consideration of architecture and architectural monuments cannot be limited to one of their components of material or formal nature or regarding their use, but must concern the architectural substance to which all these different points of view converge. In this case, the architectural substance is intelligible even where the seismic events have caused partial destruction and, in this sense, the restoration is conservative even where it takes the form of reconstruction, as it intends to conserve the memories and the cultural values of the complex. The reconstruction will not be based on conjecture or linguistic inventions, but will consist in a restatement of well documented elements. Without such partial reconstructions of the architecture, the castle would be deprived of its own integrity, and its authenticity will not be perceived anymore by the regional community which identifies itself in the monument. This is the meaning of the possibility to reconstruct a building allowed by the *Charter of Krakow 2000*: "reconstruction of an entire building, destroyed by armed conflict or natural disaster, is only acceptable if there are exceptional social or cultural motives that are related to the identity of the entire community" (Cristinelli, 2002). The guidelines given by the regional authority requested in fact the reconstruction of the castle in order to restore the image of the monument.

One of the aims of the project is also to make directly accessible for people with disabilities all public areas and buildings and adaptable most of the private ones, in compliance with the Guidelines for the elimination of architectural barriers in places of cultural interest edited by the Italian Ministry for cultural properties (Viridia et al., 2008).



Figure 8. The Nievo wing, present state.



Figure 9. Survey of the Nievo wing: in grey the portion still existent, in white the parts destroyed by the earthquake.

### The project: method and principles

The project was commissioned by the Regione Autonoma Friuli Venezia Giulia to a project team coordinated by the Studio Altieri, where the architects Giuseppe Cristinelli, Manfred Wehdorn, Vittorio Foramitti and Stefano Campetti had the task to develop the architectural and restoration project.

The first phase of the project consisted in the preliminary researches aimed at the knowledge of the history and the characteristics of the site and of the buildings in their actual condition and how they were before the earthquake of 1976. This was done at first with a detailed survey of the site and the ruined buildings. On the present survey have been overlaid the surveys carried out by the architects Aldo Nicoletti and Giorgia König in the first half of the seventies, together with all informations drawn by old photographs.

In the plans, elevations and sections were highlighted with proper graphic the remaining parts, the parts and elements that existed before the earthquake, the safety interventions made after 1976, such as the masonry used for closing the openings and the coverings and shorings.

These drawings have been the fundamental basis for the development of the general architectural project, where have been defined the characteristics and the spatial distribution of all the buildings, verifying as well the possible location of the furniture and the elements of the electrical and heating systems in coherence with the characteristics of the rooms.



Figure 10. Survey of the Keep before the earthquake, by A. Nicoletti and G. König.



Figure 11. The East front of the Keep, present state.

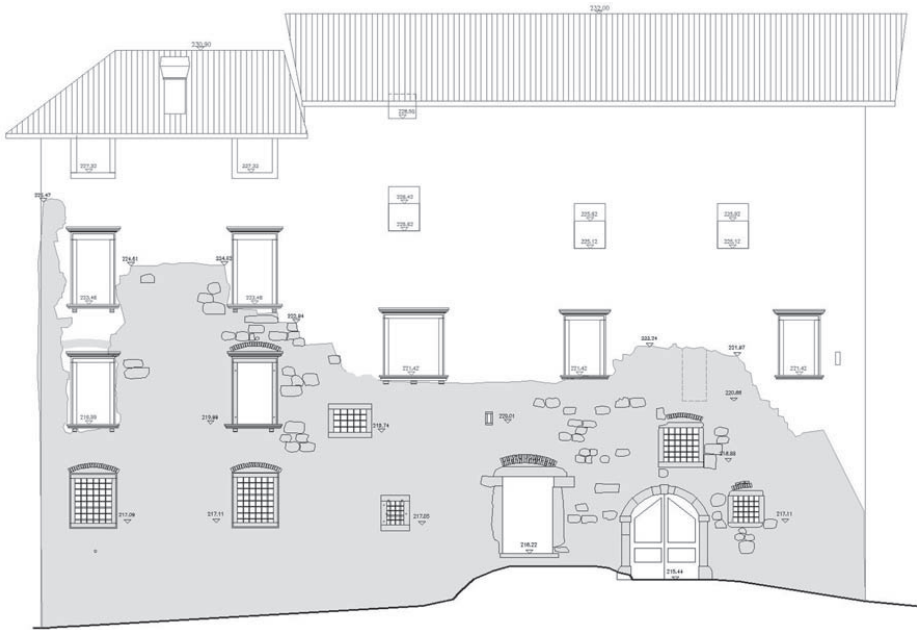


Figure 12. The East front of the Keep: in grey the portion still existent, in white the parts destroyed by the earthquake and to be reconstructed.



Figure 13. The East front of the Keep: the survey overlaid on the old photograph, with the indication of the height of the stone ashlars in the part to be rebuilt.

The various public and private functions have been placed into the complex so as not to alter the distribution except in the less significant parts, in order to achieve an outcome compatible with the architectural features of the existing buildings, conserving the most of every structure while ensuring an

optimal functionality for the new proposed uses. Moreover, has been taken into account the compliance with the fire safety regulations and those to ensure accessibility for people with disabilities. All the interventions necessary in order to achieve these requirements are placed in a manner compatible with the architectural features of the complex, without the insertion of elements invasive for the form or the perception. Accordingly with the fire safety regulations and the derogations admitted for cultural properties, in some buildings the crowding was limited and many fire exits were maintained in their original width. Only in the conference rooms placed in the East wing, that must be accessible to a large number of people, two stairs are provided with all the safety features. New elevators will be installed inside the buildings, placed where they cannot interfere with the spatial features of the buildings.

The project also includes the enhancement of the archaeological remains discovered in the last two decades inside the buildings, with their inclusion as part of the museal features. In the same way, the remains found on the outside, as the foundations of a building, maybe a tower, and other structures near the northern wall of the Keep (Tomadin, 1989; Tomadin, 1994; Tomadin, 2000), will be maintained visible along the new pedestrian way of access on that side.

In the northern side of the hill there will be a new road that connects the existing access to the West wing with the outside square. Parallel to this is planned the construction of the walkway that will allow the visibility of the archaeological area north of the Keep and which will reach the entrance to the castle situated between the Keep and the East wing.

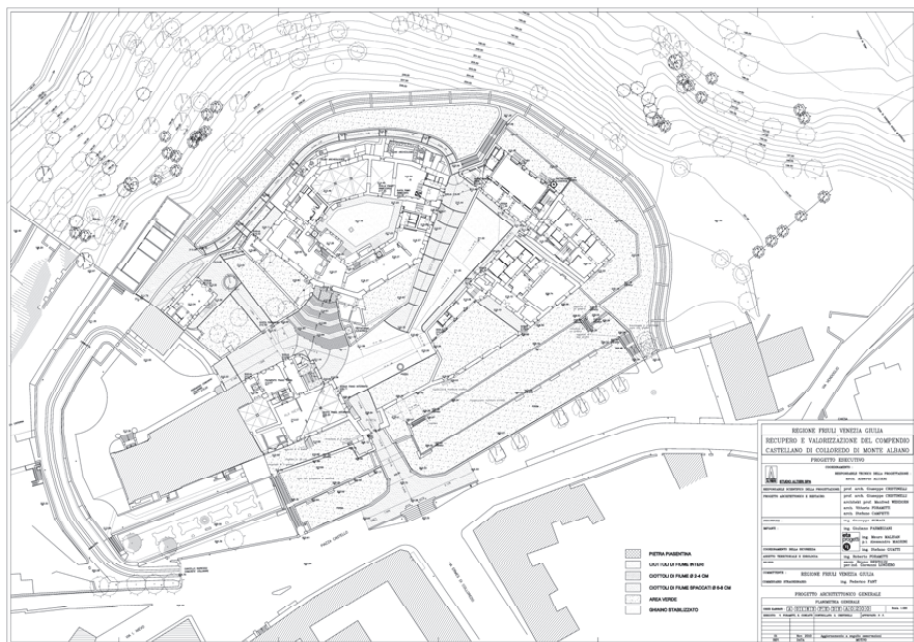


Figure 14. General project plan of the Castle.

### The planned works: materials and technologies

The restoration project makes use of the traditional technologies of the existing buildings, with the aim to preserve any trace of what is still existing and to integrate the lacunae or gaps with a technique similar to the original one only when it is not possible to recover the original material on the ground.

Where the original parts or fittings are completely lost, the elements will be reconstructed according to their technological and constructive implications or, if this doesn't result acceptable from the technical or economic point of view, also contemporary technologies will be adopted.

The goal is always to ensure that there is physical and chemical compatibility between the existing parts and the reconstructed ones, and between the traditional and the innovative technology. All the reconstructions and integrations should not be seen as elements of contrast. They should be recognizable but must visually harmonize with the surviving parts.

It will be possible, however, to distinguish the old parts from those which have been rebuilt, and this through slight variations in grain or color, limited signs on the edges and, in the case of stone elements, differences in surfaces workmanship or etching the date of construction. The new elements, such as the iron stairs projected inside the buildings are limited and measured to satisfy real needs and stringent functional distribution. In these, an essential contemporary language is used, undertone in comparison with the context.

As regards the structural intervention, the analysis of the buildings has allowed the definition of the interpretative models of the existing structures and the definition of the necessary interventions. The project, aimed at the structural enhancement, provides for the conservation of surviving elements through the strengthening in order to restore their original structural capacity, possibly augmented by non-invasive technologies and compatible with the conservation requirements. The choice of intervention criteria was carried out on a case by case preferring techniques similar to those used in the original construction of the individual artifacts and giving priority to those experienced with satisfactory results.



Figure 15. The west front of the East wing before 1976.



Figure 16. The west front of the East wing after the earthquake.



Figure 17. The west front of the East wing, present condition.

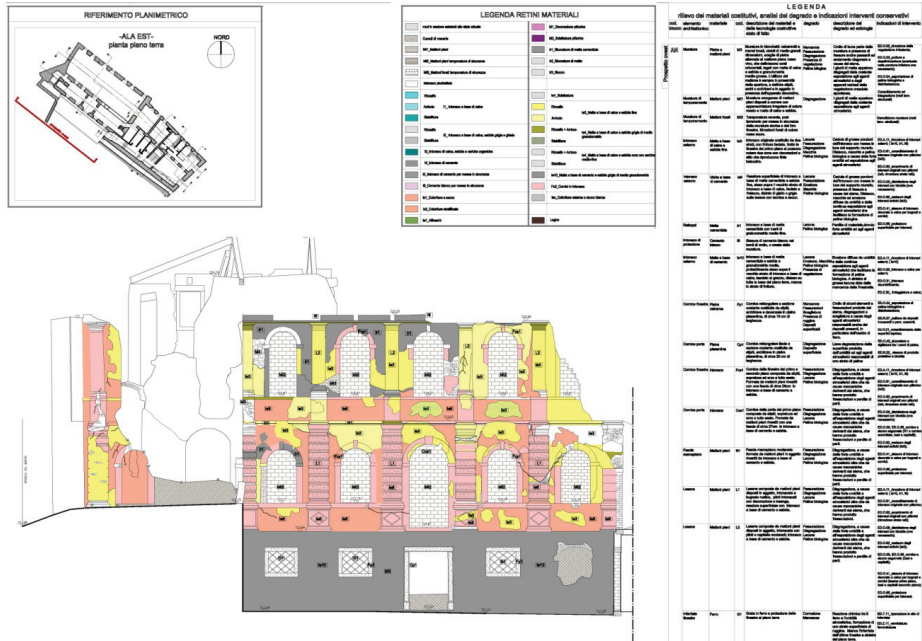


Figure 18. Conservation project drawing of the west front of the East wing, with the indication of the different kinds of plaster, the degradation and the conservative interventions.

The stoneworks which constitutes the most part the walls will be conserved, injected with lime based mortar and strengthened with fiber reinforced lime plaster. The cracks will be repaired with the substitution of the broken elements with similar ones.

For the reconstruction of the collapsed parts, traditional building techniques will be adopted in most cases, in order to meet the requirement of compatibility with the surviving parts and the need to restore the original aspect of the castle. But this doesn't mean that all the structures will be reconstructed exactly with the same technology: the one meter thick stone walls will be reconstructed only with the outer side in stone ashlars, while the interior will be a brick masonry of 38cm. of thickness. To reach the original width of the wall, which is one of the features of this kind of building, a partition will be built in the inner side, leaving an interspace where can be placed the pipes for the plants and the insulation panels.

The conservative and architectural works have been defined after a detailed analysis of the existing buildings, and also on the basis of the surveys and photographs prior to the earthquake. In the drawings have been carefully described the constructive characteristics, the state of deterioration and the structural damages. These informations were used for the definition of the necessary conservative interventions and for the integration of the lacking parts.

In detail, starting from the ground floor, ventilated foundations and outer drainage trenches for the defense from moisture will be made. Floors and roofs will be reconstructed in wood with the conservation of the few original elements still surviving.

The few original floorings, still conserved in the ground floor, will be removed and replaced with the necessary integrations. Otherwise they will be made in brick and in the local limestone called *pietra piacentina*. On the upper floors the floorings are generally made of wooden planks, except in some rooms where they are documented in *terrazzo alla veneziana*, and will be rebuilt after some fragments found in the ruins.

The external faces of the walls will be conserved with cleanings, in depth sealing of joints, strengthening and restoration of the oldest plasters and removal of the newer ones made in cement mortar.

Those which have to be rebuilt will be made with similar materials and finishes, signaling the separation between the conserved and the reconstructed part. For the internal plasters the intervention will be cleaning, strengthening and integration, with the detachment and replacement of the oldest ones in order to allow the structural interventions.

As regards the frescoes originally present inside the buildings, most of those in the Nievo wing were removed immediately after the earthquake of 1976 and are now stored waiting for their replacement in the original position. The few fragments of wall paintings still present in the Nievo wing will be removed and replaced, as well as those recovered inside the Keep.

All the stone elements will be conserved and restored, the missing ones will be rebuilt with the same materials and forms.

The plants have been carefully designed so as to fit in the buildings without being invasive. For this reason, instead of using independent heating or cooling units for each of the buildings, a single heating and cooling plant will be positioned in a new building on the slope of the hill in the north west side of the site. This centralization of the plants has been also preferred for technical reasons, energy efficiency, minimization of operating costs and safety.

On the northern side, the walkway that surrounds the walls of the Keep has a slope of 5%, suitable for adequate autonomous use by people with disabilities, that allows direct access to the basement rooms of the Keep, otherwise only accessible via a steep ramp that starts from the inner courtyard.

## Conclusions

The reconstruction of ruined buildings has always been a matter of discussion, generally with the opinion that the ruins must be carefully conserved in their conditions. Exceptions can be only admitted when the destruction is recent and caused by dramatic events such as wars, earthquakes, fire, etc., and when the monument is strongly representative of the identity and the culture of a population.

The castle of Colloredo is one of these monuments. The purpose of its reconstruction, even if made almost forty years after the earthquake for economic and bureaucratic reasons, is the restitution of an outstanding monumental complex in an integrated conservation approach, affording also new functions which "corresponding to the needs of contemporary life, respect their character and ensure their survival", as the Declaration of Amsterdam stated in 1975.

## References

- Cristinelli, G. (ed.) (2002) *La Carta di Cracovia 2000. Principi per la conservazione del patrimonio costruito*. Venezia: Marsilio.
- Custoza, G. C. (1993) *Il castello di Colloredo di Monte Albano*. Reana del Roiale: Chiandetti.

- Custoza, G. C. & di Colloredo Mels, A. (2003) *Colloredo: una famiglia e un castello nella storia europea*. Udine: Gaspari.
- Miotti T. (1978) *Castelli del Friuli/2, Gastaldie e giurisdizioni del Friuli centrale*. Udine: Del Bianco.
- Tomadin, V. (1989) *Il castello di Colloredo di Monte Albano: testimonianze archeologiche*. Colloredo di Monte Albano: Comune di Colloredo di Monte Albano.
- Tomadin, V. (1994) *Indagine archeologica nell'ala Nievo del castello di Colloredo di Montalbano*. Colloredo di Monte Albano: Fondazione Ippolito Nievo.
- Tomadin, V. (2000) *Colloredo duemila. Nuove testimonianze archeologiche dall'ala Nievo del castello di Colloredo di Montalbano*. Monfalcone: Edizioni della Laguna.
- Virdia E. et al. (2008) *Linee guida per il superamento delle barriere architettoniche nei luoghi di interesse culturale*. Roma: Gangemi.





ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable Development

Vol. 4, No. 1, 2015, pp. 89-96

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## Visualizing the intangible: conceptualizing audio-visual Media and the representation of Intangible Heritage

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Since UNESCO's 2003 convention and the inauguration of the Representative *List of the Intangible Cultural Heritage of Humanity* in 2008, a number of projects have utilized digital technologies for the preservation and promotion of heritage. However, no comprehensive media strategies for the representation of Intangible Heritage have been developed to date and globally circulated audio-visual representations still largely adhere to conventional styles of documentary cinema. Referring to a variety of media conceptualizations, as they have developed within Social/Cultural Anthropology, this paper aims to show that in the context of heritage mediation it is necessary to consider the strategies and tools in use while representing cultural practices and constituting knowledge through audio-visual means. Considering the postmodern reflection on the authorship of knowledge and reflecting postcolonial criticism regarding a Western predominance within representation practices, the paper proposes a theoretical framework for the integration of local communities in the representation of "their" heritage. Hereby, subject-generated and participatory media are considered significant tools through which objectification and a reaffirmation of difference can be prevented. Instead, access, participation and reciprocity within knowledge production and dissemination are considered sustainable concepts for the mediation of ICH. They enable a (re)shaping of meaning, the maintenance and strengthening of agency and identity bonds, and thus safeguarding regarding ICH.

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**Keywords:** Intangible Cultural Heritage, audio-visual media, representation, community participation.

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### Introduction

Audio-visual media are powerful tools for the construction and representation of social reality in a globalized world with an ever-increasing number of people accessing audio-visual representations to collect information. Since the proclamation of masterpieces in 2001, UNESCO's 2003 convention and the inauguration of the *Representative List of the Intangible Cultural Heritage of Humanity* in 2008, a number of projects have utilized digital technologies for the preservation and promotion of heritage. However, no comprehensive media strategies for the representation of Intangible Cultural Heritage (ICH) have been developed to date. Authorized and globally circulated audio-visual representations still largely adhere to conventional styles of documentary cinema. Herein, aesthetically refined visual material is arranged to illustrate a verbally transmitted argument and an invisible, omnipotent narrator speaks, while the concerned subjects often remain voiceless and unidentified. Further, the media tend to reproduce Western standards of value-making and hierarchies regarding representation and interpretation.

This paper argues that the audio-visual representation of ICH needs to be rethought in the course of a postmodern reflection on the authorship of knowledge (Clifford and Marcus, 1986) and in view of postcolonial criticism regarding Western-dominated regimes of representation (Hall, 1997). In the context of heritage mediation, it is necessary to consider the strategies and tools in use while representing cultural practices and constituting knowledge through audio-visual means. Furthermore, in view of ICH being a living heritage, it is necessary to differentiate between representation as 'speaking of' and representation

as 'speaking for' (Spivak, 1988). Epistemological and ethical issues regarding the responsibility and the right to speak for, about, with or alongside others need to be considered (Ruby, 2000).

In searching for sustainable strategies for the mediation of ICH, the paper proceeds as follows. The first part identifies the constructivist perspective on heritage, identity and media, before the second part discusses the concepts of ICH and safeguarding as defined in the *Convention for the Safeguarding of the Intangible Cultural Heritage* (ICHC). The following parts attend to different conceptualizations and usages of audio-visual media, as they have developed within Social/Cultural Anthropology, and the final part expresses recommendations for the audio-visual representation of ICH.

### Heritage as process

Heritage is knowledge, a cultural product and a political resource at the same time. From a constructivist perspective, heritage can be seen as a way through which selected past traditions, practices, expressions and material artefacts become cultural, social, political and economic resources for the present. The demands of the present and even of an imagined future select, shape, create and manage content, form of representation and interpretation of heritage resources (Ashworth et al., 2007). Therefore, heritage can be described as present-centered and time-specific, whereby its meaning is altered, reread and reconstructed in new contexts.

Moreover, it is important to consider heritages and identities as plurals. In particular, ICH functions in multiple ways and involves many producers, actors and stakeholders who all have various objectives in the creation, management and promotion of heritage (Ashworth and Graham, 2005). Heritage is a socio-cultural product, constructed and produced by institutions, interactions and actors. These productive efforts are based on processes of meaning-making. Therefore, heritages are strongly about the meanings and representations that are constructed for them (Graham et al., 2000; Graham, 2002). Meanings give value and are produced and exchanged through social interaction via multiple media. They are marked out by identity and created through consumption and interpretation (Graham and Howard, 2008). As such, they are constantly revised and subject to change.

This dynamic has made heritage one of the most useful tools in the process of constructing and representing identity. Identity is also never fixed; rather, it is dynamic and responsive. Hall (2006, [orig. 1990]) stresses the point that identity is ever changing, in process and always constituted within, not outside, representation. While identities are mediated through the signifying practices of film, video and television, these audio-visual practices are shaped by the political economies of the dominant cultures. Nonetheless, local/disenfranchised/minority producers can negotiate and participate in the process of constructing identities. Hall (1997) argues that audio-visual media help individual and collective social agents to make identity claims. He stresses the importance of a social agent's control over the means of representation to create power and meaning.

Audio-visual representations of ICH participate in anchoring memory and legitimizing versions of heritage and identity. These versions imply inclusion and exclusion, remembering and forgetting. They make sense of the world and position subjectivities within the world. However, at any given time, several rivaling and contesting representations may exist and coproduce each other. They are manufactured from either outside or within a socio-cultural group or in collaboration between members of both groups.

Moreover, audio-visual representation involves media and practices through which meanings are produced, constructed and circulated among social groups. These meanings are to a certain extent shared meanings and they are constitutive of culture. Therefore, audio-visual representations, as constitutive practices, are never innocent, neutral or objective. It is important to reflect that these representations do not merely present reality but rather produce and (re)shape reality. They produce knowledge and exercise power. As Hall (2006, p. 436) argues: "every regime of representation is a regime of power formed, as Foucault reminds us, by the fatal couplet, 'power/knowledge'".

### Intangible Cultural Heritage (ICH)

Intangible Cultural Heritage is defined as "the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage" (UNESCO, 2003, Article 2(1)). ICH manifests itself in five domains: oral traditions and expressions, including language; performing arts; social practices, rituals and festive events; knowledge and practices concerning nature and the universe; and traditional craftsmanship (ibid, Article 2(2)). The 2003 convention abstains from describing ICH as a masterpiece bearing outstanding universal value and instead recognizes communities, groups and individuals as major reference points. Indeed, it is their recognition that is crucial for the identification of ICH. Furthermore, ICH is identified as a living heritage. While being "transmitted from generation to generation", it is "constantly recreated by communities and groups in response to their environment, their interaction with nature and their history" (ibid, Article 2(1)). Here, the centrality of the communities and groups is illustrated again. Moreover, ICH is described as sensitive and responsive to contextual change, as flexible, dynamic and constantly changing. Simultaneously, ICH is described as cohesive, forming a constituent part of the cultural identity of a particular social group, whereby it "provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity" (ibid).

Hence, ICH can also be understood as traditional and yet contemporary, as inclusive, representative and community-based (UNESCO, 2009a).

The prime concern of the convention is the safeguarding of ICH. Safeguarding measures encompass, yet are not restricted to, documentation, preservation and protection; instead, they go far beyond these concepts and aim at enabling viability (UNESCO, 2003, Article 2(3)). Safeguarding departs from notions of conservation and preservation, which might lead to a "fixed or frozen" heritage and rather aims to encourage the continuous development and transmission of ICH, of "knowledge, skills and meaning" (UNESCO, 2009b, p. 3). Crucial importance is not given to products or "concrete manifestations, such as dance performances, songs, music instruments or crafts", but rather to "processes involved in transmitting, or communicating it from generation to generation" (ibid). Again, the communities, groups and individuals must be considered as the nodal point, whereby "outsiders can help" (ibid) only alongside them. They can collect and record information, mediate knowledge about ICH through major institutions like schools and universities, as well as through media. Nevertheless, customary practices regarding access to knowledge within the respective communities need to be considered.

It is clearly stated by UNESCO that "any safeguarding measure must be developed, and applied, with the consent and involvement of the community itself" (ibid). Article 15 of the ICHC mandates that in the course of any safeguarding activity, the "widest possible participation of communities (...) that create, maintain and transmit such heritage" shall be guaranteed (UNESCO, 2003, Article 15). Local communities shall be encouraged to have a sense of ownership of their respective heritage, reaffirming their identity and value as a community. In fact, States Parties are bound to engage in a collaborative approach, accommodating local concerns regarding the safeguarding of ICH.

Indeed, as ICH manifests itself and is continuously re-created in the socio-cultural realities of the communities, groups and individuals concerned, safeguarding measures will interfere and leave a direct impact upon their respective contemporary realities. As such, the requirement of community participation points into the right direction and should find adequate application, including within practices of representation.

### **The audio-visual representation of culture**

With regard to the approaches towards representation and documentation of culture, we can learn from the discourses and major shifts in the conceptualization and usage of audio-visual media in Social/Cultural Anthropology and especially its sub-discipline of Visual Anthropology. The diverse conceptualizations are outlined in some detail below.

### **The salvage paradigm**

Ethnographic film started as a "phenomenon of colonialism" (de Brigard, 2003, p. 15). In its beginnings, it can be described as a major project that was trying to document with visual and later audio-visual means "disappearing cultures" – cultures of the "others", the small-scale, kinship-based and non-western societies, societies that were the primary objects of anthropology in its beginning stage. Félix-Louis Regnault produced the first ethnographic film already in 1895, at the same time that the first cinematic film was screened openly by the Lumière brothers using a cinematograph. At the colonial exhibition, *Exposition Ethnographique de l'Afrique Occidentale* in Paris, he recorded inter alia a Wolof woman doing pottery (Böhl, 1985). Alfred Court Haddon and his British multi-disciplinary expedition to the Torres Straits Islands in 1898 was the first documented anthropological project using film in the field (de Brigard, 2003). One of Haddon's main objectives was ethnographic salvage and his main interest was in material culture. A few minutes of film material have survived, which show inter alia three men performing a mask-dance. Baldwin Spencer and Frank Gillen also used visual devices in their work with Australian Aboriginals at the turn of the century, with one hour of film produced showing the Aranda engaged in ceremonial acts. The works of Haddon, Spencer and Gillen were pioneering and had a considerable effect on visual methods in Social/Cultural Anthropology.

Film seemed to permit direct observation and was used as a scientific tool and method of research, as well as to present findings, e.g. in multimedia lectures (Griffiths, 2002; Grimshaw, 2001). The general expectation towards film was the possibility of recording reliable neutral evidence concerning other cultures, which could be investigated and comparatively analyzed, or at least, serving the salvage paradigm, function as reliable, detailed and exact documents of (mainly material) culture. In Renault's words, film "preserves forever all human behaviors for the needs of our studies" (Regnault, 1931, p. 306 cited in de Brigard, 2003, p. 15). His understanding of the usage of film anticipated a belief in the objectivity of the filmic material, reflecting a positivist approach wherein filmic records could be collected, compared, analyzed, measured, classified and categorized. In Renault's words: "Only cinema provides objective documents in abundance; thanks to cinema, the anthropologist can, today, collect the life of all peoples; he will possess in his drawers all the special acts of different races" (Regnault, 1923, pp. 680-681, also cited in Ruby, 2000, p. 44). Regnault further requested the establishment of film archives. In 1900, the *International Ethnographic Congress* in Paris acknowledged the usage of film for documentation purposes and expressed that museums could include film archives to facilitate an understanding of the usage of artefacts displayed.

At the very beginnings of an ethnographic filmic tradition, the observer and the observed were thus differentiated from each other through a strong demarcation line, the technological instrument camera, whereby the "civilized" could study the "racial other", the "primitive". The positivist approach to science in the 19<sup>th</sup> century aimed at the collection of "life", which could then be scrutinized and classified according to the evolutionary model and colonial needs. However, when the evolutionary paradigm in anthropology developed into a realist paradigm and Anthropology established itself as a scientific discipline, the use of visual technologies was marginalized. Anthropology became a "science of words" (Mead, 2003, p. 5).

Margaret Mead and Gregory Bateson's usage of film was an exception. Mead acknowledged film as being predestined for systematic research, especially in the context of ethnographic salvage. In *Visual Anthropology in a Discipline of Words* (Mead, 2003, [orig. 1974]), she refers to the anthropologist's "responsibility" for "making and preserving records of the vanishing customs and human beings" (p. 3). Acknowledging "the limitations of language in conveying or translating aspects of social life" (Grimshaw, 2001, p. 88), she points to the fact that dance, song, language as well as transactional relations in particular can be preserved and analyzed well through audio-visual footage (Mead, 2003, p. 5). These records would further be useful for the revitalization of cultural heritage and the preservation of cultures and behaviors. In her words: "(Be)cause these are disappearing types of behavior, we need to preserve them in forms that not only will permit the descendants to repossess their cultural heritage (and, indeed, will permit present generations to incorporate it into their emerging styles), but that will also give our understanding of human history and human potentialities a reliable, reproducible and re-analyzable corpus" (ibid, pp. 8-9). According to Mead, human forms of behavior are disappearing while scientists are sent into the field with "a hopelessly inadequate note-taking of an earlier age" (ibid, p. 4).

Mead understood films as "objective materials" that allowed for a purely technical illustration of reality that will be available for analysis and reanalysis even in the light of changing theoretical paradigms and objectives. She called for "long sequences from one point of view", "unedited stretches of instrumental observation", "prosaic, controlled, systematic filming" and predicated that a "finer recording of these precious materials can illuminate our growing knowledge and appreciation of mankind" (ibid, p. 10). For the preservation of "observations in as complete a form as possible", Mead (2004, p. 47, [orig. 1973]) even recommended using an un-manned and continuously running 360-degree camera. Mead and Bateson transcended the usage of images for illustration purposes of already developed arguments towards a conceptualization of images as data and records and therewith to primary sources for the study of social interaction and for elements in – instead of simply illustrating – an argument (Grimshaw, 2001; Sullivan, 2007). Following a realist paradigm, they thought to film an un-manipulated and uninterrupted pre-filmic reality.

However, it can be argued that instead of representing a pre-filmic authentic reality in its completeness, this approach is very close to surveillance (Foucault, 1977) and fosters the production of highly artificial filmic artefacts, dehumanizing and objectifying in its effects, which remain at a distance from people's lived experience, socio-cultural contexts and cultural significance. Thus, this approach is highly criticized and seems outdated today (Banks, 2001). Instead, knowledge production is understood to be generated essentially through a form of interaction involving a relationship between the informant and researcher, rather than through an intellectual output of the researcher gained through objective observation of the informant.

### Observation without control

In the early-1950s, the positivist paradigm in filmic representation was challenged by innovations in audio-visual technologies and practices. Grimshaw (2001) relates these developments to an increased political awareness, especially in France and the US, where intense political struggles took place regarding colonial independence and civil rights. The documentary project changed its approaches, with the notion of observation now at its center. Two schools developed: direct cinema, established by the Drew associates in the US; and *cinéma vérité*, developed by the French anthropologist and filmmaker Jean Rouch.

*Cinéma vérité* was committed towards an unfolding and undirected process of filmmaking, within which scripts were not allowed; rather, films evolved spontaneously and in an improvised manner. The camera was meant to bathe in a fluid and evolving reality. It was freed from the constraints of the tripod and was allowed to be mobile, alive, flexible and embodied. The filmmaker and camera were acknowledged as participating in the event of the film, creating realities in the plural rather than discovering and recording a fixed reality. Films had a highly reflexive stance; they did not intend to record objective ethnographic reality, but rather aimed to break with objective and objectifying endeavors and attend to the complex and diverse subjectivities of the people, acknowledging that ethnographic realities are produced in an encounter. Moreover, the audience was not patronized; instead, they were considered to actively participate in the creation of meaning.

At the same time in the US, Robert Drew and his colleagues developed direct cinema. Here, no direction, stimulation or interaction with the film subjects was allowed. Small film crews of around two people spontaneously recorded reality with synchronous sound, as it unfolded before the camera. Tripods, lights, scripts, staging and repetition were forbidden. The filmmakers and the camera were free to move to catch what was happening around them. Accordingly, they first had to learn to see and immerse themselves in the situations unfolding in front of them, conceptualizing themselves as a sort of eyewitness

of the actions. Furthermore, they rejected montage and favored the *mise-en-scène*. They did not conceptualize themselves as partaking in the creation of a (filmic) reality, but considered themselves to investigate the world through intense observation practices. In order to generate significance and meaning, the audience was expected to engage with the shown material and immerse in the event through the reception of the film. Nonetheless, the material of the film was still conceptualized as evidence.

In an ethnographic context, this methodology was termed as observational cinema (Young, 2003, [orig. 1975]). Its approach radically differed from the realist paradigm, in which the camera was considered to record data or illustrate arguments. Instead, the camera became deeply involved with the subjectivities of people and an all-knowing expert summary or narration is replaced with a variety of voices speaking in diverse ways and contexts. Leaving their privileged positions, filmmakers attempted to be open and receptive towards the world. The method was observation, an approach that was considered to foster respect and carried an ethical stance (Grimshaw and Ravetz, 2009).

Despite initially being celebrated as a major breakthrough in ethnographic filmmaking, observational cinema quickly encountered serious criticism. MacDougall (1995, p. 118, [orig. 1975]) argued that the "orthodoxy" of the observatory approach involves a "self-denying tendency". Furthermore, the camera is not participatory but seems to be not there, an unseen presence able to deliver evidence through its ability to adopt countless perspectives and positions. Hereby, the process of production, of filmmaking and meaning-making is mainly neglected. The camera wants to film things as if they would have happened anyway, to film people in an undisturbed interaction, in an approach that seems to legitimize the "voyeur's peephole" or the surveillance camera (ibid, p. 120). The filmmaker is conceptualized as omnipotent, invisible and all knowing, able to grasp an event in its totality and provide evidence of it, using the camera as a "secret weapon in the pursuit of knowledge" (ibid). MacDougall (ibid) argues that this "lonely approach", within which the filmmaker has to neglect his/her presence, makes the audience an accomplice in a reinvention of the colonial legacy of separating the self and the other based upon rigid lines. He states: "The traditions of science and narrative art combine in this instance to dehumanize the study of man. It is a form in which the observer and the observed exist in separate worlds, and it produces films that are monologues" (MacDougall, 1995, pp. 124-125). Film subjects are denied access to the film and the filmmaker. The production crew and the audience conceive of themselves as being separate from the seen, unable to interact and communicate. Thus, the screen serves as a demarcation line and a protective shield. While immediate emotional reactions might arise, the audience remains in the secure locus of absolute separation.

### **Participatory Media**

For David MacDougall, "participatory cinema" lies "beyond observational cinema", since it acknowledges the event of production and allows for an encounter between subjects and filmmaker. It is acknowledged that the camera "is held by a representative of one culture encountering another" (ibid, p. 125). As such, the produced media is never "merely a record of another society: it is always the record of a meeting between a filmmaker and that society" (ibid). Participatory cinema not only gives credit to negotiation processes between filmmakers and subjects in the construction of the film, but also conceptualizes the audience as actively participating in the construction of meaning (Grimshaw and Papastergiadis, 1995). Participatory cinema attempts to balance fundamental inequalities between the observer and the observed. It acknowledges the presence of the filmmaker as being fundamentally involved in the process of meaning-making and gives space for culture being "imprint(ed) directly upon the film" by the subjects themselves (MacDougall, 1995, p. 125). Through revealing his/her position, the filmmaker constructs the audio-visual material as evidence. Film-elicitation, direct requests and interventions are considered further tools for gathering deeper data, while collaboration and joint authorship are also mentioned as promising and necessary strategies. Ruby (2000) even argues that only reflexive, collaborative ethnographic films that also give voice to the informants could be called ethically correct visual representations.

Within participatory cinema, (audio-visual) ethnographic knowledge production is now conceptualized as an exchange, as a process and a dialogue involving two sides, rather than a process of simple data collection followed up by scientific assessment, interpretation and evaluation from one side. Here, the pre-filmic reality is not in focus for mediation; nevertheless, the accumulation of information "about them" is positioned as an aim and therewith corresponds with the aim raised in observational cinema, as well as realistic approaches in scientific cinema. It can be argued that the "entering actively into the world of his subjects" (MacDougall, 1995, p. 125) can be better described as actively entering into a co-produced process of meaning-making of a world, which differs from "their world" through being a shared world.

We can summarize that ethnographic film departed from the objective and objectifying endeavor in anthropology and became increasingly subjective and reflexive until the 1980s and 1990s. In terms of approach, it developed from a realistic paradigm to an observational cinema and subsequently to a participatory cinema (Grimshaw, 2001; Loizos, 1993).

### Self-representations

A further step was taken during the 1980s and early-1990s when former film subjects (indigenous/minority/disenfranchised) started to "shoot back", producing and constructing their own audio-visual media. In a move that resembled the postcolonial strategy of "writing back" against colonial master-narratives, they challenged the colonial gaze and existing power relations in the representation of their own culture. Issues of power, control over production, distribution and content as well as social implications of media were discussed. This subject-generated cinema relates to the conscious self-production of audio-visual representations by members of the represented community using an insider's point of view. Subject-generated media is used as a form of social practice, a self-conscious positioning within the politics of representation, a positioning that at the same time creates and represents contemporary subjectivities. It may also encompass indigenous media, which initially was often closely linked to notions such as cultural regeneration, documentation of specific cultural practices, as well as the reconstruction and reassertion of identity (Prins, 2002).

Indigenous media, like ethnographic film, mediates across cultural boundaries. Nevertheless, indigenous media, to which subject-generated media can also be added, is more concerned with "heal(ing) disruptions in cultural knowledge, in historical memory, and in identity between generations" (Ginsburg, 2002, p. 216). It provides a social, cultural and political tool for (re)constructing cultural identities. Furthermore, it enables influence and agency. On the other hand, ethnographic film is more concerned with mediation, creating understanding between two different groups. Nonetheless, both approaches are shaping the "processes of identity construction" within and outside the community; they "are not based on some retrieval of an idealized past but create and assert a position for the present" (ibid, p. 217).

The Faustian dilemma and the global village can be identified as the major paradigms used regarding the positioning of these new media activities. The Faustian contract is linked back to the Frankfurt school, which identifies traditional culture as authentic and inherently good, and considers this culture to be threatened and irreversibly polluted or destroyed by contact with mass media, mass culture and high technology. As Ginsburg (2002, p. 213) stresses, this position tends to freeze both kinds of societies "into paradigmatic positions that essentialize features that distinguish them". On the other hand, societies are defined in the global village paradigm as "constantly changing rather than determined by state, economic, and technological imperatives". In this paradigm, social agency and an optimistic conception of these media is promoted as a connecting tool, linking different cultures all over the world with each other, therewith creating a sense of community that resembles a local community within a village. However, the approach of "electronic democracy" also has shortcomings, given that it does not pay adequate tribute to different power relations and experiences (ibid). Ginsburg criticizes both paradigms for promoting static essentialism and cultural and political myopia, respectively, and calls for a bricolage, for new media forms as "a means of cultural invention that refracts and recombines elements from both the dominant and the minority societies" (ibid, p. 230). She stresses that the long proclaimed indigenous "other" shall not be maintained as being positioned within a dichotomic order that recreates and rearticulates the discourse of the "other", but should be included in analysis as a diverse yet shared representational practice on an equal standing. She argues for "incorporating ethnographic film and indigenous media within the same analytical frame" (ibid, p. 216). Using the metaphor of a "parallax effect" - parallax refers here to the Greek parallax, which denotes change and alternation - she states that indigenous media has an "epistemologically positive impact" (Ginsburg, 1995, p. 65). Developed in astronomy, the parallax effect describes "the phenomenon that occurs when a change in the position of the observer creates the illusion that an object has been displaced or moved; this effect is harnessed to gain a greater understanding" (ibid). For Ginsburg, the cinematic representation of culture appears different when seen from the perspective of indigenous media and ethnographic film, respectively, and a juxtaposition or combination of these different perspectives will allow for a better understanding of the complex phenomenon that we call culture. This argument can be extended to cover subject-generated cinema in general.

### Concluding remarks

Taking into account the characteristics of ICH, as well as the requirements that have been outlined for its safeguarding and considering the aforementioned methodological approaches to audio-visual representation, the following points can be noted.

First, since ICH manifests itself through the recognition of communities, groups and individuals, with clear reference given to identity and continuity within these communities, their interpretations are highly significant and should remain constitutive of practices. As audio-visual representations do not provide neutral reflections of reality, but rather encroach upon reality - they legitimize versions of heritage, assign inclusion and exclusion, remembering and forgetting - community participation within representation practices should be encouraged. In the light of meaning being constructed and (re)created within representation, subject-generated cinema and participatory cinema seem significant circuits through which meaning can be shaped regarding ICH. Moreover, control over means of representation will enable social agents to make identity claims, which in turn will strengthen their involvement with ICH practices. Furthermore, the 2003 convention asserts that safeguarding measures need to be developed and applied

together with the respective communities. Thus, collaborative approaches within cinematic representation seem adequate.

Second, if we acknowledge that ICH is a living heritage that is constantly in a state of becoming and that meanings are not fixed but rather evolving and contested, the filmic (re)construction of 'authentic tradition' seems misleading. Representational strategies need to take into account that ICH is situated in time and space, and thus approaches that freeze, standardize and musealize living cultural traditions should be avoided. Instead, audio-visual representations should strive to examine the different layers of history, as well as the manifold realities of contemporary practice and experience. In doing so, contemporary practitioners would also receive recognition and promotion.

Third, as audio-visual representations of ICH are not windows into the world but are constructed in an encounter, the camera should not mark a demarcation line between cultures but rather a possibility for dialogue and exchange. Indeed, multiple agents have various objectives in the creation, management and promotion of heritage. Thus, to avoid disempowering bearers and custodians of ICH, triple access is needed: access to production processes, to the visual text itself, as well as to reception processes. The provision of access in an intercultural setting will contrast objectification and prevent a reframing and reaffirmation of difference; instead, it will promote diversity and enable reciprocity within knowledge production and dissemination. Finally, a combination of different perspectives of vision will allow for a better understanding of the complex phenomenon that we call ICH.

## References

- Ashworth, G. J. & Graham, B. (eds.) (2005) *Senses of Place: Senses of Time*. Aldershot: Ashgate.
- Ashworth, G. J. et al. (2007) *Pluralising Pasts: Heritage, Identity and Place in Multicultural Societies*. London: Pluto.
- Banks, M. (2001) *Visual Methods in Social Research*. London: Sage.
- Böhl, M. (1985) *Entwicklung des ethnographischen Films: Die filmische Dokumentation als ethnographisches Forschungs- und universitäres Unterrichtsmittel in Europa*. Göttingen: Ed. Herodot.
- Clifford, J. & Marcus, G. E. (eds.) (1986) *Writing Culture: The Poetics and Politics of Ethnography*. Berkeley: University of California Press.
- de Brigard, E. (2003) The history of ethnographic film. In P. Hockings (ed.) *Principles of Visual Anthropology*, 3<sup>rd</sup> ed.. Berlin: Mouton de Gruyter, pp. 13-44.
- Foucault, M. (1977) *Discipline and Punish: The Birth of the Prison*. London: Allen Lane.
- Ginsburg, F. (1995) The Parallax Effect: The impact of aboriginal media on ethnographic film. *Visual Anthropology Review* 11(2), pp.64-76.
- Ginsburg, F. (2002) Mediating culture: indigenous media, ethnographic film, and the production of identity. In K. Askew & R. Wilk (eds.) *The Anthropology of Media: A Reader*. Oxford: Blackwell Publishers, pp. 210-235.
- Graham, B. (2002) Heritage as Knowledge: Capital or Culture?, *Urban Studies* 39, 1003-17.
- Graham, B. et al. (2000) *A Geography of Heritage: Power, Culture and Economy*. London: Arnold.
- Graham, B. & Howard, P. (eds.) (2008) *The Ashgate Research Companion to Heritage and Identity*. Aldershot: Ashgate.
- Griffiths, A. (2002) *Wondrous Difference: Cinema, Anthropology and Turn-of-the-century Visual Culture*. New York: Columbia University Press.
- Grimshaw, A. (2001) *The Ethnographer's Eye*. Cambridge: Cambridge University Press.
- Grimshaw, A. & Ravetz, A. (2009) *Observational Cinema: Anthropology, Film, and the Exploration of Social Life*. Bloomington: Indiana University Press.
- Grimshaw, A. & Papastergiadis, N. (1995) *Conversations with Anthropological Film-Makers: David MacDougall. Prickly Pear Series 9*.
- Hall, S. (ed.) (1997) *Representation: Cultural Representations and Signifying Practices*. Thousand Oaks, CA: Sage.
- Hall, S. (2006) Cultural Identity and Diaspora. In B. Ashcroft et al. (eds.) *The Post-colonial Studies Reader*. Oxford, New York: Routledge, pp. 435-438.
- Loizos, P. (1993) *Innovation in Ethnographic Film*. Manchester: Manchester University Press.
- MacDougall, D. (2003) Beyond observational cinema. In P. Hockings (ed.) *Principles of Visual Anthropology*, 3<sup>rd</sup> ed.. Berlin, New York: Mouton de Gruyter, pp. 115-132.
- Mead, M. (2003) Visual anthropology in a discipline of words. In P. Hockings (ed.) *Principles of Visual Anthropology*, 3<sup>rd</sup> ed.. Berlin, New York: Mouton de Gruyter, pp. 3-10.
- Mead, M. (2004) Changing styles of anthropological work. In M. Mead, *Studying Contemporary Western Society: Method and Theory*. New York: Berghahn Books, pp. 40-73.
- Prins, H. (2002) Visual Media and the Primitivist Perplex: Colonial fantasies, indigenous imagination, and advocacy in North America. In F. Ginsburg et al. (eds.) *Media Worlds: Anthropology on New Terrain*. Berkeley: University of California Press.

- Ruby, J. (2000) *Picturing Culture: Explorations of Film and Anthropology*. Chicago: University of Chicago Press.
- Spivak, G. C. (1988) Can the subaltern speak?. In C. Nelson & L. Grossberg (eds.) *Marxism and the Interpretation of Culture, Urbana*. Chicago: University of Illinois Press, pp. 271–313.
- Sullivan, G. (2007) Recording Social Action: Margaret Mead and Gregory Bateson’s Contribution to Visual Anthropology in Ethnographic Context. In B. Engelbrecht (ed.) *Memories of the Origins of Ethnographic Film*. Frankfurt am Main: Peter Lang, pp. 59-70.
- UNESCO (2003) *Convention for the Safeguarding of the Intangible Cultural Heritage*. Paris: UNESCO.
- UNESCO (2009a) *ICH: what is intangible cultural heritage? Infokit*. Paris: UNESCO.
- UNESCO (2009b) *ICH: questions & answers, Infokit*. Paris: UNESCO.
- Young, C (2003) Observational cinema. In P. Hockings (ed.) *Principles of Visual Anthropology*, 3<sup>rd</sup> ed.. Berlin, New York: Mouton de Gruyter, pp. 99-114.




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## Conservation of Intangible Cultural Heritage in formal curriculum of Hong Kong: from cultural space to learning space

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Hong Kong is a highly urbanized metropolitan, yet it still preserves many traditional Chinese cultural practices. Cantonese Opera is the first Hong Kong item to be inscribed in the UNESCO List of the Intangible Cultural Heritage (ICH) of Humanity. Four other traditional festive events and rituals were also inscribed in the National List of Intangible Cultural Heritage of China. Education is an important means to inherit and further develop intangible cultural heritages. The education reform of New Senior Secondary (NSS) curriculum offers new opportunities for integrating ICH into formal curriculum. It is a perfect timing for utilizing the cultural spaces of ICH into a learning space, and let students learn about the local arts and culture from different dimensions. Since 2006, HKU Cantonese Opera Education and Research Project worked together with partnership schools, to integrate Cantonese Opera into the secondary school curriculum and on related researches. Interdisciplinary and school based courses with ICH elements have been developed in different partnership schools. Under these curricular, students are guided to explore the cultural space of different ICH items, such as the significant Bamboo Sheds of Cantonese opera, to learn how to appreciate and treasure their own culture and traditional art form, to recognize these events and rituals as local intangible cultural heritages, and to fulfill their social responsibility as members of the global community to preserve their own cultural heritage by participating actively in promoting its sustainability. This paper will share the experience of the successful development in integrating ICH into formal curriculum, as well as discussing the possibility to promoting this mode of ICH curriculum development in more schools and in other countries.

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### Introduction and context

Cantonese opera is a local traditional art in Hong Kong. On 30<sup>th</sup> September, 2009, Cantonese Opera was inscribed in the UNESCO List of the Intangible Cultural Heritage (ICH) of Humanity, which was the first Hong Kong ICH item to be inscribed. This raised the interest of Hong Kong people on local ICH items and awareness on the importance of safeguarding them.

Addressing this specific issue, the Hong Kong government suggested putting more resources to support the development and inheritance of Cantonese opera and other ICH items as valuable local cultural treasures of Hong Kong.

The Hong Kong government was aware of the importance of preserving and promoting Cantonese opera as an indigenous art form before the inscription, thus the Cantonese Opera Advisory Committee (COAC) and the Cantonese Opera Development Fund (CODF) were set up by the Home Affairs Bureau in 2004 and 2005 respectively. Up to 2013, the CODF has already granted over \$50 million to support different programmes and events on the study, promotion, cultural exchange, education, professional training and the continuous development of Cantonese opera.

According to the Convention for the Safeguarding of the Intangible Cultural Heritage (hereafter "the Convention"), adopted by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in April 2006, China is one of the State Parties. In order to undertake necessary work in compliance with the Convention, an Intangible Heritage Unit was set up in 2006 under the establishment of the Hong Kong Heritage Museum. (Hong Kong Heritage Museum, 2012). Intangible Cultural Heritage Advisory Committee was set up by the Home Affairs Bureau later in July 2008, to give advices and to monitor the conduct of a territory-wide survey on Hong Kong's ICH as well as the measures to safeguard ICH items of Hong Kong. With the effort of the committee and Intangible Heritage Unit, four local traditional festivals and practices, namely the Jiao-festival of Cheung Chau, Tai O Dragon Boat Water Parade, Tai Hang Fire Dragon Dance and Yu Lan Ghost Festival of the Hong Kong Chiu Chow Community, were successfully inscribed onto the Third National List of Intangible Cultural Heritage of China in 2011. The inscription definitely aroused more public awareness in identifying and safeguarding local ICH items in Hong Kong.

In the Article 14 of the Convention, it states "each State Party shall endeavour, by all appropriate means, to ensure recognition of, respect for, and enhancement of the intangible cultural heritage in society, in particular through educational, awareness-raising and information programmes, aimed at the general public, in particular young people." (Convention for the Safeguarding of the Intangible Cultural Heritage, Article 14, a,i)

However, only a small number of young people appreciate or are interested in their own intangible cultural heritage. Taking Cantonese opera as an example, according to a survey in 2009, among all audiences of Cantonese opera in Hong Kong, only 2.9% of the total audience falls into the age group of 10-29. (Ng, Lam & Choi, 2010) Therefore it is important to work on the promotion and safeguarding of Cantonese opera and other ICH items through education, as it is an important means to inherit and further develop the intangible cultural heritages.

In September 2009, the New Academic Structure was implemented in Hong Kong. The New Senior Secondary (NSS) curriculum, which aims at enhancing students' adaptability, creativity, independent thinking and life-long learning capabilities, provided a perfect breeding ground for embedding ICH elements into formal curriculum. It is a perfect timing for utilizing the cultural spaces of ICH into a learning space, and let students learn about the local arts and culture from different dimensions.

In the following parts of this paper, we will share the experience of the successful development in integrating ICH into formal curriculum in Hong Kong, as well as discussing the possibility to promoting this mode of ICH curriculum development in more schools and in other countries.

### **Interdisciplinary school-based approach model**

Since 2006, HKU Cantonese Opera Education and Research Project worked together with partnership schools, to integrate Cantonese Opera into the secondary school curriculum and to develop related researches. Interdisciplinary and research-based curriculum with Cantonese opera and ICH elements has been developed in different partnership schools. There are five steps leading to the development of a school-based model with integration of ICH elements.

### **Analyzing and matching learning components with ICH and Cantonese opera components**

Before designing the ICH elements integrated curriculum, we need to identify the matching components of ICH/ Cantonese opera and learning components.

There are various ways to start matching the learning components with the ICH components. The HKU Cantonese Opera Education and Research Project have successfully used the theory of Multiple Intelligence to match the components in the past years.

Howard Gardner's theory of Multiple Intelligences classified "Intelligences" into 7 different categories, namely the 1. Verbal-Linguistic Intelligence, 2. Logical-Mathematical Intelligence, 3. Spatial Intelligence, 4. Musical Intelligence, 5. Bodily-Kinesthetic Intelligence, 6. Interpersonal Intelligence and 7. Intrapersonal Intelligence. The eighth intelligence of Naturalist Intelligence was added later, making a total of 8 categories. These classifications allows teachers to take care of students' diversity and individual discrepancies, which makes teaching more effective to achieve final learning goals.

The learning activities of ICH education can be matched with various multiple intelligence development of students. Taking Cantonese opera as an example, the analysis of script can help students to develop Verbal-Linguistic Intelligence, Logical-Mathematical Intelligence, Interpersonal Intelligence, Intrapersonal Intelligence and Naturalist Intelligence. (Ng &Yeung, 2011) For other ICH items, students can develop their verbal-linguistic intelligence by doing research on the background and history of ICH items; musical intelligence can be developed through the learning of traditional music and art forms; bodily-kinesthetic intelligence in martial arts, and by doing group and individual learning projects and assignments, interpersonal and intrapersonal intelligence can be built etc. (Ng, 2013).

In order to match with the aims of the NSS curriculum, the Curriculum Development Council has set up seven learning goals for the students under the new curriculum framework to achieve in their

studies, namely healthy lifestyle, breadth of knowledge, learning skills, language skills, habit of reading, national identity and responsibility. By achieving these goals, students will hopefully become all-rounded persons in the society.

The following table illustrates how the components can be matched with the seven learning goals.

Table 1. Cantonese opera and ICH components matched with NSS curriculum of Hong Kong.

NSS Learning Goals	Cantonese opera components	ICH components
Healthy Lifestyle	Develop an interest in and appreciation of aesthetic values in Cantonese opera	Develop an interest in local cultures
Breadth of Knowledge	Possess a breadth and foundation of knowledge about safeguarding and background of Cantonese opera and other ICH items	
Learning Skills	Develop high order and independent learning skills such as critical thinking and information technology through project studies and cultural space exploration	
Language Skills	Learn classical Chinese through lyrics, poetries, allusions and antithesis etc. in scripts	Develop language skills through reading information about ICH, writing reports, interview with ICH inheritors etc.
Habit of Reading	Read Cantonese opera scripts and lyrics	Make a habit of independent reading through researching and reading information about ICH
National Identity	Strengthen the sense of Chinese nationality through learning the moral ethics and traditional Chinese values embedded	
Responsibility	Recognise their roles and responsibilities as members in the society by safeguarding Cantonese opera and other local ICH items	

**Curriculum design: a school-based approach**

The curriculum reform in Hong Kong in 2009 provided a great chance for ICH to be integrated in formal curriculum. Under the new system, schools can design their own school-based curriculum for core and elective subjects that suit the interests and strength of students and teachers. This gives plentiful room for integrating ICH elements into the curriculum. There are a lot of components of Cantonese opera and ICH which can match with different learning components of different subjects and learning areas (Ng, 2012).

**In school/ classroom**

With the flexibility given by the new curriculum, there are many opportunities to embed Cantonese opera and ICH components into whole-school and cross-disciplinary curriculum. For example, in the core subject of Chinese Language and Culture, schools can design special topics for students to study the festive traditions or scripts of Cantonese opera, for Liberal Studies, students can study the current situations and inheritance of ICH etc.

ICH elements can also be integrated with learning components of different subjects. Under the new curriculum, apart from taking the core subjects of Chinese Language, English Language, Mathematics and Liberal Studies, students need to choose 2 to 3 elective subjects. They can choose elective subjects from different Key Learning Areas, Applied Learning courses and/or other language courses. Applied learning subject can be developed by school according to the needs and strength of their students, which ICH topics and elements can be easily fit in.

A very successful example of such is the whole-school crossed disciplinary course on ICH in the Buddhist Wai Yan Memorial College on Cheung Chau island in Hong Kong. The school picked Jiao-festival (also known as the Bun Festival) as focus, since the festival is a unique event on Cheung Chau and was inscribed in the National List of Intangible Cultural Heritage of China in 2011. Examples of subjects and themes with ICH elements in this school are: Application of Probability: Fortune Telling and Fortune Stick Drawing in Mathematics, Making of Peace Bun (special festive food on Cheung Chau) in Home Economics and Tourist Route Design for the Bun Festival in Tourism and Hospitality subject etc.

**In cultural spaces**

According to the Convention by the UNESCO, state parties need to “promote education for the protection of natural spaces and places of memory whose existence is necessary for expressing the intangible cultural heritage” (Convention for the Safeguarding of the Intangible Cultural Heritage, Article 14 – Education, awareness-raising and capacity-building).

The exploration of bamboo-shed theatre is a very good example of formulating the framework and process of learning traditional culture in the modern world in the light of experiential learning theory and the phenomenographical approach to learning (Ng et. al., 2001; Kwan & Ng, 2002; Tsui et. al., 2004)

David Kolb (1984) argued that experiential learning encompass the totality of the human learning process, where experience forms the foundation for four-phase learning cycle. Based on this theory, there are also four phases in the cross cultural learning of bamboo theatre cultural exploration.

The following figure shows a complete cross-cultural learning cycle, using Cantonese opera learning as an example, in terms of experiential learning theory and Phenomenographical approach of learning.

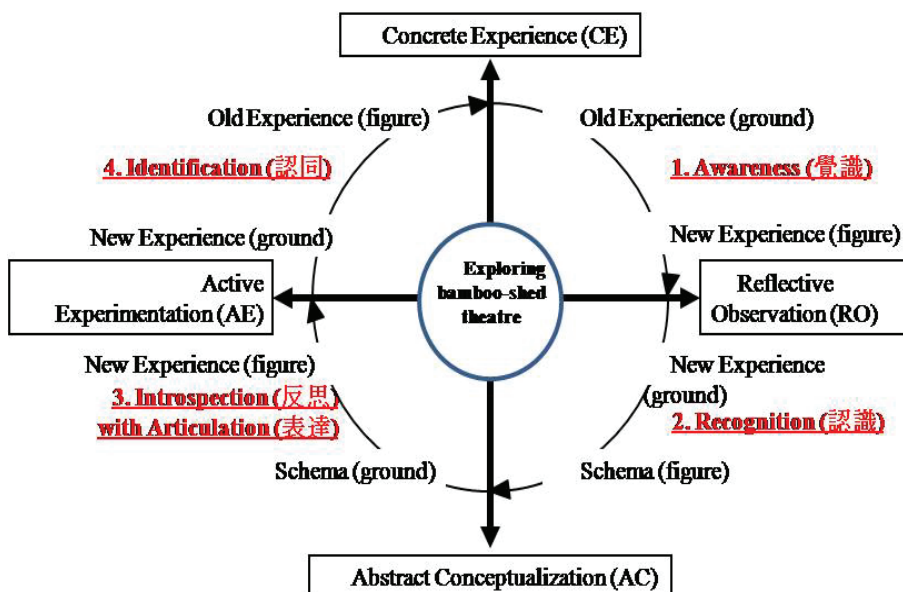


Figure 1. Cross-cultural learning cycle of Cantonese opera learning.

### In Cyberspace

In the era of Web 2.0, web tools and other e-learning platforms are widely used to allow more effective learning of students. The multi-media interface and interactive cyberspace provide a common ground for learning which allows students to experience more learning possibilities which cannot be obtained through traditional learning methods.

Free web tools such as weblogs and other social media, can be used in designing the curriculum of ICH education. For example, multi-media video clips can be posted on weblogs to show students of specific festive activities of ICH items, or interactive discussions platforms of students can be developed on social media platforms such as Facebook groups.

### Teacher training/ seminar and workshops

Local secondary school teachers might not be very familiar with Cantonese opera and other ICH items, therefore they might not have the confidence and might face problems when it comes to teaching such topics to students. Regarding this issue, teacher training and supports should be given to them in order to raise their professional ability in the aspect so that they eventually would feel confident in teaching the topics.

There are three stages of teacher training in ICH education, including 1. ICH knowledge enrichment programmes, 2. Joint-school lesson preparation and 3. Feedback and school-based support.

"Cantonese opera/ ICH knowledge enrichment programme" is provided to the teachers who are about to teach the related topics, in which, professionals in the field, such as Cantonese opera artists and ICH inheritors are invited as guest lecturers to introduce their specific items to the teachers through talks, workshops and showcase performances etc. After learning more about the ICH itself, teachers can then start to work on the school-based lesson plans that suit their schools and students most.

After initially designing their own school-based model, teachers are invited to gather together for a Joint-school lesson preparation session, that they can exchange their ideas and experiences in planning. Professional comments and assistance from education scholars are also given in the sessions so teachers can refine and polish their teaching plans before executing.

When teachers start teaching their self-designed school-based teaching plans in school, education scholars would visit their lessons and give feedback to them. School-based support for each school would also be provided if needed.

Teachers will eventually master the skills and knowledge in teaching ICH related topics as well as the essence of local culture after these teacher training activities. They will also be inspired on how to explore and utilize teaching resources so as to improve their teaching quality. And by reflecting on their own teaching process, getting feedbacks from professionals and exchanging experiences with fellow teachers, the atmosphere of knowledge exchange can be built among teachers of different schools, which can benefit the professional development of individual teachers and teaching materials and successful models can also be accumulated for future reference.

### **Implementation strategies**

The HKU Cantonese Opera Education Research and Promotion project started the integration of Cantonese opera with formal curriculum in 2006. Starting from just integrating Cantonese opera elements into Chinese Language subject, the successful model got expanded and the integration was extended to different subjects such as Liberal Studies and Other Learning Experiences. Besides Cantonese opera, other ICH items were also used in interdisciplinary areas. School-based subjects and models were also designed and successfully run in partnership schools under the assistance and guidance given by the project scholars. The four layers of implementation strategies and experiences are as follows:

#### **In classroom**

Cantonese opera script bears very rich language, literature and cultural content, through the teaching of Cantonese opera scripts in the subject of Chinese Language, using different teaching approaches such as the pedagogy of story schema (Ng & Lam, 2009), students can develop different language skills required by the curriculum, including reading, writing, textual analytical skills etc. Other than the literature elements that can be directly related to the subject requirements, students can also learn other important elements such as traditional Chinese moralities through formal classes and the arts of traditional movements and dances in workshops conducted by Cantonese opera artists.

#### **In school**

The project brings kick-off performance of Cantonese opera to partnership schools, allowing students to have a first encounter with Cantonese opera, and giving them some brief ideas of how the art form is like. This kind of showcase can also be used by other ICH items, for example, ICH inheritors can be invited to schools to introduce their respective ICH items. Students therefore can get first-handed information and interactive experiences about the item instead of just reading information from books and other second-handed materials passively. It can also raise their respect and recognition of the items as local ICH and valuable cultural assets of Hong Kong.

#### **In cultural space**

Other Learning Experiences (OLE) is a new part in the NSS curriculum besides the original core and elective subjects. Through the participation in OLE, students can acquire learning experiences of moral and civic education, community services, physical and aesthetic education and career-related experiences etc. OLE aims at exposing students to a broader and balanced curriculum and nurturing whole-person development (Introduction: Other Learning Experience).

Bamboo theatre is one of the most significant icons of Cantonese Opera in Hong Kong. Cantonese opera is a folk art that is always performed in bamboo theatres. These bamboo theatres are intricately related to the local rituals and festivals thus is a significant cultural space in Hong Kong. For example, teachers can lead students to have field trips to such cultural spaces like bamboo sheds and temples as OLE activities or special topic project of Chinese Language and Culture subject. In such case, ICH education can act as a conductor, to link up the ICH cultural spaces with learning spaces, or even transforming the cultural spaces into learning spaces. And by doing so, students can be pulled out of their classrooms and schools, to learn and explore through various learning activities within these spaces. Schools can also choose cultural spaces for students to explore according to the religious, geographical or cultural background of the school or of the students (Ng et al., 2012).

### **In Cyberspace**

The project used web tools on different levels along the teaching and learning process of Cantonese opera and ICH. The first level are weblogs which are used as project e-learning platforms, which are set up by the project team, examples are blogs to guide students in appreciating Cantonese opera and also webquest for pre-visit preparation for cultural spaces.

The second level of web learning is student writing weblogs as their learning outcome. By building their own weblogs, students can learn more about the subject by actively involved in research and collecting information, they can also acquire corresponding literacy such as information literacy and tool literacy etc. throughout the process (Ng et al., 2010).

The third level is using interactive functions of weblogs and social networking platforms for the exchange of knowledge. Students can give comments to different weblogs done by fellow classmates, so that they can exchange ideas and thus fostering collective learning among students. Social networking platforms such as facebook, can also be used as discussion platforms for students as they are mostly familiar with such web tools and can use them effectively, so the atmosphere of interactive and collaborative learning can be easily created.

### **Evaluation of curriculum and learning outcomes**

Under an interdisciplinary curriculum, the effectiveness of teaching and learning is evaluated or assessed based on students' performances instead of only by outcome-based assessments such as examinations. These assessments can be done along the way during the teaching process on different levels.

#### **In classroom/ school**

Students are required to write self-assessments or reflections after taking the courses so that teachers can evaluate their learning outcomes. Feedbacks from student after taking integrated Cantonese opera classes showed they have changes in attitude and impression towards Cantonese opera. Following are some of the feedbacks from students:

"I used to have an impression that Cantonese opera is boring, but I later found out every bit of Cantonese opera, like movements and lyrics, are all very meaningful and are carefully structured."

"I was not familiar with Cantonese opera, and found it not interesting at all, but now I'm getting more interested in it. I think it's meaningful to develop a new interest." (Ng, Chung & Lam, 2008).

Some students present their learning outcomes in another way. Students from True Light Middle School wrote creative poetries based on their knowledge learnt from studying the famous Cantonese opera script the Reincarnation of Lady Plum Blossom (Ng & Yeung, 2010).

#### **In cultural space**

Under the different modes of assessments allowed in the new curriculum, students are no longer only assessed on written reports and examinations. For example, the Cheung Chau Buddhist Wai Yan Memorial College, encouraged students to take part in a student company programme named "Junior Achievement Hong Kong – Company Programme". The Form 4 students started a company called "Call Now Yeah" to promote Cantonese opera as local intangible cultural heritage. By selling self-designed goods and stationeries with Cantonese opera elements, students tried to introduce the art form to the public, and it was well received.

Students of the same school also showed their effective learning outcomes in actual cultural space of the Jiao Festival. The Form 5 students designed guiding brochure and touring routes for English speaking tourists in their English Language classes. After that, they participated in the Jiao-festival as tour ambassadors, using their self-designed materials, to introduce the tradition to the tourist on spot (Ng, 2013).

#### **In Cyberspace**

Students are required to scaffold their own weblogs as learning outcomes. It is more interesting for student to write on blogs then to write on paper, and they can also learn and exchange knowledge though the interactive process of getting feedbacks from other students online. This can arouse their learning interests and also can help them to acquire corresponding literacy by building the weblogs with other elements such as photos and weblog design.

The outcomes on cyberspaces were fruitful, that students did not only build the weblogs and pages as assignments, because a sustainable e-learning community is formed on the online platforms, which keeps accumulating learning outcomes and useful reference for future learners.

## Conclusion

The successful experience of the project over the six years inspired other institutes/ schools to use similar models in the subjects of Applied Learning and Music, and also in the aspect of Other Learning Experiences. Education stakeholders in Hong Kong are now more confident in integrating Cantonese opera and ICH elements in formal and informal education. The Cantonese opera artists and ICH inheritors are also more willing to support similar education projects since they are now more popular and which makes them more familiar about the effect and importance of inheriting their cultural treasure to the next generation.

The influence even spread out to the tertiary education level, which more universities are willing to open courses and experiential learning programmes related to ICH for their students. The Hong Kong Academy for Performing Arts will be launching the first Bachelor of Fine Arts (Honours) Degree in Chinese Opera (Cantonese Opera Performance)/ (Cantonese Opera Music) in Hong Kong. This significant step forward shows the rapid development on preserving and inheriting the ICH in professional aspect.

The project outcomes also lead to a backwash effect to the society and government through advisory boards of related issues, making the government and the society more aware of the importance of and the effectiveness of preserving and promoting ICH through education. For example, the Leisure and Cultural Services Department (LCSD) launched "Let's Enjoy Cantonese Opera in Bamboo Theatre" to promote Cantonese opera, especially targeting children, through informal education in the cultural space of bamboo shed theatre.

The West Kowloon Cultural District (WKCD), directly financed by the government, aims at boosting cultural and entertainment establishments at Hong Kong, is the largest cultural project in the territory. The WKCD will feature a visual arts museum, theatres, concert halls and other performance venues under the management of the West Kowloon Cultural District Authority (WKCDA).

Cantonese opera is one of the major art forms that the WKCD will emphasise. The first cultural venue of the WKCD will be the Xiqu (Chinese Opera) Centre, which will be in used in 2016. It will be equipped with performing spaces and arts education facilities, aiming to become the home base and the hub for the development and preservation of Chinese operas in the region. Before the hardware of the WKCD are finished, the WKCDA has already started to bring liveliness to the district by organizing various activities in the unconstructed area of the cultural district. One of the most successful events is the West Kowloon Bamboo Theatre in 2012 and 2013.

The WKCDA tried to bring this special cultural space to the site and introduce it to the general public before this cultural practice is about to distinct due to the modernization of villages. The events in the past two years were well received by the public and the WKCDA aims at turning it to be an important annual event in Hong Kong's cultural calendar.

The West Kowloon Bamboo theatre does not only act as a cultural space for the public to enjoy the art of Cantonese opera in its unique cultural atmosphere, it can also be transformed into a learning space for students to have experiential learning activities. The bamboo theatre in the international arts hub of WKCD, also brings the traditional art form onto the international stage and helps preserving this endangered ICH item on international level.

Let us conclude the paper using the following diagram:

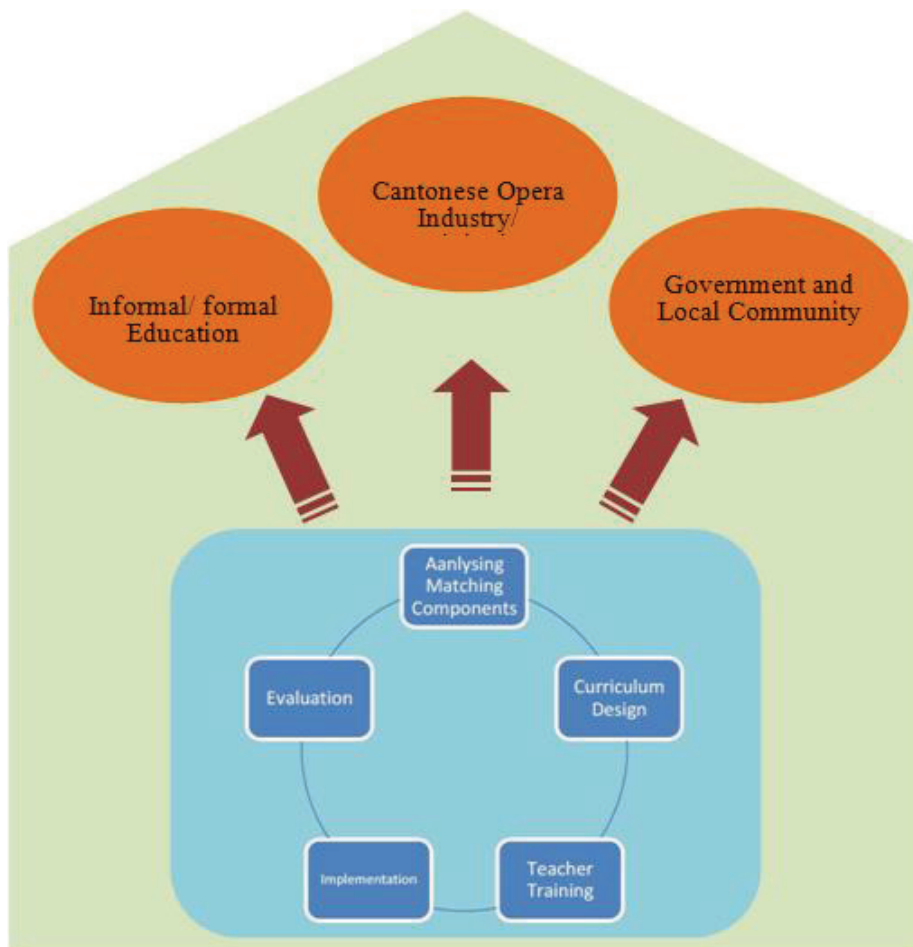


Figure 2. Integrating ICH in Education in Hong Kong.

The successful integration of ICH elements into curriculum in Hong Kong, influences the both formal and informal education sectors, Cantonese opera industry and also the government and local community, which pushes forward the development of promoting and preserving ICH in the territory. It is hope that the promotion of local ICH items is not only to the general public of Hong Kong, but also to the whole world, so that these valuable cultural treasures can be introduced to other countries.

**References**

Curriculum Development Council (Hong Kong, China) (2009) *Senior secondary curriculum guide: the future is now: from vision to realization* (secondary 4-6). Hong Kong.: Curriculum Development Council.

Curriculum Development Council (Hong Kong, China) (2002) *Basic Education Curriculum Guide: Building on Strengths* (Primary 1 – Secondary 3). Hong Kong: Curriculum Development Council.

Curriculum Development Council (Hong Kong, China) (2001) *The way forward in curriculum development: consultation document summary*. Hong Kong: Curriculum Development Council.

General Office of the State Council of the People's Republic of China (2005) *Requirements of Inscription on the National List of Intangible Cultural Heritage* (國家級非物質文化遺產代表作申報評定暫行辦法). China: General Office of the State Council. Available at [http://www.ihchina.cn/inc/detail.jsp?info\\_id=88](http://www.ihchina.cn/inc/detail.jsp?info_id=88).

Kwan, T. & Ng, F. P. (2002) Repetition and Variation, in F. Marton & P. Morris (eds.) *What Matters: Discovering Critical Condition of Classroom Learning*. pp.39-58. Goteborg, Sweden: Acta University, Gorthoburgensis.

- Ng, F. P. (2013) Safeguarding the Intangible Cultural Heritage of Cheung Chau: Research and Assessment of the School-based Approach. *The International Journal of Learner Diversity and Identities* (1). Common Ground Publisher (Accepted).
- Ng, F. P., Lam, J. W. I., Chan, E. S. Y., & Lo, A. M. F. (2012) *Bamboo-shed Cantonese Opera & School Education: from Culture Space to Learning Space* (戲棚粵劇與學校教育—從文化空間到學習空間). Centre for Advancement of Chinese Language Education and Research. Hong Kong: The University of Hong Kong (In Chinese).
- Ng, F. P. & Wai-Sze Y. (2011) The Practice and Assessment of Cantonese Opera in Interdisciplinary Chinese Language Courses in Hong Kong. *The International Journal of Learning*, 17: pp. 277-295.
- Ng, Dorothy F. P. & Lam J. W. I. (2009) Teaching Cantonese Opera Script: Story Schema Approach. In N. H. Salas & D. D. Peyton (eds.) *Reading: Assessment, Comprehension and Teaching*. New York: Nova Science Publishers.
- Ng F. P., Chung A. L. S. & Lam J. W. I. (2009) A Curriculum Development and Strategies of Integrating Cantonese Opera in Chinese Language Education in Hong Kong. *The International Journal of Learning*, 15, pp. 59-66.
- Ng, F. P., Lam, J. W. I. & Chung, A. L. S. (2009) *Legend of the Purple Hairpin Classroom* (紫釵記教室). Centre for Advancement of Chinese Language Education and Research. Hong Kong: The University of Hong Kong (In Chinese).
- Ng, F. P., Chung, A. L. S. & Lam, J. W. I. (2008) *Princess Chang Ping Classroom* (帝女花教室). Centre for Advancement of Chinese Language Education and Research. Hong Kong: The University of Hong Kong (In Chinese).
- Ng, F. P., Tsui, A. B. M. & Marton, F. (2001) Two faces of the Reed Relay- Exploring the effects of the medium of instruction. In J. Biggs & D. Watkins (eds.) *Teaching the Chinese Learner: Psychological and pedagogical perspectives*, pp.135-160. Comparative Education Research Centre. Hong Kong: The University of Hong Kong.
- Tsui, A. B. M., Marton, F., Mok, I. A. C. & Ng, F. P. (2004) Question and the Space of Learning. In F. Marton & A. B. M. Tsui (eds.) *Classroom Discourse and the Space of Learning*, pp.113-138. New Jersey: Lawrence Erlbaum Associates, Publishers.
- United Nations Educational, Scientific and Cultural Organization (2003) *Convention for the Safeguarding of the Intangible Cultural Heritage*. Paris.
- United Nations Educational, Scientific and Cultural Organization (2010) *Seoul Agenda: Goals for the Development of Arts Education*. Seoul.
- West Kowloon Cultural District (n.d.) *Xiqu Centre* (Leaflet). Hong Kong: West Kowloon Cultural District Authority.
- (2009) *Governments developing Cantonese opera* (Press Release) [October 30, 2009]. Available at [http://www.lcsd.gov.hk/en/ppr\\_release\\_det2.php?id=1862](http://www.lcsd.gov.hk/en/ppr_release_det2.php?id=1862).
- (2011) *Four traditional activities from Hong Kong successfully inscribed onto the national list of intangible cultural heritage* (Press Release) [June 3, 2011]. Available at <http://www.info.gov.hk/gia/general/201106/03/P201106030233.htm>.
- (2012) *West Kowloon Bamboo Theatre Kicks-off Today* (Press Release) [January 20, 2012]. Available at [http://www.wkcda.hk/en/newsroom/press\\_releases/index\\_id\\_101.html](http://www.wkcda.hk/en/newsroom/press_releases/index_id_101.html).
- [online] *Introduction: Intangible Cultural Heritage*. Hong Kong Heritage Museum. Available at <http://www.heritagemuseum.gov.hk/eng/cultural/cultural.aspx> [Accessed 6 September 2012].
- [online] *Introduction: Other Learning Experiences. Curriculum Development Council*. Education Bureau, Hong Kong. Available at [http://cd1.edb.hkedcity.net/cd/lw/ole/01\\_intro\\_01.asp](http://cd1.edb.hkedcity.net/cd/lw/ole/01_intro_01.asp).
- [online] *West Kowloon Bamboo Theatre: Viva la Cantonese opera*. CNN Travel. Available at <http://travel.cnn.com/hong-kong/play/cantonese-opera-west-kowloon-211277> [Accessed 20 January 2012].



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## Evaluating built environments through a socio-cultural approach. The case of the narrow gauge railway stations, VästraGötaland (Sweden)

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This paper presents an approach for determining factors relating to the knowledge and decision making of a given local built environment in order to understand its evolution. Outlining concepts related with sustainable built development, the research considers evident the pressing problems on specific Historic Built Environments (HBE). Many are the factors that have an influence on the dynamics of HBE but being interested specifically in the study of HBE by appropriation a review on settled paradigms may let us bridging socio-cultural values in a common sphere between people, buildings and landscape. The study attempts to create a common understanding on the occupancy, maintenance, optimization and appearance of built environments providing a selection of indicators to evaluate their status. The research comes to clarify that building use, maintenance or abandon, is not only affected by ecological and economic dimensions, also by social and cultural. The research concludes that it is possible to identify socio-cultural indicators in order to obtain a more coherent dynamics on sustainability and development.

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**Keywords:** Historic Built Environment, Sustainable development, Social Cultural Indicators, Railway Stations, Sweden.

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### Introduction

The present study is focused on the analysis of dozens of buildings that remain along the historical and now extinct narrow gauge railways landscape of the VästraGötaland region, southern Sweden. Data collection was carried out with extensive fieldwork, in the environments in which buildings are located, by taking notes, photos, and measurements. All the information was collected and processed using digital cartography and other media sources. Data collection shows a fieldwork survey based on approximately eighty-five detached buildings built for a specific purpose in the late 19<sup>th</sup> century.

The inventory reflected the contemporary situation of the HBE and the direct and indirect consequences stemming from long-term socio-cultural connections to these landscapes, which are affected by their detachment from symbols and signals that originally linked these buildings to their purpose. To evaluate the current situation of the three chosen railways landscape, it was necessary to carry out a specific individual analysis of each building in order to understand direct and indirect reasons linked with use, dereliction and maintenance.

Throughout the 19<sup>th</sup> century intense efforts were made to improve communication conditions in Sweden (Bodstedt, 1945). When the railroads emerged in 1850 as a feasible alternative to canals and other waterway projects, there was extensive debate about the pros and cons of each type of communication. Most parishes were in favor of railroads and wished to see some built crossing their own land, but designs responded mainly to the geographical location of the specific parish (Johansson & Mårtensson, 1979). Most of these railway lines were built around 1850, coinciding with the greatest expansion of this means of transport (Linde, 1989).

The birth of the railway also helped farmers to develop their settlements, providing schools and other services which had been non-existent until then. This benefited agriculture as the population was no longer divided and could engage in farm management. Besides, the development of industry in the province was specifically supported by private companies looking for international commerce (Forsæus, 1985).

Many buildings in the countryside, such as the stations for the narrow gauge railways, were influenced by publications of architect Adolf Edelsvård and the farm builder Charles Emil Löfvenskjöld (Linn, 1986). Architects wanted to adapt buildings to the surrounding natural environments (Wetterberg, 2012). Influenced by contemporary English literature they were attracted by the emerging picturesque villa style (Linde, 1986).

**Built environments valuation**

Current research analyzes specific built environments as fragments of regional infrastructures which technological and economic development caused to become detached from their original purpose and specific functions. Most of these buildings have undergone important transformations, while others have been abandoned. The inflexion point is fully dependent on the understanding of how socio-cultural implications and decision making can affect the equilibrium between the historical legacy, its materiality, its representation and the necessary changes forced by time and development (Fig. 1).

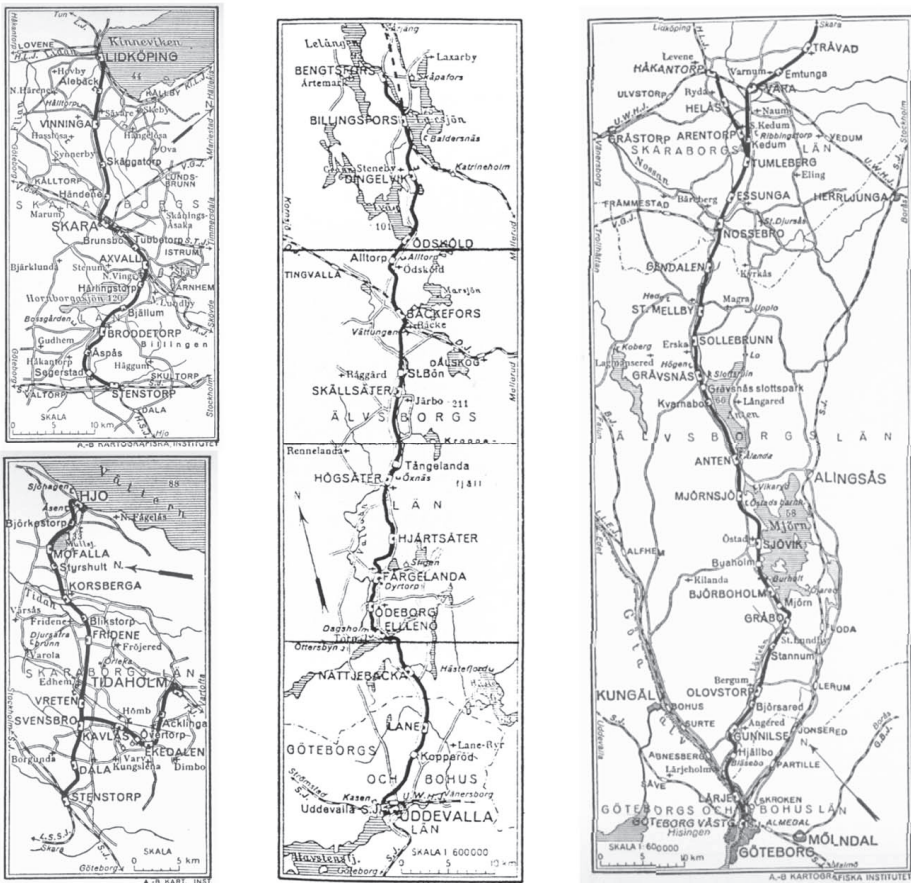


Figure 1. Narrow gauge railway lines (891mm) from Västragötaland. The first studied connected Lidköping-Stenstorp (LSSJ) and Hjo-Stenstorp (HSJ) on November 13<sup>th</sup>, 1873. On July 31<sup>st</sup>, 1885 the second railway, connected Udevalla with Lelångens (ULB), while the last one, the Västragötaland-Göteborg railway, opened to the public on January 1<sup>st</sup> 1900.

The relationship between cultural values and built environments' sustainability has been presented through diversity and the property needs of future generations to be understood as part of the process. Lately, these terms have been adopted as relating to tangible and intangible values; direct and indirect consequences of the history of the place that play a part in the current situation. Throughout their history, all buildings have improved their conditions in accordance with requirements of comfort (Andersson&Sjomar, 1984). But adaptations linked with access to materials and technology, were slowly changing the way these buildings were built (Figs. 2 and 3).

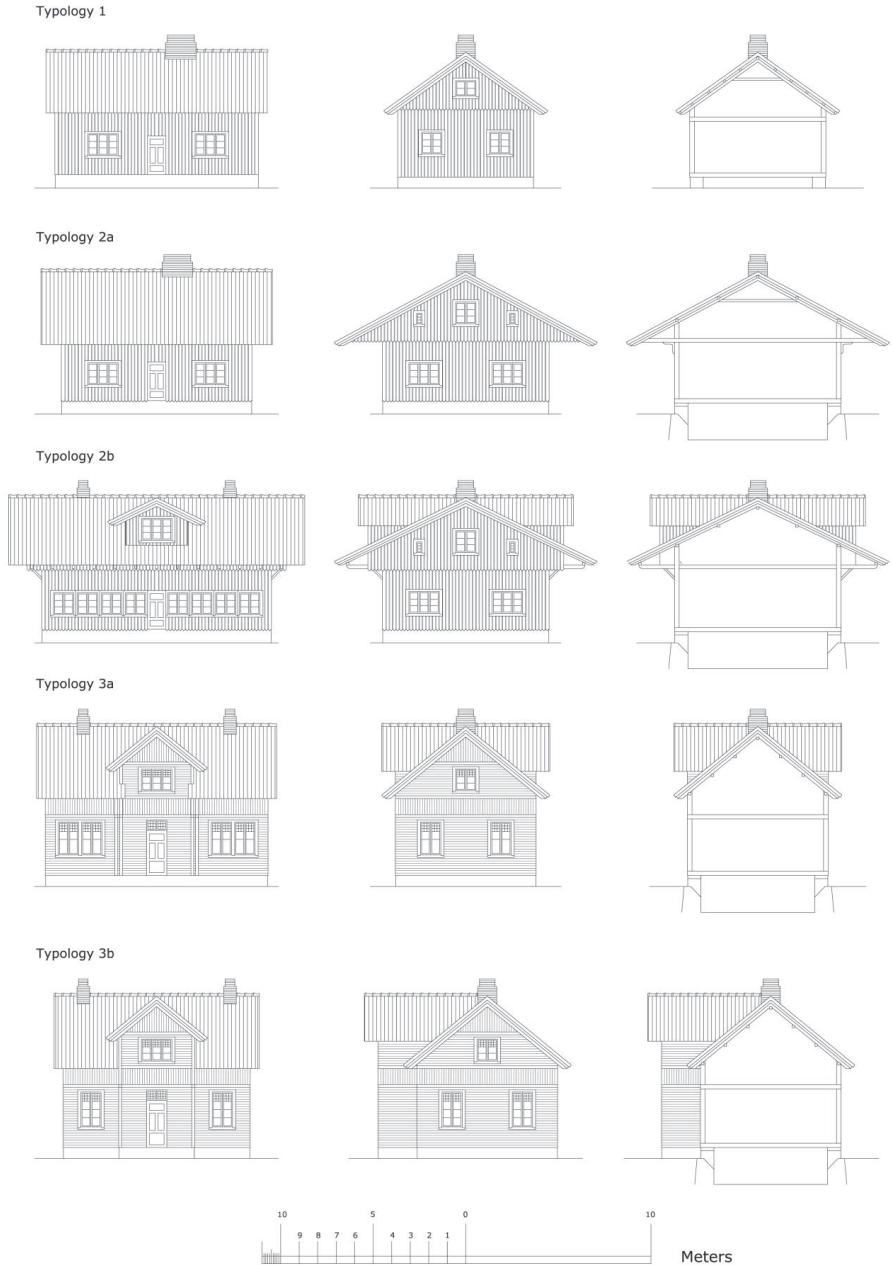
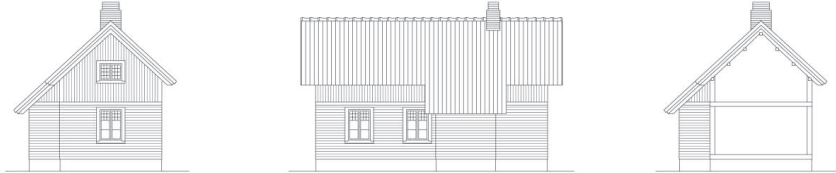


Figure 2. The different models of railway stations surveyed on the three railways studied.

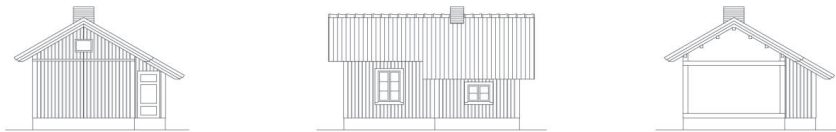
Typology 4a



Typology 4b



Typology 5a



Typology 5b

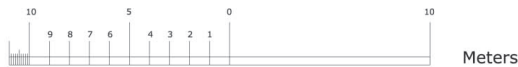
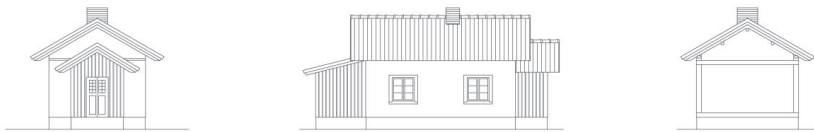


Figure 3. The different guard cabins found in an average separation of 3kilometres ofrailway, detached from urban settings to control rural junctions and the maintenance of the associated railway stretch.

The socio-cultural evolution of each country, the existence of centers of knowledge, political decisions, laws, and other forms of decision making are indirectly related to long-term processes that affect the way they understand the physical deterioration of their buildings, their maintenance and their repairs. In this respect, each environment is indirectly affected by the transformations of its buildings (Jönsson, 1992). Thus, preservation should be synonymous of not forgetting, something which is mostly related with aesthetic perceptions –culture and knowledge- and not only transmitted by an amount of dislocated buildings. Today, second generations live and reenact the landscape which was the stage for the sensations and desires of their ancestors’ lifestyle. Although this lifestyle has now gone, some descendants are still able to recall places which were orally transmitted.

Lately, experts who have been particularly close to terms linked with iconographic conservation have stated that some locations with outstanding universal values (Pereira & van Oers, 2012) have suffered as a result of the growing tension between globalization and local development. In a substantial number of places this has provoked incompatible new development in historical settings, unsustainable tourism, and overall environmental degradation, all of which cause new challenges to urban heritage

conservation and its management (van Oers & Pereira, 2012). In addition to this, recent recommendations have promoted new ways to include various different aspects of conservation in an integrated framework in the hope of reaching consensus, assessing and integrating vulnerabilities, prioritizing actions or establishing suitable partnerships (Bandarin & van Oers, R. 2012).

Understanding the management of built places as a complex entity far removed from previous conventions, based on “external” challenges regarding objects, people and places that are culturally, intellectually, and economically less developed, can provide us with an insightful understanding of occupancy, maintenance, transformations, transigrations and popular art of specific environments (García-Esparza, 2012) (Fig. 4).

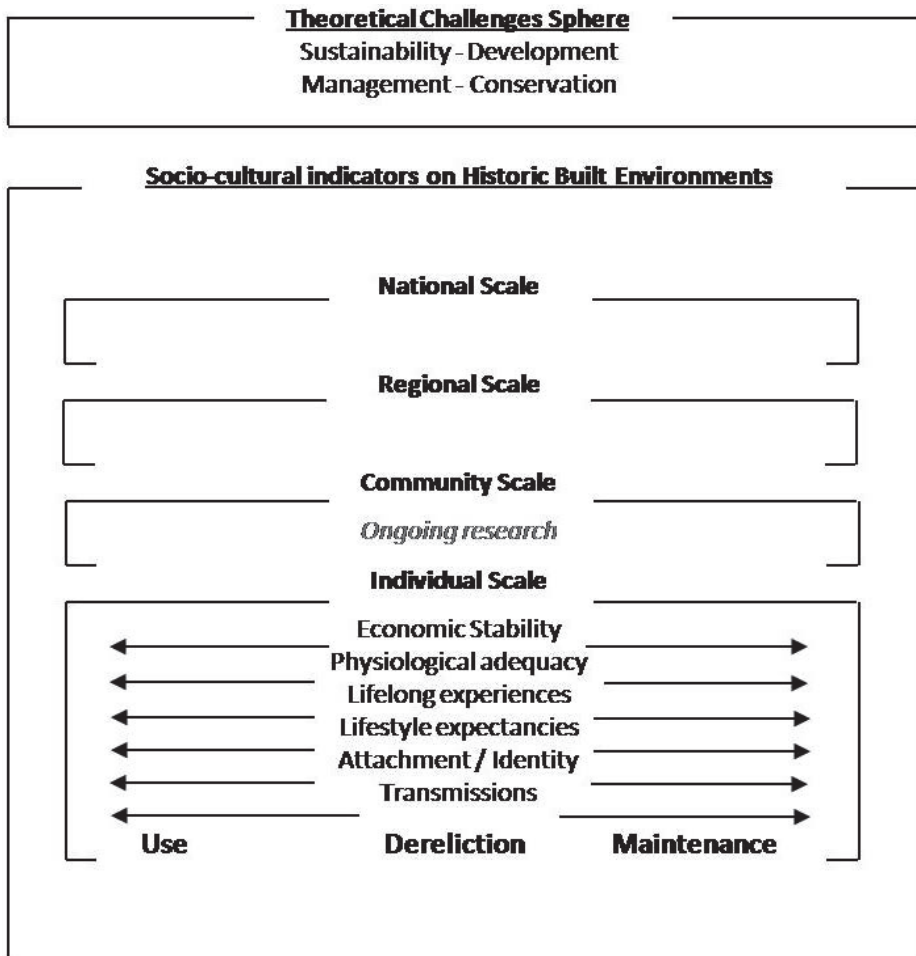


Figure 4. Scheme of the Socio-cultural indicators on historic built environments.

**Methodology**

The aim of this paper is to present new and specific approaches for demonstrating empirical evidences, highlighted by personal, social and cultural meanings, on the dynamics of specific HBE. Following terms of social and cultural capital (Colantonio, 2007), while social relates the interaction of an individual in a society and cultural is related to the interaction of groups of people with objects and structures (Mikusinski et al., 2013), the study will analyze the interaction between the individual and the building.

System performance indicators are exposed to provide information about the equilibrium between individuals and buildings (Innes & Booher, 2000). The measurement of HBE factors is an empirical

assessment to assure that such indicators can be influential and can contribute to its sustainability. Our framework is firmly grounded in the theoretical approach (Innes, 1990) by analysing social and cultural affections on given HBE. Several studies have analysed the importance of indicators of social values for economic development (Knack & Keefer, 1997), environment (CSTB, 2001), human health (Grahn & Stigsdotter, 2010), urban and regional planning (Wong, 2006), urban historical areas (Elsorady, 2012), rural development (Van der Ploeg et al., 2000), communities (Phillips, 2005) and landscape (Bouwen & Taillieu, 2004).

The data compilation started by elaborating a database where buildings' features and owners' comments were related with pre-established indicators. The information extracted from each building visited along the cataloguing work was stored. Once all buildings were analyzed the evaluation process began. According to the importance of the features and the owners' concerns expressed on each building, data were associated with the correspondent indicator depending on a three levels scale: Low, Middle and High. The qualitative exposed methodology is descriptively analyzed when explaining the results and discussion.

The set of chosen buildings to undertaking the indicators evaluation belongs to an inventory developed in Sweden in 2012. Buildings are associated to three narrow gauge railways in VästraGötaland originals from the end of the 19<sup>th</sup> Century. The reason of analysing the materiality and the landscape surrounding specific buildings is founded in understanding HBE long term process affected by individuals' decision making. Nevertheless, to attempt a specific analysis of the obsolescence process (Mohr & Schmidt, 1997) given by the evident consequences of interactions, it cannot be effective without being evaluated under potential indicators (Fig. 5).

	<b>BUILDING USE</b>	<b>References:</b> <b>(Pereira, &amp; van Oers, 2012), (García-Esparza, 2013).</b>
8.1	<b>Economic Stability</b>	<b>The individual is intended to remaining in the building</b>
8.2	<b>Physiological adequacy</b>	<b>The building fits with a desired physiological adequacy</b>
	<b>BUILDING DERELICTION</b>	<b>References: (Martínez-Fernandez et al., 2012), (Isaksen &amp; Karlsen, 2013).</b>
9.1	<b>Lifelong experiences</b>	<b>Forms of inadequacy, pathologies or other misfits</b>
9.2	<b>Lifestyle expectancies</b>	<b>Abandon because of necessity or life option</b>
	<b>BUILDING MAINTENANCE</b>	<b>References:</b> <b>(Doratli, 2005), (Gallent et al., 2011).</b>
10.1	<b>Attachment/ Identity</b>	<b>Capacity of maintaining the character of the building</b>
10.2	<b>Transmissions</b>	<b>Culture: individual's experiences and transmissions</b>

Figure 5. Building use.

The research project has considered establishing three levels of indicators affecting the process of obsolescence in buildings: the use, the dereliction and the maintenance. The first indicator, the building use, is normally affected by owners' stability, if the individual or family is intended to remaining in the place in the future and in same terms if the building fits with their desired physiological adequacy, changes and adaptations. The second factor, the abandon, is normally forced by other forms of inadequacy, pathologies, insalubrities or third affections coming from what the owner understand as building's misfit on the contemporary immediacies.

On this factor, it also must be considered in which extent each individual considers its abandon because the necessity of mobility or because other options of life. The third factor, the maintenance, is related with the adequacy of the building. Independently of the choice of the owner, how the capacity of maintaining the character of the place is reflected in the building. Thus, this factor is directly affected by individual's knowledge and its capacity to respectfully adequate the shape of the building to the necessary changes. This factor is directly affected by the transmission of the culture, individual's experiences, centres of knowledge and even legislation if existent.

## Results and discussion

The inventory, assessed by extensive field work, was aimed to analyse the situation of obsolescence of 83 buildings never catalogued before. The research found that the 44,58% of them no longer existed. For the rest of the buildings, 55,42%, indicators show that the 14,46% of the buildings are seriously threaten because of the abandon, or the intention of, a temporary use but with harsh deteriorations or a lack of

maintenance and repair. The stay of decay of the building does not ensure its survival for future inhabitants or the level of transformation has completely deleted any sign or remembrance of the past. The 24,09% of the buildings manifest similar dimensions and features from the traditional craftsmanship that characterized the specific typology of each building. Thus, they are inhabited and present respectful changes and good conditions to be passed through next generations. The 16,87% are used, adapted and maintained in really good conditions of conservancy. Thus, their conservation level ensures from then on its existence with respectful adaptations because of the socio-cultural awareness, locals' transmissions and nearby centres of knowledge.

From the 14,46% of abandoned buildings the catalogue found, the 10,84%, are severely transformed or rebuilt because of pathologies or insalubrities. This percentage is related with buildings that show high levels of economic stability along generations due to their permanent occupation. The kind of transformations shows low rates of adequacy to contemporary functions. The transformations indicate the existence of severe pathologies along their history, some of them still manifested it, and thus, high levels of insalubrities or inadequacy could be the reason of such transformations. The previously said perhaps is related with high indices of uncomfortable experiences; nonetheless the option of living there remained highly valued by their owners due to its contemporary feasibility.

The other 3,62% have completely disappeared or what remains is a neo interpretation of what the building was. The previous comments can also be applied here. But in these cases there is a manifested historical breakage between the owners and the building. The differences with the previous case are low levels of economic stability of their owners. In some of the analyzed cases their location, far from the nearest villages or directly affected by pressures of new developments, could affect the exposed dynamics. In both cases, a low sense of identity or attachment is manifested. These cases also represent low levels of transmissions, cultural training or knowledge referred to maintaining certain features. Nonetheless some other reasons related with the age of the owners shouldn't be disregarded.

From the 24,09% of the buildings still in use, those that have high indices of use, 10,84%, have demonstrated high levels of physiological adequacy, a sustained or maybe good rates of economic stability, low rates of pathologies and insalubrities and furthermore low expectancies of owners moving elsewhere; it means that contemporary lifestyle is well adapted to the building and the environment. As regards as the level of maintenance they show good or high levels of physical features maintenance, what could be the indicator of high engagement with nearby communities, the identity or attachment to the place or even high levels of local culture knowledge and transmissions.

The other 13,25% are used as a secondary house. The survey relates low levels of economic stability from previous generations but high expectancies from current ones of moving elsewhere; in spite of said a few pathologies are manifested. Low levels of knowledge and transmissions are expressed in terms of small actions of refurbishment by which some parts of the building or important features associated to the original shape were sensitively transformed or lost. Nonetheless, in some extent the building and their owners manifest high levels of attachment or identity with the place.

From the 16,87% of buildings classified in this section, a 9,64% are probably related with high historical stability in economic terms. Buildings that never changed their usage or highly fitted with new comments in the different epochs. Then, these are buildings which manifest low rates of pathologies or no important misfits but a doubtful background on their owners' stability. Today, the ownership of the buildings is mostly public; maybe it has been along their history and because of that, their higher level of material conservation and original expression could be explained. But, in spite of said, the other 7,23% were leased at some stage of their history. Today, they highly express their historical background although they manifest high levels of contemporary inadequacy because of their location, access or other infrastructures that affect them; thus, they are highly exposed to arising critical pathologies. Nonetheless, in both cases, the high levels of maintenance are ensuring their survival just because of the high levels of sensitivity and knowledge from nearby communities (Mannarini et al., 2006).

## Conclusions

As regards as the relation between buildings and individuals analyzed in the case study, the research has found a direct relation between Lifelong experiences, the Economical Stability and Lifestyle Expectancies as directly connected with Historical Abandon and Significant Transformations. Some other buildings have shown clear relations between Attachment, Transmissions and Lifestyle Expectancy determining in which extent contemporary buildings that today maintain a specific use are highly or lower maintained in terms of physical conservancy. Finally, the study has found a clear correspondence between indicators of Economical Stability, Physiological Adequacy and Lifelong Experiences to explaining differences between use and abandon in buildings with high standards of maintenance.

The research demonstrates that it is possible to identify indicators and match them with verifier variables to support inclusion of social and cultural values on HBE dynamics. There is, however, more work to do because a clear disconnection is manifested in the assessed realities. Traditional settings, places and landscapes are constantly changing. Although it is widely accepted, the implications the rhythm and forms of change bring with them are not. The research has demonstrated how individual's perceptions and physical features may affect the integrity of a given environment. Empirical research that explicitly

investigates these links in specific case studies is still uncommon. Thus, the qualitative data processing employed to evaluate the scale of indicators is intended to develop ties with a future quantitative research.

Further research on HBE indicators should analyze in which extent relationships between communities and historic environments can affect their sustainability. There is an ongoing study in which the author of this paper has focused his interest on these interactions at Local or Community level by analyzing and comparing different realities. According to pre-established indicators measured levels of attitude-behaviour could be assessed by relating places, spaces and objects with societal meanings.

## References

- Andersson, G. & Sjomar, P. (1984) Threshing barn in Eggen - a medieval sources. *Bebyggelsehistorik Tidskrift* 7: pp.25-45.
- Bandarin, F., & van Oers, R. (2012) *The Historic Urban Landscape – Managing Heritage in an Urban Century*. Oxford: Wiley-Blackwell.
- Bodstedt, I. (1945) *Historik över Sveriges småbanor*. Stockholm: Esselte Aktiebolag.
- Bouwen, R. & Taillieu, T. (2004) Multi-party collaboration as social learning for interdependence: Developing relational knowing for sustainable natural resource management. *Journal of Community & Applied Social Psychology*, 14 (3): pp.137–153.
- Centre Scientifique et Technique du Bâtiment, CSTB (2001) Démolir et/ou réhabiliter pour le développement durable des quartiers. *Elaboration d'une grille d'analyse comme outil d'aide à la décision*, n- 3320. Paris: Cahiers du CSTB.
- Colantonio, A. (2007) *Social sustainability: An exploratory analysis of its definition, assessment methods metrics and tools*. Oxford: EIBURS Working Paper Series.
- Dorati, N. (2005) Revitalizing historic urban quarters: A model for determining the most relevant strategic approach. *European Planning Studies*, 13(5): pp.749–772.
- Elsorady, D. A. (2012) Heritage conservation in Rosetta (Rashid): A tool for community improvement and development. *Cities*, 29 (6): pp.379-388.
- Forsæus, S. (1985) *Lelånganbanan*. Borås: Svenska Järnvägsklubben.
- Gallent, N., Hamiduddin, I. & Madeddu, M. (2011) *Selecting and allocating sites for housing development: politics, expedient sites, regional planning and localism, (FIBRE – Findings in Built and Rural Environments)*. London: RICS Foundation.
- García-Esparza, J. A. (2012) Epistemological paradigms in the perception and assessment of vernacular architecture. *International Journal of Heritage Studies*. [doi: 10.1080/13527258.2012.666755].
- García-Esparza, J. A. (2013) Revitalization of architectural and ethnological heritage: the recovery of vernacular building techniques in a nineteenth-century winery. *International Journal of Architectural Heritage*, [doi:10.1080/15583058.2012.675402].
- Grahn, P. & Stigsdotter, U. K. (2010) The relation between perceived sensory dimensions of urban green space and stress restoration. *Landscape and Urban Planning*, 94 (3-4): pp.264–275.
- Innes, J. E. (1990) *Knowledge and Public Policy: The Search for Meaningful Indicators*. New Brunswick, NJ: Transaction Publishers.
- Innes, J. E., & Booher, D. E. (2000) Indicators for Sustainable Communities: A Strategy Building on Complexity Theory and Distributed Intelligence. *Planning Theory & Practice*, 1 (2): pp.173-186.
- Isaksen, A. & Karlsen, J. (2013) Can small regions construct regional advantages? The case of four Norwegian regions. *European Urban and Regional Studies* 20 (2): pp.243-257.
- Jönsson, L-E. (1992) Småhusets byggnadsteknik 1930-1975. En aspekt på den sociala bostadspolitikens fram växt. *Bebyggelsehistorik Tidskrift* 24: pp.77-92.
- Johansson, G. & Mårtensson, T. (1979) *Kanaler och smalspår i småländska bygder*. Växjö: Historiska föreningen i Kronobergs län.
- Knack, S. & Keefer, P. (1997) Does social capital have an economic payoff? A cross-country investigation. *Quarterly Journal of Economics*, 112 (4): pp.1251–1288.
- Linde, G. (1986) Från Malmö till Boden på 40 år. A W Edelsvärds stationshus 1855-95. *Bebyggelsehistorik Tidskrift* 12: pp.108-130.
- Linde G. (1989) *Stationshus 1855-1895. A.W. Edelsvärd som järnvägsarkitekt*. Stockholm: Svenska Järnvägsklubben.
- Linn, B. (1986) Svensk järnvägsarkitektur. *Bebyggelsehistorik Tidskrift* 12: pp.89-107.
- Mannarini, T., Tartaglia, S., Fedi, A. & Greganti, K. (2006) Image of neighbourhood, self-image and sense of community. *Journal of Environmental Psychology*, 26 (3): pp.202–214.
- Martínez-Fernández, C., Audirac, I., Fol, S. & Cunningham-Sabot, E. (2012) Shrinking Cities: Urban Challenges of Globalization. *International Journal of Urban and Regional Research*, 36 (2): pp.213–225.

- Mikusinski, G., Blicharska, M., Antonson, H., Henningsson, M., Göransson, G., Angelstam, P., et al. (2013) Integrating ecological, social and cultural dimensions in the implementation of the Landscape Convention. *Landscape Research*, 38 (3): pp.384-393.
- Mohr, E. & Schmidt, J. (1997) Aspects of Economic Valuation of Cultural Heritage. In N.S. Baer, & R. Snetlage. (eds.) *Saving our Architectural Heritage*. Berlin: Dahlem Workshop Report.
- Pereira, A. & van Oers, R. (2012) Guidance on heritage impact assessments: Learning from its application on World Heritage site management. *Journal of Cultural Heritage Management and Sustainable Development 2* (2): pp.104–114.
- Phillips, R. (2005) *Community indicators measuring systems*. Aldershot: Ashgate.
- van der Ploeg, J. D., Renting, H., Brunori, G., Knickel, K., Mannion, J., Marsden, T., et al. (2000) Rural development: From practices and policies towards theory. *Sociologia Ruralis*, 40 (4): pp.391–408.
- van Oers, R. & Pereira, A. (2012) Historic cities as model of sustainability. *Journal of Cultural Heritage Management and Sustainable Development 2* (1): pp.4-14.
- Wetterberg, O. (2012) Conservation and the professions: the Swedish context 1880-1920. In M. Hall (ed.) *Towards World Heritage, International origins of the preservation movement 1870-1930*, pp.201-220. Burlington: Ashgate.
- Wong, C. (2006) *Indicators for urban and regional planning: the interplay of policy and methods*. London and New York: Routledge.

### **Acknowledgements**

I would like to thank professors Ulrich Lange and Ola Wetterberg from the Conservation Department at Gothenburg University because of their invitation and support during my research in Sweden.





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## Cultural Routes/Serial Entities: a method for assessing and prioritizing the significance of components along Historic Railways

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Recent times have seen the concept of heritage expanding to include a range of buildings and objects, among them the relatively young and seemingly ordinary buildings relating to Railway heritage. This paper will present the case of the Israel Railways Corporation (ISR), which in recent years had repeatedly faced outbursts of public protest over demolitions of historic railway buildings, resulting in delays in the planning and execution of projects, as well as a compromised public image. In response, in 2012 the ISR initiated an inventory of the railway system, from the late 19<sup>th</sup> century Jaffa-Jerusalem Line to the shore line of the mid 1950's, identifying, characterizing and prioritizing their historic stock, assessing the impact of future development, and developing a comprehensive heritage management plan. In the rapidly transforming environment of the 21<sup>st</sup> century, ever-increasing public demands to protect seemingly unremarkable built objects and landscapes whose values are not immediately evident cannot easily be justified. Moreover, due to the scale and distance between the various fragments, railway heritage is rarely treated as the linear and serial entity which it is, a misconception which leads to the formation of localized legislative protection focused on single sites or buildings. The broader social and cultural contexts are lost; giving rise to doubts about the significance of these fragments, the legitimacy of the costs invested in their maintenance, and the limitations their conservation imposes on development. The paper argues the case for a holistic values-led conservation policy which protects the attributes which best manifest the values of the historic railway, while allowing for the calculated removal of less valuable components.

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### Introduction

The conservation of historic railways is a new challenge to the field of Heritage Conservation around the world. Within the expanding debate concerning industrial heritage and cultural routes in recent years, historic railways have been attracting substantial attention expressed through a growing body of academic research<sup>1</sup>, as well as in an increasing demand for local and international railway-focused heritage sites. At present this heritage is widely regarded as a complex socio-technical phenomenon, which fuses technical aspects inseparably with social ones (Coulls, 1999).

In Israel the remains of the historic railway systems are scattered throughout the country and reflect key eras in the region's modern history, from the late 19<sup>th</sup> century Ottoman epoch, through the phase of the British Mandate and up to the relatively new Israeli period. In recent years, the Israel Railways Corporation Ltd (ISR), an independent, government-owned corporation and the sole company in charge of main-line railway transportation in the country, is advancing plans for expanding Israel's railway transportation infrastructure. Thus, existing rail tracks are being doubled and old or abandoned tracks are being revived.

At the same time, awareness to architectural heritage in Israel has heightened. The fourth addition to Building Regulations, setting forth bylaws pertaining to architectural heritage came into effect in 1991, followed by the 5<sup>th</sup> addition in 2008<sup>2</sup>. The efforts of the Society for Preservation of Israel Heritage Sites<sup>3</sup> (established in 1984) to raise public awareness had begun to bear fruit, and groups of individuals

interested in local heritage were now a growing phenomenon throughout the country. In addition, the state of Israel, having joined UNESCO's World Heritage Convention in 1999, had obtained World Heritage Site status for a number of sites in the country. The attention directed at these high profile nominations contributed to the rise in public interest, and helped establish the more formal commitment of the authorities towards heritage sites and their conservation.

In the rapidly transforming environment of the 21<sup>st</sup> century, ever-increasing public demands to protect seemingly unremarkable built objects whose values are not immediately evident cannot easily be justified and accepted by decision makers. Nevertheless, by the mid 2000's the ISR had already encountered effective public protests against the demolition of historic railway stock. It had also already witnessed a competing authority (Trans-Israel Highways Management Corporation Ltd) garner public appreciation (as well as the support of planning authorities) for the self-imposed conservation of the early 20<sup>th</sup> century Te'enim River Bridge. By the late 2000's all public authorities were required to comply with new impositions by Local and regional planning authorities, these including the production of historic property surveys, which have become standard pre-requisites for discussing large scale development plans.



Figure 1. Te'enimRiver Bridge. Restored by Trans-Israel highways management corporation Ltd as part of highway 6 development project. Executed 1999-2008.

Amongst the historic railway remains that the ISR was compelled to survey as part of its development plans, this paper will focus on two stations: Hadera-East and Zichron-Yaacov. Both stations were set up as part of the Haifa-Kantara historic railway, established between the years 1916-1918 as part of the British army effort against the Ottoman Empire during WW1. After the war was over, it became the main line of the British Palestine Railways (PR). The Haifa-Kantara line was used for passenger as well as freight transportation, for both military and civilian purposes (Cotterell, 1986). The British Mandate in Palestine was terminated on May, 1948, followed by the Israeli-Arab war, whose aftermath was the partition of the former Mandatory Palestine between the newborn Israel with Jewish majority, the West Bank annexed by the Jordanian Kingdom, and the Gaza Strip under military occupation of Egypt. After 1948, the fragmented Haifa-Kantara railway ceased to exist as a whole, and today only parts of it are still functioning through the ISR.



Figure 2. A map displaying Zichron-Yaacov and Hadera-East stations within the historic railways system setting.

Although originally both stations were part of the same historic railway line, at present their circumstances are completely different. In today's infrastructure they function within two separate lines- Hadera-East (HE) station is part of the defunct Haifa- Kantara Eastern line, while Zichron-Yaacov station (ZY) is a redundant station along the main artery of contemporary railway activity, the Haifa- Tel Aviv Shore Line. Nevertheless, both exemplify the most common circumstances which endanger railway heritage: in the course of being modernized for future use, the upgraded railroad infrastructure enters a competition with the historic buildings along its route. The survival of one becomes an obstacle to the other's development. Both also exemplify the prevailing current practice of the ISR (and other large authorities), which deals with its heritage ad-hoc, on a case-specific basis, rather than as part of a comprehensive policy.



Figure 3. On the left: Hadera East station. 1946. Photo courtesy of ISR archive. On the right: Zichron-Yaacov station, 2001. Photo courtesy of Mr. Chen Melling.

## Methodology

Through the story of the ZY station and its counterpart, the Hadera East (HE) station, this paper will highlight the importance of approaching the conservation of Railway Heritage by addressing it as one linear and serial entity, and of seeing and analyzing all its fragments through the broad social and cultural contexts of the railway. The first part of this paper will describe the cases of the ZY and HE train stations, considering the motives for addressing their conservation within the circumstances of existing development plans. In its second part, the paper will propose a method for a whole-system analysis, through which local conservation policies and approaches can be defined and implemented. This method is currently employed by the authors and the ISR in the preparation of the Israel Railways Conservation Policy.

## Data presentation

In 1997 the 16:54 Tel Aviv–Haifa train stopped for the last time at Zichron-Yaacov. Due to long term population shifts and changes in travel habits, passenger traffic to and from this small-town station had been declining for some years, eventually rendering it too expensive to maintain. The station building, erected in 1946, was now in a state of advanced dilapidation, yet still inhabited by the former Station Master's widow, a woman in her late 70's, who moved out in 2001 (Liberty-Shalev, 2011).

Ten years later, the Israel Railways Corporation (ISR) was in the midst of advanced planning for a general upgrade of the Tel Aviv–Haifa line. The scope of the plans included identifying locations for new station buildings as well as expanding the existing two-track rails to four. One of the locations identified for a new station was the Zichron-Yaacov (ZY) station compound, in the past part of the Haifa-Kantara Line, and today on the Haifa-Tel Aviv Shore Line. The station was now empty and forgotten at the far edge of the parking grounds of a newly erected suburban shopping center.

Although the existing 1946 building at ZY station was too small and otherwise incapable of satisfying the requirements of a new station, it was understood that simply suggesting to replace it with a new building would encounter resistance, and would therefore require justification and a clear statement of its (lack of) significance. In view of all this, in 2011 the ISR approached our firm with the request to document the station building.

The ZY station was the second 20<sup>th</sup> century station which our office had documented, the first having being the Hadera East (HE) station, some 20km further south on the Eastern line<sup>3</sup>. While analyzing our research findings on HE, we discovered that the British Palestine Railways developed their train stations based on a standardized prototypical design, locally modified according to the specific requirements of each station (Liberty-Shalev, 2009). The stations at HE and at ZY were, respectively, a large and a small version of the same standard prototype, which was a well-designed but otherwise unimposing architectural object executed during the mid-1940's at six locations along the Haifa-Kantara Line<sup>4</sup>.

Yet, despite the architectural similarity, the values attached to the two stations were vastly different: HE was an important agricultural distribution center, surrounded by citrus groves and local warehouses (Liberty-Shalev, 2009), while ZY was a small, underused and structurally problematic stop throughout its 75 years of operation (Liberty-Shalev, 2011)<sup>5</sup>. In both cases the ISR's plans aimed to replace the existing infrastructure of two tracks with a four-track system, which would occupy a significantly wider strip of land. Since railroad structures tend to be, for obvious reasons, located close to the tracks, the proposed expansion of the new tracks mandated the demolition of both station buildings, as well as a 1930's citrus shed in the HE compound. Hence, in both cases the significance of each historic building was carefully weighed against their unique values.

The HE station was deemed by the documentation report (Liberty-Shalev, 2009) as highly important and typical of the Palestine Railways era. This assessment was accepted by the ISR and the relevant planning authorities, and consequently implemented into National Ordinance Plan 22. Great effort went into changing the course of the proposed tracks in order to retain the station's historic core intact, while even greater efforts went into salvaging the citrus shed, which is now slated to undergo conservation treatment, then dismantled and re-erected at a new location within the historic compound.



75 metres x 15 metres Citrus Fruit Shed : Hadera.

Figure 4. The Citrus Shed at Hadera station, 1935. Courtesy of ISR Archive.

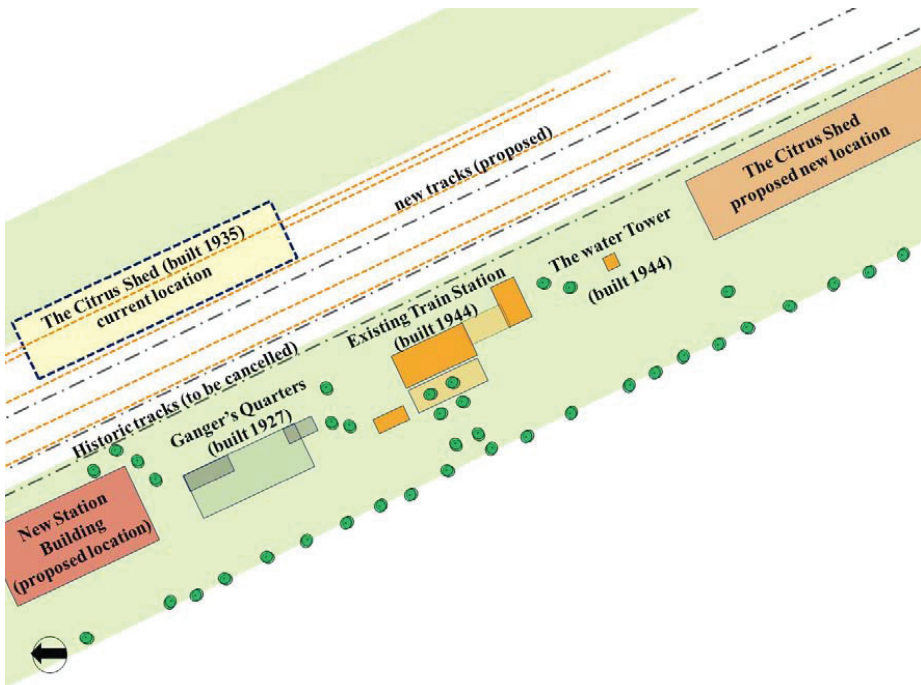


Figure 5. Schematic plan of the historic core at Hadera East station, showing proposed development.

In the case of ZY station, the course of events was different. Documentation of the site revealed that this station had never played a central role in the operation of the railroad or the life of the local community<sup>6</sup>. The only justification towards slating it for conservation was it being 'a typical example for the use of standardization in railway buildings', but even as a variation on a standard prototype, it was one of the two smallest buildings of its series. Moreover, its foundations were not structurally sound, and when compared to the other surviving station buildings, was in the worst state of repair (Liberty-Shalev, 2011). On the grounds of this relative-value analysis, the documentation file's conclusion (much to the ISR's relief) was that the building need not be conserved. However, when presenting these articulated conclusions to the District Planning Authority<sup>7</sup>, a legitimate question arose:

When using a locally-prompted comparative analysis to justify a demolition, can the ISR assure the safeguarding of the other, more significant site, to which the demolished site was compared? Are they able to display a general policy, which identifies and suggests measures for the conservation of some sites, when proposing to demolish others?

The discussions surrounding the ZY station revealed that the ISR had no larger 'railway heritage policy' in place to back their proposal for, and the demolition of the ZY station building was refused. This outcome was key to the ISR initiative in 2012 to undertake an inventory of the whole railway system, from the late 19<sup>th</sup> century Jaffa-Jerusalem and Hedjaz Lines to the shore line of the 1960's, identifying, characterizing and prioritizing their historic stock, and assessing the impact of future development.

## Analysis

The method for this project was developed first in the framework of an academic essay (Har-Noy, 2012) and then expanded as the 'Israel Railways Conservation Policy' project, which is currently underway. This paper will describe the method developed to identify and protect select attributes which best manifest the values of the historic railway in question, while allowing for the calculated removal of less valuable components.

Recent years have seen the concept of heritage expanding to include a range of hitherto 'insignificant' buildings and objects (Chaoy, 2001), among them the relatively ordinary, functional, and young buildings relating to industrial heritage, railways included. Each railway, however, is a large-scale spatial ensemble, which encompasses hundreds, sometimes thousand, of diverse objects, reflecting a range of topics and significances. It is a distinctive historical and geographical phenomenon that can be related to two existing arenas within contemporary heritage debate: conservation of Industrial Heritage, and Cultural Routes (Har-Noy, 2012). Industrial Heritage focuses on buildings, structures and tools constructed for industrial activities, bearing historical, technological, social, architectural or scientific cultural significance (TICCIH, 2003). Obviously, railways are an inseparable part of this heritage. However, railways are also linear spatial entities along which movement and interchange triggered the creation of a range of elements, very similar to Cultural Routes. Under this category, Railways can also be defined as 'physically delimited routes of communication' characterized by 'interactive movements of people as well as multi-dimensional, continuous, and reciprocal exchanges of goods, ideas, knowledge and values between peoples, countries, regions or continents over significant periods of time' (ICOMOS, 2005).

To aptly identify the wide cultural aspects of the railway, the two arenas have been fused into a comprehensive approach, which on the one hand, interprets the socio-economic, technological and environmental phenomena reflected and influenced by the railway as an industrial entity, and on the other hand allows for the exploration of the railroad's interaction with its wider physical and cultural context, as would be reflected in the wider environment of a cultural route (Har-Noy, 2012).

The first phase of applying the railway analysis method entails identifying the railway's main themes. These themes are topics reflecting the various values of the specific historic railway. Their identification is to be based on a thorough study of the historic railway in question, its history, features and components, while focusing on the railway's influence on economic, social and technological development. Themes such as 'The railroad as an agent for advancing the technologies of local industry and the building trade' may be applied to many historic railways, while other themes, such as 'The railroad as a catalyst for the citrus industry in Palestine' have a more specific nature.

Then a list of tangible as well as intangible cultural and historical attributes reflecting each theme is assembled. These attributes serve as guidelines, and help focus our attention on the significant historic remains which might be found along the railway route. To complete this phase, a comprehensive survey should be conducted in order to detect the historic components of the railway route. These components are likely to span a diverse range of scales, from technical facilities and machinery, to buildings, whole compounds, and landscape settings, as well as memories and customs (TICCIH, 2003). Moreover, this method perceives the railway as an inseparable part of its environment, therefore identifying not only objects constructed directly for railway operations, but also nearby non-train components which relate to the themes exemplified and highlighted by the railway, such as remains of a military camp dependent on the railroad for its functioning, or even an ancient fortress indicating the presence of a route prior to the railroad.

The second phase of the method is establishing a clear link between the historic railway components in each site along the route and the themes they reflect, thus providing every site with a list of themes, and creating a uniform basis for comparison between the sites.

A layout map marking the themes represented in each site and using a different color or shape for each theme visualizes the data collected and provides the basis for an effective assessment of significance. It demonstrates the distribution of the themes along the railway, highlights sites with many varied themes as opposed to sites with one primary theme. The layout map also illuminates which themes are present in multiple sites along the railway versus themes with little remains left.

Last is the evaluation phase: A historic railway is usually comprised of hundreds or even thousands of remains. It is impossible to preserve them all. Thus, a process of sorting, rating and selection has to take place regarding the sites along the railway, using the theme layout map as the main tool. The map highlights sites with numerous themes. These sites, indicated by the map as rich heritage sites, should be highly rated for conservation. On the other hand, specialization of a site in one theme thus reflecting it in a unique way may be of equal importance. Sites representing the same theme as demonstrated by the layout map should be compared to each other, taking into consideration other variables such as the physical state of the site, its authenticity and integrity and the legal status of the site, thus selecting the most appropriate site or sites to preserve.

By using the themes layout map, which connects the themes with their geographical location, the eventual selection of the sites can consider a well-balanced distribution along the railway in order to preserve a sense of continuity. The themes map is the main evaluating tool, but should be accompanied with additional schemes, regarding other criteria for evaluating the sites, such as their role in the railway operation system and the diversity of the components comprising them. Sites bearing a vital role in the railway operation system, such as terminal or crossing stations, as well as sites that were active for long periods of time and particularly sites along operative railway should be prioritized.

The above outlined method will now be demonstrated on a particular historic railway, the Haifa Kantara line. Thorough research led to the formulation of eight themes related to different aspects along Haifa-Kantara historic line. For each theme a list of attributes was elaborated. For example, one clear characteristic of the line was its military function. It was established as a military railway and served as a crucial instrument for transporting soldiers and military equipment, and was perceived as a symbol of the British governing power (Cotterell, 1984). Despite its Major role in aiding the social and economic development of both Jewish and Arab population in Palestine, since the late 1930's it was the target of terrorist attacks against the unwelcomed colonial power, first by Arabs and by the 1940's by Jews as well.

Attributes related to this theme, exhibiting and representing The railroad as an Instrument for Imperial Occupation and Military Control, could include evidence of defense systems protecting the line against politically-motivated attacks from within and without (guarding posts, watch towers, defense buildings such as pillboxes and blockhouses), as well as evidence of military infrastructure in the vicinity of railway intersections (camps, hospitals, communication networks, cemeteries etc.).

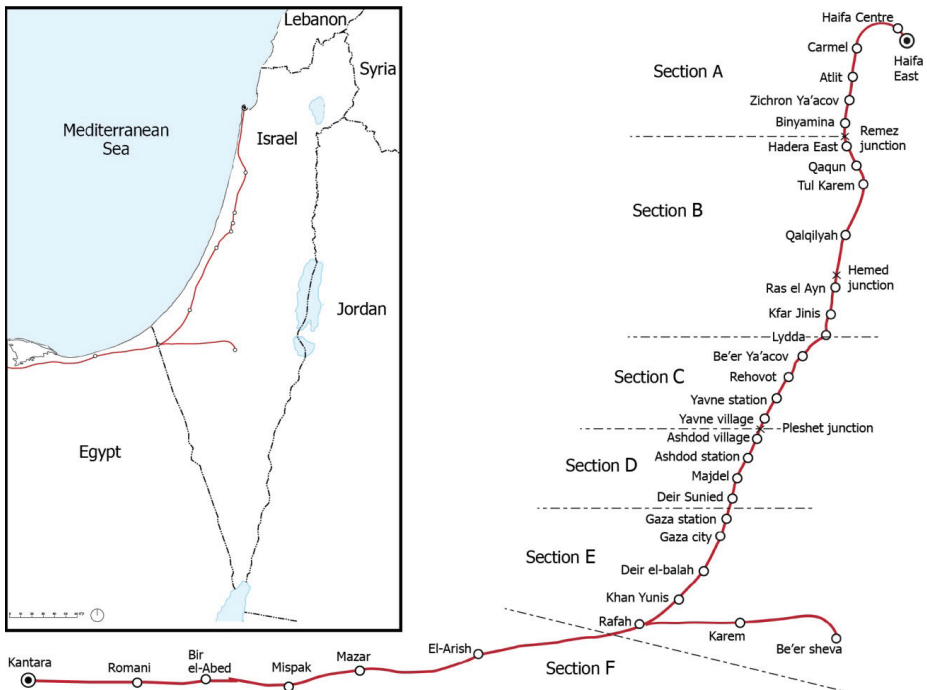


Figure 6. General map of Haifa-Kantara railway.

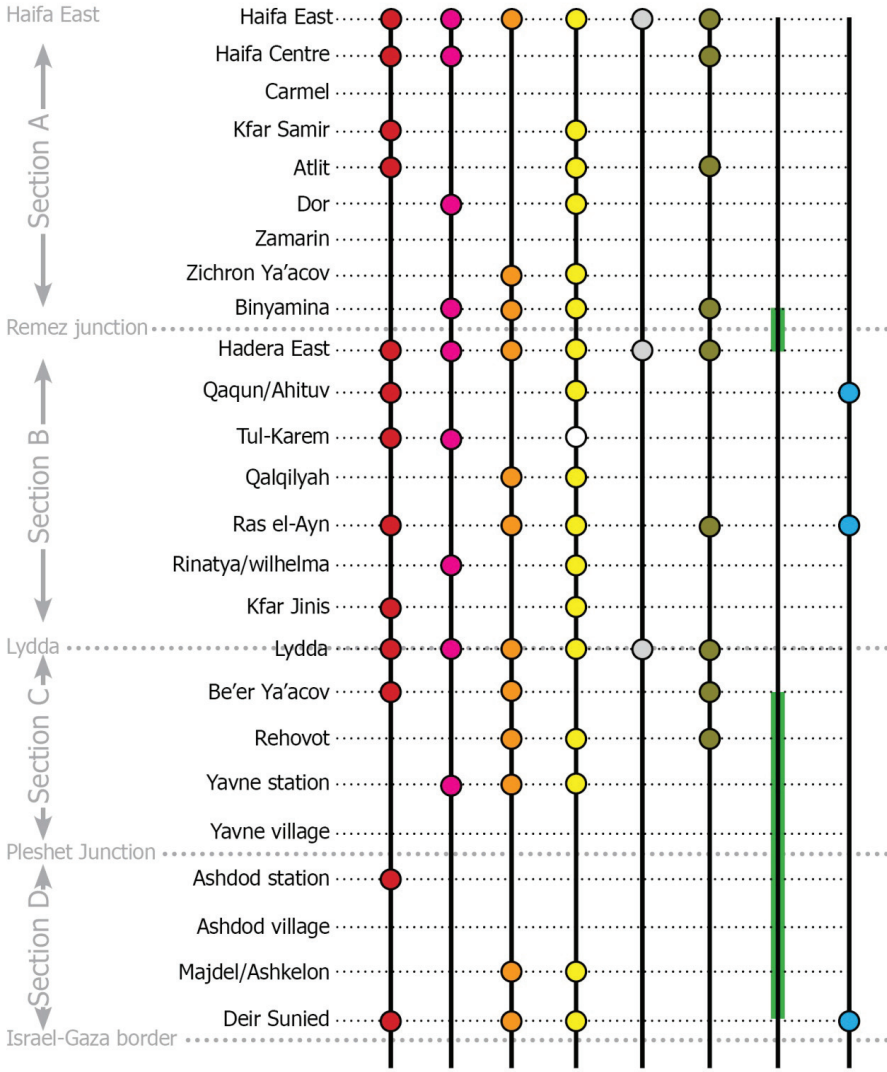
Another well-established theme along the Haifa-Kantara railway is the typical use of standardization in railway buildings and compounds. The standardization of railway buildings is a widespread and well acknowledged phenomenon throughout the world (Burnmann, 1997). In Palestine it was initially introduced by the Ottomans in their train stations (Pic, 1979), but expanded during the era of British rule to include prototypes for different railway buildings, such as workers quarters, signal boxes, latrines etc. which were designed and built by the railway company (PR). Moreover, the station compound was also arranged using a replicated pattern. A close examination of the standard prototypes often sheds light on the parameters considered in their design: Climate and local materials adaptation, building costs, maintenance and durability and aesthetic considerations. All these relate to the wider cultural context within which the railroad developed, and which influenced and in turn was shaped by the railroad (Liberty-Shalev, 2009, Har-Noy, 2012).

Attributes related to this theme could include typical uniform structures along the railway, the typical station compound, plans and correspondence regarding it.



Figure 7. Two layout maps of the Haifa-Kantara line indicating sites reflecting the following themes: On the left: 'The railway as an Instrument for Imperial Occupation and Military Control'. On the right: 'The railway as an outstanding example for the use of standardization in Buildings and Compounds' theme.

Based on the information accumulated in a comprehensive survey, each site along the railway is to be explored in the same manner by drawing the connection between the historic remains and the themes. For example, the sole remaining component at ZY station is a typical station building built in 1946, reflecting mainly the theme of '*Haifa Kantara Railway typical use of Standardization in Buildings and Compounds*'. On the other hand, HE station still exhibits 10 built components other than the station building: the aforementioned citrus shed, five staff quarters buildings (specifically designated for the lineman, the platelayers, the ganger, and station master) a latrine, a water tower, a pillbox and a blockhouse. Within these components six different themes are reflected, one of them being the theme '*Haifa Kantara railway as a typical example for the use of standardization in buildings and compounds*'. This theme is manifest in all components of the site, as of the buildings mentioned above are standard types in this station, even the latrine. Some of the components are connected with more than one theme. For example, the citrus shed, a historic steel shed, built in 1934-35 as a warehouse for packing and storing oranges collected from the surrounding orchards and sending them to markets in Palestine and abroad (Liberty-Shalev, 2009), is connected with three themes: 1. *The role of the railway as a key element in the citrus industry*. 2. *The promotion of new technologies*. 3. *An example for the use of standardization along the railway*.



- The railroad as an instrument for imperial occupation and military control
- The railroad as an agent for advancing the technological innovation of local industry and the building trade
- The railroad as a catalyst of the citrus industry's development in Palestine
- The railroad as an outstanding example for the Use of standardization in buildings and compounds
- The railroad as a welfare-oriented large-scale employer, Involved in various aspects of its employees lives.
- The railroad as signifying the expanse of British military camps in Palestine, and their influence on later settlement.
- The railroad as a force in landscape transformation
- Vistas from the railroad to the remains of the ancient route of Via Maris

Figure 8. The Haifa- Kantara Line Themes Layout Diagram.

Based on such individual site research, the comprehensive layout map created for the Haifa-Kantara railway reveals new insights into the railway and its key-sites. Multi-Themed sites such as Haifa East, Hadera, Ras al-Ayn, Lydda and Deir el Seneid stations as well as Single-Themed sites such as Zichron, Petah-Tiqva and Rinatya stations are highlighted by the map. Themes that are well represented along the railway such as *'Standardization of buildings'* and *'The railway as a mean for occupation and military control'* stand out against themes less represented such as *'Advancing new technologies'* and *'Vistas towards the remains of the ancient Via Maris'*<sup>6</sup>.

Assessing the ZY station with respect to the Haifa-Kantara themes layout map leads to a clear conclusion: in comparison to other sites along the railway, it is less significant. With few themes relating to it, little diversity in existing heritage components and no important local narrative to link it to surrounding communities, it appears to be among the less valuable components of the track. Moreover, in close proximity along the northern part of the Haifa-Kantara railroad, the survey revealed four sites manifesting the same station building type: Atlit, Zichron-Yaacov, Binyamina and Hadera-East, together creating a unique geographic sequence. As part of its conclusions, the 'Israel Railways Conservation Policy' recommends the further documentation and conservation of Atlit and Binyamina stations, as these two, together with HE (which has already been slated for conservation), appear to be the more significant joints composing this chain.

Had this conclusion, in its wide context, been available when the ISR were trying to justify the replacement of the ZY historic station building with a new one, their request would have been more seriously considered, and perhaps ultimately granted.

## Conclusions

Developing a conservation policy for a complex sequence of thematically related historic sites, spread over large distances along rail tracks and characterized by repetitiveness, is not a simple task. It requires a value-based approach, underlined by the realization that in order to function and thrive, transportation systems must be upgraded. Given that resources are always limited (especially those allocated for what is perceived as non-essential work), prioritization has to take place, and questions have to be asked: Are all of the historic components equally important? Are some sites and fragments more significant than others? How many items can we afford to lose and still maintain the integrity of the series as a sequence?

Firstly, assessing the values of sites which are linked by the railway has to take place in relation to one another. As this paper demonstrates, due to the scale and distance between the various fragments, the conservation of railway heritage is rarely perceived and treated as the linear and serial entity that it is. Individual railway components tend to be studied and documented on a singular basis, prompted by development plans which happen to affect the particular site in question, and which have little to do with its cultural context or historic value. The conservation approach which is developed on the basis of this fragmentary research often results in the site's contextual meaning being either exaggerated or overlooked, eventually leading to the loss of the broader social and cultural contexts of the railway system, and giving rise to doubts about the significance of these fragments and the worthiness of the limitations their conservation imposes on development.

Development-minded bodies such as railway authorities tend to perceive the conservation of heritage as an expensive interruption which hinders and complicates their plans, and offers no measurable benefits. For such organizations, a comprehensive conservation policy such as the one presented in this paper can be a tool not only for conservation, but also for well justified removals. When presenting an all-encompassing policy for the railway system, they can single out significant sites and slot them for conservation, while identifying less important sites which can be altered or spared altogether. The thematic method can supply solid, fact-based arguments for these decisions, and by way of its systematic analysis has the power to negate sentimental or uninformed arguments. This is, of course, the opportunity and the threat of the analysis method proposed in this paper: on the one hand, it can push a powerful but otherwise reluctant organization to get in touch with its responsibility for the public historic assets under its jurisdiction, survey them and formulate a plan for their selective protection. But it can also become an effective instrument for the enhancement of certain 'formal' narratives over other, more local or subaltern ones. The use of this method, then, requires caution, a deliberate breadth of themes, and constant self-reflection.

## Endnotes

<sup>1</sup> For a concise bibliographical compilation on the subject see for example ICOMOS's 2009 publication 'Industrial and Technical Heritage- Bibliography', at their online documentation centre: [http://www.international.icomos.org/centre\\_documentation/bib/industrialheritage.pdf](http://www.international.icomos.org/centre_documentation/bib/industrialheritage.pdf).

<sup>2</sup> The Fourth Addition to the Planning and Building Regulations of 1965, approved in 1991, stipulates the local authority's obligation to identify heritage properties under its jurisdiction and compile a list of those properties, which will serve as a municipal database. The new legislation also calls for establishing a conservation committee which will serve as the governing body responsible for approval and rejection of building permits to those properties. The 5th Addition, approved 2008, provides easements to safety regulations in historic sites.

- <sup>3</sup> The Eastern Line is the part of the Haifa-Kantara railway starting a few kilometers north of Hadera-east, and continuing southward up to Lod station, approximately 60km.
- <sup>4</sup> Other stations known today of the same prototype are Binyamina, Atlit, Rosh Ha'ayin and Ashkelon. It is possible that additional stations of this prototype existed but have not been documented or survived.
- <sup>5</sup> The existing train building was preceded by an earlier train station, constructed when the station was first established at this location between the years 1921-1925. For more detailed information, see Liberty-Shalev, 2009, Hadera-East Railway Station. Conservation documentation dossier, ISR.
- <sup>6</sup> Historic documentation (Liberty-Shalev, 2011) revealed that the station's location relatively far from the village of Zichron Yaacov, coupled with ongoing problematic transport connections, rendered the station underused throughout its years of operation.
- <sup>7</sup> During a planning consultation meeting on 23<sup>rd</sup> May 2012 at the Haifa District Planning Bureau concerning a proposed plan for a new station at the ZYe site.
- <sup>8</sup> There are two possible reasons for lack of representation of a theme: either the theme was originally represented in fewer sites, or over the years less of its attributes survived. It is important to assess which of the two scenarios applies in each case, as the conclusions and consequent course of action might be different.

## References

- Burnmann, P. (1997) Philosophies for Conserving the Railway Heritage. In P. Burnmann & M. Stratton (eds.) *Conserving the Railway Heritage*. UK: E&FN Spon. pp. 18-33.
- Choay, F. (2001 [1992]) *The Invention of the Historic Monument*. UK: Cambridge University Press.
- Cotterell, P. (1984) *The Railways of Palestine and Israel*. Abingdon: Tourrett Publishing.
- Coulls, A. (1999) *Railways as World Heritage Sites*. Occasional Papers for the world heritage convention.
- Har-Noy, A. (2012) *Conservation of the Railway Heritage in Israel. Case Study: The Palestine Railway Line Haifa-Kantara*. Unpublished thesis (MSc). Technion-Israel Institute of Technology. [Hebrew].
- ICOMOS (2005) The ICOMOS Charter on Cultural Routes 5<sup>th</sup> draft. *Proceeding of the ICOMOS 15<sup>th</sup> General Assembly*. China, October 2005.
- Liberty-Shalev, R. (2009) *Hadera-East Railway Station*. Conservation documentation dossier, ISR. [Hebrew].
- Liberty-Shalev, R. (2011) *Zichron-Yaacov Railway Station*. Conservation documentation dossier, ISR. [Hebrew].
- Pic, P. (1979) Meissner Pasha: Pioneer of Trains in the Land of Israel and its Neighbours. In *Katedra 10*. Jerusalem: Itzhak Ben Zvi Foundation. pp. 102-128. [Hebrew].
- TICCIH (2003) *The Nizhny Tagil Charter for the Industrial Heritage*. Russia: The International Committee for the Conservation of the Industrial Heritage.

## Acknowledgments

This paper is largely based on data obtained through the author's research at the Israel Railways Company Archives, ongoing since 2009. The authors would like to thank Mr. Chen Melling, Head of the Israel Railways Company Archives, for generously sharing his vast knowledge with us, and LArch. Michal Sussman from the ISR's General Development department for her ongoing support.





ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable Development

Vol. 4, No. 1, 2015, pp. 129-139

## The folk and oral roots of the Portuguese «Livro de São Cipriano»

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The Portuguese «Livro de São Cipriano», while fitting into the European grimoire tradition, seems to have only come into its current form in the late 19<sup>th</sup> century. Still, careful analysis reveals that large sections of this book have their origin in pre-existing Iberian folk magic practices, a conclusion which may be arrived at by the occurrence of the same recipes and sorceries in the records of such scholars as J. Leite de Vasconcelos and Teófilo Braga. This observation makes this book a window into elusive aspects of culture and traditional belief and practice, adding up to a grimoire quite distinguishable from most others, but whose content does challenge these in terms of ancestry. In this paper a basic outline of the «Livro» is presented, highlighting those sections that find their root in oral traditions and also the mechanisms allowing for the dissemination of its various versions in Brazil.

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### Introduction – Approaching the «Livro» as a cultural object

As a book inserted in the European grimoire tradition, the current form of the Portuguese «Livro de São Cipriano» is actually little more than one hundred years old. While it is a clear and more than tangible physical object, today on sale in most bookstores, it is a highly complex symbol whose full significance may completely elude an outsider to its cultural environment.

Being a grimoire, the foremost grimoire of Portugal, one must always remember that these are objects that extend well beyond themselves. The cultural significance of a traditional magic book is never restricted to the printed sheets of paper that make up its physical form. The «Livro» in this sense is an almighty ghost, a haunting shadow in the traditional Portuguese mind, a kind of black box concept where all magic, diabolism and mystery may fit and may spring from.

Given this fact, the most disparate attributes are found associated with this book: that reading it causes insanity, or may even summon the Devil; that a house where one resides will not fare well in any regard or that owning or even touching one a sin. A series of magical properties that can be summed up in the Portuguese saying: "To touch this book is a sin, but who reads it will rise to the clouds without wings".

These, it should be noted, are not just beliefs to be found in old ethnographic records, but rather, they are very much alive still today. This makes this book an invaluable window into the intangible Portuguese mental substrate from which all culture arises, both by its written and unwritten content and which has been unexplainably left unstudied and unattended by the academic community at large.

### Variations and editions – The Iberian duality

Before dwelling into this one single book, it should be understood that it actually inserts itself in a long and rich tradition of Iberian magical literature. Typically, the custom in both Portugal and Spain has been to call any and all magical books a Book of St Cyprian (Davies, 2010), and as such many books have carried such a title throughout history, some of them original Iberian creations and other mere translations of other well reputed European specimens, such as the «Le Grand Grimoire» (Barreiro, 2010), a book which today bares many touching points with the Iberian Cyprian books, particularly the Spanish ones. Besides this, and making the full chronology of Cyprian books in Iberia a challenge to grasp, clear evidence of old

and all but lost books can actually be found in particular ethnographic records from the late 19<sup>th</sup> and early 20<sup>th</sup> century, such as the following fragmented excerpt collected by Coelho (1889a) and entitled "Cypriani Magjje septē horar Magicae":

Ne Opuz hoc contrafial & falso meo NOMine currant Hoc Sabs eripsi & Rubricavi Mea propria Littera  
Cyprianus Magnus primus

Cyprianus gratia [Belse]buth Locifuge Resoce et ejusdem omnium potestatum Universi  
Magust primust, eni tantunmodo cognosscere Magiae arcana principalia, et tolere de sina  
Terae nuiea et generali methodo Thesaura omnia invenire.....

concessum fuit; nunc pro viribus meis atenuatis Magicandi.... et parvulos inopiam suam  
perdere voleus: anrient [arg]entumom ne et aurum, sient alia pretioza in terra jandudum  
Magiae virtute detenta: has septem horas Magiae didico sequentibus notiz. primo: De  
antiquis solum. ADAMI. MAEGI, quae vera est [faina] De paradiso omni Boni ac Mali Cientia  
expulsis est. Secundo: Nemo Thezaura haurire deziderans v... fican (?) quaeat..... Mulieres,  
illae raro pacto suficiens debent: Querit egenun (?) vel CLoRICIV, qui pro interin Locifuge  
Thezaurorum custode pactum faciat, et fide legat vel a sacerdote audiens pronuncied omnia  
infra scripta:

Magiae artes abjudicate manu; quis in illis aliquod deficiet, et tantum mea propria manu  
subscripta, et Typis edita valent, ed solum in ipsis data; potente pactum Verum facienti.

The analysis of this "Latin" text, even if particularly challenging, may provide precious clues and indications on the cultural and historical fitting of such books. The particular reference to «Locifuge Resoce», a probable corruption due to an oral transmission of the name «Lucifuge Rofocale», a demon of particular relevance in the French «Le Grand Grimoire» (Anon, 2011), indicates a connection to other wider European ceremonial magic procedures, and this demon's role in the «Le Grand Grimoire» as a keeper of buried magical treasure should not be taken as a coincidence.



Figure 1. Illustration of «Lucifuge Rofocale» from the «Le Grand Grimoire».

As for the titular St Cyprian, the repented black magician turned saint, his figure as Iberian magical hero cements itself in his "orthodox" tale as reported by the «Flos Sanctorum», also known as the «Legenda aurea», «Legenda sanctorum» or Golden Legend, a 13<sup>th</sup> century collections of hagiographies reproduced in most Cyprian books, particularly the Portuguese ones (Anon, 2001). Besides this, one can find numerous folk legends that transport Cyprian from his distant Antioch (modern day Turkey), directly into the Iberian world (Coelho, 1889a). The underlying reason behind the preeminence of this saint as the local magical hero however may be difficult to understand, but evidence of his magical predilection among the Iberian magic practitioners can be found at least as early as the 16<sup>th</sup> century (Frisvold, 2013), as also attested by the play «Exortação da Guerra» by Gil Vicente (Ferreira, 1992), where his name features in an evocation of two demons (Zebon and Danor) by a necromancer-priest.

Approaching the modern times, we find that the many current (but not all) versions of St Cyprian books can mostly be grouped into two main branches, which can currently be divided by the linguistic and national borders of Portugal and Spain.

The most prolific Spanish version, both in terms of recent editions and variations, is most commonly called «El Libro de San Cipriano – Tesoro del Hechicero» (Vicente, 2007). Between the Portuguese and the Spanish versions, this is the one that falls more in line with the typical European grimoire tradition. Although it does also possess sections consisting of several magical secrets and folk remedies taken from oral and traditional sources (some of which are common with the Portuguese version) it also displays other more ritual inclined sections, such as instructions on the production of several magical tools (on certain occasions similar to those presented in the grimoire «The Key of Solomon the King» (Mathers, 2006)) and instructions for the summoning of both Celestial and Infernal spirits, for example (according to Vicente (2007), these sections somewhat follow the grimoire «Arbatel of Magic» and the «Pseudo-Monarchia Daemonum»).

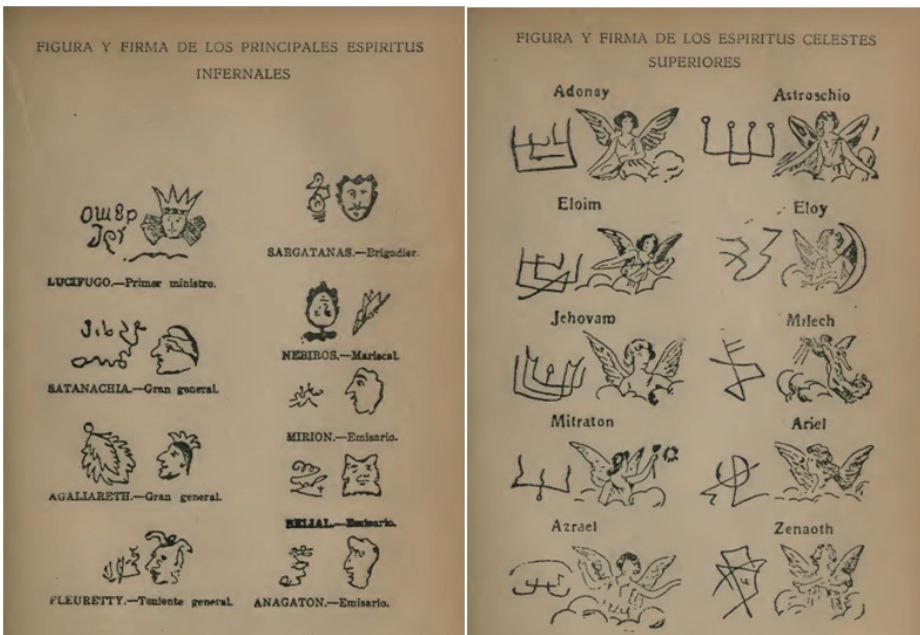


Figure 2. Sigils and identification of the various Infernal (left) and Celestial (right) spirits listed in the Spanish «Libro»; some of the sigils presented for the celestial spirits are rough reproductions of those presented in the grimoire «Arbatel of Magic» as belonging to the seven «Olympick» spirits Aratron, Bethor, Phaleg, Och, Hagith, Ophiel and Phul, rulers of the seven planetary spheres.

Also significant in these same evocation instructions, is the description of the same magical circle of protection as given in the «Le Grand Grimoire», once again underlying the connection between these two books.

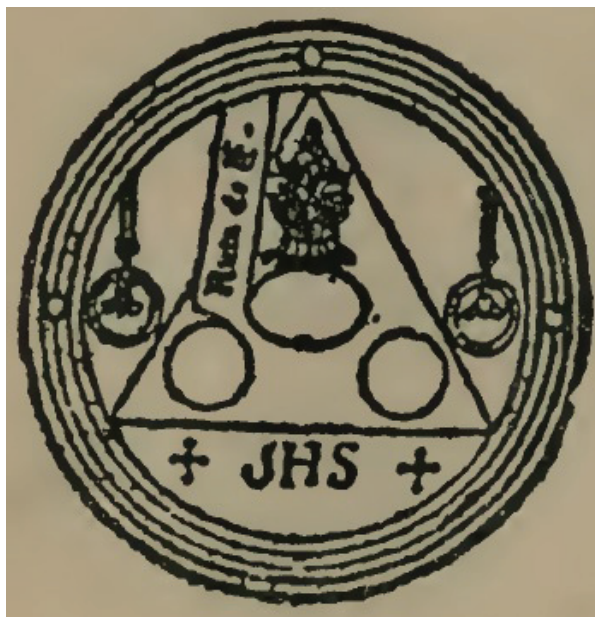


Figure 3. Circle of protection from the «Le Grand Grimoire», also presented in the Spanish «Libro» for the practice of spirit evocation.

This version presents a considerable plasticity as, besides these examples, among its various editions several sections from various other grimoires, such as the «Grand et Petit Albert», may be found, amounting to a considerable number of possible content which finds its most impressive expression in the large tome entitled «El Libro Infernal – Tratado Completo de las Ciencias Ocultas».

The Portuguese «Livro», commonly called «O Livro de São Cipriano – O Tesouro do Feiticeiro», removes itself quite substantially from this line of grimoires, as this Portuguese «Livro» seems to rather be a large collection of folk traditions, orisons, remedies and sorceries, fitting itself into the vast intangible complex that Espirito Santo (1990) called the Portuguese Popular Religion (this, it should be noted, is merely valid for the currently available version, as records of a long out of print edition named «O Verdadeiro Livro de S. Cypriano», printed in Porto, do exist (Vasconcelos, 1996; Vicente, 2007)).

As such, this book somehow presents itself at the crossroads between the oral and the written word, as oral knowledge congealed in book form. This particularity seems to generate an “open” book, with a beginning but no concrete end (Ferreira, 1992), as it does not present a set of ideas contained within themselves. This aspect of it, when we expand our analysis beyond Portugal (where this book’s content has been roughly the same for well over one hundred years), gives rise to a different kind of plasticity, when compared with the Spanish «Libro», as it is still used as a deposit of practical oral material by its users, with new editions coming to light on a regular bases containing new original sections clearly relating to such living cults as Umbanda and Quimbanda. This process has, remarkably, managed to preserve the «Livro» as flexible and living as the oral traditional frame it originally sprang from, making up a literary and magical continuum ranging from Iberia to South-America.

Beyond de Ibero-American scope, one should also note the existence of books associated with St Cyprian both in Italy and Scandinavia (other punctual examples may be found all through Europe (Skinner & Rankine, 2009)). Of these two, the Italian branch is the least remarkable, as these books present themselves as merely Italian translations of the Spanish «Libro», more precisely of the «El Libro Infernal – Tratado Completo de las Ciencias Ocultas» (translated into Italian as «Il Libro Infernale – Tesouro delle Scienze Occulte»). Even though northern Italy is home to several traditional practices related to St Cyprian, such as orisons, remedies and sorceries, the occurrence of this version of the book in this area seems to have been a purely commercial move by publishers in order to capitalize on pre-existing native folk practices, and as such these do not represent an original product of the local culture.

The Scandinavian case on the other hand is a completely different and legitimate branch of the grimoire tradition. Commonly called the «Cyprianus» or the «Svarte Boken», Black Books, these once again present themselves as repositories of traditional and oral knowledge, with literally hundreds of variations. The explanation of this phenomenon is due to the traditional practice consisting that every new copy of a Black Book should be made by hand copying a previous version, adding whatever new secrets

the new owner wished to include (Stokker, 2007; Rustad, 2010). Such a circumstance meant that these never came to crystallize into a standard version by action of the printing press.

In this case, it is quite certain that the name «Cyprianus», both as the title of these books and the name of their author, is a reverence to the same Sorcerer Saint of Antioch, supposed author of the Iberian books, but this connection in Scandinavia present itself more diffuse and confusing.

As far as Denmark goes, there appear to be two distinct reports of who Cyprian was. One says that he was an exceedingly evil Dane who was banished from Hell by the Devil himself (Davies, 2010). Upset by this event, he dedicated himself to writing nine books on black magic, whose content is the base for the Scandinavian Black Books. The other account, also present in Norway (Stokker, 2007), describes him as a gentle and orderly person, who, while passing by the Black School of Norway, made a pact with the Devil and become a Sorcerer. His book is said to have been written during his later years as he repented such evil actions, having the purpose to show how evil is performed so as one may counteract it. This legend goes on to say that this book is in fact divided into three parts, the Cyprianus, Dr. Faustus and Jacob Ramel.

Going south towards Germany, we once again encounter similar traditions to the ones presented in Denmark, the following account is given by Thorpe (1851):

In ancient times there lived in one of the Danish isles a man named Cyprianus, who was worse than the Devil; consequently, after he was dead and gone to hell, he was again cast forth by the Devil and replaced on his isle. There he wrote nine books, in the old Danish tongue, on Witchcraft and magical spells. Whosoever has read all these nine books through becomes the property of the Devil. From the original work three (or nine) copies are said to have been made by a monk, and mutilated copies of these have been dispersed all over the world. A count, who resided in the castle of Ploen, is said to have possessed a perfect copy, which he caused to be fastened with chains and buried under the castle; because in reading through eight books he was so troubled and terrified that he resolved on concealing it from the sight of the world. One of these books still exists in Flensburg. Some spells from the nine books are still known among aged people. Whoever wishes to be initiated therein must first renounce his Christianity.

One other remarkably different Scandinavian account describes Cyprianus as a beautiful Mexican nun from 1351. Her story states that after refusing the advances of a depraved clergy member she was locked in a dungeon where she wrote her book of magic with shreds from her clothing and her own blood (Stokker, 2007).

### **The Portuguese «Livro»**

Focusing on the Portuguese «Livro», the oldest example of what has become its current standard version can today be found in the Portuguese National Library, originally printed in Lisbon by Livraria Economica in an uncertain date but most likely in the late 1800s.

The structure of this book, although having suffered very minor alteration regarding the numeration of its various sections throughout the years, is in its essence the same as the most modern (Portuguese) editions. Its structure goes as follows:

The book opens with the «Vida de S. Cypriano – Extraída do Flos Sanctorum ou a Vida de Todos os Santos», which consists of the “orthodox” account of St Cyprian’s life as the terrible dark sorcerer who repents his actions and joins the Christian faith. This section, although present in every book, seems to place itself outside of its standard three parts.

The first part is divided into two sections: the first of these, entitled, «Livro de S. Cypriano» is in the entire book what most resembles a classical grimoire. This is itself divided into nine chapters, being that the first seven present in fact a quite well structured system of healing, banishing and exorcism through prayers and orisons, having many interesting nuances and variations depending on the nature of the evil being treated, be it a devilish sorcery, an evil spirit or a good spirit. This part in particular relates quite strongly to the Northern Portuguese concept and preoccupation of the «Almas Penadas» and the dead in Purgatory (Parafita, 2000, 2006), offering methods of identifying these spirits and aiding them in achieving Heaven.

One other remarkable particularity about this section is an extremely lengthy and elaborate banishment for the disenchantment of one hundred and forty eight buried treasures, as this is a book that has always been intrinsically linked with magical treasure hunting. This section bares strong and complex folkloric connections, which are fully exposed below. Finally, chapters VIII and IX of this section present a system of cartomancy and an interpretation of the Zodiac.

The second section of the first part is entitled «Poderes Ocultos – Cartomançia, Orações e Esconjuros» and is largely a list of sixteen sorceries and magical procedures, be them for divination, manipulation or protection.

This first part is finalized with an orison named the «Oração do Justo Juiz» and yet another system of cartomancy, both standing on their own and not as a part of any subsection.

The second part is divided into five sections: the «Verdadeiro Tesouro da Magia Preta e Branca ou Segredos da Feitiçaria» consisting of a list of twelve sorceries\magical secrets and an unnumbered description of a talisman referred to as the «A cruz de S. Bartholomeu e de S. Cyrano». Directly following is the «Mysterios da Feitiçaria Extraídos d'um Livro de Magia Que se Julga do Tempo dos Mouros» yet another list of thirty eight sorceries\magical secrets, amounting both these parts to fifty procedures. In more recent edition (Anon, 2001) this list has been divided further into more than thirty eight entries, as its numeration is on occasions illogical, with a few distinct entries listed under the same number.

The third section, «Arte de Adivinhar as Paixões e Tendencias das Pessoas pelo Craneo e a Pysionomia», consists of several methods of determining the character of any person by their physical attributes, from the use of phrenology to the shape of their various features.

The forth section is once again a cartomancy system, the «Cartomançia Cruzada», and finally this part closes with a dictionary-like list of elements for the interpretation of dreams.

The third part is divided into seven sections, and it is usually subtitled «Tesouros da Galiza», which should be a direct reference to its first part, a lengthy narrative entitled «Inguerimanços de S. Cypriano ou os Prodigios do Diabo – Historia Verdadeira Acontecida no Reino da Galiza». This narrative describes the tale of the Frenchman Victor Siderol, as he finds a copy of the Grimoire (Inguerimanço) of St Cyprian and is lead to Galicia by the Devil in search of buried treasure and an easy life. The second section of this part is then directly related to this narrative, as it lists one hundred and seventy four buried treasures, some of which feature in the narrative presented in the first section.

Following this is an extremely erudite text regarding ghostly apparitions entitled «Espiritos Diabolicos que infestam as casas com estrondos e remedios para os evitar», which on some points does seem to contradict the banishment and spiritual succor instructions given in the first part of the «Livro». Such a text stands out in the book as it is clearly not from a folk or traditional source, quoting authors such as Johannes Hymonides, Antonio Possevino, Gerolamo Cardano or Alessandro Alessandri.

The forth section is another list of thirty sorceries\magical secrets, entitled «Poderes Ocultos do Odio e do Amor Descobertos pelo Magico Jannes e praticados por S. Cypriano». This is followed by a short chiromancy section, which on some more recent editions has been included in the previous list of sorceries\magical secrets.

The sixth section is another remarkable, yet short, text on alchemy which is indicated as having been extracted from the book

«Crimini falsi» by a certain Cecilio Rodigenio. And the book is finally closed by the text «A Feiticeira de Évora ou Historia da Sempre Noiva – Tirada de um Manuscrito de Amador Patricio datado de Salvaterra aos 23 de Abril de 1614», which, as indicated, consists of two different excerpts from the book «Historia das Antiguidades de Évora» by Amador Patricio.

### **Folk and oral roots**

The greatest evidence of the traditional and folk roots of the «Livro» can most easily be found in the various lists of sorceries\magical secrets spread out through the book. This may be solidly arrived at by the analysis of the works of J. Leite de Vasconcelos and Teófilo Braga (among others), as these same eminent scholars seem to have collected many of the exact same recipes and folk magic procedures as presented in the «Livro» by their own methods. Other punctual cases are also detectable in its other sections, such as the use of a particular sigil of protection in the two sections referring to the disenchantment of buried treasures, identified by Vasconcelos (1996) as a traditional «sino-saimão dubrado», a doubled sign\sigil of Solomon.

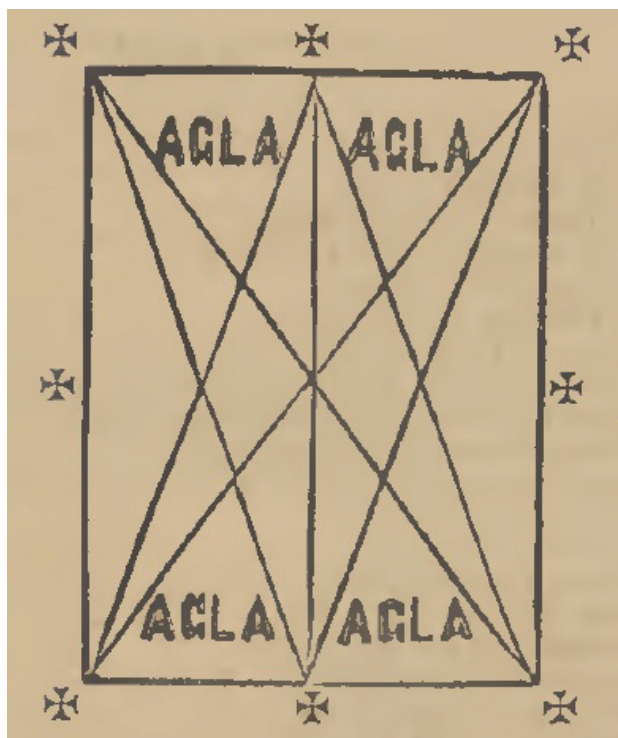


Figure 4. Sigil of protection ascribed in the Portuguese «Livro» for the disenchantment of treasures, an elaboration on a traditional Portuguese «sino-saimão dobrado».

Surprising however is the fact that the relation between these folk practices and the «Livro» has never before been made, neither by these researchers, as Coelho (1889a), and even Vasconcelos himself, had some knowledge of its content (Vasconcelos, 1996), nor by others since. Among the many listed sorceries and magical secrets presented in the «Livro», the following can be presented as examples: in the «Poderes Ocultos» section, we can cite Points X, XI and XII, which, among two interesting narratives of the life of St Gregory and St Cyprian, one can identify the popular «Oração do Anjo Custodio», the Orison of the Custodian Angel, also popularly known as the Twelve Words Said and Returned or as the Orison of St Cyprian. This, in its oral and folk root, is an extremely wide spread and flexible orison, with examples literally from all around the world (Coelho, 1889b) and it is based on the numerical enumerations of religious concepts and objects, such as the two tables of Moses, the three persons of the Trinity, the four evangelists and so on (Vasconcelos, 1882). In Portugal in particular, references to this orison can be found at least as far as the 16<sup>th</sup> century, when it was outlawed and consequently starts to feature in Inquisition processes (Braga, 1994).

In the «Verdadeiro Tesouro da Magia Preta e Branca» section, point VIII, one finds the «Encantos e magica da semente do feto e suas propriedades», enchantment and magic of the fern seeds and its properties, which describes the process of collecting fern seeds on St John's Eve and their magical properties (in the current case it is mostly related to love and the banishment of evil spirits, but such a practice actually occurs throughout Europe for various other purposes (Frazer, 1993)). A similar procedure is mentioned by Braga (1994), which is referred in traditional sources as the seed of the «feito» or «feitelha». Vasconcelos (1882) also describes this same tradition, adding many details quite similar to the ones presented in the «Livro», quoting the following folk song from the Douro which refers directly to it:

Meu amor não vás a Avintes,  
Nem p'ra lá tomes o jeito;  
Olha que as moças de lá  
Trazem a semente do feito.

In the «Mysterios da Feitiçaria» section, points XXXVI and XLVI one can find instructions for the creation of two magical needles, both meant for romantic incantation of an individual. These two points, while sharing most of their attributes and general instructions, differ in the aspect that one is prepared by passing a needle through the skin of a dead man (point XXXVI) while the other through the eyes of a bat (point XLVI). Although remaining silent about the process by which one may activate the magical power of such needles, Braga (1994) refers quite directly to the practice of the dead man needle, while Vasconcelos (1882) mentions a similar tradition which consists on passing a needle through the eyes of a snake, indicating that these are most likely to be flexible and wide spread customs.

Also interesting in this section is point XXXVII, the instructions on how to acquire a miraculous herb that is said to restore life to the dead. This particular herb is introduced in the «Livro» in a narrative featuring Cyprian and the mountain shepherd Barnabé, who describes how one may obtain the herb.

This process consists in finding a swallows' nest, removing the eggs from it and boiling them, returning them to the nest before the swallows notice they are gone. Upon realizing that their eggs are dead the swallows are said to go fetch an herb which restores their life, being that one merely needs to take this herb in order to operate similar miracles.

These same instructions can also be found in the book «Fysiognomia, e Varios Segredos da Natureza» by Cortés (1699), an author whose influence on Iberian and South-American folk practices cannot be underestimated (Almeida, 2012), and who is actually directly cited in the «Livro» in point XII of the «Poderes Ocultos do Ódio e do Amor». Besides this, Braga (1994) also mentions similar instructions, hailing from Spain, for the acquisition of a stone used for the curing of every affliction of the eyes. The instructions are in all similar to the ones in the «Livro», but one should locate a swallows' nest and blind the already born hatchlings, which will entice the swallows to fetch this miraculous stone.

Finally, in this section it should also be mentioned a particular procedure for the dispelling of the evil influence casted by a hunchback, point L. Vasconcelos (1996) mentions this as a general superstition, brought into being by the 17<sup>th</sup> century physician Fonseca Henriques, which determined this particular physical deficiency, together with limping, blindness, possessing a cross-eye or only one hand, to be one that is able to cast fascinations and bad luck on all those who see them. Vasconcelos further mentions magical gestures (mainly the fig sign) and several incantations in order to counter act this evil influence, of which the one mentioned in the «Livro» is but one.

In the «Poderes Ocultos do Ódio e do Amor», point XXVI presents the instructions on the construction of a viper head talisman, an object which is mentioned on several other sources as an extremely powerful and effective magical tool (Pires, 1895; Ribeiro, 1917), being occasionally part of complex composite talismans in the form a bags or consecrated pouches containing several magical items (Aragão, 1994), a form of syncretic Afro-European folk magic popularized in the 18<sup>th</sup> century as the «bolsas de mandinga» (Calainho, 2008).

Taking the above examples into consideration, the particular characteristics of these various lists of secrets and sorceries make them, in the whole of the «Livro», particularly soft spots for the integration and alteration of content. Their organization and overall logic is challenging, with even the occurrence of repeated sorceries or various recipes for exactly the same purpose. This transmits the same clear notion of fluidity and plasticity as these various procedures also possess in their original folk roots, and which are merely collected and congealed here under the name of the Sorcerer Saint Hero of Iberia.

To the attentive reader this opens this grimoire into a whole underlying world of traditional practices, and the very chaotic and apparent random organization of these lists then seems to suggest an "open" book, a mere circumstantial reflection of a particular aspect of traditional lore. Yet, this situation is further complicated by the existence of a mythical corpus around the «Livro» itself as a magically charged cultural object. Its own mythical status has given it an "imaginary" ancientness, also reinforced by its connections to the old Iberian practice of magical treasure hunting (Missler, 2006a, 2006b, 2006c), placing the «Livro» in a complex crossroad of remoteness and proximity.

### Imaginary roots

Not explicit in its text is the strong connection of the «Livro» with other mythical and folkloric aspects of traditional Iberian culture. These may reveal to be completely invisible and unperceivable to the outside observer, but they greatly enhance its magical glamour and add layers of interpretation to its text. Particular among these is the connection of the «Livro» with the mythical corpus of the «Mouras Encantadas», the Enchanted Moors.

The two lists of treasures presented in part one and three of the «Livro» are a direct descendent of the once popular «roteiros de tesouros», small booklets or pamphlets describing the locations of old Moorish buried treasures (Sarmiento, 1888; Missler, 2006a, 2006b, 2006c). Analyzing these two lists, besides the several direct references to «Mouros» acting as treasure keepers, the most obvious connection can be picked out from the introduction to the second list of treasures: «Todos os thesouros e encantamentos do antigo reino da Galliza acham se depositados pelos mouros e romanos em esconderijos subterraneos», all treasures and enchantments of the ancient kingdom of Galicia were deposited by the Moors and the Romans in underground hiding places.

Besides these, one should also note the occurrence of the word «haver», a belonging, as part of the description of several of these treasures. This word, or its variation «aver», is reported by Braga (1994) as being the specific designation of a buried treasure guarded by a «Mouro», and it occurs thirty-six times in the list of treasures presented in part one and thirty-two in the one presented in part three.

The presence of these lists in the «Livro» transports it further away from the usual grimoire or folk magic realms and instead weaves it into the vast complex of mythical and legendary narratives surrounding the «Mouros Encantados». A complete explanation of the concept of the «Mouro Encantado» may be difficult to achieve, as these represent a multileveled folkloric figure, echoing the collective memory of the «Reconquista», ancient pagan cults or general folk fairy lore (Parafita, 2006). Although certain classification models for a structured study of «Mouras» and «Mouros» have been proposed by Vasconcelos, Consiglieri Pedroso and Francisco Manuel Alves, all these seem to be lacking, being that Pedroso himself admitted the frailty of his (Parafita, 2006). This seems to be due to the vastness that the concept of the «Moura» has taken in Portuguese folklore, where it seems to almost fully occupy the folkloric "niche" of any and all remote notions of nymphs, gods or fey folk.

As a whole, the «Mouro» mythical corpus, independently of the identity or characteristics of this figure, always present it as the "Other". The «Mouro» is all which is strange, remote and ancient, but mainly, all which is not Christian (Parafita, 2006). In this sense, all strange and unnatural phenomenon is traditionally attributed to the «Mouros» as a whole, meaning that all pre-Christian structures such as «castros» (Iberian pre-Roman hill forts), standing stones or dolmens (places frequently referred to as having stashes of «Mouro» treasure buried underneath them, both in the «Livro» and in oral sources) are frequented attributed to «Mouro» construction, a term which is used to designate all inhabitants of Iberia before the Christian «Reconquista» (Parafita, 2006). This places the «Mouro» as a being of a different order, inhabitant of a murky and diffuse notion of an ancient pre-Christian age, the current Cosmic order.

As such, the inclusion of these two lists of buried «Mouro» treasures and all they imply, as well as the significant presence of the «Livro» itself in several «Moura» legends (Parafita, 2006), claims for it an "imaginary" glamour of absolute ancientness, as its magic reaches all the way back to the pre-Christian age of Iberia and its remote Moorish rulers. Moreover, the «Livro», by assuming its power over these treasures and their guardians, takes up in the religious duality arising from the narratives of the «Reconquista» the position of the always victorious Christian.

In all of this one may contemplate the vast nexus of culture and folklore which makes up the «Livro» as a concept, both by its direct significance (the objective and purpose of its various magical proceedings) as well as by its indirect implications and ramifications.

## Crossing the Atlantic

Further adding to this argument is the interesting evolution the «Livro» and its content has suffered in Brazil. Its aspect as an "open" book, together with the fact that the «Livro» on various occasions present itself as a reduced and adulterated version of a supposedly mythical "true" book of Saint Cyprian, assuming itself as an "unfinished" book, seems to set the field for the free and open possibility for constant additions and alterations to its content and organization. This seems to have been the attitude assumed by several Brazilian authors who have taken up the challenge of constantly reinventing, reorganizing and updating the «Livro» in order to fit it to new social, economical and religious backgrounds (Ferreira, 1992; Molina, 1993). As an offshoot of folk magic it has become truly a book of the people (Ferreira, 1992) and although its readers and environment changes, its function remains the same: a repository and collection of magical secrets under the great and dark cloak of St Cyprian, the supreme master of all magic.

Coming into the cult of Quimbanda, and its legions of spirits referred to as Exu and Pomba Gira, for example, both St Cyprian and his book have taken up a relevant and prestigious role in this genuinely Brazilian system (Frisvold, 2012). This can both be observed by the presence of many «despachos» or «trabalhos» echoing those presented in the «Livro», or the presence of the figure of the Saint himself as one of the many spirits worked in this cult (Frisvold, 2012, 2013).

Even though the presence of similar proceedings in this cult as those presented in the «Livro» are, logically, not to be taken as a surprise, these take on much more intense and novel connections when they are seen attributed to particular other spirits in the cult. According to its own narrative, it is said that it was from the spirit Exu Meia-Noite that St Cyprian acquired his occult knowledge (Alva, n.d.; Frisvold, 2012), which was later crystallized into the «Livro». As such, in this context, the «Livro»'s procedures may be separated from the figure of the mythical Sorcerer Saint and attributed to Exu Meia-Noite, gaining in this way a new and much more solid grounding in the core of this relatively new cult.

One other remarkable aspect which seems to have taken a life of its own is the narrative of the «Feiteira» or «Bruxa» of Evora. As stated above, this is the last section of the «Livro» in its basic Portuguese version, and it is itself taken from a previous book by Amador Patricio (a pen name of Francisco José Freire, a quite relevant neo-classical Oratorian Friar from the 18<sup>th</sup> century, one of the inspirers of the movement of the Arcádia Lusitana). As such, associated with the figure of this «Bruxa» one may today find grimoires attributed to her in the Brazilian market (Santander, n.d.). Further elaborating on this figure, new narratives seem to have emerged in which the «Bruxa» is counted as one

of Cyprian's masters (similarly to Exu Meia-Noite) and that the «Livro» came to be due to the scrolls he inherited from her (Ferreira, 1992; Frisvold, 2013). Furthermore, the figure of the «Bruxa» has come to occupy a relevant role in Afro-Brazilian cults, much like the Saint, either under her own name and attributes or as the Pomba Gira Bruxa de Évora (Farelli, 2006; Frisvold, 2011) worked in Quimbanda, being occasionally counted as having also been the master of Maria Padilha, a known historical figure that today occupies an extremely relevant role in the legion of the Pomba Giras of Quimbanda (Frisvold, 2013).

We can also travel forward and find the figure of Athanásio, a character from the original «Flos Sanctorum» tale who is described as one of Cyprian's students, but that now appears as an author of his own grimoire in Brazil, which shares large portions of its content with the original «Livro» (Athanásio. n.d.; Frisvold, 2013).

The figure of the Saint himself may also be brought into examination, as besides the character presented in the original «Flos Sanctorum» and general catholic narratives, various other variations and nuances of this figure may be observed in the workings of this cult. Of absolute importance at this point is the understanding of the common confusion between St Cyprian of Antioch and St Cyprian of Carthage, occasionally referred to as the Pope of Africa. This, over time, has then led to the association of St Cyprian with the African line of Umbanda and the spirits known as Pretos Velhos, later turned into the line of the Souls, the specific spiritual line worked in Quimbanda. From these we can then gather the examples of the Pretos Velhos Pai Cipriano (Frisvold, 2013) and Cipriano Quimbandeiro (Anon, n.d.), also, São Cipriano das Almas (Carqueja, n.d.) and São Cipriano Quimbandeiro (Frisvold, 2012), as the specific Quimbanda manifestation of the Saint. This then adds further articulation to the variability of "Cyprianic" material which may find itself associated with the «Livro».

Given its "unfinished" nature, these instances are perfect examples on how the «Livro» may find new content, as now, within the mechanics of these cults, it can be deconstructed and rearranged in a constant stream of new canonical information (according to these cults), producing theoretically infinite variations of the «Livro» depending on the influence of particular spirits cultivated by a potential new author.

Nonetheless, such instances further cement what was referred to previously as "imaginary" roots of the «Livro», this time in Brazil. By the addition of such characters to the overall narrative of the «Livro» a new authority and glamour of power and ancientness can be attributed to it in a new land where it previously had no roots, establishing itself once again as a repository or reflection of folk magic. Once again, this places the «Livro» in a most privileged position for the observation of such cults and the narratives they establish of themselves.

## Conclusions

Multiple evidences that the current Portuguese version of the «Livro de São Cipriano» is akin to a collection of magical secrets and beliefs of an oral and folk nature has been presented. Such an instance, coupled with the «Livro»'s own acceptance of its incomplete nature, as well as its attribution to the folk magical hero of Iberia, places it in a complex position that allows for the constant addition and alteration of this book's content.

Still, a clear glamour of authenticity and ancientness seem to be claimed by the «Livro» as it has become intertwined with the rich and vast mythical corpus of the «Mouras Encantadas», representations and expressions of ancientness and otherness in the Northern Portuguese rural imaginary, claiming in this way what may be referred to as "imaginary" roots.

When traversing to Brazil and into its particular magical and religious environment, the «Livro» takes on a particularly relevant aspect, as through the mechanics of cults such as Quimbanda its content may be deconstructed and attributed to both novel and pre-existing characters of its own narrative. This allows for the generation of new "imaginary" roots for this grimoire, which then permit for the continuing evolution of its content in a new social, economical and religious environment.

All these aspects of the «Livro» make up a unique cultural phenomenon, both in Portugal and in Brazil, where it may be regarded as a rare window into several aspects of the intangible culture of the environments where it may be found, both due its written content as well as the reactions it triggers in its surroundings.

With all this, the «Livro» proves to be an invaluable tool and object of interest that has been largely disregarded by most researchers and which beckons a more attentive and multidisciplinary study.

## References

- Almeida, A. V. (2012) *Saberes e Práticas de Cura no "Lunário Perpétuo" de Gerónimo Cortés (1555-1615) e sua Influência no Nordeste Brasileiro*. Olinda: Editora Universitária da UFRPE.
- Alva, A. (n.d.) *O Livro dos Exus (Kiumbas e Eguns)*. Rio de Janeiro: Editora Eco.
- Anon (2001) *O Livro de São Cipriano – O Tesouro do Feiticeiro*. Lisboa: Moderna Editorial Lavoeres.
- Anon (2011) *The Grand Grimoire*. Calgary: Theophania Publishing.

- Anon (n.d.) *3000 Pontos Riscados e Cantados na Umbanda e Candomblé*. Rio de Janeiro: Editora Eco.
- Aragão, T. (1994) *Diabruras Santidades e Profecias*. Lisboa: Veja.
- Athanásio (n.d.) *O Livro do Feiticeiro*. Rio de Janeiro: Editora Eco.
- Barreiro, B. (2010) *Brujos y astrólogos de la Inquisición de Galicia y el libro de San Cipriano*. Sevilla: Extramuros Edición, S.L..
- Braga, T. (1994) *O Povo Português nos seus Costumes, Crenças e Tradições*. Vol. II. Lisboa: Publicações Dom Quixote.
- Calainho, D. B. (2008) *Metrópole das mandingas: religiosidade negra e inquisição portuguesa no Antigo Regime*. Rio de Janeiro: Garamond.
- Carqueja, J. A. (n.d.) *O Livro de São Cipriano das Almas*. Rio de Janeiro: Editora Eco.
- Coelho, F. A. (1889a) Notas e Paralelos Folkloricos – I Tradições relativas a S. Cypriano. *Revista Lusitana*, I, pp.166-174.
- Coelho, F. A. (1889b) Notas e Paralelos Folkloricos – II As doze palavras retornadas, *Revista Lusitana*, I, pp.246-259.
- Cortés, J. (1699) *Fysiognomia, e Varios Segredos da Natureza*. Lisboa: Officina de Miguel Manescal.
- Davies, O. (2010) *Grimoires – A History of Magic Books*. New York: Oxford University Press.
- Espírito Santo, M. (1990) *A Religião Popular Portuguesa*. Lisboa: Assírio & Alvim.
- Farelli, M. H. (2006) *A Bruxa de Évora*. Rio de Janeiro: Pallas Editora.
- Ferreira, J. P. (1992) *O Livro de São Cipriano: Uma Legenda de Massas*. São Paulo: Editora Perspectiva.
- Frazer, J. G. (1993) *The Golden Bough: A Study in Magic and Religion*. Hertfordshire: Wordsworth Editions.
- Frisvold, N. M. (2011) *Pomba Gira & the Quimbanda of Mbúmba Nzila*. Croydon: Scarlet Imprint.
- Frisvold, N. M. (2012) *Exu & the Quimbanda of Night and Fire*. Croydon: Scarlet Imprint.
- Frisvold, N. M. (2013) *St. Cyprian & the Sorcerous Transmutation – Some observations about the role of St. Cyprian in Quimbanda*. Fenioux: Hadean Press.
- Mathers, S. L. M. (2006) *The Key of Solomon the King (Clavicula Salomonis)*. San Francisco: Weiser Books.
- Missler, P. (2006a) Tradicion y parodia em el Millionario de San Cipriano, primer recetario impreso para buscar tesoros en Galicia (Las hondas raíces del Ciprianillo: 1ª Parte). *Culturas Populares - Revista Electrónica*, 2.
- Missler, P. (2006b) Las hondas raíces del Ciprianillo - 2ª parte: los grimorios. *Culturas Populares - Revista Electrónica*, 3.
- Missler, P. (2006c) Las Hondas Raíces del Ciprianillo, Tercera parte: las 'Gacetas'. *Culturas Populares - Revista Electrónica*, 4.
- Molina, N. A. (1993) *Antigo Livro de São Cipriano – Gigante e Verdadeiro Capa de Açá*. Rio de Janeiro: Editora Espiritualista.
- Parafita, A. (2000) *O Maravilhoso Popular – Lendas, Contos, Mitos*. Lisboa: Plátano Editora.
- Parafita, A. (2006) *A Mitologia dos Mouros – Lendas, Mitos, Serpentes, Tesouros*. Canelas: Edições Gailivro.
- Pires, A. T. (1895) Miscellanea III. *Revista Lusitana*, III, pp. 366-367.
- Ribeiro, J. D. (1917) Turquel Folklórico. *Revista Lusitana*, XX, pp. 54-80.
- Rustad, M. S. (2010) *The Black Books of Elverum*. Lakeville: Galde Press.
- Santander, A. (n.d.) *O Livro da Bruxa ou A Feiticeira de Évora*. Rio de Janeiro: Editora Eco.
- Sarmiento, F. M. (1888) A propósito dos "Roteiros de Tesouros". *Revista Guimarães*, V, pp. 5-11.
- Skinner S. & Rankine D. (2009) *The Grimoire of St. Cyprian – Clavis Inferni*. Singapore: Golden Hoard Press.
- Stokker, K. (2007) *Remedies and Rituals – Folk Medicine in Norway and the New Land*. St. Paul: Minnesota Historical Society Press.
- Thorpe, B. (1851) *Northern Mythology – Comprising the principal popular traditions and superstitions of Scandinavia, North Germany and The Netherlands - Compiled from original and other Sources*. Vol. II. London: Edward Lumley.
- Vasconcelos, J. L. (1996) *Signum Salomonis; A Figa; A Barba em Portugal – Estudo de Etnografia Comparativa*. Lisboa: Publicações Dom Quixote.
- Vasconcelos, J. L. (1882) *Tradições Populares de Portugal – Bibliotheca Ethnographica Portugueza*. Porto: Livraria Portuense de Clavel & C.ª.
- Vicente, F. F. C. (2007) O Livro de San Cibrán – Unha realidade no imaxinario popular. *Murguía – Revista Galega de Historia*, 12, pp. 69-104.





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## Interpretation and preservation of archeological sites from their building construction techniques. The case study of S. Maria in Portuno in Italy

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Archaeological sites are very complex systems, each having peculiar features, often characterized by local and characteristic construction technology and techniques. Their conservation and enhancement for cultural and tourist purposes have taken up a significant technical and economic role. The presence of archaeological sites is recognised as one of the essential components of the tourist supply and a strong incentive in promoting its development. Thus, an essential condition for the enjoyment of archaeological sites is their conservation. But any conservation project should consider a variety of factors (technical, cultural, relating to the landscape, economic, social and so on) the complexity of each of them is strictly related to a full understanding of the archaeological site. In this communication an interpretation for better understanding an archaeological site starting from the study of its building construction techniques is proposed. This approach is applied to the case study of S. Maria in Portuno's site (Italy). The obtained results will allow to guide the future conservation actions of the site and to increase the current knowledge of the ancient building practice.

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### Introduction

The S. Maria in Portuno's archaeological site (Corinaldo, Marche region, Italy) is located in the centre of Italy near the Adriatic sea (Fig. 1). It is positioned along a road axis that coincides with an ancient Roman road and it was investigated, since 2001, by a series of different archaeological investigations as shown in Giorgi and Lepore (2010) and Lenci et al. (2011). From these investigations an on-site continuity of human settlements seems to come out, allowing to identify five main building phases of the site from the Roman Age to the current period (Giorgi and Lepore, 2010): (1) the productive site in the Roman Age, confirmed by the well-preserved walls of the Roman kilns used to carry out bricks and tiles; (2) the construction of a

little church and its cemetery area built between the 8th century A.D. and the 10th century A.D.; (3) a more complex church with one nave and two aisles, similar to those ones of the same period sited in Ravenna's area (Italy) and in the Byzantine Empire, and its cemetery areas in the High-Middle Age (10<sup>th</sup>-11<sup>th</sup> century A.D.) until the Middle Age (12<sup>th</sup>-14<sup>th</sup> century A.D.); (4) the collapse of the northern aisle and the rebuilding of the church with only one nave in the Renaissance Age (15<sup>th</sup> century A.D.); (5) the new façade and the bell tower dated 18<sup>th</sup> century.

The remains of the original medieval masonries (10<sup>th</sup>-11<sup>th</sup> century A.D.) of the northern aisle of the church and of its eastern area were found from these archaeological investigations (Fig. 2). They seem to represent an unusual, but surely smart, construction technique for building bearing masonries using cheap and really available materials, such as tile and brick fragments. In this way an interpretation for better understanding this archaeological site has started from the study of this building construction technique so as to obtain results that will allow to guide the future conservation actions of the site itself and to increase the current knowledge of the ancient building practice.

A technological-construction survey was firstly carried out. Then, chemical and physical analyses were carried out both on mortar samples and on ceramic ones. Furthermore, compression tests were performed on the ceramic specimens to characterize their mechanical behaviour.



Figure 1. Some views of the S. Maria in Portuno's site: the church (a) and the northern zone of archaeological excavations (b).

## Materials and methods

In situ investigations were carried out on the medieval masonries of the church. A geometric and technological-construction survey was firstly carried out. The average dimensions of the tile and brick fragments were determined by the analysis of some "open" masonry transversal sections. The distinction between the fragments of tile and brick was reached by their dimensions. Successively, ceramic and mortar samples were taken from the investigated masonries following the procedure suggested by Italian UNI 11305 (2009). Samples were taken at the elevation level and at the foundations as reported in Table 1. Some ceramic samples were also taken from the few remains of Roman masonries sited under the medieval level of the site (Table 2), so as to investigate the possible reuse of tile and brick fragments coming from pre-existing Roman structures.

The characterization of the mortars was developed according to Candeias et al. (2006), Pecchioni et al. (2008) and following the protocols suggested by Italian UNI 11305 (2009) and UNI 11176 (2006). The determination of the samples particle size distribution was performed by sieve analysis on dried samples (UNI EN 1015-1, 2007). The mortar samples were fractionated and sieved through ISO 565 series sieves. Thin sections and polished surfaces were prepared by vacuum impregnation with low viscosity epoxy resin and they were observed with a petrographic microscope (NIKON OPTIPHOT2-POL) equipped with an automatic photographic system and a digital camera, enabling the identification of the morphology, dimension and type of aggregates, binder, and additives. Non-disintegrated mortar fragments were also included into acrylic resin, following the Italian recommendation Normal 14/83 (1983), in order to confirm the conclusion obtained by the petrographic analysis by using a scanning electron microscope (ESEM Quanta-200, FEI) with an EDS micro-probe (X-EDS Oxford INCA-350, FEI). The samples were polished and coated with a thin layer (10nm) of Au-Pd and examined.

On the binder fraction X-ray diffraction measurements (XRD) were carried out (X'Pert PRO MRD Panalytical diffractometer) with Ni-filtered CuK $\alpha$  radiation to determine the crystalline phases present on

the samples. The patterns were recorded in the 3-90° 2θ range at room temperature, with a scanning rate of 0.001°/s and a step size of 0.02. Finally, thermogravimetric (TG) and differential thermal analyses (DTA) were recorded at 20°C/min up to 1000°C in flowing air (STA 429, Netzsch), in order to confirm the binder nature.

The characterization of the brick and tile fragments followed the protocols suggested by Italian UNI 11084 (2003). After a preliminary observation at stereo-microscopy, petrographic and electron scanning microscopies were used as reported before for the mortars. A GeoPyc 1360 Envelope and T.A.P. Density Analyzer (Micromeritics Inc.) was used to determine the bulk density (pb). The true density (pt) of the fired samples was determined using a gas displacement pycnometer instrument (AccuPyc 1330, Micromeritics Inc.) while the total porosity (TP) was calculated by using the following formula:  $TP = (1 - pb/pt) \cdot 100$ .

XRD analysis was performed, in the same conditions used for mortars, on the fraction with grain size < 25µm in order to obtain information on the mineralogical composition and firing temperature of the ceramic fragments. Finally, thermogravimetric (TG) and differential thermal analyses (DTA) were performed, at the same conditions reported before for mortars, to confirm the firing temperature.

Six tile specimens of average dimensions 6×6×6cm<sup>3</sup>, each consisted of two piled elements 6×6×3cm<sup>3</sup>, and six brick specimens 6×6×5cm<sup>3</sup> were tested under compression, following the protocols suggested by UNI EN 772-1 (2002). The compression tests were carried out by displacement control and the displacement rate was equal to 0.02 mm/s.

Table 1. XRD results of the mortar fractions < 63 µm.

Sample code	Sampling area	XRD results (< 63 µm)
3	Masonryseptum	calcite (+++) quartz (++) muscovite (+) albite (t)
4	Masonryseptum	calcite (+++) quartz (++) muscovite (t)
12	Pillar	calcite (+++) quartz (+)
18	Apse	calcite (+++) quartz (+) illite (t)

## Results and discussion

The tile fragments have two principal thicknesses: the first one, relative to the raised edges of the original tile, of dimension equal to about 6cm, and the second one, relative to the flat zone of the original tile, equal to about 3.5cm. The average thickness of the brick fragments is equal to 5cm. These average dimensions are consistent with those of the well-preserved U-shaped flat tiles and bricks found at the Roman level (Fig. 2).

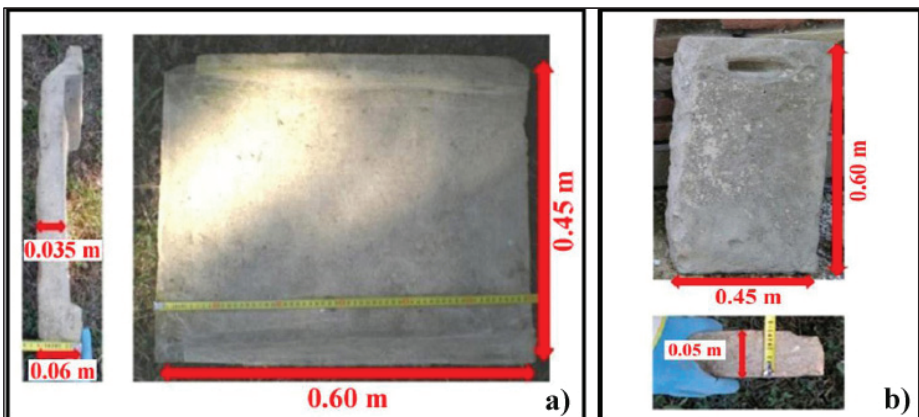


Figure 2. Well-preserved Roman tile (a) and brick (b), called manubriati, found at the Roman level lower than that of the medieval church.

The masonry lay-out at the elevation level is made by two types of horizontal layer, piled one above the other (Fig. 3). The first one (type 1) is made by brick and flat tile fragments so as to achieve an "U-shaped formwork" to be filled by the second layer. Tile fragments of the first type of layer were placed with the raised edges towards the outside and this construction technique permits to have a regular external leaf of the walls. The second one (type 2), confined within the first type of layer, is made by

ceramic irregular fragments. This represent a smart local way of building bearing masonries to obtain regular external curtains from units with irregular shape, using cheap and really available materials such as tile and brick fragments.

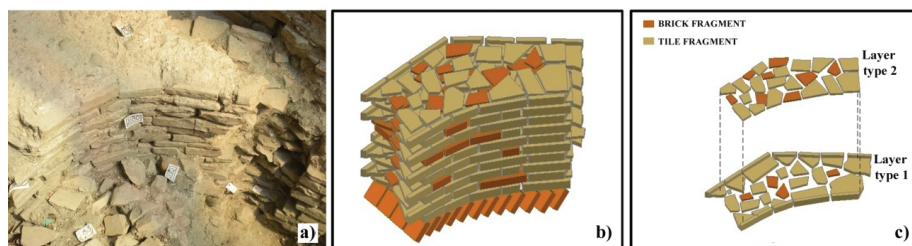


Figure 3. Some of the investigated Medieval masonries (a). An arrangement of the masonry lay-out (b) made by two types of horizontal layer piled one above the other (c).

The mortar joints have an average thickness equal to 1.5cm due to the granulometrical distribution of the mortar and to the irregular shape of the ceramic fragments. The same mortar appears to be rather coarse, crumbling by the simple effort of sampling, and it could be classified as a conglomerate by a first visual inspection, because there is the presence of aggregates larger than 2mm.

Considering the mortars taken from the foundations, the average percentage of gravel ( $d > 2\text{mm}$ ), sand ( $63\ \mu\text{m} < d < 2\text{mm}$ ) and binder ( $< 63\ \mu\text{m}$ ) was equal to 40.8, 55.4 and 3.8 wt%, respectively. On the other hand, the average values of the granulometrical distribution of the mortar used at the elevation of the investigated structures showed gravel, sand and binder content equal to 39.7, 54.5 and 5.9 wt%, respectively. The reported data showed that the average grain size distribution for the mortar samples at the elevation level was similar to that of the foundations. However, columns and pillars foundations and the elevations showed a quite different grain size distribution characterized by a gravel content lower than those of the other considered sampling areas. The binder content was very low for all the considered mortar samples with a small increment, in general, from the foundation to the elevation level.

The petrographic analysis of the mortar samples presents a lithoclast with millimetric dimension and rounded smooth shape surrounded by the mortar. Analyzing the mortar, the image confirmed the very low binder quantity and the presence of micritic binder lumps where shrinkage fissures can be observed: this means that no particular care was devoted to the mortars curing, leaving the mortar dry throughout the setting reaction. The aggregates are made by sedimentary rock fragments with rounded smooth shape, crystals, mainly quartz, calcite and feldspars, and carbonate shell. No differences were observed in the mortar samples used at the elevation. The XRD patterns of the mortar binder fraction showed the predominant presence of calcium carbonate as calcite and quartz (Table 1), in agreement with petrographic and EDS results. The visible impurities are generally clay. TG analysis confirmed these results and enabled to confirm the typical lime nature of the mortars. In particular, it demonstrated the absence of any important weight loss before the calcite decomposition ranging between 820-840°C and releasing over 20%  $\text{CO}_2$  (equivalent to over 45%  $\text{CaCO}_3$ ). The mortars do not present any hygroscopic behaviour, since they contain adsorbed water more or less around 2% during heating up to 120°C, and the slight weight loss between 200-600°C is attributable to the characteristic dehydroxylation of the clay impurities. The obtained results allowed to define that the binder used in this site was lime with small amount of clay impurities that gave a slightly hydraulic nature to the mortar.

The mineralogical and physical properties of the ceramic samples taken from the medieval masonries of the church are consistent with those of the samples coming from the pre-existing local Roman structures (Quagliarini et al., 2014). In both cases, in fact, the samples are made by a homogeneous micritic matrix with crystals of quartz, calcite, biotite, microcline and iron oxides (Fig. 4). The XRD patterns of the samples ( $< 25\ \mu\text{m}$ ) (Table 2) indicated that all the analyzed bricks and tiles were originated from a calcareous clay and were fired at around 900°C, but not for time needed to allow the complete transformation of the low-T phases. These results are in good agreement with the TG-DTA results that showed the characteristic decomposition of calcite at around 800°C. The porosity of the samples (around 40%) are quite similar, too.

The average compressive strength of the tile specimens was equal to 22.1MPa and that of the brick specimens was equal to 23MPa. They indicate good mechanical properties of the ceramic units if i.e. we consider that for Italian modern masonries the characteristic compressive strength of the brick unit has to be within 2-40MPa (Circolare Esplicativa 617, 2009). Furthermore, they are similar to those of some Medieval bricks shown in literature (Modena et al., 2002).

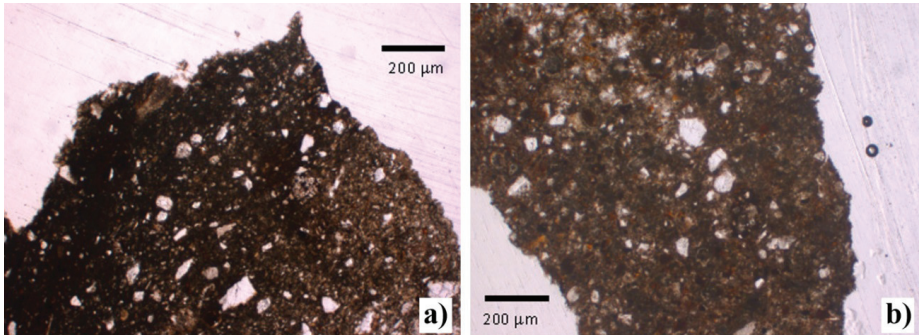


Figure 4. Petrographic micrographs of thin sections of brick samples: a) sample B22 (plane polars); b) sample B01 (plane polars).

Table 2. XRD results of the fraction < 25 µm for tile (T) and brick (B) samples and for the Roman ones.

	Sample code	Sampling area	XRD results (< 25µm)
TILE AND BRICK	T05	Masonry/septum	calcite (+++) microclino (++) quartz (+) muscovite (+)
	T08	Column	calcite (+++) quartz (+) diopside (+) anortite (t)
	B15	Pillar	quartz (+++) calcite (+) diopside (+) muscovite (+)
	B16	Pillar	calcite (+++) quartz (++) albite (+) muscovite (+)
	B22	Apse	calcite (+++) quartz (++) albite (+) ghlenite (+)
	B23	Crypt	calcite (+++) quartz (++) diopside (+)
	B24	Crypt	calcite (+++) quartz (++) diopside (+)
ROMAN TILE AND BRICK	T01	Roman masonry	calcite (+++) quartz (++) muscovite (+)
	T02	Roman masonry	calcite (+++) quartz (+) muscovite (+)
	B01	Roman masonry	calcite (+++) quartz (++) albite (+)
	B02	Roman masonry	calcite (+++) quartz (++) diopside (+)

Results from mineralogical and physical characterisation of different ceramic samples are quite similar and this could corroborate the common Roman origin. The reuse of existing materials was a common practice during the High-Middle Age (Mannoni, 2000; Novara, 2000) and results seem to confirm that, even at S. Maria in Portuno's site, the ceramic fragments used for building bearing medieval masonries came from pre-existing Roman materials such as flat tiles and bricks. This totally agrees with what is reported in historical literature: the manufacturing of new bricks generally began on large scale from the 14th century A.D. (Mannoni, 2000) and this fact holds for the S. Maria in Portuno's church too, since the production of new bricks began with the building of the new defensive walls of Corinaldo after its destruction (1360 A.D.) as shown in literature (Giorgi and Lepore, 2010).

In this way, the considered construction technique allowed in the Middle Age (11th century A.D.) to build bearing masonries with regular sides starting from ceramic fragments characterized by irregular shapes. Moreover, this peculiar construction technique is very similar to a local Roman one, where the masonry lay-out at the elevation level is arranged in the same way by two types of horizontal layer, piled one above the other (Fig. 5). The only difference is that the first one is made up of a whole U-shape flat tile across the thickness with the raised edges towards the outside, so as to achieve an unbroken "U-shaped formwork" to be filled by the second layer. In this way, the results seem to demonstrate a continuity of the local building practice at least until the 11th century A.D. and the influence of the social and economic context on the building practice in the High-Middle Age, as shown in literature for other historical masonries (Tobriner, 2003).

The mortars used both at the foundation level and at the elevation level are similar in their compositions. They mostly contain big aggregates (> 2mm), mainly calcite and quartz, and the used binder was lime with small amount of clay impurities that gave a slightly hydraulic nature to it. Generally, the percentage of binder by weight (< 63 µm) results very low, also respect to the historical mortars described in literature (Calderoni et al., 2010; Corradi et al. 2008; Miriello et al., 2010). Some differences between the grain size distributions of the mortars of the considered sampling areas may be due to the historical building process characterized by poor economical conditions and by a lack of qualified workers. These mortars, from the actual engineering point of view, should be defined as "concrete" due to the gravel content in their compositions. In this way, they not only allowed the regularization of the horizontal layers of the masonry but also the filling of the large voids of the wall between the irregular ceramic fragments, a common role for historical masonries.



Figure 5. Well-preserved ruins of some local Roman masonries made by flat tiles near the S. Maria in Portuno's site (Suasa's archaeological site).

## Conclusions

Archaeological sites represent an important heritage to be protected and preserved, but any conservation project should consider a variety of factors, such as technical, cultural, relating to the landscape, economic, social and so on, the complexity of each of them are strictly related to a full understanding of the archaeological site itself. In particular, each archaeological site is often characterized by local and peculiar construction technology and techniques which can represent a powerful interpretation mean of the archaeological site itself. In this way, in this communication an interpretation for better understanding the S. Maria in Portuno's archaeological site is provided starting from the study of its building construction techniques. The obtained results have pointed out that the medieval masonry construction technique is very simple, smart and does not require expert masons. It permitted to save money and time by re-using ceramic fragment coming from ancient Roman structures and by employing a mortar poor in binder and with big aggregates (> 2mm). Besides, it allowed to obtain regular external masonry leaves, by putting the raised edges of tile fragments toward the outside of the wall. In this way, these masonries at a first glance look like an ordinary masonry made by full bricks, and this can misguide engineers or architects. Moreover, a continuity of the local building practice at least until the 11<sup>th</sup> century A.D. and the influence of the social and economic context on the building practice in this period seem to be demonstrated. The obtained results will also allow to guide the future compatible restoration of the investigated masonries.

## References

- Calderoni, B., Cecere, G., Cordasco, E. A., Guerriero, L., Lenza, P. & Manfredi, G. (2010) Metro-logical definition and evaluation of some mechanical properties of post-medieval Neapolitan yellow tuff masonry. *Journal of Cultural Heritage* 11, pp. 163–171.
- Seruya, A. I. (2006) Characterization of ancient mortars: present methodology and future perspectives. In CERC3 Workshop on Chemistry in the *Conservation of Cultural Heritage: pre-sent and future perspective*. EU-ARTECH: Available at [http://www.eu-artech.org/files/Ext\\_ab/candeias.pdf](http://www.eu-artech.org/files/Ext_ab/candeias.pdf).
- Circolare Esplicativa 617 (2009) *Istruzioni per l'applicazione delle Norme Tecniche per le Co-struzioni di cui al Decreto Ministeriale del 14/01/2008* [in Italian].
- Corradi, M., Tedeschi, C., Binda, L. & Borri, A. (2008) Experimental evaluation of shear and compression strength of masonry wall before and after reinforcement: deep repointing. *Construction and Building Materials* 22, pp.463–472.
- Giorgi, E. & Lepore, G. (2010) Archeologia nella valle del Cesano tra Suasa e Santa Maria in Portuno. In A. Quem (ed.), *Atti delle Giornate di Studi*, 18 and 19 December 2008, Bologna, Italy [in Italian].
- Gliozzo, E., Damiani, D., Camporeale, S., Memmi I. & Papi, E. (2011) Building materials from Thamusida (Rabat, Morocco): a diachronic local production from the Roman to the Islamic period. *Journal of Archaeological Science* 38, pp.1026–1036.
- Lenci, S., Quagliarini, E. & Piattoni, Q. (2011) *Ingegneria e archeologia. Dalla planimetria di scavo alla terza dimensione dell'elevato. La chiesa paleocristiana di S. Maria in Portuno di Co-rinaldo* (AN). Roma, Italy: Aracne Editrice [in Italian].
- Mannoni, T., 2000. I problemi dei laterizi altomedievali. In S. Gelichi & P. Novara (eds.), *Atti della giornata di studio: I laterizi nell'alto medio-evo italiano*. Italy: Ravenna, pp. 109–136 [in Italian].

- Miriello, D., Barca, D., Bloise, A., Ciarallo, A., Crisci, G. M., De Rose, T., Gattuso, C., Gazi-neo, F. & La Russa, M. F. (2010) Characterisation of archaeological mortars from Pompeii (Cam-pania, Italy) and identification of construction phases by compositional data analysis. *Journal of Archaeological Science* 37, pp. 2207–2223.
- Modena, C., Valluzzi, M. R., Tongini Folli, R. & Binda, L. (2002) Design choices and interven-tion techniques for repairing and strengthening of the Monza cathedral bell-tower. *Construc-tion and Building Materials* 16, pp. 385–395.
- Normal 14/83:1983 (1983) *Thin and polished sections of stone materials*.
- Novara, P. (2000) La produzione e l'impiego dei laterizi nell'alto medio-evo ravennate. In S. Gelichi & P. Novara (eds.), *Atti della giornata di studio: I laterizi nell'alto medio-evo italiana*. Italy: Ravenna [in Italian].
- Pecchioni, E., Fratini, F. & Cantisani, E. (2008) *Le malte antiche e moderne tra tradizione ed innovazione*. Bologna, Italy: Patron Editore [in Italian].
- Quagliarini, E., Lenci, S., Piattoni, Q., Bondioli, F., Bernabei, I., Lepore, G. & Zaccaria, M. (2014) Experimental analysis of romanesque masonries made by tile and brick fragments found at the archaeological site of S. Maria in Portuno. *International Journal of Architectural Heritage* 8 (2) pp. 161-184.
- Tobriner, S. (2003) Building the Cathedral of Noto; earthquakes, reconstruction and building practice in 18<sup>th</sup> century Sicily. *Construction and Building Materials* 17, pp. 521–532.
- UNI 11305:2009 (2009) *Cultural heritage. Historical mortars. Guideline for the mineralogical-petrographycal, physical and chemical characterization of mortars*.
- UNI 11176:2006 (2006) *Cultural heritage. Petrographic description of a mortar*.
- UNI 11084:2003 (2003) *Cultural heritage. Ceramic materials. Characterization*.
- UNI EN 1015-1:2007 (2007) *Methods of test for mortar of masonry. Part 1: determination of particle size distribution by sieve analysis*.
- UNI EN 772-1:2002 (2002) *Methods of test for masonry units. Determination of compressive strength*.





ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

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International Journal of Heritage and Sustainable Development

Vol. 4, No. 1, 2015, pp. 149-157

## Integrating Intangible Cultural Heritage elements and learning strategy: a case study

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Tanzania has a rich and diverse cultural history based in community cultural life. However, at present, young people have limited opportunity to exploit this richness of creative expressions and engage in creative jobs as their future career. Hence, the significant challenge remains: how to integrate Intangible Cultural Heritage elements and learning strategy as a means of promoting creative jobs for youth. This paper presents a case study on 'Strategies for youth employment in Tanzania: A creative industries approach'. The case study employed mixed methods incorporating questionnaires, interviews and focus groups and was held in Dar-Es-Salaam, Mwanza, Dodoma, Lindi and Morogoro from July to October, 2012. This paper discusses some of the issues and argues that there is no virtual utilization of the intangible cultural heritage knowledge and skills in 'putting education to work' (UNESCO, 2012) for the better prospects of youth. Although the discussion is specific to Tanzania, the case may also apply to other developing countries.

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**Keywords:** intangible cultural heritage, learning strategy, promotion, creative jobs, young people, knowledge, skills, education.

### Introduction

Recent developments in the global economy have heightened the need to recognize and harness culture and creative assets as distinctive tools for community development (Dewhurst, 2008, 1; Florida, 2002; United Nations, 2008, 3). In the same way WIPO (2003) contends, the above mentioned development paradigm has also embraced intangible cultural assets as creative products consisting of characteristic elements of tradition-based innovations and creations; which therefore, appear as vital parts of a community's past and cultural heritage. Furthermore, they can serve as inputs into other markets, such as performance, art, tourism, architecture, and fashion (WIPO, 2003, 29).

Extending that idea, a considerable amount of existing literature has given a variety of definitions of the term Intangible Cultural Heritage (ICH). This paper will use the definition suggested by UNESCO (UNESCO, 2003b) that means creative out-puts including practices, representations, expressions, knowledge, skills, as well as instruments and objects. Others are artifacts; cultural spaces associated with those communities, groups, and in some cases, individuals are recognized as part of their cultural heritage (such as folktales, folk poetry, riddles, signs, words, symbols and identifications). Oral traditions and expressions, including language, are also an instrument of intangible cultural heritage, as are the performing arts (e.g. music expressions, folksongs, instrumental music, and folk dances), social practices, rituals and festive events, knowledge and practices concerning nature, the universe and traditional craftsmanship (UNESCO, 2003b, 2).

So far, however, there have been few initiatives relating to the integration of the outlined Intangible Cultural Heritage elements in the education process so as to articulate identity, values, nurturing the creative capital, and thus, promoting creative jobs for young people in Tanzania. History reveals that, Tanzania has a rich and diverse ICH background based in community cultural life. Evidently, that could have inspired young people to develop their creative potential and skills through education and ultimately reach their dreams of a better life. In accordance with article 24 of the 2003 convention on ICH,

Tanzania entered into force and deposited its respective instrument of ratification on the 18<sup>th</sup> of October, 2011(UNESCO, 2003a).

However, since then, the government, policy makers, economists and politicians have never taken deliberate action to create opportunities for young people to exploit intangible cultural heritage elements, and utilize them easily in creative industries and as their future career. Hence, this paper argues that there is no actual utilization of the intangible cultural heritage elements, and the artistic expressions, knowledge and skills found within the 126 ethnic tribes in Tanzania. In that regard, this paper seeks critically to discuss the existing gap between the education systems, its aims and goals on one side, and the growing awareness of the creative economy and ICH. In short, this paper attempts to show how the integration of ICH and learning strategies could add value and benefit in "Putting education to work" (UNESCO, 2012).

In meeting the underlined purpose, this paper begins by positioning the industry through the identification of related literature and opportunities in the body of knowledge, debate on existing gaps and ways of adding value to the integration of ICH and learning strategies. In the following section, the paper lays out the theoretical dimension of the recently conducted case study, and hence, reports on experiences and the data collection field work results related to ICH and educational aims and goals in Tanzania. Finally, this paper assesses and gives some recommendations on how the integration of ICH elements could add value to educational opportunities and promote creative jobs in Tanzania.

### **Background to culture and education development in Tanzania**

A considerable amount of literature published on culture and development in Tanzania, as in many African countries, reveals that colonization had hidden effects that fragmented identities, indigenous knowledge, informal education, and thus, produced a strong sense of loss, devaluation of Africa and its cultural heritage. Hence, the notion about education and cultural heritage in most African countries appears now to be largely influenced by external theories and leadership experiences in various circles (Boswell, 2008, 11-23; Ministry of National Culture and Youth, 1962, 1-6; Nyerere, 1962, 1).

Clearly then, in regard to education, the Tanzanian government defines it as follows: "a process by which the individual acquires knowledge and skills necessary for appreciating and adapting to the environment and ever-changing social, political and economic conditions of society and as a means by which one can realize one's full potential" - Ministry of Education and Culture (MOEC, 1995, i). Furthermore, the Ministry of Education and Vocational Training clarifies the education system components that formulate the entire structure as firstly in-formal education as "traditional education", that is, -training that deals with everyday experiences interpreted by elders or peers and not planned (Kleis, 1993, 72-74; MOEC, 1995, 1). Second is formal education: this system is "predominantly academic, ranging from primary to university level" (MOEC, 1995, 12). The third system is non-formal education: which implies to a planned and structured activity "out -of-school education as distinguished from formal education, which is in-school education"(MOEC, 1995, 16).

In Tanzania, pre-colonial education or "traditional education" emphasized principles of ethical citizenship, acquisition of life-skills and perpetuation of valued customs and traditions (MOEC, 1995, 1). The transmission of indigenous knowledge and technology has always been through oral traditions and oral practice. In that way, members of a clan or tribe came to know their individual history, which had an unbroken continuity to the present. Therefore, traditional knowledge was a tool for promoting creative talent and served as a way of communication, development, and entertainment, and to pass on oral skills, values, ethics and creativity to young people from one generation to the next (Ministry of National Culture and Youth, 1962, 5). Pursuing this further, Tanzania inherited its current educational system from the British, and the system was nurtured through western education methods. Following the western tradition, Tanzania has separated work from the lives and values of its young people. Most of the educated population in Tanzania do not consider self-employment as an option, and thus, continue to embrace the British influence which introduced "white collar jobs or knowledge work" (Pink, 2005, 3). In that regard, this paper argues that, Tanzania is distancing itself from its creative workforce actions and the fact that, creativity as part of traditional knowledge and "the driver of social and economic change" (Hartley, 2005, 1) will keep on facing challenges. Relatively, Hearn and Rooney (2008) point out that:

Throughout history of all societies and economies have been-profoundly dependent on knowledge, As the 21<sup>st</sup> century gathers pace, the dependence on knowledge is becoming more complex and presents new challenges ...In short, knowledge is a thoroughly social phenomena (Hearn and Rooney, 2008, 1).

Reflecting knowledge as a social phenomenon as argued by Hearn and Rooney (2008), immediately after independence in 1961, the Tanzania government passed the education act of 1962 aiming at regulating the provisions of education, and thus, repealed and replaced the 1927 Education Ordinance. Since then, the Tanzanian government has taken various steps in changing the education policy and laws all based on two main levels:

- On a quantitative level: to ensure access to education and equity in the distribution and allocation of resources to different segments of the society;
- On a qualitative level: to ensure that the country produces the skills needed for rapid social and economic development (MOEC, 1995, i-2).

Difficulties arise, however, when an attempt is made to practically implement well-structured public policies and laws. For this purpose, this paper is going to discuss educational opportunities for ICH elements as a means of paving the way for the promotion of a creative workforce for young people in Tanzania.

### **Theoretical dimensions: ICH elements and learning strategy**

It is becoming difficult to ignore the reality of integrating ICH elements within the learning environment due to the increasing scientific evidence revealed by researchers. To illustrate, Bamford, UNESCO, Australia Council for the Arts and IFACCA (2009) have commented: 'arts education aims to pass on cultural heritage to young people, to enable them to create their own artistic language and to contribute to their global development (emotional and cognitive)' (Bamford et al., 2009, 21). In addition, Bamford et al (2009) clarify by saying that arts education is far from being a means of communication of cultural knowledge, it also plays a highly significant role on both the learners' academic and personal level. Finally, Bamford et al (2009) elaborate the two different approaches to arts education as:

- 1) Education in Art: implies teaching pupils or students the practices and principles of the different art disciplines, with a focus on stimulating their learning, critical thinking and problem solving, thereby, enabling learners to construct their cultural identities.
- 2) Education through Art: means that art emerges as a vehicle for learning other subject content and a way for teaching other general educational outcomes (Bamford et al., 2009, 21).

Indeed, arts education and training could assist in enhancing creativity and innovation also employment among talented creative young people. As Nestor Garcia Canclini (1992) points out:

instead of the death of traditional cultural forms, we now discover that tradition is in transition, and articulated to modern processes. Reconversion prolongs their existence. To reconvert cultural capital means to transfer symbolic patrimony from one site to another in order to conserve it, increase its yield, and better the position of those who practice it (Canclini, 1992, 31).

To illustrate, through arts education, young people are most likely to embrace the cultural heritage and create their own artistic language (Bamford et al., 2009, 21). Such a focus, will contribute to the quality of artistic creations or rather 'recycle their skills by transferring them to another area' (Canclini, 1992, 32).

Evidently, in the drastic changing technology and global competition for talent and creative economy, what young people want to know, is certainly, how to learn the latest knowledge and skills related for them to lead the best life (Bentley and Kimberly, 1999, 9-18; Florida, 2002; McWilliam, 2008, 16; Segal, Chipman and Robert, 1985, 1; UNESCO, 2012, i-ii). However, there are limits to how far the ideas of the two basic approaches to arts education as mentioned above. The key argument is how far have educators put that into operation within the learning environment in Tanzania? In the pages that follow, this paper will discuss this point and provide evidence from the case study data findings.

As already noted above, how to learn new information and skills remains a challenge and the integration of ICH elements focuses at the implementation level; hence, looking for ways of adding significant value to education. Previous studies related to learning experience relied heavily on Bloom's Taxonomy (1956) built on three types of learning. First, the cognitive domain based on mental skills (knowledge); second, the affective related to growth in feelings or emotional area (based on attitude), and the third, the psychomotor related to manual works or physical skills (Bloom, 1956, 6-10). Nevertheless, the learning domains have, on the other hand, not escaped criticism from various cognitive researchers, program developers and teachers of cognitive skills. Similarly, Dansereau (1985) offered a definition on an effective 'learning strategy' as 'a set of processes or steps that can facilitate the acquisition, storage, and /or utilization of information' In addition; Dansereau (1985) cautioned that the learning strategy may vary along with a number of fundamental dimensions (Dansereau, 1985, 210). Likewise, Harmon and Jones (2005) labeled this as 'learning styles' and put them into two key folds namely 'sensory learning' and 'hemispheric learning'. These categories reflected different ways in which persons prefer to learn or acquire new information and skills for their future lives (Harmon and Jones, 2005, 96-97).

A recent study by Tomlinson (2009) found, 'learning profile' to be an umbrella term, containing several categories that have a positive influence in student learning. Hence, four categories among the many could intersect, and play a vital role in the whole learning process. These include gender, culture, learning style and intelligence preference (Tomlinson, 2009, 28-34). One question that needs to be asked, however, is whether many parents of today due to globalization and social threats, do acquire or practice

(e.g. folk-tales, folk-songs, riddles, music expressions, folk-poetry, folk-dances or traditional craftsmanship) within their cultural and social environment, and, are they in a better position of transmitting the knowledge and skills to their children and young people in Tanzania or within the developing world?

### ICH as means of promoting creative jobs for youth

Development in the field of cultural and creative industries has led to a renewed interest in 'creativity'. Hence, creativity is found in all societies and denotes 'the formulation of new ideas and the application of these ideas to produce new works of art and cultural products, functional creations, scientific inventions and technological inventions' (United Nations, 2008, 3). Similarly, ICH as part and parcel of creative industries has the potential to articulate people's identity, values, create employment, economic growth and alleviate poverty (Barrowclough and Kozul-Wright, 2008, 3-5; United Nations, 2008, 3-4; World Bank, 1998).

However, the prevailing rapid development has a serious effect on most local communities within Tanzania as a developing country. The key point is that many young people are confused about their identity, values and norms because of not having adequate exposure to elders as their society's repository of ICH capital. Thus, deliberate and extra effort is essential in transmitting traditional knowledge and skills as tools and as the basis for their 'intellectual capital' and sustainable creative jobs promotion (United Nations, 2008, 3-7).

The very idea of lack of exposure of the young people to ICH elements has also raised a number of questions, such as, knowing the essence and value chain embedded within the folkloric artifacts. Furthermore, experts have missed knowing what and how the contribution of ICH to economic development is and determine employment opportunities within the cultural and creative industries. In that regard, the preservation, promotion and financial support of ICH productions, services and activities in Tanzania like in many developing countries, remain a challenge in their broad range (United Nations, 2008, 177-178; World Bank, 1998).

On the other hand, a large and growing body of literature shows, in the new creative economy, many elements of traditional culture have contributed to the creation of employment opportunities and development of modern creative industries in various fields. These include but are not limited to video gaming, design and cinema. Similarly, this extends to businesses such as in choreography, dancing, drawing, weaving and doll-making. In the same way, cultural aspects of tourism through festivals, dance and performances, and visits to museums, monuments, archaeological and other local historical sites make a contribution (Cunningham et al., 2008, 67; Ministry of National Resources and Tourism, 1999, 11; United Nations, 2008, 177-178).

To illustrate this, Table 1 provides a comprehensive approach to measuring the impact of creative activity and determining employment based impact within the creative workforce in regard to the Centre of Excellence for Creative Industries & Innovation (CCI) definition of creative workforce (Higgs, Cunningham and Pagan, 2007, 5).

Table 1. The axes of Creative Trident methodology for determining employment within the Creative Workforce.

	Creative Industries	Employed in Other Industries	
Creative Occupations	Specialists Creatives	Embedded Creatives	Total employed in specific Creative Occupations
Other Occupations Employed	Management and Support Staff		
	Total employment within businesses In the specific Creative Industries		The total employment In the creative Workforce

Source: ARC Centre of Excellence for Creative Industries & Innovation: Australia.

As Higgs, Cunningham and Pagan (2007) elaborate, this Creative Trident approach is the sum of:

Creative occupations within the core creative industries (Specialists), plus those in creative occupations in employment in other industries (Embedded), plus the noncreative management and support occupations that are employed within the specific creative industries (Support) (Higgs, Cunningham and Pagan, 2007, 5).

To this end, the idea of integrating ICH elements and learning strategy as a means of promoting creative jobs for young people seem to be valid in considering the employment problem. However, this

paper argues that it (and Tanzanian education and cultural policy objectives related to ICH) will turn out to be more beneficial to young people and the nation than persisting with an unrealistic trend.

## Method

This paper presents the preliminary results of a research project which investigated how the two Ministries of Culture and Education might work together to better support Tanzania's young people to secure, and engage successfully in creative jobs. This being a social research, as Denscombe (2007) states, 'the social researcher is faced with a variety of options and alternatives and has to make decisions about which to choose' (Denscombe, 2007, 3). In that regard, the researcher chose interview, focus groups and questionnaires because using mixed methods aids in verifying the validity of the data, and in the exploration of the relevant literature and practice in relation to the case as a whole (Yin, 1994, 33). The researcher conducted the study in Dar-Es-Salaam, Bagamoyo, Dodoma, Lindi and Morogoro during the period July to October, 2012.

## Interviews

The study carefully selected 19 participants from government officials, policy makers, law enforcers, planners, and decision-makers within government ministries, institutions, departments, and related agencies within the arts and cultural sector. In their capacity, these participants were likely to be able to contribute well to a discussion on the issues concerned with this research. Each interview lasted for one and a half hours, and the entire exercise ran from 7<sup>th</sup> August to 17<sup>th</sup> September, 2012.

## Focus groups

The project invited people who had (i) firsthand experience within the arts and cultural sector, and (ii) knowledge, understanding as activists, and experts within the cultural and education sectors. Thus, in their capacity, they were likely to be able to contribute valuable insights on the issues related to the betterment of young people's future in Tanzania. The whole exercise involved five groups, each comprised between 6 to 9 participants. Each session took one and a half hours to two hours duration, and each involved an audio and video recording.

## Questionnaires

The researcher distributed questionnaires to creative industries stakeholders aged between 15 to 35 years. The project invited these cultural actors as people who are closely familiar with challenges, and opportunities within the arts and cultural sector. They could confidently comment on how best to promote the creative works to young people in Tanzania.

## Results and discussion

### Understanding the value of art education and ICH

In giving views on the need for the inclusion of arts education so as to add value to the educational opportunities, respondents reflected on traditional and creative expressions. Hence, many related this to the informal/traditional education strategy, - where-by elders transmitted the values, knowledge and skills, and methods of obtaining daily needs of Tanzanian society from one generation to the next through oral tradition and practice. This included arts and craft work, folk-tales, folk music, and art of the theatre as part of the cultural heritage. The following quotes from interviewees who took part in the face-to-face interviews, illustrate this:

After my graduation at Butimba Teachers College as a teacher with specialization in performing arts, I started teaching at Kigogo Primary School in Dar-Es-Salaam. There, unfortunately, I could not teach the subjects of my specialty. In compensation, I decided to introduce a traditional arts group as an extracurricular activity for interested pupils. Amazingly, most pupils joined the group, and after six months, there were no truancy cases, and most of the group members performed well in classes too. Hence, their thinking and learning ability of new information was higher in academics – Michael (Field Notes: 7/08/2012).

A change in our education system is a crucial agenda. It has to include arts education. I suggest a rural body to be established. The body has to create awareness, and help in preserving and coordinating the use of ICH elements that could add value to the formal education. In so doing, the focus should be that of nurturing creativity and preserving knowledge and skills embodied in elders. Having that in mind, VETA Mtwara centre, has

introduced fundamental creative courses in wood curving/sculpture, decorating, tailoring and fashion designing- Enock (Field Notes: 12/9/2012).

### On the integration of art education and ICH elements

The majority of participants felt that the integration of traditional artistic elements, knowledge and skills found within the 126 ethnic communities in Tanzania and the learning strategy could be of immense help in promoting creative jobs, and thus, enabling young people to become self-employed or to find jobs in both public and private sectors. As illustrated in Table 2 below, most respondents of the questionnaire schedule were the ones who earn their living through artistic jobs as full time or part time workers. In addition, the following comments describe the real situation:

A change of mindset to the entire society is compulsory so as to rescue the young generation; thus, be exposed to and value the traditional artistic expressions and skills (Respondent 39: a 48 year old man/traditional dancer/ performing artist).

The government through Ministry of Education must give priority to traditional art education in schools. This has to start from primary school up to secondary school level so as to nurture creativity within young people; thus, make them get self-employed after their studies. Hopefully, this will reduce the employment problem and the influx of young people into town and cities in search of jobs (R 57: a 20 year old male/ working in the film industry).

Table 2. Frequency table for wage range (interval) data.

Wage	class	Frequency		
		Full time	Part time	Total
Below Tshs.100,000	A	25	7	32
100,001 to 300,000	B	8	2	10
300,001 to 600,000	C	3	2	5
600,001 to 1,000,000	D	1	1	2
Above 1,000,000	E	8	-	8

The Table above presents the monthly income results of the 57 respondents working within the creative industries. The results show that 45 persons earn their living as full time workers. This is 78.9 percent of all respondents working within the cultural and creative sector.

Table 3. ICH and learning.

Category	Respondent's quotation from the data
Heredity or transmission of ICH elements	1. 'I mean, teaching and learning should adopt traditional education approach of oral and practice, and art education should be in schools, social centers, and in local villages for all sundry. As done in olden days! people played drums , danced celebrated some village events or after harvest' 2. 'I say, let researchers and cultural experts rescue our traditional heritage through writing books, publications, and use of electronic and digital media to educate and stimulate young people'
ICH and technology	1. 'I think through competitions that integrate ICH elements among young people and award the best will stimulate creativity and innovation' 2. 'In fact, vocational training incorporating traditional elements e.g. in architecture, fashion designing or making indigenous musical instruments will help'
ICH repository establishment	1. 'I don't know(about) if local villages or local governments could manage establishing libraries, museums, documentation, archives or resource centers, without any support and mobilization ?!' 2. 'Equally important, networking within Tanzania, Africa or developing countries will help'

### Usefulness of the integration of ICH and learning strategy

Table 3 illustrates some categories with respondents' quotations from the data on ICH and learning strategy. The majority of the participants were within the five focus group sessions held in Dar-Es-Salaam, Mwanza, Dodoma, Lindi and Mwanza sample areas when giving their opinions on the question, 'What are your feelings, ratings and comments on the current education system in relation to the growing number of primary and secondary school leavers drifting from rural to urban areas in search of jobs in Tanzania?'. Most participants expressed the key challenges as being poor teaching and learning styles in schools. Participants often said that they do not allow learners to apply what they have learnt in the real world. The following comments illustrate participants' views well:

TUSEME PROJECT (by the University of Dar-Es-salaam) based on the promotion of 'theatre for children' is a good example of facilitating learning to young people. Hence, almost 85 per-cent of the children involved in this had joined university studies – Agnes (Focus group: 2<sup>nd</sup> August, 2012).

I think the value of arts and culture is not well known to policy makers, and that's why arts education is not a priority aspect in our education system- Mwinshehe (Field notes: 1<sup>st</sup> October, 2012).

In our artistic works, we do educate people in both rural and urban areas through theatre for de-velopment method. We employ a Participatory Theatre Approach and Radio Soap Opera. The-se styles have proved highly effective means of making people learn new information easily while being entertained- Zainabu (Focus group: 17<sup>th</sup> October, 2012).

In general, the results, as shown in Table 4 (from focus groups within a 'social constructionist framework' employing content analysis), indicate that 'respondents are advanced, elaborated and negotiated in this social' phenomenon (Wilkinson, 2008, 197-199).

Table 4. Theory construct: ICH and employment.

Category	Example: representatives quotations from the data
ICH and work identity	<ol style="list-style-type: none"> <li>1. 'I wonder how most young people playing 'Bongo Flava music', even within the film industry, have ignored our identity in their works!'</li> <li>2. 'I say Tanzania must deliberately take initiatives in acknowledging and establishing mechanisms of preserving 'Tingatinga Paintings' (established by the late Edward Saidi Tingatinga in 1968). This is a national brand/treasure and identity! I suggest young artists in schools should be taught the skills of Tingatinga style of painting'</li> <li>3. 'Special songs composed in the olden good days and taught in schools, National Service camps and the public (for patriotism/national values/ identity/motivating workers) are never heard nowadays!'</li> </ol>
Employment opportunities	<ol style="list-style-type: none"> <li>1. 'Here in Mwanza, we have Bujora village museums that attracts tourists and has contributed to creation of employment, I mean this is one of the opportunities'</li> <li>2. 'sometimes, I think Festival like the one we have here in Mtwara (Makuya Traditional Festival) can create employment, the government must support such initiatives'</li> <li>3. 'Cultural heritage sites most are neglected, they can help in employment creation, or as educational resources and tourism!'</li> </ol>
Embedded creativity	<ol style="list-style-type: none"> <li>1. 'Thanks, we earn our living as artists through tradition dance performances, and sometimes as educators on HIV/AIDs and environmental conservation issues in our local areas when sponsored'</li> <li>2. 'I mean far from doing art works, I also work as a fashion designer serving women in small scale industries doing art work on their 'Batik' fabrics'</li> <li>3. 'I am a musician but also a Music teacher at 'Music Empowerment Trust' organization based in Dar-Es-salaam at National Arts Council premises. I also have skills in making various indigenous musical instruments'</li> </ol>

## Conclusion and recommendations

This paper has discussed how the integration of ICH and learning strategy could assist in promoting creative jobs for young people in Tanzania. However, the analysis has revealed that the biggest challenge is how to integrate new information or knowledge and skills relevant to their artistic practice, and creative jobs in the context of global developments (Bamford et al., 2009, 21; Hearn and Rooney, 2008, 1; Segal, Chipman and Robert, 1985, 1). In that regard, aspects needed include, recognition of learning styles, more infrastructures, and investing in work-based learning, curriculum change and teaching methods including refresher courses for teachers. Returning to the thematic area of this paper, it is now possible to state that there is a need to create various ethnic and national data-bases for works of folklore and ICH in Tanzania, as these could benefit learners, teachers and researchers to access the repository, and thus, stimulate human, social and artistic creations, innovation and learning styles. In short, this will ensure the protection of cultural expressions, provide access to learners and create real value in educational opportunities for inclusion of ICH elements. Consequently, this would promote creative jobs to youth and provide a new understanding of cultural policy and educational aims and goals in Tanzania.

## References

- Bamford, A., UNESCO, Australia Council for the Arts & IFACCA (2009) *The Wow Factor: Global research compendium on the impact of the arts in education* (2<sup>nd</sup> edition). Berlin: Waxmann.
- Barrowclough, D. & Kozul-Wright, Z. (2008) *Creative Industries and developing countries: Voice, choice and economic growth* (ed.) London: Routledge Taylor & Francis Group.

- Bentley, T. & Kimberly, S. (1999) *The creative age: knowledge and skills for the new economy*. London: Demos.
- Bloom, B. S. (1956) *Taxonomy of Education Objectives Handbook 1: The Cognitive Domain*. New York: Longman.
- Boswell, R. (2008) *Challenges to identifying and managing intangible cultural heritage in Mauritius, Zanzibar and Seychelles*. Dakar Senegal: CODESRIA Monograph Series.
- Canclini, N. G. (1992) *'Cultural reconversion' On edge: The crisis of contemporary Latin America culture*. (ed.) Yudice, Franco & Flores, USA: University of Minnesota Press.
- Cunningham, S. D., Ryan, M. D., Keane, M. & Diego, O. (2008) *Creative Industries and Developing Countries: Voice, choice and economic growth*. Edited by D. Barrowclough & Z. Kozul-Wright. London: Routledge Taylor & Francis Group.
- Dansereau, D. F. 1985, *In Thinking and Learning Skills Volume 1: Relating Instruction to Research*. Edited by J. W. Segal, S. S. Chipman & G. Robert. New Jersey, USA: Lawrence Erlbaum Associates Inc.. [Accessed 5 January 2013].
- Denscombe, M. (2007) *The good research guide: for small-scale social research projects*. 3<sup>rd</sup> edition. Meidenhead: Open University Press.
- Dewhurst, C. (2008) *"Arts and culture entrepreneurship. In the engaged scholar magazine volume 3 summer 2008"*. USA: Michigan State University.
- Florida, R. L. (2002) *The rise of the creative class: and how it's transforming work, leisure community and everyday life*. 1<sup>st</sup> edition. New York: Basic Books.
- Harmon, D. A. & Jones, T. S. (2005) *Contemporary education issues, Elementary Education: A Reference Handbook*. St Barbara California USA: Library Congress Cataloging -in Publication Data. Available at <http://www.abc-clio.com> [Accessed 5 January 2013].
- Hartley, J. (2005) *Creative industries*. Malden, MA: Blackwell.
- Hearn, G. & Rooney, D. (2008) Knowledge Policy: Challenges for the 21<sup>st</sup> Century. *Reference and Research Book News*, 23 (3).
- Higgs, P. L., Cunningham, S. D. & Pagan, J. D. (2007) *"Australia's creative economy: Definitions of the segments and sectors report (2007)*. ARC Centre of Excellence for Creative Industries & Innovation, Brisbane, edited: CCI. Available at <http://eprints.qut.edu.au/archive/0008242/> [Accessed 7 February 2013].
- Kleis, J et al. (1993) "What is non-formal education?" Philosophical article, The Pennsylvania State University. *Journal of Agricultural Education*, Winter 1993, pp. 72-75. Available at [https://ronna-afghan.harmonieweb.org/education/Shared%20Documents/Formal%20vs%20Nonformal%20Ed\\_Article\\_%20Penn%20State%20University,%20date%20unknown%29.pdf](https://ronna-afghan.harmonieweb.org/education/Shared%20Documents/Formal%20vs%20Nonformal%20Ed_Article_%20Penn%20State%20University,%20date%20unknown%29.pdf) [Accessed 2 February 2013].
- McWilliam, E. (2008) *The creative workforce: How to launch Young People into High-Flying Futures*. UNSW Press. Australia: NSW.
- Ministry of National Culture and Youth (1962) *Culture revolution in Tanzania*, edited by Ministry of National Culture and Youth. Dar-Es-Salaam: Print-Pak Tanzania.
- Ministry of National Resources and Tourism (1999) *"National tourism policy"*. edited by Ministry of National Tourism, Dar-Es-Salaam: Tanzania: Government Printer.
- MOEC (1995) *Education and training policy*. Dar-Es-Salaam: Ministry of Education and Culture Press.
- Nyerere, J. K. (1962) President Nyerere's speech on the work of the created new Ministry of National Culture and Youth on 10<sup>th</sup> December, 1962. In *Cultural revolution in Tanzania*, edited by Ministry of National Culture and Youth. Dar-Es-Salaam: Print-Pak Tanzania.
- Pink, D. H. (2005) *A whole new mind: Moving from the information age to the conceptual age*. Australia: Allen & Unwin.
- Segal, J. W. Chipman, S. F. & Robert, G. (1985) *Thinking and Learning Skills volume 1: Relating Instruction to Research* (edited). Vol.1. New Jersey, USA: Lawrence Erlbaum Associates Inc.. [Accessed 5 January 2013].
- Tomlinson, C. A. (2009) "Learning Profiles & Achievement". *School Administrator*, 66 (2), pp.28-34, [Accessed 9 January 2013].
- UNESCO (2003a) *Convention for the safeguarding of the intangible cultural heritage: Ratification list*. Available at <http://www.unesco.org/eri/la/convention.asp?KO=17116&language=E&order=alpha> [Accessed 1 February 2013].
- UNESCO (2003b) *"Text of the convention for the safeguarding of intangible cultural heritage"*. Available at <http://www.unesco.org/culture/ich/index.php?lg=en&pg=00006> [Accessed 1 February 2013].
- UNESCO (2012) *Education for All Global Monitoring Report: Youth and Skills Putting Education to Work* (2<sup>nd</sup> edition)". edited by UNESCO. Paris: UNESCO.
- United Nations (2008) *Creative economy report: the challenge of assessing the creative economy towards informed-policy making*. New York: United Nations,
- Wilkinson, A. (2008) *In qualitative psychology: A practical guide to research methods*. edited by J. A. Smith. London: Sage Publications Ltd..
- WIPO (2003) *Consolidated analysis of the legal protection of traditional cultural expressions/expressions of folklore*. Publication n° 785 (E). Geneva: WIPO.

World Bank (1998) "Cultural Heritage and Development Action Network", In *Working Group Meeting*, 26-27. Washington D.C. [edited]. Available at <http://icom.museum/bank.html> [Accessed 17 September 2009].

Yin, R. K. (1994) *Case study research: design and methods*. Vol.5. Thousand Oaks, CA: Sage.

### **Acknowledgements**

The research data on which this article is based is part of my PhD thesis at Queensland University of Technology (QUT), Brisbane, Australia. I would like to thank Professor Greg Hearn of Queensland University of Technology (QUT), Creative Industries Faculty for his helpful comments.





ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable Development

Vol. 4, No. 1, 2015, pp. 159-171

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## Sustainable conservation and the inherent qualities of the traditional community in Taos Pueblo in the United States of America

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The main features of the conservation project taking place at Taos Pueblo seem to agree with the concept usually referred to as "sustainable conservation". Despite the recognition of traditional living communities, such as Taos Pueblo, as sustainable communities, some of the heritage values that Taos Pueblo enjoys might be argued to contradict with the general principles of sustainability. The main aim of this study was to investigate the potential conflicts that might occur as a result of adopting the concept of sustainable conservation as an approach to the conservation of Taos Pueblo. The previous objective was approached by evaluating the conformity of the heritage values that Taos Pueblo enjoys to the principles of sustainability. The analysis of the property's values was approached by means of a proposed methodology that incorporated sustainability principles as indicators of the relevant values. Subsequently, the findings of the analysis were examined against the justifications of the property's Outstanding Universal Value, which were officially adopted by section five of the property's nomination document that is entitled "Justification for Inclusion on the World Heritage List". The findings indicated that some aspects of the property's values; particularly those related to its traditional governance, religious and social systems; might be argued to contradict with the principles of sustainability that are concerned with social equity and empowering women. The findings suggest that such controversial aspects should be understood to reflect the local community's struggle to sustain their unique culture and identity, which are rooted in these aspects. These efforts might be regarded to reflect the conformity of the traditional community's qualities to another sustainability principle that is concerned with strengthening the local identity of indigenous peoples. The findings suggest that sustainable conservation projects of traditional living communities should respect these communities' unique identity and inherent qualities.

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**Keywords:** urban conservation, sustainable conservation, indigenous communities.

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### Introduction

The conservation of traditional living communities' heritage seems to confront many challenges. These challenges are associated with these communities' extremely significant intangible heritage, in comparison with their tangible heritage, and their reluctance to acknowledge that their built environment has turned into heritage since they are living communities. Taos Pueblo in the United States of America is an example of such traditional living communities.

The main features of the conservation project at Taos Pueblo seem to agree with the concept referred to as sustainable conservation. The aim of sustainable conservation seems to be adapting heritage resources to sustainability standards while preserving them, which might require the installation of modern equipment inside historic buildings that might detract from their historic character (Tyler and Dilcher, 2010). Sustainability standards might also contradict with the traditional living communities' socio-cultural and governance systems. The key features of the conservation project at Taos Pueblo seem to involve the community-based approach to conservation, the dependence on recyclable and local materials,

the dependence on energy efficient construction technologies, training the local community on traditional construction and conservation skills, and the creation of jobs. All these features seem to agree with the principles of sustainable conservation.

Although the main features of the conservation project at Taos Pueblo agree with the concept of sustainable conservation; some of the inherent traditional qualities of the local community; particularly the traditional socio-cultural, governance, and religious systems; might be argued to contradict with the general principles of sustainability. These principles are largely concerned with social equity and democratic decision making processes. Nevertheless, other sustainability principles, particularly those concerned with strengthening the local identity of traditional living communities, might be adopted to refute these arguments.

## **General backgrounds**

### **The historic origins and the key principles of sustainability**

The Brundtland report's definition of sustainable development states that "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Rodwell, 2007: 56), while the definition of the concept of sustainability per se states that "sustainability is about prolonging the useful life of a building in order to contribute to a saving of energy, money and materials" (Rodwell, 2007: 57). The publication of the novel entitled "Silent Spring" in 1962 can be considered one of the earliest stages in the historic development of the principles of sustainable development (Rodwell, 2007). The other significant historic stages might involve the Earth Day in 1970, the Club of Rome publication of the report entitled "Limits to Growth" in 1972 (Steele, 1997), the oil crisis in 1973 (Rodwell, 2007), the publications of the International Union for the Conservation of Nature in 1980, the Brandt Commission first meeting in Germany in 1978 and the publication of its report entitled "North-South: A Program for Survival" in 1980, and the publication of the Brundtland Commission report entitled "Our Common Future" in 1987 (Steele, 1997). One of the most recent and significant stages is the Rio de Janeiro Earth Summit held in 1992 and its proceedings entitled Agenda 21. Agenda 21, which has involved 120 program outlines and 1000 proposals, has been concerned with six subject areas, which are (1) the quality of life on earth, (2) efficient use of the earth's materials, (3) the protection of our global commons, (4) the management of human settlements, (5) chemicals and the management of waste, and (6) sustainable economic growth. The document has been interested in supporting the most vulnerable social groups; particularly women, indigenous peoples and minorities (Steele, 1997).

Agenda 21's second subject area recommends the dependence on renewable sources of energy, granting further political powers to local authorities, and the participation of local communities in all decision-making processes. The fourth subject area recommends using local and traditional building materials, using traditional building techniques and self-help systems, adopting energy efficient designs, and the dependence on labor-intensive construction techniques (Steele, 1997). Agenda 21 recommends supporting democracy and the openness of any decision-making process. The programs adopted by Agenda 21 recommend eradicating poverty by generating employment opportunities; improving living conditions of women, minorities and indigenous peoples; and adopting community-based approaches that provide women a full participation to any decision-making process and respect the cultural integrity and rights of indigenous peoples. Agenda 21 also recommends adopting traditional agricultural and irrigation techniques, supporting the involvement of local communities in the conservation of their historic buildings, and providing equal employment opportunities for women (Sitarz, 1993).

Another relevant international joint framework has been developed to help developing countries in addressing urban environment challenges. This framework incorporates a number of international organizations, one of which is the United Nations Development Programme (Sitarz, 1993). The main concerns of the previous programme involve building democratic societies and empowering women (United Nations Development Programme, 2013). The United Nations Millennium Declaration is another relevant document, as indicated by Article 22 in the declaration. Article 20 in the declaration indicates the determination of the United Nations to promote the principles of gender equality and the empowerment of women in order to achieve a sustainable development. The declaration adopts a number of human values; which include equality between men and women, respect for nature, and freedom represented by the adoption of democratic and participatory governance systems (United Nations, 2000).

### **The concept of sustainable conservation**

The concept of sustainable conservation can be argued to have evolved as a response to the growing influences of the concept of sustainable development on all aspects of life. Adopting the concept of sustainable conservation seems to imply adopting the objectives of sustainable development along with the objectives of value-centered conservation. The objectives of the sustainable conservation project at the Pere Marquette Railroad Depot in Michigan have involved both the objectives of sustainability and those of conservation. The conservation strategy adopted in this project involved three different approaches to deal with the original fabrics. The first approach focused on matching the original elements regardless of their sustainable performance. The second approach focused on complementing the original

elements using similar elements that were more sustainable. Finally, the third approach focused on selecting totally new materials that enjoy high sustainable qualities. The first approach was adopted for the conservation of the most iconic historic features. In the new internal spaces, the conservation strategy focused largely on using sustainable materials (Tyler and Dilcher, 2010).

Adopting the concept of sustainable conservation might also imply the provision of income-generating new functions to disused heritage resources that guarantee their future and sustainable maintenance, the contribution of the preserved heritage resource to the regional growth, the contribution of the conservation project to the regional cohesion, the adoption of a multi-problem-oriented approach, the increase in the level of knowledge, the strengthening of the local identity, the strengthening of democracy, the creation of new jobs, the rehabilitation of existing heritage resources instead of the rebuilding of these resources, and the usage of environment-friendly materials and renewable sources of energy (Gustafsson and Rosvall, 2008). Sustainable conservation might also mean the conformity of the conservation works to sustainability principles. These principles seem to involve the community-based approach to conservation, the participation of the local community to the conservation works, the dependence on trained nongovernmental organizations, the flexibility of the conservation project and its ability in meeting the changing needs of the local community, and the recognition of the revitalization of the local community as the first priority against the other secondary priorities that should involve looking after visitors' needs (Haney, 2003).

The conformity of conservation works to sustainability principles seems to indicate their representation of the concept of sustainable conservation. These sustainability principles involve the adoption of a minimalist socioeconomic approach to conservation, the connection of people with existing employment opportunities, the training of the local community in traditional arts and crafts, the adoption of low-cost and low-tech technical solutions, the dependence on traditional materials and methods, and the dependence on the revolving-funds economic concept that guarantees the sustainability of the conservation works on the long run (Siravo, 2003). The relevant sustainability principles also involve the generation of material and nonmaterial benefits, the intergenerational equity that implies the long-term nurturing of resources instead of the short-term exploitation of resources for quick benefits, and the reversibility of any changes or what might be described as a precautionary principle (Throsby, 2003).

### **Introduction to the case study, Taos Pueblo**

Taos Pueblo, the case study of this research, is located to the north of New Mexico in the United States of America. The Pueblo of Taos is one of 19 living Pueblo communities located along the Rio Grande River in New Mexico. Those 19 Pueblos are Acoma Pueblo, Cochiti Pueblo, Isleta Pueblo, Jemez Pueblo, Laguna Pueblo, Nambe Pueblo, Ohkay Owingeh Pueblo, Picuris Pueblo, Pojoaque Pueblo, Sandia Pueblo, San Felipe Pueblo, San Ildefonso Pueblo, Santa Ana Pueblo, Santa Clara Pueblo, Santo Domingo Pueblo, Taos Pueblo, Tesuque Pueblo, Zia Pueblo, and Zuni Pueblo (Indian Pueblo Cultural Center, 2007). Taos Pueblo is a sovereign nation that has a federally-recognized tribal government (United States Department of the Interior, Bureau of Indian Affairs, 2012).

The property incorporates two residential areas, one to the north, which is called "the north side Pueblo"; and the other one, "the south side Pueblo", is located to the south of the property. The two residential areas are separated by "the Red Willow Creek". The property incorporates other elements, such as the Mission of St. Jerome, the ruins of St. Jerome Church, and a group of six kivas. The kivas are under-ground ceremonial chambers. The property still retains its old walls.

Taos Pueblo has been listed on the American National Register of Historic Places Inventory in 1987 (United States Department of the Interior, National Park Service, 1987). The property has also been listed as a National Historic Landmark since 1960 (United States Department of the Interior, National Park Service, n.d.). Taos Pueblo has been inscribed on the World Heritage List in 1992 (UNESCO World Heritage Centre, 2013).

### **The preservation project in Taos Pueblo**

In 2009, the governor of Taos Pueblo applied for the Department of the Interior's financial support for the conservation of the property. The tribal government's efforts led to the achievement of a \$500000 American Recovery and Reinvestment Act Grant from the U.S. Department of the Interior, which covered the costs of the first phase of the conservation project. The first phase involved the establishment of the training center, which is located next to the Red Willow Education Center (Fig.1). The first phase was planned to involve the restoration of 120-150 houses in Taos Pueblo, the training of the local people in traditional construction and conservation techniques, the carrying out of a detailed assessment of the structures in the village, the development of architectural and working plans, and the establishment of a cultural center and tribal archives. The second phase was financed by a grant from the World Monuments Fund, who listed the property on their watch list of 2010 because of its endangered nature (Livingston, 2010). The previous fund has been used to restore 11 houses (Fig. 2). By the time when the project ends, 21 adobe houses should have been restored (Taos Pueblo Preservation Program, n.d.). The previous fund has also covered the costs of a detailed laser scanning of the property, which has been carried out by CyArk consultancy in 2010 (World Monuments Fund, 2013). Taos Pueblo has achieved another fund;

which is the Rural Innovation Fund granted by the U.S. Department of Housing and Urban Development, HUD; that is expected to cover the costs of the rehabilitation of 52 traditional multi-use spaces. The main aim of the HUD grants is to build sustainable communities (U. S. Department of Housing and Urban Development, 2011).



Figure 1. The training center of the preservation project at Taos Pueblo.



Figure 2. One of the buildings that have been preserved through the World Monuments Fund project.

The main features of the conservation project in Taos Pueblo seem to involve the community-based approach to conservation, the training of the local community in traditional construction and conservation techniques, and the establishment of partnerships with governmental and nongovernmental entities, such as the Native American Housing Consultants and New Mexico Tourism (Livingston, 2010). These features also involve the creation of jobs; the usage of traditional building materials, such as earth; and the dependence on traditional construction techniques and renewable energy sources. The project has also aimed at preserving the traditional way of life of the local community and at sustaining their cultural

traditions (World Monuments Fund, 2013). The previous features seem to indicate the agreement of the project with the principles of sustainability.

### **The aim and the method**

The main aim of the study was to investigate the potential conflicts that might occur when adopting the concept of sustainable conservation in the case of traditional living communities. The study also aimed at analyzing the agreement and contradiction of the heritage values of Taos Pueblo, as an example of traditional living communities, with the principles of sustainability. To achieve the previous aims, the values of Taos Pueblo were identified using a developed version of Feilden's typology of values (Feilden, 2003). Feilden's typology was developed to incorporate sustainability qualities as indicators of heritage values. The values whose indicators were developed in order to incorporate sustainability qualities were the architectural value, the townscape value, the landscape and ecological values, the functional value, the economic value, the social value, and the political value. For instance, the sustainability indicators of the architectural value involved the property's efficient use of energy, and the construction using local materials and traditional construction techniques (Steele, 1997). The sustainability indicators of the townscape value included the dependence on fuel efficient transportation means (Steele, 1997), the provision of walkable streets, and the reduction of transportation demands (U.S. Green Building Council, 2011). The sustainability indicators of the functional value included the flexibility of the building's design, while those of the economic value included the dependence on localized food production systems (U.S. Green Building Council, 2011).

In order to identify the values that enjoy an outstanding universal significance, the level of significance of each value was evaluated against four criteria. These four criteria are the exceptional testimony of the value to a civilization, which is living or which has disappeared, and its culture; the exceptional representation of the value of a traditional settlement, its culture and its interaction with the environment; the interchange of the value on a geographical level or over a span of time (UNESCO, 2008); and the level at which the value is experienced and appreciated (Mason, 2002). Finally, the findings were examined against the justifications of the property's Outstanding Universal Value, which were officially adopted by the property's nomination document.

### **The findings**

#### **The values and significance of the property according to the nomination document's analysis**

To justify Taos Pueblo's Outstanding Universal Value, the property's nomination document has adopted two of the World Heritage Centre's criteria, which are criteria (iv) and (v) (UNESCO, 1987a). According to the World Heritage Convention's Operational Guidelines of 1987, criterion (iv) attributes the property's Outstanding Universal Value to its being an outstanding example of a type of building or architectural ensemble which illustrates a significant stage in history. While criterion (v) attributes the property's Outstanding Universal Value to its being an outstanding example of a traditional human settlement which is representative of a culture and which has become vulnerable under the impact of irreversible change (UNESCO, 1987b). In 2005, the Operational Guidelines' criterion (v) has been revised to involve the property's being an outstanding example of a human interaction with the environment as a justification of its Outstanding Universal Value (UNESCO, 2005). However, the property has been eventually inscribed on the World Heritage List based on criterion (iv) (UNESCO World Heritage Centre, 2013).

The property's nomination document has addressed some values, such as the architectural value, the social value, the cultural value, the religious value, and the economic value. The themes that have been adopted to justify the property's significance involved the adobe houses' traditional style and exceptional architectural qualities, the continuity of the property's architecture representing the evolving Pueblo's culture, the continuity of the property as a traditional living community, and the property's traditional cooperative agricultural system (UNESCO, 1987a). The justifications of the property's Outstanding Universal Value do not seem to have addressed its sustainability qualities as heritage values explicitly, since the concept of sustainability has not been matured yet at that time. Nonetheless, the arguments on the continuity of the property's inherent qualities might be considered as indicators of its sustainability qualities. The nomination document has also addressed other aspects that are relevant to the concept of sustainability to justify the property's Outstanding Universal Value. These aspects involve the property's adaptation to its arid and semi-arid climate, and its efficient interaction with its environment (UNESCO, 1987a).

#### **The analysis of the values that the property enjoys and their level of significance**

The analysis revealed that the property enjoys 13 values (Table 1), all of which are more likely to contribute to its outstanding universal significance (Table 2). These values involve, among other things, the religious value, the historic value, the age value, the architectural value, the townscape value, the landscape value, and the social value. The Outstanding Universal Value of the property seems to be attributed to the contribution of all the adopted criteria (Table 2). However, the most influential criteria

were found to be the first two criteria; which are the exceptional testimony of the value to a civilization, which is living or which has disappeared, and its culture; and the exceptional representation of the value of a traditional settlement, its culture and its interaction with the environment. Each of the previous criteria seemed to justify the international level of significance of 12 values. The fourth criterion, which is the level at which the values are appreciated, seemed to have contributed to the justification of the significance of 11 values; while the third criterion, which is concerned with the interchange of the values, seemed to have contributed to the justification of the significance of 10 values.

Table 1. The indicators of the values that Taos Pueblo enjoys.

The values	The indicators of the values
Spiritual/religious value	Some religious buildings in the property; such as the kivas, St. Jerome Mission, and the ruins of St. Jerome Church; are capable of stimulating the local community's religious feelings.
Historic value	The technological qualities of the adobe houses in the property and their age, which is said to extend to 1000 years (Spouce, 2012), indicate its historic value. The property is historically associated with significant events in the past, such as the Pueblo revolt that was planned by Popé in 1847 in Taos Pueblo (Wikipedia, 2013).
Age value	The property retains evidences of lack of integrity caused by weathering and time factors, such as the decaying areas in the adobe walls.
Aesthetic value	The exceptional visual qualities of the property, which are attributed to the beautiful forms of its adobe houses and its harmonious relationship with its beautiful surrounding natural environment, indicate its aesthetic value. The traditional dances and the kivas' religious rituals also contribute to the value.
Artistic value	The property's retention of artworks produced inside it, which are mainly pottery products, and the children art center indicate its artistic value. The property enjoys an artistic value because of its association with renowned native artists, such as Virginia Romero (Seth and Seth, 1988), and because of its being the subject of renowned artists, such as Ernest Leonard Blumenschein.
Architectural value	The delight of the buildings' design and their exceptional beauty and harmony with their surrounding natural environment indicate their architectural value. The firmness of the adobe buildings, as indicated by their survival for almost 1000 years (Spouce, 2012), contributes to the architectural value. The architectural value is indicated by the adaptability of the adobe houses to different uses. The exceptional sustainability qualities of the property, represented by its recyclable building material that is earth, also indicate its architectural value.
Townscape and urban values	The property's harmonious relationship and visual association with its surrounding natural environment indicate its townscape value. The material that contributes in establishing this harmonious relationship, which is earth, indicates this value. The townscape value is attributed to the property's exceptional inward and outward views into the surrounding mountains. The natural materials, out of which most of the landscape elements are made, such as the timber seats and drying racks, indicate the townscape value. The sustainability qualities of the townscape elements, represented by the property's layout that supports pedestrians' movement, indicate the townscape value of the property.
Landscape and ecological values	The natural qualities of the landscape elements in the property; such as the timber bridges, the river and the trees along it; indicate its landscape value. The property's traditional layout that maximizes the use of open spaces and its traditional water system, indicate the property's sustainability qualities and its exceptional landscape value.
Functional value	The functional value of the property is attributed to its being in use till present time. The adaptability of the property's buildings to alternative uses, which represents the sustainability qualities of the property, indicates its functional value.
Economic value	The property is capable of encouraging tourism and thus supporting the economic development of the local community. The equitable access to resources in the property might indicate its sustainability qualities and its economic value.
Social value	The function of the property as a venue for social activities; such as the dances that take place in the main plaza, the race, and the activities taking place inside the mission and the kivas; indicates its social value. The social value is indicated by the property's retention of its traditional social characteristics. The property's traditional social system characterized by its equitable access to resources and land ownership indicates its sustainability qualities and emphasizes its social value.
Educational value	The property's retention of a number of educational institutions; such as the children school, the art center, and the kivas; indicates its educational value. The property's ability to provide the young generation with knowledge about their culture and history indicates its educational value.
Political value	The political value is indicated by the ability of the property's surviving traditional political system in re-establishing its political identity. The value is indicated by the property's positive effect on the people's political behavior, which can be represented by the struggle to return the Blue Lake. The property's local and autonomous traditional political system indicates its sustainability qualities and its political value.

The following analysis explains how the level of significance of the architectural value was evaluated. The property was evaluated to enjoy an architectural value because of its efficient function; the delight, firmness and adaptability of its buildings; and because of the sustainable qualities of the property's buildings. The maximum potential level of significance of the previous indicators was evaluated to reach the international level, as well as the overall level of significance of the value.

The architectural value, as indicated by the property's efficient function, can be considered a testimony to a living civilization. The efficiency of the function of the buildings in the property is emphasized by the adaptability of those buildings to new uses, and their ability to absorb the continuous horizontal and vertical expansion and decline. The architectural value, as indicated by the delight of the property's buildings, can be considered to be experienced and appreciated on the international level. The exceptional beauty of the property and its natural surroundings is the reason why it has become an international tourism destination, and the reason why many artists settled around it, such as the Russian artist Nicholai Fechin.

The architectural value, as indicated by the firmness of the property's buildings, can be considered a testimony to a living civilization. The survival of the property for centuries, despite that it is constructed using earth, emphasizes the continuation of Taos Pueblo as a living civilization. The architectural value, as indicated by the adaptability of the property's buildings, can be considered to have been interchanged within an international level and over a span of time that goes back to the Spanish time. The ability of the property to absorb the changes in the functions of its buildings and the external influences indicates its adaptability. The property was able to absorb the new architectural elements introduced during the Spanish era, such as the external ovens (Bodine, 1977).

Finally, the architectural value, as indicated by the property's sustainable qualities, can be considered an exceptional representation of a traditional settlement and its interaction with the environment. The sustainable qualities of the property's architecture are indicated by the material used for the construction of the buildings in the property, which is earth. This building material indicates the property's exceptional interaction with its natural environment. The level of significance of the other values was evaluated using the same methodology.

The significance of the property might also be attributed to its intangible heritage, particularly its language. The language spoken at Taos Pueblo, which is known as the Taos language, has been listed on the UNESCO's list of endangered languages (UNESCO, 2010). The previous findings seem to indicate that the significance of the values that the property enjoys is largely attributed to its sustainability qualities, which are represented by its ability in interacting with its environment and by its survival while maintaining its unique socio-cultural and political characteristics.

Table 2. The level of significance of the heritage values that Taos Pueblo enjoys and the criteria that justify their level of significance.

The values	The level of significance	The relevant criteria *
Spiritual/religious value	International	(1), (2), (3)
Historic value	International	(1), (2), (3), (4)
Age value	International	(2), (4)
Aesthetic value	International	(1), (2), (3), (4)
Artistic value	International	(1), (2)
Architectural value	International	(1), (2), (3), (4)
Townscape and urban values	International	(1), (2), (4)
Landscape and ecological values	International	(1), (2), (3), (4)
Functional value	International	(1), (3), (4)
Economic value	International	(1), (2), (3), (4)
Social value	International	(1), (2), (3), (4)
Educational value	International	(1), (2), (3), (4)
Political value	International	(1), (2), (3), (4)

\* (1) The exceptional testimony of the value to a civilization, which is living or which has disappeared, and its culture

(2) The exceptional representation of the value of a traditional settlement, its culture and its interaction with the environment

(3) The interchange of the value, on a geographical level or over a span of time

(4) The stakeholders or the level at which the value is experienced and appreciated

### The values that conform to the principles of sustainability

Traditional living communities, such as Taos Pueblo, have always been recognized as sustainable communities (Sitarz, 1993), and as sources for sustainable ideas (Steele, 1997). The traditional building materials, such as adobe, that are used in these communities have always been considered to enjoy sustainable qualities (Carroon, 2010; Woolley, 2000). The findings seemed to support the previous arguments. Many of the values that Taos Pueblo enjoys seemed to conform to the principles of sustainability. The sustainability qualities of seven values were found to contribute to their level of significance that is more likely to reach the outstanding universal level. These values are the architectural

value, the townscape value, the landscape value, the functional value, the economic value, the social value and the political value.

The sustainability qualities of the architectural value might be attributed to the efficient use of energy and natural resources like water of the adobe buildings in Taos Pueblo (Duran, 2012). Inside Taos Pueblo, it is still prohibited to install electricity cables or water pipes (UNESCO, 1987a). The local community uses the river as its main source of water. The sustainability qualities of the architectural value are also attributed to the construction and conservation of the property using a traditional and a recyclable building material, which is earth, and to the construction of the adobe houses using a traditional and a clean technology. The flexibility of the design of the houses that tolerates the change of their uses also emphasizes these sustainability qualities (Fig. 3). The construction and conservation of the buildings using a labor-intensive and a self-helping system, along with the traditional management system of the work that does not depend on contractors, emphasize these sustainable qualities.



Figure 3. One of the adobe houses in Taos Pueblo that have been converted into gift shops, which indicate the property's adaptability to new uses and emphasize one of the aspects of its inherent sustainability qualities.

The sustainability qualities of the townscape value might be attributed to the property's layout that supports pedestrians' movement; maximizes the use of open spaces, such as the main plaza; and incorporates a number of walkable urban spaces. The sustainability qualities of the landscape value are attributed to the property's traditional water system (Fig. 4). The adaptability of the property's houses to alternative functions seems to indicate the sustainability qualities of its functional value. The sustainability qualities of the economic value might be attributed to the property's traditional production system, represented by its agricultural and irrigation systems, and its traditional work system. The traditional work system that was adopted in Taos Pueblo as an agricultural society, which was characterized by its duration from sun-rise to sun-set, is a very energy efficient and a very sustainable system because it is a natural-lighting-oriented system. However, at present time, the local community seems to have adopted the modern work system (Spouce, 2012). The sustainability qualities of the social value might be attributed to the society's equal access to land ownership. Finally, the sustainability qualities of the political value might be attributed to the property's traditional local and semi-autonomous political system.



Figure 4. The Red Willow Creek, which is the only source of water in the property since the installation of water pipes is totally prohibited.

### Controversial aspects

Some aspects of the values that Taos Pueblo enjoys might be argued to contradict with the general principles of sustainability. These aspects are associated with three values; which are the economic value, the political value and the religious value. Hunting, which has always been a common practice in many Native American tribes, seems to be the most controversial economic aspect. The most relevant example to the previous controversial aspect might be whale hunting practiced by the Makah tribe that is located in Washington State (Makah Cultural and Research Center, n.d.). When the Makah tribe resumed whale hunting in 1999 and hunted a large grey whale many environmental groups, such as the Sea Shepherd Conservation Society, bitterly opposed such hunting as an unsustainable practice. Grey whales were listed on the list of the most endangered species, yet in 1994 they have been delisted from this list. For Makah tribe, whale hunting is a tradition, the revival of which is very significant to emphasize their being a living culture. The International Whaling Commission has allowed Makah tribe to hunt a maximum of five whales annually (Gulliford, 2000). The controversy about whale hunting does not seem to be justified, since Native American tribes have always used traditional ways of hunting that are harmless to biodiversity. What should be considered an actual threat to biodiversity is the modern ways of hunting (Sitarz, 1993). Hunting in Taos Pueblo might be argued to represent an unsustainable practice. The main species that are hunted in Taos Pueblo are rabbits, deer and buffalo. Deer hunting in Taos Pueblo seems to have been considered a threat to biodiversity. It was argued that around 1880, deer hunting in Taos Pueblo caused the death of four thousand deer (Parsons, 1936: 19). The previous argument on the harmless effects of the traditional ways of hunting on biodiversity is relevant to Taos Pueblo where such traditional ways are adopted. The small size of traditional living communities, such as Taos Pueblo, in terms of the size of their population, should also be taken into consideration in such arguments.

The restrictions on women membership to the tribal council (Bodine, 1977) is another controversial aspect associated with the political value. Until present time, women are not allowed membership to the tribal council (Spouce, 2012). The theocratic government at Taos Pueblo and the limited opportunity for religious minorities to have a political representation in the government, which might be argued to constitute a discrimination against religious minorities, represent other controversial aspects associated with the political value. Bodine (1977) has indicated that in order for anyone to be elected to one of the four main governmental positions, he should have been initiated to the kivas religious system (Fig. 5). The initiation to the kivas is almost similar to baptism in churches in Christianity. Smith (1969) has cited a story that supports the previous argument about a young man in Taos Pueblo who has not been initiated to the kivas; consequently he has never been entitled to positions; such as the Governor, the Lieutenant Governor, the War Captain or the Lieutenant War Captain. The young man has never been entitled to the membership of the tribal council either.



Figure 5. One of the kivas in Taos Pueblo, which are not accessible to visitors.

The last controversial aspect is associated with the religious value. The controversy is associated with a historic instance that is referred to as the peyote controversy, which might be interpreted to represent religious intolerance. The peyote cult was introduced to Taos Pueblo in 1720. The affiliates of the peyote cult were prejudiced since the cult was growing fast and was feared to threaten the kivas religion. Some of the peyote cult affiliates were prosecuted, while others were dismissed from their kiva membership (Smith, 1969). Although it was a historic instance, the conflict with the peyote people reflected the then traditional community's intolerance towards other growing religions that were feared to threaten its cultural and religious distinctiveness.

### The discussion

The previous controversial aspects might be argued to contradict with some principles of sustainability, particularly those concerned with social equity and empowering women and minorities. However, the

previous controversial aspects should be interpreted in the context of another relevant sustainability principle, which is concerned with strengthening the local identity of traditional communities. Hunting, the theocracy of the tribal government, the limited-to-men tribal council, and the kivas traditional religion have become the major intangible characteristics of Taos Pueblo. Therefore, when the local community restricted the peyote cult it was actually protecting its traditional culture and identity. The previous argument applies to the other controversial aspects. The World Monuments Fund's preservation project at Taos Pueblo seems to have supported the local community's efforts to preserve their intangible culture and identity. The objectives of this project will be to preserve the structures in the property and the traditional way of life that makes the local community unique (World Monuments Fund, 2013). This traditional way of life should involve the local community's traditional governance, social and religious systems.

The ICOMOS Charter on the Built Vernacular Heritage seems to support the local community's efforts to safeguard their traditional culture and identity. The charter recommends that the local community's cultural identity should be respected (ICOMOS, 2011). There are other international documents and conventions that seem to support the local community's efforts to protect their identity, which are the "United Nations Declaration on the Rights of Indigenous Peoples" (United Nations, 2008) and the "Indigenous and Tribal Peoples Convention, 1989" (International Labour Organization, 1989). Article 34 in the United Nations declaration, which states that "Indigenous peoples have the right to promote, develop and maintain their institutional structures and their distinctive customs, spirituality, traditions, procedures, practices and, in the cases where they exist, juridical systems or customs, in accordance with international human rights standards" (United Nations, 2008: 12), seems to support such local community's efforts.

## Conclusions

The previous preview seems to indicate the significant contribution of Taos Pueblo's sustainability qualities and the criteria that are relevant to the concept of sustainability to the justification of its Outstanding Universal Value. These relevant criteria seem to involve the exceptional testimony of the property's values to a living civilization and the exceptional representation of these values of a traditional settlement and its interaction with the environment. The main features of the conservation project at Taos Pueblo seem to agree with the general principles of sustainable conservation. Nevertheless, some aspects of the property's values, such as hunting and the restrictions on women membership to the tribal council might be argued to contradict with the principles of sustainability.

Although some environmental groups accused tribal hunting as a threat to biodiversity, it seems that the real threat is the large scale hunting that uses modern technologies (Sitarz, 1993). The restrictions imposed on women's membership to the tribal council and the theocracy of the tribal government might be argued to contradict with the sustainability principles concerned with social equity and empowering women and minorities. However, these controversial aspects should be understood to represent the local community's struggle to protect their culture and identity. From this perspective, these controversial aspects should be regarded to agree with another sustainability principle concerned with strengthening the local identity of indigenous communities. Some international charters and conventions; such as the ICOMOS "Charter on the Built Vernacular Heritage", the "United Nations Declaration on the Rights of Indigenous Peoples", and the "Indigenous and Tribal Peoples Convention, 1989"; seem to support the local community's efforts to protect their traditional way of life.

The findings suggest that sustainable conservation projects of traditional living communities should respect these communities' unique culture and identity. Such projects should not focus on carrying out comprehensive changes to such communities to guarantee the conformity of all their inherent qualities to the principles of sustainability. Instead, these distinctive qualities should be considered to represent these communities' local identity that should be strengthened.

## References

- Bodine, J. J. (1977) *Taos Pueblo, a walk through time*. Santa Fe: Jene Lyon Publisher.
- Carroon, J. (2010) *Sustainable Preservation, Greening Existing Buildings*. New Jersey: John Wiley & Sons Inc..
- Duran, A. (2012) *The director of the preservation project and the training center at Taos Pueblo*. Interview with A. G. Abdel Tawab, 23 May 2012, the training center at Taos Pueblo, Taos Pueblo.
- Feilden, B. M. (2003) *Conservation of Historic Buildings*. Oxford: Architectural Press.
- Gulliford, A. (2000) *Sacred Objects and Sacred Places*. Boulder: the University Press of Colorado.
- Gustafsson, C. & Rosvall, J. (2008) The Halland Model and the Gothenburg Model: a quest toward integrated Sustainable Conservation. *City & Time*, 4 (1), pp.15-30.
- Haney, G. (2003) Castles and Community in Cape Coast, Ghana. In J. M. Teutonico and F. Matero (eds.) *Managing Change: Sustainable Approaches to the Conservation of the Built Environment, Proceedings International Symposium*, Philadelphia, 5-8 April 2001, Getty Publications, Los Angeles, pp. 117-126.

- ICOMOS (2011) *Charters and other doctrinal texts - International Council on Monuments and Sites*. Paris: ICOMOS International Secretariat. Available at <http://www.icomos.org/en/charters-and-texts> [Accessed 25 April 2012].
- Indian Pueblo Cultural Center (2007) *The 19 Pueblos of New Mexico*. Indian Albuquerque: Pueblo Cultural Center. Available at <http://www.indianpueblo.org/19pueblos/index.html> [Accessed 2 August 2013].
- International Labour Organization (1989) *C169 Indigenous and Tribal Peoples Convention*. Geneva: International Labour Organization.
- Livingston, J. (2010) *Taos Pueblo to restore historic village - The Taos News: News*. Taos: The Taos News. Available at [http://www.taosnews.com/news/article\\_d26cb373-dbc4-51dd-9e34-c188577fac99.html?mode=story](http://www.taosnews.com/news/article_d26cb373-dbc4-51dd-9e34-c188577fac99.html?mode=story) [Accessed 24 July 2012].
- Makah Cultural and Research Center (n.d.) *Makah Home*. Neah Bay: Makah Cultural and Research Center. Available at <http://www.makah.com/index.html> [Accessed 1 August 2012].
- Mason, R. (2002) Assessing Values in Conservation Planning: Methodological Issues and Choices (Chapter 1). In M. de la Torre (ed.) *Assessing the Values of Cultural Heritage*. Los Angeles: The Getty Conservation Institute, pp. 5-30.
- Parsons, E. C. (1936) *Taos Pueblo*. Menasha: George Banta Publishing Company Agent.
- Rodwell, D. (2007) *Conservation and Sustainability in Historic Cities*. Oxford: Blackwell Publishing Ltd..
- Seth, S. & Seth, L. (1988) *Adobe! Homes and Interiors of Taos, Santa Fe and the Southwest*. Stamford: Architectural Book Publishing Company, Inc..
- Siravo, F. (2003) Sustainability and the Planning of Historic Cities: The Experience of the Aga Khan Trust for Culture. In J. M. Teutonico & F. Matero (eds.) *Managing Change: Sustainable Approaches to the Conservation of the Built Environment, Proceedings International Symposium*, Philadelphia, 5-8 April 2001, Getty Publications, Los Angeles, pp. 127-135.
- Sitarz, D. (1993) *AGENDA 21: The Earth Summit Strategy to Save Our Planet*. Boulder: EarthPress.
- Smith, M. E. (1969) *Governing at Taos Pueblo*. Portales: Eastern New Mexico University.
- Spouce, I. (2012) *A tourist guide at Taos Pueblo tourism office*. Interview with A. G. Abdel Tawab, 23 May 2012. Taos Pueblo: Taos Pueblo tourism office.
- Steele, J. (1997) *Sustainable Architecture, Principles, Paradigms, and Case Studies*. New York: McGraw-Hill.
- Taos Pueblo Preservation Program (n.d.) *Taos Pueblo Preservation Program, Preserving our Past for our Future*. Taos Pueblo: Taos Pueblo Preservation Program.
- Throsby, D. (2003) Sustainability in the Conservation of the Built Environment: An Economist's Perspective. In J. M. Teutonico & F. Matero (eds.) *Managing Change: Sustainable Approaches to the Conservation of the Built Environment, Proceedings International Symposium*, Philadelphia, 5-8 April 2001, Los Angeles: Getty Publications, pp. 3-10.
- Tyler, I. R. & Dilcher, A. K. (2010) Sustainable Heritage Conservation: Pere Marquette Railroad Depot in Michigan. *APT Bulletin*, 41(1), pp. 21-26.
- U. S. Department of Housing and Urban Development (2011) *HUD Archives: HUD Secretary Donovan Awards Three New Mexico Grantees over \$2.7 Million to Promote Affordable Housing and Economic Development*. Washington: U. S. Department of Housing and Urban Development. Available at <http://archives.hud.gov/local/nm/news/pr2011-08-23.cfm> [Accessed 24 July 2012].
- U.S. Green Building Council (2011) *LEED 2009 for Neighborhood Development*. Washington: U.S. Green Building Council.
- UNESCO (1987a) *Convention Concerning the Protection of the World Cultural and Natural Heritage*. World Heritage List, Nomination Submitted by the United States of America. Pueblo of Taos, New Mexico, 1987. Paris: United Nations Educational, Scientific and Cultural Organisation.
- UNESCO (1987b) *Operational Guidelines for the Implementation of the World Heritage Convention*. Paris: United Nations Educational, Scientific and Cultural Organisation.
- UNESCO (2005) *Operational Guidelines for the Implementation of the World Heritage Convention*. Paris: United Nations Educational, Scientific and Cultural Organisation.
- UNESCO (2008) *Operational Guidelines for the Implementation of the World Heritage Convention*. Paris: United Nations Educational, Scientific and Cultural Organisation.
- UNESCO (2010) *UNESCO Atlas of the World's Languages in danger*. Paris: United Nations Educational, Scientific and Cultural Organisation. Available at <http://www.unesco.org/culture/languages-atlas/> [Accessed 26 July 2012].
- UNESCO World Heritage Centre (2013) *Taos Pueblo - UNESCO World Heritage Centre*. Paris: UNESCO World Heritage Centre. Available at <http://whc.unesco.org/en/list/492> [Accessed 19 August 2013].
- United Nations (2000) *Resolution adopted by the General Assembly, 55/2*. United Nations Millennium Declaration. New York: United Nations.
- United Nations (2008) *United Nations: Declaration on the Rights of Indigenous Peoples*. New York: United Nations.

- United Nations Development Programme (2013) United Nations Development Programme [Online]. New York: United Nations Development Programme. Available at <http://www.undp.org/content/undp/en/home.html> [Accessed 23 July 2012].
- United States Department of the Interior, Bureau of Indian Affairs (2012) *Tribal Leaders Directory*. Fall 2012. Washington: Bureau of Indian Affairs.
- United States Department of the Interior, National Park Service (1987) *National Register of Historic Places, Inventory-Nomination Form*. Taos Pueblo. Washington: National Park Service.
- United States Department of the Interior, National Park Service (n.d.) *National Historic Landmarks Survey, Listing of National Historic Landmarks by State, New Mexico*. Washington: National Park Service.
- Wikipedia (2013) *Pueblo Revolt* – Wikipedia, the free encyclopedia. Available at [http://en.wikipedia.org/wiki/Pueblo\\_Revolt](http://en.wikipedia.org/wiki/Pueblo_Revolt) [Accessed 19 August 2013].
- Woolley, T. (2000) Natural materials, 'zero emission' and sustainable construction. In N. Sterry (ed.) *Terra 2000, 8<sup>th</sup> International Conference on the Study and Conservation of Earthen Architecture*, Proc. intern. conf., Devon, 11-13 May 2000, James and James (Science Publishers) Ltd., London, pp. 352-357.
- World Monuments Fund (2013) *Taos Pueblo / World Monuments Fund*. New York: World Monuments Fund. Available at <http://www.wmf.org/project/taos-pueblo> [Accessed 19 August 2013].



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## The demolition of the restaurant inside Queen's Fort of Tarragona (Spain)

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British General James Stanhope reached Tarragona in 1709. He wanted to establish a naval base, in order to give military support to Archduke Charles of Austria in his dispute for the throne of Spain with Philip V. The "Fortí de la Reina" (Queen's Fort) is part of the overall project for the city fortification, led by Austrian and British; its position defended the northeastern end of Miracle Beach. Between 1988-1992 a large restaurant (about 2500 m<sup>2</sup>) was built within the walled perimeter of the Fort; it recreated a Romanesque cloister using GRC panels (glass fiber reinforced concrete), an architecture totally incongruent with the austere 18th century military structure in which it was housed. After various legal disputes, in 2007 a court ordered the demolition of the restaurant to return, as much as possible, the Queen's Fort to its previous state. In this paper we describe this demolition work.

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### Queen's Fort original construction

In the context of the dispute for the throne of Spain between Philip, Duke of Anjou (the future Philip V), and the Archduke Charles of Austria, the British General James Stanhope reached Tarragona in 1709 accompanied by 12 troop regiments favorable to the cause of the Austrian candidate, with the intention to establish a naval base. It was decided to carry out a city fortification project, creating a defensive line that would surround the urban area between the port and the Miracle beach (Aloguín, 1998). The "Fortí de la Reina" (Queen's Fort) is placed at the eastern end of this defensive network (see Fig.1), which should have been built between 1709 and 1713 under the supervision of Lord Stanhope and Guido von Staremberg. However, the construction of the Queen's Fort was not completed until 1745, under the direction of the engineer's colonel Miguel Marín and artillery's commander Antonio de Olmedo (Massó & Menchón, 1999).

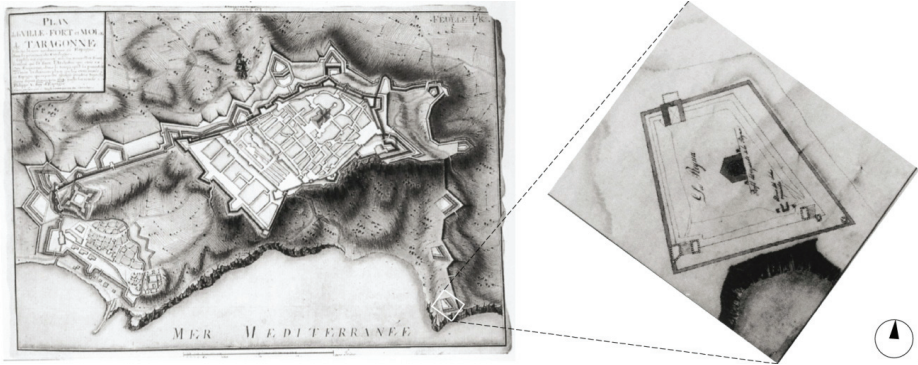


Figure 1. Tarragona plan from the first half of the 18th century, and detailed plan of the Queen's Fort from 1748 by Juan Rafael Silby, both from photographic archive of National Archaeological Museum of Tarragona (MNAT).

Queen's Fort has a trapezoidal layout. The walls original section consisted of an embankment coated on the outside by a sloping masonry wall. In photographs from the early 20<sup>th</sup> century we can see how their structures followed the inclination of the rocky terrain where relied, with the top very deteriorated, as we cannot distinguish the parapets that typically protected such fortifications (Diaz, 2004). Access to the inner enclosure was performed by a tower on the north flank, with a vaulted gallery oriented towards the neighboring St. George's Fort.



Figure 2. Queen's Fort transformation due to the construction of the restaurant. Comparison between historical images and its appearance in 2007.

### The construction of the restaurant

The works carried out between 1988 and 1993 within the Queen's Fort perimeter affected its original composition:

- The original section of the wall was altered in order to increase the inner surface of the enclosure. Inner embankments were emptied, and concrete blocks retaining walls were constructed to stabilize the outer sloping masonry wall.
- Various openings in the wall were performed: six windows and three emergency exits.
- Exterior walls were raised to disguise the upper floor volume.

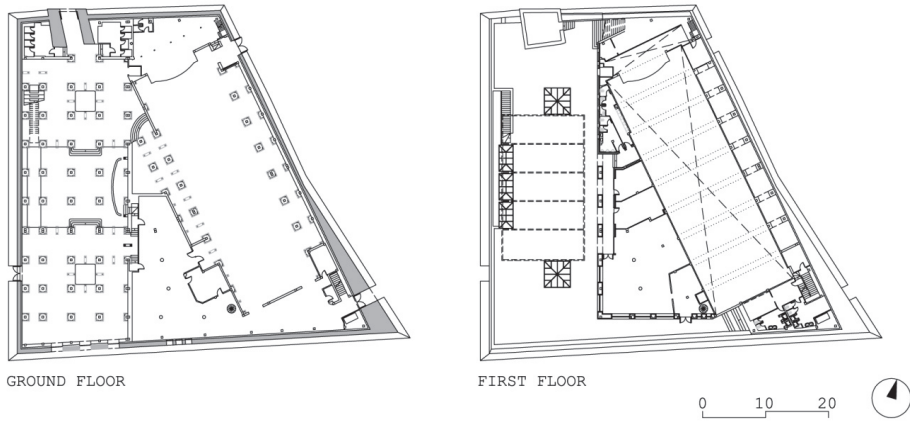


Figure 3. The restaurant within the walled perimeter of the Fort.



Figure 4. Restaurant interior with 'Romanesque style' decoration.

### Project to demolish the restaurant and to consolidate the Fort

The restaurant had been built by a private developer with a wrongly issued municipal license, as the Fort was urbanistically classified as a garden zone. Moreover, there were several discrepancies between the various projects drafted by the architect Fernando Trueba (1987, 1988, and 1992) and the "as-built" final solution. Without going into too much detail, we can say that in early project versions the original walls were not ostensibly raised and the top floor had a much lower volume.

These irregularities led to a series of legal disputes. Eventually, in 2007 a court ordered the demolition of the restaurant to return, as much as possible, the Queen's Fort to its previous state.

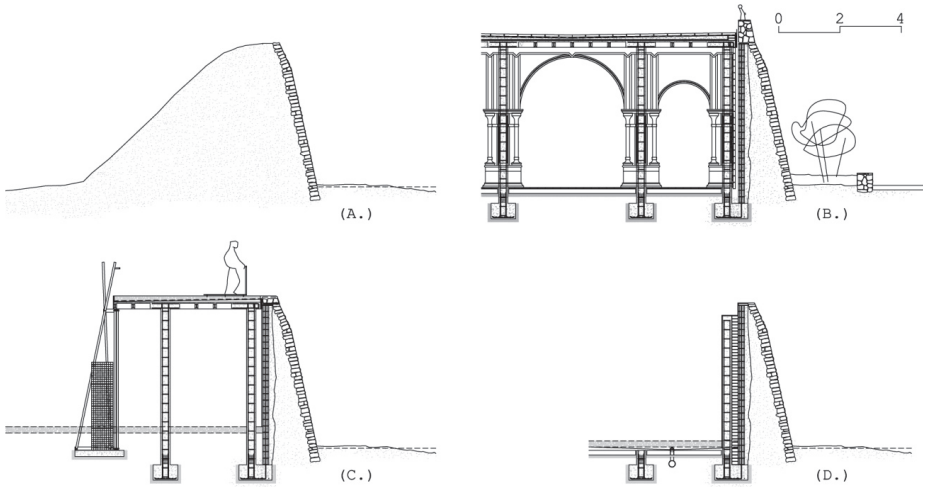


Figure 5. Section of the walls of the Fort: original (A.), alteration caused by the construction of the restaurant (B.), demolition and consolidation project (C.), after the demolition of the restaurant (D.).

Tarragona City Council held a competition to compose an architectural Project for the restaurant demolition and the consolidation of the original parts of the Fort. The winning proposal (Toldrà, 2007) provided to preserve the first bay of the restaurant structure in order to restore the volume of the embankment where exterior stone walls were supported, creating a covered space opening to a central courtyard, with a façade composed by the structural shoring system and metal gabions filled with stones from the restaurant dismantling. A series of ramps allowed easy access to the upper terrace, an excellent viewpoint of the city's waterfront.

We must remember that the Queen's Fort was of private ownership. The competition and the winning proposal assumed that City Council would have an agreement with the owners to acquire the property, so that the demolition work could be accompanied by an intervention to restore the original character of the building—a military courtyard protected by a wall—and open its interior space to citizens. However, the deal fell through, so the actions were limited to the demolition of the restaurant while ensuring the stability of the original walls.

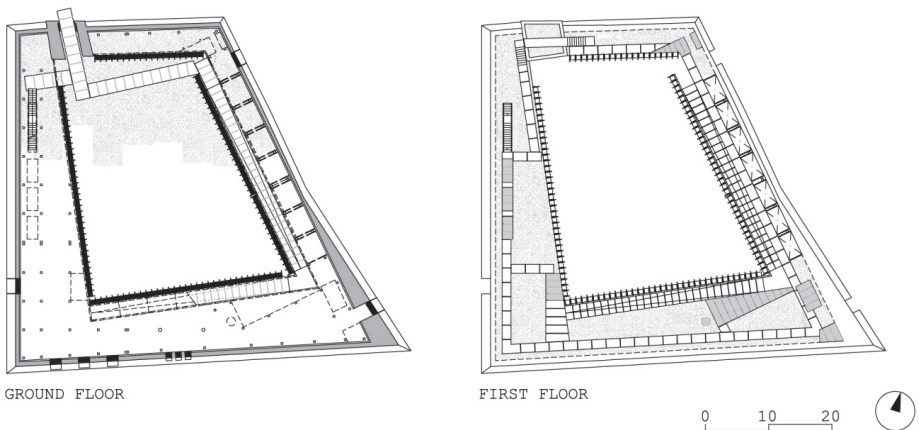


Figure 6. Proposal for consolidation the Fort.

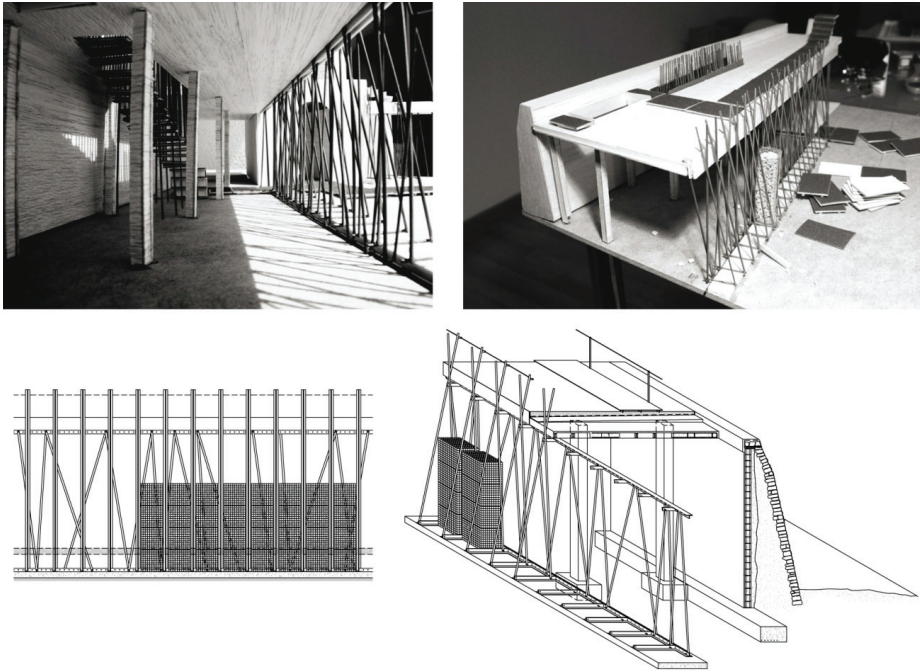


Figure 7. Model and details of the consolidation project.

## Methodology for implementing the restaurant demolition

### Preliminary work

First, utilities were cancelled (electricity, telecommunications, water and gas) and the restaurant furniture was removed. Numerous tests were performed to check the current status of the construction elements. They corresponded in general to the projected forecast, with one notable exception: the retaining walls were made of concrete blocks, instead of solid concrete walls as indicated in the project details. This was not a surprise; we had examined photographic documentation of its construction, and the demolition project contained various solutions to stabilize the block walls. However, contrary to the expectations, we found very little concrete filling inside the blocks.

The tests were used, as well, to collect samples of the inner GRC (glass fiber reinforced concrete) panels, verifying that they did not contain asbestos or other toxic components.

Much of the outer contour of the walls was occupied by decorative vegetation that impeded an overview of the exterior. These plantations and its boundary walls were removed. An ornamental fountain on the north façade was also demolished. In this same façade, some walls adjacent to the main gate's stone tower were preserved. Even though part of the original structures were not documented in pictures of the early 20<sup>th</sup> century, it was understood that they had historical value, since they possibly defined the beginning of the road that connected the Queen's Fort directly to the neighboring San Jorge's Fort.



Figure 8. Preliminary work developed out of the walls.

### Non-structural elements removal

First, glazing and carpentry that were not required to close the worksite were removed, in order to facilitate the extraction of materials. Then, decorative veneers were dismantled, a particularly laborious operation due to the profusion of GRC panels decorating the restaurant's walls and ceilings, creating a Romanesque atmosphere (in an 18<sup>th</sup> century building...). The pavement stone tiles of the interior rooms and terraces were manually removed and stored for reuse.

After this first cleaning of veneers, pipes of various installations that came into view were dismantled, and non-structural walls laid out the interior were demolished. On the terraces, chimneys and protection walls were removed. The additions of the Fort walls were lowered to an elevation close to the original, leaving the definitive treatment of the coping to the consolidation phase.



Figure 9. Dismantling decorative veneers.

### Structure removal

One of the main criteria was to avoid transmitting vibrations to the original structures. To achieve this, the contacting joints between the restaurant and the walls of the Fort were demolished manually. Once both structures were unrelated, mechanical means were used to deconstruct the modern ones.



Figure 10. Manual removal of the terrace stone tiles (left), disconnecting the structure of the restaurant from the perimeter of the wall (center) and demolition of restaurant structures (right).

Solid concrete elements (columns and beams) were cut with diamond disks and extracted in large parts to the outside of the enclosure. Especially delicate was the removal of the large beams covering the banquet hall of the eastern half of the ground floor: they had a span of almost 15 meters, with a rough section of 40x80cm and a weight of about 12 tons. A shoring system allowed to unload the supporting pillars, then the beams were lifted by a large crane and deposited on the outside, where they were divided into smaller pieces for transport.



Figure 11. Dismantling and removing the large beams from the east hall.



Figure 12. Interior of the enclosure without most of the restaurant's structures.

### Archaeological work

Archaeological excavation under the restaurant ground floor gave a completely negative result. Under the stone tiles there was concrete, sand and gravel filling, disposed directly over the natural rock, which was lowered in a good part of the area during restaurant construction to gain headroom.

The external excavations yielded the most interesting data. Along the east façade, the boot of the walls was found resting directly on the natural rock, about 1.5 meters below the existing pavement. The works made it possible to identify the section of the original moat that surrounded the building (Bea & Salsamendi, 2009).

### Monument consolidation

Windows and doors opened in the wall during restaurant construction were closed. To allow reconnaissance of the alteration, it was decided to keep the jambs and lintels clad in local stone arranged mimetically with the rest of the facing. It was taken into account that extraction could destabilize the wall, and in fact it was difficult to identify the gap between the original parts and the mimetic coatings. Various solutions were tested for walling up:

- Stainless steel gabions filled with stones debris from restaurant dismantling. This was the original option in the project. We understood that this allowed to preserve the overall colour unity of the facades, while the intervention was clearly perceived: the stones were placed without mortar, and his view was screened by steel grid. On the other hand, it permitted easy removal, if necessary, to reopen one of the emergency exits in the future.
- Stone tiles extracted from restaurant pavement, arranged in dry or with a thin layer of mortar.
- Stones recovered from the demolition and grouted with lime mortar.



Figure 13. Tests for the outer walled up.

Although the first two options seemed to us more appropriate, the Culture commission of the Generalitat de Catalunya considered both inadequate, and gave only its approval to the third solution.

The additions to the Fort walls were lowered in the non-structural removal phase. In the consolidation phase, it was decided to retain some of the 'fake' rows to uniform the wall coping, establishing rectilinear guidelines for the capstones, with the aim of restoring the exterior image of the Fort before the construction of the restaurant.

It was necessary to underpin some of the retaining walls of the restaurant, particularly in a broad section of the east façade, and to ensure the stability against the push of the outer wall the restaurant pillars attached to them were preserved, to a height slightly below its crowning. Walls and pillars were coated with a protective layer of lime mortar.

The foundation footings of the restaurant structure were not removed. Archaeological surveys showed that the pavement on the ground floor lay almost directly on the natural rock, and to execute the restaurant the foundations were excavated; an irreversible alteration, but it did not affect any original structure of the Fort.

The inner paving was solved reusing demolition materials to create a smooth transition between the two platforms on the ground floor (lowest to highest from west to east). To avoid accumulation of water inside the enclosure, the existing sewer system was reutilized, and expanded with various branches and scuppers.



Figure 14. Interior of the Fort after the demolition and consolidation works.

## Conclusions

Overall, the works were executed in the order established in the planning and the executive project, but with some significant exceptions:

- It was expected to leave the treatment of outdoor spaces to the final phases, but in the initial stages of the project it was decided to bring it forward in order to facilitate the movement of equipment, material storage and assembling of scaffolding protection for walls.
- As a result of the above, it was possible to move outside the enclosure a significant part of the work previously planned to be carried out inside. In fact, it was only necessary to introduce machinery for the demolition and the cargo of the debris. Because a significant portion of the materials were extracted by cranes located outside the walls, the movement did not require truck traffic within the perimeter of the Fort, and neither its passing through the only large enough way: the original door of the north facade.
- It was expected to demolish most of the floors by manual means or by jackhammers handled by operators. In practice, though, once the restaurant structure was detached from the perimeter wall, it was found that the use of heavy machinery did not produce any damage to the Fort's original structures: the vibrations were not transmitted and demolition material itself cushioned the fall of structure fragments.

We believe that the final result of the work fulfills the goals established by the court order: the Queen's Fort has returned, as much as possible, to its original state before the changes caused by the construction of a restaurant within its walls.

## References

- Aloguín, R. (1998) *Guia de fortificacions de Tarragona*. Tarragona: Col.legi d'Arquitectes de Catalunya.
- Bea, D. & Salsamendi, I. (2009) *Intervenció Arqueològica al Fortí de la Reina Anna Stuart de Tarragona*. Tarragona: Arxiu de l'Ajuntament de Tarragona.

- Díaz, C. (2004) *La fortificación abaluartada. Una arquitectura militar y política*, Madrid: Ministerio de Defensa.
- Massó, J. & Menchon, J. (1999) *Les muralles de Tarragona. Defenses i fortificacions de la ciutat (s.II a.C. – XX d.C.)*. Tarragona.
- Toldrà, J. M. (2007) *Projecte Bàsic i Executiu d'enderroc combinat del restaurant del Fortí de la Reina*. Tarragona: Arxiu de l'Ajuntament de Tarragona. Visat Col.legi d' Arquitectes de Catalunya (COAC): 2008601747.
- Trueba, F. (1987) *Proyecto Básico: Restauración y Reutilización del Fortín de la Reina*. Tarragona: Arxiu de l'Ajuntament de Tarragona. Visat Col.legi d' Arquitectes de Catalunya (COAC): 876-02125.
- Trueba, F. (1988) *Proyecto de Ejecución: Restauración y Reutilización del Fortín de la Reina*. Tarragona: Arxiu de l'Ajuntament de Tarragona. Visat Col.legi d' Arquitectes de Catalunya (COAC): 886-02907.
- Trueba, F. (1992) *Modificación del Proyecto Básico y de Ejecución: Restauración y Reutilización del Fortín de la Reina*. Tarragona: Arxiu de l'Ajuntament de Tarragona. Visat Col.legi d' Arquitectes de Catalunya (COAC): 926-02375.





ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

[www.ijhsd.greenlines-institute.org](http://www.ijhsd.greenlines-institute.org)

International Journal of Heritage and Sustainable Development

Vol. 4, No. 1, 2015, pp. 183-191

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## Assessment of the stability conditions of an ancient stone masonry tower

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One of the major challenges in the scope of rehabilitation and repair of existing structures is the inspection and analysis of the stability conditions, which includes the detection of the damaged zones, cracking and defects, mechanical characterization of materials and further structural analysis of masonry structures. This diagnosis work is generally carried out not only based on experimental investigation on the laboratory but also by means of in situ nondestructive methods. Sophisticated nondestructive techniques have been developed and improved throughout the years and are applied to various types of structures in distinct fields, namely masonry structures. In this scope, the work presented here deals with a non-destructive approach to make a preliminary diagnosis of an ancient masonry tower, the Quintela Tower, in Vila Real, Portugal. The tower presents a square shape of about 5x5m<sup>2</sup> and has about 30m height and was built exclusively with granite. It presents some distributed cracking and a major concentrated crack near a corner in the north-west corner passing through the units and unit-mortar interface. The stone presents high degree of weathering in some places with detachment of small pieces of material. The inspection of the structure includes the application of GPR and boroscopy to characterize the cross section of the walls and stone slab at the base of the tower. Additionally, natural frequencies were obtained based on dynamic identification with ambient vibration. The characterization of materials (stone and wood) was carried out based on Schmidt hammer for the stone and on the pycnometer and resistograph for the wood. Additional characterization of the stone was performed based on SEM analysis aiming at understanding its weathering level. Besides the understanding of the structure and of materials of the masonry tower, the non-destructive approach enables also to derive the main basic properties for the numerical evaluation of the stability conditions of the masonry tower.

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### Introduction

The Quintela tower is a masonry structure located in the region of Vila Real, in Portugal. Its construction dates back to the XIII-XIV centuries (Fig. 1). The building is isolated, situated in a rural setting and surrounded by low-dwellings, and is located in the periphery of the Quintela settlement next to agriculture fields, near Ribeira da Marinheira, west of Vila Real.

This building constitutes one of the few examples of civil-militar architecture that proves an advancement of the typical low-medieval feudal land-ownership in the transmontan region. Quintela (the site), located in the civil parish of Vila Marin, had an estimated population of 16 inhabitants in 1530 and of 28 in 1721.

In terms of geology characteristics, the Vila Real municipality is integrated into a large structural unit (Maciço Hespérico) that represents the oldest structural unit of the Iberian Peninsula, where the most ancient rocks are located (granites, shale, quartzite and diverse metamorphic rocks).

The tower presents a square shape of about  $5 \times 5 \text{m}^2$  and has about 30m height settled on bedrock and was built exclusively with granite. It is covered by a four-sided roof having sloping ends and sides. The walls are crowned by pyramidal merlons with the rhythm marked by slits. The principal facade is perforated in the center by an entrance door on a level higher than the ground. The door and windows with semicircular arch evidence certain fidelity to the Romanic style, whereas the ogival relieving arch and the balconies with battlement parapets constitute an example of the gothic style. The lateral and posterior facades are symmetrical, with slit perforated and equally centered balconies. In the top of the facades, similar balconies exist in the corners with machicolations and parapets. In two of the facades, two gargoyles appear at the same height.

The connection to the superior floors from the ground floor is done by a timber stair located in the right of the entrance door. The second floor is accessed also through timber stairs with the same angle as the previous level and constitutes the "noble" part of the building. This description originally mentions the existence of an additional floor level that can be assumed to have existed previously as the supporting corbels exist, but are not used currently.

In the center of each one of the four walls are located doors that allow access to the balconies and have in the interior a segmental arch. The roof is supported by two wood trusses.



Figure 1. Various views from the Quintela tower: (a) northwest and northeast facades, (b) southwest and southeast facades, (c) views of the roof and border surrounded by battlement with merlons, (d) slit and balconies, (e) slit openings from the interior and (f) view of the trusses and roof.

The work presented here deals with a non-destructive approach to make a preliminary diagnosis of the tower, which includes visual inspection and the application of GPR and boroscopy to characterize the cross section of the walls and stone slab at the base of the tower. Additionally, natural frequencies were obtained based on dynamic identification with ambient vibration. The characterization of materials was carried out with the Schmidt hammer for stone and the resistograph for wood. Additional characterization of the stone was performed by SEM analysis aiming at understanding its weathering level.

### Material and structures

The materials found in the present state of the Quintela tower are granite used for walls, ground floor pavement and external access stairs. Cement mortar was used for repointing the stone joints in an intervention in 1982 and clay tiles were used for the roof. Some engravings on the stones used on the facades can be assumed as evidence of an ancient construction period.

Timber was used for the roof structure and the intermediate floor slabs. The floors of the first and second floor were built in 1983 with beams supported on existing corbels on the masonry walls. The type of timber used is French chestnut for the beams and flooring in Portuguese Pine.

The structural system is constituted by bearing walls of granite stone masonry and timber slabs for the floors. The bearing walls have a three-leaf configuration. The outer leaf measures, in average, 0.4m, the inner core measures 0.7m and the inner leaf measures 0.4cm, approximately. These values were obtained from GPR and boroscopy field tests. The inner core is constituted mainly of rubble, dirt and voids. These characteristic can affect the mechanical properties of the stone masonry walls in the tower. In particular, the weak collaboration among structural elements (walls, floors and roof) do not provide any effect in the connection of the overall structure, due to the fact that floors and roof timber structures are simply supported on the stone corbels sticking out of the masonry walls. In fact, neither timber nor roof existed for several centuries and only were rebuilt on 1982.

Three arches are used in the main entrance door and lintels for the window openings that are narrow (slits) towards the outside but widen towards the inside (where a column to support the lintel is observed), as illustrated in Figure 1e.

The boards of pine timber that compose the floor are nailed on transversal joists, which are supported by seven main timber beams. The main beams are simply supported on granite stone corbels. See Figure 2.



Figure 2. Constitution and distribution of beams and joists from the timber floors.

### Visual inspections

A preliminary visual inspection was carried out in order to locate and map visible damages in order to understand its distribution and to have a general idea about the reasons why the damages occurred. The damage maps were prepared with the help of the existing drawings that were obtained as blueprints, which dated back to 1983. Figure 3 illustrates the location and distribution of the damages and decay observed.

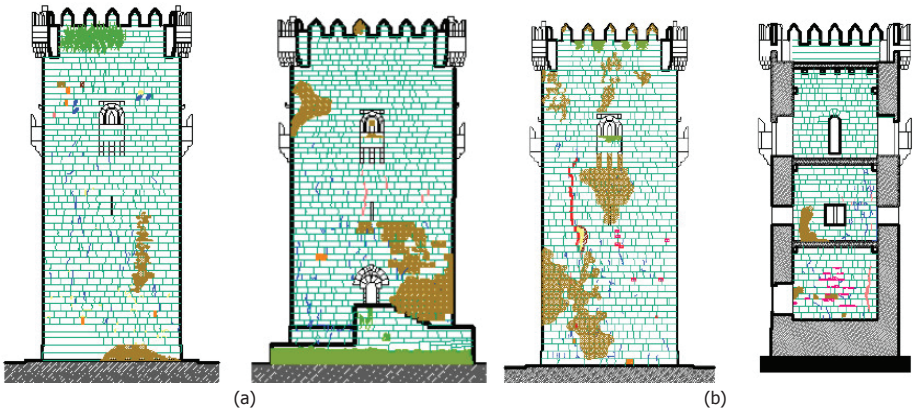


Figure 3. General view of the damages in the tower's facades: (a) southeast and (b) southwest facade and the (c) northwest facade and the (d) interior view of the northwestern wall.

Generally, the damages and decay were mainly cracking and weathered material (Fig. 4). Relatively to cracks, structural and nonstructural cracks were observed. The most important cracks concentrate in three different locations of the tower and are known to exist before the intervention in 1982. The most important structural damage is found on the northwest façade, which exhibits a vertically extending crack, which is thicker on the second floor level on the exterior façade. The crack has an estimated width of 2cm. Historical survey showed that the crack exists since the 1980s. This crack was repaired with a thick mortar during an anterior restoration intervention. Around those cracks are visible some thin cracks that started to appear after the first intervention. However, the main repaired crack did not showed to have reopened.

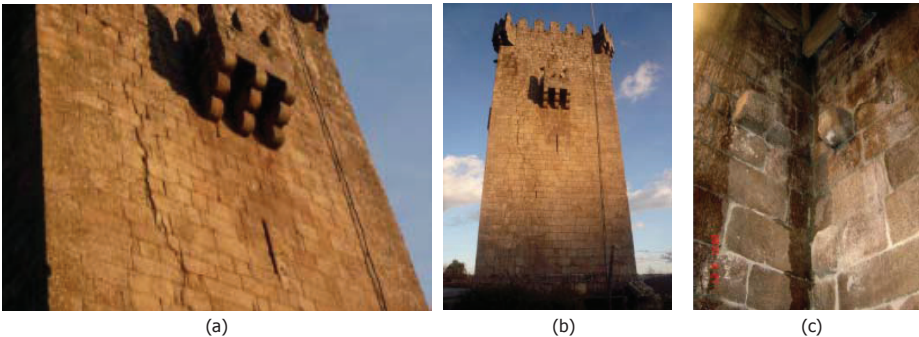


Figure 4. Detailed view of the damages in the tower: (a) main crack and (b) water infiltration.

Material decay was observed in timber elements (biological attack, water infiltration, moist spots) and in stone units (biological growth, stains due to humidity, water infiltration, vegetation). The decay in the timber beams placed under the timber slabs caused some deformations. In fact, water infiltration and biological attack are the main problems regarding decay on the timber elements. The stone units suffer from the erosion and spalling, mainly concentrated of the ground floor.

### Non-destructive tests

#### Ground Penetrating Radar

The objective of this test was to use GPR to gain more information regarding the geometrical features of the cross-section of the walls. The inspections were carried out using a medium and high frequency antennae (800 and 1600MHz) and were performed in the ground, 1<sup>st</sup> and 3<sup>rd</sup> floors. Further information about GPR can be found in Binda et al. (1998) and Daniels (2004).

From the analysis of the acquired profiles, stones of irregular geometry were observed, as illustrated in Figure 5 but a three leaves masonry constitution was confirmed. The inner layer seemed to be the most irregular of the three leaves, composed approximately by stones with thicknesses varying between 0.26 and 0.40m. The outer leaf presents a more regular structure, with values close to 0.40m of thickness. Consequently, the infill dimensions ranged from 0.70 to 0.80m. Certain radargrams exhibited a certain decrease in the amplitude of the signal with depth. This loss of information can be attributed to the presence of humidity, which was well observed by visual inspection.

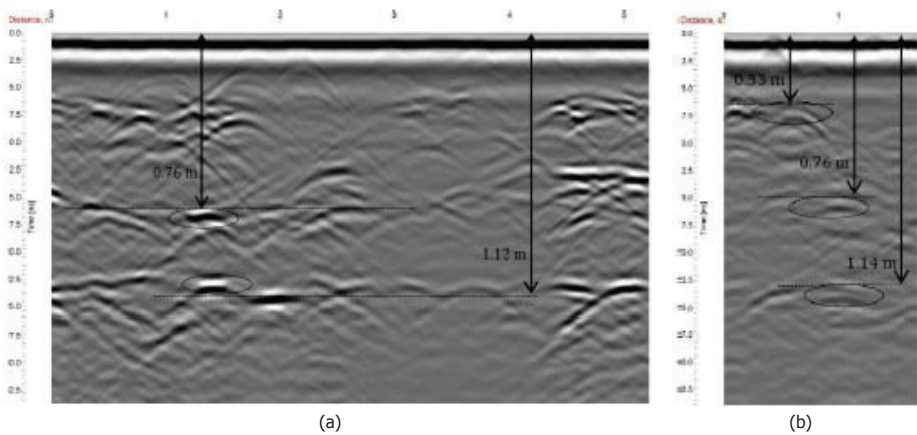


Figure 5. Radargrams carried out in the walls of the tower. Examples of an (a) horizontal and a (b) vertical profile are illustrated.

The slab of the tower is constituted by stones with relative similar longitudinal sections. As result of the GPR test (Fig. 6), the pavement slab thickness could be determined and also the thickness of the leveling slab for these stones. Regarding the supporting system, the obtained results were not much conclusive; however they may indicate the presence of a supporting structure.

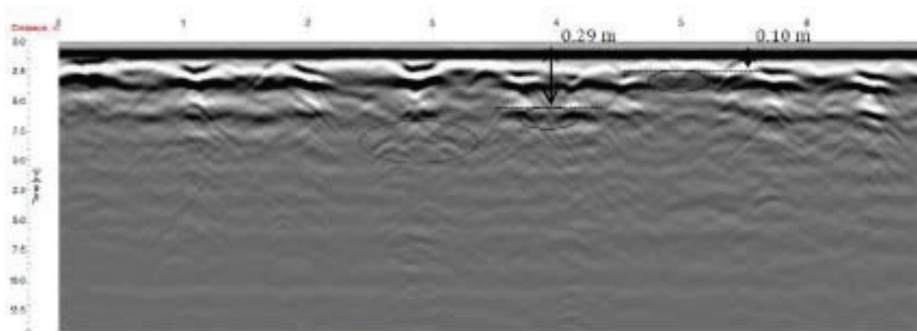


Figure 6. Radargram carried out in the ground slab of the tower.

### Resistograph

The resistograph measures the resistance to penetration of a small drill with 3mm of diameter (Rinn, 1994; Feio, 2006). This resistance is registered in each point of the drill path, and therefore, can be used to detect decayed areas and inner voids, as well as nodes. It is based on the micro drilling principle, which measures the energy required for maintaining same speed of drilling. This method is generally adopted to obtain density profiles of wood. Figure 7 illustrates the application of the resistograph in wood beams and the resultant graphic.

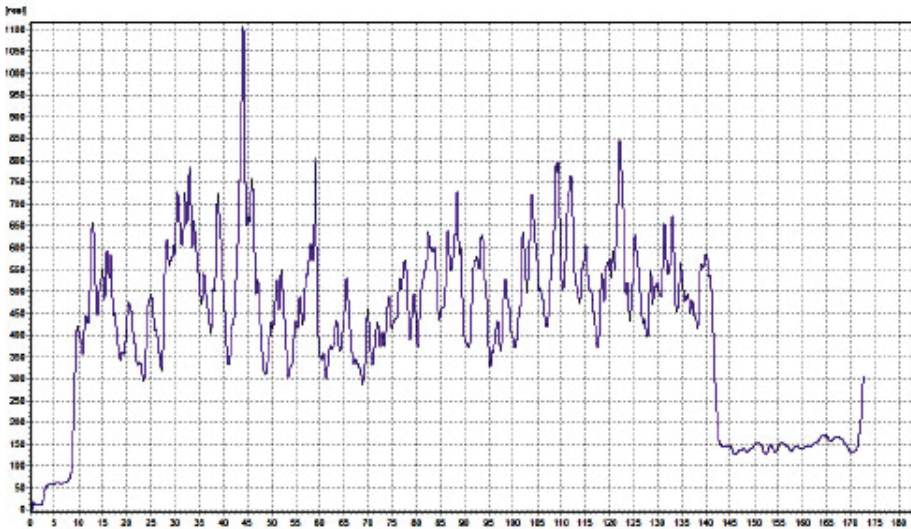


Figure 7. Application of the resistograph in wood beams and an example of the final result.

### Schmidt hammer test

The Schmidt hammer was applied in the interior walls of the tower in order to gather information on the surface hardness and, possibly, compressive strength. The surface hardness is only representative of a layer of 5cm depth. The measurements were carried out along two different heights: 0.75 and 1.5m from the ground of each floor. Some result variation is expected due to heavy infiltration on some parts of the wall. Four measurements were taken at each point and during analysis the average of these points were taken.

The results obtained show some consistency, which can be deduced that the level of deterioration on the surfaces of the walls is relatively uniform. However, when the values obtained are compared with the values for solid granite from literature, a significant decrease in the values is observed, which indicates loss of strength related to weathering. In some points, unexpectedly low values were obtained, which possibly indicates the occurrence of detachments from the stone surface.

### Measurements with boroscopic camera

The measurements carried out with the boroscopic camera allowed to observe the constitution of the inner leaf and, simultaneously, confirm the results from GPR. Therefore, three holes were drilled on the wall in

order to observe the thickness of the solid granite leaf as well as the depth of the inner layer, which was found to be approximately 0.4m, confirming the GPR results. This is illustrated in Figure 8.

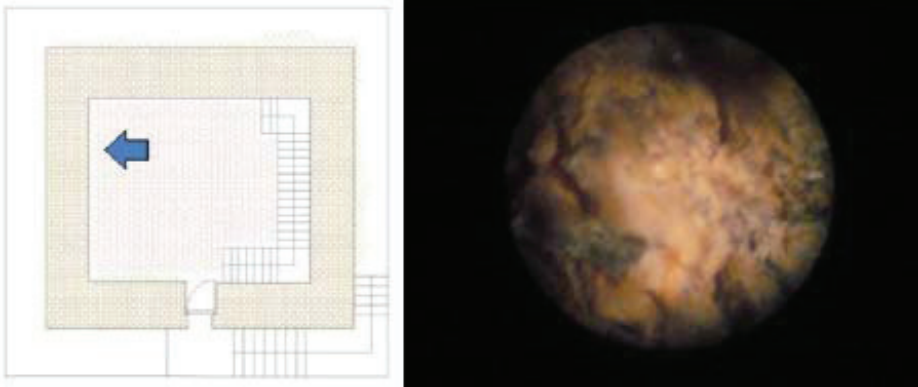


Figure 8. Inspection with boroscopic camera: location and image from the inner leaf.

### Other tests

Ultrasonic pulse velocity tests were carried out in situ and in laboratory. The average velocity found was 2500 m/s, which is characteristic of a stone with some degree of deterioration (Vasconcelos et al., 2007). Additional analysis of the surface of the stones by scanning electron microscope (SEM) showed evidences of weathering, as illustrated in Figure 9.

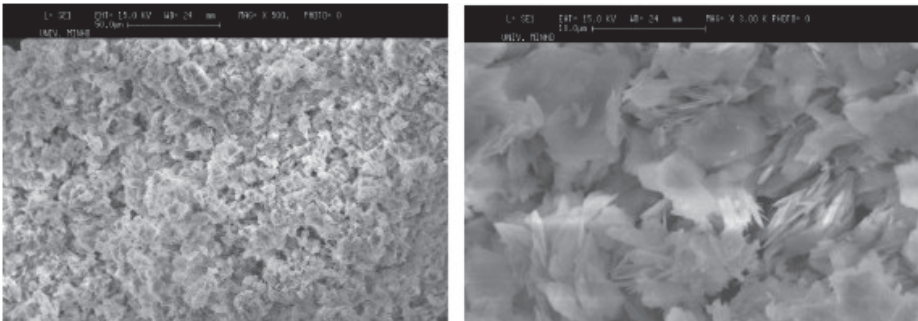


Figure 9. SEM images from the surface of the stone.

### Structural analysis

A finite element model was carried out to better understand the structural behavior of the structure under static and dynamic loads. The modeling of the three-leaf walls was simplified by assuming a homogeneous material along the thickness of the wall. Also since the weight of the timber roofs compared to the self-weight of the granite masonry is too low, the application of these loads was not considered in the analysis.

To calibrate the material properties of the model, a dynamic modal identification test was carried out in situ. A preliminary linear analytical model was done and the material properties were assumed taken into account the preliminary lab test on the granite and the fact that the wall was modeled as a continuum element (Fig. 10a).

The dynamic test was performed using the ambient vibration caused by the wind, which allowed the determination of the three principal mode shapes (Figure 10b) and Table 1. These mode shapes allowed to obtain the material properties for the numerical model, namely the elastic modulus of 1GPa. The other properties remained unchanged (Poisson's ration of 0.2 and density of 2000 kg/m<sup>3</sup>).

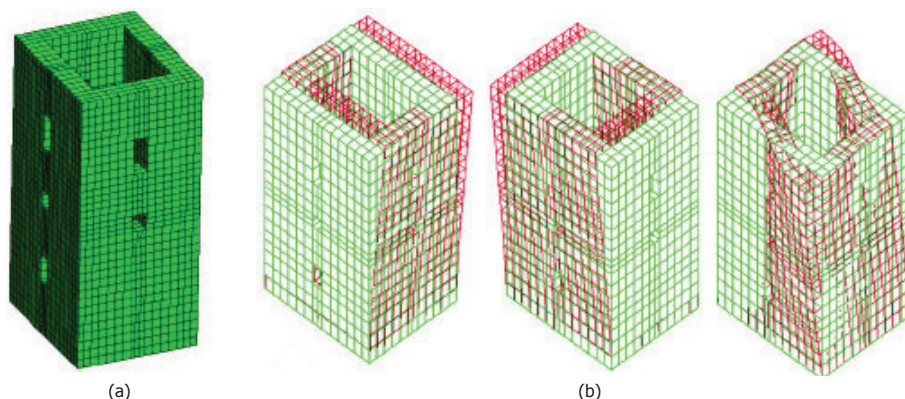


Figure 10. FEM model for the tower: (a) continuum model and (b) mode shapes from the modal identification analysis.

Table 1. Results of the mode shapes frequencies (initial model, experimental characterization and updated model).

	Frequencies (Hz)		
	Preliminary analytical model	Experimental Modal Identification results	Calibrated model
Mode 1	1.64	2.27	2.32
Mode 2	1.89	2.58	2.67
Mode 3	3.25	4.67	4.63

After calibrating the model, deflections and stresses were checked in an updated linear elastic analysis. As handcheck calculations anticipated, low compressive stresses were found in the results, where maximum compression stresses values of approximately 1MPa were obtained. Figure 11 shows the stress level in all the tower. It can be observed that maximum tensile stresses occur mainly around openings.

**Conclusions**

The Quintela tower has been showing signs of deterioration for several years, and although it has been subjected to several interventions, it still bears indication of damages, implying that those past interventions did not locate or solved the problem. Good practice indicates that a preliminary survey is fundamental to understand the structure. In this paper, a non-destructive approach to make a preliminary diagnosis of the ancient masonry tower was undertaken.

The visual inspection resulted in the verification that the main crack extending along the second floor does not seem to be active after the repointing intervention in 1982, although further tests and monitoring are necessary to confirm this assumption. The overlapping of the damage maps showed that the thin vertical cracks observed are following the same pattern of the main external crack. The possible reason of these vertical cracks could be due to soil settlement. Apart from this problem, no out-of plane or any kind of similar phenomena is observed by visual inspection, which implies that the tower does not seem to present severe structural problems.

The decay observed on timber slabs can be categorized as the decay due to biological attack, water infiltration and non-structural cracks in the contact point with the walls. The slabs don't seem to have any structural problems but the decay caused by water contact and biological growth can influence the structural capacity of the timber in the long term. The stone units suffer from diverse weathering process such as erosion, loss of material, detachment, loss of material, deformation-crust and biological colonization.

The dynamic modal identification test allowed the calibration of a numerical model, fundamental to understand the crack pattern and the occurrence of other damages.

Therefore, the tasks undertaken allowed to obtain information regarding the current conservation state of the structure and components, the geometry of the walls and calibration of a numerical model for posterior analysis.

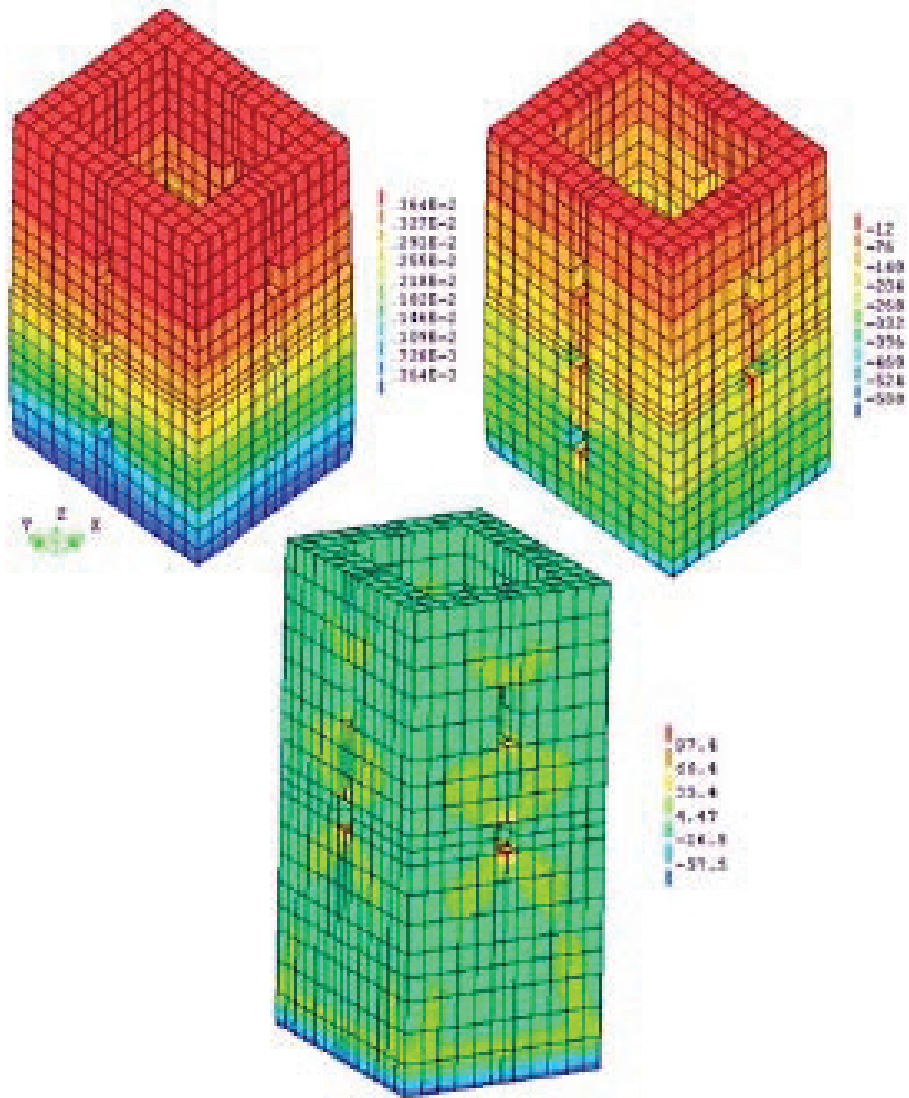


Figure 11. Updated FEM model for the tower showing stress levels.

## References

- Binda, L., Lenzi, G. & Saisi, A. (1998) 'NDE of masonry structures: use of radar tests for the characterisation of stone masonries'. *NDT&E International*, 31(6), pp. 411-419.
- Daniels, D. J. (2004) '*Ground Penetrating Radar*'. London, UK: IEE.
- Feio, A. (2006) '*Inspection and Diagnosis of Historical Timber Structures: NDT Correlations and Structural Behaviour*'. Unpublished thesis (PhD). Portugal: University of Minho.
- Vasconcelos, G., Lourenço, P. B., Alves, C. & Pamplona, J. (2007) 'Prediction of the mechanical properties of granites by ultrasonic pulse velocity and Schmidt hammer hardness'. *10<sup>th</sup> North American Masonry Conference*, St. Luis, Missouri.
- Rinn, F. (1994) 'Resistographic inspection of construction timber, poles and trees'. *Pacific Timber Engineering Conference*, Gold Coast, Australia, July, 1994.





ISSN 1647-4112 (print) ISSN 2182-2751 (on line)

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International Journal of Heritage and Sustainable Development

Vol. 4, No. 1, 2015, pp. 193-200

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## Sound Museum of Istanbul

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This paper introduces the conceptualization of a museum project which will exhibit the sonic environment of Istanbul. As sounds are distinctive elements of Intangible Cultural Heritage, my objective is to capture, collect and protect them from a possible extinction and to increase public awareness of their importance and uniqueness. Recording the most characteristic sounds, I will archive them in digital media and I will display them with mobile installations, which can also be readapted to other museums or to various sites throughout the city. Because the soundscape is constantly changing, this museum project will allow us to add new recordings and to update it regularly. Therefore, even though recordings are frozen ICH elements, the collective soundscape will not represent a frozen moment in time. Being the first and only of its kind, the Sound Museum, has great importance for maintaining the sonic reflections of culture and for keeping them alive.

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**Keywords:** Sound Museum, everyday life, daily, traditions, sonic values, soundscape, Istanbul, intangible cultural heritage, acoustic environment.

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### Introduction

How many people can describe in detail the sonic world in which they are living? How many people realize the sonic values with which they are surrounded? Even when people notice them, do they consider them as a part of cultural heritage, or do they only perceive them as part of their everyday life?

This paper explores ways of raising the awareness of sonic environment within a museum concept. My project of musealization of intangible cultural heritage is to design a museum consisting of the sounds of Istanbul and exhibiting them through installations. The intention of establishing the Sound Museum of Istanbul is to make people aware of the daily acoustic environment that surrounds them. Everyday traditions are indeed fundamentals of cultural identity; however, these traditions and their sonic reflections are rarely ever consciously experienced in the moment, and unfortunately they get lost in the rhythms of daily life.

Moreover, intangible cultural heritage elements are also changing over time. If not protected, they will disappear, and so do their acoustic values. Once their sonic reflections are gone, it is not possible to create those sounds in their original form.

Hence I aim to collect and protect these sonic values and to create a public con-sciousness of the uniqueness and importance of the acoustic environment. In order for the sound heritage to have an adequate effect on visitors, experience design will be applied, rather than just playing the sounds.

In the next sections, I will give detailed information about properties of the main parts of the museum, such as collection, archive and exhibition. In the final section, I will mention potential future studies.

## Museum

The Sound Museum of Istanbul, which is planned to be established within the coming three years in Istanbul (Turkey), will display the contemporary sounds of Istanbul which are unique expressions of sonic culture. They give the sense of connectedness and identity. However, these characteristic sounds are not realized within everyday life. Carrying the sounds which can be heard around the city into the museum, the exhibition has a tongue-in-cheek approach. The exhibition presents them to audience once more in a clear way. Bringing them inside, I will design an isolated space where the audience will focus on the sounds and realize their uniqueness in terms of cultural heritage. The whole objective of the project is for the visitors to have more conscious ears and a more conscious sense of aural perception than before.

## What?

Sound is everywhere, as John Cage's famous phrase "*There is no such thing as si-lence*". No matter what type, level, quality or meaning it has, we hear it. First of all, there is a very crucial difference between sound and noise. To distinguish one from the other, we have to know the entire acoustic environment and its context. What is heard may be considered noise in one context and sound in another as they cannot be thought separate from their surroundings. To give a concrete example, traffic is definitely perceived as noise for those who are subject to hearing it at home, whereas for those who are in traffic, car horns are no longer considered noise, but sound-signals warning them (Redström, 1998). On the other hand, John Cage declares in his most famous book, *Silence: "Wherever we are, what we hear is mostly noise. When we ignore it, it disturbs us. When we listen to it, we find it fascinating"* (Cage, 1961).

We can classify sounds by using R. Murray Schafer's taxonomy. He puts forward several categories of classification based on physical characteristics, referential aspects, and aesthetic qualities. To briefly explain, physical characteristics mainly concern duration, frequency, fluctuations and dynamics of sound. They define sounds with their quantitative physical features. Referential aspects give us information about sources that produce sounds. Its sub-categories include natural sounds, human sounds, sounds and society, mechanical sounds, quiet and silence, and sounds as indicators. According to Schafer, sorting sounds based on their aesthetic qualities is hardest to accomplish, as effects of sounds differ from society to society, from person to person, and even from context to context for the same person. This type of classification depends entirely on aesthetic values and perceptive differences of people and societies (Schafer, 1977).

If we are to describe an acoustic community, all relevant elements specific to that area have to be determined. For example, comparing a rural environment to an urban one, we hear completely different acoustic harmonies. In fact, they vary even among themselves from country to country or from region to region, depending on factors such as climate, agricultural properties, population, language, and nature. Or we can choose to observe a specific event or development, such as gentrification process of a certain place through the modification of its acoustic environment. This study, of course, differs from the previous one both in content and required type of research. Here, the goal is to determine the initial concept of the museum.

The very first step is to define the soundscape concept and the boundaries of the content of the acoustic environment to be put on display. The urban soundscape consists of different types of sounds and noises, such as natural sounds (wind, sea waves, birds, dogs, etc.), mechanical sounds (car horns, alarms, signals, etc.), musical sounds (street musicians, festivals, etc.) and so on, each of which can be explored under its own title. For example, the songs and cries of different types of birds of Istanbul can be considered in the context of the Natural Soundscape. Since in the Sound Museum of Istanbul, my focus is on the daily life and urban culture of Istanbul and their sonic values, I include only the sounds that belong to culture itself, no matter if they are produced by human, nature or by machines. Therefore, with the aim of emphasizing the city's everyday habits and lifestyle through their acoustic reflections, which are basically Istanbul's cultural sound heritage, I propose to use the term *Cultural Soundscape* to describe the content of the museum collection.

Even if my concentration is on sounds, they are not the initial point of the research process. I depart from the lifestyle of the city and from urban culture itself. Once the most characteristic traditions are determined, their acoustic qualities are explored. Not all the symbolic cultural items have sonic values; for example, there are many churches in Istanbul and they represent the diversity of religion in the city, but it was forbidden to ring church bells under the Ottoman Empire, and churches still continue to be silent in contemporary Istanbul. Hence, even though a fundamental cultural value may play a great role in the history of city and its culture, it may not be part of the collection of the Sound Museum of Istanbul. On the other hand, those who have also sonic values, such as the nostalgic tramway, the Ahırkapı festival, smoking nargile (water pipe), preparation of kokoreç (a kind of food), call to prayer, playing backgammon, stirring tea in a glass with a clinking spoon, marches on national festivals, car horns commemorating Atatürk (the founder of the Turkish Republic) every year on a specific day, and so on, are considered unique parts of the *Cultural Soundscape*.

### Why?

Traditions and culture are not stable phenomena; they are evolving over time. Being part of intangible cultural heritage, they are endangered unless they are protected. Especially sonic culture is temporary in two aspects: First, traditions are changing, being quickly replaced due to transformed conditions of living, political situations, immigration, and so on. Secondly, the physical presence of sound depends on the factor of time. In order to listen to the same sound again, one has to rewind it or produce it once more in the same way. It might even be different from what has been heard before. In other words, unlike visual elements, sonic elements do not last for a long time. Hence they are twice endangered.

Today, the acoustic facets of Istanbul's past daily traditions, such as the cries of firemen (tulumbaçılar) and street vendors are already lost due to a lack of protection. We see them in films or read about them in books, but we cannot hear them. We do not know their exact qualities. Only imagination can enliven them in our minds.

Thus, I aim to prevent at least the extinction of the present city's acoustic environment and to keep it for following generations.

### How?

At present, the preliminary research toward the museum project consists of a review of primary sources, followed by soundwalking. The latter is a walk focused on listening and discovering the acoustic environment (to be discussed in greater detail below). Based on the soundwalk's findings, further, more focused research into textual sources continues, which in turn determines an adjustment of focus for additional soundwalks. As a result, a table of key traditions and daily habits including both the past and the contemporary city, day and night, will emerge for each region.

### The process: first steps

As I mentioned above, my departure point is the daily city culture and then as a second step, exploring its sonic values. (Çevikayak, 2012) Starting from the historical aspect, the history of the city has led to determining and selecting the neighborhoods I currently investigate.

The chosen neighborhoods are Karaköy, Galata, Beyoğlu, Pera, Eminönü, Beyazıt, Ahırkapı, Kumkapı, Fatih, Eyüp, Balat, Beşiktaş, Ortaköy, Kadıköy and Büyükdada. They all have a rich cultural history and have housed people from diverse ethnic backgrounds, different religions and with various languages since the first Megaran settlement was established starting in 8/7<sup>th</sup> century BC.



Figure 1. Istanbul map. (The selected regions are in dark grey).

The pace of Istanbul can be clearly observed in these regions as they are located in the heart of the city, as shown in the map above (Fig. 1). To have a better understanding and comprehensive knowledge, I have conducted library research for each region. This research is supported by systematic soundwalks before, during and after the studies, all of which have a different approach to sonic exploration. During the soundwalks, I have examined whether the daily traditions that I have determined from my research also have sonic values. I have prepared detailed tables for each region according to my

findings which are the fundamentals of Cultural Soundscape. Below, there is a sample table (Fig. 2) consisting of past and contemporary traditions of the neighborhood of Pera.

		PAST EVERYDAY TRADITIONS	CONTEMPORARY EVERYDAY TRADITIONS
DURING THE DAY	<ul style="list-style-type: none"> <li>children going to armenian schools</li> <li>going to cinemas and to theatres with elegant dresses</li> <li>different languages in hotels and in cafés</li> <li>horns of buses at square</li> <li>bargaining with flower sellers</li> <li>feeding pigeons in the parc</li> <li>horse-drawn tramways</li> <li>rituals in churches</li> </ul>	<ul style="list-style-type: none"> <li>antique dealers</li> <li>souvenir shops</li> <li>many tourists in hotels and in cafés</li> <li>booksellers</li> <li>tea houses</li> <li>passages</li> <li>dead-end street of Terkoz</li> <li>mosques and churches</li> <li>tramway</li> <li>different types of music coming from the shops</li> <li>kokoreç (a kind of food)</li> </ul>	
AT NIGHT	<ul style="list-style-type: none"> <li>bars</li> <li>brothels</li> <li>nevizade</li> <li>raki (typical Turkish alcoholic drink)</li> <li>fasil (music that is played while drinking raki)</li> <li>belly dancers</li> <li>transvestites</li> <li>midye, kokoreç</li> </ul>	<ul style="list-style-type: none"> <li>elegant restaurants</li> <li>bars, clubs</li> <li>kokoreç (a kind of food)</li> <li>the music coming from the shops that are still open</li> <li>drunk people</li> <li>taxis</li> <li>traffic and car horns</li> <li>street musicians and accompaniers from regular public</li> <li>people drinking on the street</li> </ul>	

Figure 2. Table 1. Table showing past and contemporary traditions of Pera. (Note: since each neighborhood has a different demographic and cultural make-up, this is not to be considered a representative sample of the entire city. For example, drums used to wake up people at sunrise during Ramadan are not commonly encountered here).

### Soundwalking

Soundwalking was born out of curiosity about how it can be adapted and engaged as a methodological tool, both for academic qualitative research and for artistic purposes. It has always been of particular importance for acoustic ecology as well as disciplines such as contemporary performing arts (Paquette & McCartney, 2012).

A soundwalk consists of a walking tour concentrated on listening to the surround-ings. It is most effective when standing at certain points with eyes closed, focusing only on listening. A soundwalk may result in different findings according to the soundwalker's previous knowledge about the area explored. It can be applied at three levels, paralleling three phases of research: discovery, observatory and analytical soundwalking.

No Knowledge	→	Discovery Soundwalking
Some Knowledge	→	Observatory Soundwalking
Adequate Knowledge	→	Analytical Soundwalking

Firstly, soundwalking without having any idea about the area is discovery sound-walking since whatever is heard is new and maybe not yet meaningful. Secondly, knowing some information about the region turns soundwalking into an observatory action. This knowledge makes the area theoretically familiar to soundwalkers and encourages them to seek clues about what they know. Lastly, when soundwalkers are knowledgeable enough about the zone, they reinforce what they already knew by catching additional small details.

In the step of collecting information about the areas of Istanbul, all levels of soundwalking have been applied. In other words, all regions that are covered in this project - Karaköy, Galata, Beyoğlu, Pera, Eminönü, Beyazıt, Ahırkapı, Kumkapı, Fatih, Eyüp, Balat, Beşiktaş, Ortaköy, Kadıköy and Büyükdada - have been visited at least three times, according to the type of soundwalking outlined above. First, I have

carried out site discovery myself; thus the soundwalks are individual. During the individual soundwalks, I have conducted interviews and questionnaires with locals to understand the neighborhood. Then, I have organized collective group soundwalks with non-locals of the zone or the city. The route choices were always different depending on the participants' suggestions. Thus, the decision about what to collect would be more objective.

### Significance assessment

Significance assessment is a common and important method applied in museums to evaluate an item's value and appropriateness for the collection during the process of accessioning. Once I have created tables of characteristic traditions and their sonic representations, further research is needed to assess their significance. The assessment process consists of analyzing the soundscape element, gathering information, researching its history, provenance and context, comparing it with similar items, understanding its values, consulting people, and finally writing a statement of significance (Russel & Winkworth, 2009); in other words, a concise summary of the values, meaning and importance of the object (Russel & Winkworth, 2009). The significance assessment has to be done for each and every sound, to understand its values and meanings. It also shows whether the determined sonic reflections are appropriate for the collection of the Sound Museum of Istanbul, as it is meant to be a systematic collection. A systematic collection requires the collector to be consistent and related to the theme when collecting (Pearce, 1991), and an assessment of significance will help deciding on what to include or exclude. This example below demonstrates why that specific sound item is important and how it is connected with the theme:

The first tramway of Istanbul, which was a horse-drawn type, started to operate in 1871. Before horse-drawn tramways, fiacres and phaetons were hardly affordable for middle-income families. A great demand occurred for horses with the Balkan War in 1912. Since the horses were all used for war purposes, there was a lack of transportation as tramways were the only way of transportation at that time. In 1914, electrical tramways were introduced. Over time, Istanbul expanded very much, and this has led to a search for alternative ways of transportation. Due to tremendous traffic problem in Istanbul, there are only a few tramway lines left today and just two of them are nostalgic tramways. In today's Istanbul, although there is another nostalgic tramway on the other side of the city, you can hear this sound only on Istiklal Caddesi, Beyoğlu. The other tramway has no sonic value and almost disappears in the urban fabric. Despite the fact that the sound of the tramway bells is similar to that of other cities and other countries, each one has a different meaning and history behind. In Istanbul, the sound of the tramway bells symbolizes Istiklal Caddesi, Beyoğlu. It is a very characteristic sound which has a strong relationship with the place where it is located. It has a great contribution to the sonic environment of both the zone and the city. Moreover, the nostalgic tramway of Beyoğlu not only contributes to the acoustic environment of today's Istanbul but also represents the historic sonic values, such as sounds of horsewhips and bugles and cries of vardacılar who were shouting "*the tramway is coming, get out of its way*" to warn people in the streets. Having these strong meanings, this sound fits perfectly to the theme of the exhibition which is "*Cultural Soundscape of Istanbul*." Since the aspect is related to culture and its reflections on the acoustic environment, "*The Sound of the Tramway in Beyoğlu*" is a unique piece of the collection.

### Archive

Deciding on the most important characteristic cultural soundscape elements, I will record and archive these in an appropriate manner.

I will record the sounds with the method of binaural recording. Binaural recording is done with two microphones in order to give a sense of depth. Then I will transfer the recordings to the digital library. This arrangement of sound recordings will be done according to the ontological representation of the *Cultural Soundscape*, which I will explain below.

R. Murray Schafer, who was the first to propose the term soundscape, has directed the *World Soundscape Project*, including many studies and research project from the 1970s to the 2000s across the world. The recordings collected during these studies are kept in a digital library called the *World Soundscape Tape Library*. For this archive, a formal semantic representation of a library has been developed based on the soundscape taxonomy outlined by Schafer (Thorogood, Pasquier & Truax, n.d.). Departing from this point, the Sound Museum of Istanbul needs a model appropriate for its own specific context.

The ontological representation of *Cultural Soundscape* is mainly a categorization method for cultural sounds in order to archive them systematically. To classify these intangible cultural heritage elements, I need to pick up specific terms to define the concept clearly and I need to arrange tags to find the sounds easily in the digital archive. This ontological model will facilitate placing the cultural sounds of Istanbul according to their various qualities, such as source, type, zone, and frequency of repetition, and tags will be determined accordingly, such as food, entertainment, religion, daily, weekly, annual, at night, during the day, etc. For example, some traditions are daily actions, such as call to prayer which is heard five times a day. Therefore, for this sound item, the tags would be religion, daily, during the day and at night, as well as the name of the zone in which it is located. This is in contrast to annual events, such as national and religious festivals, which happen only once a year. With this example, a different aspect of the model arises: I need to clarify the frequency of repetition that contributes to their meaning in cultural

identity as well. Hence, this model does not offer a simple classification method by demonstrating only the physical qualities – location, source, and type – of cultural sounds, but it provides a deep perception of evaluating the essence of the cultural sonic values in the context of city life.

## Exhibition

Having been determined, recorded and archived, the most characteristic cultural sounds of Istanbul can now be displayed within a well-designed exhibition in order to communicate the museum's message. According to Beverly Serrell, an authority on museums, deciding on the *Big Idea* of the exhibition is the very first step of the entire process (Serrell, 1996). The Big Idea tells the general concept of an exhibition with one sentence or statement. Considering the main message, the big idea of this exhibition is the following: *What you hear in this exhibition can easily be found and listened to in the outside world, but to be able to do so, you have to, first, hear them consciously. I would like to emphasize the importance of approaching the sonic environment consciously.* The Sound Museum of Istanbul also has the purpose of protecting sounds that are about to disappear from urban culture and providing an accumulation of sound heritage for future generations.

Most residents are not aware of the sounds collected, despite being immersed in them every day; on the other hand, for foreign visitors, visuality is more dominant when discovering the city. This museum aims to increase awareness of sonic culture and, at the same time, to create a unique experience for all visitors through the exhibition. Since my target group includes domestic visitors and tourists, the behaviors and characteristics of both need to be considered. The message I wish to convey requires the museum to be visitor-based in terms of participation and experience. Nina Simon explains the concept of participatory museum and what is intended by participation in this way:

The goal of participatory techniques is both to meet visitors' expectations for active engagement and to do so in a way that furthers the mission and core values of the institution. Rather than delivering the same content to everyone, a participatory institution collects and shares diverse, personalized and changing content co-produced with visitors. It invites visitors to respond and add to cultural artifacts, scientific evidence, and historical records on display. It showcases the diverse creations and opinions of non-experts. People use the institution as meeting grounds for dialogue around the content presented. Instead of being "about" something or "for" someone, participatory institutions are created and managed "with" visitors (Simon, 2010).

Therefore, beyond my studies and recordings, visitors will be able to contribute to this accumulation as well. There will be a specialized area for exchanging ideas and sharing sonic memories. This sound heritage and culture belong to Istanbul, to its residents and to the entire humankind, and everyone has the right to contribute and to protect it.

A statement from the Excellence and Equity report of the American Association of Museums explains exactly my point of highlighting the importance of soundscape: *"Objects are no longer viewed solely as things in themselves, but as things with complex contexts and associated value-laden significance"* (AAM, 1992). For this reason the museum, in general, will be designed as a sonic space in which the audience gains aural experiences, rather than an object-centered museum where visitors are only viewers. This design decision can be supported with another statement from the same report: *"Changing interpretive approaches will have a strong impact on museum collections and the public's understanding of them"* (AAM, 1992).

Now I will turn to various aspects of the design process, such as the technology, colors, lighting and graphics. The sounds will be communicated to the audience through directional sound technology, which operates like an audio spotlight. In other words, speakers send sound waves to a particular direction, and visitors cannot hear the sound outside this specific direction. Using this technology for each sound, dispersal of sound waves will be prevented, and there will be no interference with other sounds. Thus, a sound can only be heard if the visitor is in the particular area dedicated to that sound. Outside of those areas, the exhibition space will be quiet. Despite creating experiences, installations are neither the final objective nor the visual focus; they are just the medium used to convey the message.

Taken as a whole, the exhibition makes use of *"white cube design"* approach – keeping the architecture and interior design as simple as possible – to emphasize the sounds themselves. The Museum of Modern Art, New York; can be given as a very successful example in which the focus always remains on what is exhibited. Hence, the space will be designed with a minimum number of visual elements, not more than necessary. For instance, since the exhibition space is silent for those who stand outside the sound spots, gently flashing lights together with an appropriate choice of graphics and colors will be used as indicators of the area of each sound. I will conduct workshops to decide whether the photographs or videos of the cultural items need to be included in the exhibition. If so, I will conduct further research on how to present them without hindering or lessening the attention on sonic values. Moreover, in order to

keep the displayed sounds on focus, possible unwanted sounds will also be prevented. For example, the floor will be designed with soft materials in order to prevent the noise of footsteps.

A representative map of Istanbul will cover the ground and determine the organization and placement within the exhibition. As the sonic environment needs to be perceived as a whole, the exhibition space will be designed as a unique section without walls or any kind of separation. It will be designed on an open plan, since I want visitors to see the entire exhibition (McLean, 1993). In order to avoid confusing visual elements, there will be no permanent labels. For the duration of the visitor standing in a sound spot, the related label will be projected on the wall. Thus, visitors will see only what they absolutely need to see. The image below (Fig. 3) is a preliminary sketch to visualize the initial idea.



Figure 3. Preliminary Sketch by the author.

Labels will present information updated daily - an example for this kind of a label:

"What you are listening to now is the sound of 'Ahirkapi festival' (Hidrellez) which was celebrated three days ago in Ahirkapi. Every year in the evening of 5 May, people dance and make wishes by tying ribbons on rose trees to welcome spring."

Sounds will also be updated regularly via live streaming technology which will be placed in the original locations of the sounds. Communicating in a dynamic manner, the exhibition will be alive, just like its content.

In this exhibition, accessibility especially for the hearing impaired is a major issue. Not to deprive them from this experience, vibrations will be designed in accordance with the rhythm of the sound which they can feel in the sound spots. For the visually impaired, information will be provided as tactile experience.

## Conclusion

In the process of working towards the Sound Museum of Istanbul, such steps as assessing the significance of soundscape elements, soundwalking, archiving, and exhibition design will lead to further studies. As this

is a multi-disciplinary project, it will bring forth new terms and applications derived from the interaction of various subjects, as well as several additional projects.

First, discovering the *Cultural Soundscape* of the city and determining the significant sounds of daily culture, I will explore whether there is a distinctive soundmark, in parallel to generally visually perceived landmarks, for each zone. A soundmark is the most characteristic and unique element of the acoustic environment. Therefore, it needs to be protected, as R. Murray Schafer states: "*Once a soundmark is identified, it deserves to be protected, for soundmarks make the acoustic life of the community unique*" (Schafer, 1977). Significance assessments, as mentioned above, will play an important role to determine the soundmarks of each region and of the city as a whole. For example, the sound of the tramway bells symbolizes only one specific place in Istanbul. It is a unique sound, thus the soundmark of that neighborhood.

Second, after collecting the essential sounds from the entire city, I will analyze the distribution and prevalence of these sounds. The results of these analyses will help to draw the general outline of the contemporary *Cultural Soundscape* of Istanbul. This outline will then be compared with that of the past *Cultural Soundscape*, as far as it can be reconstructed, to see how changing life conditions affect the sonic environment. The results will lead to a longitudinal study to which future *Cultural Soundscapes* will be added.

Third, as mentioned above, in the archiving process a method will be developed to organize sounds. This method will be turned into a model that may be applied to all cities to classify the concept of *Cultural Soundscapes* across the world.

Finally, the exhibition design – which, I hope, will offer several innovations in display technology – will be planned to allow for easy transportation and travel. Installations will consist of interchangeable and moveable parts to facilitate adaptability to other museums and even to open air spaces.

Overall, I hope that the Sound Museum of Istanbul will help visitors to become aware of their sonic surroundings, to own these intangible cultural heritage elements as an important part of their daily lives, and to protect their cultural identity, as it is partly shaped by sound-related practices.

## References

- American Association of Museums (1992) *Excellence and Equity: Education and the Public Dimension of Museums*. Washington, D.C.: American Association of Museums.
- Cage, J. (1961) *Silence*. Middletown: Westleyan University Press.
- Çevikayak, P. (2012) *Attraverso i suoni. Guida non convenzionale per la città di Istanbul: Soundtourist*. Unpublished thesis (MSc). Politecnico di Milano.
- McLean, K. (1993) *Planning for People in Museum Exhibitions*. Association of Science Technology Centers.
- Paquette, D. & McCartney, A. (2012) Soundwalking and the Bodily Exploration of Places. *Canadian Journal of Communication* 37(1), pp. 135-145.
- Pearce, S. M. (1991) Collecting Reconsidered. In G. Kavanagh (ed.) *Museum Languages: Objects and Texts*, pp.137-153. Leicester: Leicester University Press.
- Redström, J. (1998) Is Acoustic Ecology about Ecology?. Reflections on the *International Conference on Acoustic Ecology "Stockholm, Hey Listen!"*.
- Russel, R. & Winkworth, K. (2009) *Significance2.0: A Guide to Assessing the Significance Collections*. Collections Council of Australia.
- Schafer, R. M. (1977) *Our Sonic Environment and the Tuning of the World - The Soundscape*. Vermont: Destiny Books Rochester.
- Serrell, B. (1996) *Exhibit Labels: An Interpretive Approach*. AltaMira Press.
- Simon, N. (2010) *The Participatory Museum*. Available at <http://www.participatorymuseum.org/preface/>.
- Thorogood, M., Pasquier, P. & Truax B. (n.d.) *Toward an Ontological Representation of the World Soundscape Project Tape Library*. unpublished.

## Acknowledgements

I would like to thank to Assist.Prof. Nina Ergin for her valuable contributions and comments and to the organizing committee of the 3<sup>rd</sup> International Conference on Intangible Heritage for inviting me to present my project. Much thanks are also due to the audience at the conference, as their questions helped to reframe some of my methodologies.



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## Analysis of traditional building techniques and damage assessment of traditional Turkish house - "case study of timber framed Kula houses"

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Western part of the Anatolia is one of the most important regions of the World that many civilizations have lived during the history since ancient times. Kula is an important historical town dating back to 17<sup>th</sup> century and is hosting important timber framed structures (mansions) unique with their space organizations, architectural features and structural system. This study creates an analysis model which is based on a detailed case study, defining structural system and damage causes for the upcoming restoration works within the region, and this methodology can be applied for other traditional regions as well.

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**Keywords:** Traditional Turkish Houses, Kula, Timber Structures, Traditional Building Techniques, Architectural Technology.

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### Introduction

Having a shelter, in other words, having a house is one of the oldest needs of human-being since the beginning of the life. Depending on the social, cultural and physical properties of society and also depending on the properties of the place, many different formations of vernacular settlements have been existed during the history. Some of these settlements do not exist today while some of them survived and some of them have been transformed into today's modern way of living. Western part of the Anatolia is one of the most important regions of the World that many civilizations have lived during the history since ancient times.

With a general point of view, most of the traditional vernacular settlements may have similarities, because of the limited kind of building materials and limited construction techniques. They were non-engineered structures but were results of long term experimentation and classical trial and error period. A fast examination on these settlements may form an idea of complete difference at every comparable element. But a closer look could point out to some similarities of the formation of the settlements. These can be the materials, construction techniques, and formation of the house plans according to the weather conditions and sunlight or the topographic features of the environment.

In other words, the building practices that performed well were replicated and further improved. One of the most important examples of vernacular architecture in the Western Anatolia is Ottoman style Traditional Turkish Houses which are very important part of our cultural heritage.

In this study, Kula, a small city near Manisa has been selected as the case study area because of its preserved traditional housing.

Kula has a quite large and well preserved traditional pattern where one can follow traces of the traditional architecture and construction system. In this context, this study aims to put forward the historical building techniques and deterioration reasons of the timber framed Turkish Houses dating back to 18<sup>th</sup>-19<sup>th</sup> centuries located specially in Kula Settlement which are one of the parts of this important Cultural Heritage. By learning/understanding the rules of these traditional constructions it is aimed to develop more effective conservation techniques/issues and to get some useful ideas for new constructions.

With this idea, in the first part of the paper, traditional Kula Houses has been described according to the general analysis of whole settlement. Then, case area has been narrowed to be able to make more detailed structural analysis and damage assessment as well as to be able to make more definite comparisons between cases. So, some cases that located on Akgun district have been chosen and examined, because Akgun district has been a less studied area of Kula by comparing the other districts that include different examples of traditional housing. Other reasons of the choice of this area can be explained as; originality of the houses within the district, accessibility of cases within the district, similarity of houses in the context of structural, constructional and spatial organization.

### **Description of the houses in traditional Kula settlement**

In this part of the study, general properties of traditional houses in Kula will be described in 3 main titles:

1. Spatial organization;
2. Structural system and its components;
3. Architectural building components.

#### **Spatial organization**

These houses are located in a courtyard, which is surrounded by high courtyard walls for obtaining privacy to the house. The ground floor is used for service facilities such as barns, depots and also it is surrounded by thick stone walls and these facility rooms have no openings to the street. All the openings of the house are viewed from the courtyard, while rooms located on the first or second floor can also have openings to the street. North facades of the houses have solid surfaces to prevent the interior of the houses from cold, and south facades have open surfaces to obtain sun and breeze in the interior of the houses. All the rooms located in the first and the second floors are opened to a semi-open space called as "sofa". Most of Kula Houses have scheme system with outer sofa<sup>1</sup> which has a strong relation with the courtyard (Table 1).

From the point of view life experience in the house, the two striking aspects of the Kula House were the courtyard and the hayat-sofa (hall). Courtyard is both like a large, open room for the activities of the household and it is also the edge space between the compound and the outside; through the wall of the courtyard, the household and the visitors can move in and out of the compound.

The hayat-sofa (hall) is more than a circulation area between the rooms and the staircase; it is a semi-open multi-functional living space on the upper floors. With its strong visual connection to the courtyard and to its natural setting as well as to the rest of the town with its projections both to the courtyard and the street, hayat-sofa (hall) is a unique part of the house. In other words it serves as connection point between the courtyard and the rooms. Many of the daily activities occur in Sofa space due to its semi-private character. A raised wooden platform for sitting on one, two or three sides oriented towards a vista/panorama is the architectural elements of this space. A semi-open projection with a lattice-window, a projection to the street and/or to the courtyard, staircases, projected and raised platforms for resting, a rectangular planned space open at one side, either in the form of an extension of the Sofa or as a single semi-open space acting as a Sofa are the other important features of the Sofa.

Shortly, ground floor closed to the street with a stone or adobe wall and an upper floor which sits on either load bearing stone walls or wooden studs characterizes the house type generally seen in Kula region. The upper floor(s), which are built by timber frame construction system consist rooms. Room; often with an elevated platform that was used as a seating area by day and a place to lay sleeping mattresses by night. Room is the main private unit of the house and designed according to ergonomic requirements (Asatekin, 2005, 403). Repetition of this unit is the basis of the typology (Kuban, 1975, 199). In Kula region, the number of the rooms differs from each other depending on how big is the family of the house. For example there are houses in the settlement called with their family names, as Beyler, Bekir Beyler, Palanduzlar, Gödeliler, and these houses are built as mansions with repetition of numerous of rooms. The rooms are planned with square or square like forms and are about 12-15m<sup>2</sup>; the height of the room is approximately 3 meters. One of the rooms serves as main one and called as "bas oda". This main room differs from other rooms not only with larger dimensions but also with a projection to the street.

There may be differentiations of room use including: summer/winter rooms. Summer rooms are mostly placed on the upper floors with larger openings to street or courtyard, and the winter rooms are placed mostly at ground floors with smaller openings and thick walls. Surfaces of the rooms are carefully

designed both horizontal and vertical surfaces are designed to express the hierarchy of the space. Rooms also have some sub units named as; *sekialti*, *sekiustu* and *seki*.

**Sekialti:** is the entrance of room, a special space for taking off one's shoes; it is separated for hygienic reasons, and can be covered with timber planks. **Sekiüstü:** is the main platform of the room, this space is differentiated from *Sekialti* space by using dissimilar timber floor covering like altering the direction of planking, and sometimes by using timber balustrade separation. The timber floors of the room can be covered with carpets to obtain the heat isolation of the space. **Seki:** is the sitting timber platform in the room. This platform is raised between 20-60cm (early examples are rather low) from the floor, and placed on one, two or three sides of the room, the windows are placed at a higher level. There is a wooden shelf called as "*Sergen*" which turns the surfaces roundabout just to respond it to human scale. (Figs. 8-9).

The middle floor, if there is one, has a low ceiling and is either a mezzanine floor or a whole floor. The top floor has, through time, become ever livelier with several projections and with multitude of windows which are of a standard size. The standard size of the window creates a sense of unity with its recurrent rhythm, not only in each house but also throughout the town. The roof always slopes on all four sides. This is one of the main discriminating characteristics of Traditional Kula House (Günay, 2007).

### Structural system and its elements

Structural systems of Kula houses are consist of both masonry and wood as main construction materials. Most of the houses have two stories. Houses are surrounded by load bearing masonry walls mostly made of local Stone called "*kufeki*" at the ground floor level, including courtyard. Most of the time, this heavy stone wall is continued through the upper floor at the North side (facade) of the house by considering the climate. Masonry walls are supported by horizontal beams called as "*hatil*" at vertical intervals of about 1-1.50 meters. Wooden beams (*hatils*) that placed with particular distances (also in today regulations advice that the vertical distance between *hatils* should be 1,2- 1,5 meters) help to bind the stone layers together without interrupting the continuity of the masonry construction. In addition to strengthening the masonry structure by connecting the wall surfaces *hatils* decrease the ratio of height to width and help to determine the location of the first crack. The decay of these wooden elements mostly by the effect of water causes the masonry wall to be collapsed (Hughes, 2000).

Upper floor is constructed with the infill frame system and this structure called as "*himis*" in Turkey. This is a typical wooden frame structure that small pieces of row materials (brick, stone etc...) are used as infilling material. This is a common use of wood and masonry in vernacular settlements in other regions of the Turkey as well as the different seismic regions of the World. This issue has been underlined by Langenbach with following words:

"The timber with brick infill vernacular construction is documented to have originated as early as the 8<sup>th</sup> Century AD. There is much to support a hypothesis that this building tradition traveled from Europe into Asia as a result of the reach and influence of the Ottoman Empire, which at one time extended almost from Vienna to the Caspian Sea. The Islamic Religion, which extended farther, may also have provided a cultural connection helping to further extend the construction method. The infill frame style of construction may have followed these same lines of cultural influence" (Langenbach, 2000).

By considering the ground floor system can be defined as a "semi" load bearing masonry system without having a solid floor like reinforced concrete which has to be used in conventional load bearing masonry system according to Turkish Earthquake Code. Use of the *himis* technique on the first floor helps to decrease the dead-loads.

Before the construction of the upper floor, the timber wall plates are placed on the inner and outer edges of the ground floor main walls. Also, free-standing posts placed in the semi-open circulation spaces known as *taslik* are connected horizontally to the main beams, forming a base for the upper floors. In the upper floors, Posts (studs) and secondary posts are placed on a timber beam which is called as the sole plate (usually 12/12cm a square section element) as a base on the masonry wall. Usually with a dimension of 10/12 or 12/12cm posts made of yellow pine tree are installed in approx. 1 meter distance with each other on sole plate (*yastik*-traditional name of sole plate). These posts are connected with a wooden beam on the top level as well which is called as the top plate. These posts are supported with the secondary diagonal timber elements with 8/8cm dimensions. In the cases of a need of openings such as windows or doors, secondary posts are used for to obtain the necessary void for the openings. Two secondary timber beams, one in the bottom of the opening and one at the top of the opening (lintel) are used to obtain door or window openings on the surface of the wall. These beams are connected to the main posts with nails. Usually the walls are filled with *kufeki* stone to form the surface. The construction is plastered by tow "*kıtkılı sıva*" which is usually made of mud and tow.

### The floor and roof

In traditional Kula houses first floor is constructed with timber floor beams that covered with timber boarding. The floor construction can be seen from the ground floor since it does not have a ceiling covering. Floor beams are generally supported by stronger elements in section with about 2.00-2.50 meters intervals depending on the room size. This floor construction is connected to the masonry ground floor walls by horizontal timber beams called as "yastik", but sometimes it is seen that floor beams are simply tied to the masonry without any other wooden element or insulation layer.

Floor beams (joists) which have usually 8/15cm dimensions in sections, are spaced at approximately 50 cm intervals. The spatial dimensions are usually determined according to the size of the available materials, whereas in some larger spaces such as the sofa—the main circulation hall in Ottoman houses—and taslik where a wide span is required, long timber beams with a relatively larger cross-section (like 15\*20, 20\*20cm) are used to support the secondary joists. Then the floor is covered with a timber boarding which is nailed to the joists. The floor system that consists of timber joists moving in one direction. Floor has an important role against the lateral forces especially in case of earthquakes since it connects all the masonry walls of the structure as well as the roof.

### Projections

Another important element of the first floor is projection spaces that are commonly used in traditional Turkish House and Kula Settlement has numerous unique examples of projections. To built projection (cikma in Turkish) on the upper floor, the load-bearing elements that carry the projection are constructed according to the type and extension of the projection and put in place at this stage. Main beam(s) is extended and the floor beams placed on/between them. And the timber cantilever beams are supported by diagonal bracing elements (pit prop).

Projection spaces are commonly used architectural elements in Kula Settlement and have numerous unique types. In the point of view of space organization, two types ra obtained in the pattern, one a semi-open space which is the evtenion of sofa space to street, and one a close space which is the extension of room or several rooms to street. The open semi-open projection of sofa space to street is isolated from the street by wooden fences.

The outer shell of the house is finished with a wooden roof covered with tiles. The use of timber beams and joists are very similar in both floor and roof structure. The main difference is the slope of the roof. To construct the roof, rafters are placed on the top plate of the frame but in some cases a secondary beam—a purlin can be used as well on the top plate. Rafters are connected to the beam on top of the roof. This beam is supported by posts in approximately 200cm intervals. Like the floor rafters are covered with firstly a timber boarding, then tiles are placed on this timber layer. In some cases especially in lower income houses rafters cannot be covered with timber boarding, in this case tiles are placed on the rafters which are placed parallel to the long side of the roof directly. The roof construction usually cannot be seen inside the rooms since the ceiling of the room is covered with timber boarding, this coating layer is supported by ceiling joists similar with the floor joists. The ceilings of the important rooms are usually ornamented. The mouldings are used in the connections of wall and ceiling surfaces.

With the features that are tried to be described above, this long construction tradition has been proved to be quite effective against earthquakes. Especially after the big earthquakes in Marmara region in 1999 and 2000 it has been seen that traditional houses could survived while conventional reinforced concrete buildings collapsed and caused to die of many people. Earthquakes have been an important part of life in Anatolia during the history. It is not a certain issue if these houses were built by considering earthquakes as a design parameter or not, since neither the science of earthquake nor the science of building were not defined as a separate professional activity at that times. But by considering the logical selection of the construction system and size of the building elements it can be said that earthquake could affect the construction process as a criterion. Besides the earthquake resistance, these traditional houses are important examples of optimum use of local sources and building materials.

### Architectural building components

Timber is used as the building component as well as the structural system element in Kula houses. The timber components used in Traditional Turkish house architecture can be considered as the art works within its period. These elements can be classified as:

- Doors, door ornamentations and doorjambes;
- Windows and window ornamentations;
- Fireplace and fireplace ornamentations;
- Cupboards and its ornamentations;
- Ceiling and its ornamentations;
- Wooden facade ornaments such as plasters;
- Ornament Elements on wooden projections;
- Stairs, balustrades, and handrails and their ornamentations;
- Eaves and their ornamentations.

Wood is the common material for the usage of the **doors**. There are two main door usages in Kula Houses as inner doors and outer doors.

Inner doors are major decorative elements often embellished with geometric, floral and calligraphic patterns. Less important inner doors, such as toilet doors were left plain. The doors approximately have 200-240cm height and 90cm width. Decorative inner doors are made up of small pieces of wood laboriously fitted together. On doors with complex angular patterns, the number of pieces may easily run into the thousands. This type is called as Kündekari doors and have supporting panels on the inside (much like on a panel door), which provide for support of the kündekari pieces. The Kündekari doors are used as the entrances of the most important rooms of the house and are carved with geometrical and floral patterns in Kula. Less important inner doors are made up of a number of panels placed between stiles and rails. The rigidity of panel doors depends on the quality of joints between the stiles and rails. Panel doors have similar appearance front and back.

The outer doors are the entrances to the house from the street; they are batten doors the plainest doors of the listed above. They are usually used where they will not be highly visible. To build a batten door, the carpenter lays square-edged or tongue-and-grooved boards side by side, and joins them with additional lateral boards.

Before the sheet glass became widespread in 18<sup>th</sup> century only shutters were used in the **window** openings then wooden windows were started to be used mostly with shutters in front of them. The sash windows commonly used in Traditional Turkish houses is the main type used in Kula settlement. Decorated wooden balustrades are the second element that is used in front of the windows as well as the shutters. Knotted grille is the common type of balustrades used in Kula region. Since sheet glass was not available different types of windows had to use for ventilation and light to interior space. Shuttered windows placed at a level where a sitting person could see outside were used to provide views and to ventilate the space. Upper windows which formed a second row above the lower windows only provided light to the interior. After the use of sheet glass lower window assumed both the functions of lighting and ventilation but upper window continued to be used as a decorative elements.

**Stairs** are another important wooden component in Kula houses; their construction details are as simple as the other structural elements of the house. Two main beams (limon kirişi) carry the ladder steps. The steps approximately have 25cm width. The riser heights of the steps are 17cm. The ladder steps which are made of wood are usually fitted to the beams. The beams carry the wooden balustrades as well, and the balustrades are the most ornamented element of the stairs, the decoration of the balustrades has usually of geometrical and floral pattern.

**Wooden columns** as posts are used both as structural and the decorative elements of the Sofa, in all floors of the house. The capitals of the wooden columns are decorated with geometrical and floral patterns in the façade of the sofas in the floors which have high priority.

There are two types of **fireplaces** in houses used both cooking and heating. The hearth of the fireplace is commonly set about 10 cm above floor level and the smoke is collected by a large conical hood called as "külâh", this part is placed above a decorated "yasmak". (Uluengin, 2007, 164) The latter encloses the sides of the hearth, and it is usually ornamented. Fireplaces are the centres of attention, so an extra care is invented for their decoration. The ornaments are usually decorated with geometrical and floral patterns.

Closets in Kula region are the main compound in a room made of timber used for different purposes, varies for the functions, the main function is storing mattresses and clothes, and sometimes a small ablution space is hidden in it. There may be other closets placed on the walls of the room and they are especially niches for gas lamps, flowerpots, beverage containers, both can be ornamented if used in the important rooms, and decorated with geometrical and floral pattern.

Ceiling as a part of decoration element of Traditional Turkish Architecture has some diversity in the context of adorned techniques and construction techniques. Cause of diversity of construction and adorned techniques are financial strength of owner, talent of craftsman and function of room. With awareness of these factors appropriate ceiling type was preferred for the traditional buildings. While service sections of the buildings usually decorated with simple ceiling, the most important rooms (main room) and the main hall which are the most used spaces in the house have been decorated with adorned ceilings.

The simple and most seen type is called as "Flat Ceiling" Ceiling structure is not seen by user. Structure of ceiling is covered with board. Joints between the boards and wall are veneered with lath.

Traditional Turkish House Ceiling adornments can be group in the context of type of laths, type of joint of boards, techniques of adorned ceilings' cut and carve techniques, painting and picture techniques. In Kula houses, two types of adorned ceilings, adorned with lath and carved wood techniques are used. In the first technique, and the widespread one, desired pattern is obtained with lath, curved or diagonal laths are fixed on flat ceiling surface. Flat roof on the ground is created with the ceiling. In the second technique, a geometry drawn on the board is cut with a saw for obtaining a decorative wooden shape. And then this wooden geometry is nailed to the ceiling surface. The decorative wooden shapes are geometrical and floral patterns.

**Eaves:** especially in the southern and south-east facing facades, where the openings are more in numbers, are kept widefor keeping the structure from natural factors such as rain or the sun, varying in size from 80-150cm. the eave elements that are located in Sofa or Facades facing south, are covered with

plates. In the houses belonging to important families, the decorative coverings are used for eaves. The eaves located on the façade facing north direction are shorter than the other directions of the house because of the reason that there is less and small dimensioned openings in these façades. The dimensions vary 30-60cm in length.

### Structural analysis and damage assessments of cases

To identify the structural features and damage assessments, 10 houses have been studied from Akgün District. These cases are chosen by the criteria below:

- They are similar in the context of dimension (number and dimensions of the rooms);
- They are similar in the context of spatial;
- They are similar in the context of owner profile (number of family members, economical character of the family);
- Accessibility of cases within the district during the measurement and evaluation process;
- Ease of analysis and monitoring of structural and constructional organization;
- originality of the houses within the district.

Cases are numbered as follows:

- Case01 Zabun House (Akgün District 86 Street No:7/A);
- Case02 Akgün District 26 Street No:24;
- Case03 Akgün District 26 Street No:28;
- Case04 Akgün District 25 Street No:14;
- Case05 Akgün District 26 Street No:38;
- Case06 Akşehirli House (Akgün District-88 Street-No:21);
- Case07 Akgün District 86 Street;
- Case08 Akgün District 18 Street No:26;
- Case09 Refik Aksoy District No:5;
- Case10: Akgün District 84 Street No:15.

### Zabun House (Akgün District 86 Street No:7/A)-C01

Zabun House is the example of the external sofa typed house, with its sloped roof and courtyard, and is typically a two-storied building. The building is a unique example among the settlement when both the plan layout and the use of timber elements is analyzed. The construction system of the ground floor is stone masonry; second floor of the building is timber frame structure, unlike other surfaces of the building, all stories of the north facing wall is constructed with stone masonry system. Considering the period of the building it can be said that the upper walls of the timber frame structure is made of Himis Technique.

The building stands on the corner therefore; the courtyard of the building has two individual entrances from both of the two streets. The hayataltı space, one storied annex building and a wooden staircase that leads one to upper floors are located in the courtyard of the building. The first floor of the building has additions throughout time as a result of today's requirements such as the transformation of the external sofa space into a closed space. This approach turned all of the wooden openings of the rooms (doors and windows) into an interior space element, and by this way all of these architectural timber elements are protected from the atmospheric conditions. Now that the building carries on its original usage as a residence today, the periodic maintenance of the structure can be achieved during the historical period.

Four rooms are located on the first floor and are all opened to Sofa space, one of them is overlooked to the main street and the other three are situated side by side and prolonged to the other side of the street by angled projections. The rooms are decorated with unique wooden architectural elements such as cupboards, fireplaces.

The masonry stone wall thickness varies between 65-75cm on the ground floor, and varies between 50-60cm on the first floor. The length of the span of the masonry ground floor wall is 11 meters on the west direction, and 16 meters on the south direction and shelters not only the rooms but also the courtyard. The masonry wall on the west direction is supported by walls with similar thickness but the masonry wall on the south direction is not supported by any wall element. When this finding is compared to nowadays standardizations, it can be said that due to regulations it is not eligible to build a masonry wall bigger than 5.5 meters length without any support element in first degree seismic zone areas. The researches show that; when traditional dwellings suffer from earthquakes in Turkey in recent years is analyzed; the less-damaged or undamaged cases show that the wall length of masonry unsupported wall is not more than 10 times of the thickness of the masonry wall. (Aksoy,Ahunbay, 2005). In our case the ground floor wall thickness varies in between 65-75cm, according to what have been discussed in previous sentences, the unsupported span should not be more than 6,50-7,00 meters. When the length of the ground floor masonry walls is taken into consideration, it can be said that, the flexible behavior and lightweight of the timber structure that is constructed over the masonry wall, and the timber elements

(hatıl) that are used within the masonry wall as support elements stabilize or exist in the system without creating any risk in terms of structure system.

The depth length of sofa space is 3meters, and its longitudinal length of this space is 11 meters. 15x15cm cross-sectioned and 2.65 meter long timber beams that are in the sofa space are placed at intervals of 2.00 meters. The main room which is the biggest room opening to sofa space has 5,50x4.30 meters dimension. The second biggest room opening to street on both south and west directions has 5,00x5,00 meters dimension. The smallest room on this floor is room 105 and its dimensions are 2,45x5,00 metres. The structural timber beam intervals can be read throughout the façade organization of the house and it is approximately 1.00 meters. The window openings are 0.80 meters long. The floor is constructed with timber floor beams that covered with timber boarding, the timber beam elements are used as they are taken from the forest without any carpentry work. According to the analyzes that are made for the rooms plan scheme, the main floor beams passes about 5,00 meters span in maximum and are supported approximately by 0,25x0,18m cross-sectioned beams within 2.50 intervals. The secondary beams radiuses are approximately 0.10 meters, and are placed on the main beam with 0,45meters intervals.

The bagdadi covered long eaves of the building is very characteristic, and surround the three side of the building for preserving the timber structure from atmospheric conditions such as rain. The curvilinear beams supporting the projections are covered with bagdadi as well. All the significant indoor and outdoor architectural elements of the building such as windows, shutters, doors, ceiling coverings and etc. are made of wood, the wooden plaster elements are used on the facades as the ornaments.

It can be seen that now that the building ensured the continuity of its building use, the deteriorated architectural elements are replaced with new elements during the historical process. By this attempt, the original first floor windows and doors, the floor coverings of sofa space and the staircase are replaced with new timber elements. The repairs that have been maintained by the owner the house are made by using the same quality wooden structural and architectural elements. These attempts lead the building to be preserved to nowadays with its original features. Even if the periodical repairs have been done during the process, some deterioration on the facades of the building caused by atmospheric conditions such as color changes on wooden elements can be obtained.

### **Akgün District 26 Street No:24 C02**

The building is a two-storied, an external sofa typed small scaled house with a courtyard. The sofa space establishes a relationship with only courtyard, and is not projected to street. The construction system of the ground floor is stone masonry; second floor of the building is timber frame structure. The masonry walls are not plastered on the outer facades so the timber diagonal beams placed between the masonry walls as the support elements (hatıl) with some intervals can be seen from the surface. The masonry wall thickness on the ground floor is approximately 0,65- 0,85m, and on the first floor is 0,70m.

The masonry stone wall is approximately 17,5 meters long throughout the 26<sup>th</sup> Street where the entrance is obtained from, and is an unsupported wall. The other two ground floor masonry stone walls situated perpendicular to the entrance wall are similarly maintained as unsupported masonry walls with 17meters and 12 meters length.

The biggest room on the timber structured first floor has dimensions like 4.35x4.50 meters. This room is projected to the street about 0,70 meters with a simple projection, the projection is supported by three curvilinear timber elements.

The floor is constructed with timber floor beams that covered with timber boarding, and these beams are carried by posts with 0,15x0,15 meters cross-section situated on the courtyard with different intervals. The floors main beam passes about 4 meters span. The secondary floor beams are situated on the main beam on the opposite direction and used as they are taken from the forest without any carpentry work.

The first floor timber post elements on the sofa façade have 0,15x0,15 meters cross-section and are placed within 1,5meters intervals. The wooden eaves of the building are projected both to courtyard and to street about 0.70 meters. The eaves on the street side are covered with bagdadi.

The wooden architectural elements of the building such as windows, doors, shutters, balustrades, and etc. are unique elements, and very well preserved during the historical process. There are no replacements, but there are some several deteriorations on the wooden elements now that the building is emptied since 1950's.

The structural system details of roof structure can be easily seen from outside because of the loss of roof coverings, according to this the rafter elements are used as they are taken from the forest without any carpentry work, and placed in intervals randomly according to the size and section of the timber element.

The most important degradation type observed in the house is material loss. The wooden materials of roof coverings, eave coverings are partly lost, there are color changes obtained on the architectural façade elements.

### **Akgün District 26 Street No:28 C03**

The building is an external sofa typed, two-storied, timber structured characteristic house with a courtyard. The ground floor is built with a stone masonry structure supported by timber beam elements (hatıl). The building ensured the continuity of its building use as a house.

The masonry stone wall is approximately 15 meters long throughout the 26th Street where the entrance is obtained from, and is an unsupported wall. The biggest and the main room on the timber structured first floor has dimensions like 4.35x4.70 meters. The whole building is projected to the street throughout the all facade about 0,50 meters with a simple projection, the projection is supported by three curvilinear timber elements, and covered by bagdadi system and plastered. The first floor timber post elements on the sofa façade have 0,15x0,15 meters cross-section and are placed within 2.00 meters intervals.

The owners of the house live in a one storied new house which they have build in the courtyard of the building during the recent years. During this process, the building has also suffered from wrong repair attempts as well. The external sofa space is partly closed, the hayataiti space is closed with a concrete extension, and some new openings are added to the façade of the building. The atmospheric conditions caused to degradations as well such as the material loss and colour changes on the wooden eaves, ceiling coverings and floor coverings.

### **Akgün District 25 Street no:14 C04**

This case consists of two individual buildings sharing the same small courtyard. One of these houses is a two-storied, external sofa typed house, and the other is a one storied external sofa typed house. Their façade organization is very simple.

The one storied building has stone masonry walls with a thickness of 0,75 meters supported by timber beams in 3 directions. The courtyard façade of the building is made of timber frame construction system. The stone masonry wall of the rectangular one-storied building facing the street passes a span around 10,5 meters without any support. Six timber post elements carrying the Sofa space have 0,15x0,15 meters cross-section dimensions and are placed within 2.00 meters intervals on the courtyard direction. The two rooms of the building are produced with similar dimensions, and the dimensions of the rooms are approximately 4,20x4,00 meters. The length of the Sofa space is 8 meters and the depth of Sofa space is 2,56 meters long.

The two-storied building is surrounded by stone masonry walls with a thickness of 0,75 meters supported by timber beams on all four sides on the ground floor, and only on two sides on the first floor, the façades facing both the courtyard and street are constructed with timber frame structure. The two rooms situated on the first floor differ from each other when the sizes are compared. The room facing the entrance façade's dimension are 3,70x4,60 meters and the other rooms dimensions are 4,60x4,75 meters. The length of the Sofa space is 10,30 meters and the depth of Sofa space is 2,90 meters long. Six timber post elements carrying the Sofa space have 0,15x0,15 meters cross-section dimensions and are placed within 2.00 meters intervals on the courtyard direction.

The deterioration types that have been identified can be listed as, fungi attacks, infestation, material loss, color changes. There are fungi attacks, color changes and infestation on the post elements carrying the Sofa. There are material losses and color changes on the coverings of the eaves. There is deflection on the first floor carrying system, and some material losses and color changes on the floor coverings.

### **Akgün District 26 Street no:38 C05**

The building is an external sofa typed house. The linear plan schemed house establishes a relationship with the street, by using the slope of the topography the building is established as two individual buildings standing edge-to-edge, one block facing the street with three stories, and the other block with two stories. The top floor integrates the two buildings. From the courtyard with a seven stepped staircase, one can reach to the semi floor and a unique wooden staircase leads one to the top floor.

The ground floor of the building is made of a stone masonry wall, the upper floors are made of timber framed structure, unlike other surfaces of the building, all stories of the north facing wall is constructed with stone masonry system.

The rooms in the mezzanine and first floor are placed parallel to Sofa space. The timber post elements carrying the Sofa space have 0,15x0,15 meters cross-section dimensions and are placed within 2.00 meters intervals. The posts carrying the upper floor are established with a height of around 4,00 meters, especially buildings two-storied place.

It can be seen that now that the building ensured the continuity of its building use and it is restored since the recent years, it is not possible to obtain any important deterioration problem within the structure system and the materials of the house. The restoration attempt of the building, replaced the deteriorated architectural elements with new elements by preserving the uniqueness of the building.

### **Aksehirlı House Akgün District 88 Street no:21 C06**

The building is an external sofa typed house. The building is situated on the corner facing two streets, and the courtyard of the building is getting its access within these two streets with individual two courtyard doors.

The ground floor of the building is made of a stone masonry wall with a thickness of 0.70cm. The upper floors facing south directions and 88th Street are made of timber framed structure, unlike other surfaces of the building, all stories of the north and north-east facing wall is constructed with stone masonry system.

The room facing south direction and south part of Sofa space are projected to Street number 88 about 0,80cm with a simple projection; the projection is supported by three culvilinear timber elements, and covered by bagdadi system and plastered.

Timber post elements carrying the Sofa space have 0, 15x0,15 meters cross-section dimensions and are placed within 2.00 meters intervals on the courtyard direction. The two rooms opening to Sofa Space are organized in 420x485cm and 420x455cm dimensions. The stone masonry walls of ground floor are supported by masonry walls on the opposite direction, but contrary to this situation, the masonry walls on the first floor are unsupported walls with dimensions of aproximety 12meters on one direction and 11,5 meters on the other direction.

The deterioration type that has been identified within this case is the color changes mainly on the wooden elements. During the historical process; a one-storied building is build in the courtyard of the house as an extension. The original space organization of the ground floor is changed due to this extension spaces. This new addition space organization changed the façade organization as well with new openings on the masonry walls.

### **Akgün District 86 Street C07**

The building is an external sofa typed, two storied house. The construction system of the ground floor is stone masonry; second floor of the building is timber frame structure. Considering the period of the building it can be said that the upper walls of the timber frame structure is made of Himis Technique. This small scaled house is a typical Kula House with its hipped roof, courtyard, its space organization, and the type of timber architectural elements used within the building. The life of the building is ensured its continuity only on the ground floor, first floor is emptied.

All the architectural elements used on the façade and interior are made of wood. The main room of the building is projected to the street. This projection is a very simple by supported by three culvilinear timber elements, and is not covered by bagdadi system and plastered. Because of this, the floor beams can be easily seen from outside. The floor beams are used in the building like it is onec collected from the forest without any carpentry work. In order to establish the projection, the floor beams are extended to the street about 0,80 meters long. The three culvilinear timber elements that support the extended flor beams have different sizes.

Now that the upper floor of the building is emptied, the maintenances that should be done periodically colud not be provided during the process, and the building is suffering from physical deteriorations. The deteriorations started from the roof structure of the building, the plasters and the bagdadi coverings of the eaves have materil losses and color changes. This kind of deteriorations can be observed within all the abandoned houses within the territory.

The ground floor of the building ensured the continuity of the building life so some new windows are opened on the stone masonry wall surfaces while transforming the ground floor uses (space organization) to first floor uses with wrong workmanship, and with a wrong restoration manner.

### **Akgün District 18 Street No:26 C08**

The building is an external sofa typed, two storied, timber framed house and have more than one projection to the street. The construction system of the ground floor is stone masonry; second floor of the building is timber frame structure. The building is abandoned the maintenances that should be done periodically colud not be provided during the process, and the building is now suffering from physical deteriorations such as material loss and color changes.

The deteriorations started from the roof structure of the building, the plasters and the bagdadi coverings of the eaves have materil losses and color changes. The causes of rain can be easily seen from the shelter of the building such as; color changes on all the wooden architectural elements like wooden shutters, wooden balustrades, and wooden façade elements.

All of the projections are established very simple supported by three culvilinear timber elements, and the covering materials of the projections are lost due to the physical deterioration factors.

### **Collapsed House Akgün District 18 Street No:5 C09**

The building is an external sofa typed, two storied house with a courtyard. The construction system of the ground floor is stone masonry supported by timber post beams (Hatıl Constructiob Type); second floor of the building is timber frame structure. The building is desolated and because of that reason the masonry wall facing the street has collapsed. Especially the deteriorations on timber elements caused deformation of the structural system.

The main deterioration factor can be seen within the case is suffering from humidity. Humidity caused color changes, fungi attacks on timber element. Different from other cases, insect invansion can be obtained in this case on the timber beam elements that support the masonry stone wall. The insect invansion fragmented and reduce the cross section dimension of timber elements.

### **Akgün District 84 Street No:15 C10**

The building is an external sofa typed, two storied house with a courtyard. The construction system of the ground floor is stone masonry supported by timber post beams (Hatıl Constructiob Type); second floor of the building is timber frame structure.

The building has a rectangular plan scheme. The ground floor is used like a depot and the upper floor is used for living facilities. The rooms on the upper floor are placed on the long side of this rectangle plan and directly open to Sofa Space. The sofa is projected both to courtyard and to the street. Sofa space has differences in elevation. This elevation differences separated this space for different uses such as sitting spaces (seki). The seki space is projected to street. There are three rooms on the upper floor. The main room is projected to the street as well. The projections are very realized very simple.

The wooden elements used within the house have preserved their authenticity and uniqueness. The doors (kündekari doors), windows, shutters, and floor coverings (ornamented with floral patterns), furnice, closets, timber post elements, staircase and balustrades of staircase are realized very unique as the evidences of Typical Kula Houses architectural details.

The eaves of the building are extended to the courtyard side as a console about 2.00 meters. The eave is covered with a wooden covering. The eaves are extended to the street similarly, and cover the street from the top.

Timber post elements carrying the Sofa space have 0, 15x0,15 meters cross-section dimensions and are placed within 2.00 meters intervals on the courtyard direction.

The house is in good condition in the general point of view. Deterioration can be seen within the building is some material loss on the eaves of the building. A second thing can be seen within the building is a wrong restoration attempt example which is a one storied space added under the sofa space of the building and this space demolishes the space organization of the ground floor.

## **Evaluation**

### **Structural assessment**

Structural systems of the selected cases have been evaluated in terms of dimensions and span length of wooden elements and the length of the load-bearing masonry walls between supporting walls. A comparative summary of all the cases can be seen in Table 8, when one examines the cases; it is seen they are quite important examples that have the continuity of building use. Effective use of materials which is one of the important aspects of structural design is also identified as one of the main aspects within the evaluation of cases. Even if many deteriorations can be seen within the cases, the ones that ensure the continuity of its building use have no serious structural deformations.

When this table is examined, another important aspect is impossibility of building such a structure by considering the actual earthquake codes. According to actual code, the maximum length of load-bearing masonry walls between two supports is limited to 5,5meters, and the length of the openings (in horizontal plane) is limited as well. Despite the lack of compliance with the regulations, the reason of their being standing still can be explained by the flexibility of the system rather than stability because of the wooden frame structure standing on top.

### **Damage assessment**

Ahunbay (Ahunbay 2004, 38-45) (Tampone and Messeri 2006) classifies the deterioration factors of all the monuments mainly as internal factors and external factors. The location of the building, incorrect methods of constructions, wrong choice of materials, defective workmanship, ground-soil properties are defined as the internal factors, long-term outer effects (Fungus, invasion of insects, frost, wind), natural disasters (earthquake, flood, etc.), man-made reasons like abandonment, incorrect methods of construction, wrong choice of materials, fire, wars, vandalism, air pollution, lack of laws in protecting the structures.

During the evaluation process on the selected houses, deteriorations have been described individually for each example, in this part it is aimed to summarize them to be able to define most

important factors that needs to be solved. In this context, main deterioration factors have been grouped in three main titles:

- Physical factors,
- Biological factors and
- Deteriorations caused by human factor.

Chemical factors and fire damage have not been taken into consideration since their affects are rare by comparing other factors around Kula district. In general, most of the deterioration factors affect the wooden elements of the house first due to the natural features of the material, and then corruptions spread all the building in time. This issue shows that wooden elements within the structural system have an important role.

### **Physical factors**

Most of the examples are suffering from physical factors, especially the effect of moisture and water, since most of the building elements are made of wood. Main sources of the moisture/water can be listed as rain, ground water, evaporated water within the building and leaks from the plumbing system by considering the cases. Such deteriorations grows fast by the effect of abandonment, because when the houses are left their own, necessary simple repair or maintenance work cannot be made in time, so building elements are exposed to atmospheric forces directly. Most of the time, by the damage of tiles, that covering whole wooden roof construction, water can reach to the wooden elements and moisture content of the elements changes. This can be observed by the color change and by the time decay of the elements. Also increase of the moisture content creates suitable environmental conditions or accelerates grow of existing fungal attacks.

When other atmospheric forces like wind and earthquake are considered, cases can be considered as quite effective due to the flexibility of the system rather than stability.

In addition, simple details of construction system accelerate deterioration of wood material, as well as simple and sometimes wrong workmanship details. Especially, connection points, where the load bearing elements like beams fastened to the masonry base/walls directly accelerate deterioration process due to the water content within the masonry components.

### **Biological factors**

During the study, main biological factors that have been seen are fungi and/or insect attacks. Most common observed traces of fungal attacks are color change and decay of the wooden elements. In addition, in some cases it is possible to see many holes or/and material loss within the wooden elements.

### **Deteriorations caused by human factor**

When Kula is examined in deterioration reasons framework, the most important factor of the deterioration seen in this settlement is the abandonment. Abandonment can be accepted as the starting point of the other deterioration factors. The owners of these big timber structures moved to the new developing part of the town, to reinforced concrete multi-storey apartment buildings, rented their houses to people with lower-income, or left them to their elders whom cannot take care of the repair expenses of the buildings, or left them as they are. The new owners of the houses prefer to live in the courtyards of the buildings where they built new one storied concrete houses, or if they prefer to live in the old structures, they modify them with defective workmanship, incorrect attempts at restoration, incorrect methods of construction, changing the sizes of windows, closing the sofas with aluminum joinery. The emptied timber structures are exposed to long-term outer affects especially rain and wind, which causes fungi attacks, and insect invasion.

### **Conclusions**

This study analyzed the general construction typology of the timber houses dating back to 18<sup>th</sup>-19<sup>th</sup> centuries located specially in Kula Settlement, but this analysis can be evaluated as a pilot-sample work, and a typological study among the whole region due to the similarities of the constructions. Most of these constructions, as the evidences of house tradition of the region, representing their spatial organization, its period's art concept, traditional design and construction technology, are at risk of disappearing because of lack of care and proper restoration works.

When the damage assessments have been discussed and the reasons for their deterioration have been analyzed within the selected area, it is seen that main factor of damage is abandonment. This problem should be solved by encouraging locals to live in the traditional houses without harming the original spatial organization and structural system and material use. This issue mainly depends on how successfully houses can be adapted to nowadays use. Local people, who sustain their lives in the district, solve their adaptation problems by their own, with wrong restoration attempts and wrong workmanship instead of consulting from a specialist. The main reason of this behavior is the communication gap between local people and authorities as well as the economical problems of the owners.

The general aims of the principles of preservation of old structures are to conserve the authenticity of the structure and its original function in a condition of sufficient safety. Decisions of repair and maintenance should be taken in accordance with each structure and the features of its structural details.

In cases with no possibility of maintenance, details pertaining to the original structure should be kept as records in the structures. Making some strategic assessment on ancient timber structures one should take these into account and consideration:

- The historical value of the fabric;
- The overall condition of the structure and hence;
- The scale of repairs;
- The options for the future uses.

Sustainability of the life of the area is quite a complicated problem which most of the traditional settlements in Turkey suffer from. For that reason, the solution of the problem depends on mostly macro scale studies in-cooperation with local authority and also cultural heritage politics. Within this frame, this study creates an analysis model which is based on a detailed case study, defining structural system and damage causes for the upcoming restoration works within the region, and this methodology can be applied for other traditional regions as well.

## Endnotes

<sup>1</sup> Turkish plan typology was firstly classified by S.H.Eldem due to the spatial organization of Sofa spaces, as Outer-Inner-Central Sofa typed houses (Eldem, 1955-1972) (Eldem, 1984). Eldem defines the "Turkish House" according to the plan type of the piano nobile-the first floor of the main building of the dwelling unit. The sofa; as a semi-closed or a closed space shared by the members of the family is the basis of the typology (Eruzun, 1989, 70).

## References

- Ahunbay, Z. (2004) *Tarihi Çevre Koruma ve Restorasyon*. İstanbul:YEM.
- Aksoy, D. & Ahunbay, Z. (2005) Geleneksel Ahşap İskeletli Türk Konutu'nun Deprem Davranışları. *ITU (Istanbul Technical University) Journal*, 4/1, pp.47-58, İstanbul.
- Asatekin (2005) «Understanding Traditional Residential Architecture in Anatolia.». *The Journal of Architecture*, pp.389-414.
- Eldem, S. H. (1984) *Türk Evi Osmanlı Dönemi*. İstanbul: Taç Vakfı.
- Eldem, S. H. (1955-1972) *Türk Evi Plan Tipleri*. İstanbul: ITU Mimarlık Fakültesi Yayınları.
- Eruzun, C. (1989) «Kültürel süreklilik içinde Türk Evi.». *Mimarlık* 236, pp.68-71.
- Günay, R. (2007) *Geleneksel ahşap yapılar sorunları ve çözüm yolları*. İstanbul: Birsen Yayınevi.
- Hughes, R. (2000) "Hatil Construction in Turkey." Earthquake-safe: lessons to be learned from traditional construction. *International Conference on the Seismic Performance of Traditional Buildings*. İstanbul
- Kuban (1975) *Türk Ev Geleceği üzerine söylemler*. İstanbul: Sanat tarihimizin Sorunları.
- Kuban, D. (1995) *Türk Hayatlı Evleri*. İstanbul: Mısırlı Matbaacılık.
- Langenbach, R. (2000) Intuition from the Past: What We Can Learn from Traditional Construction in Seismic Areas. *International Conference on the Seismic Performance of Traditional Buildings*, İstanbul, Turkey, Nov.16-18.
- Tampone, G, & Messeri, B. (2006) «Compliance of the practice of strengthening ancient timber structure in seismic areas with official documents on conservation.». In *Proceedings of the 15<sup>th</sup> International Symposium of IIBC-Why Save Historical Timber Structures*, İstanbul.
- Uluengin, F. (2007) *Klasik yapı Detayları*. İstanbul: YEM Yayınları.

## Tables

Table 1. Spatial organization.

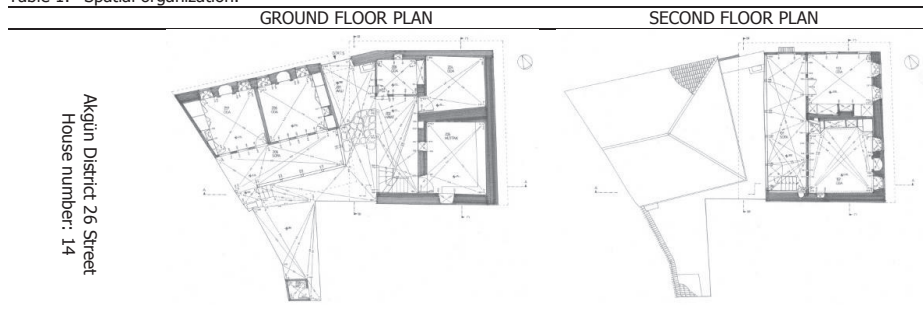


Table 1. Spatial organization (continued).


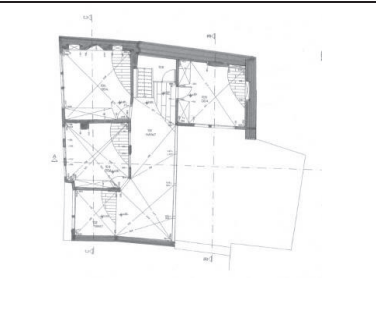
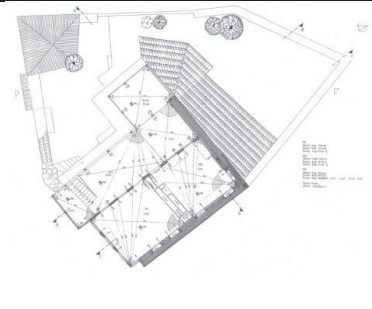
<p>Akçın District 26 Street House number: 24</p>		
<p>Akçın District 26 Street House number: 28</p>		
<p>Akçın District 86 Street House number: 7</p>		
<p>Akçın District 86 Street House number: 7</p>		

Table 2. Definition of Structural System.

	Masonry wall Thickness (m)	Length of load-bearing masonry wall between two supporting wall (m)	Span of main beam (m)	Span of Floor Beam(m)	Dimensions of Projection (m)	Dimensions of main Post (m)
C01	G.F:0,65-0,75 1.F:0,5-0,6	11-16	4,30	2,75	4,3x0,80	0,15x0,15
C02	G.F:0,65-0,85 1.F:0,7	17,5-12	4,35	2,25	4,35x0,70	0,15x0,15
C03	G.F:0,70-0,80 1.F:0,7	15	4,35	2,35	9,5X0,50	0,15x0,15
C04A	G.F:0,75	10,5	4	2,10	No projection	0,15x0,15
C04B	G.F:0,75-0,85 1.F:0,70-0,80	6	4,6	2,5	No projection	0,15x0,15
C05	G.F:0,75 1.F:0,6-0,7	7	5	3,2	4,30x0,80	0,15x0,15
C06	G.F:0,7 1.F:0,5-0,6	11,5-12	4,20	2,40	4,20x0,80	0,15x0,15

Table 3. Door Types.

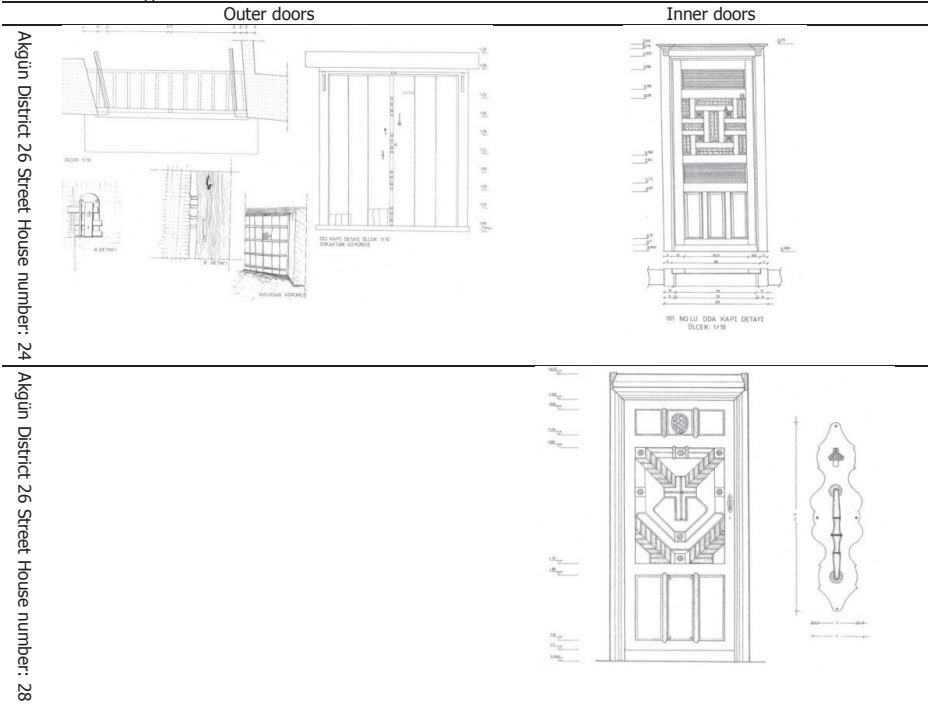
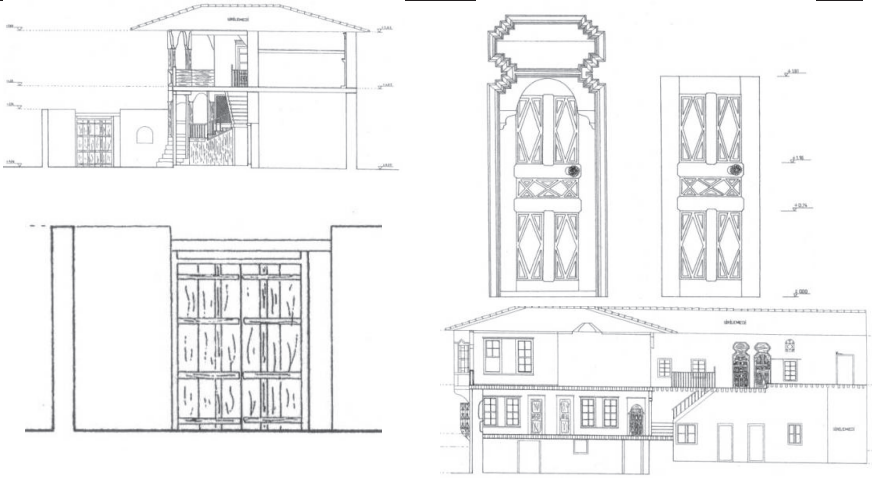


Table 3. Door Types.

Akgün District 26 Street House number: 38



Akgün District 88 Street House number: 21

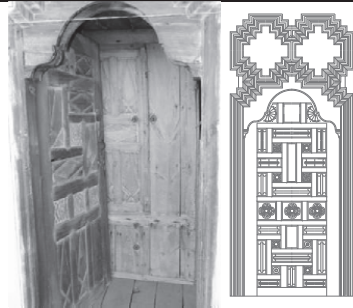


Table 4. Stairs.

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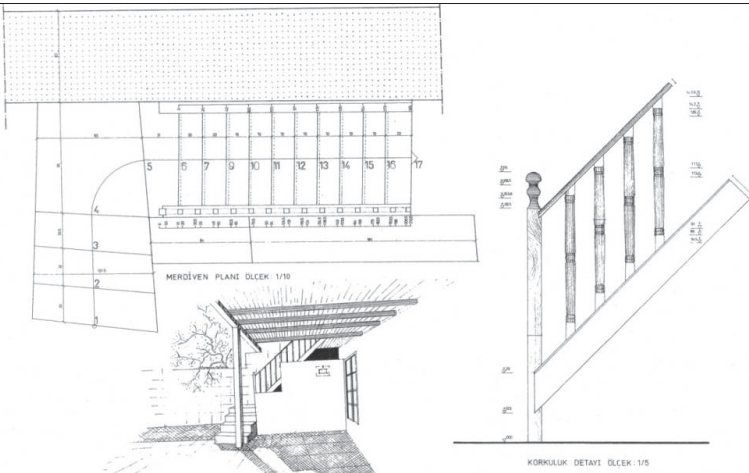


Table 4. Stairs (continued).

Akşun District 26 Street House number : 28

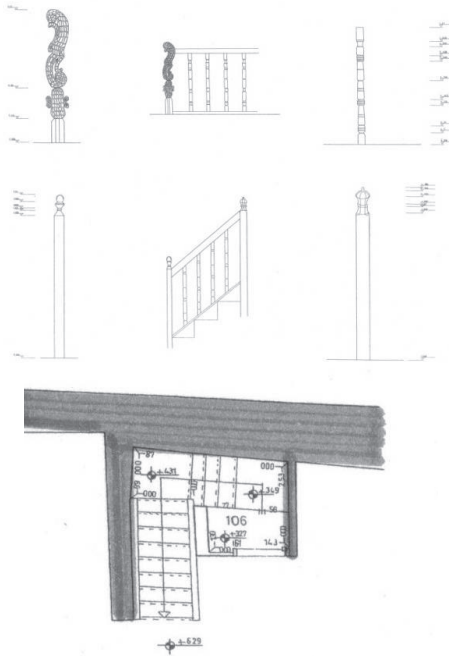


Table 5. Closet-Cupboard Types.

Akşun District 26 Street House number : 24

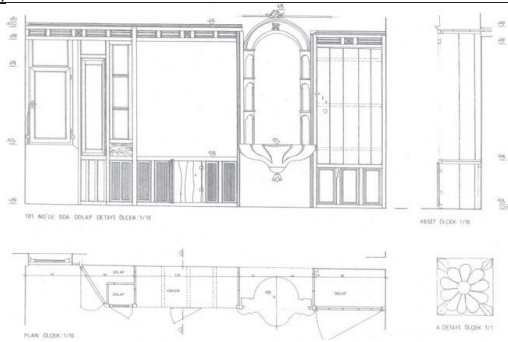
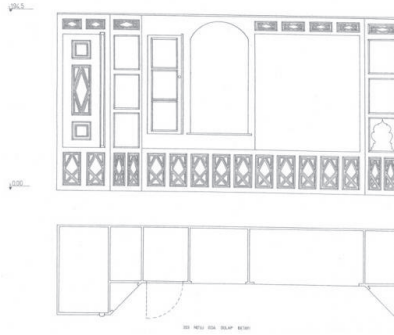
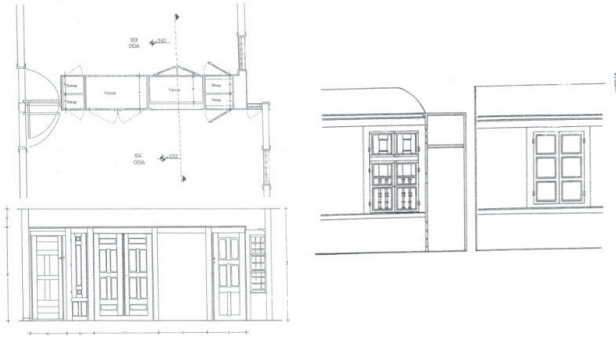


Table 5. Closet-Cupboard Types (continued).

Akşın District 26 Street House number: 38



Akşın District 26 Street House number: 7

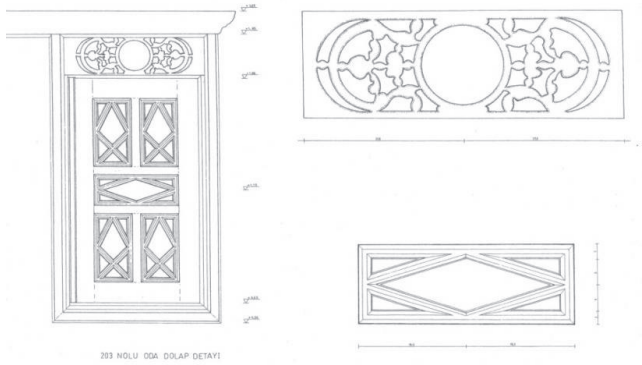


Akşın District 88 Street House number: 21

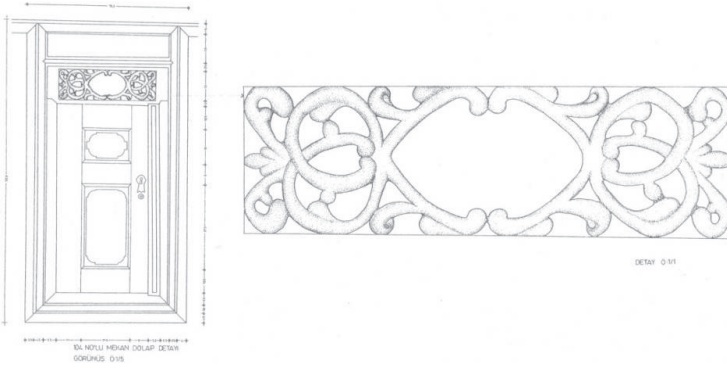


Table 6. Cosets Types.

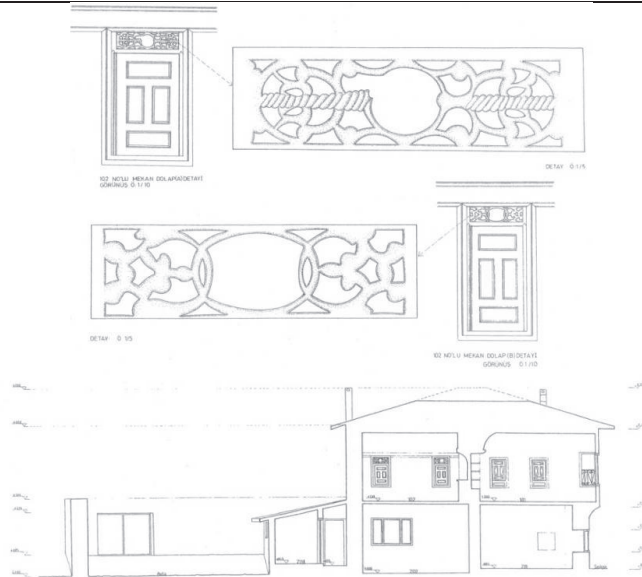
Akgün District 26 Street House number: 38



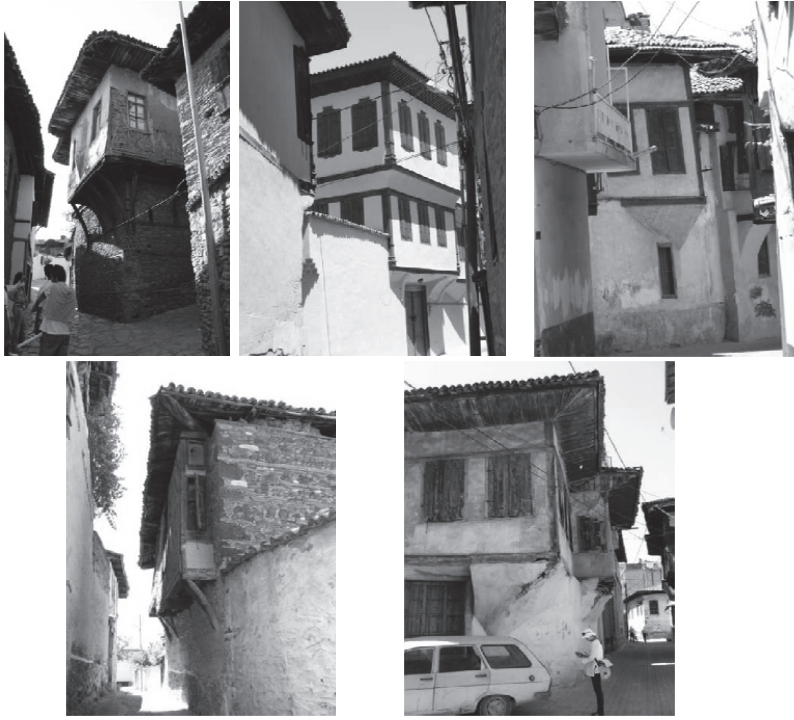
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Akgün District 88 Street House number: 21



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Figure 9. Sekialti Space of the room.



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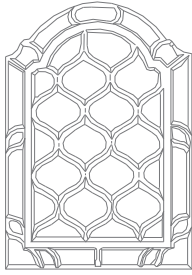


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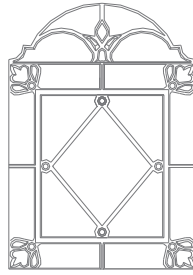


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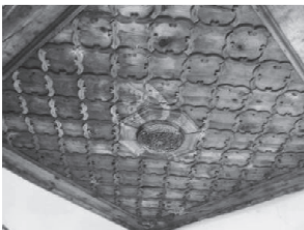
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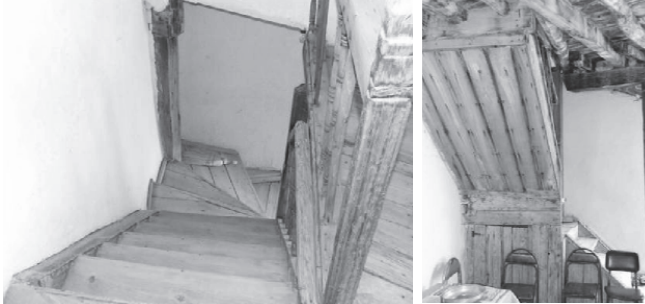


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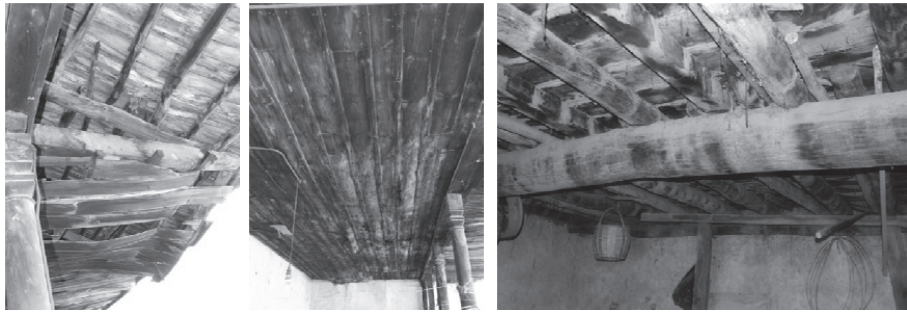
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eISSN 2182-2751



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