



**ISUEP
2018**

**INTERNATIONAL SYMPOSIUM ON
URBANIZATION AND ENVIRONMENTAL PROBLEMS:
TRANSITION / TRANSFORMATION / AUTHENTICITY**

**ULUSLARARASI
KENTLEŞME VE ÇEVRE SORUNLARI
SEMPOZYUMU**

DEĞİŞİM / DÖNÜŞÜM / ÖZGÜNLÜK

28-30 HAZİRAN 2018

TAM METİN BİLDİRİ KİTABI *CİLT 1*



Materyal Bilgileri

Takım Numarası: 978-605-01-1250-4 (Tk)
ISBN: 978-605-01-1251-1 (1.c)

Eser Adı

Isuep2018 uluslararası kentleşme ve çevre sorunları sempozyumu değişim/dönüşüm/özgünlük
28-30 haziran 2018 tam metin bildiri kitabı
Alt eser adı: Isuep2018 uluslararası kentleşme ve çevre sorunları sempozyumu
değişim/dönüşüm/özgünlük 28-30 haziran 2018 tam metin bildiri kitabı cilt 1

Yazar: Yazar yok.

Emeği Geçenler

Editör: Araş. Gör. Tuna TORUN; Editör: Araş. Gör. Melih KAMAOĞLU; Editör: Araş. Gör.
Serkan Can HATİPOĞLU; Editör: Araş. Gör. Ayni Deniz KABAKOĞLU; Editör: Prof. Dr.
Berrin AKGÜN YÜKSEKLİ

Yayının Tarihi: 2018

Basım ve Çoğaltım Yeri: -

Basım Özelliği: -

Genel Bilgiler

Materyal Türü: Elektronik Kitap (Çevrim içi / Web tabanlı)

Elektronik Yayın Formatı: PDF

Elektronik Yayın Tipi: PDF

İnternet Kullanıcı Türü: Open Access

İnternet Adresi: <http://www.cevrekentlesmedonusum.com/2018/>

Konu: AKADEMİK YAYIMLAR / Yer Bilimleri, Coğrafya, Çevre, Planlama

Konu Başlığı: Kentleşme; Çevre

Yayınlandığı Dil - Alfabe: Türkçe - Latin Alfabesi değiştirilmiş (Türkçe vb.)

Hedef Kitle: Bilimsel / Akademik

Çok ciltli mi? Evet

Alt Hedef Kitle: -

Kaçıncı cilt: 1

Yayımcı Bilgileri

Yayımcının Adı: TÜRK MÜHENDİS VE MİMAR ODALARI BİRLİĞİ - Balıkesir Şubesi

Yayımcının Bulunduğu Şehir: Balıkesir

KGYM Bilgileri

Onaylandı mı? Evet

Onaylanma Tarihi: 10/12/2018

Materyal Ajans'a geldi mi? Hayır

Derlendi mi? Hayır

CİLT 1
VOLUME 1

ETKİNLİK DÜZENLEME KURULU

Mehmet Ali ÖZERK

Uluslararası Lions Klüpleri, 118-K Yönetim Çevresi Genel Yönetmeni, Mimarlar Odası
Balıkesir Şubesi Başkanı,

Mehmet YAVAŞ

Uluslararası Lions Klüpleri, MD 118 Çevre Ulusal Komisyon Başkanı

Neş'e YILDIRIM

Uluslararası Lions Klüpleri, MD 118 Halkla İlişkiler Ulusal Komisyon Başkanı

Dursun ÖZBEY

Uluslararası Lions Klüpleri, 118-K Yönetim Çevresi Genel Yönetmen 1. Yardımcısı

Hilmi Korhan YAKUT

Uluslararası Lions Klüpleri, 118-K Yönetim Çevresi Çevre Komite Başkanı, TEMA Vakfı
Balıkesir İl Temsilcisi

Prof. Dr. Berrin AKGÜN YÜKSEKLİ

Balıkesir Üniversitesi, Uluslararası Lions Klüpleri, 118-K Yönetim Çevresi Sempozyum
Komite Başkanı

Prof. Dr. Gaye BİROL

İzmir Demokrasi Üniversitesi, Uluslararası Lions Klüpleri, Akdeniz Konferansı Görevlisi,
118-K Yönetim Çevresi Sempozyum Komite Başkan Yrd.

BİLİMSEL DÜZENLEME KURULU

Prof. Dr. Aysu AKALIN
Gazi Üniversitesi

Prof. Dr. Berrin AĞÜN YÜKSEKİ
Balıkesir Üniversitesi

Prof. Dr. Gaye BİROL
İzmir Demokrasi Üniversitesi

Prof. Dr. Alper ÇABUK
Anadolu Üniversitesi

Prof. Dr. Nuray ÖZASLAN
Anadolu Üniversitesi

BİLİMSEL KURUL

MİMARLIK

Prof. Dr. Sofia ALEIXO
Prof. Dr. Neslihan DOSTOĞLU
Prof. Dr. Erdem ERTEN
Prof. Dr. Halil Semih ERYILDIZ
Prof. Dr. Kemal Kutgün EYÜPGİLLER
Prof. Dr. Türkan GÖKSAL ÖZBALTA
Prof. Dr. Abdi GÜZER
Prof. Dr. Demet İRKLİ ERYILDIZ
Prof. Dr. Serdar KALE
Prof. Dr. Javier Sánchez MERINA
Prof. Dr. Aylin ORBAŞLI
Prof. Dr. Uğur TANYELİ
Prof. Dr. Gülser ÜNLÜ ÇELEBİ
Doç. Dr. Semra ARSLAN SELÇUK
Doç. Dr. İdil AYÇAM
Doç. Dr. Hicran Hanım HALAÇ
Doç. Dr. Zrinka Barišić MARENIC
Doç. Dr. Yusuf YILDIZ
Doç. Dr. Şebnem YÜCEL
Dr. Tamara ROGIC
Dr. Dürrin SÜER KILIÇ
Dr. Tülay ÇİVİCİ

ŞEHİR VE BÖLGE PLANLAMA

Prof. Dr. Mike GIBSON
Prof. Dr. Nilgün GÖRER TAMER
Prof. Dr. Ruşen KELEŞ
Prof. Dr. Çağatay KESKİNOK
Prof. Dr. Arzu KOCABAŞ DİREN
Prof. Dr. Luca MUSCARA
Prof. Dr. Mehmet TUNCER
Doç. Dr. Kübra CİHANGİR ÇAMUR
Doç. Dr. Saye Nihan ÇABUK
Doç. Dr. Ebru Vesile ÖCALIR AKÜNAL
Doç. Dr. Koray VELİBEYOĞLU
Doç. Dr. Özge YALÇINER ERCOŞKUN
Jeff AUSTIN

PEYZAJ

Prof. Dr. Mükerrerem ARSLAN
Prof. Dr. Ümit ERDEM
Prof. Dr. Abdullah KELKİT
Prof.Dr.E. Figen İLKE
Prof.Dr.Faris Karahan
Prof.Dr.Halim PERÇİN
Prof.Dr.Hayriye Eşbah Tunçay,
Prof.Dr.İlkden TAZEBAY
Prof.Dr.Kemal Tuluhan YILMAZ
Prof.Dr.M. Emin BARIŞ
Prof.Dr.Mehmet Faruk ALTUNKASA
Prof.Dr.MURAT ÖZYAVUZ
Prof.Dr.Nilgöl Karaddeniz
Prof.Dr.Oğuz YILMAZ
Prof.Dr.Osman UZUN
Prof.Dr.Öner Demirel
Prof.Dr.RÜYA YILMAZ
Prof.Dr.TUĞBA KİPER
Prof.Dr.Şükran Şahin
Doç.Dr.Gül ATANUR
Doç.Dr.Mehmet TOPAY
Doç.Dr.Murat AKTEN
Doç.Dr.Nur Belkayalı
Doç.Dr.Sevgi ÖZTÜRK
Doç.Dr.Tahsin YILMAZ

ÇEVRE MÜHENDİSLİĞİ

Prof. Dr. Mahnaz GÜMRÜKÇÜOĞLU YİĞİT
Doç. Dr. Arzu KALIN

İÇİNDEKİLER

DAVETLİ KONUŞMACILAR

Kentsel ve Çevresel (Doğal ve Kültürel) Değerlerin Korunmasında Hukuk ve Ahlak Kuralları	2
Ruşen KELEŞ	
Sözde-İyimserlik ve Hedonizm Çağında Mimarlık Düşünmek	8
Uğur TANYELİ	
Türkiye’de Kültür Mirasının Korunması ve Restorasyonlar Üzerine Gözlemler	9
Kemal Kutgün EYÜPGİLLER	
Gençlere ve Çocuklara Kültürel Mirasımızın Öğretilmesi	17
Hicran Hanım HALAÇ	
The Future of Residential Areas: Expectations and Responsibilities.....	19
Neslihan DOSTOĞLU	
Planning Healthy Neighbourhoods / Cities	27
Arzu KOCABAŞ	
Participatory Planning for Sustainable Neighbourhood Development - Innovations in English Practice	28
Michael S. GIBSON	
Change Through Time: The City as a Self-Regulating System – It Never Has Been Just the Buildings	29
Jeff AUSTIN	
Urban and Environmental Change as a Cultural Challenge.....	31
Luca MUSCARA	
Environmental Cha(le)nges in the Twenty-First Century: Authenticity in Transition	33
Sofia ALEIXO	
The Future of Urban and Environmental Issues Are Based on the Authentic Transformation of Our Schools of Architecture: To Accelerate the Transition of the Students into Active Participants of Cultural Experiences.....	42
Javier Sánchez Merina	
İzmir Modeli Kapsamında, Çevre Koruma ve Atık Yönetimi.....	53
Ümit ERDEM	
Avrupa Birliği Remourban (Akıllı Kentsel Dönüşümün Hızlandırılması için Yenileme Modeli) Projesi	55
Ahmet ATAÇ	
Yaklaşık Sıfır Enerji Yerleşimler.....	56
Türkan GÖKSAL ÖZBALTA	

Doğa Sonrası Dönemde Kır ve Kent Değişirken: İzmir'de Yerel Varlık-Odaklı ve Doğa Esaslı Çözümler	57
Koray VELİBEYOĞLU	
Ekokentler - Karşılaştırmalı Çözümleme Önerisi	64
H. Semih ERYILDIZ	
Kentleşme ve Değişen İklimler	73
Mahnaz Gümrükçüoğlu YİĞİT	
Kentler ve Enerji Verimliliğine Genel Bir Bakış	81
Yusuf YILDIZ	
Gelenekselden Geleceğe Bir Bakış: Gaziantep Mimarlığı	82
Gülser ÇELEBİ	
Yerleşim Ölçeğinde Ekolojik Uygulamaların Getirdiği Ek Maliyet ve Kazanım	84
Demet İrklî ERYILDIZ	
Kentsel Yaşam Kalitesine Peyzaj Mimarlığı Bakış Açısı	92
Abdullah KELKİT	
Atatürk Orman Çiftliğinin Değişim Ve Dönüşüm Süreci	96
Mükerrem ARSLAN	
DEĞİŞİM/İKLİM	
Post Modern Yerleşmelere Doğru: İklim Değişikliğine Karşı Dayanıklı Kentlerin CBS Yöntemleriyle Sağlanması	102
Ayşecan AKŞİT, Alper ÇABUK	
Kentsel Dönüşüm Uygulamasında Örnek Bir Proje: IBA Hamburg	107
Erkan Avlar, H. Sueda Yılmaz	
Kentlerin Özgünleşmesinde İklim Duyarlı Yapı Tasarımının Önemi	116
İdil Ayçam, Fulya Gökşen	
Geçmişten Geleceğe Türkiye'nin İklim Yolculuğu	128
Mithat Ekici, Hüdaverdi Gürkan	
İklim Verilerinin Deniz Etkisi Altında Kentsel Kırsal Farklılığı, Samsun	138
Savaş Çağlak, Tamer Özlü ve Süleyman Toy	
Kentsel Dönüşümde Sıvılaşmanın Önemi	146
Ersin GÜLER, Kamil Bekir AFACAN	
Eskişehir'de (Biyo)iklim Duyarlı Kentsel Tasarım Örneği	155
Süleyman Toy, Dilara Büşra Kayıp	
Eskişehir İlinde Rüzgar Enerjisi Potansiyelinin CBS Destekli Tanımlanması	165
Balca AĞAÇSAPAN, Fulya DEMİRCİOĞLU	
An Investigation on Airflow Simulation Study on Urban Scale for Passive Ventilation Strategies .	174

Ramazan Sarı, Hülya Aybek	
Avrupa Ülkelerinde Yaklaşık Sıfır Enerjili Bina Tanım ve Maliyet Optimum Seviyelerin Oluşturulmasına Yönelik İlerlemenin Değerlendirilmesi.....	182
Yusuf Yıldız, Şeyma Durak, İ. Korhan Demir, Derya Atahan	
İnsan Biyoklimatik Konfor Şartları Üzerine Kentsel Alanların Etkisi ve Erzurum Kenti Örneği.....	191
Süleyman TOY, Savaş ÇAĞLAK	
Ağaçların Bina ile Olan Mesafesinin Termal Konfor Üzerine Etkisi: Erzurum Kenti Örneği.....	198
Ayşegül Aksu, Sevgi Yılmaz, Başak Mutlu, Hasan Yılmaz	
Termal Konforlu Peyzaj Tasarım Alanları için Enerji Verimli Planlama Senaryolarının Envi-Met İle Belirlenmesi.....	206
Sevgi YILMAZ, Hasan YILMAZ, Emral MUTLU, Başak ERTEM MUTLU	
Xeriscape Yaklaşımı ile Kurak Ortamda Sürdürülebilir Peyzaj: Ege Üniversitesi Bayındır MYO Bahçesi Örneği.....	214
Handan ÇAKAR, Özlem AKAT SARAÇOĞLU, Hülya AKAT	
Antalya Koşullarında Bazı Örnek Alanlardaki Bitki Türlerinin Hava Kirliliğine Dayanıklılığının Bitkisel Tasarım Kapsamında Değerlendirilmesi.....	222
Selma Kösa, Sibel Mansuroğlu	
Yeşil Çatılar İle İklim Değişikliğinde Mücadele	230
Merve Aydınlı, Gülşen Aytaç	
Malatya Kenti için Akıllı Kent Modeli Önerisi	239
Bülent Yılmaz, Sevgi Görmüş, Serhat Cengiz	
DEĞİŞİM/ KENT / PLANLAMA	
Mekânsal Planlama Kapsamındaki Mekânsal Risklerin Yönetiminde Peyzaj Fonksiyonları ve Peyzaj Hassasiyetinin Tanımlanması	247
Osman UZUN, Azime TEZER, Fatih TERZİ, Pınar KÖYLÜ, Elif KUTAY KARAÇOR, Nilgün OKAY, Zeynep TÜRKAY, Melek YILMAZ KAYA, İpek GÜLER, Bilge AYDIN, Didem KARA	
Korunan Alanların Planlanmasında McHarg-Overlay (Çakıştırma) Yönteminin Kullanılması: Bursa Örneği.....	259
Gökçe Uzgören, Esra Dinç Ilgaz	
Sivrihisar İlçesi Geleneksel Kent Dokusunda Özgünlük Kurgusunun Kural Tabanlı Analiz Yöntemi ile Analizi	267
Kadir ÖZ, Meliha Havva ÖZ, Doç.Dr. Arzu Özen YAVUZ	
Kent Ölçeğinde Değişim/ Dönüşüm Kavramının Doğal Çevre Temelli Biyomimikri Ve Temiz Enerjili Sistem İle Entegrasyonu Üzerine Bir Deneme	275
Dilek Aybek Özdemir, Arzu Özen Yavuz	
Çıldır Gölü'nün Rekreatif Turizm Potansiyelinin Belirlenmesi.....	282
Hasan YILMAZ, Emral MUTLU, Başak MUTLU, Metin DEMİR, Mehmet Akif IRMAK	
Kırsal Alan Rekreatif Etkinliklerinde Sürdürülebilirlik.....	289

Deryanur DİNÇER, Fatih BEKİRYAZICI	
Hamburg Kenti Desantralizasyon Süreci	294
Şeyma SARIARMAĞAN	
Dünden Bugüne Yerleşime Açılan Alanlar; Niğde Kenti Örneği.....	302
Gülden SANDAL ERZURUMLU	
Gaziantep Kenti İmar Planının Yerleşime Uygunluk Açısından Değerlendirilmesi	308
Ahmet Salih GÜNAYDIN, Murat YÜCEKAYA	
Kilis Kenti Alan Kullanımlarındaki Zamansal Değişimin Değerlendirilmesi.....	317
Muzaffer YÜCEL, Ayşen ÇOBAN	
Kayseri Kentinde 20. Yüzyılda Yaşanan Mekânsal Değişim ve Bu Değişimde Yeşil Alanların Yeri...	325
Suat ÇABUK, Murat ÖZYAVUZ, Meltem GÜNEŞ	
Kentsel Yaşam Kalitesi Bileşenleri İçinde Spor Alanlarının İncelenmesi: Ordu Kenti Örneği	333
Murat YEŞİL, Kübra Nur BEYLİ	
Yaşanabilir Kentler İnşa Etme Sürecinde Kentsel Dönüşüm Çalışmalarının Analizi: Bursa Örneği .	342
Elif KARAKURT TOSUN	
Dayanıklı (“Şok’a Dayanıklı”)Kentler İçin “Sürdürülebilirlik Değerlendirmesi” : Eskişehir Kentinin Değerlendirilmesi	349
Bedriye Asımgil	

Environmental Cha(le)nges in the Twenty-First Century: Authenticity in Transition

Sofia Aleixo¹

¹Évora University, School of the Arts, Architecture Department; Integrated Researcher at CHAM – FCSH/UNL; victor mestre | sofia aleixo, architecture office, Portugal. saleixo@uevora.pt

Abstract

Since the 1960s, principles of architectural conservation have been established in doctrinal documents issued by UNESCO, ICOMOS and the Council of Europe. These documents initially focused on the preservation and safeguarding of the authentic material evidence of historic environments. This objective was considered to be achievable when the conservation of the cultural good, i.e., when the transitional stage from past to present as established in guiding drawings and texts, implied minimal change of the historic fabric. *The Nara Document on Authenticity* (1994) and the *Nara +20* (2015) are the fundamental documents to understand the development of the concept of authenticity.

Architectural conservation practice aims to transform old, and sometimes obsolete spaces, into contemporary used places, within the above-mentioned framework of change, establishing exciting challenges to architects' professional ethics regarding what authenticity is and what the limits of change are.

Considering that architectural conservation inevitably requires that changes to the built environment take place, the concept of authenticity is perceived to be at a transitional status in the twenty-first century, shifting from a unique material perspective to embrace environmental and sensorial experiences of communities, which trigger meanings and ascribe significance to heritage places.

This presentation will approach the methodology applied in the rehabilitation of historic buildings in Lisbon - Portugal by the office vmsa architects, focusing on the specific challenges faced in two recently awarded interventions, in architectural conservation (*Passos Manuel* Lyceum - Europa Nostra Award, 2013) and in restoration (Quinta Alegre - National Prize for Urban Conservation 2016) categories. The aim is to question whether definitions of authenticity have been relevant to architectural conservation practice, its challenges and changes, in the Portuguese context of the twenty-first century. The interventions, in a historic secondary school building and in an historic manor house, demonstrate the importance given to authenticity, not just in the material perspective but already shifting to a social approach to conservation by considering the communities' values, present as well as future, in the establishment of design strategies. It is concluded that established definitions have adapted to the development of the definition of cultural values and authenticity.

Keywords: architectural conservation, historic built environment, design practice, Portugal, authenticity

1. INTRODUCTION

This paper argues that the concept of architectural heritage *authenticity*, in terms of the conservation perspective, is at a transitional stage, i.e., at a process in which the inherent value of heritage integrity, a material value as ascribed by experts, is shifting to a higher valorisation of significance and meaning as ascribed by communities, which is becoming more important than even before. Although this shift of material authenticity to immaterial authenticity is recognised in recently issued doctrinal and guiding documents, architectural conservation practice has not yet found guidelines to apply such an

approach and is, in itself, also in the beginning of a process of change and adaptation to the challenges posed by this new approach.

The current shifting moment will be discussed and recent interventions in architectural heritage are used to illustrate the small steps that are being taken towards an inclusive approach to architecture conservation in a traditional context. In this context, the material values are still valued more than the social values, but a sense of social responsibility can also be found

2. CHALLENGES AND CHANGES TO AUTHENTICITY

When the United Nations Educational, Scientific and Cultural Organization delivered *The Nara Document on Authenticity* that established that the conservation of cultural heritage is rooted in the values attributed to the heritage (UNESCO, 1994). Regardless of form or historic period, it was the ethical duty of the architect to recognize and understand all the existing material and immaterial values, which are required to establish a place's authenticity. Knowledge about existing values were considered to depend on the study of credible and truthful information sources so that the characteristics of the cultural heritage and their meaning could be established. It was UNESCO's belief that this method followed the principles of *The Venice Charter* [1] by establishing authenticity as the essential qualifying factor concerning values. The proposal of a set of internationally applicable conservation principles is considered the first effort in the 30 years since the Venice Charter towards "acceptance of conservation judgments as necessarily relative and contextual" [2]. And acknowledging that judgements about values attributed to cultural properties may differ from culture to culture, and even within the same culture, the judgements of values and authenticity can no longer be based on fixed criteria, as "heritage properties must be considered and judged within the cultural contexts to which they belong" [3].

As *The Nara Document* contributed to a shift towards a values-based approach to the understanding of the importance of the historic environment, twenty years later, ICOMOS-Japan promoted a set of experts' meetings to evaluate and learn from the practical experiences in the past twenty years. The document issued, *Nara +20: On Heritage Practices, Cultural Values, and the Concept of Authenticity* [4] provides a definition for *cultural values* which considers "the meanings, functions, or benefits ascribed by various communities to something they designate as heritage, and which create the cultural significance of a place or object". The change of heritage evaluators, from the expert to the communities, changes the responsibility in the conservation of heritage to communities' participation, social inclusion, sustainable practices and intergenerational obligation. This change in perceptions of authenticity is justified by the effect of developing and emerging modes and technologies that are now available for the assessment and experiencing of heritage. Furthermore, in this document *authenticity* acquires an updated definition recognizing that heritage values evolve and change [5]: "authenticity: a culturally contingent quality associated with a heritage place, practice, or object that conveys cultural value; is recognized as a meaningful expression of an evolving cultural tradition; and/or evokes among individuals the social and emotional resonance of group identity" [4].

The importance of cultural heritage for society was not a new topic in 2015. Ten years before the *Nara +20*, the Council of Europe had already begun a complex process for guiding decision-making in the conservation practice by calling the attention to social significance of cultural heritage values in the *Faro Convention* [6], arguing for the enlargement of the heritage conservation group of stakeholders, in order to include communities and users. Now, *Nara +20* emphasized that the definition of *authenticity* is shifting from a unique material perspective, focused on physical integrity, to embrace environmental experiences. Hence, the conservation expert, with its scientific and technological knowledge, is urged to recognize and understand the values of historic environments not just by studying the historic fabric and written sources, but also by gathering credible oral information from current users and those who know of the place's history, and by practicing an effective inclusion of all stakeholders in the conservation process.

In the global context of the twenty-first century, it has been argued that traditional theories of conservation do not have the necessary resources or qualities available for the changing demands of building conservation, for such rapidly shifting attitudes and the need to respond to the challenges of conservation today [7]. The material authenticity, closely linked to the concept of component integrity, is now questioned in relation to design authenticity. Which is more valuable in guiding conservation? The approach to authenticity has become value-based, unveiling a shift from interventive conservation to preventive conservation as Ashley-Smith argues: “it may be possible to manage the rate of change by encouraging individuals to express in detail their personal ethical beliefs, rather than relying on shifting interpretations of general ethical principles”[8]. Values change according to the specific context of each intervention, become a matter of local or personal choice: “In reality, the conservator may often be forced to consider one attribute as being more important than another in a particular case. It may be necessary to create a hierarchy of attributes if a workable solution is to be found. At the moment there is no guidance on constructing, or selecting from, such a hierarchy” [8].

Muñoz-Viñas (2018) argues that design practice considers developments - technological, social, etc. – as much as the need to preserve the environment, by recycling existing materials and making the use of renewable sources incremental. To mitigate the effects of negative developments in the approach to the preservation of the historic built environment, a strategic methodology should be used, if authenticity is to be preserved. Firstly, identify the existing heritage values and the challenges posed to place authenticity; secondly, design in order to mitigate physical changes and preserve most of the historic material integrity while enabling successful sensory experiences of the updated historic environment; and finally, get users to test the changes and evaluate how far the authenticity of the heritage place was affected by the architectural conservation intervention.

As an example, one possible strategy to preserve material authenticity is to use the Japanese art of *kintsugi*, as explained by Muñoz-Viñas: “it consists of repairing broken objects in such a way that the repair is made clearly visible. The work of the repairperson is not concealed, as it is not shameful: it is openly acknowledged and contributes to the value of the object”[9]. *Kintsugi* may then be considered an ethical approach to architectural conservation, preserving the object truth and its meanings, keeping all the layers of time and enabling the chronologic interpretation of the objects, and therefore adding value to the conserved object. Authenticity, therefore, relies on the preservation of meanings and on the reactions of its users to their interpretations.

In architectural heritage, it can be said that the most credible source of information on authenticity relies on the built environment itself: its’ “form and design, materials and substance, use and function, traditions and techniques, location and setting, and spirit and feeling, and other internal and external factors”[9]. However, Muñoz-Viñas noticed that authenticity judgements depend on the nature of the cultural heritage, its cultural context, and its evolution through time, as recorded on the above mentioned credible sources of information. In summary, architectural conservation must acknowledge two challenges to authenticity: the preservation of changing values and the fact that changes to authenticity are inevitable.

3. CONSERVATION OF THE HISTORIC BUILT ENVIRONMENT: TWO CASES

There are multiple ethical standpoints of viewing, and valuing, heritage and authenticity [7]. When the *Nara Document* questions how to establish “concrete measures for safeguarding the vestiges of the past”? [3] it reveals an awareness about the diminishing importance of doctrinal documents on architectural conservation, where its guiding principles are no longer enough to guarantee the preservation of heritage values.

Two recently awarded interventions in listed buildings located in Lisbon, Portugal, undertaken by our architectural practice, are now used to explain the heritage challenges faced, the strategies established and the resulting changes in the process of architectural conservation. Portugal is used as an example of the current situation in the architectural conservation field, and as a place of cultural heritage

diversity, both in time (20th and 18th century) and in space (a secondary school and a manor house). These selected cases are purposefully different in size and in use, as one has been in continuous use for one hundred years, while the other has been abandoned for decades. The result of our experience in architectural heritage conservation for three decades, where the context has always played a decisive role, is illustrated here in the sustainable process of change which aims to bring the past to the present, meeting current needs, without compromising the ability of future generations to meet their own needs. By clearly stating what our overall mission is, our hierarchies of values and the activities currently practiced in the historic built environment, this paper is used as a platform to engage the audience to the public debate of our conservation practice and our understanding of the transitional stage of the concept of authenticity.

My argument is based on two cases located in Lisbon, Portugal. Lisbon is the capital of Portugal and lies on the north bank of the Tagus River, on the European Atlantic coast. It is the westernmost city in continental Europe. It is a mid-sized city (c. 565,000 inhabitants, surrounded by a larger metropolitan area that is home to another almost two million people). The rural *Quintas* were located around the capital, having increased particularly after the 1755 earthquake, when the city was devastated, and the noble families decided to get away from the urban environment to the country, establishing their manor houses on agricultural properties. On the other hand, secondary schools were referential buildings in the beginning of the 20th century, occupying some of the best locations in the city and becoming beacons of education.

3.1 Passos Manuel Lyceum, Lisboa

Located in the historic core of Lisbon, in Portugal, this school has historic significance in both an educational and an architectural context, as it was the first lyceum purposefully built in Portugal under the 1836 education reforms [Figure 1]. Its inauguration in 1911, offered an educational facility inspired by the French *lycée* of the time, where two enclosed courtyards evoke the style of old monastic colleges where education took place. But the most relevant architectural significance relies on the modern constructive features, such as metal structures, steel beams, cast iron columns and concrete flooring.

For one hundred years, the building, and the building site, has remained largely unchanged. Listed as a Monument of Public Interest since 2013, the design team was faced with the request to adapt the existing spaces to twenty-first century learning environments while preserving the architectural heritage. The main challenges relied in the unstable structural conditions of the building, the new educational programme requirements (in terms of re-infrastructuring the building by providing air quality, ITC access, adequate lighting, and introducing new learning facilities such as gymnasiums, lunch rooms and laboratories), daily intensive use (by students, staff and teachers), accessibility and in addressing environmental concerns (renewable energy sources, solar energy heating, reduced material waste, etc.). All was considered under the overall aim to retain the cultural significance of this valuable heritage place.

The design methodology then established two types of strategies: firstly, to identify the places where minimal sacrifice areas would be needed, preserving most of the existing fabric, and secondly to build the new facilities outside of the historic school building [Figure 2]. The effort to restore, renovate and structurally reinforce all degraded elements of the historic building used non-intrusive methods, applying the concept of *kintsugi* when the replacement of degraded elements was inevitable, while complying with current environmental quality and energy efficiency standards. New renewable energy sources (solar and photovoltaic panels) were introduced to ensure thermal and acoustic comfort and energy self-sufficiency. The restored school now fully complies with recent legislation regarding thermal performance, energy and acclimatisation systems, and noise and energy performance [10]. The location of the new facilities that had space and technological requirements that could not be accommodated without substantial modifications to the historic fabric, was strategically established in order not to affect the historic values of the place. Furthermore, the addition of more spaces was possible by excavating under and beside the historic building. These two design strategies for the

location of the needed extra facilities limited the impact of new volumes on the existing school significance.

The school community was involved and, as heritage professionals, the chance to discuss the project with all the stakeholders was a very useful moment to better understand and address the user's perceptions of authenticity. It was then confirmed that authenticity varies according to the cultural context, and within the cultural context, as distinct aspects were valued differently by the educational community, the owner and the architects.

This adaptation and extension work in the oldest Portuguese secondary school, a listed building, was completed in 2010. In the existing Lyceum site, with a gross surface area of 16.353 m², the intervention renewed 11.624 m² and added new constructions in a total of 4.470 m² [11]. The most direct beneficiaries are the daily users: 1.150 students and approximately 200 staff members. The conservation methodology faced the challenges raised by indoor environmental legal requirements and established the sacrifice areas where required physical changes were minimal. The intervention preserved its cultural and historic significance, as well as enhancing its educational value while improving the emotional attachment value, through an intervention that updated the place to current educational needs [Figure 3]. The aim to evoke "among individuals the social and emotional resonance of group identity" [4] was achieved [Figure 4], as recent research has demonstrated [12].

3.2 Quinta Alegre, Lisboa

Quinta Alegre was a large farm with a manor house in the late 18th century, then located in the countryside, on the outskirts of Lisbon. In 1819, it was transformed and enhanced by its new owner who took the opportunity to promote the arts and technology by inviting excellent Romantic painters [Figure 5] and by using exceptional Brazilian wood, that he brought from Pernambuco to sell in the capital, in the supporting structure of the main building. The manor house was then a secondary residence, since the family had a palace in the city, where they lived. Used as a temporary residence, for summer holidays and festivities, it preserved its rural character while enhancing the uses of recreation and leisure [13]. The manor house, the romantic garden, a small forest and a large agricultural production field established a cultural unit that ascribed identity to the landscape in the periphery of Lisbon in that period. However, throughout the 20th century, the property was divided into smaller plots and what remains now as the property of *Quinta Alegre* includes the manor house, the Romantic garden and some of the hydraulic structures, and was listed as a Monument of Public Interest in 1962. In 2007, the entrance, made through a scenic space where *figuras de convite* (welcoming characters) designed in Portuguese hand painted tiles, welcomed visitors into an abandoned historic place, that is partially in ruins and vandalised.

The main challenges faced in this process mainly relied firstly on the need to mitigate the deteriorated conservation conditions of the historic fabric, in order to preserve the exuberant decorative paintings on walls and ceilings, secondly, to adapt to current legislation on accessibility and fire safety, to introduce infrastructures (light, ITC, ventilation) plus toilet facilities and a small kitchen unit, and finally - and of the utmost importance for the resolution of all previously listed challenges - to establish a use that would value the historic heritage of the place as embedded in its fabric [Figure 6].

Following the idea of social sustainability in the maintenance and reuse of *Quinta Alegre's* historic building and garden, a suitable use was found in the most recent concept of *intergenerational relationships* in residential structures. Therefore, the objective of this architectural complex transcends itself in the narrow technical sense, mainly by its social reach and by the explicit ambition of aiming towards an innovative assisted living unit. It is thus hoped that the very circumstance of an historic environment will positively interfere with the spirit of the program and its inherent activities, to be developed by the *Santa Casa da Misericórdia de Lisboa* (SCML).

The conservation methodology faced the challenges raised by legal requirements of the built environment. The need to establish strategies to minimize the impact in the decorative arts that can be seen on walls and ceilings, and to mitigate the unavoidable effects in interventions in floors, roof

and windows, used the concept of *kintsugi*. Similarly, in this project, design methodology established two strategic locations for the inclusion of new infrastructures in order to have minimal sacrifice areas: horizontally, below the ground floor for water and sewage equipment, and vertically for the passage of ventilation ducts, power and ITC cables, preserving most of the existing fabric, with a special attention to the decorative surfaces which were ethically, carefully and technically preserved. As an abandoned place, there were no users to discuss the design with, only the owner, town hall officials and heritage officials, for which matters regarding authenticity were discussed with these stakeholders which, again, proved to value differing aspects.

The historic building and garden were the first to be intervened. They hold the social unit structure of a larger intergenerational co-residential facility to be fully built in three phases. The manor house provides play areas and cultural spaces where classes, conferences, ITC and libraries provide leisure moments, while the garden provides public access to play areas, rest areas, maintenance circuit, orchard and vegetable garden. Phase 1 was inaugurated in July, 2017. Phase 2 (recently completed) is an assisted unit that provides 24-hour medical care to 17 bedrooms (75 beds). It has administration offices, living rooms, a gym, a beauty salon, a medical centre, a social laundry, and a restaurant, where daily meals are served to residents, family members, visitors and also to the general public. A new residential building (an extension linked with the historic secondary buildings) is linked at the 1st floor level by a small enclosed bridge, providing 18 bedrooms and 10 small apartments, which enables autonomous elders to have an independent life while using the amenities of the main facility. Finally, in Phase 3 (to be inaugurated in the summer of 2019), a new small apartment building will be constructed, comprising 12 apartments (24 beds) for people requiring temporary residence. A car park in the basement for 33 vehicles, will provide the required parking capacity without affecting the ground level use.

As Phase 1 and Phase 2 are completed, it can be said that the cultural and historic significance was preserved while aiming to regain the place's emotional and spiritual attachment value by fostering intergenerational relationships among individuals of different ages in qualified spaces, and therefore create group identity [Figure 7]. The intervention updated the historic site to current environmental requirements aiming to trigger new experiences and new attitudes, by sharing a temporal and socio-cultural location, and by sharing emotions generated by the exposure to an historic environment.

The already inaugurated Phase 1 has been a public success, following a political event in the inauguration where the integrational concept applied in *Quinta Alegre* was most appreciated, an on-going exhibition with organized guided visits, and the presentation of the work in international congresses has been taking place. Now, with the completion of Phase 2, the time of full use by the retirement staff members of SCML is arriving soon. When all phases are finished, the place will offer a gross surface area of 8.000m² and a 4.500m² garden to 99 users, elderly and young people.

4. EPPURE SI MUOVE

In the previously selected cases, one hundred years, or more, separate the original construction from its conservation moment. If the space has been preserved, time has given the opportunity for development to take place and the built environments are now prepared to provide contemporary needs, namely of environmental comfort, in an historic environment. Time has promoted a change of values. Conservation has transformed the historic space. Material authenticity has been preserved.

The required changes to historic built environments aim to mitigate aesthetic and symbolic losses, to evoke "among individuals the social and emotional resonance of group identity" [4], to improve gains in experiences and to capture the attention of users for the benefits of architectural heritage conservation, raising awareness for their responsibility in preserving the built heritage and contributing to a group identity. If these gains are obtained, then the conservation treatment can be considered successful [9]. However, the degree of success of a conservation treatment can only be

verified as time passes. Although decades of experience may contribute to assure reliability and durability of a conservation treatment, it is not enough as real-life circumstances play an unpredictable role.

The selected examples have detailed the ethical methodologies beyond the works, and therefore demonstrate how important is to know, think and decide consciously when addressing the conservation of the historic built environment in the twenty-first century. We hope that these two architectural conservation interventions, recognised by heritage peers, will be understood as resulting from the best possible decisions taken at the present moment, and therefore will prove to have responded positively to the challenges posed today. It is expected that the inevitable physical changes produced today will not affect the perception of authenticity, as it co-exists with contemporary living and enjoyment of the updated historic environment contributes to a sense of group identity. After all, this is just a moment in the life that these places provide, now and in the future, to hundreds - actually thousands in the case of schools - of users.

Architectural interventions that preserve authenticity appeal to users' senses, by using conservation treatments that conserve the appearance, dimensions and feel of materials' texture and temperature, will nevertheless transform the object to be conserved. Considering that architectural conservation inevitably requires that changes to the built environment take place, the concept of authenticity is perceived to be at a transitional status in the twenty-first century. However, further studies are required to answer a very important question: "How can the social bonding it affects be evaluated? How can the value of any emotion be assessed?" [9]. Knowledge on the outcomes of these interventions may shed some light in the assessment of the success of the conservation treatment.

We know the meaning of the expression "and yet, it moves", attributed to Galileo Galilei. Similarly, and centuries after that moment, traditional ideas are now challenged by contemporary new perspectives, that result from an understanding of the importance of communities in the preservation of the historic built environment. Therefore, authenticity is moving from the traditional idea of truthfulness as relying on the integrity of material values to a contemporary line of thought where social values such as emotion and esteem are considered to be the most important at the basis of architectural conservation decisions. In this process, authenticity is facing the challenge of change, authenticity itself is at a transitional stage.

ACKNOWLEDGEMENTS

I wish to acknowledge my partner Victor Mestre for the work we have been developing in our office vmsa architects since the 1990s. His significant involvement in the establishment of a specific design methodology for each heritage challenge, followed by lengthy discussions on the end results of each work, have contributed to the development of our strategies to address authenticity in the historic built environment. I would also like to thank my collaborators at the office for their continuous dedication to the assertiveness of our work.

REFERENCES

- [1]. 1. ICOMOS, *International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter)*. 1964, ICOMOS.
- [2]. 2. Stovel, H., *Origins and Influence of the Nara Document on Authenticity*. APT Bulletin, 2008. **39**(2/3): p. 9-17.
- [3]. 3. UNESCO, *The Nara Document on Authenticity*. 1994, UNESCO: Nara.
- [4]. 4. ICOMOS-Japan, *Nara +20: On Heritage Practices, Cultural Values, and the Concept of Authenticity*. Heritage & Society, 2015. **8**(2): p. 144-147.
- [5]. 5. Orbaşlı, A., *Nara+20: a Theory and Practice Perspective*. Heritage & Society, 2015. **8**(2): p. 178-188.
- [6]. 6. Council of Europe, *Framework Convention on the Value of Cultural Heritage for Society (Faro Convention)*. 2005, Council of Europe: Faro.
- [7]. 7. Orbaşlı, A., *Conservation theory in the twenty-first century: slow evolution or a paradigm shift?* Journal of Architectural Conservation, 2017. **23**(3): p. 157-170.
- [8]. 8. Ashley-Smith, J., *The ethics of doing nothing*. Journal of the Institute of Conservation, 2018. **41**(1): p. 6-15.
- [9]. 9. Muñoz-Viñas, S., *The Transactional Nature of Heritage Conservation (Text of the Reinwardt Memorial Lecture, 2017)*, ed. R. Knoop. 2018, Amsterdam: Reinwardt Academy.
- [10]. 10. Mestre, V. and S. Aleixo, *Escola Secundária Passos Manuel*, in *Designing for Education: 4th Compendium of Exemplary Educational Facilities 2011*, OECD-CELE, Editor. 2011, OECD-CELE: Paris. p. 210-211.
- [11]. 11. Mestre, V. and S. Aleixo, *From the Lyceu National Central of Lisbon (1880) to the Lyceu Passos Manuel (1908) and to the Passos Manuel Secondary School (1978). The continuity of utopia, from architectonic matrix to pedagogical model*, in *Heritage: Between Time and Movement: Liceu Passos Manuel*, José Manuel das Neves, Editor. 2011, Uzina Books: Lisboa. p. 15-43.
- [12]. 12. Aleixo, S., *Cultural Values Change in the Rehabilitation of Historic Schools in Portugal (unpublished PhD)*. 2015, Oxford Brookes University: Oxford.
- [13]. 13. Aleixo, S. and V. Mestre. *The Palace of Quinta do Marquês do Alegrete: restitution strategies for space, time and memory*. in *Palácios e Dinâmicas Urbanas - Centros de poder e conhecimento na Europa*. 2015. Évora.

FIGURES



Figure 1. Passos Manuel Lyceum, the first secondary school purposefully built in Portugal before conservation: detail of the main façade.



Figure 2. Passos Manuel Lyceum strategies to mitigate the impact of added facilities.



Figures 3 and 4. Passos Manuel Lyceum, after intervention: main façade and recreational use by students in the historic environment of the restored enclosed courtyard.



Figure 5. Quinta Alegre: preservation of the manor house and extension to house an intergenerational residential unit.



Figure 6. Quinta Alegre: preservation of the manor house and extension to house an intergenerational residential unit.



Figures 7 and 8. Quinta Alegre after restoration: Romantic decorative programme and naturalist paintings in the dining room, beside the main corridor, waiting to be fully used.