INTERVENTIONS ON IMMOVABLE ARCHAEOLOGICAL HERITAGE AS A TOOL FOR NEW FORMATION PROCESS

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ABSTRACT

INTERVENTIONS ON IMMOVABLE ARCHAEOLOGICAL HERITAGE
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In the preservation discourse, interventions are generally viewed as technical issues. Considering that interventions cause variety of changes in the characteristics of archaeological edifices starting from the excavation, these changes constructs and shapes the archaeological edifices in terms of its appearance and meaning. In that respect, interventions act as tools for making changes in archaeological edifices by causing transformation of existing characteristics, loss of some others and adding new ones.

Based on this, the study aims to evaluate interventions by putting change at the center in order to understand how interventions affect archaeological edifice in constructing its appearance and meaning. The study is based on evaluation of intervention through a 'new formation process', which is based on two phases. The first phase deals with evaluation of changes in values through the 'value formation process'. The second phase is related with the assessment of changes in the characteristics of archaeological edifice as a whole, in terms of its physical, functional and semantic characteristics. This approach enables the examination of the process of change starting from prior to excavation and the assessment of interventions through the principles of change (reliability, consistency, legibility) and the 'value formation process'. The evaluation method is sampled on certain intervened archaeological edifices on the Curetes Street in Ephesus.

The study concludes that the interventions are significant tools for making changes in archaeological edifices throughout its new lifecycle. The 'value formation process' and the 'new formation process' approach can make it possible to predict changes in archaeological edifices, prevent value conflicts caused by interventions and improve the quality of change shaped by

interventions. Approaching the intervention process as a change management problem necessitates to develop appropriate change strategies and to define this process as a ‘new formation process’.

Keywords: Excavation, Conservation, Interpretation and Presentation, Archaeological edifices, Values of archaeological edifice, Change, Formation process, Ephesus.

ÖZ

TAŞINMAZ ARKEOLOJİK MİRASA UYGULANAN MÜDAHALELERİN
YENİ BİÇİMLENME SÜRECİNİN ARAÇLARI OLARAK TANIMLANMASI

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Koruma disiplininde müdahaleler genellikle teknik olgular olarak kabul edilmektedir. Kazıyla başlayan müdahalelerin arkeolojik yapılarda çeşitli değişimlere sebep olduğu düşünüldüğünde, bu değişimlerle uzun zamandır kaderine terkedilmiş arkeolojik yapıların yeniden biçimlendirildiğini ve oluşturulduğunu söylemek mümkündür. Bu kapsamda, müdahalelerin arkeolojik yapıların kimi varolan niteliklerinin yok olmasına, kimilerinin dönüşmesine ve yeni niteliklerinin oluşmasına yönelik araçlar olarak tanımlayabiliriz.

Bu çalışma, genellikle teknik olgular olarak kabul edilen müdahaleleri, arkeolojik yapıların özelliklerinde değişikliklere sebep olan araçlar olarak tanımlamayı ve arkeolojik yapıların biçimlenmesine etkilerini değerlendirmeyi amaçlar. Bu amaç çercevesinde, çalışma müdahalelerin değerlendirilmesi için iki ana aşamadan oluşan bir 'yeni biçimlenme süreci' yaklaşımını tanımlar. Birinci aşama, arkeolojik yapıların korunmasının nedenini olan değerlerdeki değişimin 'değer oluşum süreci' yaklaşımıyla değerlendirilmesidir. İkinci aşama ise, arkeolojik yapıların fiziksel, fonksiyonel özelliklerindeki ve değerlerindeki değişimin değerlendirilmesini içerir. Böylelikle, müdahaleleri, değişim ilkeleri (güvenilirlik, tutarlılık, okunabilirlik) ve 'değer oluşum süreci' ile kapsamlı biçimde değerlendiren bir yaklaşım sunulmaktadır. Geliştirilen bu yaklaşım, Efes Antik Kenti Küretler Caddesi üzerinde müdahale edilmiş yapılardan bazılarında sınanmıştır.

Sonuç olarak, müdahalelerin arkeolojik yapılarda değişimi biçimlendiren önemli araçlar olduğu belirtilmiştir. 'Yeni biçimlenme süreci' yaklaşımı, arkeolojik yapılarda meydana gelen bazı değişimlerin tahmin edilebileceğini, müdahalelerin neden olduğu bazı değer çelişkilerinin engellenebileceğini ve müdahalelerin biçimlendirdiği değişimin kalitesinin yükseltilebileceğini

ortaya koymaktadır. Ayrıca, müdahale sürecine, değişim yönetimi sorunu olarak yaklaşılması, uygun değişim stratejilerinin geliştirilmesinin gerekliliğini ve bu sürecin 'yeni biçimlenme süreci' olarak tanımlanması gerekliliğini ortaya çıkarmıştır.

Anahtar Kelimeler: Kazı, Koruma, Yorum ve Sunum, Arkeolojik Yapılar, Arkeolojik Yapıların Değerleri, Değişim, Biçimlenme Süreci, Efes.

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,

To my loving mother and father
Nazan and Nevzat Şimşek and
my darling son, Erdem

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CHAPTER 1

INTRODUCTION

Since the 16th century, especially in Europe, there has been great interest in archaeological remains and edifices, and this interest lead many curious people to visit and explore archaeological places. Throughout the visits, the archaeological remains and edifices were drawn and photographed and, notes were written including descriptions of remains and imaginations of visitors. The picturesqueness was viewed among the main qualities of archaeological remains that legitimized its conservation and protection[1]. The pastoral view of the archaeological places, including ruins of ancient remains and structures, attracted attention and were usually described together with their fragmentary states[2]. In these descriptions, antique remains and structures were generally called as 'ruins'[3].

As a result of the travelers' visits from the 16th century onwards, new archeological sites were explored in relation with the concern on ancient remains, and excavations were conducted at sites such as Pompeii and Herculaneum.[4] After archaeology emerged as an academic discipline, scientific excavations put emphasis on accumulation of archaeological data[5] from 'ruins' through digging. Winckelmann, who was the founder of modern scientific archaeology, made the initial attempts to use scientific methods and critical examinations for the study and definition of ancient remains. He contributed to the development of modern conservation principles by applying a new policy based on "… distinguishing modern

[1] Jokilehto, J., 1999, *A history of Architectural Conservation*, Oxford, Butterworth- Heinemann, p.50.
[2] For instance, Allom, English artist, describes Hierapolis with the words "on approaching the place, the traveler sees before him the sloping face of a hill, of a pure white and apparently fleecy texture, swelling into little eminences, resembling a mass of wool laid upon the surface, and as if slightly agitated by the wind." quoted from Allom, Thomas, 1838 *Constantinople and the scenery of the seen churches of Asia Minor*, London, Fisher, p.70.
[3] Ruin is defined "to spoil or destroy severely or completely" quoted from http://dictionary.cambridge.org retrieved on 30 April 2007. For instance, in his book, C. Fellows use "ruin" for explaining walls of the town of Denizli, columns and blocks and fragments of white marbles taken from Fellows, C., 1852, *Travels and Researches in Asia Minor : more particularly in the province of Lycia*, London, John Murray.
[4] "The ruins at Pompeii were first discovered late in the 16th century by the architect Domenico Fontana. Herculaneum was discovered in 1709, and systematic excavation began there in 1738. Work did not begin at Pompeii until 1748, and in 1763 an inscription ("Rei publicae Pompeianorum") was found that identified the site as Pompeii. The work at these towns in the mid-18th century marked the start of the modern science of archaeology." Retrieved February 2, 2008 from http://www.britannica.com/EBchecked/topic/469420/Pompeii/5860/History-of-excavations.
[5] According to Trigger, Scandinavia archaeology developed as one of the pioneering branch of scientific archaeology and, "Scandinavia archaeology was more interested in learning from archaeological data..." quoted from Trigger, B. G.,1989, *A history of archaeological thought*, Cambridge; New York, Cambridge University Press, p. 109.

additions clearly from the antique original".[6] Following the establishment of archaeology as an academic discipline, concern about conservation of 'monuments' including the archaeological remains grew in time, and especially in the 19th century, new ideas were developed by the pioneers of the century such as Violet-le-Duc, Morris and Ruskin.

In the 19th century, new ideas were effective in the interventions. The principles and concepts such as "the criterion of the minimum needed intervention"[7], restoration as "to reestablish in a finished state, which may in fact never have actually existed at any given time"[8] extensively guided the interventions in the new era. In the following century, the common agreement was on the use of modern scientific methods and techniques in conservation of archaeological heritage. In the Athens Charter (1931)[9], the first international conference on the protection of monuments, "…the judicious use of all the resources at the disposal of modern technique and more especially of reinforced concrete"[10] (article 4) is recommended. Following this, archaeological excavations and the problems rising in relation with excavation are discussed. In the mid 20th century, the first few documents[11] began to be produced on the documentation and preservation of archaeological remains[12]. In the document, Recommendation on International Principles Applicable to Archaeological Excavations in New Delhi (1956), archaeology and preservation is initially associated. The issues in relation with archaeological remains and interventions also were also mentioned in the International Charter for the Conservation and Restoration of Monuments and Sites (1964)[13]. In 1969, European Convention on the Protection of the Archaeological Heritage, the second document on archaeological remains, was established for defining the ideas and principles that are common for European countries.

In 1980's, the increase in housing development and the evolution of town and spatial planning raises the problem of protecting uncovered archaeological heritage. These issues led to establishment of some principles and rules for the protection and enhancement of the archaeological heritage, which was viewed as an important factor in cultural and economic

[6] This principle was applied in the restorations in Rome in 18th century, i.e. the Montecitorio obelisk in Rome and other three obelisks in Rome taken from Jokilehto, J., *A history of Architectural Conservation*, Oxford, Butterworth-Heinemann, p.59-65.
[7] William Morris developed this principle in the 'Manifesto of the Society for the Protection of Ancient Buildings' taken from Vaccaro, A., Melucco, 1996, 'Restoration and Anti-Restoration', *Historical and Philosophical Issues in the Conservation of Cultural Heritage*, Los Angeles, Getty Conservation Institute, p. 312.
[8] Violet-le-Duc defines restoration and develop the principle of preference in relation with historicism with an intention of idealization of medieval architecture taken from Skarmees, G.Christos, 1983, *An Analysis of Architectural Preservation Theories: From 1790 to 1975*, Ph.D. dissertation, Pennsylvania, University of Pennsylvania. Retrieved April 4, 2008.from http://proquest.umi.com.
[9] 1931, *The Athens Charter for the Restoration of Historic Monuments*, the First International Congress of Architects and Technicians of Historic Monuments'. Retrieved June 5, 2007 from http://www.icomos.org/athens_charter.html.
[10] 1931, ibid., article 21.
[11] UNESCO, 1956, *Recommendation on International Principles Applicable to Archaeological Excavations*, New Delhi, article 4. Retrieved May 16, 2007 from http://www.icomos.org/unesco/delhi56.html 1956.
[12] In this document, preservation is "...guarding, maintenance and restoration of the site together with conservation, during and completion of his work, objects and monuments uncovered" quoted from UNESCO, 1956, ibid, article 21.
[13] ICOMOS, 1965, *International Charter for the Conservation and Restoration of Monuments and Sites*, first developed at the 2nd International Congress of Architects and Technicians of Historic Monuments, Venice, 1964. Retrieved October 12, 2008 from http://www.international.icomos.org/charters/charters.pdf.

development. In that respect, two documents were issued by Council of Europe: the Conclusions on the colloquy on archeology and planning (1984)[14] and Recommendation No. R (89) 5 (1989)[15]. The first document emphasizes the lack of understanding between archaeologists, planners, public authorities, and lack of involvement of archaeological considerations into planning procedures. The Council of European Committee of Ministers establishes the recommendation, which aimed at creating general principles, and methods for integration of protection of archaeological remains into development processes[16].

At the beginning of the 1990's, there was an agreement on the necessity for establishing a wider basis of professional, scientific knowledge and skills for the protection of the archaeological heritage, and the principles relating to the different aspects of archaeological heritage management. In this respect, the Charter for the Protection and Management of the Archaeological Heritage (1990) was created. In 1992[17], European Convention on the Protection of Archaeological Heritage (1969) was revised due to serious threats and deterioration caused through the increasing number of major planning schemes, natural risks, insufficient public awareness and clandestine or unscientific excavations.

As summarized above, a variety of concepts, approaches and techniques were developed in order to understand and explain archaeological remains since the archaeology became an academic discipline. Starting from the beginnings of 20th century, archaeological remains have been treated through variety of interventions[18] and today the discipline of preservation produce solutions not only for their conservation but their management and integration into planning as well. Parallel with the developments explained above and the changes in approaches, various ancient structures in archaeological sites have been treated and inserted into the life of contemporary society through interventions.

Considering the states and appearance of archaeological heritage starting from pre-excavation stage up to presentation stages, a great change can be observed in archaeological heritage. Under these circumstances, interventions, which are generally viewed as technical issues[19], cause great changes in archaeological heritage. Considering

[14] Council of Europe, 1984, Conclusions on the colloquy on archeology and planning', Florence, 1984 taken from Madran, E. and Özgönül N., 1999, *International documents regarding the preservation of cultural and natural heritage***,** Ankara, METU Faculty of Architecture Press, p.264-66.
[15] Council of European Committee of Ministers, 1989*, Concerning the Protection and Enchangement of the Archaeological Heritage in the Contet of Town and Country Planning Operations, Recommendation No. R (89) 5*, 1989. Retrieved on April 29, 2008 from https://wcd.coe.int/com.instranet.InstraServlet?command=com.instranet.CmdBlobGet&InstranetImage=44016&SecMode=1&DocId=701006&Usage=4.
[16] Summary of some topics taken from Council of European Committee of Ministers, 1989, ibid.
[17] Council of Europe, 1992, *European Convention on the Protection of the Archaeological Heritage (Revised)*, Valetta. Retrieved March 8, 2007 from http://fletcher.tufts.edu/multi/www/bh997.html.
[18] Despite intervention refers to variety of conservation treatments in the field of conservation, in this thesis, the term "intervention" refers to main treatments on immovable archaeological heritage; excavation, conservation, interpretation and presentation. See definitions in chapter 1 for detail.
[19] See, for example; Stubbs, J.H.,1995, Protection and Presentation of Excavated Structures, In Conservation on Archaeological Excavations, With Particular Reference to Mediterranean area, 23-26 August 1983, p. 73.

the process of interventions starting from excavation, each intervention has essential role in shaping and framing the characteristics of recovered archaeological heritage, both movable and immovable. Especially, immovable archaeological heritage[20] (IAH), as structures and buildings in fragmentary form and ruinous state prior to excavation, are generally shaped, redefined and opened to re-use through interventions. Considering IAH, as tangible document of architecture of its time, social and economic lives of past societies, the interventions act as evidences of contemporary human approaches.

In this scope, this study concentrates on the changes in the characteristics of IAH in its new lifecycle. Throughout this process, IAH is redefined and shaped in terms of not only their physical characteristics but meaning as well. Therefore, this dissertation explores the issues of interventions not only as a 'technical issue' but as a formation process, throughout which new appearance and meanings of IAH are defined. Interventions are viewed as among the main tools causing changes in the characteristics of IAH. This change is related with contemporary approaches rather than past and, has a great role in defining the scope and content of values and new meaning of IAH. Therefore, the study engages with the changes in appearance and values of IAH caused through interventions, and attempts to create ways to understand the relation between interventions and changes in order to understand whether interventions cause a progress or regress in IAH.

Considering the new physical environment created through interventions, both physical characteristics and meaning of IAH are formed as outcomes of interventions. Consequently, interventions, as key tools in the formation of new lifecycle and characteristics of IAH, constitute the context of the thesis.

1.1. Definition of the Problem

Interventions have been widely analyzed and discussed in the preservation discourse. We have significant amount of knowledge about the nature of interventions and how interventions are explained and assessed. Considering that interventions are not only related with archaeological heritage but all types of architectural product of past societies, it is necessary to explain the issues and development in interventions in a broader context, in other words, within a historical perspective.

Initial Discussions on Interventions

In the 19th century, there were various attempts to define new approaches and principles. Among the first attempts to define restoration was done by Viollet-le-Duc, who defined it as

[20] In this dissertation, immovable archaeological heritage include architectural products of past cultures including structure, building, their remains and complementary elements such as sculptures, wall paintings, mosaics and etc.

"…to re-establish it in a finished state, which may in fact never have actually existed at any given time" in relation with the interest in medieval buildings. In that respect, accurate and detailed documentation and systematic research of a building with chronological and stylistic comparison in its historical context were emphasized[21]. On the other hand, 'anti-restoration movement' based on the criterion of the "minimum needed intervention" and, the appeal to "stave off decay by daily care" was developed by Morris and Ruskin opposed to Viollet-le-Duc's approach[22]. Modern conservation approach shaped by new historical consciousness developed in the second half of the 18th century gives emphasis on understanding values and establishing the "critical process for the definition of what is to be conserved and how". These concepts were initially applied to ancient monuments and archaeological objects[23]. The basis of modern conservation movement is established through the ideas of Riegl on values, which according to him are grouped into two: commemorative values (age, historical and intentional commemorative values) and present day values (use, newness, artistic and relative artistic values).[24] In practice, Riegl considered the limitation of restorations to what was necessary for their preservation, and gave special emphasis on minimum intervention. Principles of respecting age value and the protecting monuments from ultimately destruction guided his decisions and activities[25].

Towards 'Scientific Restoration'

The concept 'scientific restoration', which gives emphasis on the monument as a document, was developed by Giovanni, who emphasized the critical and scientific evaluations.[26] His focus is on visual and picturesque values and, he approaches restoration as a cultural problem of evaluation. His ideas focusing on repair, maintenance and consolidation, use of modern technology, preservation the authenticity of the structure and artistic life of the monuments were mentioned in the International Congress in Athens[27] (1931), which was the first international document whereby a general consensus was reached on modern conservation policies. The International Congress in Athens explains some principles in relation with aesthetic enhancement of Ancient Monuments (article III), collaboration of different disciplines for applying necessary precautions against deteriorated ancient monuments (article 7), anastylosis of ruins, necessity for recognizing new materials that are

[21] Kuban, D., 2000, ibid., p. 28
[22] Vaccaro, A., Melucco,1996, 'Restoration and Anti-Restoration', in N. S. Price, M. K. Talley Jr. and A. M. Vaccaro (eds.) *Historical and Philosophical Issues in the Conservation of Cultural Heritage*, Getty Conservation Institute, Los Angeles, 1996, p. 309.
[23] Jokilehto, J., 1999, ibid. p. 303.
[24] Jokilehto J., 1999, ibid, p.295.
[25] Jokilehto J., 1999, ibid, p.218.
[26] Carbonara,Giovanni,1976,'The Integration of the Image: Problems in the Restoration of Monuments', in N. S. Price, M. K. Talley Jr. and A. M. Vaccaro (eds.), ibid., p. 238
[27] Jokilehto, J., 1999, ibid. p. 219-222.

used (article 6), use of modern materials for the consolidation of ancient monuments and especially reinforced concrete (article 4).[28]

The importance of interventions is known since the beginning of early practices and, both conceptual and practical developments on interventions go parallel with the development of modern conservation principles. Much work has been done on defining the nature and characteristics of scientific interventions. In this thesis, interventions in immovable archaeological heritage (IAH) are explained and studied. In this perspective, there were various practices in IAH. For instance, in the Temple of Athena Nike, the Caryatid Porch on the Acropolis at Athens, varieties of interventions such as removal of latter additions, restoration were applied in the early interventions. Restoration was based on placement of authentic building material in random positions on the walls and embedding of metal ties in authentic architectural elements. In the years between 1898 and 1940, placing authentic materials into their original positions and cutting the elements for making fit with new material became a common approach in the interventions in the Parthenon the Erechteum, the Propylaea done by Nikolaos Balanos[29]. These projects were completed and finished contrary to broad and severe critics in aesthetic aspects and quality of works in national and international level[30].

Interventions in the International Documents

Defining international principles applicable to archaeological remains, the Recommendation on International Principles Applicable to Archaeological Excavations in New Delhi (1956) initially associates archaeology and preservation in the principles and rules for the protection of archaeological remains. The Recommendation gives emphasis on excavation, and problems rising in connection with excavation. According to this document, preservation of archaeological remains is provided "… for guarding, maintenance and restoration of the site together with the conservation, during and on completion of his work, of objects and monuments uncovered". [31]

The Venice Charter(1964), which was founded on the Carta del Restauro in Italiana (1931)[32], explains the principles of intervening monuments and ruins as follows; excavation, conserving and restoring monuments as historical evidence not just as a work of art, preserving and revealing the aesthetic and historic value of the monument through

[28] Summary of some ideas taken from 1931, *The Athens Charter for the Restoration of Historic Monuments,* First International Congress of Architects and Technicians of Historic Monuments'. Retrived June 5, 2007 from http://www.icomos.org/athens_charter.html.
[29] Mallouchou-Tufano, F., 1994, 'The History of Interventions on The Acropolis' in R. Economakis (ed.), *Acropolis Restoration: The CCAM Interventions*, , London, Academy Editions, p.69-74.
[30] Jokilehto, Jukka, 1999, ibid, p.187-9.
[31] UNESCO, 1956, *Recommendation on International Principles Applicable to Archaeological Excavations*, New Delhi, article 4. Retrieved May 16, 2007 from http://www.icomos.org/unesco/delhi56.html 1956.
[32] Erder, C., 1986, Carta del Restauro Italiana (1931), *Our Architectural Heritage: From Consciousness to Conservation*, Unesco, Paris, p. 215-217.

restoration, use authentic documents, evaluating the importance of the elements involved, avoiding decision-making on what may be destroyed based solely on the individual in charge. Excavating in accordance with scientific standards defined in 1956 (Recommendation on International Principles Applicable to Archaeological Excavations), facilitating the understanding of the monument without distorting its meaning and use of anastylosis for conserving the monument and reinstatement of its form[33] are emphasized. The European Convention on the Protection of the Archaeological Heritage (1969)[34] acts as guidance for the European countries and develops the concept of 'archaeological objects' for archaeological remains. It stresses the importance of archaeological heritage as sources of scientific information and clarifies general responsibilities for its protection. In this document, archaeological remains are defined as 'archaeological object'[35] and, main emphasis is given to importance of 'archaeological object' in terms of scientific information, creation of reserve zones, ensuring dissemination of information and etc[36]. In the following years, during the 1970's, the conservation of archaeological remains is becoming to be considered in a broader context, parallel to the emphasis on sustainable development, establishment of conservation policies and so on. [37]

Since the 1970's, there was an increase in the design of legislations in order to protect and conserve the past and in the number of organizations like UNESCO, which take roles in promoting the conservation of the remains of the past. The need for taking into account the impact of planning and development upon archaeological remains has grown. In that respect, the Conclusions on the colloquy on archeology and planning (1984)[38] and Recommendation No. R (89) 5 (1989)[39] develop solutions for integrating archaeological considerations into planning and developing an understandings between archaeologists, planners and other stakeholders[40]. Another attempt is on the protection of archaeological remains located in the town or the countryside in the context of development operations. The Council of European Committee of Ministers establishes the Recommendation No. R (89) 5 (1989), which aims to create general principles, and methods for integration of protection of

[33] ICOMOS, 1965, 'International Charter for the Conservation and Restoration of Monuments and Sites', first developed at the 2nd International Congress of Architects and Technicians of Historic Monuments, Venice, 1964. Retrieved April 26, 2007 from http://www.international.icomos.org/charters/charters.pdf.
[34] Council of Europe, 1969, *European Convention on the Protection of the Archaeological Heritage*, London, 1969. Retrieved March 3, 2007 from http://conventions.coe.int/Treaty/en/Treaties/Html/066.htm.
[35] It is defined as '… all remains and objects, or any other traces of human existence, which bear witness to epochs and civilizations for which excavations and discoveries are the main sources or one of the main sources of scientific information' are defined as archaeological objects (Council of Europe, 1969, ibid., article 1).
[36] Council of Europe, 1969, 'ibid.
[37] Jokilehto, J., 1999, ibid., p.240.
[38] Council of Europe, 1984, Conclusions on the colloquy on archeology and planning, Florence, 1984 taken from Madran, E. and Özgönül N., 1999, *International documents regarding the preservation of cultural and natural heritage*, Ankara, METU Faculty of Architecture Press, p.264-66.
[39] Council of European Committee of Ministers, 1989*, Concerning the Protection and Enchangement of the Archaeological Heritage in the Contet of Town and Country Planning Operations, Recommendation No. R (89) 5*, 1989. Retrieved April 29, 2008 from https://wcd.coe.int/com.instranet.InstraServlet?command=com.instranet.CmdBlobGet&InstranetImage=44016&SecMode=1&DocId=701006&Usage=4.
[40] Summary of some topics taken from Council of Europe, 1984, ibid.

archaeological remains into developments.[41] It develops new working methods including legal, financial, technical and scientific solutions and explains the principles for the success of harmonized development and protection operations including precautions to be taken prior to any field intervention, phases of field intervention and work required following the field interventions.

Increasing urban and infrastructural development, threats to traditional cultures, the search for cultural roots and tourism were the driving forces behind the growth of working with not only academic interest but also public interest as well[42]. The necessity for sharing the archaeological knowledge with the public and the growth in public archaeology is among the main reasons for conceiving archaeology from social aspects. In that respect, values became the center of debate since 1980's, and the concept of 'management' has evolved in addition to the concerns on environmental threats, tourism and participation of public. Parallel with these developments, the Charter for the Protection and Management of the Archaeological Heritage (1990) defines the concept of 'archaeological heritage'[43]. The aspects of archaeological heritage management "… include the responsibilities of public authorities and legislators, principles relating to the professional performance of the processes of inventorisation, survey, excavation, documentation, research, maintenance, conservation, preservation, reconstruction, information, presentation,…"[44]. The aim of archaeological heritage management is defined as preservation of monuments and sites *in-situ*. Among various interventions, it puts emphasis on the presentation and reconstruction. While presentation is viewed as "… an essential method of promoting an understanding of the origins and development of modern societies", the functions of reconstructions is explained as experimental research and interpretation. Reconstruction, which takes into account of evidence from all sources in order to achieve authenticity, is permitted[45].

The revised European Convention on the Protection of Archaeological Heritage (1992) associates the protection of the archaeological heritage with a legal system. "The aim of this (revised) 1992[46], European Convention on the Protection of Archaeological Heritage is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study."[47] It recommends a provision for the maintenance of an inventory of its archaeological heritage, the creation of archaeological reserves, application of procedures for the authorization and supervision of excavation, to

[41] Summary of some topics taken from Council of European Committee of Ministers, 1989, ibid.
[42] Renfrew, C. & Bahn, P., 2005, Archaeology: The key concepts, Routledge, London and New York, p. 219-23.
[43] It is defined as "vestiges of human existence and consists of places relating to all manifestations of human activity, abandoned structures, remains of all kinds (including subterranean and underwater sites), together with all he portable cultural material associated with them" quoted from ICOMOS/ICAHM, 1990, *Charter for the Protection and Management of the Archaeological Heritage*, article 1. Retrieved March 21, 2007 from http://www.international.icomos.org/e_archae.htm.
[44] Summary of the ICOMOS/ICAHM, 1990, ibid.
[45] ICOMOS/ICAHM, 1990, ibid., article 7.
[46] Council of Europe, 1992, ibid.
[47] Council of Europe, 1992, ibid., article 1.

ensure qualified, specially authorized persons for carrying out excavations and other potentially destructive techniques and guarantees the scientific significance of archaeological research work.[48] In the years that follow, there is great interest on authenticity as declared in Nara Document (1994) and special emphasis is given to the relationship between values and authenticity. The relativity of values from culture to culture, and even within the same culture is explained, and the necessity of considering heritage within the cultural context to which it belongs is stated[49].

In the Declaration of San Antonio, archaeological site is explained as static site "… whose active communal and social purpose have faded or even ceased", and they are the ones whose "… descendants of the original creators and traditional inhabitants have lost their direct link to the physical fabric of the site, thereby also weakening their ability to perceive and interpret the site's meaning and value."[50] The meaning of authenticity in preservation in the Americas is discussed. Another emphasis on reconstruction is given in the Operational Guidelines of UNESCO of 2008 by mentioning that "reconstruction is acceptable only on the basis of complete and detailed documentation and to no extent on conjecture" (article 86)[51]. The impacts on archaeological heritage are discussed in relation with the concept 'integrity' and, according to this document, the conditions of integrity requires assessing the extent to which the property suffers from adverse effects of development and/or neglect (article 88)[52].

Searching for New Meanings for Interventions

As explained above, the conceptual documents and practical issues in relation with interventions mainly focus on value, authenticity, scientific knowledge and re-use. Traditionally, understanding the physical condition of archaeological heritage is accepted as the first step for making decision on types of interventions. As pointed out by Avrami, Mason & de la Torre, "every act of conservation is shaped by how an object or place is valued, its social contexts, available resources, local priorities, and so on. Decisions about interventions are not based solely on considerations of physical decay; yet the lack of a coherent body of knowledge that addresses and integrates all three fronts[53] makes it very difficult to assess and incorporate these other, equally important factors in the work of conservation

[48] Summary from the Council of Europe, 1992, ibid.
[49] ICOMOS, 1994, *Nara Conference on Authenticity in Relation to the World Heritage Convention*, Nara, Japan. Retrieved May 3, 2007 from http://www.international.icomos.org/naradoc_eng.htm.
[50] ICOMOS, 1996, *InterAmerican Symposium on Authenticity in the Conservation and Management of the Cultural Heritage*, San Antonio, Texas. Retrieved March 11, 2007 from http://www.icomos.org/docs/san_antonio.html.
[51] UNESCO, 2003, *Convention Concerning the Protection of the World and Natural Heritage, the draft decision on the revision of the Operational Guidelines*, Paris. Retrieved April 22, 2008 from http://unesdoc.unesco.org/images/0012/001293/129343e.pdf.
[52] UNESCO, 2003, ibid.
[53] Three fronts includes physical condition, management context, cultural significance and values taken from Avrami, E. and Mason, R. and De la Torre, M. 2000, *Values and Heritage Conservation,* Research Report, Los Angeles, Getty Conservation Institute, p.4. Retrieved February 11, 2003, http://www.getty.edu/conservation/publications/pdf_publications/valuesrpt.pdf.

professionals"[54]. Today, although there are attempts to investigate impacts of developments[55], the impacts of interventions have yet to be sufficiently studied.

It must be pointed out that interventions are still viewed as 'technical issues' and practices. However, interventions are not technical issues only and are not confined to treating heritage scientific manner and giving scientific information. Although great emphasis is given to understand and define values and other multi-faceted issues, the relationship between interventions and values are argued in relation with the influences of values on interventions[56]. On the other hand, the impacts of interventions on archaeological heritage and its characteristics, especially values, have not been studied sufficiently and broadly.

Archaeological heritage, which have lost their original creators and functions, changes through interventions starting with excavation and, its new characteristics are defined by its new lifecycle. Change being inevitable part of new lifecycle of IAH has direct potential of affecting both appearance and meaning of IAH and the physical environment, in which it is located, in other words, the archaeological site. In recent years, there are some efforts for analyzing effects of intervention in urban scale. For instance, in Sagalassos, the possible impacts of the anastylosis of the NW Heroon on the perception of the site are considered[57]. However, the **changes in IAH caused by interventions are generally not considered adequately and comprehensively**.

In addition, interventions have various impacts on the loss of some characteristics, transformation of several others and gain of new ones. In some cases, there is a great danger of the complete loss of several values of IAH, which legitimize its conservation. Along with these possible impacts on IAH, one of the main impacts of the interventions is the change occurred within the site and its meaning, in which IAH is located. These impacts, regarded as loss, transformation and gain of characteristics, are generally not considered in detail with respect to IAH. This problem became common and fundamental in the decision-making processes concerning interventions. In that respect, **there is a need to establish interrelations between interventions and characteristics of IAH by putting the change at the center** such as which interventions cause loss, what characteristics are lost and etc.

It must be emphasized once again that viewing interventions just as technical issues is a problem. The interventions, starting from excavation, are the documents and acts as the evidences of current approaches to IAH. In that respect, they are important tools that cover

[54] Taken from Avrami, E. and Mason, R. and De la Torre, M. 2000, ibid., p. 5-6.
[55] UNESCO, 2008, Operational Guidelines for the Implementation of the World Heritage Convention, article II.1. Retrieved December 11, 2008 from http://whc.unesco.org/archive/opguide08-en.pdf.
[56] Feilden, B.M. & Jokilehto, J., 1993, Management Guidelines for world cultural heritage sites, Rome, ICCROM, p. 17-21.
[57] Wealkens, M. Ercan S., Torun E., 2006. Principles of Archaeological Management at Sagalassos. In Z. Ahunbay and Ü. İzmirligil (eds.) *Management and Preservation of Archaeological Sites*, İstanbul, p.70.

main aims and intentions of the ones, who make decisions on IAH. Today, IAH comes into existence through interventions, and interventions define its appearance and meaning for contemporary society. In that respect, **interventions cannot be considered just as technical issues**, but rather they are tools of changes in IAH.

In this dissertation, the problem will involve the reasons such as viewing interventions just as technical issues, failure in integrating the change in the characteristics of IAH into the decisions on interventions and insufficiencies in the assessment of the impacts of changes caused through interventions, especially the changes in values. The study also comprises the issues relevant with the definition of 'new formation process'. These problems are common to most of the interventions in IAH in different countries, as well as, those in Anatolia. To understand the changes caused by interventions and impacts of the interventions, there are no widely accepted approaches and methods. Therefore, it is necessary to develop a method for assessing changes in IAH through correct and sufficient information and appropriate intervention cases.

1.2. Aim and Scope of the Study

Considering that IAH was created and used by past cultures and abandoned for many years, it is possible to define the state of IAH prior to excavation as 'dead monument'[58]. Beginning with the excavation however, the state of IAH changes and, a new lifecycle starts (Figure. 1.1). Throughout this new lifecycle, interventions shape the characteristics of IAH. In that respect, the aim of the study is to define and frame a method for assessing the changes in IAH caused by interventions and its characteristics.

The changes in the characteristics are in various extent and content. Therefore, the change caused by interventions is the basic and essential issue of IAH's new lifecycle, in other word, the new process. In this context, the study aims at re-evaluating interventions as tools of change and 'new formation process' (NFP) in order to integrate change in the process of interventions. In this initial stage, there is a great necessity for giving a brief description for 'new formation process', which will be explained later. At first glance, the concept 'new formation process' is related with the whole intervention process and has different stages. It deals with the changes in the characteristics of IAH throughout its new lifecycle and ensures balance between what is lost and gained.

[58] The term 'dead monument' was explained as the monuments '… belonging to a past civilization or serving obsolete purposes' in the Recommendations of the Madrid Conference issued in the Sixth International Congress of Architects, 1904. In this thesis, 'dead monument' refers to the stable state of the archaeological edifice prior to excavation, in which IAH has value in terms of its picturesque and virgin characteristics.

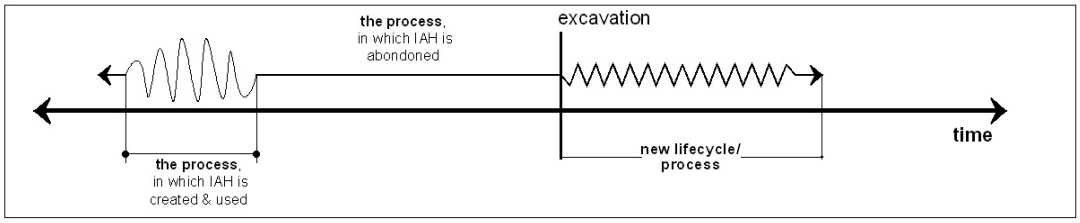

Figure.1.1. The new lifecycle/process for archaeological edifice started through excavation

Defining interventions as tools for the 'new formation process' can be achieved if the change in IAH can be explained and understood. The changes in the characteristics and meaning of IAH are vital for identifying interventions and their impacts on IAH. This dissertation is a study of interventions as being the criteria of the change. However, the study does not deal with the change theories. It is a fact that interventions have great influences and contributions on shaping new features of IAH. Understanding changes in values necessitate examining judgments of interested ones and comprising the key question "valuable to whom"[59]. However, the judgments of interested and value theories are not studied here. The concepts of 'change' will be key words and issues for understanding and defining impacts of interventions on the characteristics of IAH and interventions as tools of NFP. However, the change related with IAH can not be random. Therefore, the change should be based on a framework, in which the principles of changes will be explained.

There are also considerable expected contributions to be derived from this thesis. The study defines a new concept and approach in the preservation discourse called the 'new formation process'. Although the change and its management have been debated in recent years[60], the most critical issue addressed by this dissertation is to interpret interventions among the main tools that cause loss of some values and gain of others, as phases of NFP. It will produce knowledge on the proposed changes and effects of interventions in the building scale. It will be useful in predicting impacts of any intervention on the characteristics of archaeological heritage. In addition, it will inform decision-makers on the positive and negative effects of specific intervention options. Accordingly, the main goals of the thesis are as follows:

[59] Darvill, T. 2005. "Sorted for ease and whiz"?, Approaching value and importance in archaeological resource management. In Clay Mathers, Timothy Darvill & Barbara J. Little (eds), *Heritage of value, archaeology of reown:* Reshaping archaeological assessment and significance, Gainesville, University Press of Florida, p. 22.
[60] Teutonico, J. M. and Matero, F. (eds.), 2003, *Managing Change, Sustainable Approaches to the Conservation of the Built Environment*, Los Angeles, Getty Conservation Institute.

- To define the framework and principles of a method for questioning whether it is appropriate to define interventions as tools of the ‘new formation process’.
- To define the change as one of the main parameters framing and shaping new characteristics of IAH in its new lifecycle. The definition of principles of change and quality of change will allow understanding and explaining the changes in IAH. From another viewpoint, there is an attempt of understanding the quality of change, whether the interventions cause a ‘progress’ or a ‘regress’ prior to their implementation.
- To define ‘new formation process’, in which new lifecycle of IAH is initiated and new characteristics are shaped and framed. By doing this, it is attempted to balance ‘lost’ and ‘gained’ and to render them measurable.

1.3. Methodology

Interventions, as tools for ‘new formation process’, can be studied from various viewpoints such as those of the decision-makers and visitors. However, the study is limited with the viewpoint of the ‘expert’, who makes decisions on how to conserve and present IAH, by defining the concept ‘change’ caused by interventions, and the changes in some main characteristics of IAH. The change in IAH, as a tool for reshaping and reframing its characteristics, cannot depend on random basis and thus requires defining several principles. To define the principles of change is among the key components of the research method in order to establish a sound and viable framework and structure. However, this approach necessitates explaining not only principles of changes, but also the tools that cause the change, in other words, the types of intervention. Definition of types of interventions explains the extent and content of change in IAH. Therefore, it is necessary to study **what** is changed, **which** characteristics are changed, **how** those changes have occurred and **why**. In that respect, three main complements of the thesis are the principles of change, tools of change and characteristics of IAH.

Before defining the research method, it is necessary to explain the method of writing the thesis. The words/terms in the ancient Greek and Latin languages such as the heroon, bouleterion, odeon, are written in normal style in the text. However, some words in German and Turkish such as *tapınak-gömüt* are written in italic style. All sources of the photographs are mentioned in the captions; in cases where no information is given, the photographs belong to the author.

In this section, the method of handling the thesis problem is explained through focusing the concept of ‘change’ within three main parts. In the first part, the research method, which views interventions as tools of change, is determined. In the second part, data collecting methods are described and sources being necessary for explaining interventions are

explained. At another level, the data needed for filling the gaps in the research are defined, followed by an explanation on how the case study was selected. In the third part, the method of reporting the results is given.

1.3.1. Design of the Research Method: Interventions as Tools of Change

Similar to other discourses and disciplines such as economics, natural sciences and social sciences, the change is an integral part of preservation studies. The concept 'change' is generally debated in relation with urban context and, managing change is viewed as essential. In general, the approaches and models of change, which were developed in order to understand and define the change and its impacts, originate from specific fields such as physics, chemistry, biology and economics.[61] On the other hand, in preservation discourse, there is not a common model or a methodology concerning change as far as the main sources and international documents are concerned. As it widely accepted, each case has its own potentials and problems. In that respect, it is not possible to develop a standard model and method for all types of cultural heritage and archaeological heritage. To structure correct and executable method for change in IAH, the main characterizing properties of change, as developed in other disciplines, are explained.

Although there is a great interest for developing change methods and strategies in variety of disciplines in recent years, as mentioned above, the preservation discourse has not transferred and adapted sufficiently the existing change models, methodologies and concepts. However, change is at the center of the debates in the preservation discourse, and there is an emphasis on managing change especially in cultural landscapes. Some basic ideas on "…how to reconcile minimizing loss with the needs of the present …"[62] have been developed. Besides, the 'change' is inserted into the management plans of some archaeological sites such as the Stonehenge and Avebury[63] in England and the Chan Chan in Peru[64] by providing sustainability. However, integration of change into intervention in IAH is not sufficiently considered. Although the change in IAH depends of various factors such as topographical situations, climatic conditions, environmental factors and etc. In this thesis, the change caused through interventions is at the center.

The change in IAH generally viewed as the reflections of cultural, political and religious ideas of its time is fundamental issue within this new process, throughout which IAH is shaped and

[61] Wimmer, A. and Kössler**,** R., 2006, *Understanding change: models, methodologies, and metaphors*, Basingstoke, Hampshire, New York, Palgrave Macmillan, Houndmills, p. 14-6.
[62] Fairclough, G., 2003, Cultural Landscape, Sustainability, and Living with Change? In J. M. Teutonico and F. Matero (eds.) *Managing Change: Sustainable Approaches to the Conservation of the Built Environment*, 4th Annual US/ICOMOS International Symposium Organized by US/ICOMOS, the Graduate Program in Historic Preservation of the University of Pennsylvania, and the Getty Conservation Institute, Philadelphia, Pennsylvania, April 2001.p.23.
[63] Batchelor, D. , 2003, Towards a Sustainable Management Plan: The Case of Stonehenge and Avebury ? In J. M. Teutonico and F. Matero (eds.) ibid, p.95-106.
[64] Castellanos, C., 2003, Sustainable Management for Archaeological Site: The Case of Chan Chan, Peru. In J. M. Teutonico and F. Matero (eds.), ibid, p.107-116.

defined with its new characteristics. In this study, the concept 'new formation process' is related with the whole intervention process and new lifecycle of IAH by reconsidering interventions as tools of change.

The accurate understanding of 'new formation process' necessitates defining the **principles of change** (essential to understand and interpret various cases such as how interventions cause changes), **tools of change**, **what changes** and **how it changes**. Explaining change in IAH necessitates formulating a method that defines the tools causing changes and the changing characteristics of IAH. The changing characteristics include various characteristics ranging from function to form, material to cultural layers, values to construction technique. However, it is not possible to define and map all characteristics of IAH and build this study on total change. In this case, it is necessary to build this study on through selecting main characteristics of IAH. In this context, the principles, tools and several main changing characteristics (design/form, material, construction technique, cultural layers, and function) of IAH are the backbone of thesis.

Principles of Change

The principles help us to understand the nature and properties of IAH of Antiquity and their potential of change through interventions. The changes on IAH can be analyzed by using some key concepts such as non-renewability, authenticity reversibility, etc. Considering non-renewable character of archaeological heritage, the archaeological heritage has a distinctive aura and is authentic[65]. IAH, as an element of an archaeological site, includes evidences of various historical events, cultural issues, which cannot be produced again once they are harmed. From another viewpoint, they are authentic documents of the past cultural, social life and the built environment created by past societies. Therefore, they are reliable documents and authentic sources of information, and as a result they give reliable information. The change that emerges in IAH through the interventions affects the level of reliability. As there is great emphasis on the significance of reliability and use of authentic sources and documents in preservation discourse[66], reliability is an issue that can not be ignored in relation with the change. Thus, it is essential to define reliability among the principles of change.

IAH of antiquity is composed of architectural products of various cultures. It was constructed and used for different purposes in time, and it is also difficult to give a specific time period. For instance, IAH in the ancient city of Miletos, which includes the evidences and settlements[67] of many cultures (Myceneans, Carians, Greeks, Roman and Turks), includes

[65] Holtorf, C. J., 2001, Is the past a non-renewable resource?, In R. Layton, P. Stone & J. Thomas (eds.), *Destruction and Conservation of Cultural Property*, Routledge, London and New York, p.286-7.
[66] ICOMOS, 1965, ibid.
[67] Roebuck, C., 1959, *Ionian trade and colonization*, Chicago, Ares Pub., p.25.

IAH dated from the 14th c. B.C up to 17thc. A.D. Throughout this process in Miletos, some archaeological edifices continued to be used according to their original function, while some others were converted. IAH that represent the multi-cultural and multi-layered formations are unique in historical context. In that respect, all cultural layers produced through a society that no longer exist are significant today, and it is necessary to treat them all in the same manner. This issue in the field of preservation, in other words, to treat all cultural layers in the same manner without loosing any period of IAH, requires defining 'consistency' as another principle.

As Lipe states, "archaeological resources serve as tangible links to the past from which they have survived …".[68] I agree with Lipe and Holtorf that IAH is irreplaceable and non-renewable[69] and therefore, once it is damaged and destroyed, we cannot remake them[70]. For this reason, it is essential that unique and irreplaceable IAH can be made legible. Hence, legibility of interventions is necessary and essential principle for understanding change.

When change is considered as an inevitable result of interventions, the change in various characteristics including physical, conceptual and perceptual must be noted. Hence, this study concentrates on the main characteristics of IAH. However, it is not possible to define absolute principles for each characteristic. For instance, it is not possible to define absolute principles for the values, which are shaped through the given significance and preferences. As a result, the change in IAH is defined in relation with the principles of **reliability, consistency,** and **legibility**. The principles widely accepted concepts in the preservation discourse are valid and necessary for ensuring reliable, clear and readable changes. In addition to this, the principles are main common accepted concepts in preservation discourse. In addition to these principles, the common types of change explained in preservation discourse are defined. Understanding and explaining change necessitates identifying the characteristics that are been changed by interventions.

Characteristics

As mentioned earlier, the characteristics that change through interventions have not been studied in detail in the preservation discourse. The classification and definition of every aspects and characteristics of IAH is a complex issue, therefore, in this part of the dissertation, a general framework for the characteristics that change will be given. The main characteristics of IAH are selected for explaining and understanding these changes.

[68] Lipe, W. D., 1984, Value and Meaning in Cultural Resources, In Cleere, H. (ed.), *Approaches to the Archaeological Heritage: A Comparative Study of World Cultural Resources Management Systems*, Cambridge University Press, New York and Cambridge, p.4.
[69] Holtorf, C. J., 2001, ibid.
[70] Lipe "Episode or period of the past can never be truly recaptured; the words that can never spoken, the actions taken, the exact cultural and environmental context, the people themselves- as real entities they no longer exist and can never be brought back" quoted from Lipe, W. D., 1984, ibid.

The definition of change necessitates explaining the states of IAH throughout its new lifecycle. Considering that IAH is generally composed of fragments of architectural elements found throughout excavation process, the primary element to be considered is the architectural fragments. On the other hand, as an antique architectural product, an intervened IAH has the characteristics of the buildings and/or structure. Considering different states of archaeological edifices, defining the characteristics of IAH necessitates examining the characteristics of cultural heritage and architectural products.

Taking into consideration that interventions cause changes in the conditions of authenticity, it is useful to examine the characteristics defined for the cultural heritage that can be nominated to the World Heritage List. The characteristics mentioned below, which explains the conditions of authenticity for the cultural heritage, are also valid for defining the characteristics of archaeological edifices. These characteristics are:

- form and design;
- materials and substance;
- use and function;
- traditions, techniques and management systems;
- location and setting;
- language, and other forms of intangible heritage;
- spirit and feeling; and
- other internal and external factors.'[71]

IAH, as architectural products of past cultures, have common characteristics with architectural products. In the field of architecture, there are various studies focusing on the physical aspects[72], functional aspects and conceptual aspects[73] of architectural products. Similarly, IAH has physical aspects, functional aspects and conceptual aspects as any other architectural product. The archeological edifice is composed of these main characteristics, which reflect the changes in the appearance and meaning of IAH, and are chosen to be studied in the scope of the thesis. These characteristics are design/form, material (substance), construction technique, cultural layers, function and value. The change in location is involved in design. Understanding how IAH is changed necessitates explanation of the tools that causes changes in IAH. In the formation of this new process, it is fundamental to understand in detail the key tools, interventions and the factors shaping them.

[71] Para. 82 of the Operational Guidelines for the Implementation of the World Heritage Convention, 2005, Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage. Retrieved December 11, 2008 from http://whc.unesco.org/archive/opguide05-en.pdf.
[72] Ching, F.D.K. 2002, Mimarlık, Biçim, Mekan ve Düzen; Von Meiss,P., 1990, *Elements of architect*ure, *From form to place*, London, Van Nostrand Reinhold.
[73] Norberg-Schulz, C., 1980, *Genius loci, Towards a phenomenology of architecture*, New York, Rizzoli.

Tools for Change: Interventions

Various tasks including cleaning of shrubs, excavation, recording and inventory of findings, investigation on findings, planting, delivering architectural elements to local museum, conservation, presentation activities (summary of the reports of the teams in *Kazı Sonuçları Toplantısı* series) are executed in relation with IAH. It is possible to accept each task having impact on archaeological heritage as tools of changes. However, in this thesis, the term 'intervention' denotes main actions that cause changes in IAH and directly frame and shape its new characteristics and meaning. Therefore, it is necessary to re-consider interventions in relation with IAH. Three main actions are regarded as the tools for change:

I. excavation
II. conservation interventions
III. interpretation and presentation interventions

Defining interventions as tools of change will have various contributions such as learning impacts of interventions on IAH, improving decisions on IAH and explaining collective experience. At another level, identifying tools of change will enable decision-makers to make many critical changes in their actions. However, a study on excavation is not examined in detail in this thesis. It takes a closer look at the types of interventions of conservation, interpretation and presentation. The interventions are examined in relation with three main topics; objectives, main factors shaping interventions and types of interventions.[74]

Although the objectives differ from intervention to intervention, interventions generally require explaining the meaning of IAH, which is created by a society gone forever, from the viewpoints of the contemporary society. In that respect, interpretation is inevitable aspect of interventions, which makes interpretation an essential component of each intervention. As the preservation discourse usually links 'interpretation' and 'presentation', a similar approach will be taken in this thesis. Interventions are classified related with change under four groups:

- Intervention revealing archaeological remains / excavation
- Interventions transferring archaeological remains by giving information on how they found/ protective measures, consolidation and 'preservation as found'[75] and etc.
- Interventions transforming archaeological remains by giving information in various extent / anastylosis, restoration, reconstruction, and etc.

[74] The interventions and its objectives are explained in order to understand its main aims and understand how the objectives of interventions make contribution in changing IAH. According to this, the objectives of interventions are classified in relation with three types of interventions and the aim of each intervention. The factors having great roles in making decision on a specific type of interventions in IAH also affects on shaping its new attributes and meaning.
[75] 'Preservation as found' refers to a certain intervention approach that provides conservation of archaeological remains in-situ.

- Interventions presenting archaeological remains / interventions of interpretation and presentation including re-assembling, refunctioning and etc.

The main factors shaping interventions are defined under three main topics: the potential of archaeological remains as information source, the state of IAH and its surrounding, and the context including the contemporary values and approaches. Within the context of the thesis, each type of intervention is described, however, types of excavation, which are closely related with the extent of actual digging carried out within the whole archaeological site[76] are not studied.

Case Study

Among immovable archaeological heritage, it is noticed that the archaeological edifices of Antiquity in Anatolia has been exposed numerous interventions beginning from the 20th century. Antique archaeological edifices, which include the remains of Greek and Roman periods, contain to a variety of interventions that cannot be experienced in other archaeological sites such as the ones from the Neolithic, Chalcolithic and Iron Age periods.

The interventions in IAH of Antiquity ranging from excavations to various forms of re-erection, make it possible to evaluate the impacts on IAH independent from other factors that cause changes. In that regard, it is important to emphasize once again that IAH located in rural areas are the ones where changes occurred through interventions, and impacts of interventions can be observed clearly and comprehensively without considering other factors causing changes such as development, agriculture and tourism. Also, it is possible to observe and examine a variety of interventions in IAH of Antiquity, which have been treated continuously for more than a century in several sites such as Pergamon, Ephesus, Priene and Miletos. Therefore, the archaeological sites of Antiquity act as a laboratory of interventions with IAH representing several interventions and approaches.

Choosing the cases

In this conceptual base, some archaeological edifices that have been intervened on Curetes Street in Ephesus are chosen as the samples to assess the nature, content and impacts of interventions on the new characteristics of IAH and the roles of interventions in causing change. The following factors are considered in selecting IAH on Curetes Street in Ephesus:

[76] In addition to total excavation, new excavation types are put forward; research based excavation and rescue excavation. Rescue excavation, which is necessary when the site has already been damaged by various factors such as erosion, time refers to recovering the remains before the site totally damaged. Research-based excavation, in other words, problem oriented excavation, is seen as the fundamental aspect of the process of archaeological investigation. As a debated concept, it is explained as digging according to specific objectives (Roskams, 2001:35). Total excavation is to dig as large as an area as possible. The concept of "total excavation" is discussed in terms of various viewpoints (Roskams, 2001:31-4).

- IAH on Curetes Street has been treated through a variety of interventions concerning excavation, conservation and presentation. They have the potential for acting as a laboratory for interventions in relation with conservation philosophies, practices and changes.

- IAH that represent diverse approaches starting from the early 20th century enables to examine and study interventions and changes of different periods.

- As a result of different intervention approaches, the generally multi-layered nature of IAH is changed. The study of these intervened IAH enables to map changes emerged through particular intervention types.

- IAH used for contemporary purposes give the chance to explore changes in IAH in social and cultural aspects.

- Studying intervened IAH makes it possible to understand the new lifecycle and the 'new formation process' for particular part of the site, Ephesus.

In that respect, IAH on Curetes Street in Ephesus, which demonstrate a diverse set of intervention types and resulting changes in the characteristics of IAH is chosen as the case of the thesis.

Designing the research method for the case study

Understanding changes in the archaeological edifice requires describing the different states of archaeological edifice such as its state prior to excavation, its state after implementation of conservation intervention in order to understand and compare the effects of each intervention. It also necessitates testing interventions in terms of principles of change whether it fulfills the change principles or not. In addition, there is a necessity for explaining the changes in values. Here, the changes in values are explained in relation with the approach 'value formation process'. The validity of the approach is tested through three cases, which is treated through different intervention types. The cases comprise the Didyma Apollo Temple (preservation as found), the Northwest Heroon at Sagalassos (anastylosis) and the Latrine in Hierapolis of Phrygia (restoration). After this stage, the changes in the characteristics and the states of IAH are evaluated as a whole. In that respect, the research designed for examining the archaeological edifices in Ephesus is defined as a 'new formation process'. The method is based on three main steps as given below.

- describing different states of archaeological edifices,
- testing the validity of principles for each state and explaining changes in values through the approach 'value formation process',

- evaluating changes through defining change, patterns of change and quality of change.

Describing different states of archaeological edifices is based on three parts; site survey, literature review and data analysis. In the first part of the study, current state of each archaeological edifice is described through survey sheets and documented with photographs taken during the visits to Ephesus in July 2008. The data obtained on interventions is organized in order to understand the content and extent of interventions applied to particular archaeological edifices. The second part covers a literature review on the states of each archaeological edifice. The data about the states of the archaeological edifices is examined in order to describe the effects of three intervention types. The descriptions are made in relation with the following states:

- Description of the current state,
- Description of the state of archaeological edifice during and after excavation,
- Description of the state of archaeological edifice prior to excavation,
- Description of the proposals on the authentic states in the past.

The third part includes understanding the changes in the characteristics of archaeological edifices in relation with the principles (legibility, consistency and reliability) explained in chapter 2 and the 'value formation process' defined in chapter 3. The data is organized and analyzed for each state. The results are evaluated in order to understand the changes and roles of interventions in these changes. Change is explained according to types of change patterns and the quality of change. In this context, the interventions in IAH on Curetes Street are examined in relation with its physical and social functions and impacts. Then, the results of each archaeological edifice are evaluated in order to make a generalization and figure out the relations between variables. Besides, the changes in Curetes Street are also explained and evaluated.

1.3.2. Sources and Collection of Data

The data on IAH, which have various dimensions and meaning, is multi-faceted and complex. In that respect, data is collected through two main methods, literature review and survey.

Literature review

It is necessary to investigate and study many sources in order to design the proper research method, collect data on various issues and select proper survey tools for the case study. Published documents, un-published thesis, reports and electronic resources are the main

sources when collecting data. Understanding the extent and content of information on models of change, methodologies, interventions, historical and theoretical developments in interventions, their types, characteristics of IAH and developing a research framework compatible with the research aim requires collecting data on various topics. Besides, defining interventions as tools of a 'new formation process' requires to do research on many subjects. The main topics researched throughout the thesis are explained below.

Understanding interventions in IAH necessitate obtaining information on the conceptual and practical approaches concerning interventions. In that respect, a variety of documents on the historical development of the preservation theory are studied starting from the earliest interventions. Another important input is the theoretical and practical developments in the discipline of archaeology, therefore, the key ideas in archaeology, archaeological thinking and methodology were researched as the main topics for understanding the nature and main characteristics of archaeological edifices. Throughout the history of interventions to IAH of Antiquity, it is a fact that interventions to the archaeological heritage spreading over the Mediterranean Region affecting one another, and as a result, several common principles were developed. In that respect, the interventions in IAH of Antiquity starting from the early interventions in Pompeii are studied from various sources. Starting from early excavations in Anatolia, IAH has been exposed to a diverse set of intervention types and approaches. In that respect, intervention practices applied to IAH in Anatolia by various archaeological research teams are studied in order to understand the historical development and key ideas. Understanding change in IAH, developing a method and strategy necessitate gaining information on existing methods of change, models and strategies. In this context, the methods and models developed in other disciplines are studied in order to have a general idea and framework for handling a problem of change. The monographs, annual excavation reports of archaeological research team and decisions issued by the Regional Council for Preserving the Cultural and Natural Assets are studied in order to obtain information on issues such as the historical development and the significance of Ephesus, the archaeological research, IAH on Curetes Street, intervention practices and decisions.

Site Survey

Understanding the changes comprehensively requires selecting proper archaeological edifices on Curetes Street and compatible survey tools related with aims of the research. In order to understand the link between interventions and change, it is necessary to select representative samples of different types of interventions and to decide, which archaeological edifices might be critically significant. For instance, archaeological edifices may have existing architectural elements of different quality and quantity, so they should be recognized as separate samples of change. There are fourteen structures on Curetes Street,

defined by archaeological research team. The structures were treated in various manners[77], and these interventions are listed chronologically in Table 1.1.

Table 1.1. List of IAH on the Curetes Street and applied conservation intervention

ARCHAEOLOGICAL EDIFICES	**DATES OF INTERVENTION**	**TYPE OF INTERVENTION**
So-called Temple of Hadrian	**1957-8/**	**Anastylosis**
Latrine	1957-8/	*?*
Fountain of Trajan	**1962/**	***Conservation Interventions***
Memmius Monument	**1963/**	***Conservation Interventions***
Pollio Monument	1966/	Anastylosis
Library of Celsus	**1969-78/**	**Anastylosis**
Pollio Fountain	1970-71/	Anastylosis
Terrace House I	1978-85/	Conservation Project
Gate of Mazaeus and Mithridates	1979-85/	Anastylosis
Terrace House II	**1987-8/**	Anastylosis **- Conservation Project**
Gate of Hadrian	1987-?	Anastylosis
Octagon (Tomb of Arsinoe)	-	Not treated
So-called Gate of Herakles	?	?
Heroon	?	Not treated

As shown in the Table 1.1, most of IAH on Curetes Street are intervened through anastylosis according to the research team. The process of interventions, starting with excavation and ending with interpretation and presentation interventions, has been completed for the edifices. To understand the changes caused through different intervention types,

[77] Wiplinger, G. and Wlach G., 1996, Ephesus, Vienna.

archaeological edifices that are treated through different types of interventions should be selected. In this study, the interventions in IAH that are defined as anastylosis show different approaches. In this thesis, the chosen case study areas show interventions that are critically significant for understanding the relation between interventions and change, or are representative samples of a particular type of change. In that respect, the Celsus Library, the Memmius Monument, the Fountain of Trajan, the so-called Temple of Hadrian, and the Terrace House II were chosen as case studies. The Terrace House II being basically an outcome of 'preservation as found', and other cases, as outcomes of different re-erection approaches, represent a range of interventions, through which different change patterns can be investigated (these structures are in bold).

Selection of Site Survey Tool

For the purpose of investigating IAH on Curetes Street, a survey sheet is considered, specifically developed to investigate change in terms of various characteristics, is considered as the appropriate tool. The nature and impacts of change in each IAH is also presented in the survey sheet.

Design of survey sheet: The aim of the survey sheet is to understand the types of changes, change patterns, their commonness and to find generalizations and common relations between variables through descriptive analyses. Defining and describing change in IAH is a multi-dimensional and complex issue. For instance, considering the different states of the Fountain of Trajan in the different phases of intervention process, it is hard to describe the changes in the Fountain of Trajan. Understanding change necessitates describing the characteristics of architectural elements in different phases of the process of interventions, evaluation of the changes in relation with the principles of changes. In that respect, the survey sheet is designed to include four layers, allowing viewing each intervention as a separate layer:

Layer 1. The current state (after implementation of presentation interventions)

Layer 2. The state of IAH during and after excavation

Layer 3. The state of IAH prior to excavation

Layer 4. The proposals on the authentic states of IAH in past

For each layer, the characteristics are examined in relation with five main criteria: form/design, material, construction technique, cultural layer and function. The valid principles are reliability, consistency and legibility as shown in Table 1.2. However, the validity of principles varies from intervention to intervention. For instance, while legibility is valid in prior to excavation, it is not valid for the proposals on the authentic states of IAH in past. Therefore, validity of each principle must be considered in relation with each intervention. As

a result, changes in characteristics are evaluated together by a descriptive analysis in order to understand the nature, content of change and impacts of interventions on IAH and then, the types of change in each IAH are described. Following the collection of data, the data are evaluated in order to figure out change patterns and formulate principles for intervention types, which might guide future actions (Table 1.2).

Table 1.2. Types of data collected and analyzed on physical and functional characteristics

	Design/Form	**Material**	**Construction Technique**	**Cultural Layer**	**Function**
LEGIBILITY	Applicable	Applicable	Applicable for interpretation and presentation interventions	Applicable	Applicable
CONSISTENCY	Applicable	Applicable	N.A	Applicable	N.A
RELIABILITY	Applicable	N.A	N.A	Applicable	N.A

1.3.3. Reporting the Results

It is significant to remember that the study aims to define a method including change as the one of the main parameters framing and shaping new characteristics of IAH and defining interventions as tools of change and 'new formation process'. Therefore, it is necessary to describe the nature of change and functions of interventions. There is a need to explain change caused through interventions in relation with four aspects; types of change, patterns of change, information content given through change and quality of change. The type of change is related with how the characteristics of archaeological edifices become different through interventions. In that respect, the characteristics show four types of change; transfer, transformation, gain and loss. It is possible to state that the characteristics of archaeological edifices behave differently under different intervention types throughout their new lifecycle. Understanding change requires explaining types of change patterns, in other words, the arrangement of change types throughout the process of interventions. The change pattern indicates the effect of series of interventions (excavation, conservation interventions and interpretation and presentation interventions) in shaping and defining the new characteristics of archaeological edifices. In that respect, there are classified into two main groups; transfer

and transformation. Intervention cause changes in the information content. In that respect, IAH changed by interventions conveys some particular information content.

Considering that current approaches generally views interventions as ‘technical issues’, and there is an emphasis on physical function of interventions, there is a necessity for evaluating interventions in terms of the quality of change. Besides, it is also necessary to evaluate the method in terms compatibility for defining interventions as tools of change, and clarify certain results. In conclusion, there is an attempt for explaining ‘new formation process’.

1.4. Content

The content and details of the chapters are as follows:

In Chapter 1, the overall scheme of the thesis is given by defining the problem, aim and scope of the study, explaining the methods of research design, the sources and collection of the data and defining the ways of reporting the results and content. In addition, this chapter defines key concepts used in the thesis and the encountered constraints.

Chapter 2 provides the definition of change caused through interventions. Significant attention is given to the principles of changes. The principles of change are essential to understand what is added, what is lost and what is transformed in the characteristics of archaeological edifice in its new life cycle. The main principles are classified into three groups; legibility, consistency and reliability. Besides, the common types of change in IAH are explained.

The emphasis of the Chapter 3 lies with three main issues, the characteristics of IAH, the interventions, as tools of change, and the quality and patterns of change. The key changing characteristics are explained under main six main topics; design, material, construction techniques, cultural layers, function and values. The description of interventions, as tools for change, is based on a literature review concerning three main intervention types; excavation; conservation interventions and interpretation and presentation interventions. The interventions will be studied in terms of objectives, the main factors shaping interventions and types. Each intervention type is assessed and, a new classification in relation with the main effects of interventions on archaeological edifices is made. The quality of change and patterns of change are explained and classified. As a result, this chapter identifies the methods for evaluating the interventions in IAH and the changes caused by interventions.

In Chapter 4, the method and approach ‘new formation process’ is explained in chapter 4. The changes in several IAH on Curetes Street at Ephesus are evaluated according to the method. The Celsus Library, the Memmius Monument, the Fountain of Trajan, the so-called

Temple of Hadrian, and the Terrace House II are selected as samples, in which changes caused by interventions are explained. The impacts of interventions on the archaeological edifice, and the nature and quality of change are examined in order to understand the change patterns, and their commonness to make generalizations. At another level, the changes in the Curetes Street as a whole are explained so as to make sense of the effects of changes not only in the individual archaeological edifice scale but also for the urban context as well.

In Chapter 5, the study is evaluated, and suggestions for future studies are explained. The evaluation is based on an assessment of the approach developed for understanding the changes and interventions as tools for defining 'new formation process'. Then, the 'new formation process' is explained and the interventions are evaluated with regard to the 'new formation process'. The avenues for future research and some final conclusions are given.

1.5. Definitions

In the preservation discourse, there is not a consistent terminology. The terms included in this dissertation have various definitions and meanings changing from country to country and from disciplines to disciplines. Any particular term refers to various meanings, i.e. the term 'conservation' has various meanings. Its meanings range from interventions to small objects, wall paintings, etc. to a broader meaning including protection, presentation and re-use. Therefore, it is necessary to define some key concepts and terms in this part in order to prevent confusion throughout the thesis. These terms are archaeological heritage, immovable archaeological heritage, intervention, excavation, conservation interventions, interpretation and presentation interventions, anastylosis, restoration, and reconstruction.

Archaeological Heritage

Together with the foundation of archaeology as a modern science, archeological remains have generally started to be called as 'ruins'. Starting from the early 20th century, various terms have been used to define archaeological remains, such as referring to archaeological remains and structures as 'dead monuments'[78]. In the European Convention on the Protection of the Archaeological Heritage (1969), the term 'archaeological object'[79] is used. Today, the term 'archaeological heritage' is the common term that defines archaeological remains. In the ICOMOS Charter for the Protection and Management of the Archaeological Heritage (1990), 'archaeological heritage' is defined as "… all vestiges of human existence and consists of places relating to all manifestations of human activity, abandoned structures

78 The Recommendations of the Madrid Conference, ibid.
[79] Council of Europe, 1969, ibid., article 1.

and remains of all kinds (including subterranean and underwater sites), together with all the portable cultural material associated with them" (article 1)[80].

Two main definitions on 'archaeological heritage' are agreed on "the material culture of past societies that survives in the present" and "the process through which the material culture of past societies is re-evaluated and re-used in the present". The former definition is preferred by national governments, cultural agencies, and professional bodies in order to define what is culturally significant, which is to be preserved and etc. and, the latter is used by critical historians[81].

The complex character of archaeological heritage archaeological heritage includes the material cultures of past societies, which is inserted into contemporary societies' life through defining and shaping its characteristics. I agree with critical historians, when archaeological heritage is defined as a process for re-evaluation. From my point of view, it is the common product of the human being, which reflects the culture of past societies and the behavior of contemporary society. Archaeological heritage comprise material cultures of past societies including both portable objects and immovable products such as structures, buildings and sites.

Immovable Archaeological Heritage (IAH)

In a broader context, 'immovable archaeological heritage' involves all kinds of non-portable parts of the subterranean and underwater sites, which includes materials of past cultures and societies, in other words, the archaeological sites, the structures and the buildings. In this thesis, the term 'immovable archaeological heritage' (IAH) denotes the remains and traces of the architectural products of past societies, which have archaeological character of subterranean. IAH involves the 'place' of the abandoned structure(s), the structure(s), their remains and its complementary parts such as sculptures and mosaics.

Interventions

It is significant to express that there is no common terminology and agreement on interventions. The term 'intervention' generally denotes all types of tasks and facilities for conserving and preserving cultural properties and is explained in various ways. The term 'treatment' is used in the same meaning as intervention[82]. In the preservation discourse, interventions generally are defined as necessary issues to prevent further deterioration of archaeological heritage, protect existing condition and ensure its sustainability for future

[80] ICOMOS/ICAHM, 1990, ibid.
[81] Skeates, R., 2000, *Debating the Archaeological Heritage*, London, Duckworth, p. 9-10.
[82] Feilden, B. M. & Jokilehto, J., 1993, Management Guidelines for the World Heritage Sites, Rome, ICCROM, p.59-61.

generations. The common terminology on the interventions on archaeological edifices is based on conservation activities from the ones aiming solely at preventive measures to the ones aiming at interpretation.

Consequently, it is appropriate to identify interventions in archaeological heritage, as intentional actions, that start the new lifecycle of IAH, and define its characteristics throughout its new lifecycle. The interventions comprise main intentional actions for recovering, conserving, interpreting and presenting IAH. These actions are the main tools for revealing and defining new characteristics of archaeological edifice throughout its new lifecycle. In that respect, interventions include three main actions; the first, excavation; the second, conservation and the third, interpretation and presentation. These interventions usually overlap and sometimes follow each other throughout the new lifecycle of IAH. The interventions have specific types that need to be explained. Excavation, conservation, interpretation and presentation, anastylosis, restoration and reconstruction are defined in the following part.

Excavation

The content and method of excavations vary in relation with the developments in the discipline of archaeology, i.e. processual archaeologists view sites as parts of buried systems and, attempt on understanding the dead society by sampling their behavior. This approach shows itself as numerous small, square and rectangular areas, which are the samples that are excavated[83]. In general, it is explained as various actions such as works done before digging, preparations, recording and descriptions[84]. In the discourse of preservation, "…archaeological excavation is meant any research aimed at the discovery of objects of archaeological character …"[85]. Stanley Price criticizes this definition that it is "out of keeping with contemporary thought in archaeology". According to him, excavation is defined as a technique that is used to acquire information from archaeological evidence and is not "aimed at the discovery of objects".[86] In this dissertation, excavation refers to the actions that reveal archaeological edifice and transfer it into contemporary life of current society.

Conservation

In general, it refers to various types of interventions such as interventions to individual building elements, objects, safeguarding buildings and sites. Conservation is defined as part of an integrated approach to management in relation with cultural landscapes and urban

[83] Renfrew, C. & Bahn, P., 2005, Archaeology: The key concepts, London and New York, Routledge, p.106-110.
[84] Roskams, S., 2001, Excavation, Cambridge University Press, Cambridge and New York.
[85] UNESCO, 1956, ibid.
[86] Stanley Price, N. P. Conservation on Excavations and the 1956 UNESCO Recommendation, in N.P. Stanley Price, 1995, ibid., p. 137-8.

areas. The main aim is to "preserve the authenticity and integrity of the cultural resource".[87] Generally, in the preservation discourse, it is an umbrella term that includes all types of actions for preventing damages, protecting the existing state of IAH and consolidating damaged parts. It includes "all operations designed to understand a property, know its history and meaning, ensure its material safeguard and if required, its restoration and enhancement"[88].

In relation with the archaeological edifices, there is no specific definition given in the international documents such as the Recommendation on the International Principles Applicable to Archaeological Heritage (1956) and the European Convention on the Protection of the and Archaeological Heritage (1992). In this dissertation, conservation interventions are related with various types of interventions that concerning the maintenance of physical existence, prevention of damage, consolidation and re-erection. In this context, conservation interventions involve these five main intervention types; protective measures, consolidation, anastylosis, restoration and reconstruction.

Interpretation and Presentation

Understanding the term 'interpretation and presentation' necessitates defining each term. 'Presentation' is viewed as an essential part of the conservation process and is significant as a communicative act. The choices on how to preserve and what to preserve are accepted as representative of a generation's vision of what is significant and what is valuable. In that respect, 'presentation' has an interpretation aspect and "…is the most important means of promoting an understanding of the need for its protection"[89]. Presentation is essential components of heritage conservation efforts, and each presentation activity is based on an interpretation. Interpretation associates with potential activities, enhances understanding of the heritage and increases public awareness. Presentation is related with the arrangement of ways of communication through interpretive information, physical access, and interpretive infrastructure[90]. In this dissertation, the interventions related with designing the methods of communication through installing necessary equipments and tools such as walkways, information boards and visitor centers refer to interventions of interpretation and presentation.

Anastylosis

It is a Greek term that was initially used by Balanos for conducting the early interventions in the Acropolis at Athens[91] and refers to 'restoration' and 're-erection of columns'[92]. It means

[87] Feilden, B. M. & Jokilehto, J., 1993, ibid. p.62.
[88] ICOMOS, 1994, ibid., definitions.
[89] ICOMOS/ICAHM, 1990, ibid., article 7.
[90] ICOMOS, 2007, ICOMOS Charter on the Interpretation and Presentation of Cultural Sites. Retrieved May 5, 2007, http://www.enamecharter.org/downloads/ICOMOS_Interpretation Charter_EN_10-04-07.PDF.
[91] Mallouchou-Tufano, F., 1994, 'The History of Interventions on The Acropolis' in R. Economakis (ed.), *Acropolis Restoration: The CCAM Interventions*, London, Academy Editions, p.82.

"… re-assembling of existing but dismembered part…"[93]. The aim is to "… make the spatial character of a ruined structure visually more comprehensible by reinstating its lost form, using the original material that is both in suitable condition and is located at the site".[94] It is a practice of gathering survived archaeological remains of the structures having identifiable elements and placing them in their original location on the structure. In other words, it is appropriate for the structures composed of stone blocks joined without mortar and allows for an exact restitution.[95]

Although it has a clear meaning, there is also an inconsistency in the use of the term 'anastylosis' i.e. the intervention in Library of Celsus at Ephesus that includes completion of the walls by using new materials is defined as anastylosis.[96]. In this dissertation, it refers to the re-assembling of existing architectural elements and placing them in their original setting through insertion of new parts that are necessary for its structural stability.

Restoration

It has different meanings in different periods and cultures, but there is common understanding that restoration is to "…return to an object its lost form or appearance."[97] Today, there is a specific definition for restoration and, it is "… to preserve and reveal the aesthetic and historic value of the monument and is based on respect for original material and authentic documents"[98]. There is a great emphasis on the use of original documents and materials. Two criteria are "bearing contemporary stamp for any new work" and the second is "basing on archaeological and historical study"[99].

I agree with Jokilehto and Feilden, when they explain that restoration is a specialized process in order to conserve the structure, through revealing its values and improving the legibility of its original design[100]. Restoration intends not only to protect the physical state of heritage but also reveal and upgrade several values through elevating its visual perception.

Reconstruction

In general, it refers to the completion of missing parts of the structure in order to give a complete impression. In this case, use of new material is extensive and there is a danger of lacking critical evaluation of completeness. In the International Charter for Archaeological Heritage Management (1990), it is explained that "….be carried out great caution, so as to avoid disturbing any surviving archaeological evidence and they should take account the

[92] Feilden, B. M. & Jokilehto, J., 1993, ibid., p.62.
[93] ICOMOS, 1965, ibid., article 15.
[94] Feilden, B. M. & Jokilehto, J., 1993, ibid., p.63-4.
[95] Philippot, P., 1976, 'Historic Preservation: Philosophy, Criteria, Guidelines, II', In N. S. Price, M. K. Talley Jr. and A. M. Vaccaro (eds.), ibid., p. 362.
[96] Wiplinger, G. and Wlach G., 1996, Ephesus, Vienna, p.124.
[97] Feilden, B. M. & Jokilehto, J., 1993, ibid., p.62-3.
[98] ICOMOS, 1965, ibid., article 9.
[99] Ibid.
[100] Feilden, B. M. & Jokilehto, J., 1993, ibid, p.62-3.

evidence from all sources in order to achieve authenticity".[101] In this context, reconstruction aims giving overall impression of the archaeological edifice for educational purposes. In this thesis, reconstruction refers to a specific type of interventions, through which the archaeological edifice is almost completely re-erected.

1.6. Constraint

There are various limits throughout the study. In this part of the thesis, these limits will be explained under three headings.

Lack of common terminology

In the literature related with archaeological edifices, there is an inconsistency in the use of several terms due to changes in their meanings from disciplines to disciplines and country to country. For instance, the use of 'anastylosis', which refers to the re-assembling of existing architectural elements and placing them in their original setting through inserting new parts necessary for its structural stability, is used to define the intervention in the Celsus Library by the Austrian team and this creates a confusion due to difference in the meanings of the term. Therefore, it is a necessity to understand the content of each intervention throughout the research. In that respect, lack of common terminology, which limits coherent communication, is among the handicaps of the thesis.

Inaccessibility to archive documents on IAH studied as cases in Ephesus

Although various attempts were made in order to use the archive documents on the archaeological edifices at Ephesus. It was not possible to get permission from the archaeological research team. Therefore, in some cases, original documents could not be reached.

Lack of Turkish publications on the archaeological researches

In Anatolia, research teams and their members studying archaeological sites are from various countries around the world. Generally, the archaeological research teams are composed of researchers speaking several native languages such as German, English, Italian, and French, and the publications on archaeological edifices and sites are generally written in their own native languages. Most peoples including researchers, students and the public at large cannot get sufficient information on archaeological edifices and sites, to which

[101] ICOMOS/ICAHM, 1990, ibid, article 7.

they live side-by-side. In that respect, there is a problem of in the number of Turkish publications available.

CHAPTER 2

CHANGE

> "The world all around us is in a state of flux and turbulence. Things move about through space and alter their features, some are relatively enduring, some fleeting and evanescent, some grow and develop for a while, then decay and perish, while others emerge into being. Change is the most striking and pervasive feature of all existence".[102]

2.1. Definition of Change

Change and its management become at the heart of the debates about cultural heritage and their sustainability in a rapid changing world.[103] IAH is also in a continuous change like everything in our physical and built environment such as objects, structures, and buildings. Among the ways to inquire the nature of change in IAH is to inspect the principles, which act as rules for guiding changes in IAH. In that respect, the following part of the thesis will cover the definition of change, its principles and common types of changes, which are defined in preservation discourse.

In general, the term 'change' means "to become different what used to be"[104]. Various methods and strategies such as mechanistic models, post-mechanistic models are developed in several disciplines in order to understand the nature and characteristics of change. Understanding and explaining changes in IAH necessitates examining general approaches and models. In this study, two main change models; mechanistic models and post-mechanistic models, are discussed in terms of its validity for understanding the changes in IAH. In mechanistic models, change is generally defined as a transition from one state to another and a continuous, linear process leading from low values to higher ones. Besides, it is a reversible process, in which end point of the transition curve was known to the researcher.[105]

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[102] Pivcević, E., 1990, *Change and selves*, Oxford and New York, Clarendon Press and Oxford University Press, p.1.
[103] Teutonico, J. M. and Matero, F. (eds.), 2003, ibid.
[104] In Cambridge Dictionaries Online, change refers "to make or become different or to exchange one thing for another thing". Retrieved October 21, 2008 from http://dictionary.cambridge.org.
[105] Wimmer, A. and Kössler, R., 2006, 2006, ibid., p.7.

According to post-mechanistic models, change is described with the following properties; 'non-linearity'[106], 'partial determination'[107], 'branching effects'[108] and 'irreversibility'[109]. The current approach accepts that there is a move in the views "… which saw change unfolding along a pre-defined path from stage to stage until it reached a known end point…".[110] At present, the attention is on the process rather than stages. As shown in the Table 2.1, there are some contradictions in two models. For instance, post-mechanistic model rejects some traditional approach and agreements such as pre-defined path, continous process, involving stages, while mechanistic model is based on these characteristics and agreements.

Table 2.1. The characteristics of mechanistic and post-mechanistic change models

MECHANISTIC MODELS	**POST-MECHANISTIC MODELS**
a transition from one state to another	non-linearity
continuous and linear process leading from low values to higher ones	partial determination
the end point of the transition curve was known to the researcher	branching effects
a reversible process	irreversibility

As a first impression, it is not possible to explain the change in IAH from a single approach; mechanistic models or post- mechanistic models. In a broader context, various factors such as environmental factors, topographic conditions, atmospheric effects, physical state of survived archaeological remains, potentials of survived archaeological remains for re-assembling and re-erection[111] cause changes in IAH. Besides, interventions also cause various changes in the characteristics of IAH. For instance, the interventions on the Bath-Gymnasium Complex in Sardis have been caused variety of changes. At first, the Complex, which was composed of scattered many architectural fragments, were revealed through excavation. Following this, some architectural elements were consolidated, and some others

[106] It is discontinuous behavior of the entire system and, bifurcations, chaos are shown as the most obvious examples of non-linearity. Taken from Wimmer, A. and Kössler, R., 2006, ibid.p.8.
[107] Probabilistic elements are involved in most paradigms and these paradigms describe zones of "partial determination" and in some cases, non-determination. Taken from Wimmer, A. and Kössler, R., 2006, ibid.p.8.
[108] "Branching effects" are generally viewed as the results of multi-linearity. The final outcome is based on non-linearity and partial determination in branching effects. Taken from Wimmer, A. and Kössler, R., 2006, ibid.p.8.
[109] "Irreversibility" is the result of non-linearity and path-dependency. Taken from Wimmer, A. and Kössler, R., 2006, ibid.p.8.
[110] Wimmer, A. and Kössler, R., 2006, Understanding change: models, methodologies, and metaphors, Basingstoke, Hampshire, New York, Palgrave Macmillan, Houndmills, p.1.
[111] In this dissertation, re-erection is related with building the archaeological edifices by various approaches; *anastylosis*, restoration, reconstruction and re-assembling.

were re-erected by gathering architectural elements and inserting new material for missing parts. In the need of some repair and consolidation, it will be intervened again. Comparing the different states of the Complex such as its state during the excavation (Figure 2.1) and after the application of conservation interventions (Figure 2.2), it is possible to state that the interventions cause changes in the Complex. Considering that excavation is an unrepeatable action, the change caused through excavation is irreversible. In that respect, the change in IAH shows the characteristics of post-mechanistic models. However, the final state of the Complex after implementation of conservation interventions was known by the researcher. Therefore, the change in IAH shows the characteristics of mechanistic models. As a result, the change in the Complex has some common properties with both mechanistic models and post- mechanistic models.

Figure 2.1. The state of the architectural fragments belonging to Bath-gymnasium Complex in Sardis throughout excavation (Source: Yegül, 1986: fig.21).

Figure 2.2. The Bath-gymnasium Complex in Sardis as a standing structure after re-erection (Source: Yegül, 1986: fig.22).

In preservation discourse, general understanding of change in relation with the heritage settings views change as "... an ongoing process..."[112]. However, IAH, which is abandoned

[112]Article 9 taken from ICOMOS, 2005 (final version), Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas, Xi'an China. Retrieved February 10, 2007 from http://www.international.icomos.org/xian2005/xian-declaration.htm.

for many years prior to any excavation, is dead and generally covered. The contemporary life generally ignores existence of IAH unless excavation starts. For instance, IAH in Alabanda antique city, on which Araphisar village was settled, was dead and not part of the contemporary life of the village until the excavation was started by Aydın Museum in 2002. In that respect, the changes in IAH is not an ongoing process, rather a new process, which is started through excavation and framed with all types of interventions. As an initial impression, it is possible to define the change in IAH as a new process, throughout which IAH is redefined and reshaped.

Throughout this new process, new characteristics that include appearance, meaning and use of IAH are shaped and defined. For instance, the interventions on the Tetrapylon at Aphrodisias define and shape its new appearance, meaning and use. In this case, the interventions emphasizing architectural characteristics of the Tetrapylon in its new lifecycle shape its appearance and meaning as a representative of ancient architectural product. In another case, the intervention in the Late Roman and Archaic Lydian houses at Sardis shape its appearance and meaning in terms of overlapping cultural layers, rather than architectural design of a particular period. In that respect, it is possible to explain that the change caused through interventions define the appearance and meaning of IAH in its new lifecycle. The extent and content of the change in IAH vary from intervention to intervention and IAH to IAH. Explanation of the change in IAH requires to describe various issues such as how this process develops, what are the outcomes and how it leads IAH, whether from low values to higher ones or from higher ones to low. Finding the answers for these questions requires defining some particular principles for the change in IAH.

2.2. Principles of Changes

IAH, as the authentic sources of information on past cultures, gives and represents various types of information. The information represented through IAH ranges from architectural to historical, from didactic to functional. The information, which legitimizes IAH as heritage, is generally changed through interventions. It is a fact that change caused through interventions is inevitable. The change directly appears as an alteration in various characteristics such as material, cultural layers and values. In that respect, there is a great need for defining some principles for change in IAH that belongs to all mankind.

The principles of change in IAH, as the authentic sources of information, are generally related with the information on IAH and its accurateness. The changes may cause loss in scientific information in IAH. In that respect, change associates with accurateness of information, understanding the changes in the content of information and level of scientific information. For instance, the Bath-Gymnasium Complex in Sardis, which was re-erected,

gives hypothetical information on the architectural design of the Antique structure[113]. Therefore, it does not act as an accurate source of information. Therefore, the standing structure representing hypothetical image of the antique structure does not give scientific information on both authentic architectural design and historical facts. In this case, the interventions cause loss in the accurate information and distortions in the meaning of archeological remains as authentic and tangible sources of scientific information. Therefore, there is a necessity for defining 'reliability' as a fundamental principle in order to ensure change within the limits of scientific information. On this basis, the 'reliability', which is among the fundamental concepts in the preservation discourse, is valid principle for describing the limits of change caused through interventions in IAH.

From another viewpoint, preventing loss in scientific information and ensuring progress in IAH requires definition of some particular principles for the changes in several characteristics of IAH. The principles of legibility and consistency described in the preservation discourse are among the main principles for providing readable changes in IAH and preventing loss and distortions in scientific information. As mentioned above, the types of changes including transfer, transformation, gain, loss in the characteristics of IAH are other main issues, which one must tackle, in order to ensure a 'progress'. Understanding and explaining change necessitate defining the principles of change in order to evaluate interventions as causes of a 'progress' or a 'regress'. In this context, the following part sets down three principles as follows:

- Reliability,
- Consistency,
- Legibility.

2.2.1. Reliability

Reliability refers to the state of being reliable[114]. In the preservation discourse, reliability is related with the sources of information. Besides, there is a great emphasis on scientific information. In the context of archaeological heritage, it is accepted that "all remains and objects, or any other traces of human existence, which bear witness to epochs and civilizations for which excavations and discoveries, are the main source or one of the main sources of scientific information…"[115] Regarding to this statement, IAH itself is a reliable source of scientific information.

[113] Yegül, F., 1986, The Bath-Gymnasium Complex at Sardis, Harvard University Press, Cambridge, Mass., p. 10.
[114] In English, reliable refers to "something or someone that is reliable can be trusted or believed because they work or behave well in the way you expect" taken from Cambridge Dictionaries Online. Retrieved March 2, 2007 from http://dictionary.cambridge.org/define.asp?key=66754&dict=CALD.
[115] Taken form the European Convention on the protection of the archaeological heritage, article 1 from E Madran, & N. Özgönül, N. (eds.), 1999, International documents regarding the preservation of cultural and natural heritage, Ankara, METU Faculty of Architecture Press, p.83.

It is adequate to pick the definition and meaning of ‘reliability’ as used in the preservation discourse. The aim of the principle of ‘reliability’ is to establish a basis for information. It is related with the sources and accurateness of information, which convey information about the level of recognizability. Accordingly, there is a need for explaining recognizability. It is generally related with extent of information about IAH such as the characteristics of the architectural elements and the relationship between architectural elements. Thus, the level of recognizability depends on the level of information on these issues. The interventions generally cause changes in the level of information in relation with the level of recognizability. Hence, reliability is based on the recognizability, in other words, level of information, and sources of information.

Conveying accurate information on intervention through distinguishing known and unknown parts of IAH is not sufficient in order to define any change as reliable. For instance, the Fountain Trajan at Ephesus gives accurate and scientific information on interventions. However, it does not give accurate information on the design of the antique structure. In that respect, the change is reliable in terms of intervention, but not reliable in terms of its design (Figure 2.3). As a consequence, the reliability of change must be considered in terms of two issues, the first, reliability in interventions and the second, reliability in the information represented through IAH, as outcome product of interventions.

Reliability in interventions deals with conveying accurate information through interventions by demonstrating the extent of information on each architectural element and distinguishing known and unknown parts. For instance, in the Trajan Fountain, the missing column shafts, on which information on the dimension are not known, are designed as short elements without giving impression of a column shaft (Figure 2.3). In this context, new elements not referring to a certain dimension of a column shaft gives adequate information on the extent of information. Therefore, the intervention ensures reliability in interventions. However, understanding the reliability of change also requires describing reliability in terms of information conveyed through IAH. The following part defines reliability in information conveyed through IAH.

Reliability in the information given through IAH associates with level of accurateness of information represented through IAH. In some cases, the reliability in the information represented through IAH is not taken into consideration. For instance, the intervention in Bath-Gymnasium Complex at Sardis conveys information on what is new and what is authentic. In other words, it is clear in terms of extent of information, therefore, it is reliable in terms of the intervention. However, the information on the architectural features, which is

based on the hypothesis[116], is not based on authentic sources of information. In that respect, although there are great efforts to distinguish new and authentic parts, the information represented through the actual structure is not reliable. Therefore, the change in the Bath-Gymnasium Complex at Sardis is not completely reliable. On the other hand, the Apollo Temple in Didyma that is interpreted and presented as it is found gives accurate information on both how it is intervened and how it was found. Thus, the changes in the Apollo Temple based on scientific information on interventions are reliable (Figure 2.4). As a result, understanding reliability of change necessitates evaluating information on interventions and the information represented through IAH totally.

2.2.2. Consistency

In general, the term 'consistency' is explained as to behave or perform in a similar way, or to happen in a similar way[117]. In other words, consistency is an agreement on certain principles and relies upon a notion of adherence to same certain principles, materials and etc. In recent studies in preservation discourse, the term 'consistency' is used in order to provide sustainable management of heritage settings through implementation. It is viewed among the requirements of effective planning and legislative tools, policies, strategies and practices[118].

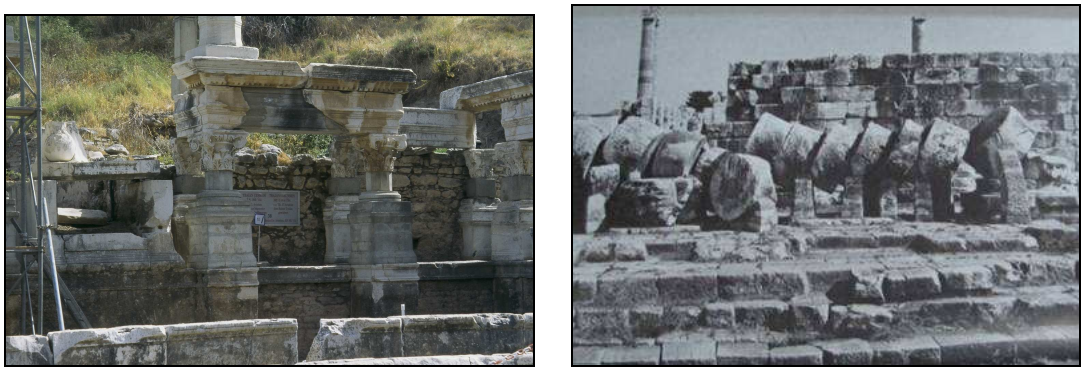


Figure 2.3. The missing column shafts designed as short elements at the Trajan Fountain, Ephesus.

Figure 2.4. Reliable changes in the Apollo Temple in Didyma based on scientific information.

[116] Yegül, Fikret, 1986, The Bath-Gymnasium Complex at Sardis, Harvard University Press, Cambridge, Mass., p. 10.
[117] The definition is taken from Cambridge Dictionaries Online. Retrieved January 18, 2007 from http://dictionary.cambridge.org/define.asp?key=16399&dict=CALD.
[118] ICOMOS, 2005, ibid., article 5.

In relation with interventions, ‘consistency’ is meant that to apply the same principles and techniques to the parts of IAH, which have the same level of reliability. It is better to understand consistency in the following case. Considering the arch of the window and the arches of proskenion at Hierapolis Theater, the level of recognizability of two elements are the same. Both the window arch and the arches of proskenion are composed of marble blocks, whose dimension, form, location, details are known. In this case, the recognizability degree of each element and the sources of information are the same. In that respect, the level of reliability is the same. However, different approaches are observed at the Theater. While concrete is used for the missing parts of the arches of proskenion, the missing parts of the window arch is completed with brick units. Accordingly, although the elements have the same level of reliability, they were not treated in a consistent manner (Figure 2.5, Figure 2.6). Since both interventions were applied almost at the same period, it is possible to state that there is inconsistency. Certainly, having knowledge on the level of reliability is among the essential input for ensuring consistency in interventions and consistent change.

From another viewpoint, consistency in interventions, especially conservation, interpretation and presentation, is essential for understanding what is authentic and new in IAH by ensuring uniformity. In the case of the Tetrapylon at Aphrodisias, the principle is based on using white concrete and outlining the contours of authentic coffins for the missing architectural elements and parts. Therefore, the intervention ensures uniformity in new parts in terms of material and detail and consistency in change. In another case, the Apollo Temple in Side, one of the authentic column capitals was found during the excavations[119]. The other columns were reproduced according to this existing one (Figure 2.7). Although there is consistency, it is not possible to understand that some capitals are reproduced and new. As explained above, uniformity is fundamental for differentiating authentic and new parts of IAH and guaranteeing consistency in change. However, it is not always sufficient for providing to distinguish new and authentic parts.

In some cases, varieties of materials and techniques are used in the interventions of different periods. For instance, the seating blocks of the Theater in Ephesus have been intervened in different periods by using varieties of materials and techniques. Therefore, there is inconsistency in the interventions (Figure 2.8). In this context, there are various issues to be questioned. For instance, should one change the materials and techniques of interventions for a specific IAH that was intervened previously? Why do decision-makers of different periods use different materials and construction techniques for a particular element that has the same level of recognizability? What are the main reasons behind these changes? In the preservation discourse, to use modern materials and techniques is in the nature of the process. Of course, new construction materials and techniques reflect a change on

[119] İnan, J., 1988, Side, Apollon Tapınağı Restorsyonu, 1986 yılı çalışmaları, IX. Kazı Sonuçları Toplantısı II, T.C. Kültür ve Turizm Bakanlığı, Eski Eserler ve Müzeler Genel Müdürlüğü, 6-10 Nisan 1987 Ankara, p.173.

intervened IAH. However, it is clear that insertion of varieties of new materials results with complex changes that cannot be understood and causes inconsistent changes. As a result, to apply the same intervention techniques for the elements, which have the same level of reliability, is essential in order to cause a consistent change.

2.2.2.1. Criteria of Consistency

It is necessary to explain some criteria for checking consistency in change. In that respect, the validity of the criteria in consistency is discussed in relation with design, material and cultural layers below.

Figure 2.5. The arches of the proskene completed with concrete (with black cement) at the Theater, Hierapolis

Figure 2.6. The arch of the window completed with brick units at the Theater, Hierapolis

Figure 2.7. New column capital of the Apollo Temple in Side reproduced according to the existing one (Source: Inan, J., 1987: 177.)

Figure 2.8. Inconsistent uses of various materials and techniques in the seating blocks of the Theater, Ephesus.

Consistency in Design

IAH, as the architectural products of past cultures, has some features that need to be designed in relation with some certain types of conservation interventions. The form, dimension and detail are among these main features of architectural elements. In a hypothetical structure, there is a need for completing some architectural elements and/or producing new ones. Accordingly, there is great need for designing the architectural elements in terms of its form, dimension and detail and ensure consistency in design. Therefore, consistency in design is based on treating form, dimension, and detail of architectural elements in the same way for the ones having the same level of reliability. There are three subtitles in relation with the consistency in design: consistency in form, consistency in dimension and consistency in detail.

Consistency in form suggests acting in the same way for the form of architectural elements having the same reliability level. In practice, missing architectural elements and missing parts are generally completed and constructed with new materials and techniques in the same or similar form with the authentic architectural elements. For instance, marble blocks of crepidoma of the Zeus Temple at Priene were constructed in the same form with the authentic ones. In general, providing consistency in dimension of architectural elements is preferred in the interventions. In case of the bouleterion in Ephesus, the dimensions of the rubble stones used in the core of the seating blocks (Figure 2.9) are similar with the authentic ones. Therefore, there is consistency in dimensions. Considering that the changes in the form and dimension of an unit element cause great differences in the appearance and perception of IAH, the changes in the form and dimension is not generally preferred. For instance, the seating places of the theater at Pergamon are completed and reproduced through concrete without taking into consideration the authentic dimensions of the seating blocks. Therefore, the uses of different form and dimension for new and missing architectural elements cause a change that distorts the authentic appearance and perception of the theater at Pergamon (Figure 2.10). Accordingly, ensuring consistency in form and dimension in relation with the authentic dimensions of architectural element is an important criterion for transferring the authentic effect of IAH. In general, form and dimension are not variable criteria in interventions for distinguishing new and authentic parts.

Consistency in detail associates with the features such as level of workmanship, texture and ornamentation. Considering that IAH of Antiquity has various ornamentation and stylistic motifs, there is a great need for providing uniformity in the ornamentation and stylistic motifs. In that respect, the detail is related with the ornamentation here. It refers applying similar technique for the details of each architectural element having the same level of reliability. In general, use of authentic details for completing missing parts is not preferred. New detail that provides distinguishing new and authentic parts is generally designed in the completion of

missing parts. For instance, the ornamentation of the coffins of the Tetrapylon in Aphrodisias are outlined and simply given in the whole structure. In that respect, there is consistency detail. Besides, there is consistency in dimensions and forms of the coffins, which are the same with the authentic ones. Consequently, the interventions in the coffins of the Tetrapylon in Aphrodisias (Figure 2.11) are consistent in term of design. In general, giving the outline of the authentic ornamentation in new parts of IAH is a common practice. For instance, missing and new parts are constructed by giving the outline of the authentic ornamentation in the Trajan Temple in Pergamon (Figure 2.12) and the Tetrapylon in Aphrodisias (Figure 2.11). Accordingly, the detail is another criterion, which needs to be taken into consideration for providing consistency in design. As a result, consistency in design associates with three criteria; the form, dimension, and detail.

Figure 2.9. The seating blocks of the Bouleterion completed with rubble stones, Ephesus.

Figure 2.10. Completion and reproduction of the seating places in the Theater, Pergamon.

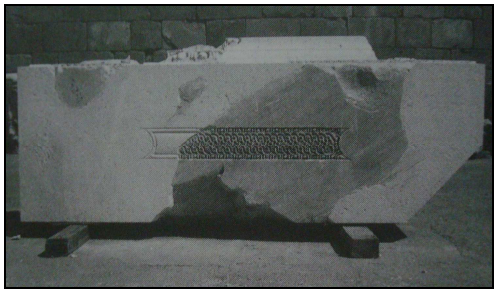


Figure 2.11. Consistent intervention in the coffins of the Tetrapylon, Aphrodisias.

Figure 2.12. The design of the missing parts in the Trajan Temple, Pergamon (Source: Nohlen, 1999: 98).

Consistency in Material

It is possible to explain that consistency in material is to apply the same material to missing parts and new elements of IAH, which has the same level of reliability. However, application of the same material is not always possible for the architectural elements, which do not have the same level of durability. For instance, some architectural elements having structural problems require material ensuring structural stability. On the other hand, some others do not. In the case of the Artemis Temple in Magnesia ad Meander, the missing parts of the west pediment, which is originally of marble, was completed with a type of new material, a mixture of white cement, marble dust, sand and etc. and strengthened with iron bars. As a result of intervention, the consistency in material is ensured in the pediment (Figure 2.13).

In the Late Hellenistic Fountain House in Sagalassos, natural stone was used for the missing parts. Five column capitals, wall blocks and step block were carved in limestone found near Yaraşlı[120]. Therefore, the interventions ensure consistency in material. However, in some cases, there is a need for using new materials such as iron bars and fiber bars, which provide structural stability, in some parts of IAH. In this case, it is possible to state that there is inconsistency in the use of material. Accordingly, it is possible to define consistency in material as a principle for change without taking into account the change caused through insertion of new materials such as iron bars and fiberglass rods that provide structural stability.

Consistency in Cultural Layers

IAH, as ancient architectural products, was constructed for specific purposes and generally used for different purposes in later periods. Therefore, IAH is composed of cultural layers of different periods, and as it is commonly accepted, each layer of IAH is significant part of IAH. In that respect, any cultural layer of IAH cannot be completely destroyed in order to emphasize a particular layer and certain image of the structure. Hence, consistency in layer is necessary in order to prevent complete loss of some cultural layers and explain changes in the layers of IAH. For instance, the place of the Late Roman and Archaic Lydian houses in Sardis, which is composed of various layers[121], is interpreted and presented as it is found by applying various interventions and constructing the protective shelter (Figure 2.14) In this case, each layer is preserved and presented. Therefore, consistency in cultural layers is ensured through interventions. On the other hand, to treat each layer of IAH in the same manner is not always possible due to certain decisions expressing significance of a particular layer. As a result, consistency in interventions deals with conserving remains of all periods

[120] Wealkens, M., Vermeersch, P.M., Ozturk, I. & Ekinci, H., 1999. The 1997 Excavation Campaign at Sagalassos and Derekoy, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX.Kazı Sonuçları Toplantısı II, p.295.
[121] Greenewalt, Jr. C.H., 1999, Sardis, Archaeological Research in 1997, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX.Kazı Sonuçları Toplantısı II, p. 4.

as much as possible. In conclusion, the consistency and criteria explained above are essential for understanding what is authentic, new and the extent of changes in IAH caused through interventions.

2.2.3. Legibility

'Legibility' provides some foundations for several questions such as what is found, what has been changed and how. The term 'legible' refers to "writing or printing that can be easily read"[122]. In the preservation discourse, there is a great emphasis on legibility. For instance, the statement of "the material used for integration should always be recognizable…" [123] indicates the emphasis for providing legibility in conservation interventions. It basically suggests applying interventions in such a manner that allows reading what is authentic and new. In general, this separation can generally be achieved by using different approaches for design and material of new and missing architectural elements. In that respect, it is possible to conclude that there has been great effort for making interventions legible in the field of preservation.

Figure 2.13. Consistency in material in the west pediment of the Artemis Temple, Magnesia ad Meander.

Figure 2.14. Consistency in cultural layers of the Late Roman and Archaic Lydian houses, Sardis.

[122] In English, the term "legibility" is the noun form of "legible". The definition is taken from Cambridge Dictionaries Online. Retrieved May 5, 2007 from http://dictionary.cambridge.org/define.asp?key=45451&dict=CALD.
[123] In Venice Charter adopted by ICOMOS, 1965, 'International Charter for the Conservation and Restoration of Monuments and Sites', first developed at the 2nd International Congress of Architects and Technicians of Historic Monuments, Venice, 1964, article 15. Retrieved October 12, 2008 from http://www.international.icomos.org/charters/charters.pdf.

From my point of view, the relation between ‘change’ and ‘legibility’ is associated with the questions of ‘how can change be easily read?’ and ‘what are the criteria for reading the change?’ The change can be easily read through ensuring ‘clarity’ and ‘transparency’. In my opinion, clarity in change associates with the quality of being clear and the state of being understandable in intervention and IAH, as outcome of interventions. Besides, transparency is related with the characteristic of being easy to see through interventions and IAH. Transparency necessitates providing access to information on various issues such as how IAH was found, what is done through various tools including IAH itself, presentation panels, audio-visual equipments and so on. In general, it is not possible to give various kinds of information through IAH. In that case, it is possible to emphasize certain kinds of information through presentation installations. Accordingly, there are various ways of providing access to information in order to ensure transparency. For instance, in Priene, the information in the Temple of Athena is accessed through the structure itself and the presentation panel, on which the name and construction date were written. However, there is no information about various subjects such as how it was found, how it was intervened and the current state of the columns, which are shorter than the authentic ones. Therefore, the information about the Temple is missing, wrong, and not transparent. As a result, the change is not legible. Transparency also associates with reading the history of IAH from the recovered archaeological remains. For instance, the Parthian marbles, which were found during the excavation, are the evidences of transformation of the Celsus Library at Ephesus into a Byzantine Fountain. At present, the existence of Parthian marbles or their reproduction would make the history of the place of the Library readable. However, current state, where there is very limited evidence of this transformation, makes the changes unreadable. The tangible documents of past treatments and uses of past cultures are not legible in the place of the Celsus Library. Besides, the accurateness of information conveyed through the outcome product is extremely important for ensuring legibility in change. For instance, the original design of the Fountain of Trajan is not legible due to misinforming features related with the scale and proportions, although the intervention is legible (Figure 2.15). In that respect, legibility is based on conveying accurate information on both the interventions and the authentic characteristics of IAH such as the scale and proportion. Legibility of change is also related with consistency in change. When new and authentic parts are clearly distinguished, the change becomes legible. For instance, the change in the Theater at Ephesus, where there is inconsistency in the use of material for missing parts, is illegible. Therefore, legibility is absolutely related with consistency.

Consequently, it is possible to state that legibility in change is an important principle for change in order to read the interventions and IAH. In that respect, legibility in conservation interventions is mainly based on two main issues; the first, to provide access to information through the interventions and the architectural design of IAH and, the second, consistency. However, legibility is not only related with the conservation interventions, but also the

interpretation and presentation interventions. The main issues related with the legibility are explained under four topics; reading signs and evidences of interventions, reading evidences and traces of history, reading the information on the process of change, and reading architectural design. Three former topics are related with all intervention types. However, the forth one associates with the interventions providing re-erection of IAH.

Reading Signs and Evidences of Interventions

Throughout new lifecycle of IAH, interventions have various impacts on the characteristics of IAH and its surrounding. For instance, the Tetrapylon at Aphrodisias, there is no evidence of excavation today. The Tetrapylon standing independently seems as if it was not recovered through excavation in any time of its history. The evidences and traces of the excavation are completely lost. Considering conservation interventions, evidences and signs of intervention should support reading the process of interventions and distinguishing of new and authentic parts. For instance, the original and newly intervened parts of the Tetrapylon at Aphrodisias can easily be distinguished due to the signs and evidences of interventions. In another case, the agora at Perge, it is not possible to read the signs of excavation. However, some columns of the portico re-erected by adding concrete for missing parts are readable (Figure. 2.16).

Figure 2.15. Legible interventions in the Fountain of Trajan and illegible architectural design.

Figure 2.16. The agora being legible in conservation interventions, Perge
(Source: Abbasoğlu, 2001:212).

Reading evidences and traces of history

The archaeological heritage of Antiquity constructed in a particular period was generally transformed into another building type and re-used or discarded in another period. For instance, the temple of Zeus Olbios located near to the village of Uzuncaburç in Cilicia was transformed into church presumably in the second half of the 5th century AD[124] (Figure 2.17). In another case, the Byzantine city wall constructed on the bouleterion indicates the evidences of multi layered characteristics of the 'place' at Metropolis (Figure 2.18). Therefore, the evidences and traces of the history are legible in case of the bouleterion. In that respect, IAH generally includes overlapped remains and traces of various cultures and, accordingly they are multi-layered remains. The evidences of multi layered characteristics are generally revealed through excavation. However, in some cases, these evidences and remains are generally removed from its context through some interventions. Accordingly, the change in IAH representing some overlapped remains of periods becomes illegible.

Besides, re-erection of IAH generally causes complete loss archaeological remains in-situ that generally includes demolishment layers, its evidences and traces. For instance, the standing columns at the north gallery of the Asclepion in Pergamon, which were found in demolished state during the excavation[125], prevent reading the evidences of its demolishment due to earthquake. In that respect, there is generally a conflict between reading evidences and/or traces of history and reading architectural design of a particular period. This conflict leads me to take some measures and searching for new approach.

Figure 2.17. The temple of Zeus Olbios bearing the evidences of conversion into church (Source: Accessed by http://www.iconoclasm.dk/?p=92 on September 11, 2008).

[124] Retrieved September 11, 2008 from http://www.iconoclasm.dk/?p=92.
[125] Radt, W., 2002, Pergamon, Antik bir kentin tarihi ve yapıları, Istanbul, YKY, p.234.

Figure 2.18. Legible interventions on overlapped bouleterion and the Byzantine city wall, Metropolis.

Reading the information on the process of change

Legibility is also based on being transparent on the information and the process of change caused through interventions. In practice, reading the information on the process of change is related with giving information on different states of archaeological edifice in its new lifecycle. There are various tools for conveying the information on the process of change such as IAH itself and the presentation panels. As noted above, some information about the process of construction of the protective shelter in the Terrace House II is given through presentation panels (Figure 2.19). Accordingly, the change caused through the protective shelter in Terrace House II, which is legible, ensure reading some parts of the change process. Therefore, it partially ensures legibility in change process. However, in general, it is not possible to read the information on the process of change in current practice.

Reading architectural design of IAH

Interpreting and presenting IAH as a representative of Antique architectural product, is among the common practices as mentioned above. In that case, the change is resulted with presentation of an architectural design of a particular period. In addition, reading the architectural design become at the center. In this circumstance, legibility in change suggests reading the architectural design. For instance, the change in the Trajan Temple at Pergamon and its environment caused through re-erection ensure legibility in terms of its architectural design (Figure 2.20).

As a result, legibility associates with being transparent in the outcome product and the process, in which IAH is shaped, and providing access to information. The information is related with reading interventions, reading information on decisions related to intervention,

evidences and traces of the history and/or architectural design of a particular period. In that respect, legibility ensures reading not only the history of IAH, but also its new lifecycle. However, it is not generally possible to provide reading evidences of history and architectural design at the same time. In many cases of IAH, re-erection of architectural elements generally causes loss in the evidences of other periods and historical facts. For instance, in Hierapolis, re-erection of the architectural elements that belong to the Latrine causes loss in the evidence of additions of other periods and its demolishment due to earthquake (Figure 2.21, Figure 2.22). In that respect, there is generally a conflict between two criteria, which lead us for searching new approach for interventions.

It is fact that legibility in change is not completely ensured in many cases. There can be various reasons for illegibility. From my point of view, illegibility of change is mainly based on two reasons; the first, the general approach, which focuses on the re-erection of IAH and the second, lack of consistency. Generally, re-erection and giving a picture or an impression of IAH are preferred. While re-erection of a specific building type is realized, the remains of other periods are generally ignored and/or removed. In that case, there is a loss in the legibility of essential parts of IAH's history and meaning. As a result, there is a great necessity for ensuring high levels in legibility in change in order to give clear information on the history of IAH, contemporary interventions and architectural design. As mentioned above, the conflict between some criteria can be solved through defining a change strategy that is valid for new process.

Figure 2.19. Presentation panel providing legibility in the process of change on the construction of the protective shelter in the Terrace House II, Ephesus.

Figure 2.20. The Trajan Temple and its environment being legible in terms of its architectural design, Pergamon (Source: Radt, 2002:300).

Figure .2.21. The state of the Latrine being legible in terms of the evidence of its demolishment, Hierapolis (Source: D'Andria, F., 2003:81).

Figure 2.22. The state of the Latrine in 1997 being not legible in terms of the evidences of its demolishment, Hierapolis (Source: D'Andria, F., 2003:80).

2.2.2.1. Criteria of Legibility:

This section includes the operational guidelines and defines the criteria of legibility. The legibility of change mainly depends on four criteria; legibility in design, material, cultural layer and function related with interventions.

Legibility in Design

The design is among the essential feature of IAH, as authentic and non-renewable architectural products of past cultures. Legibility in design requires conveying accurate information among the relationship between architectural elements and IAH itself. Legibility in design also necessitates giving accurate information on what is new and what is authentic. For instance, the Fountain of Trajan in Ephesus does not give accurate information on the height and facade characteristics of IAH and the relationship between the architectural elements (Figure 2.23). Hence, legibility in design is not provided. From another perspective, the issue of legibility in design is a complex issue for IAH that was used for variety of purposes in the past. For instance, what about legibility in design for Roman structures that was generally converted and used for different purposes in Byzantine period? It is clear that it is not always possible to ensure legibility in design of each period. Although legibility in layers cannot be ensured for each period, legibility in design can be guaranteed for a particular period by emphasizing certain architectural design.For instance, the Celsus Library, which served as a library and fountain in the past, represents the architectural

design of a Roman library today; therefore, it ensures legibility in design (Figure 2.24, Figure 2.25).

Figure 2.23. The Trajan Fountain not giving accurate information on the authentic design, Ephesus (Source: Wiplinger, G. & Wlach, G., ibid.: 97).

Figure 2.24. The remains of the fountain and Library found throughout excavation, Ephesus.

Figure 2.25. The Celsus Library being legible in terms of the Roman façade architecture.

Considering that IAH has architectural elements that have specific workmanship and ornamentation, the legibility in design also involves being legible in detail by applying new design and techniques that differentiate authentic ornamentation from new ones. It associates with reading the changes in the details of architectural elements and necessitates

designing new details different from the authentic ones. For instance, the details of the missing parts and new coffins of the Tetrapylon in Aphrodisias are simple and different from the authentic parts. This difference in detail ensures legibility in details (Figure 2.26). As it is exemplified, in some cases, legibility in design is provided by using new details. In practice, the form and dimension are not generally preferred as variable criteria for ensuring legibility in design. For instance, at the east wall of the Celsus Library, the concrete used for the missing parts appears in the same or similar dimension and form with the authentic ones in order not to distort the original pattern on the wall (Figure 2.27). Consequently, legibility in design ensures reading authentic architectural design and is related with providing clarity in the detail, form and dimension of new parts.

Legibility in Material

It is generally related with the issue of distinguishing new and authentic parts that is emphasized in Venice Charter[126]. The uses of new materials for missing parts that can be easily distinguished from authentic parts ensure legibility in material. One of the ways of providing difference in new and authentic parts is related with use of different types of materials (i.e. concrete, marble and etc.) for new parts. For instance, the legibility in material in the Trajan Temple in Pergamon is ensured by using concrete in white for new parts. In another case, use of concrete also ensures legibility in material in the the Tetrapylon in Aphrodisias. As mentioned above, the emptied parts of the inner core of exterior wall of the Faustina Bath in Miletos (Figure 2.28) were completed with rough stone blocks. Therefore, it ensures legibility in material and intervention, and this difference act as a sign for another cultural layer of IAH in its new lifecycle.

Figure 2.26. The new and authentic parts of the coffins of the Tetrapylon, Aphrodisias.

Figure 2.27. The new and authentic parts of the east wall of the Celsus Library, Ephesus.

[126] ICOMOS, 1965, ibid., article 12.

Legibility in Cultural Layer

In Anatolia, IAH of Antiquity generally is the product of various cultures such as Greeks, Romans, Turkish Principalities and Ottomans. Hence, survived architectural products are generally composed of overlapped remains and traces of several cultures. In that respect, legibility in layer refers to read different states and layers of IAH, as they are found during the process of excavation. For instance, the so called 'Tripartite building' in Iasos has five phases, among which the most recent dating is the late Byzantine period[127] (Figure 2.29). Today, the remains representing various layers provide legibility in layer.

Considering interventions as the evidences of contemporary history of IAH and contemporary human approaches in defining IAH in its new lifecycle, interventions act as an another layer. Hence, legibility in layers also necessitates knowing the state of IAH prior to any interpretation and presentation interventions. On the other hand, re-erection generally results with emphasizing a particular cultural layer and giving an impression of a standing structure, while other layers are ignored or lost. From my point of view, legibility includes not only reading the cultural layers of IAH produced by past cultures but also reading the signs and evidences of interventions, as a new cultural layer produced by contemporary society. For instance, the Tetrapylon in Aphrodisias giving almost complete picture of the Ancient propylon do not allow us to understand how it was found and how it was changed. In another case, the walls of the 'Building Z' in Pergamon have the signs of consolidation. The consolidated part, which is a part of the new strata of the wall, is indicated by separating two parts with a joint as shown in Figure 2.30. In another case, the emptied part of the exterior wall of the Faustina Bath in Miletos is intervened by filling the inner core through providing a plain surface. The intervention shows the signs of consolidation; therefore, it ensures legibility in intervention, as a cultural layer in new lifecycle of IAH. Although these changes and evidences of interventions are viewed as the signs for ensuring legibility in material, they also act as the evidence of new formation of IAH in its new lifecycle.

Legibility in Function

IAH being architectural products of past cultures was used for variety of purposes in past. For instance, the temple of Aphrodite, which was constructed in the late 1st B.C, was converted into a church around A.D. 500 and used as the city's cathedral[128] (Figure 2.31). Although the archaeological edifice does not generally have potential for serving original functions at present, it is significant to give information on how it was used and how it was changed in time. However, in general, the conservation interventions that re-erect IAH ignore

[127] Berti, F., Italian Archaeological Mission at Iasos (Caria), The 2005 Campaign, T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 28. Kazı Sonuçları Toplantısı, 1. cilt, p.108.
[128] Retrieved on www.nyu.edu/projects/aphrodisias/taph.htm March 12, 2009.

giving information on original functions of archaeological edifices. For instance, there is no information on conversion and use of the Celsus Library as a fountain in Byzantine times (Figure 2.32). In the case of the Latrine at Hierapolis, it is also not possible to observe different phases of use (between the 5th and the beginning of the 7th century A.D)[129]. In that respect, the interventions generally do not ensure legibility in functions. Considering that there were generally changes in the functions of archaeological edifices in the past, today, it is necessary to make the functions of archeological edifices readable for contemporary society.

Figure 2.28. The missing parts of the exterior wall of the Faustina Bath, Miletos.

Figure 2.29. The 'Tripartite building' having various phases behind the east stoa, Iasos (Source: Berti, F., 2007: 115).

Figure 2.30. The walls of the 'Building Z' having the signs of consolidation, Pergamon (Source: Obtained from Ozge Yurtsevenler)

Figure 2.31. The temple of Aphrodite converted into church around A.D. 500. (Source: Retrieved on April 5, 2009 from http://en.wikipedia.org/wiki/File:Aphrodisias_turkey.jpeg)

[129] De Bernardi, 1998, D.F., Report on the Mission's Activity carried out in 1996, T.C. Kültür Bakanlığı, Anıtlar ve Müzeler Genel Müdürlüğü, XIX. Kazı Sonuçları Toplantısı II, Ankara, Kültür Bakanlığı Milli Kütüphane Basımevi, p. 239.

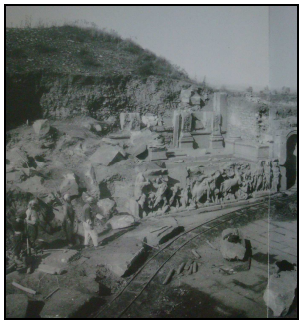


Figure 2.32. The evidences of the use of the Celsus Library as a fountain in the Byzantine period (Source: Wiplinger, G. & Wlach, G., 1995: 32).

2.3. Types of Change

In the preservation discourse, the interventions have various impacts on IAH and cause certain types of changes. The types of change are generally related with how characteristics of cultural properties become different in time. The types of change are explained as addition, removal, conversion and etc. In the context of this thesis, the types of change in IAH associates with the changes caused through interventions. The change types deal with how IAH has been changed through interventions starting from pre-excavation stage. These changes and impacts of interventions are classified under four topics; transfer, transformation, gain and loss.

Transfer

'Transfer', which refers to the characteristics of IAH remaining the same until the end of the new lifecycle, is a valid concept and accepted as a change type here. It associates with transmitting authentic characteristics of IAH, which are revealed through excavation, as they are found until the end of the interpretation and presentation interventions. Some conservation interventions including interventions aiming to control the environmental conditions, prevent threats and remedy the problems in architectural decoration and preserve IAH as found cause this type of change. For instance, in the Magnesia ad Meander, the theatron is transferred by mainly ensuring preservation of the existing characteristics (Figure 2.33; Figure 2.34).

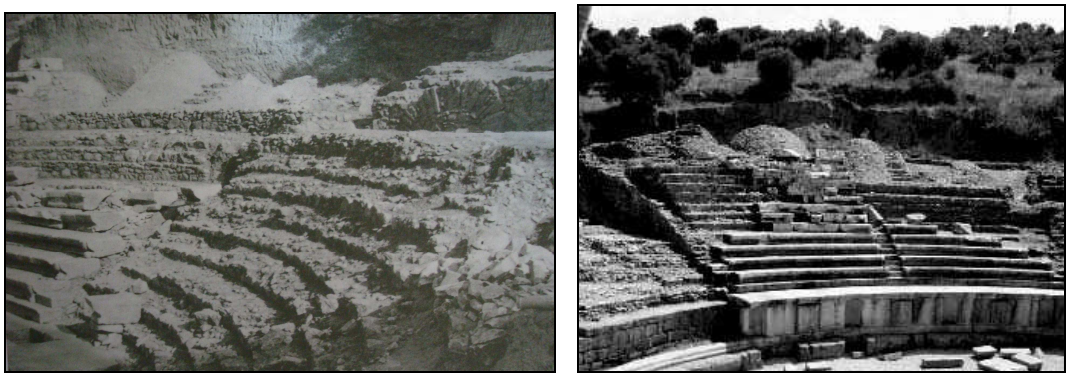


Figure 2.33.The state of Theatron throughout excavation (Source: Bingöl, O, 1995:51)

Figure.2.34.The state of Theatron after interventions (Source: Bingöl, O., 2005: 231)

Transformation

In some cases, transformation of existing characteristics is the main type of change and impact of interventions on IAH. Transformation refers to change the appearance and meaning of something completely different from the existing one. In general, the conservation interventions causing re-erection cause transformation inIAH. For instance, the Trajan Temple in Pergamon and its surrounding was completely transformed through restoration (Figure 2.35; Figure 2.36). In another case, the Late Hellenistic Fountain House being completely covered prior to excavation was transformed into a standing structure through interventions (Figure 2.37; Figure 2.38).

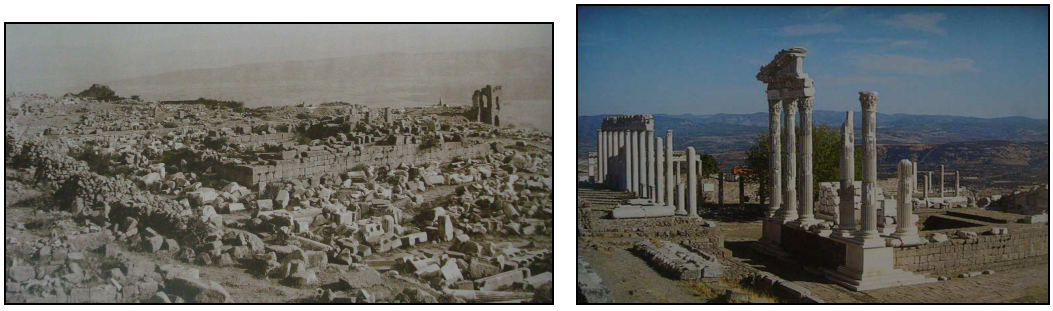


Figure 2.35. The state of the Temple of Trajan during excavation in app. 1900's, Pergamon (Source: Radt, 2001:300).

Figure 2.36. The state of the Temple of Trajan after interventions (Source: Radt, 2001:300).

Figure 2.37. The state of the Late Hellenistic Fountain House in 1990, Sagalassos (prior to excavation) (Source: Wealkens, M. & Poblome, J., 1993, Sagalassos II, Report on the third excavation campaign of 1992, Leuven: Leuven University Press, p.56).

Figure 2.38. The state of the Late Hellenistic Fountain House in Sagalassos after interventions (Source: Wealkens, M., Vermeersch, P.M., Ozturk, I. & Ekinci, H., 1999. The 1997 Excavation Campaign at Sagalassos and Derekoy, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX.Kazı Sonuçları Toplantısı II, p.310).

Gain

Some interventions providing insertion of archaeological edifice into the life of contemporary society cause another type of change, which is referred as ‘gain’ here. The interpretation and presentation interventions provide ‘gain’ in terms of various new characteristics such as use of some edifices (i.e. theaters, odeon) for cultural and social activities, use of the archaeological edifices for visits and providing economic gain for local public. For instance, addition of function value, social value, and economic value are among the main characteristics, which show this type of change. In case of Ephesus, uses of archaeological edifices and the site for visits provide insertion of the structures into the cultural and social life of contemporary society (Figure 2.39). Besides, insertion of IAH and site into lives of local public is ensured by viewing and using IAH as a tool for economic gain (Figure 2.40).

Figure 2.39. The archaeological edifices in the Square of Domitian having social value and economic value Ephesus.

Figure 2.40. The shops on the north entrance of the Ephesus representing economic value of IAH and site for local peoples.

Loss

Some characteristics are no longer available by application of a particular intervention, in other words, they are lost. For instance, the Theater at Alinda has picturesqueness value and virginity value due to its appereance and untouched quality as shown in Figure 2.41. Considering that excavation causes changes in the environmental conditions, these values will be lost through excavation. In that respect, loss is another type of change in IAH. In some cases, the interventions, which emphasize architectural design of a particular period, cause loss in originality value. In case of the Celsus Library in Ephesus, the conservation intervention causes loss in originality value in relation with the loss of evidences and remains of other periods.

Figure 2.41. The Theater at Alinda having picturesqueness value and virginity value.

As explained above, the interventions cause some certain types of change in IAH. Excavation always causes loss in some values such as picturesqueness value and virginity value. Besides, it transforms some existing values such as architectural value, document value and information value. Therefore, these change types; transformation and loss are the results of excavation. Three types of change; transfer, transformation and loss are the results of conservation interventions. ‘Gain’ as another type of change is the result of interpretation and presentation interventions.

2.4. Evaluation

This section is a close look on the principles of change caused through interventions. It began with a definition of change, its principles and criteria, which work as an approach and operational guidelines for studying interventions. Throughout new lifecycle, IAH is recovered, shaped and inserted into the life of contemporary society. Besides, it is transmitted to future generation by giving it a physical form and making it visible. In that respect, the change continues and shows a trend. Change in IAH, which is the common asset of all mankind, can be toward improvement or decline. In that respect, the change have significance role in shaping IAH and requires describing some principles. The principles; reliability, consistence and legibility act as common laws of change to all possibilities for defining the change and have some common characteristics as explained below:

- the principles have meanings for change and are viewed as a limitation imposed upon change in IAH,
- the principles are the natural outcome of the change,
- defining change as the issues having impacts on the characteristics of IAH and its new lifecycle is a limited one.

As it is explained above, new appearance and meaning of IAH are shaped and defined through the changes caused interventions. The change differs from intervention to intervention and IAH to IAH. It is possible to describe change as an approach having particular principles, which act as limitations on new characteristics of IAH. The criteria defined for the principles work as operational guidelines. Besides, it is possible to define change as sets of issues having a certain degree reliability, consistency, legibility in relation with both interventions and IAH, as an outcome of interventions. However, it is necessary to describe some main issues in order to understand how new characteristics of IAH is changed through interventions.

In this context, among three principles explained above, reliability, which is based on the recogniziblity in IAH and sources of information, is at the top of a triangle of change principles. It acts as a base for other principles, consistency, legibility and appropriate

changes in IAH. Besides, consistency is directly based on reliability. However, consistency and legibility in change does not ensure reliability. Consistency and legibility has close relationship and always affect each other (Figure 2.42). These principles act not only limitation upon interventions, but also shape the ways of making interventions and creates new appearance and meaning for IAH. In addition, they act as evidences of interventions, as another cultural layer in new lifecycle of IAH.

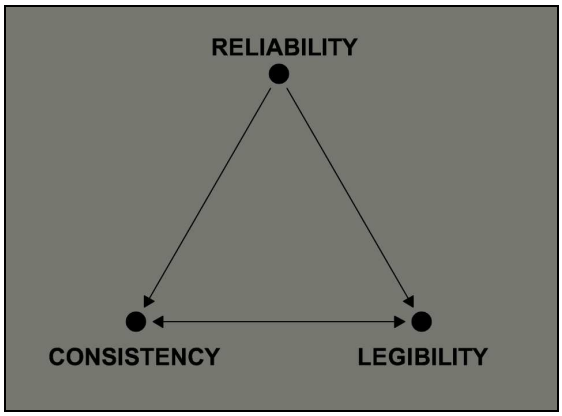


Figure 2.42. The relationship between principles of change

The formulation of the principles of change can never be satisfactory without considering the tools of change and main changing characteristics of IAH for understanding change and new formation process. In that respect, it necessitates description the properties of change. Description of the properties of change is succeeded through explaining main changing characteristics of IAH, the tools of changes, the patterns and quality of change. Hence, interventions, as tools of change, and main changing characteristics of IAH are studied in the following chapter.

CHAPTER 3

INTERVENTIONS & CHANGING CHARACTERISTICS

Understanding changes in IAH necessitate explaining some main characteristics and nature of change in IAH. In that respect, this chapter is composed of three main parts. In the first part, the main characteristics of IAH, which alter through interventions, are defined. In the second part, the interventions, as tools for causing changes in IAH, are clarified in terms of their objectives, types and main factors shaping interventions. The third part explains how IAH is changed through defining some issues such as change patterns and quality of change.

3.1. THE CHARACTERISTICS OF IAH CHANGED THROUGH INTERVENTIONS

IAH has some particular characteristics, which are changed through interventions. As a result of this change, IAH is in different states throughout its new lifecycle. For instance, while IAH is in-situ during the excavation process, it has potential to be a standing structure through some conservation interventions or to be preserved as it is found through some other intervention types. This part explains the main characteristics defining different states of IAH. In that respect, the characteristics are examined under two groups; the first, physical and functional characteristics, and the second, semantic characteristics.

3.1.1. Physical and Functional Characteristics

The physical and functional characteristics are design, material, construction technique, cultural layers and function, which have great effects in the formation of new state of IAH.

3.1.1.1. Design

In the preservation discourse, the relevant terms in relation with physical aspects of heritage resource are ‘form’ and ‘design’[130]. There is a great emphasis on the credibility of ‘form’. The

[130] Para. 82 of the Operational Guidelines for the Implementation of World Heritage Convention, 2005, Intergovermental Committee for the Protection of the World Cultural and Natural Heritage. Retrieved July 14, 2008 from http://whc.unesco.org/archive/opguide05-en.pdf.

statements on “all reconstruction[131] work should, however, be ruled out *a priori*”[132] show the sensitivity and emphasis on the ‘architectural form’ based on scientific information.

On the other hand, in the discipline of architecture, the design is related with the elements of a structure and unification of them into a coherent whole, according to the original design intentions. The form is generally examined and defined in various ways and explained as the combinations and relations of various components of the structure. From one perspective, the form “…suggests reference to both internal structure and external outline and the principle that gives unity to the whole.”[133] On the other hand, there are various debates on the ‘architectural form’ and, various theories are developed. For instance, Gelernter categorizes the sources of forms with five basic ideas; “architectural form is shaped by intended function, generated within the creative imagination, determined by the prevailing social and economic conditions, derives from timeless principles of form that transcend particular designers, cultures and climates.“[134] The archaeological edifice was designed in relation with these ideas in its initial lifecycle. In new lifecycle of IAH, the design is mainly related with developing a project for the preservation of IAH. There are various options for developing a design project, and the design project can be based on various ideas. In some cases, it is based on authentic design of IAH. In order to develop a project based on authentic design, it is necessary to understand the authentic design. Therefore, it requires comprehending the relationship between all fragments and actual position of each block within the structure through documenting archaeological remains in-situ and existing elements belonging to the structure. After classification of each architectural element related with its type such as base, capital, architrave, geison, pediment and wall, it is possible to join some fragments and form the stone blocks. As a result of this research, it is possible to understand the total scheme of the structure and develop a proposal for its authentic design.

Besides, the design project is mainly based on evaluation of the structure in relation with the proposal. The evaluation includes assessing the values and determination of the significance of the structure from historical, architectural perspective in various scales such as urban, region. Besides, there is a need for determining the problems in material and structure. For instance, the evaluation of the NW Heroon at Sagalassos based on various issues such as material and structural problems and evaluation of the impact of IAH after it is re-erected[135]. Following this evaluation, a design project defining new characteristics of IAH is prepared. The design project gives comprehensive explanation on what is to be intervened, how is to

[131] Reconstruction refers to re-erection of IAH through completing in Venice Charter adopted by ICOMOS, 1965, International Charter for the Conservation and Restoration of Monuments and Sites’, first developed at the 2nd International Congress of Architects and Technicians of Historic Monuments, Venice, 1964. Retrieved October 12, 2008 from http://www.international.icomos.org/charters/charters.pdf.
[132] Venice Charter, ibid., article 15.
[133] Ching, F.D.K., 2002. Mimarlık, Biçim, Mekan ve Düzen. Istanbul: Yapı Endüstri Merkezi. p.34.
[134] 1995. Sources of architectural form: a critical history of western design theory. Manchester ; New York : Manchester University Press. p.3-18.
[135] Wealkens, M. Ercan S., Torun E., 2006. Principles of Archaeological Management at Sagalassos. In Z. Ahunbay and Ü. İzmirligil eds. Management and Preservation of Archaeological Sites, İstanbul, p.70.

be intervened and etc. However, it is based on some certain principles showing the approaches of the ones dealing with IAH. For instance, the design principle for the Antonine Nymphaeum at Sagalassos is explained as follows:

> 'Preserving the authenticity of the original material and the construction system, as well as applying minimal interventions is the main principles to be followed throughout the anastylosis of the structure, directing the choice of materials and techniques.'[136]

As it is mentioned, the design principle explains the extent of interventions in both original blocks and new parts with the words "preserving the authenticity of original material" and "minimum intervention" as shown in Figure 3.1. The design principle also directs the choices on the use of materials and technique. In the case of the Temple of Trajan in Pergamon, the principle is re-erection of the edifice in order to preserve integrity of the Temple by joining together and completing missing parts through artificial stone[137] (Figure 3.2). As it is exemplified, the design principle explains the general idea and approach on how to intervene IAH. In that respects, the choices on the extent of intervention, type of new material and construction technique are the extension of the main design principle. Besides, there is a necessity for making decisions on various issues mainly explained below:

- Making decisions on the broken fragments to be joined and the decisions on new parts to be added,
- Making decisions on missing parts to be completed, and designing the detail and ornamentation used in missing parts such as column, capitals, bases and cassettes,
- Choosing the blocks need to be consolidated due to some problems such as cracks and small gaps,
- Making decision on new blocksand their dimension, detail and form,
- Checking and consolidating the problems in the building elements such as podium, and wall before re-erection of architectural elements,
- Re-erecting the blocks,
- Decisions related to material use and construction technique for each element and etc.

[136] ibid. p.73.
[137] Nohlen, K. 1999. The Partial Re-erection of the Temple of Trajan at Pergamon in Turkey, A German Archaeological Institute Project, Conservation and Management of Archaeological Sites, v.3., p.91.

In addition, the detail is among the main component of the design approach, through which a form is proposed for the ornamentation of missing parts. The detail is related with how to intervene missing parts of architectural elements having ornamentation. According to this, the design is related with an architectural project including decisions on how IAH is constructed and looks in its new lifecycle. Therefore, the design is among the main characteristics, which is defined through interventions. The design project proposes changes in the appearance and values of IAH, which legitimize its preservation as 'heritage'. In this context, the design is a significant evidence of change and construction of IAH throughout its new lifecycle.

Figure 3.1. The Antonine Nymphaeum showing the evidences of interventions, Sagalassos (Source: Vandermeulen, B. & Veys, D., 2007)

Figure 3.2. The design approach providing integrity in the Trajan Temple, Pergamon (Source: Radt, W., 2001, p.299)

3.1.1.2. Material

Material is among the main changing characteristics. In the preservation discourse, there have been emphases on the use of material for missing parts. For instance, the statement on "the material used for integration should always be recognizable and its use should be least…"[138] indicates that decision-makers are encouraged to use new material that is recogizable in interventions. In various practices on archaeological edifices, use of various types of material are observed in different cases such as use of concrete (with black cement) in the agora in Perge, the terrace façade of the Domitian Temple in Ephesus (Figure 3.3), use of concrete (with white cement) in the west pediment of the Artemis Temple in Magnesia ad Meander (Figure 3.4), the west corner of the Apollo Smintheon Temple in Gürpınar and use of original material in the Antonine Nymphaeum in Sagalassos (Figure 3.5). In that respect, the 'material' associates with both authentic substances, from which Antique architectural product was constructed, the traces of time on them and new substance used for missing parts. Besides, various other factors such as amount of authentic material, their physical state, potential for gathering and placing in original location within the structure are among the major input in decision-making on the type of material and intervention.

The material is basically related with the type of substance. Considering the material used in the missing parts, concrete is common material used for various purposes such as joining fragments and completing missing parts in practices. Besides, some architectural elements carry evidences and traces of time in different forms such as discoloration, missing parts at the edges, and etc. These evidences acting as the witness of the time and the age of authentic remains are the main components of material in contrast with new material types inserted through intervention. In this context, the material is basically associated with the type of substance, some evidences and traces on authentic remains and is the main evidence for understanding changes in IAH. Therefore, the change in material through interventions is among the significant evidences of construction of IAH throughout its new lifecycle.

3.1.1.3. Construction Technique

In general, construction technique is related with construction technology of time. Antique architectural productions have their own construction technology involving production methods of blocks, joining and finishing techniques. IAH, which is generally lost its structural soundness, gives enormous information on its original construction techniques. In new lifecycle of IAH, new construction techniques are generally applied for several purposes including consolidatation of some blocks, joining some fragments, re-erection and etc.

[138] Venice Charter, ibid., article 15.

Figure 3.3 Use of concrete (with black cement) in the terrace façade of the Domitian Temple, Ephesus (Sources: Scherrer, P., 2000, p.93).

Figure 3.4. Use of concrete (with white cement) in the west pediment of the Artemis Temple, Magnesia ad Meander.

Figure 3.5. New Corinthian capital carved from original material from the second aedicule, Sagalassos (Source: Accessed by http://www.archaeology.org/interactive/sagalassos/field06/antnymph1.html on March 18, 2009)

Some interventions cause re-erection of the architectural products of past cultures by using new construction techniques. For instance, in general, new construction technique based on joining the fragments, drilling holes in appropriate diameter on each fragments, and inserting iron bars into the holes are applied for re-erecting. In the case of the NW Heroon at Sagalassos, the stone blocks are placed in their original location by using '… fiberglass dowels for vertical connections and ropes made of woven fiberglass matting for horizontal

connections…'[139]. Then, a type of grout is leaked into holes in order to join physically the fragments (Figure 3.6). In the Antonine Nymphaeum, the construction technique is based on use of epoxy based adhesives, mortars and fiberglass reinforcing rods for joining architectural elements[140].

Besides, construction technique is related with the production methods of ornamented elements. In some cases, carving is a technique applied in IAH such as the Apollo Temple at Side and the Antonine Nympheum at Sagalassos. In case of the fragmentary blocks of the west pediment of the Artemis Temple in Magnesia ad Meander, reinforcing steel rods, araldite and etc. are used[141] for gathering (Figure 3.7). Besides, some missing parts of the ornamented blocks constructed by shaping a type of concrete mixture in the form, which resembles the original ones at the East Façade of the Celsus Library (Figure 3.8). In that respect, construction technique is related with production techniques of each individual element such as producing new blocks, completing missing parts, consolidating, carving, finishing techniques and joining of blocks. In that respect, construction technique acts as a significant characteristic for understanding the change in IAH.

Figure 3.6. Leaking of the grout between the fragments of the Northwest Heroon, Sagalassos (Source: Wealkens, M. Ercan S., Torun E., 2006)

Figure 3.7. Reinforcing the fragmentary blocks of the west pediment of the Artemis Temple, Magnesia ad Meander (Source: Bingöl, O., 2000:66).

[139] Wealkens, M. Ercan S., Torun E., ibid., p.71.
[140] Wealkens, M. Ercan S., Torun E., ibid., p.74.
[141] Bingöl, O. 1999, Magnesia ad Meandrum (1996-1997), In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX. Kazı Sonuçları Toplantısı II, Ankara, Kültür Bakanlığı Milli Kütüphane Basımevi, p.15-32.

Figure 3.8. The missing parts of the ornamented blocks at the east façade of the Celsus Library, Ephesus.

3.1.1.4. Cultural Layers

IAH is generally composed of productions of several cultures and generally acts as the evidence of destruction. Therefore, it involves various cultural layers and construction phases. These cultural layers act as the document and evidence of various issues such as how archaeological edifice was used, how it was changed, destroyed and urban history. For instance, in the room R in the Late Roman insulae at Sardis, the oven, bottom, and latrine indicates the late occupation phase, and the mosaic floor covered is the evidence of early occupation phase[142] (Figure 3.9). In the case of the Nymphaeum of the Tritons at Hierapolis, the architectural elements of the back wall showing its demolishment due to earthquake are the evidences of the destruction layer (Figure 3.10). The evidences of various cultural layers are non-renewable and authentic sources of information on past, which legitimize preservation of IAH. In practice, the cultural layers are generally changed through interventions. This change generally results with complete loss in a particular cultural layer, which is irreplaceable and nonrenewable. In some cases, a particular cultural layer is emphasized through interventions in terms of the architectural design of a particular period. At the same time, some other layers are lost. For instance, the evidences of conversion and use of the Celsus Library as a fountain in Byzantine time are ignored and lost through interventions. In another case, in Hierapolis, the evidences of the use of the Latrine as a storeroom for hay and stables for mules[143] in the later periods are ignored. In the case

[142] Greenewalt Jr., C.H., 1999, Sardis, Archaeological Research in 1997, T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX. Kazı Sonuçları Toplantısı II.cilt, p.2.
[143] D'andria F., 2002, Hierapolis Antik Kenti 2001 Yılı Kazı ve Onarım Çalışmaları, 24. Kazı Sonuçları Toplantısı 2.cilt, Ankara, pp. 84-5.

Asclepion at Pergamon, the columns of the north portico acting as the evidence of demolishment due to earthquake are lost through re-erection (Figure 3.11).

As a result, cultural layers are among the main characteristics, which are generally changed through interventions. The change in cultural layers generally results with loss of some evidences and cultural layers. Therefore, it is generally not possible to find the evidences of this change unless authentic documents are investigated. Thus, cultural layer is among the significant characteristics that need to be considered in relation with the change caused through interventions.

3.1.1.5. Function

IAH, as ancient architectural products, was constructed for specific purposes and generally used for different purposes in later periods. Although archaeological edifices, which are in ruined state and composed of fragments, generally do not have potential of serving for a specific function, some IAH having potential for re-functioning is utilized for contemporary purposes. In some circumstances, insertion of new installation is required for permanently or temporarily in relation with the requirements of new function. For instance, the hall of the Celsus Library is refunctioned as a kind of information center through inserting information panels into the niches of the hall (Figure 3.12). On the other hand, temporary stages are inserted for the performance in the Ephesus Theater, which is interpreted as an unpleasant view for the tourists and negative effect on tourism[144] in some circumstances (Figure 3.13). Use of IAH for specific functions has positive and negative effects on various aspects such as structure, urban view and tourism. The interventions create changes in various extents. Function is a significant evidence for understanding the change in IAH. It is an effective tool for inserting IAH into socio-cultural life of contemporary society. Thus, it is among the main characteristic of IAH for understanding changes caused through interventions.

3.1.2. Semantic Characteristics: Values

It is important to emphasize once again that some values are lost, some others are transformed and, new ones are added throughout new lifecycle of archaeological heritage. The changes in values for archaeological heritage are among the significant issues in understanding the changes and new formation process. In that respect, there is a great need for examining and studying the changes in values. Having arrived at this point, it is necessary to define the concept of ‘value’ and the value types for archaeological edifices.

[144] Öztürk, A. 2006. Re-use Problems related to the Great Theater in Ephesus. In Z. Ahunbay and Ü. İzmirligil eds. Management and Preservation of Archaeological Sites, İstanbul, Yapı Endüstri Merkezi, p.96.

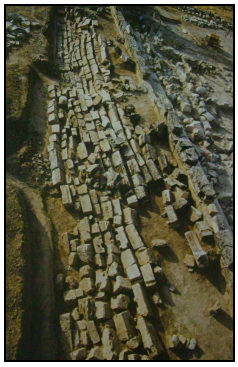


Figure 3.9. Different cultural layers in the room R in the Late Roman insulae, Sardis (Source: Greenewalt Jr., C.H., 1999, p. 9.)

Figure 3.10. The evidences of the demolishment of the Nymphaeum of the Tritons, Hierapolis (Source: D'Andria, F., 2003, p.118).

Figure 3.11. The evidences of the demolishment of the north stoa in Asclepios found in 1932, Pergamon (Source: Radt, W., 2001, p.234).

Figure 3.12. The use of the Celsus Library as a kind of information center.

Figure 3.13. Insertion of a new stage into the Theater for a performance, Ephesus (Source: Öztürk, A., 2006, p.96.)

3.1.2.1. Definition of Value

Values are among the most heavily studied and debated concept in preservation discourse. The theories of value often focus on the relation between judgments about an object's valuableness and the properties of an object. There is no value, which is purely based on information or personal approval.[145] In that respect, value is based on the information and personal approval, which refers to judgments of someone. Considering that the information on archaeological edifices is acquired through excavation and research, there is a change in the extent and content of information in relation with the extent of excavation and research. In that respect, values of IAH change in relation with excavation and research. For instance, in Kaunos, the demolished roof and burned materials such as glass, baked earth and metal on the floor of the spaces at Kap Krio, which are uncovered through excavation, are sources of information on fire and evidences of abandonment[146]. Therefore, excavated area including the evidence of fire and abandonment has information value, which is revealed through excavation.

The values and value formation, as among the most heavily studied fields, show some basic characteristics. It is necessary to give a summary. The value systems are conceived on a macro scale and generally holistic.[147] The values ascribed to heritage vary from person to person, specialist to specialist and discipline to discipline.[148] Therefore, there are many kinds of values such as cultural, historical, economical and aesthetic ascribed by various groups. From another perspective, values alter in time and related with the contextual factors.[149] For instance, the changes in values and value judgments on the cultural heritage in Africa are good examples, which show mutable characteristics of value. Up to recent years in Africa, only physical remains are considered as 'protected properties' in relation with Eurocentric legislative and administrative structures set up during colonial period. However, today, this approach changed and local community become among the major stakeholders in value formation.[150] Therefore, it is possible to state that values are mutable in time and contextual factors. In addition to these basic characteristics, values and value systems are conceived in relation with the question of why to conserve in preservation discourse. Besides, scholars are generally inspired the value of 'monument' in the formation of value systems for archaeological resources.[151] In this context, current value types identified for cultural heritage are summarized in the following part. Then, values for archaeological edifices are defined

[145] Lepley, R., 1944; House, E.R. and Howe, K.R., 1999.
[146] Özgan, R. 1993, 1991 Knidos Kazısı, T.C. Kültür Bakanlığı, Anitlar Müzeler Genel Müdürlüğü, XV.Kazı Sonuçları Toplantısı II, p.172.
[147] Darvill, T. 2005; 'Sorted for ease and whiz'?, Approaching value and importance in archaeological resource management in C. Mathers, T. Darvill and B.J.Little (eds.)Heritage of Value, Archaeology of Reown, p. 37.
[148] Darvill, T. 1995; Value System in Archaeology, In M.A. Cooper, A. Firth, J.Carmen, D. Wheathy(eds) Managing Archaeology, London, New York: Routledge, p.41.
[149] Mason, 2002, Assesing values in conservation planning, Methodological issues and choices. In de la Torre, M. (eds), Assessing the values of cultural heritage. Research report, p.5. Retrieved April 21, 2007 from http://www.getty.edu.tr/conservation/publications/pdf_publications/assessing.pdf.
[150] Ndoro, 2001. Heritage Management in Africa, In Newsletter 16.3, Fall 200. Retrieved April 23, 2004, from http://www.getty.edu/conservation/publications/newsletters/16_3/news_in_cons1.html.
[151] Carver, M., 1996. On archaeological Value, Antiquity 70, p.46.

after their validity is proven. However, the definitions of some values overlap each other; therefore, these definitions are given under a particular type in order to underline main types of values[152].

3.1.2.2. Identification of Values for Archaeological Edifices

There are varieties of values identified for several cultural properties in relation with their physical, cultural, social and economic aspects. Identifying values in relation with archaeological edifices requires explaining some particular criteria. However, it is possible to identify various criteria. For instance, considering that archaeological edifices were the products of the past cultures, the values legitimizing its preservation are also related with their picturesque appereance and untouched quality. In this dissertation, the criteria related with the identification of values for archaeological edifices are given below.

Relating with the qualities of being untouched for along time

Archaeological edifices, which are not part of a living society until excavation starts, are significant due to its characteristics based on untouched quality, in other words, not changed. In that respect, there are some values related with this quality, which is not

[152] Aesthetic value (Creative arts value[152], Darvill 1995) having aesthetic qualities, appreciation of beauty and art (Lipe 1984, Burra Charter, 1999[152]); age value being the oldest and earliest example in terms of particular characteristics (Uçar 2007); archaeological research value being source for archaeological research (Darvill 1995); associative/symbolic value (cultural/symbolic value[152], symbolic representation value[152]) referring to materials, ideas having passed through time (Mason, 2002); architectural value (relative artistic and technical value[152], technical value) representing development in the history of architecture and being an example of a particular construction system, material use, workmanship (Uçar 2007[152]); authenticity value being important as representative of regional characteristics (Uçar 2007); bequest value being important for donating cultural property to future generations (Darvill 1995 & Mason 2002); continuity value having importance of keeping something happening such as functional continuity (Uçar 2007); cultural identity value (identity value[152]) having cultural relations (Darvill 1995); document value being tangible evidence of human history (Uçar 2007); economic value being source for investment and economic gain (Jokilehto and Feilden,1993 & Lipe, 1984); education/socialization value (education value[152]) having role in education of public (Darvill 1995), environmental value being valuable as a settlement in terms of originality, totality, buildings scale and etc. (Uçar 2007); existence value being resource to people who derive pleasure and satisfaction from knowing it exists (Darvill 1995, Mason 2002); functional value (use value[152]) utilizing heritage for contemporary purposes (Feilden & Jokilehto, 1993), historical value (historic value[152]) showing the development of human activity, being historically important, having associated with historical events, historical characters (Riegl, 1976 & Mason, 2002); homogeneity value being uniformly distributed in a tissue (Uçar 2007), impression value being influence on people (Uçar 2007), informational value being sources of information and providing data (Lipe 1984); legendary value having importance in related with miraculous historical tale (Uçar 2007[152]); location value: having importance due to its topographic and geographic location (Uçar 2007); memory value being important for a group or a nation in relation with a historical event, character (Uçar 2007); mystery and enigma value having source of unknown and involving mystery (Darvill 1995); option value having potential for uses in the future (Darvill 1995 & Mason 2002); originality value being related to originality in terms of material use, form, construction period, multi-layeredness and etc. (Uçar 2007); plurality value having great quantity of architectural and urban elements in a particular built environment (Uçar 2007), political value (legitimating of action value[152]) evaluation of heritage in relation with specific historical events, political idea and etc. with respect to a particular region and country (Feilden & Jokilehto 1993, Darvill 1995); rarity value (scarcity value[152]) evaluating the properties of heritage among the heritage of same type, period and etc. (Feilden & Jokilehto 1993); recreation and tourism value using heritage for recreation, tourism and entertainment (Darvill 1995); resistance to change value being against change (Darvill 1995); social value (social solidarity[152]) using heritage for contemporary social integration (Feilden & Jokilehto 1993, Burra Charter, 1999); scientific research value (scientific value[152]) being source for all types of scientific research (Darvill 1995); spiritual/religious value having valuable as a system of belief and worship of an organized religion (Mason, 2002); stability value evaluating of heritage for future uses (Darvill 1995), and tradition value being in relation with beliefs, lifestyle and knowledge of past societies and cultures (Uçar, 2007).

generally mentioned. From my point of view, it is possible define this quality with two value types. Virginity value is based on the quality of being untouched and being not utilized for along time prior to excavation. Picturesqueness value deals with attractive appearance and pleasing form of ruins, which has not changed throughout centuries.

Being sources of researches and tangible documents of past

Considering that the values for archaeological edifices, which legitimate its preservation, are related with their importance as a source of information, research and a document on past societies. In that respect, the quality of archaeological edifice, as sources for research and document, is the other main criterion. Hence, informational value, archaeological research value, scientific research value and document value are valid for archaeological edifices.

Reflecting cultural connection between society and archaeological edifices

Some values such as historical value, spiritual value, which reflects the connections between contemporary society and cultural property, are valid for archaeological edifices. In that respect, historical value, identity value, legendary value, spiritual/religious value, symbolic value and memory value are among the main values reflecting cultural connection between contemporary society and archaeological edifices.

Indicating contemporary uses

Considering that archaeological edifices are inserted into the life of contemporary society, some values are related with utilization of archaeological edifices for the uses of contemporary society. Hence, the values, which associate with contemporary uses of archaeological edifice and provide continuity in IAH in authentic function, are valid for archaeological edifices. The values indicating contemporary uses are social value, economic value, political value, educational value, functional value and continuity value.

Signifying physical qualities and existence

Some values related with the physical qualities of archaeological edifices such as architecture, artistic and authenticity are also valid. In that respect, age value, artistic value, architectural value, authenticity value, originality value, location value, impression value, aesthetic value and rarity value are among the main values signifying physical qualities and existence of archaeological edifices.

Reflecting importance of archaeological edifices for future uses

Archaeological edifices are important for not only current uses but also future uses. There are reserve areas for future uses. Therefore, some values are related with their importance for future generation and uses. Hence, the values reflecting importance of archaeological edifices for future uses are valid for archaeological edifices.

Relating with the quality of being part of a site

IAH is not an individual structure; rather it is part of a site, which is composed of varieties of structures and remains. Therefore, archaeological edifices have values in relation with the quality of being part of a site. The quality associates with various issues. For instance, some archaeological edifices being uniformly distributed in a site such as the residential units of the Terrace House I and II have homogeneity value. Besides, the residential units being part of the site, its planning style and roads have environmental value like other archaeological edifices in Ephesus. On the other hand, archaeological edifices, which are revealed through excavation of a particular area within the site, have potential for having plurality value, which is related with the abundance of architectural and urban elements[153]. However, the plurality value is related with the extent of excavation within the site. For instance, the archaeological edifices in the archaeological sites in Anatolia do not generally have plurality value in relation with the extent of excavations. However, the archaeological edifices in Pompeii, which considerable portion has been excavated, have plurality value. Therefore, plurality value is valid for the archaeological edifices as part of a site. In that respect, homogeneity values, environmental values and plurality value are valid for archaeological edifices.

To conclude, the values for archaeological edifices are related with the qualities of being untouched for along time, the quality of being part of a site, current and future uses of archaeological edifices, physical qualities of edifices, cultural connection between society and edifices, its importance as a source of information and research. However, the values reflecting importance of archaeological edifices for future uses does not related with change caused through interventions, which redefine and shape the characteristics of IAH. Therefore, the values are not included for explaining the change in values. The values of archaeological edifices taken into consideration in relation with the change are listed and exemplified below.

[153] Uçar, M. 2007, Assesment of User-Ascribed Values for Cultural Properties in relation with the Planning process, case study, Tarsus. Unpublished Ph D Thesis, Middle East Technical University, The Graduate School of Natural and Applied Sciences, p. 48.

i. Informational value: For instance, in Hierapolis, the so called '*büyük yapı*' is located on two insulae, and there is a cornice and a tower on its façade[154]. In another case, burning traces in many rooms of a large dwelling in the so-called Domestic area in Sagalassos has informational value as the evidence of destruction of the building by fire.[155]

ii. Archaeological research value: For instance, in Miletos, the Agora Basilica, which is discovered through geophysical surveys in 2002 and lies on the east of agora, has archaeological research value.[156] The sacred areas of the Temple of Hekate at Lagina and the surrounding porticos been studied[157] have archaeological value

iii. Scientific research value: As a result of archeozoological researches on animal bones in Miletos, it is discovered that starting from 4th c. B.C., veal, mutton, pork were eaten.[158] The artificial hill of sector «MMS» largely created by the ruins of a «Colossal Lydian Structure», which functional role is not known,[159] has scientific research value.

iv. Document value: The state of the rear wall of the Latrine in Hierapolis indicated the demolishment of the wall due to earthquake. It acts as a tangible document of its history. In that respect, it has document value. The walking level identified on top of a destruction layer in Room XLVI acting as the document of function of the room as a transition space[160] has document value.

v. Historical value: In the place of the so-called '*büyük yapı*' in Hierapolis, houses and a fountain were built in Byzantine period (9th-10th c. A.D.). The seismic researches indicates an earthquake (10th c. A.D.?), which was not known before. In that respect, the archaeological edifices giving crucial information on history of ancient city of Hierapolis has historical value.[161]

[154] D'andria F., 2002, Hierapolis Antik Kenti 2001 Yılı Kazı ve Onarım Çalışmaları, T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 24. Kazı Sonuçları Toplantısı 2.cilt, Ankara, p. 417
[155] Wealkens, M., 2007, Report on the 2005 Excavation and Restoration Campaign at Sagalassos, T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 28.Kazı onuçları Toplantısı, 2.cilt, 29 Mayıs-2 Haziran 2006 Çanakkale, p. 317-8.
[156] Von Graeve, V., 2005, 2001-2003 Milet Çalışmaları, T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 26.Kazı Sonuçları Toplantısı 1.cilt, 24-28 Mayıs 2004, Konya, p. 207.
[157] Tırpan, A.A. & Söğüt,B.B., Lagina ve Börükçü 2005 Kazı Çalışmaları, .C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 28.Kazı onuçları Toplantısı, 2.cilt, 29 Mayıs-2 Haziran 2006 Çanakkale, p.592.
[158] Von Graeve, V., 2005, ibid., p. 215.
[159] Greenewalt, Jr., C.H., Sardis, Archaeological Research in 1986, T.C. Kültür ve Turizm Bakanlığı, Eski Eserler ve Müzeler Genel Müdürlüğü, IX. Kazı Sonuçları Toplantısı II, 6-10 Nisan 1987 Ankara, p. 42.
[160] Wealkens, M., 2007, ibid., p.318.
[161] D'andria F., 2002, Hierapolis Antik Kenti 2001 Yılı Kazı ve Onarım Çalışmaları, T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 24. Kazı Sonuçları Toplantısı 2.cilt, Ankara, p. 416.

vi. Identity value: The hall named 'Marble Court' by the excavators[162] is among the representatives of existence of Jewish identity in Asia Minor. In that respect, the structure has identity value for Jews. Two Early Byzantine churches and a fortified structure of Byzantine period are among the indicators of existence of Christian population in the Hadrianoupolis in Paphlagonia[163]; therefore, they have identity vaşue for Christians.

vii. Legendary value: The relief on the so-called Hadrian Temple, in which mythological founder is displayed.[164], representing the fight between mythological hero, the Androklos, who is known as the founder of the city of Ephesos, and a boar has legendary value. In Aphrodisias, the mythological parapet relieves from the Basilica[165] has legendary value.

viii. Spiritual/religious value: For instance, the synagogue in Pisidian Antioch and Lystra, are viewed as the ritual environment, in which Paul gave speeches in his first journey, in the Christian world. In that respect, the edifices have religious value.[166] The synagogue of Sardis, among the earliest ones in Anatolia, has spiritual value for Jews.

ix. Political value: In the time of Sultan Abdülhamid, archaeological materials were used to secure political advantage in sultan's negotiations with Western powers. In his time, archaeological edifices and remains had political value.[167] In that respect, archaeological edifices have potential for political value.

x. Symbolic value: The remains of the Artemis Temple in Ephesus serve as the symbolic representation of the Seven Wonders of the Ancient World. In that respect, some architectural elements and re-erected column has symbolic value. In another case, the Saint Paul Church in Selcuk, as the symbol of Saint Paul's existence, has symbolic value.

xi. Memory value: The so-called '*Üçgözler*', which is the standing wall of the Bath-gymnasium Complex in the Tralleis, was generally visited by primary school children in spring, and the children had a picnic. In that respect, the structure has memory value for most people of Aydın, as an event of welcoming warm

[162] Fikret K. Yegul, 1976, The Marble Court of Sardis and Historical Reconstruction, Journal of Field Archaeology, Vol. 3, No. 2 , p. 169-194. Retrieved October 12, 2008 from http://www.jstor.org/pss/529385.
[163] Laflı, E., 2008, Terra Sigillatae from Hadrianoupolis in Paphlagonia, T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 29. Kazı Sonuçları Toplantısı 3.cilt, p. 285.
[164] Outschar, U. 2000, The Temple of Hadrian, In P.Scherrer (ed.), Ephesus, The New Guide, Turkey, Ege Yayınları, p.118.
[165] Smith, R.R.R. & Ratte, C. , 2000, Aphrodisias 1998, T.C. Kültür Bakanlığı, Anıtlar ve Müzeler Genel Müdürlüğü, 21.Kazı Sonuçları Toplantısı 2.cilt, 24-28 Mayıs 1999 Ankara, Kültür Bakanlığı Milli Kütüphane Basımevi, p.28.
[166] Destro A., & Pesce, M., 2000, Paul's Speeches at Pisidian Antioch and Lystra, 'Mise en Historie' and Social Memory, in the First International Congress on Antioch in Pisidia, Yalvaç/Isparta July 2—4 1997, Izmit: Kocaeli Gazetecilik ve Yayın A.S., p.34-5.
[167] Shoup, D.D., 2008, Monuments, Materality, and Meaning in the Classical Archaeology of Anatolia, .Unpublished Ph D Thesis, The Univesity of Michigan, p. 48. Retrieved November 14, 2008 from http://deepblue.lib.umich.edu/bitstream/2027.42/60672/1/dshoup_1.pdf.

days of spring. The archaeological edifices and the Hierapolis, which were used for picnic for many years by the people of Denizli, have memory value.

xii. Social value: The archaeological edifices and sites are inserted into the life of contemporary society as places of recreational and tourism activities. In that respect, IAH has social value. Besides, some edifices such as Aspendos Theater, which serve for performances, become part of social life of current society, have social value.

xiii. Economic value: The archaeological edifices and sites are generally attractive tourist centers, and therefore they have economical benefits. In 2007, Ephesus was visited by one thousand and half million tourists and had approximately three million and a half TL. income.[168] In that respect, IAH has economic value.

xiv. Educational value: The theatron in the Magnesia am Meander, which construction was not completed due to the earthquake, indicates the construction technique and system of a Greek theater. In that respect, the structure has educational value in terms of construction methods of ancient times. In another case, the temple of Hekate at Lagina representing the demolishment of the Temple due to earthquake has also educational value. Therefore, IAH has educational value.

xv. Functional value: In Halikarnassos, the theater, which serves for performances, has a functional value. The Antonine Nymphaeum in Sagalassos, which was used as a fountain, has functional value. Therefore, some archaeological edifices have functional value.

xvi. Age value: The Athena Temple in Assos is among the earliest Doric temple in Asia Minor. Hence, the temple has age value in terms of its architectural order. According to Lohmann, the Temple of the Archaic Panionion in the Mycale is the only one of Ionian period in the whole Anatolia in a comparable state of preservation[169]. Therefore, it has age value. As it is exemplified, IAH has age value.

xvii. Aesthetic value: In the ancient Roman city of Zeugma, the mosaics, in which various shades of color are used in order to add further depth to the images, have fine workmanship. Besides, perspective is another feature that renders

[168] Retrieved October 10, 2008 from http://www.turizmturkiye.info/efes-antik-kenti-yerli-ve-yabanc-turist.htm.
[169] Lohmann, H., 2008, Rescue Excavation of the Archaic Panionion in the Mycale (Dilek Dağları), 2nd Campaign, T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 29.Kazı Sonuçları Toplantısı 2.cilt, 28 Mayıs-1 Haziran 2007 Kocaeli, Kültür ve Turizm Bakanlıpı, DÖSİMM Basımevi, Ankara, p.273.

the Zeugma mosaics unique. Therefore, the mosaics have aesthetic value. In similar ways, IAH has has aesthetic value.

xviii. Artistic value: The 'maeander', as an architectural motif, is an element of an art style. In that respect, the motif has artistic value. For instance, the Sebastian relieves being superb and unique in the ancient world that was found at Aphrodisias has artistic value. In that respect, IAH has artistic value.

xix. Architectural value: For instance, the Artemis temple in Magnesia ad Meander, as the earliest example of pseudo-dipteros planned temple, has architectural value. In the south-eastern area of the Byzantine palatial complex, "the architectural scheme is quite unique in its use of the ground's morphology"[170]. Therefore, it has architectural value. Therefore, IAH has architectural value.

xx. Authenticity value: The archaeological edifice that indicates characteristics of a region and period has authenticity value. For instance, three-storied *agora* in Alinda, as a standing example of Hellenistic period structure with two storeys, has authenticity value in terms of its material, form, detail, location and etc.

xxi. Originality value: For insatance, the Celsus Library in Ephesus constructed in the first half of the 2nd c. A.D. was converted into fountain in the Byzantine period through addition of a pool on its façade by using relieves from the monument of Parthes. As a tangible evidence of conversion of Roman Library into fountain, it has originality value. Similarly, IAH has originality value.

xxii. Location value: In Pergamon, the Temple of Trajan, the Theater is located on the terraces, from which the town of Bergama is viewed. Therefore, the archaeological edifices have location value. In another case, the NW Heroon, as a monument visible from every part of the Sagalassos[171], has location value. In that respect, IAH has location value.

xxiii. Impression value: For instance, the Aspendos Theater has an impression value with its state of preservation and as an example of pure Roman construction with its cavea joined to the skene. The theater, terraces and the Trajan temple, which are almost seen from every part of city of Bergama, on the Acropolis at Pergamon, have impression value. Therefore, IAH has impression value.

[170] Schneider, E.E., 2008, Elaussa Sebaste, Report of 2006 Excavation Season, T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 29.Kazı Sonuçları Toplantısı 2.cilt, 28 Mayıs-1 Haziran 2007 Kocaeli, Kültür ve Turizm Bakanlıpı, DÖSİMM Basımevi, Ankara, p.300.
[171] Wealkens, M. Ercan S., Torun E., 2006. ibid., p.70.

xxiv. Rarity value: The agora in Alinda is among the exceptional and rare example of three storied agora in Asia Minor. In another case, the theater in Side is among the biggest theaters in Anatolia. Therefore, IAH has rarity value.

xxv. Virginity value: The archaeological edifices such as theater, agora at Alinda, which are not intervened, have great quality due to its untouched quality and unchanged characteristics. Therefore, IAH has virgin value.

xxvi. Picturesqueness Value: For instance, the edifices in Heraklia and Myus having attractive appearance and pleasant form due to being in ruinous state have picturesque value. Similarly, IAH has picturesqueness value.

xxvii. Homogeneity value: In case of the Priene, residential units distributed uniformly in a particular area within the site show homogeneity; therefore, it has homogeneity value.

xxviii. Environmental value: As in the case of the Ionic stoa in Miletos facing one of the main arteries in the site and being part of the certain planning style, archaeological edifices have environmental value.

xxix. Plurality value: For instance, the residential units in Pompeii, as abundance structures within the site, have plurality value.

3.1.2.3. Interaction between Values and Interventions

It is significant to emphasize again that IAH being untouched prior to excavation is changed starting from excavation. The interventions cause transformation of some values, while some others are lost and gained. Besides, the values, which legitimize archaeological edifice as ‘heritage’, are changed through interventions. For instance, excavation causes transformation in several values such as archaeological research, scientific research, information value, document value, while the picturesqueness values and virginity value are lost. Besides, some conservation approaches, which emphasize architectural design of a particular period, cause transformation in the content of information of some values such as the document value, architectural value, and information value, while originality value is lost. In addition, interpretation and presentation interventions always cause gain in economic value and social value. As it is explained, there is a change in values parallel to intervention process. In some cases, the interventions lead to conflict in values. For instance, some interventions cause transformation in information value, document value, while they casuse transformation in the content of information in document value, archaeological research value, and scientific research value, which legitimize IAH as ‘heritage’. In this context, it is necessary to examine the interaction between values and interventions in relation with two aspects; the effects of interventions on values, and the nature and types of change.

Effects of interventions in values

Interventions have effects on values that are mainly based on two issues; interventions acting as a factor for developing conflicts in values, and interventions causing formation of values throughout new lifecycle of IAH. These effects are explained in order to view and predict positive and negative impacts of interventions below.

Interventions acting as a factor for developing conflicts in values

Some intervention approaches develop conflicts in values by causing transformation in the content of document value, education value, architectural value and loss in originality value, which is related with overlaped evidences of cultural layers. For instance, in the Celsus Library in Ephesus, the conservation intervention approach causes transformation in existing information in relation with the architectural, education, document values, while it causes loss in the evidences of some cultural layers legitimizing the place of the Library as 'heritage'. In that respect, the architectural value, education value, document values and information value are transformed, while the originality value is lost. Therefore, the intervention approach provides improvement in architectural features and enriches the content of information in terms of architecture, which is outstanding and exceptional. At the same time, it causes loss in the evidences of overlapped cultural layers in the 'place' of the Library, which is exceptional and authentic. As it is shown, these types of change caused through a certain conservation intervention approach develop conflicts in some values.

On the contrary, in some cases, the conservation intervention approach ensures transfer of the information conveyed through in-situ state, while it prevents loss in existing information and conflicts in values. For instance, the conservation intervention approach on the so-called Hadrian Temple in Ephesus causes transformation of architectural value, information value and education value, while it transfers the evidences of other cultural layers. In that respect, the conservation intervention approach upgrades some values without causing loss in originality value. Therefore, the conflict does not develop. In this context, it is possible to predict conflicts prior to implementation of interventions and prevent conflicts developed by the conservation intervention approach. Thus, it is not sufficient to view only 'what is significant' and 'what is gained'. It is necessary to develop an approach, which provides to view 'what is lost' and 'what is gained' and to predict the loss in values legitimizing IAH as 'heritage'.

Interventions causing formation of values throughout new lifecycle of IAH

As it is explained above, the changes in values are related with the definition of meaning of archaeological edifice for contemporary society. Defining meaning goes parallel with the process of intervention, and as a result, the values for archaeological edifice are formed. In

that respect, the meanings, the values of IAH, are defined through interventions throughout new lifecycle of IAH. Thus, interventions cause formation of values of IAH.

Changes Caused Through Interventions

The interventions cause variety of changes in values. Understanding changes in values necessitates examining change in IAH in different scales. Interventions cause changes in values in three scales as explained below.

- **Types of change** is related with the change in the content of information for each value type, i.e. transfer, transformation, loss and gain as explained in chapter 2;
- **Change patterns** are related with the order of the change types in a certain value throughout the process of interventions, i.e. the change pattern for the archaeological research value includes the pattern of 'transfer-transformation-transformation-transformation' as shown in Table 3.1;
- **Relationship between the changes in different values** through a specific type of intervention, i.e. the loss in picturesqueness value while the document value, architecture value, information value are transformed through excavation.

Table 3.1. The change pattern in the archaeological research value generally showing a trend from transformation through excavation to transformation through conservation interventions and then transformation through interpretation and presentation interventions.

Value Types	Value cat. prior to excavation	Value cat. after excavation	Value cat. after conservation interventions	Value cat. after presentation interventions
Archaeological research value	transfer	transformation	transformation	transformation

Types of change in values

It deals with understanding changes in a certain value type in relation with each intervention. The interaction between each value type and each intervention type form the types of change. For instance, in the Apollo Temple in Didyma, where the architectural value is transferred by preserving archaeological remains as found, the type of change is transfer. In

another case, in the Latrine in Hierapolis, the type of change in architectural value caused through the conservation approach, which emphasizes the architectural design of a particular period, is transformation. Therefore, each value type shows different and particular type of change through a certain type of intervention.

Change patterns in values

The changes caused through interventions generate a pattern throughout the process of interventions. Here, the 'change pattern' refers to the order of change types in a particular value. For instance, the architectural value shows different change patterns in relation with application of different conservation intervention approaches. For instance, in the Tetrapylon at Aphrodisias, the architectural value is transformed through excavation and anastylosis. Then, the interpretation and presentation intervention causes transfer of this architectural value as shown in Table 3.2, pattern 1. On the other hand, in the case of the Didyma Apollo Temple, the architectural value is transferred through interventions as shown in Table 3.2, pattern 2. In that respect, there are different change patterns for a certain value type in relation with the intervention types.

Table 3.2. The change patterns for the architectural value

	Excavation	**Conservation Intervention**	**Interpretation & Presentation Int.**
Pattern 1	Transformation	Transformation	Transfer
Pattern 2	Transfer	Transfer	Transfer

In the other type of value, the scientific research value, the change pattern generally show a trend from transformation through excavation, transformation through conservation interventions, and transformation through interpretation and presentation interventions as shown in Table 3.3. In that respect, there is a particular change pattern for the scientific research value, which is based on continual transformation throughout the process of interventions. Understanding change patterns is necessary in order to check whether there are some certain change patterns in value categories and if there are, to find out these patterns.

Table 3.3. The common change pattern in the scientific research value

	Excavation	**Conservation Intervention**	**Interpretation & Presentation Int.**
Pattern	Transformation	Transformation	Transformation

Relationship between changes in different values

Some interventions cause certain relationship between the changes in different values. For instance, as explained above, the conservation interventions in the Celsus Library cause transformation in architectural value, document value, information value, while they cause loss in originality value. Therefore, there is a specific relationship between architectural value, document value, information value and originality value respect to the conservation intervention approach. In another case, excavation always causes loss in virginity value while it causes transformation in several values such as document value, architectural value and information value. Therefore, there is always a specific relationship between some values (loss in virginity value and transformation in document value, architectural value, information value and etc.) through excavation.

As explained above, the changes in values appear in three scales, and the interventions have some certain effects on values. Understanding the changes in values for a particular archaeological edifice throughout the process of interventions necessitate developing an approach in order to explain how the meaning of IAH is shaped in its new lifecycle.

3.1.2.4. Identifying 'Value Formation Process'

The process of construction of meaning in IAH goes parallel with the changes in values. Therefore, it is called as 'value formation process' here. The 'value formation process' refers to the process of change in values and, the process brings all values into consideration before the intervention is applied. It is necessary to view the changes in values as the 'value formation process' in order to provide an overview on changes in values and to evaluate the change as a 'progress' or a 'regress'. Besides, it is considered that 'value formation process' provide to find out the optimum choice in conservation interventions. In this context, the approach 'value formation process' is designed in relation with the following criteria:

- the approach matching for various types of changes in values throughout the process of interventions,
- the approach listing changes in values in different scales,

- the approach predicting the suggested relationship between changes in different values through a certain type of intervention in order to find out the optimum choice,
- the approach providing an overview on the process of meaning construction for IAH.

In order to design 'value formation process' in relation with the criteria explained above, it is necessary to define value categories, change patterns, the relationship between changes in different values through a particular intervention type and quality of changes in values.

Value Categories

The way we intervene any archeological heritage relates directly to its value category membership. The categories corresponding to formation of values permit understanding the value formation patterns. There is not always a certain type of change for a particular value type. However, some values show similar and certain attitudes through interventions. In that respect, there is a need for defining certain value categories for the values showing similar attitudes. The value categories are classified into four groups; transient value category, gain value category, transformation value and stationary value category.

Transient value category

The values generally exist prior to excavation, and they are stable, fixed and common for all archaeological edifices prior to excavation. Besides, they have potential to change through interventions starting from excavation. The interventions generally cause variety of changes on values, and the values generally change their 'value category'. In that respect, there is a need for defining a category, which corresponds to the common features of values prior to excavation. Here, this category refers to 'transient value category'. The transient value category acts as a pool for values. The 'transient value category' comprises fixed and common values for all archaeological edifices. Besides, the values in 'transient value category' tend to change or transfer through interventions until the end of the process of interventions. Several values such as informational value, document value, archaeological research value, scientific research value and legendary value are in 'transient value category' as shown in Table 3.4. However, some values such as social value, function value formed as the results of interpretation and presentation interventions are not in transient value category.

Gain value category

Considering that archaeological edifices are usually untouched, in ruinous state and not part of the contemporary life of the today's society, they do not have social value, economic value and function value. The interpretation and presentation interventions provide insertion of archaeological edifices into the life of current society and generate the values that are related with the socio-economic life of current society.

Table 3.4. Values in Transient Value Category

Value Types	Value category prior to excavation
Archaeological research value	transient
Scientific research value	transient
Historical value	transient
Architectural value	transient
Authenticity value	transient
Impression value	transient
Informational value	transient
Document value	transient
Educational value	transient
Aesthetic value	transient
Artistic value	transient
Originality value	transient
Rarity value	transient
Social value	nonexistent
Economic value	nonexistent
Virginity value	transient
Picturesqueness Value	transient
Identity value	transient
Legendary value	transient
Spiritual/religious value	transient
Symbolic value	transient
Political value	transient
Memory value	transient
Location value	transient
Functional value	nonexistent
Age value	transient
Enviromental Value	transient
Homogenity value	transient
Plurality value	transient

The values in ‘gain value category’ are the ones added through insertion of archaeological edifices into contemporary life of current society. Therefore, social value, economic value and function value, which are formed at the last stage of new lifecycle of IAH, are always in ‘gain value category’. For instance, in Ephesus, the archaeological edifices excavated starting from the end of 19th c. are not part of the socio-economic life of the society up to 1950’s, when Ephesus was opened to public. Then, the social value and economic value are added for archaeological edifices. In another case, the Aspendos Theater has social, economic and function value by using it for performances as shown in Figure 3.14. Besides, after the theater of Ephesus is re-functioned for performances and cultural events, it gains function value.


Sanatla iç içe yaşayan Belkıslı kadınlar, bir yandan temsili izlemek üzere gelen turiste gözleme yaparken, bir yandan da "Operada sıkıldığımız zaman oluyor ama baleyi sonuna kadar izliyoruz" diyorlar. Erkeklerin bir kısmı ise özellikle kadrosu geniş Aida Operası'nda yıllarca figüranlık yapmış. Belkıslılar sahneye konan oyunların provalarını ise hiç kaçırmadıklarını anlatıyorlar.

Aspendos Antik Tiyatrosu, yerli halkı sanatla tanıştırdı

Belkıs opera dinliyor

Figure 3.14. News on the use of the Aspendos Theater for performing opera (Source: Cumhuriyet, July 23, 2003)

Transformation value category: The interventions cause changes in the the information content of several values. The changes generally include loss in existing content of information and addition of new ones. Here, the values are classified in ‘transformation value category’. While some values are always in ‘transformation value category’ through particular intervention types, some others are sometimes in ‘transformation value category’ in relation with the type of the conservation intervention and interpretation and presentation interventions. Besides, certain values always transform through some particular interventions, and this specific relationship between values and interventions are as follows:

- The values being always in ‘transformation value category’ through excavation: The archaeological research value, scientific research value, historical value, architectural value, authenticity value, impression value, informational value,

document value, educational value, aesthetic value, artistic value, originality value and environmental values are the ones, in which excavation cause transformation (Figure 3.15, Figure 3.16). For instance, some values such as document value, education value and information value are transformed in the Bouleuterion in Ephesus, after it was excavated.

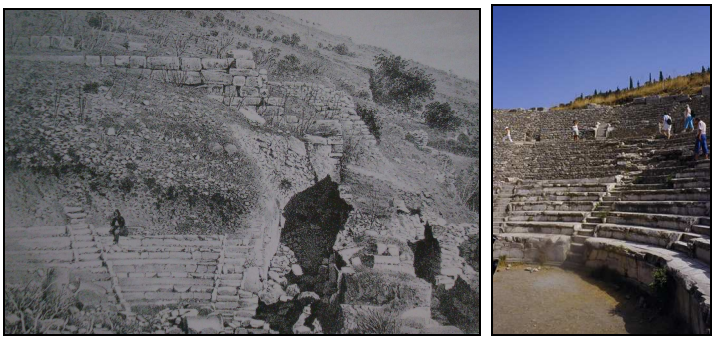
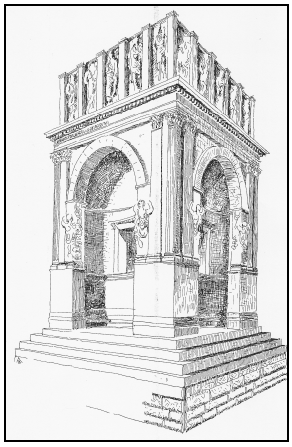


Figure 3.15. The Bouleterion in 1864 having archaeological research value, scientific research value and etc., Ephesus (Source: Wiplinger, G. & Wlach, G., 1995, p.5).

Figure 3.16. Some values (i.e. archaeological research value, scientific research value and etc.) of the bouleterion always transformed through excavation, Ephesus.

- The values being always in ‘transformation value category’ through some conservation, interpretation and presentation interventions: Some values such as archaeological research value and scientific research value are the ones, in which conservation interventions cause continuous transformation. For instance, the Memmius Monument, on which new proposals on its architectural design have been developed, indicates that the archaeological research value and scientific research value have potential for transforming continuously through interventions (Figure 3.17, Figure 3.18).



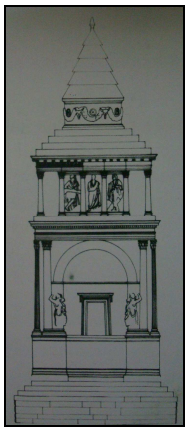


Figure 3.17-Figure 3.18. The changes on the proposals of the authentic design of the Memmius Monument indicating transformation of archaeological research value and scientific research value continously (Source: Scherrer, P., 2000, p.97).

- The values being sometimes in 'transformation value category' through some particular conservation interventions: Architectural value, authenticity value, impression value, informational value, document value, educational value, aesthetic value, artistic value and originality value are the ones, in which conservation interventions sometimes cause transformation. For instance, the Ionic stoa has architectural value in terms of the material and construction technique of the architectural fragments and elements throughout excavation. Its category changes in relation with the type of the conservation intervention approach. In practice, the architectural value showing how material was used and constructed in the Stoa is altered through restoration by Wolgang Müller Wiener[172]. The structure representing a visual and spatial background on the Ceremonial Street, which is among the main axis in Miletos, still has architectural value though changes in the content of its architectural value. Therefore, architectural value is in 'transformation value category'.

[172] Sözen G., Sözen Z. and Ekonomi Münir (ed.), 2003. By the waters of the meander, Priene, Miletus, Didyma, Istanbul, Yaşar Education and Cultural Foundation, pp.168.

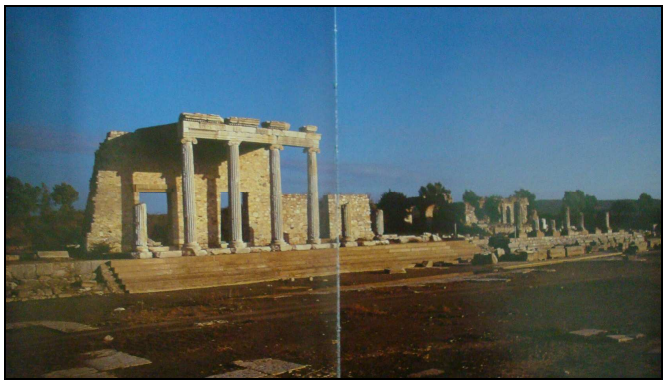


Figure 3.19. The state of the Ionic stoa after partial reconstruction in Miletos showing some values (i.e. architectural value, authenticity value, impression value, informational value) in 'transformation value category' (Source: Sozen G., Sozen Z. & Ekonomi M., 2003: 166-167).

Loss Value Category: Some existing values are lost through interventions, and these values generate another category, which will be referred as 'lost value category' here. The picturesqueness value and virginity value related with quality of being unchanged and being attractive in terms of appearance are generally lost through excavation. For instance, the edifices at the Myus and Heraklia in Caria have picturesqueness value and virginity value, which will be lost through excavation inevitably. The picturesqueness value and virginity value always lost through excavation are in 'lost value category'. In another case, the picturesqueness value and virginity value of the Apollo Temple at Didyma were lost, and these values become a membership of the 'loss value category' (Figure 3.20, Figure 3.21). Besides, the originality value is sometimes lost through some conservation approaches, which emphasize the architectural design of a particular period and remove other cultural layers. In these circumstances, the originality value is in 'lost value category'.

Figure 3.20. The Apollo Temple having picturesqueness value and virginity value prior to excavation, Didyma (Source: Textier, C., Description de L'Asie Minevre)

Figure 3.21. The Apollo Temple after its excavation indicating loss in picturesqueness value and virginity value, Didyma.

Stationary value category: In some cases, conservation interventions and interpretation and presentation interventions do not cause change in the category of value and transfer the value as it is. Here, the values transferred as it is are classified in 'stationary value category'. From another viewpoint, the intervention having null effects on the values become in the 'stationary value category'. For instance, the demolished drums of the Apollo Temple at Didyma showing how an ancient structure was demolished due to earthquake have educational value, architecture value, and information value. These values do not almost change until the end of the interpretation and presentation interventions. In that respect, these values are in 'stationary value category' (Figure 3.22). The conservation interventions transfer educational value without causing any change in the content and context. Therefore, education value is in 'stationary value category' under some conservation intervention. In the case of the Late Roman and Archaic Lydian houses at Sardis, the conservation intervention approach causes transfer of the archaeological remains in-situ. In addition, the originality value related with overlapping evidences of various cultural periods does not change and is in the 'stationary value category'. On the other hand, a particular value type, age value, is always in the 'stationary value category' in relation with the conservation interventions. There are several values in 'stationary value category' through interpretation and presentation interventions.

Figure 3.22. View from the demolished drums of the Apollo Temple, Didyma.

As explained above, some value types do not generally belong to a particular value category. The categorization of a particular value type is dynamic and change in relation with the type of intervention. The category of membership of values changes in relation the following factors:

- The content of information and extent of excavation are factors shaping the membership of values.
- They type of intervention is the main factor shaping the membership of values.

Although there are some values, which are fixed member of a certain value category, there are some others, which change their membership in relation with the intervention type. In that respects, there is a need to distinguish these value types as shown in the Table 3.5. In the table, the cells in green indicate that the value has potential for changing its value category membership. The cells in yellow indicate that the value is fixed value category membership.

Table 3.5. Transmission in value category

	Prior to excavation	**After Excavation**	**After Conservation Inter.**	**After Interpret. & Present. Int.**
Pattern 1	Transient	Transient	Transient	Stationary

Change Patterns

As explained above, the change pattern shows the sequences of value categorization for a specific series of interventions. It is possible to define eight change patterns for archaeological edifices as explained below.

Pattern 1: Transmission in value category (transient, transient, transient, stationary)
Some values show a particular pattern, which bases on transmission of values as it is at the end of the interpretation and presentation interventions (Table 3.6). Some value such as identity value, legendary value, spiritual value, symbolic value, and political value reflecting cultural ties between contemporary society and archaeological edifices, which are transferred as they are up to the end of the interpretation and presentation interventions are in the group. The transfer is mainly based on the lack of cultural ties between the contemporary society in Anatolia and the archaeological edifices.

Pattern 2: Transformation in value categories
Some values show transformation in different stages of the process. For instance, some values such as historical value, architectural value, and document value are transformed through excavation and transfered as they are by certain types of conservation interventions. In other cases, some values always in transformation. In that respect, there are diiferent patterns of transformation, which are classified into three groups.

Pattern 2.1.: Transformation through excavation (transient, transformation, stationary, stationary): In particular cases, the value is transformed through excavation and is not changed after excavation. In this case, a particular change pattern ‘transformation through excavation’ emerges (Table 3.7). Age value, virginity value, picturesqueness value, which are changed through excavation and not changed through conservation interventions, are in this group.

Pattern 2.2.: Transformation through conservation interventions (transient, transformation, transformation, stationary): Some values transformed through excavation are also transformed through conservation interventions. Then, they are in the stationary value category through interpretation and presentation interventions. These values are in the change pattern ‘transformation through conservation interventions’ (Table 3.8). The conservation interventions causing transformation by emphasizing architectural design of IAH cause this type of change in some values. For instance, the information value, document value, architecture value, authenticity value, impression value, aesthetic value, artistic value and education value are in this change pattern through a certain sequence of interventions.

Table 3.6. The category membership of each value type

Value Types	Value cat. prior to excavation	Value cat. after excavation	Value cat. after conservation interventions	Value cat. after interpret. and presentation interventions
Archaeological research	transient	transformation	transformation	Transformation
Scientific research	transient	transformation	transformation	Transformation
Historical	transient	transformation	changes in value category	Stationary
Architectural	transient	transformation	changes in value category	Stationary
Authenticity	transient	transformation	changes in value category	Stationary
Impression	transient	transformation	changes in value category	Stationary
Informational	transient	transformation	changes in value category	Stationary
Document	transient	transformation	changes in value category	Stationary
Educational	transient	transformation	changes in value category	Stationary
Aesthetic	transient	transformation	changes in value category	Stationary
Artistic	transient	transformation	changes in value category	Stationary
Originality	transient	transformation	changes in value category	Stationary
Rarity	transient	changes in value cat.	changes in value category	Stationary
Social	nonexistent	not exist	not exist	Gain
Economic	not exist	not exist	not exist	Gain
Virginity	transient	loss	stationary	Stationary
Picturesqueness	transient	changes in value cat.	stationary	Stationary
Identity	transient	transient	transient	Stationary
Legendary	transient	transient	transient	Stationary
Spiritual/religious	transient	transient	transient	Stationary
Symbolic	transient	transient	transient	Stationary
Political	transient	transient	transient	Stationary
Memory	transient	transient	transient	Stationary
Location	transient	transient	transient	Stationary
Functional	not exist	not exist	not exist	changes in value category
Age	not exist	changes in value cat.	stationary	Stationary
Enviromental	transient	transformation	transformation	Stationary
Homogenity	Not exist	changes in value cat.	Stationary or not exist	Stationary or not exist
Plurality value	Not exist	changes in value cat.	Stationary or not exist	Stationary or not exist

Table 3.7. Transformation through excavation

	Prior to excavation	After Excavation	After Conserve Int.	After Interpret. & Present. Int.
Pattern 2.1	Transient	Transformation	Stationary	Stationary

Table 3.8. Transformation through conservation interventions

	Prior to excavation	After Excavation	After Conserve. Int.	After Interpret. & Present. Int.
Pattern 2.2	Transient	Transformation	Transformation	Stationary

Pattern 2.3.: Transformation through interpretation and presentation interventions/Continual transformation (transient, transformation, transformation, transformation): Some particular values are transformed continuously throughout interventions. Each intervention causes transformation in the archaeological research value and scientific research value on IAH. Therefore, archaeological research value and scientific research value show a continual transformation (Table 3.9) and always in this group. This group show a particular change pattern based on the changes from transient to transformation.

Table 3.9. Transformation through interpretation and presentation interventions

	Prior to excavation	After Excavation	After Conserve. Int.	After Interpret. & Present. Int.
Pattern 2.3	Transient	Transformation	Transformation	Transformation

Pattern 3. Gain through interpretation and presentation interventions

Another value pattern is based on a gain of certain value types through interpretation and presentation interventions (Table 3.10). Social value, economic values and function value are always in this group.

Table 3.10. Gain through interpretation and presentation interventions

	Prior to excavation	After Excavation	After Conserve. Int.	After Interpret. & Present. Int.
Pattern 3	Not exist	Not exist	Not exist	Gain

Pattern 4. Loss in value categories

Some values are lost in different stages of the process. For instance, a value is lost through excavation. In other cases, some values are lost through conservation interventions. Therefore, there are two main patterns of loss.

Pattern 4.1.: Loss through excavation (transient, loss, stationary, stationary): Excavation causes irreversible changes in the archaeological edifice having untouched quality. These changes are viewed as loss in some values. The virginity value and picturequeness value are the ones in the change pattern 'loss through excavation' (Table 3.11).

Table 3.11. Loss through excavation

	Prior to excavation	After Excavation	After Conserve. Int.	After Interpret. & Present. Int.
Pattern 4.1	Transient	Loss	Stationary	Stationary

Pattern 4.2.: Loss through conservation interventions (transient, transformation, loss, stationary): This change pattern is related with the changes in originality value in relation with application of certain conservation approach. It is the result of transformation caused through excavation and followed by loss caused through some conservation approach as shown in Table 3.12. It is generally based on a certain approach emphasizing the architectural characteristics of a particular period, while it causes loss in other cultural layers.

Table 3.12. Loss through conservation interventions

	Prior to excavation	After Excavation	After Conserv. Inter.	After Interpret. & Present. Int.
Pattern 4.2	Transient	Transformation	Loss	Stationary

While some values have the same change pattern independent from type of intervention, some others show different change patterns. For instance, the archaeological research value and scientific research value are generally in continual transformation. In addition, historical value, social value, economic value, virginity value, functional value, memory value, identity value, legendary value, spiritual/religious value, symbolic value and political value show always the same change pattern.

In some circumstances, some values show different change patterns. For instance, the informational value, document value and architectural value are transferred as it is through 'preservation as found'. On the other hand, these values transform in relation with the conservation interventions providing re-erection of IAH. Besides, some values have potential to be gained in relation with the extent of the conservation intervention. On the other hand, the change in impression value is not only based on the type of conservation intervention, but some other factors such as the extent of intervention, quality and quantity of existing interventions.

Relationship between changes in different values

It is necessary to examine changes in different values that are caused through a certain type of intervention in order to predict whether the conservation approach causes loss in originality value and existing information content, while it causes transformation in several values such as architectural value, information value and aesthetic value. In other words, there is need for foreseeing whether intervention approach causes a conflict or not.

It is a truism that the change in values caused through interventions does not always carry IAH into a more developed state. In some cases, it causes loss of some values without adding new values and information. In that respects, it is necessary to evaluate whether the intervention approach transforms the values into an improved state or not. Thus, another criteria 'quality of change' is defined below.

The quality of Change in Values

The quality of change is related with understanding whether the interventions transform the values for archaeological edifice into an improved (a more developed) state or not. Therefore, it is based on evaluation of the relationship between changes in different values. It is possible to define three levels in the quality of change; progress, moderate quality and regress.

Progress

The improved state associates with transforming values by adding new values and information on existing ones. This type of change in values led to progress in IAH. For instance, the intervention approach applied to the so-called Hadrian Temple cause progress by transferring existing values and adding new ones.

Moderate Quality

The change in values in moderate quality depends on relationships between changes in different values. The first is based on transfer of existing values without adding and losing new information. The second associates with transforming some values by loosing existing information content and adding new ones. For instance, the intervention on the Celsus Library causes transformation of the document value, architectural value and information value by adding new information on architectural characteristics. In addition, it causes loss in the information on some other cultural layers. Therefore, it causes changes in values in moderate quality.

Regress

The change in values in regress depends on the change pattern 'loss through conservation intervention'. The intervention approach that causes loss in the information content by generating speculative information results with change as a regress.

Phases of the Approach 'Value Formation Process'

As explained above, accurate evaluation of value categories, change patterns and quality of change in values form the new approach 'value formation process'. This approach is necessary in order to guide decision-makers on the future effects of intervention proposals on values, and revise intervention proposal prior to its implementation. In this context, the 'value formation process' evaluates the changes in values in relation with four main phases:

Phase 1. Defining value categories

Each archaeological edifice has its own potentials, characteristics and values, which are subject to change through interventions. Defining the value categories for the suggested

interventions provide predictions on which values are lost, transformed and added throughout new lifecycle of archaeological edifice.

Phase 2. Explaining change patterns

Considering that the main goal of the preservation is to transfer archaeological edifice to next generation, it is necessary to explain how meaning and the values of archaeological edifice are transmitted to next generation. Therefore, the change patterns explaining the changes in each value type is fundamental to predict the suggested change and explain it. Explanations of change patterns also inform decision-makers about unexpected results of the suggested intervention approach.

Phase 3. Evaluating the relationship between changes in different values

The evaluation ensures to map the changes in different value types caused through a certain type of intervention. It is essential for preventing conflicts developed through suggested intervention approach. Besides, it provides predicting loss in existing values, which legitimize archaeological edifice as 'heritage'. It is an important phase for revising suggested intervention approach.

Phase 4. Evaluating the quality of Change in Values

The quality of change associates with understanding whether the intervention approach transforms the values into an improved state or a worse state. Understanding quality of changes in values is important, where preservation deals not only transmitting tangible characteristics but intangible ones as well. It is fundamental to examine decisions on interventions in the archaeological edifice, which are not only belong to current society, but next generations as well, in terms of the proposed changes in values and evaluate the intervention proposals in relation with the quality of change.

Testing the Approach 'Value Formation Process'

As explained above, the approach 'value formation process' used for evaluating interventions and intervention proposals is an important solution for predicting unexpected results of interventions, prevent value conflicts and revise intervention approaches prior to implementation. Understanding the changes in values necessitates exemplifying of changes in relation with actual archaeological edifices, which has been treated through various types of interventions. In that respect, the examples are chosen considering general tendency of interventions in causing changes in values and making comparison in different change patterns caused through different intervention approaches. Thus, the changes in the values of the Didyma Apollo Temple (preservation as found), the Sagalassos Northwest Heroon (anastylosis) and the Hierapolis Latrine (restoration) being representative of different interventions are explained below:

The Apollo Temple in Didyma

The sanctuary of Apollo at Didyma is south of Miletus, to which it was linked by a sacred way. According to the discoveries started in 1873 by the French archaeologists, O. Rayat and A. Thomas and completed in 1926 by Th. Wiegand and the architect, H. Knackfuß, the sanctuary of Apollo has been presumably settled for the transitional period from 2nd millennium BC to 1nd millennium BC. The temple was constructed in 6th c. BC, and was famous throughout the archaic period. After demolishment of the archaic temple, the existing temple, as the fourth biggest temple of Ancient world, was started to built and have never finished. In 5th c. AD., the church was constructed within the temple. Later, it was used as a fortress.[173]

Phase 1. Defining value categories: Five value categories are valid for the values of the Apollo Temple at Didyma as shown in Table 3.13.

Phase 2. Explaining change patterns: The changes in the value categories show basic six change patterns as shown with colors ranging from dark brown to yellow in Table 3.13.

The first is related with the change from transient to transformation through interventions as shown in dark brown. The change continues throughout the process of interventions (archaeological research value and scientific research value). Some other values are transformed through excavation and become stationary category through conservation interventions as shown in dark orange (historical value, architectural value, and etc.). Some values generated by interpretation and presentation intervention are in gain value category as shown in light orange. Some values such as virginity value and picturesqueness value are lost through excavation as shown in green. Besides, some values in transient value category become stationary without changing as shown in pink (identity value, legendary value and etc.). On the other hand, some values function value, age value, homogeneity value, plurality value never exist as shown in light yellow (function value, age value and etc.).

Phase 3. Evaluating the relationship between changes in different values: The conservation intervention approach ensures transferring existing values as they are transformed through excavation. Therefore, there is no conflict in values developed through intervention approach.

Phase 4. Evaluating the quality of changes in values: The intervention approach transfer existing values for the Apollo Temple in Didyma causes moderate quality in change.

[173] Retrieved October 27, 2008 from http://www.dainst.org/index_640_en.html.

Table 3.13. The changes in values for the Temple of Apollo at Didyma

Value Types	Value cat. prior to excavation	Value cat. after excavation	Value cat. after conservation interventions	Value cat. after presentation interventions
Archaeological research value	transient	transformation	transformation	transformation
Scientific research value	transient	transformation	transformation	transformation
Historical value	transient	transformation	stationary	stationary
Architectural value	transient	transformation	stationary	stationary
Authenticity value	transient	transformation	stationary	stationary
Impression value	transient	transformation	stationary	stationary
Informational value	transient	transformation	stationary	stationary
Document value	transient	transformation	stationary	stationary
Educational value	transient	transformation	stationary	stationary
Aesthetic value	transient	transformation	stationary	stationary
Artistic value	transient	transformation	stationary	stationary
Originality value	transient	transformation	stationary	stationary
Rarity value	transient	transformation	stationary	stationary
Enviromental Value	transient	transformation	stationary	stationary
Social value	nonexistent	nonexistent	nonexistent	gain
Economic value	nonexistent	nonexistent	nonexistent	gain
Virginity value	transient	loss	stationary	stationary
Picturesqueness Value	transient	loss	stationary	stationary
Identity value	transient	transient	transient	stationary
Legendary value	transient	transient	transient	stationary
Spiritual/religious value	transient	transient	transient	stationary
Symbolic value	transient	transient	transient	stationary
Political value	transient	transient	transient	stationary
Memory value	transient	transient	transient	stationary
Location value	transient	transient	transient	stationary
Functional value	nonexistent	nonexistent	nonexistent	nonexistent
Age value	nonexistent	nonexistent	nonexistent	nonexistent
Homogeneity value	nonexistent	nonexistent	nonexistent	nonexistent
Plurality value	nonexistent	nonexistent	nonexistent	nonexistent
	transient, transformation, transformation, transformation			
	transient, transformation, stationary, stationary			
	nonexistent, nonexistent, nonexistent, gain			
	transient, loss, stationary, stationary			
	transient, transient, transient, stationary			
	nonexistent, nonexistent, nonexistent, nonexistent			

The Northwest Heroon in Sagalassos

The heroon situated on the northwest of the monumental centre of the Sagalassos was intervened through anasytlosis between 1998 and 2004. The podium and part of the crepidoma were in-situ. Most of the architectural elements "… including a socle frieze depicting a group of fourteen dancing girls and a head of a colossal statue…" were revealed during the excavation. The heroon was studied in order to produce reliable restitution project and investigate the possible extent of re-erection by using original architectural elements. The studies indicate that it was possible to determine original position of architectural elements on the building by investigating construction technology such as anathyrosis, placement signs, clamp holes and dowel holes. Besides, the study proves that it was possible to re-assemble original architectural elements except for the ones in pronaos.

The heroon that is "… located at west end of a street along which similar memorial monuments have been erected …." has a location value. Besides, it has "… exceptional historical value dedicated to a significant citizen of the town and with architectural qualities and a state of offering sufficient elements for its anastylosis, …".[174] The heroon, which "…had an unusual but masterfully created architectural composition"[175], has architectural value. Besides, elaborated decoration, as the evidence of influence of contemporary architecture in the Roman West, which is considered as an uncommon phenomenon in Asia Minor, has artistic value.

Phase 1. Defining value categories: Five value categories are also valid for the values of the Northwest Heroon as shown in Table 3.14.

Phase 2. Explaining change patterns: The changes in the value categories show eight patterns, which show some similarities with the ones in the Temple of Apollo. There are two new patterns. The first is based on the change from transient value category prior to excavation to transformation value category through conservation intervention as shown in dark pink. The second change pattern is related with the change in the impression value through conservation intervention approach shown in red.

Phase 3. Evaluating the relationship between changes in different values: The conservation intervention approach ensures transformation of existing values. Therefore, there is loss in the information on demolished state and, new scientific information on thr architectural characteristics of the heroon is added. There is loss in the information content, which gives unique information on demolishment layer. However, there is no conflict between originality value and architectural value.

[174] Wealkens, M. Ercan S., Torun E., ibid., p.70.
[175] Ibid.

Table 3.14. The changes in the values for the Northwest Heroon at Sagalassos

Value Types	Value cat. prior to excavation	Value cat. after excavation	Value cat. after conservation interventions	Value cat. after presentation interventions
Archaeological research value	transient	transformation	transformation	transformation
Scientific research value	transient	transformation	transformation	transformation
Informational value	transient	transformation	transformation	stationary
Document value	transient	transformation	transformation	stationary
Educational value	transient	transformation	transformation	stationary
Architectural value	transient	transformation	transformation	stationary
Aesthetic value	transient	transformation	transformation	stationary
Artistic value	transient	transformation	transformation	stationary
Authenticity value	transient	transformation	transformation	stationary
Environmental Value	transient	transformation	transformation	stationary
Location value	transient	transformation	stationary	stationary
Historical value	transient	transformation	stationary	stationary
Impression value	transient	transient	transformation	stationary
Social value	nonexistent	nonexistent	nonexistent	gain
Economic value	nonexistent	nonexistent	nonexistent	gain
Virginity value	transient	loss	stationary	stationary
Picturesqueness Value	transient	loss	stationary	stationary
Identity value	transient	transient	transient	stationary
Legendary value	transient	transient	transient	stationary
Spiritual/religious value	transient	transient	transient	stationary
Symbolic value	transient	transient	transient	stationary
Political value	transient	transient	transient	stationary
Memory value	transient	transient	transient	stationary
Originality value	transient	transient	transient	stationary
Rarity value	transient	transient	transient	stationary
Functional value	nonexistent	nonexistent	nonexistent	nonexistent
Age value	nonexistent	nonexistent	nonexistent	nonexistent
Homogeneity value	nonexistent	nonexistent	nonexistent	nonexistent
Plurality value	nonexistent	nonexistent	nonexistent	nonexistent
	transient, transformation, transformation, transformation			
	transient, transformation, transformation, stationary			
	transient, transformation, stationary, stationary			
	nonexistent, nonexistent, nonexistent, gain			
	transient, transient, transformation, stationary			
	transient, loss, stationary, stationary			
	transient, transient, transient, stationary			
	nonexistent, nonexistent, nonexistent, nonexistent			

Phase 4. Evaluating the quality of changes in values: The intervention approach causes transformation of values by replacing new information instead of existing ones. Therefore, the change is in the moderate quality in the Northwest Heroon at Sagalassos.

The Latrine in Hierapolis

The latrine "… was discovered in a state of collapse, clearly caused by an earthquake…".[176] The latrine located on the Frontinus Street has a Doric façade including columns, monolithic screens between them, the architrave and cornice. It has a single room, which is divided longitudinally into two aisles through a row of Doric columns. The ceiling is composed of travertine large blocks[177]. Besides, the red painted inscriptions including acclamations to the emperor Justinian was found on the façade.

The structure, as a sign of prestige for the town like bath and nymphaeum, "…is remarkable for its size and chronology (end of the first century AD) and for its position in correspondence with the entrance to the city and to the immense agora…".[178] Therefore, it has architectural value and location value. Later, it was "…converted into storeroom for hay and stables for mules". There are abundant traces of a fire, which caused its abandonment prior to its collapse due to earthquake. In that respect, the latrine has rarity value, architectural value and age value. Besides, it acts as the evidence of an Ancient earthquake and indicates how an ancient structure was demolished due to earthquake. Therefore, it has document value. The remains showing conversion of the latrine into a storeroom and stable has originality value.

The research team started the restoration of the latrine in 1990's. According to D'andria, "the restoration, still in progress, has permitted the anastylosis of the rear wall with squared blocks. Even the piers of the façade have been reconstructed and put back into their original position, together with the monolithic screens between one pier and other, and the architrave and cornice."[179] After restoration, there are transformations in document value, architectural value and authenticity value due to changes in the content of information, form and material. The use of structure as storeroom and stable is ignored. In that respect, there is loss in originality value as shown in blue. The loss in originality value and transformation in the architectural value through restoration indicate a conflict, which should be considered in making decision on intervention.

Phase 1. Defining value categories: The values for the Latrine show the same five value categories as shown in Table 3.15.

[176] D'andria F., 2002, Hierapolis Antik Kenti 2001 Yılı Kazı ve Onarım Çalışmaları, T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 24. Kazı Sonuçları Toplantısı 2.cilt, Ankara, pp. 80.
[177] Taken from D'andria F., ibid., p. 83.
[178] D'andria F., ibid., p. 84-5.
[179] D'andria F., ibid., p. 80.

Table 3.15. The changes in the values for the Latrine at Hierapolis

Value Types	Value cat. prior to excavation	Value cat. after excavation	Value cat. after conservation interventions	Value cat. after presentation interventions
Archaeological research value	transient	transformation	transformation	transformation
Scientific research value	transient	transformation	transformation	transformation
Informational value	transient	transformation	transformation	stationary
Document value	transient	transformation	transformation	stationary
Educational value	transient	transformation	transformation	stationary
Architectural value	transient	transformation	transformation	stationary
Authenticity value	transient	transformation	transformation	stationary
Environmental Value	transient	transformation	transformation	stationary
Impression value	transient	transformation	transformation	stationary
Originality value	transient	transformation	loss	stationary
Location value	transient	transformation	stationary	stationary
Historical value	transient	transformation	stationary	stationary
Social value	nonexistent	nonexistent	nonexistent	gain
Economic value	nonexistent	nonexistent	nonexistent	gain
Virginity value	transient	loss	stationary	stationary
Picturesqueness Value	transient	loss	stationary	stationary
Aesthetic value	transient	transient	transient	stationary
Artistic value	transient	transient	transient	stationary
Memory value	transient	transient	transient	stationary
Identity value	transient	transient	transient	stationary
Legendary value	transient	transient	transient	stationary
Spiritual/religious value	transient	transient	transient	stationary
Symbolic value	transient	transient	transient	stationary
Political value	transient	transient	transient	stationary
Rarity value	transient	transient	transient	stationary
Age Value	transient	transient	transient	stationary
Functional value	nonexistent	nonexistent	nonexistent	nonexistent
Homogeneity value	nonexistent	nonexistent	nonexistent	nonexistent
Plurality value	nonexistent	nonexistent	nonexistent	nonexistent
	transient, transformation, transformation, transformation			
	transient, transformation, transformation, stationary			
	transient, transformation, loss, stationary			
	transient, transformation, stationary, stationary			
	nonexistent, nonexistent, nonexistent, gain			
	transient, loss, stationary, stationary			
	transient, transient, transient, stationary			
	nonexistent, nonexistent, nonexistent, nonexistent			

Phase 2. Explaining change patterns: The changes in the value categories show similar change patterns with the Northwest Herron at Sagalassos except some differences. The originality value is altered from transient value to loss value category through restoration. The impression value is altered from transient value to tranfromation through excavation and conservation interventions as shown in dark pink.

Phase 3. Evaluating the relationship between changes in different values: The conservation intervention approach provides transformation in the existing values. Therefore, there is transformation in the document value including loss in the information on some cultural layers and transformation in the architectural value through emphasizing the architectural design of the particular period of the Latrine. Besides, there is loss in originality value. In that respect, there is a conflict between originality value and architectural, document value developed through the intervention approach.

Phase 4. Evaluating the quality of changes in values: The intervention approach causes transformation in architectural, educational, environmental, informational, authenticity values and loss in originality value. Therefore, new information is placed instead of existing ones while causing loss in some information types. In that respect, the change in the Latrine at Hierapolis is in moderate quality.

As a result, three different intervention approaches cause changes in values in moderate quality. Considering that the archaeological edifice is authentic remains of past cultures and unique, it is important to develop variety of intervention options in order to examine proposed quality of change prior to implementation of interventions. It is important to emphasize again that accurate evaluation of value changes guide decision-makers on the future effects of suggested intervention approach on values, and provide revising intervention proposal prior to its implementation. Understanding the quality of change in values comprehensively requires explaining the change in a certain case study, which includes the archaeological edifices at Ephesus in chapter 4.

3.2. TOOLS FOR CHANGES: INTERVENTIONS

Considering that IAH is covered and not used for a long time, interventions cause various changes in IAH starting from excavation as explained above. Parallel to the excavation, conservation of IAH is among the essential necessities, which is strongly emphasized in the preservation discourse. It is recommended that "… the protection of the archaeological heritage, taking fully into account problems arising in connexion with excavations should be

ensured"[180]. In other words, the conservation begins in the field, when the excavation is proposed[181]. In addition to excavation and conservation, the interpretation and presentation of archaeological sites, monuments are recommended by the authorities[182], and various types of interventions are implemented for presenting IAH to public. In that respect, the changes in IAH closely associates with series of interventions. These interventions are classified under three main groups; the first, excavation; the second, conservation interventions[183] and the third, interpretation and presentation interventions. Defining interventions as tools of changes requires explaining some fundamental issues related with the interventions. These issues are the objectives, types of interventions, the main factors shaping interventions and the characteristics of IAH changed.

3.2.1. Interventions and its Objectives

Interventions in IAH are defined from different viewpoints and based on various objectives. While objectives of some interventions correspond to one of the objectives explained below, some others provide more than one objective. It is significant to emphasize that each intervention is related with the interpretation of IAH for the contemporary society. For instance, excavation generally includes explaining recovered archaeological remains; therefore, interpretation is at the center of excavation. In case of the excavation in the Neon Library at Sagalassos, the polychrome panel discovered is interpreted with the words: "we believed at the time that the building had been a kind of pagan basilica and suggested a date in the third quarter of 4th century A.D., …".[184] As stated, the use of the 'place' of the Neon Library and its construction date are interpreted through excavation. Therefore, interpretation is among the main components of excavation. Besides, the conservation interventions have interpretation and presentation aspect, and serve also for presentation. In some cases, the objectives of some conservation interventions such as anastylosis, restoration and etc. are explained as presentation.[185]

Interpretation associates with various issues such as choosing appropriate material and design for the missing parts and determining the extent and content of information conveyed

[180] UNESCO, 1956, 'Recommendation on International Principles Applicable to Archaeological Excavations', New Delhi, article 4. Retrieved May 16, 2007 from http://www.icomos.org/unesco/delhi56.html.
[181] Price states that 'The conservation of archaeological material must begin in the field, planning for conservation needs must therefore start when the excavation is first proposed' (Price, S. N., 1995:1).
[182] UNESCO, 1956, ibid., article 12.
[183] Conservation interventions are related with all types of interventions that transmit physical characteristics and meaning of IAH to next generations. The interpretation is among the main components of these interventions. In this context, conservation interventions involve the main intervention types: protective measures, consolidation, *anastylosis*, restoration and reconstruction.

[184] Wealkens M. and Baert-Hofman, 1995, The 1992 Excavation Season at Sagalassos, T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, XV.Kazı Sonuçları Toplantısı, pp.385 (373-407).
[185] Turan, A.B., 1988, Evaluation of interventions for the conservation of an archaeological site, Ostia Antica, Unpublished Master Thesis, Middle East Technical University, The Graduate School of Natural and Applied Sciences, p. 113-4 and Sabri-Parıldak, R. 2001, Assessment of interventions practised for the presentation of the bath-gymnasium complex in Salamis-Cyprus, Unpublished Master Thesis, Middle East Technical University, The Graduate School of Natural and Applied Sciences, p. 112.

through presentation panels. For instance, the sanctuary of Demeter and Kore, where votive deposits dating between the 6th century BC and the Hellenistic period were excavated in the 1960s[186], is viewed among the most representative structure in Iasos. Therefore, the efforts were on "… to increase the visibility and improve the understanding for the visitors …"[187]. In the case of Iasos, the purposes of the efforts are on enhancing understandings of public by providing visibility of the sanctuary of Demeter and Kore. On the other hand, excavation and conservation should also be interpreted in their own context for further developments. Therefore, this dual relation forced me to make the explanation on interpretation given below.

Interpretation and Objectives

In general, interpretation is related with heightening public awareness and enhancing understanding of heritage through ranges of activities.[188] The past is continually constructed by individuals and groups, who choose to interact with it, and this construction is created within the frameworks of their own social position and *mores*.[189] In my opinion, this viewpoint corresponds to explain the meanings of IAH from the viewpoints of the contemporary society. In that respect, interventions are related with construction of the past from the viewpoints of the contemporary society.

In theory, several approaches ranging from constructivist[190] to positivist[191]are developed for interpretation. However, in current practice, interpretation of IAH is generally based on the viewpoints of the 'experts' dealing with IAH. In other words, the meaning of IAH is constructed by the 'experts'. For instance, according to Nohlen, the re-erection of the Trajan Temple in Pergamon "enable visitor to imagine the original splendor of this monumental building"[192]. Besides, the statement "… increase the visibility and improve the understanding for the visitors …"[193] indicates that the expert's views have great roles in shaping the interpretation of the sanctuary of Demeter and Kore at Iasos. In other cases, the interpretation on the Apollo Temple at Didyma and the Late Roman and Archaic Lydian

[186] Retrieved November 11, 2008 from http://cat.une.edu.au/page/iasos.
[187] Berti, F., 2007, Italian Archaeological Mission at Iasos (Caria) the 2005 Campaign, T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, *28. Kazı Sonuçları Toplantısı 1.cilt*, p. 110.
[188] ICOMOS, 2007, The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites, definitions. Retrieved June 11, 2008. from http://www.enamecharter.org/downloads/ICOMOS_Interpretation_Charter_EN_10-04-07.pdf.
189 Stone, P.G. and Planel, P.G., 1999, The constructed past : experimental archaeology, education, and the public, p.1.
[190] For Copeland, interpretation is explained as the one '…suggests that we construct our own understandings of the world in which we live. Since the past does not exist anymore we have to construct what it might be like from present evidence' (2005:84). Constructing Pasts: Interpreting the Historic environment. In A.Hems and M. Blockley eds. Heritage Interpretation, pp.97-109. Routledge: London and New York. pp.83-95.
[191] In positivist approach, 'the interpretation aimed at the individual. The interpretation is didactic. … Visitors are viewed as consumers of knowledge'.Copeland, T. 2005 Constructing Pasts: Interpreting the Historic environment. In A.Hems and M. Blockley eds. Heritage Interpretation, pp.97-109. Routledge: London and New York. pp.83-95.

[192] Nohlen, K., ibid., p. 91.
[193] Berti, F., ibid., p. 110.

houses at Sardis are the result of the interpretation that is based on 'preservation as found' in relation with the experts opinions. As shown, the interpretations are based on the choices of the 'experts', and in general, the experts emphasizes the didactic ways of interpretation of the past. However, in theory, approaches on interpretation go a step further. For instance, the 'constructivist approach' is based on the interpretation that is "… designed for audiences and they should determine its form…"[194]. This approach is a search for engaging visitors with the evidence and assists them to understand the archaeological remains for constructing their own meanings. Besides, it necessitates use of the authetic evidences and viewing visitors as thinkers.[195] In the context of IAH, which is fragmentary and difficult to interpret, it is not possible to ignore the significance of the expert's view. Besides, it is not realistic to view each visitor as a thinker.

Interpretation is also related with the use of tools for constructing meaning. There are various common tools such as "…print and electronic publications, public lectures, on-site and directly related off-site installations, educational programmes, community activities, and ongoing research,…"[196]. As a result, each intervention has interpretation aspect, and the common objective for interventions is to construct the meaning for archaeological remains in its new lifecycle as explained below.

To construct meaning for archaeological remains in its new lifecycle: As explained above, the common approach emphasizes construction of the meaning of IAH in relation with the viewpoints and understandings of experts, who decide and apply the interventions. Therefore, each intervention explains the meaning of archaeological remains from the viewpoints of the 'expert' in relation with his discipline, background and etc. Besides, the interventions densely emphasize didactic ways of interpretation, therefore, the education value of IAH are generally transformed and upgraded in relation with the choices of the 'experts' about the content of information. As a result, the interventions serve for constructing the meanings of IAH for the contemporary society in its new lifecycle in relation with the approaches and viewpoints of the 'experts'. However, there are various factors and objectives that shape the interventions. In that respect, understanding how interventions affect construction of the meaning for archaeological remains necessitates to explain the objectives of interventions, main factors and types of interventions as explained in the following part.

[194] Copeland, T. 2005, Constructing Pasts: Interpreting the Historic environment. In A.Hems and M. Blockley eds. Heritage Interpretation, pp.97-109. Routledge: London and New York, p. 87-8.

[195] Copeland, T., ibid. Hence, the information flow does not show linearity from evidence to audience, rather a complex form shown in the figure 3.1. It is a truism that the information flow is complex and there is a possibility of constructing numerous archaeological remains and various meanings through engaging visitors for constructing their own meaning.

[196] ICOMOS, 2007, ibid., definitions.

3.2.1.1. Excavation and Objectives

Starting from the beginning of the 18th century, excavation has been among the main tool in the discipline of archaeology.[197] Today, there have been extensive developments in the methods and tools used in the archaeological discipline such as geophysical survey and aerial photography. However, the tools are generally used for making decision on a strategy for excavation, and supported by excavation in order to find answers for some particular questions.[198] Hence, excavation has been still the main method for accessing archaeological information. Besides, acquiring information on past is among the main objectives of excavation as explained below.

To acquire information from archaeological evidences

Excavation mainly aims to acquire information from archaeological evidence. It is a truism that excavation is not just about digging holes. In fact, it includes various acts such as "… recording and assembling a record of past behavior, giving meaning to that record, and applying the meanings in a wide variety of context, including academic research, education, land use planning, and public policy development[199]. It is the main way of capturing much of archaeological data by digging.[200] For instance, at Kaunos, excavation at sanctuary area aims to understand the building complex at the north and reveal these remains.[201] Besides, excavation is defined as the means, by which the past is accessed.[202] According to Renfrew and Bahn, the purpose of excavation is accessing two main kinds of information "…(1) human activities at a particular period in the past and (2) changes in those activities from period to period"[203]. In addition to these explanations, archaeological excavation is initially defined as "… any research aimed at the discovery of objects of archaeological character, whether such research involves digging of the ground or systematic exploration of its surface or is carried out on the bed or in the sub-soil of inland…" in the preservation discourse.[204] However, I agree with Price "excavation is a technique used to acquire information from archaeological evidence and not -aimed at the discovery of objects-."[205] The excavation permits not only to recover IAH, but also gather archaeological data such as how past cultures were lived, where they lived and how they changed. Therefore, the main objective of excavation is to acquire archaeological information. However, excavation, which gathers

[197] Jokilehto states that excavation is initially done in Herculaneum, Pompeii and Stabiae (1999, 57).
[198] Gamble, C., 2001, Archaeology: the basics, London and New York: Routledge. p.51.
[199] Carmichael, D.L., Lafferty III, R.H. and Molyneaux, B.L., 2003, Excavation, Oxford Altamira press, p.2.
[200] Roskams, S., 2001, Excavation, Cambridge; New York, Cambridge University Press.
[201] Öğün, Işık & Tanrıkut, 1999, Kaunos 1997 Araştırmaları, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX. Kazı Sonuçları Toplantısı II, p.195.
[202] Carmichael, D.L., Lafferty III, R.H. and Molyneaux, B.L., ibid., 32.
[203] Renfrew, C., 2004, Archaeology: theories, methods and practices, New York : Thames & Hudson, p.90.
[204] UNESCO, 1956, ibid., article 1.
[205] Price, N.S., 1995, Conservation on Excavations and the 1956 UNESCO Recommendation, In N.P.Stanley Price (ed), Conservation on Archaeological Excavations, With particular reference to the Mediterranean area, 23-26 August 1983, Italy ICCROM pp.135.

information through disturbing archaeological deposits, is viewed as destruction[206] of archaeological data and remains, which are authentic and non-renewable. In that respect, there is a great emphasis for considering conservation needs when the excavation is proposed[207].

3.2.1.2. Conservation Interventions and Objectives

The conservation interventions are based on various factors[208] including the destructive effects of excavation. Following the early excavations in the beginnings of the 20th century, the necessity for conserving archaeological remains was noticed and, several attempts were given. For instance, the archaeologists, who thought that the only way to preserve archaeological heritage is to move those to safer places and/or buildings, establish storages or museums in the beginnings of the 20th century. In case of the Pergamon, Wilhelm Dörpfeld, the director of the excavation, established a local storage-museum at the west ancient rooms near the Lower Agora.[209] In general, conservation interventions are viewed as the main acts for preventing existing threats and consolidating existing problems. In some cases, the objectives of conservation interventions are explained in terms of two aspects; "…first, the control of the environment to minimize the decay of artifacts and materials and, second, their treatment to arrest decay and stabilize them where possible against further deterioration".[210] In general, conservation interventions are accepted as technical issues that are necessary to prevent further deterioration, consolidate and strengthen the existing condition of authentic materials. I agree Price, when he states that "the conservation of archaeological material must begin in the field; planning for conservation needs must therefore start when the excavation is first proposed".[211] In the scope of the thesis, conservation intervention refers to various types of interventions such as maintenance, repair, consolidation[212] and re-erection[213] activities, which have various objectives explained in the following part.

Objectives of Conservation Interventions

The interventions have some certain objectives. The objectives are categorized into six groups as follows:

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[206] Carmichael, D.L., Lafferty III, R.H. and Molyneaux, B.L., ibid., p.32-33.
[207] Price states that 'The conservation of archaeological material must begin in the field, planning for conservation needs must therefore start when the excavation is first proposed' (Price, Stanley N., 1995:1).
[208] The factors shaping interventions are explained in chapter 3.1.2.
[209] Radt, W., 2002, Pergamon, Antik bir kentin tarihi ve yapıları, İstanbul, Yapı Kredi Yayınları, p.:293.
[210] Jokilehto, 1999, ibid., preface.
[211] Price, N.S. 1995, Excavation and Conservation, In N.P. Stanley Price (ed), Conservation on Archaeological Excavations, With particular reference to the Mediterranean area, 23-26 August 1983, Italy ICCROM p.1-9.
[212] Feilden B.M. & Jokilehto, J., 1993, Management Guidelines for World Heritage Sites, Rome, ICCROM, p.62.
[213] In this thesis, re-erection includes variety of interventions providing rebuilding the archaeological edifice through gathering and erecting architectural fragments and elements again. Re-erection comprises *anastylosis*, restoration, reconstruction and re-assembling.

- To control the environmental conditions and prevent threats,
- To eliminate the problems those threaten the architectural decoration,
- To consolidate the self-carrying capacity of the architectural and building elements,
- To provide architectural integrity,
- To provide integrity in design of a building element apart from its authentic location,
- To ensure integrity in architectural design.

To control the environmental conditions and prevent threats

Throughout the excavation, the environmental conditions changes, and these changes have potential to end with disastrous consequences on recovered archaeological remains. Therefore, some interventions aim to maintain existing state of IAH and prevent loss in fabric by controlling the environmental conditions. Here, these interventions are referred as 'protective measures'. The 'protective measures' include various treatments such as capping, lacuna, supporting with elements and construction of protective shelters. For instance, at Sardis, the conservation efforts in the wall, decoration and mosaic paving in the Late Roman suburb include routine treatment and monitoring.[214] Besides, capping was applied at the walls of the Byzantine shops in Sardis (Figure 3.23). In some cases, the architectural elements in demolished state are under threat of break and risk for visitors. Hence, there is a necessity for taking measures.

Another protective measure is the permanent shelter designed above the Late Roman and Archaic Lydian houses at Sardis in 1996[215] (Figure 3.24). In some cases, the recovered mosaics are covered with earth in order to prevent damage. For instance, the mosaics in the Bouleterion in Aphrodisias were covered with earth in order to prevent their damage (Figure 3.25). Some measures are applied in order to resist environmental factors such as ground water and flooding. For instance, the architectural elements of the Temple and sanctuary area at Klaros are permanently under threat of ground water. In that respect, the measures for draining water was applied in Klaros (Figure 3.26). In the case of Side, the architectural elements of the Theater were moved in order to prevent penetration of water collected in the area.[216]

In another case, Metropolis, some part of the Byzantine city wall is under threat of demolishment due to material loss. Therefore, the intervention is based on supporting the wall through a pillar (Figure 3.27). Another common intervention is to support the

[214] Greenewalt, Jr. C.H., 1999, Sardis, Archaeological Research in 1997, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX.Kazı Sonuçları Toplantısı II, p. 4.
[215] Greenewalt, Jr., C.H., ibid., p.4.
[216] İzmirligil, Ü. 1993. Side Tiyatrosu ve Çevresi Onarım Düzenleme Çalışmaları (1992), .C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XV. Kazı Sonuçları Toplantısı II, p.244 (243-52).

architectural elements tending to demolish through new additions of wooden and/or steel elements. To support the leaning wall through wooden elements is one of the common interventions for preventing demolishment of the wall similar to the wall of the Basilica stoa in Ephesos (Figure 3.28). At the Hierapolis, the cracks in the architrave blocks of the Byzantine Gate were supported through a steel structure, which is reversible.[217] As exemplified above, the interventions are applied as measures in order to prevent threats and some possible problems, which have potential to harm IAH. On this basis, the objective of some interventions is to control the effects of natural factors, which is responsible for what decays, what is preserved, and prevent threats and potential damages. In this case, there is not a concrete problem.

To eliminate the problems those threaten the architectural decoration

Some interventions are applied in order to prevent some existing problems. Some types of interventions are applied to decorative elements in order to remedy damaged and deteriorated parts. These interventions generally applied on the wall paintings, mosaics and sculptures in order to consolidate them. These problems are generally caused through change in climatic conditions such as change from damp to a dry environment and the type of material.[218] For instance, the wall paintings such as in the Terrace Houses II at Ephesos, the 'Building Z' at Pergamon are treated in order to remedy their conditions. At Pergamon, the stucco paintings in the *Maskenmosaikraumes* were cleaned and its missing parts were completed in 1998.[219]

Figure 3.23. Capping of the walls of the Byzantine shops, Sardis, 2003.

[217] Ferrero, D. De. B., 1993 Yılında Frigya Hierapolisinde Kazılar ve Restorasyonlar, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XV. Kazı Sonuçları Toplantısı II, p.344. (341-50)
[218] Mora, P. 1995, Conservation of Excavated Intonaco, Stucco and Mosaics, in N.P.Stanley Price (eds), ibid., p.91.
[219] Radt, W., 1999., Bericht über die Kampagne 1997 in Pergamon, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX. Kazı Sonuçları Toplantısı, p.100 (93-109)

Figure 3.24. Protective shelter over the Late Roman and Archaic Lydian houses, Sardis, 2003.

Figure 3.25. The mosaics covered with earth in the Bouleterion, Aphrodisias, 2003.

Figure 3.26. Drainage of the ground water from the sanctuary area, Klaros, 2003

Figure 3.27. The Byzantine city wall supported with pillar, Metropolis, 2003

Figure 3.28. Supporting the leaning wall of the basilica stoa, Ephesos, 2003

In another case, Sardis, the Late Roman wall painting in the apsidal room of the town house is cleaned and consolidated through some cosmetic fills and in-painting done with acrylic emulsion panting[220]. In the Terrace House II at Ephesus, the wall paintings in the *Vogelzimmer* in the Residential Unit 2 were consolidated (Figure 3.29).

Another common intervention is applied to the mosaics, which have problems. The mosaics generally need to be consolidated through various methods such as cleaning, partial extraction of soluble salts and consolidation of the parts tend to detach.[221] The mosaics at the Neon Library were consolidated in 1997[222] (Figure 3.30). In some cases, the mosaics were lifted and then consolidated such as the ones in the Basilica at Xanthos Letoon[223] (Figure 3.31). The marble elements such as statues and busts are the parts of IAH, which generally needs to be consolidated. For instance, during the excavations in 1966 in Ephesos, various marble elements were consolidated. At the Terrace House II, the surface of some marble inscription blocks had a problem based on lost in the crystals due to effects of the weather. In another case, the boy's statue with fractured surfaces was discovered in the Baths of Scholasticia. These problems were solved through a material called *Steinhärtungsmittel*. Besides, the youth's head covered with thick sinter layer was decreased with the scalpel (Figure 3.32).[224] In another case, at Klaros, the calcareous patinas on the surface of the marble statues were cleaned, and the deposits were removed in the Temple of Apollo.[225] In Aphrodisias, the white and grey revetment panels of the Bouleterion's orchestra pit are cleaned and, the gaps between these panels are filled with new marble pieces.[226] As shown in the examples, some interventions is applied in order to eliminate the problems those threaten the architectural decoration.

<u>To consolidate the self-carrying capacity of the architectural and building elements</u>

Some interventions generally provide consolidation of the architectural and building elements, which loose its integrity and carrying capacity. The consolidation of the walls, column capitals, blocks with relieves and friezes, seating elements are common intervention types. The architectural elements are generally consolidated by joining its broken parts. For instance, in Nysa, the broken parts of the Ionic capitals and capital of the ellipsoidal column found through the sondage at the Bouleterion were joined through steel-chromium, araldite

[220] Greenewalt, Jr., C.H., 2005, Sardis Archaeological Research and Conservation Projects in 2005, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, 28. Kazı Sonuçları Toplantısı 2.cilt, p.747 (743-56).
[221] Mora, P.,1995, Conservation of Excavated Intonaco, Stucco and Mosaics, in N.P.Stanley Price (ed), ibid., p.93 (91-100).
[222] Wealkens, M. and et all., 1999, The 1997 Excavation Campaign at Sagalassos and Dereköy, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX. Kazı Sonuçları Toplantısı II, p.295.
[223] Courtils, J.Des & Laroche D., 1999. Xanthos Letoon 1997 Kazı Raporu, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX.Kazı Sonuçları Toplantısı II, p.134 (131-137).
[224] Dawid, M. & Dawid, P.G., 1972-1975, Restaurierungsarbeiten von 1965-1970, *Öjh*, Band L, ,p.535-7.
[225] Geniere, J. De la, 1999, 1997 Yılı Klaros Kazısı, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX.Kazı Sonuçları Toplantısı, p.127 (125-9).
[226] Smith R.R.R., Rate, C., Aphrodisias 2005, In T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 28. Kazı Sonuçları Toplantısı, 2.cilt. p.64 (63-8)

and nickel.[227] In another case, Side, the broken parts of the column shafts were joined[228] (Figure 3.33). In the Miletos Theater, seating blocks located at the second cavea, which are not stable in original place, are removed, and their foundations are consolidated through lime mortar.[229]

As stated above, the walls are among the most damaged elements of IAH. The common problem is emptied joints and leaning wall. For instance, at the Theater of the Hierapolis, there is problem at the north wall due to leaning and damaged arch on it. The wall was initially deconstructed and then rebuilt through insertion new blocks. In this process, some stone blocks are joined through clamps (Figure 3.34).[230]

The problems in walls are also common, and the general intervention is to insert mortar in joints. In Iasos case, the walls of Agora are consolidated through employing a particular kind of mortar in order to fill the spaces among the blocks and reinforce the structure.[231] In another case, Sardis, "…the wall stumps are consolidated and capped with stone, brick, mortar and a top surface of slate, which both protects the stump …".[232] Besides, at Pergamon, the walls of the 'Building Z' are consolidated in 2005.[233] As it is exemplified, some conservation interventions are applied in order to consolidate self-carrying capacity of architectural and building elements.

Figure 3.29. *Vogelzimmer* in the Residential Unit 2, Terrace House II (Source: Accessed by http://www.oeaw.ac.at/antike/ephesos/hh/hh2/hh2wandmalerei/hh2wandmalerei.html)

[227] İdil, V., 1999, Nysa Kazısı 1997 Yılı Çalışmaları, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX.Kazı Sonuçları Toplantısı II, p.355. (353-357).
[228] İzmirligil, Ü. 1993, Side Tiyatrosu ve Çevresi Onarım,Düzenleme Çalışmaları (1992), In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XV. Kazı Sonuçları Toplantısı II, p.245 (243-52).
[229] Von Graeve, V., 2005, ibid. p.212.
[230] Ferrero, D. De B., 1995, 1993 Yılında Frigya Hierapolisinde Kazılar ve Restorasyonlar, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XV. Kazı Sonuçları Toplantısı II, p. 344.(341-50).
[231] Berti, F. 2000, The Work of the Italian Archaeological Mission at Iasos in 1998, In T.C. Kültür Bakanlığı, Anıtlar ve Müzeler Genel Müdürlüğü, 21. Kazı Sonuçları Toplantısı, 2.cilt, p.164.
[232] Greenewalt, Jr. C.H., 2005, Sardis Archaeological Research and Conservation Projects in 2005, In T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 28. Kazı Sonuçları Toplantısı, 2.cilt, p.747 (743-56).
[233] Pirson, F., 2005, Pergamon – Yeni Araştırma Programı ve 2005 Yılı Çalışmaları, In T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 28. Kazı Sonuçları Toplantısı, 2.cilt P. 507 (493-512).

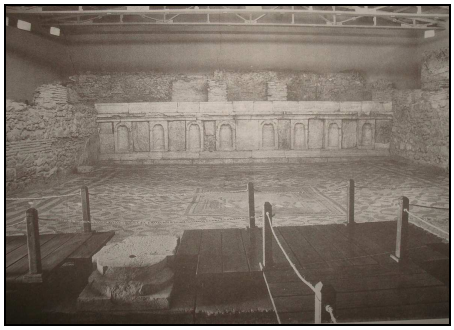


Figure 3.30. Consolidated mosaics of the Neon Library (source: Patricio T. and et all., 1999, p.311)

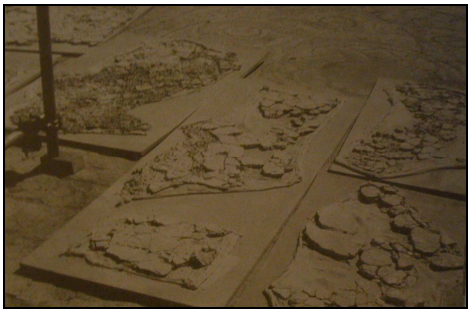
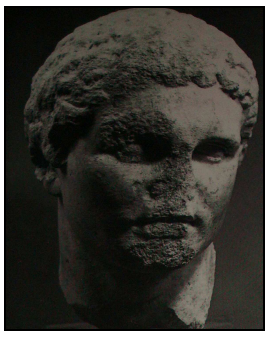


Figure 3.31.The lifted mosaics in the Basilica at Xanthos Letoon (Source: Courtils, J.Des & Laroche D., 1999, p.137)



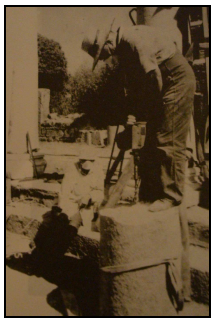


Figure 3.32. The youth's head covered with thick sinter, Ephesos (Source: Dawid, M. & Dawid, P.G., 1972-1975, p. 539)

Figure 3.33. Preparation of the broken part of the column shafts for consolidation, Side (Source: İzmirligil, Ü., 1995, p.252)

Figure 3.34. Consolidation of the leaning wall at the north of the Theater, Hierapolis (Source: Bernardi, D.F., 1995, p.348)

To provide architectural integrity

The conservation interventions explained above are generally related with the treatments providing integrity in fabric. However, some interventions not only aim to conserve integrity in fabric, but also architectural integrity as well. Before explaining architectural integrity, the term 'integrity' is explained briefly in terms of its use in the preservation discourse. Integrity is a means of the wholeness and intactness of heritage and its characteristics.[234] The definitions on integrity have been changed throughout the history. In the 18th and 19th centuries, 'integrity' referred to material and artistic unity that generally resulted with stylistic restorations. Integrity is related with the preservation of both original and the wholeness in terms of modern conservation principles. It is considered as "… a tool for the identification of elements that make up an organic whole" and "mutual relationship of such elements within the whole and the setting".[235] From my point of view, architectural integrity is also related with the identification of the parts of a whole. It associates with providing unity in the architectural elements in order to avoid damage to the original material due to being in ruined state and fragments. It does not associate with material unity and artistic unity, which lead to 'stylistic restorations'. Besides, it is not related with the integrity caused through re-erection activities such as anastylosis and restoration. For instance, the broken column bases in the Theater at Nysa were joined through stainless steel dowels and araldite adhesive[236] in order to provide their architectural integrity. In another case, the broken fragments of the blocks of the Antonine Nymphaeum at Sagalassos were joined "… by means of an epoxy mix, sometimes combined with fiber-glass reinforcing rods embedded in

[234] WHC, 2005, Operational Guidelines for the Implementation of the World Heritage Convention. Retrieved November 22, 2008 from http://whc.unesco.org/archive/opguide05-en.pdf.
[235] Jokilehto, J., ibid., p.299.
[236] İdil, V. and Kadıoğlu M., 2005, 2003 yılı Nysa Kazı ve Restorasyon Çalışmaları, In T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 26.Kazı Sonuçları Toplantısı 1. cilt, 24-28 Mayıs 2004 Konya, Ankara, Kültür ve Turizm Bakanlığı DÖSİMM Basımevi, p.392.

an epoxy grout"[237]. Besides, the broken sima and geison blocks of the Propylon at Magnesia ad Meander were joined[238] in order to provide architectural unity in blocks (Figure 3.35). These interventions aims not only to consolidate some existing blocks rather provide architectural integrity.

To provide integrity in design of a building element apart from its authentic location

In some cases, the architectural elements of a particular building element are gathered and placed in another location apart from its authentic location. The interventions provide integrity in design of some building elements such as a pediment and an arch independent from its authentic location. Therefore, the objective of some interventions is to provide integrity in design of a building element. It is also not related with material unity and artistic unity, which lead to 'stylistic restorations'. For instance, in case of the west pediment of the Artemis Temple at Magnesia ad Meander, the architectural elements were re-assembled and placed on the ground near to its original location. In another case, in the south pediment of the Trajan Temple at Pergamon, the architectural elements were re-assembled and placed on the stylobate (Figure 3.36).

To ensure integrity in architectural design

Some conservation interventions ensure integrity in architectural design by gathering architectural blocks and placing them in their original location. In general, integrity in architectural design is provided for a specific building element such as a pier, wall and pediment. In general, integrity is rarely ensured for the architectural design of the whole structure. Besides, it does not refer to the material unity and artistic unity, which is resulted with 'stylistic restorations'. In this context, the interventions providing integrity in architectural design are categorized into two groups in terms of its scale; the first, interventions providing integrity in architectural design in the scale of a building element, and the second, interventions providing integrity in architectural design in structure scale. For instance, in the Magnesia ad Meander, the blocks of the cross pier in the Agora-basilica, which are gathered and re-erected in their original location, provide integrity in the architectural design of the cross pier (Figure 3.37). In some cases, conservation interventions provide integrity in the architectural design of the whole IAH. Anastylosis, restoration and reconstruction are the intervention types, which have potential for providing integrity in architectural design of IAH. For instance, the intervention in the Bath-Gymnasium Complex at Sardis, as an important case of reconstruction, provides integrity in the architectural design in structure scale (Figure 2.2). In that respect, the objective of these interventions is to provide integrity in architectural design of the whole structure.

[237] Wealkens, M. Ercan S., Torun E., ibid., p.76.
[238] Bingöl, O., 1999, Magnesia ad Meander(1996-1997), In T.C. Kültür Bakanlığı, Anıtlar ve Müzeler Genel Müdürlüğü, XX. Kazı Sonuçları Toplantısı II, 25-29 Mayıs 1998 Tarsus, Ankara, Kültür Bakanlığı Milli Kütüphane Basımevi, p.23.

In addition to this objective, the objectives explained above are also valid for the interventions of anastylosis, restoration and reconstruction. For instance, the anastylosis of the Northwest Heroon in Sagalassos is based on the replacement of existing blocks as much as possible in exact position. Besides, the completion of missing parts depends "… on the purpose of making the installation of original elements structurally possible"[239] (Figure 3.38). In another case, the stage building of the Theater at Hierapolis, the arches of the ground floor were restored by completing missing parts in concrete. In that respect, it also aims to consolidate the self-carrying capacity of arches. As exemplified, the conservation interventions have various objectives as explained above.

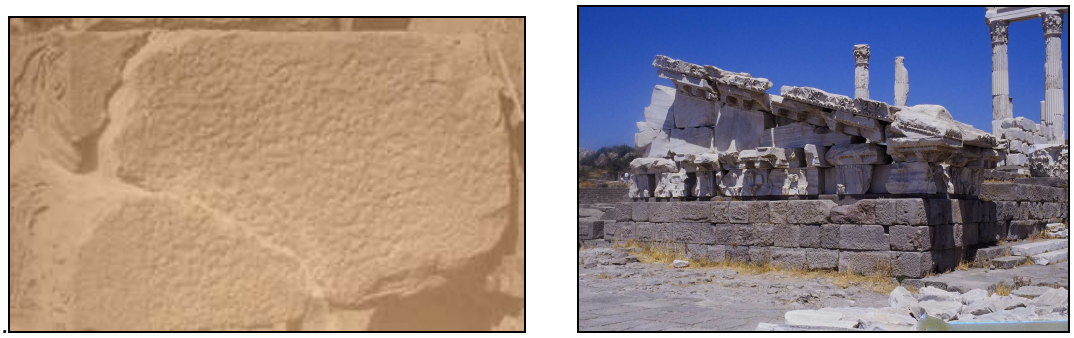


Figure 3.35. Joining of the fragments of the Propylon, Magnesia ad Meander (Source: Bingöl, 1999:31)

Figure 3.36. The south pediment of the Trajan Temple after re-assembling, Pergamon.

Figure 3.37. Re-erected blocks of the cross pier in the Agora-basilica, Magnesia ad Meander (Source: Bingöl, O., 1999, p.30)

Figure 3.38. The state of the Northwset Heroon after anastylosis, Sagalassos (Wealkens, M., Ercan S., Torun E., 2006, p.73)

[239] Wealkens, M., Ercan S., Torun E., ibid., p.70.

3.2.1.3. Interpretation and Presentation Interventions and Their Objectives

Throughout the history of preservation, the issues on displaying IAH have been among the main concerns of professionals. In the past, presentation[240] is viewed as only the concern of professionals, who deals with archaeological remains and includes crucial decisions about them. In recent years, however, the issue of display has been viewed as among the main concern of all stakeholders dealing with archaeological remains and, the concept of presentation is broadened through interpretation as explained in chapter 3.1.1. There have been extended studies on interpretation and presentation. Today, every preservation act is viewed as communicative act, [241]which enable people interact with archaeological remains. The term 'presentation'[242] refers to the content and tools of communicating with past in 1990's. However now, it is explained as "…carefully planned communication of interpretative content through the arrangement of interpretative information, physical access and interpretative infrastructure…".[243] I completely agree this statement. Before explaining presentation, it is necessary to define three terms; interpretative information, physical access and interpretative infrastructure, which are viewed as the essential parts of presentation. The interpretative information is related with the content of information, which is constructed through participation of public. On the other hand, presentation is closely related with physical access, which associates with designing methods for approaching and reaching archaeological remains in order to provide their accessibility. The presentation infrastructure includes tools, which are basic services and systems for presenting archaeological remains effectively. As explained in the Ename Charter, they comprise physical installations, facilities, and areas connected with archaeological remains. Arrangement of three components is related with the content of information, in other words, what is to be told. Besides, "…carefully planned communication of interpretative content…", as worded in Ename Charter, means the ways of telling information and setting decisions on how to share information on archaeological remains with public. It is among basic components of presentation**.** Accordingly, the definition that explains presentation as the tools and ways of telling the content, which is defined through interpretation, is reasonable. Besides, it is possible to define presentation through the Figure 3.39.

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[240] Up to ends of 1990's, while 'presentation' is the common term, which is used for providing public access and making IAH and site understandable for visitors, the term 'interpretation' was not common. For instance, Sivan entitled the study as 'The Presentation of Archaeological Sites' (De la Torre, M. ed. The Conservation of Archaeological Sites in the Mediterranean Region, An International Conference Organized by the Getty Conservation Institute and the J.Getty Museum, 6-12 May 1995, pp.51-59).

[241] ICOMOS, 2007, The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites, preamble. Retrieved June 11, 2008 from http://www.enamecharter.org/downloads/ICOMOS_Interpretation_Charter_EN_10-04-07.pdf.

[242] For Sivan, it is based on interpretative choices and brings history to life by using survived archaeological evidences and remains. It should enable visitors to communicate with archaeological remains and structures (1997 51-2).

[243] ICOMOS, 2007, The ICOMOS Charter for the Interpretation and Presentation of Cultural Heritage Sites, definitions. Retrieved June 11, 2008 from http://www.enamecharter.org/downloads/ICOMOS_Interpretation_Charter_EN_10-04-07.pdf.

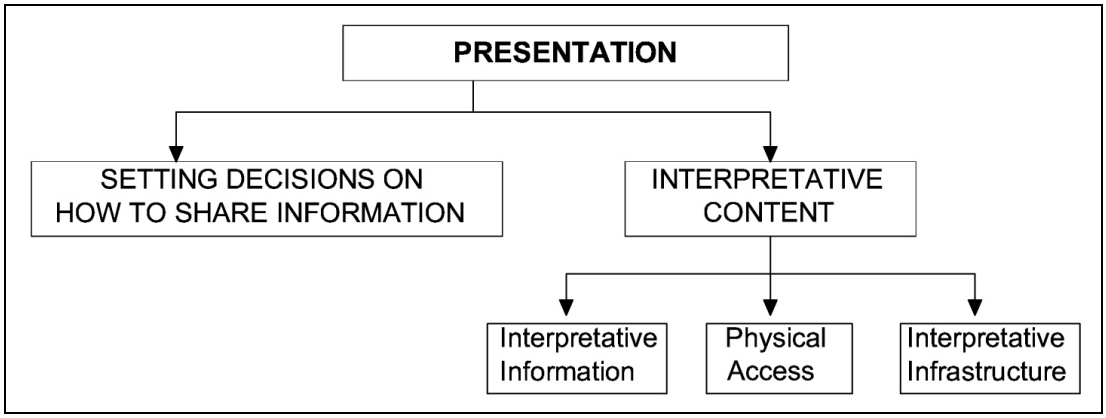


Figure 3.39. Diagram showing components of presentation

In current practice at Anatolia, the content of information about archaeological remains is generally defined by the experts dealing with them as mentioned in chapter 3.1.1 and then, this information content is shared with public. In general, the information content generally includes name and construction date of IAH, its history and architectural characteristics of a particular period, even if it has multiple layers. For instance, the information on the Byzantine shops at Sardis is limited with its name written in Turkish and English (Figure 3.40) similar to other IAH in site. In case of Ephesos, the information content is generally related with the name, construction date written in Turkish and German as shown in Figure 3.41. However, in general, the information on how IAH was founda and how it was intervened is rarely given. For instance, the content of the information about the South Gate of the Tetragonos Agora is on the date of construction, the changes in the time of Emperor Nero, the content of the inscriptions carved on the stone blocks and its demolishment. Besides, there is information on its re-erection such as its date, the names of the architect and the sponsor firm as shown in Figure 3.42.

In general, the common tool for providing physical access to IAH is to guide visitors starting from the entrance of the archaeological site and designing walkways. For instance, in the Aphrodisias, the visitors are guided through information panels showing the ways of reaching IAH within the site and the tours designed for visitors. The tours guide visitors by showing access to particular IAH. Designing walkway is related with what is worthy of being viewed and how close to view IAH. For instance, at Sardis, a walkway and a small balcony, which allow visitors to make a closer look to the Roman and archaic layers, were designed. In another case, Sagalassos, the wooden walkway in the Library provides access and makes a closer look at the mosaics (Figure 3.30).

Interpretative infrastructure includes the equipments and tools such as information panels, theatrical shows and meeting desks that are used for conveying information content. The most common tool used for conveying information is information panels. Various types of information panels are used as an infrastructure. For instance, at Pergamon, the information on IAH is conveyed through metal panels including texts in Turkish, English and German, drawings of plans, sections and etc.[244] In some cases, new parts of the structure as shown in the South Gate of the Tetragonos Agora at Ephesos is used as an information panel. In some cases, theatrical shows are used as interpretative infrastructures. For instance, at Ephesos, the theatrical show that is based on a fighting scene deals with ancient life and is not directly related with the Street of Arcadius (Figure 3.43), in which it is played. In some cases, it is necessary to design an infrastructure, a meeting desk in order to welcome visitors and to take entrance fee, as in the case of the Terrace House II in Ephesus. As shown in Figure 3.44, the current state of the infrastructure is not appropriate and compatible with the other interpretative infrastructures such as walkways and presentation panels.

From another perspective, presentation also involves use of IAH and insertion of IAH into the life of contemporary society. The uses of ancient places of performances are encouraged, and the principles of use and preservation are defined in international level (Verona Charter[245]). The use of ancient places of performances necessitates installation of interpretative infrastructure including various equipments and tools for contemporary purposes. Although various principles are defined, in current practices, the theaters are generally under threat of destruction due to inappropriate uses. For instance, the seats of the cavea and the foundation of the skene of the Theater of Sagesta used for performances have suffered much damage.[246] It is observed that the movement of audiences can be also threat for the fragile parts of the Theater. For instance, in Ephesos, the uses of every part of the Theater including the fragile parts, where necessary interventions were not applied for its consolidation, cause damages in the authentic parts due to lack of measures for preventing access. Besides, the structural problems, unpleasant views of the stages, access problems, and inappropriate uses are some problems of the Ephesos Theater.[247] On the other hand, considering that uses of ancient places of performances requires considering various issues such as kind of performance, toilets, number of spectators, stage setting and duration of the performance, it is a complex issue and problem, which must be deeply considered and discussed. As summarized above, the interpretative infrastructure comprises various equipments, tools and principles. The interpretative content necessitates making decisions

[244] Radt, W., 2006, Pergamon: Retoration, Preservation and Presentation, In Z. Ahunbay and Ü. İzmirligil eds. Management and Preservation of Archaeological Sites, İstanbul, p.65 (61-66).
[245] Council of Europe, 1997, Verona Charter on the Use of Ancient Places of Performance adopted at the International Colloquy held in Verona. Retrieved December 22, 2008 http://www.coe.int/t/dg4/cultureheritage/Source/Resources/Texts/Verone_EN.pdf.
[246] D'andria, F., 2006, Reuse and Presentation of Ancient Theaters, In Z. Ahunbay and Ü. İzmirligil eds. Management and Preservation of Archaeological Sites, İstanbul, p.82.
[247] Öztürk, A. 2006, Re-use Problems Related to the Great Theater at Ephesus, In Z. Ahunbay and Ü. İzmirligil eds. Management and Preservation of Archaeological Sites, İstanbul, p.96.

on the presentation of IAH by sharing information and strategy. With regards to the definition of interpretation and presentation, the interventions have certain main objectives as explained below.

Objectives of Interpretation and Presentation Interventions

The interventions have two main objectives:

- to educate public and
- to gain financial resource.

To educate public

It is a truism that IAH of Antiquity has educational value, which is supported through the basis of "promotion of public awareness".[248] For De la Torre and Mac Lean, "a site provide lessons in history, cultural expression, art, architecture, social development and conflict …".[249] It is also true for IAH, which is generally part of a site and gives variety types of information. For instance, the interventions on the Temple of Trajan in Pergamon educate visitors in terms of the aesthetic, artistic qualities and architectural characteristics[250]. Considering the didactic value of archaeological remains for contemporary society, it is inevitable to treat IAH in order to educate public. Besides, the purposes of some interventions are to reveal and emphasize the educational value, which is among the main values of antique IAH.

To gain financial source

It is a truism that economic (monetary) potential of IAH is among the main basis that shape decisions in relation with interventions. IAH, as a part of cultural heritage, is an important economic resource, and tourism is the basic way of realizing this economic potential of cultural heritage.[251] The interventions having potential to attract tourists are viewed as tools for sources of income for some governments. In case of the Tel Megiddo, the aim is to increase tourism and attract local visitors to site.[252] In another case, Ephesus is a significant center as a tourist attraction (Figure 3.45) and recreation. It had nearly 1.216 billion incomes in 2007. It has given the site economic value.[253] In addition, the potential of IAH for using and

[248] Taken form the European Convention on the protection of the archaeological heritage, article 9 from E Madran, & N. Özgönül, N. (eds.), 1999, International documents regarding the preservation of cultural and natural heritage, Ankara, METU Faculty of Architecture Press, p.83.
[249] 1997, The Archaeological Heritage in the Mediterranean Region, In M. De la Torre (ed.), The Conservation of Archaeological Sites in the Mediterranean Region, An International Conference Organized by the Getty Conservation Institute and the J.Getty Museum, 6-12 May 1995, p.9.
[250] Nohlen, K., ibid., p.91.
[251] De la Torre, M. and Mac Lean, M., ibid., p.10 (5-14).
[252] Killebrew, A., 1999, From Canaanites to Crusaders, The presentation of archaeological sites in Israel, Conservation and Management of Archaeological Sites, v.3., p.26.
[253] Demas, M., 1997, Ephesus, In M. De la Torre (ed.), The Conservation of Archaeological Sites in the Mediterranean Region, An International Conference Organized by the Getty Conservation Institute and the J. Getty Museum, 6-12 May 1995, p. 133. (127-49).

hiring for contemporary events such as performances, concerts and weddings is viewed as another common practice for generating income. Accordingly, among the main purposes of the interpretation and presentation interventions is to gain economic income from IAH.

As a result, the objectives of interventions explain not only the main purposes to be achieved, but the meanings of IAH for current society as well. In that respect, the interventions construct the current meaning of IAH through treating in relation with specific purposes. Besides, they cause some particular types of changes in IAH and affect its appearance and meaning. However, defining interventions as tools for change necessitate not only explaining the interventions and their objectives, but identifying them as tools of change. Therefore, the interventions are identified and classified as tools for change in the following part.

3.2.2. Types of interventions

In the preservation discourse, the interventions in IAH are classified in relation with various parameters such as objectives of interventions and scales of interventions. For instance, Stubbs classified interventions in relation with the possible scale of physical intervention starting from unexcavated parts to archaeological reconstructions[254].

Figure 3.40. The presentation panel and given information for the Byzantine Shops, Sardis.

[254] The interventions are classified into twelve groups such as discovered sites that remain unexcavated, backfilled sites which are periodically presented, above-ground ruins as found, completely restored ruins, archaeological reconstructions and etc. (Stubbs, 1995:78-9).

Figure 3.41. An example of the presentation panel for the archaeological edifices, Ephesus.

Figure 3.42. Inscribed information on the South Gate of the Agora, Ephesos, 2008.

Figure 3.43. The theatrical show played at the Street of Arcadius, Ephesus, 2008.

Figure 3.44. The employee welcoming visitors at the entrance of the Terrace House II, 2008.

Figure 3.45. Many numbers of tourists visiting Ephesus in summer, 2008.

Some other cases[255], the interventions are classified into two groups according to their objectives; the interventions aiming conservation and the ones aiming at presentation. In this thesis, the types of interventions are classified according to the impacts of interventions in terms of the information conveyed through IAH and its appearance. These groups are as follows:

- Type 1. Intervention revealing archaeological remains in-situ and acquire information about them/ excavation,
- Type 2. Interventions transferring archaeological remains by emphasizing information on archaeological remains in-situ and causing changes in their appearance in various extent /protective measures, consolidation and etc.
- Type 3. Interventions transforming archaeological remains by emphasizing information on architectural integrity and/or integrity in architectural design and causing transformation in its appearance/anastylosis, restoration, reconstruction, re-assembling and etc.
- Type 4. Interventions interpreting and presenting archaeological remains by adding information in various extents and changing its appearance by inserting new installations /interpretation and presentation interventions.
- Type 5. Interventions causing illegibity in information and appearance.

Type 1. Intervention revealing archaeological remains in-situ and acquire information about them /excavation

IAH, which is unknown and has not been explained for centuries, is revealed through excavation. Excavation provides archaeological remains in-situ to be seen and acquires information on past cultures. Besides, it opens them to physical access and interpretation of the contemporary society. For instance, in excavation, some rough stones viewed as insignificant remains of the past are discarded, and some others accepted as significant remains are emphasized and preserved. Therefore, the archaeological remains are interpreted according to viewpoints of the ones dealing with its excavation. Thus, the interpretation is based on the interaction between IAH and the ones dealing with its excavation. Although there are various interactions and interpretations, excavation provides

[255] For Turan, the interventions at Ostia Antica are grouped according to their aims. Main two aims of conservation interventions are explained; interventions aiming to conserve directly the material of the structure and the ones aiming at presentation (1988:113,114). Sabri studies the interventions are in the archaeological site of Salamis, Cyprus and give a list of interventions including re-excavation/excavation, *anastylosis*/re-erection, reconstruction, reproduction, contextual display, liberation, removal of original fragments, repair, consolidation, restoration and temporary protection The interventions are classified according to their targets: interventions aiming presentation and interventions aiming conservation/protection (2001:112).

explanation of several issues about past cultures and changes the whole appearance of the archaeological remains, which have attractive appearance in terms of its ruinous state and untouched qualities. In general, the information is on how archaeological remains were used, how they were transformed, demolished and etc. As a result, excavation acts as tool for revealing archaeological remains in-situ and acquires information about them.

Type 2. Interventions transferring archaeological remains by emphasizing information on archaeological remains in-situ and causing changes in their appearance in various extent /protective measures, consolidation and etc.

Some types of interventions such as capping, lacunae, supporting with load bearing structures or moulds, consolidation of wall painting and frescos provide conservation by emphasizing information on archaeological remains in-situ. For instance, the detached tesserae[256] and deep crack in the agora's entrance arch, which have been consolidated[257] at Iasos, are conserved by emphasizing information on archaeological remains in-situ. In other cases, it is observed that the vault of the theater is supported with steel moulding at Side. In this case, although steel moulding was added, the interventions do not cause change in the information on archaeological remains in-situ. On the other hand, although some interventions are not directly applied to authentic fabric, they have potential to cause changes in the appearance of archaeological remains in various extents. For instance, the protective shelter acting as a measure for preventing damages in archaeological remains generally cause change in appearance in various extents. In the case of Sardis, the protective shelter over the Late Roman and Archaic Lydian houses causes changes in the appearance of the authentic remains, while emphasizing information on archaeological remains in-situ. In another case, the protective 'building' on the 'building Z' in Pergamon does not only affect and change the appearance of the archaeological edifice, but also changes the appearance of the site, the Acropolis. In the case of another intervention type, the capping on the walls of the Byzantine shops at Sardis, which covers top of the walls as another layer, distorts the authentic appearance and texture of stone walls (Figure 3.40). On the other hand, the Theatron at Magnesia ad Meander, which shows the evidences of the demolishment while it was constructed, is interpreted by emphasizing information on the archaeological remains in-situ and transferring authentic appearance revealed through the excavation. As a result, some conservation interventions transfer IAH by emphasizing information on archaeological remains in-situ and causing changes in their appearance in various extents.

[256] Berti, F., 2003, Iasos: Field Work 2001, In T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 24.Kazı Sonuçları Toplantısı 2. cilt, 27-31 Mayıs 2002 Ankara, Kültür ve Turizm Bakanlığı DÖSİMM Basımevi, p. 354.
[257] Berti, F., 2000, ibid., p.169.

Type 3. Interventions transforming archaeological remains by emphasizing information on architectural integrity and/or integrity in architectural design and causing transformation in its appearance/anastylosis, restoration, reconstruction, re-assembling and etc.

Some conservation interventions, which aim to provide architectural integrity and integrity in architectural design, cause changes in information and appearance of IAH in various extents. The interventions mainly include re-assembling, anastylosis, restoration, and reconstruction. Each intervention is explained in relation with the changes in information below.

Re-assembling refers to gather architectural elements. In that respect, it provides architectural integrity in some architectural elements such as columns and blocks that are used in various parts of the structure such as wall, architrave, sima and geison. Besides, it ensures integrity in the architectural design of some building elements such as pediment, arch and vault. For instance, re-assembling ensures architectural integrity in the column bases in the Theater at Nysa[258] and the wall blocks of the Antonine Nymphaeum at Sagalassos. Therefore, re-assembling transforms broken fragments, blocks into an architectural element. Both appearance and information of an architectural element become legible in various extents such as authentic design, construction material and techniques.

In the case of the Magnesia ad Meandrum, the east pediment of the Propylon and the west pediment of the Artemis Temple are the products of reassembling. In the case of the west pediment, a mixture that includes white cement, lime, marble dust and etc. and iron bars were used for joining architectural elements. The pediment was transformed into a form, which represents the authentic architectural design, through re-assembling. Therefore, architectural integrity is provided in the pediment by re-assembling.

In addition, the pediment acts as a valuable information source representing how pediment was constructed in the Hellenistic period and gives crucial information on the sizes, forms of the architectural elements, their relationship and joint details. However, the pediments were placed on the ground near a place to its authentic location. Therefore, re-assembling results with change in the location of a building element of the upper structure of IAH. The change is based on the choices of the ones dealing with them. Therefore, the change in location is important, and new location of the building element within the site must be well-designed. As a result, re-assembling acts as a tool for transforming archaeological remains through emphasizing information on the architectural design of an architectural element or a building element.

[258] İdil, V. and Kadıoğlu M., 2005, ibid., p.392.

In the preservation discourse, anastylosis has various explanations[259]. In this dissertation, anastylosis includes placing existing architectural elements on its original location on IAH within the limits of scientific information and existing architectural elements. In some cases, there is a necessity for completing some missing parts in order to re-erect existing architectural elements. It generally provides giving general impression of IAH and information on its architectural design. For instance, the Late Hellenistic Fountain House in Sagalassos, as an outcome of anastylosis, gives crucial information on the architectural design of the fountain. The information on the design, construction material, techniques, and workmanship of the façade are emphasized. Advanced architectural orders, permitting to check the accurateness of the design of the structure permit to treat in a scientific manner. In conclusion, anastylosis causes transformation in information and appearance of IAH in relation with its architectural design. Therefore, it causes changes in information from archaeological remains in-situ to architectural design.

Restoration has various meanings.[260] In this dissertation, restoration is based on re-erection of archaeological edifice within the limits of scientific information. However, restoration is not limited with the existing architectural elements; rather it gives opportunity to insert new material within the limits of scientific information. Besides, it generally provides giving general impression of IAH and information on its architectural design similar to anastylosis. For instance, the so-called Hadrian Temple at Ephesus and the Latrine at Hierapolis at Phrygia are some outcome products of the restoration by re-erecting authentic architectural elements and inserting new materials within the limits of scientific information. The current state of the Latrine, as an outcome of restoration, gives crucial information on the design and three dimensional characteristics of a public toilet of Roman period and its façade within the limits of scientific information. The intervention emphasizes the information on the plan scheme, design, construction material, techniques, and workmanship of the archaeological edifice and its façade (Figure 2.22). Similar to Latrine, the restoration in the so-called Hadrian Temple, which are explained in detail in the chapter 4, causes radical changes. As a first impression, it is possible to state that interventions emphasize the information and appearance on the authentic architectural design. In that respect, restoration causes transformations in IAH by emphasizing its architectural design.

In preservation discourse, reconstruction is a debated concept (see definitions in chapter 1). It refers to re-erect archaeological remains in order to give a complete picture of a structure.

[259] It was initially established by Balanos, who conducts the early interventions in Acropolis at Athens. The aim of these interventions is to elevate the monuments and give a more complete impression. According to Mallouchou-Tufano, the artistic and environmental values of the monumental buildings are upgraded.[259] From another viewpoint, "it aims to make the spatial character of a ruined structure visually more comprehensible by reinstating its lost original form, using the original material that is both in suitable condition and is located at the site".[259]

[260] It is defined as returning to an object its lost appearance and form (Burra Charter, The Australia ICOMOS charter for places of cultural significance. Retrieved October 18, 2008 from http://www.nsw.nationaltrust.org.au/burracharter.html. In Venice Charter, a specific definition that explains restoration as a highly specialized operation aiming to preserve and reveal the aesthetic and historic value of the monument is given (article 9).

Therefore, it also provides transformation archaeological remains into a standing structure without missing parts and causes extreme changes in information and appearance of IAH. It is possible to state that reconstructed IAH appears in integrity and perfection, which is not appropriate for its surrounding, which is composed of architectural fragments and ruins. Besides, it causes extreme changes in the spatial characteristics. In some cases, the reconstructed structure becomes a landmark within an archaeological site. Therefore, it is possible to state that reconstruction causes extreme changes in IAH and its surrounding. Although intervention based on hypothetical information is restricted, there are some IAH that are re-erected depending on hypothetical information[261]. In that respect, reconstruction emphasizing completeness in architectural design causes generally extreme changes in information and appearance of IAH in both structure and site scale.

As a result, some conservation interventions transform information on IAH and its appearance of IAH by emphasizing its architectural design. Besides, these interventions act as tools for constructing meaning and appearance of IAH in its new lifecycle. Although each intervention provides transformation, the extent and content of transformation are shaped in relation with varieties of factors such as quantity, quality of existing architectural elements, their potentials for re-assembling and etc. Besides, the interventions cause transformation in various scales ranging from an architectural element to architectural design of the structure.

Type 4. **Interventions interpreting and presenting archaeological remains by adding information in various extents and changing its appearance by inserting new installations /interpretation and presentation interventions**

The interventions provide interpretation and presentation of IAH by defining the content of information and conveying information by using several tools. The interpretation of the information content is generally related with the significance of archaeological remains for the contemporary society. Besides, the interpretation and presentation interventions have potential to give information on various issues such as ancient life, ancient uses of the archaeological edifice, an ancient event and the interventions on archaeological edifice. For instance, it is also possible to give information on various issues on how IAH was constructed, used and demolished by inserting presentation panels. It is also possible to convey information on the ancient lives, events and many other issues through theatrical shows. Besides, refuctioning giving special emphasis on the information on architectural utility of IAH is another tool for the interpretation and presentation interventions. For instance, the use of ancient theaters for performances is among the main intervention types

[261] For instance, re-erected façade of Sardis Bath and Gymnasium Complex, as a product of reconstruction, present an integral and complete façade of a Roman building through use of authentic and new materials for missing parts. On the other hand, re-erected “U” shaped facade having great contributions on the appearance and spatial characteristics of IAH is based on hypothetical information.[261] Therefore, it is a new creation.

emphasizing their significance as an utilizable architectural product. As in the cases of the Theaters in the Halikarnasoss, the Aspendos, and the Ephesus, some theaters have potential to serve for performances similar to their authentic functions. In some circumstances, performing some cultural events such as concerts, shows and performances requires addition of new installations and creation of safe places for public. On the other hand, some structures have potentials to serve for new functions. For instance, the use of stadium in Ephesus for traditional camel wrests[262] was an example of new use. Thus, refunctioning provides information on not only the authentic function, but current meaning of IAH for the contemporary society as well. Refunctioning, which insert IAH into the life of today's society, provides continuity in functional value. As a result, the interpretation and presentation interventions cause addition of new installations. Therefore, it causes changes in the meaning and appearance of IAH. The interpretation and presentation interventions opening IAH for the use of contemporary society insert IAH into cultural and social life of the current society by using various tools.

Type 5. **Interventions causing illegibity in information and appearance**

Some interventions cause illegible information, which do not provide legibility in IAH and its characteristics. In this case, it is possible to apply various intervention types. For instance, in theTemple of Dionysus in Teos, some parts of the steps of the crepidoma were constructed in a location, which corresponds to a column, and does not provide to access stylobate. From my point of view, if the steps were constructed for providing access to the stylobate, they would not have been placed in that location. On the contrary, if they were constructed for only giving information on the existence of steps, it would be better to give that kind of information in another location. In that respect, it is possible to state that the interventions in theTemple of Dionysus in Teos cause confusion and give illegible information. As it is exemplified, some interventions create confusion and cause illegiblity in information and appereance.

As explained above, the interventions act differently as tools for change. While some interventions cause transformation in the appearance and information of IAH in various extents, some others transfer them as they are. In that respect, the changes in IAH vary from intervention to intervention. Considering that the interventions, as tools for change in IAH, are shaped by various factors, there is a need for explaining the factors defining and shaping the interventions in order to understand the factors affecting the change.

[262] Demas, M., ibid., p.130.

3.2.3. The Factors Shaping Interventions

There have been several factors defining and shaping decisions on intervention. This part of the thesis argues that interventions in IAH are based on various factors, which can rarely be explored in a comprehensive manner. In the preservation discourse, the factors shaping interventions are generally studied for a particular intervention type. For instance, Mertens considers three basic criteria that frame anastylosis of stone buildings in archaeological sites; technical conservation, scientific information and aesthetics.[263] In the context of the thesis, the main factors that shapes decisions on interventions are categorized into three groups; the first; the potential of archeological remains as an information source, the second, the state of archeological remains and its surrounding and the third, the contemporary values and approaches.

Potential of archeological remains as an information source

Archaeological remains are the main sources of information and have great potential for acquiring information on past cultures. This potential leads researchers to explore the archaeological remains and sites. For instance, the excavation in the Lydian levels at Sardis having high potential as an information source on archaic fortification wall is to clarify the aspects of design, building history and chronology[264]. In another case, the research in Iasos was started due to the potentials of the coasts of Caria for finding a particular type of grave, which was discovered in the Phaistos at Crete in 1960's by Prof. Doro Levi[265]. However, some archaeological remains loose their quality, as a source of information, due to various factors such as treasure hunting and robbery.Therefore, the potential of archeological remains as an information source is a significant factor shaping decisions on excavation.

On the other hand, in the Trajan Fountain at Ephesus, the existing blocks having lack of information on the heights of column shaft does not permit to re-erect the structure in its authentic height. In that respect, the level of information and the potentials of archaeological remains as sources of information are significant parameters for shaping decisions on conservation interventions. Besides, considering that interpretation and presentation of IAH is directly related with defining the content of information conveyed to visitor, the potential of archaeological evidences as an information source is an important parameter for the interventions of interpretation and presentation. As it is exemplified, the potential of archaeological remains as sources of information is a significant input for shaping interventions on archaeological remains.

[263] 1995, Planning and Executing *Anastylosis* of Stone Buildings, In Conservation on Archaeological Excavations, With particular reference to the Mediterranean area, 23-26 August 1983, Italy, ICCROM, p. 113.
[264] Greenewalt, Jr., C.H., 2000, ibid., p.1.
[265] Berti F., 1993, Karia Iasos'u, in F. Berti and et all. Ed. Arslantepe Hierapolis Iasos Kyme, Türkiye'deki İtalyan Kazıları, çeviren: Erendiz Özbeyoğlu, p.119.

The state of archaeological remains and its surrounding

The physical state of the archeological remains and its surrounding such as the topographical and climatic conditions surrounding the archaeological remains have effects on shaping the interventions. In that respect, various parameters are effective in shaping interventions. These parameters are namely threats, physical state of architectural element and its problems, amount of survived architectural elements, potentials of architectural elements for re-assembling, potential of architectural element for placing in its authentic location, potentials of archeological remains for educating public and potentials of archeological remains for refunctioning as explained below.

Threats

It is a truism that the environmental conditions surrounding IAH has potential to cause problem in IAH. For instance, at Pergamon, the ditches between the walls of 'Building Z' and the walls on the slope are cleaned in order to protect 'Building Z' from dampness threat.[266] In another case, Iasos, the walls of the complex of Demeter and Kore tended to wash away due to landslide effects. Therefore, the walls were reinforced with wooden elements in order to preserve them[267]. Besides, in the Theater at Ephesos, the blocks at the upper parts of the cavea, which are not stable, had a great risk of falling.[268] Therefore, it is necessary to take some measures or consolidate them. In that respect, threats are among the main factors shaping interventions.

Physical state of architectural element and its problems

Any decision on the conservation of archaeological remains is directly related with its physical state and problems. For instance, in Perge, a specific intervention was implemented in order to prevent disintegration of cracked parts of the Dionysos relief and ensure in-situ protection.[269] In another case, in the Theater in Miletos, the stone blocks of the walls at the entrance of the corridor on the West wing, which are broken and damaged, are treated by inserting small stone pieces and lime mortar.[270] Besides, the physical state of the architectural elements is also significant factor that determines its potentials for treating through conservation interventions such as re-assembling and anastylosis. For instance, in the Antonine Nymphaeum in Sagalassos, the small gaps in the blocks were filled with epoxy mortar in order to improve their structural stability[271]. As exemplified, the physical state of archaeological remains and their problems are considerable factors in shaping the type of the conservation intervention and technique.

[266] Radt, W., 1999, ibid., p.100.
[267] Berti F., 2005, Italian Archaeological Mission at Iasos (Caria): The 2005 Campaign, In T.C. Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü, 28. Kazı Sonuçları Toplantısı, 2.cilt, p.112.
[268] Öztürk, A., 2006, ibid., p.96.
[269] İnan, J., 1987, Perge Kazısı 1986 Yılı Çalışmaları, In T.C. Kültür ve Turizm Bakanlığı, Eski Eserler ve Müzeler Genel Müdürlüğü, IX. Kazı Sonuçları Toplantısı, 6-10 Nisan 1987 Ankara, p.188.
[270] Von Graeve, V., 2005, ibid., p.212.
[271] Wealkens, M. Ercan S., Torun E., ibid., p.76-7.

Amount of survived architectural elements

The extent of change caused through some conservation interventions is generally related with the amount of survived architectural elements. For instance, re-erection of the columns of the Tholos at Kaunos is generally based on the number and character of survived architectural elements. It is stated that 95% survived architectural elements lead them re-erection.[272] In other case, Sagalassos, the anastylosis of the Northwest heroon and the Late Antonine Nymphaeum mainly depend on the large amount of original building elements.[273]

Potentials of architectural elements for re-assembling

Re-assembling potential is generally based on the amount, quality of survived architectural elements and their potentials being side by side. For instance in the Magnesia ad Meander, the main factors that lead to re-assemble the blocks of the west pediment of the Temple of Artemis is the amount and quality of existing blocks and their potentials being side by side. In some cases, insertions of new material are necessary for re-assembling existing blocks. For instance, in the Northwest Heroon in Sagalassos, some additions are made in order to re-assemble the original blocks.[274] Therefore, the potential of architectural elements for reassembling is another main factor in shaping some conservation interventions.

Potential of architectural element for placing in its authentic location

Another factor is related with the potentials of architectural elements for placing in original location. The authentic construction technique, which generally based on the use of dowels for vertical connections and clamps for horizontal connections, generally gives opportunity for finding exact position of each block through a research. For instance, in the Late Antonine Nymphaeum at Sagalassos, the re-erection is based on a prelimary research on the possibility of assembling of existing elements and establishing them on exact location.[275] In another case, on the west façade of the Celsus Library, the architectural elements having high potentials for placing in authentic location provide re-erection of the façade. Therefore, potentials of architectural elements for placing in their authentic location is a significant factor for shaping certain conservation interventions including anastylosis, restoration and reconstruction.

Potentials of archeological remains for educating public

Archaeological remains are unique sources of information about past cultures, which cannot be reached through historical documents. For instance, at Hierapolis, the early medieval structures of the 9th – 10th c. built on the Frontinus Street[276] are the evidences of changes in

[272] Öğün, B., 1987, Kaunos Kazı ve Restorasyon Çalışmaları, , In T.C. Kültür ve Turizm Bakanlığı, Eski Eserler ve Müzeler Genel Müdürlüğü, IX. Kazı Sonuçları Toplantısı, 6-10 Nisan 1987 Ankara, p.242.
[273] Wealkens, M. Ercan S., Torun E., ibid., p.72.
[274] Wealkens, M. Ercan S., Torun E., ibid., p.71.
[275] Wealkens, M. Ercan S., Torun E., ibid., p.72.
[276] Ferrero, D. De B., 1999, Hierapolis İtalyan Kazı Kurulu 1997 Dönemi Çalışma Raporu, In T.C. Kültür Bakanlığı Anıtlar ve Müzeler Genel Müdürlüğü, XX.Kazı Sonuçları Toplantısı II, p..265.

uses and importance of the street in the past, which cannot be generally reached in other documents such as epigraphic evidence and historical texts. Therefore, the archeological remains have high potentials for conveying information and educating public on various issues such as architectural characteristics, function of the main artery of the ancient times, changes in the function of the main artery, and the structures surrounding it. In that respect, the physical states of the archaeological remains and its surrounding, as the authentic documents, have potentials for educating public.

Potentials of archeological edifice for refunctioning

Archaeological edifices have different potentials for utilizing for contemporary purposes. Some archaeological edifices such as theatres, odeons and amphitheatres are viewed as "among the very few monuments still – in some cases – serving the purpose, for which they were originally designed"[277]. However, it is not possible to use all of these edifices and each part of a specific edifice. For instance, the Halikarnassos Theater having potential for serving various contemporary events such as concerts, theatrical shows, and fashion shows is refunctioned. In case of the theater in Side, while the lower cavea is suitable for seating spectators, it is not possible to use the upper cavea due to structural problems[278]. Therefore, the potentials of archaeological edifice for refunctioning vary form IAH to IAH. In conclusion, the potentials of archaeological edifice for refunctioning are another significant parameter for shaping interventiond.

Contemporary values and approaches

Besides some factors related with physical qualities of archaeological remains, there are some factors dealing with the approaches and values identified by current society. The factors generally affect interpretation and the significance given to archaeological edifice and its changes. These parameters are classified into to groups; the first, values and the second, research interests and approaches of the research groups.

Values

The values become one of the major issues of our time in the determination and preservation of heritage and selection of 'appropriate' methods of intervention.[279] Various contemporary values such as scientific research value, economic value and educational value have effects in framing and shaping interventions. For instance, scientific research

[277] Council of Europe, 1997, Verona Charter on the Use of Ancient Places of Performance adopted at the International Colloquy held in Verona. Retrieved December 22, 2008 from http://www.coe.int/t/dg4/cultureheritage/Source/Resources/Texts/Verone_EN.pdf.

[278] Günay, R. 2006, Ancient Theaters: Some Thoughts on the Preservation and Use in our day, In Z. Ahunbay and Ü. İzmirligil eds. Management and Preservation of Archaeological Sites, İstanbul, p.91.

[279] Matero, F., 2003, Preface, In F. Matero and J.M. Teutonico (ed.), Managing Change: Sustainable Approaches to the Conservation of the Built Environment, 4th Annual US/ICOMOS, the Graduate Program in Historic Preservation of the University of Pennsylvania, and the Getty Conservation Institute, Philadelphia, Pennsylvania, April 2001, US: Edwards Brothers, Inc., pp.vii.

value is among the main factors for making decision on excavation. I agree De la Torre and Mac Lean that "… the purpose of most archaeological inquiry is to develop reasonable and well-supported answers to significant hypothesis"[280]. In another example, current approaches and emphasis on improving the understanding of visitor, in other words education value, is another main factor shaping interventions. In case of the Iasos, the statement on the purposes of the efforts to "…improve the understanding for the visitors …"[281] in the sanctuary of Demeter and Kore indicates the emphasis on education value that shapes the intervention. As exemplified, the values are significant parameters in making decision on interventions on IAH.

Research interests and approaches of the research groups

The backgrounds and interests of the research groups and excavation directors shape how they approach IAH such as where to excavate, what to conserve and how to conserve. For instance, Wiegand thought that the excavations in Asclepion were almost finished in 1930, and led Boehringer to finish it throughout the time he left Pergamon. Boehringer's insists on excavating Asclepion in opposed to Wiegand[282] indicates that the interest of the one directing excavation is among the main factors shaping decisions in relation with excavation. In another case, Wiplinger states that "…the temple of Hadrian and the Church of Saint John – were put in hand those energetic new beginnings, which were strongly molded by the personality of Franz Miltner, the director of excavations…"[283]. This statement is the evidence for the interest and personality of the director as an essential parameter for shaping interventions on IAH. Besides, Josef Keil directed the excavation in Ephesos between 1926 and 1935 searched for the old Ionian city and Parthian Monument according to his personal interest.[284] Accordingly, the research interests and approaches of the research teams and directors are significant factors shaping interventions.

As a result, there are some basic factors, which shape the decisions on what to intervene, what to conserve, how to conserve, what to interpret and present. For instance, the selection of the area to be excavated is mainly shaped with the potentials of archeological remains as information source, interests and approaches of the research groups and values. In that respect, one or more than one factor can be fundamental parameters for shaping a particular intervention. Therefore, there is a need for examining validity of each parameter for each intervention (Figure 3.46).

According to the Figure 3.46, excavation is mainly based on the potentials of archaeological evidences as sources of information, values, research interests and approaches of the

[280] De la Torre, M. and Mac Lean, M., ibid., p.9
[281] Berti, F., 2005, ibid., p. 110.
[282] Radt, W., 2001, ibid., p. 326.
[283] Wiplinger, G. & Wlach G., 1996, Ephesus, 100 Years of Austrian Research Ephesus, p. 58.
[284] Wiplinger, G. & Wlach, G., ibid., p.42

research groups. Conservation interventions mainly depends on threats, physical states of the archaeological remain and its problems, amount of survived architectural elements, potentials of architectural elements for re-assembling, potentials of architectural elements for placing in its authentic location, values, interests and approaches of the research groups. The interpretation and presentation interventions mainly depends on the potentials of archeological remains for educating public, potentials of archeological remains for refunctioning , values, interests and approaches of the research groups. As shown, the potentials of archaeological evidences as sources of information, values, research interests and approaches of the research groups are the main parameters, which have roles in shaping each intervention throughout the new lifecycle of IAH.

3.2.4. Evaluation

As explained above, interventions have various objectives ranging from acquiring information on archaeological remains to educate public. However, each intervention has emphasis on certain objectives. For instance, excavation mainly deals with the information acquired from archaeological remains. While some conservation interventions are related with actions for preventing some risks, some others are based on a concrete problem rather than a threat.

On the other hand, some conservation interventions provide architectural integrity, integrity in architectural design in different scales. Accordingly, the main objectives of conservation interventions are to control existing state, prevent threats, consolidate damages, strengthen authentic material, and provide architectural integrity and integrity in architectural design. Besides, the interpretation and presentation interventions prepare archaeological edifice for the visits of public with regard to some basic decisions and strategies. As explained, there are differences on the main objectives of each intervention. Considering that the interventions in IAH are not individual actions, rather parts of a process, there is necessity to evaluate the objectives of interventions as a whole (Table 3.16) in order to reach some sound basis.

The table defining the objectives of interventions as a whole shows the main purposes that shaped IAH in its new lifecycle. In the new lifecycle of IAH, at first, excavation provides acquiring information and permits archaeological remains to be seen. The conservation interventions based on variety of objectives and factors provide transmission of archaeological edifice to future generations by defining the meaning and appearance of IAH. The interpretation and presentation interventions are applied in order to educate public and gain financial resource. In that respect, the interventions having specific purposes have roles for constructing meaning and appearance of IAH in its new lifecycle. Besides, each intervention has interpretation and presentation aspect. Both the objectives of interventions and the main factors explained above shape the decisions on how to intervene

archaeological remains in various aspects such as the types of interventions, the extent of re-erection and the content of information.

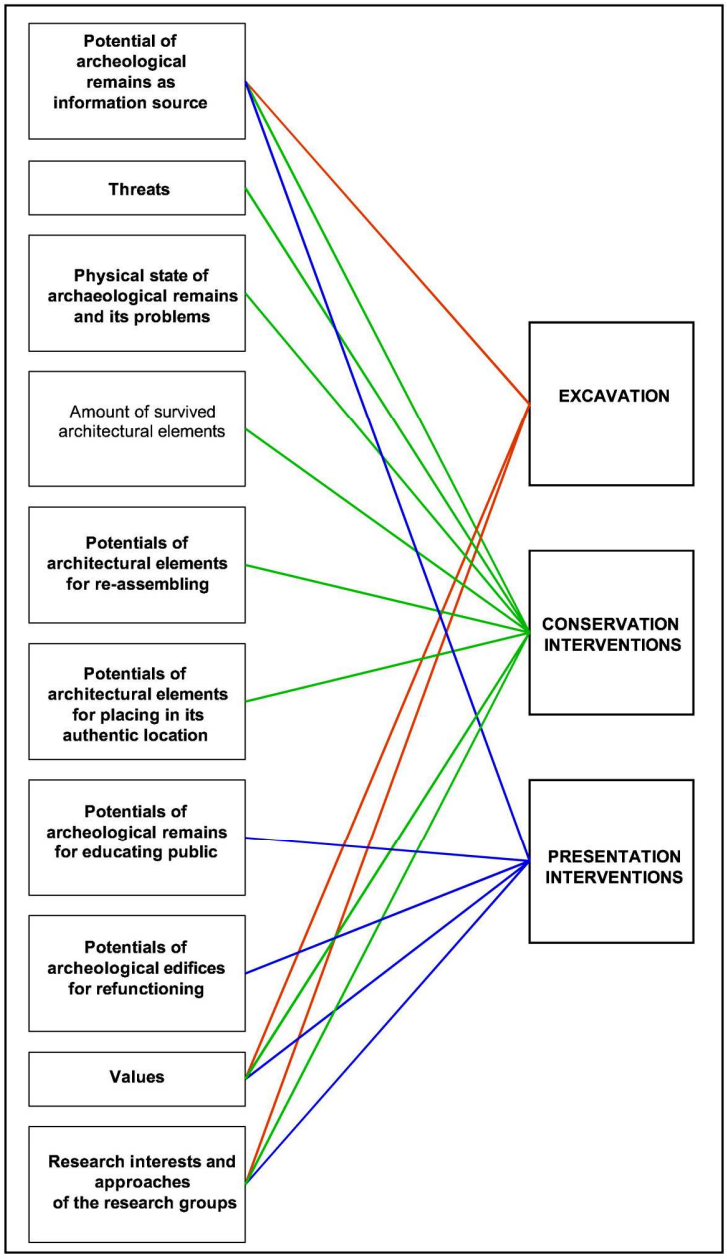


Figure 3.46. Main factors shaping Interventions

It is possible to state that a series of interventions (starting from excavation to interpretation and presentation interventions) overlaps and follow each other throughout the new lifecycle

of IAH. Therefore, they generate a ‘process’, throughout which meaning and appearance of IAH are defined in relation with the viewpoints and approaches of the contemporary society.

Table 3.16. Interventions and their objectives

	EXCAVATION	CONSERVATION INTERVENTIONS	PRESENTATION
OBJECTIVES	To construct meaning for archaeological remains in its new lifecycle		
	To acquire information from archaeological evidences	To control the environmental conditions and prevent threats	To educate public
		To eliminate the problems those threaten the architectural decoration	To gain financial resource
		To consolidate the self-carrying capacity of architectural elements and walls	
		To provide architectural integrity	
		To provide integrity in design of a building element apart from its authentic location	
		To ensure integrity in architectural design	
		To educate public	
		To gain financial resource	

In this process, it is possible to put interventions in an order (Figure 3.47). In this order, excavation is the initial intervention, which is overlapped by conservation interventions after excavation got started. As mentioned above, each intervention has interpretation and presentation dimension. However, interpretation and presentation interventions being at final stage of the process of defining archaeological remains and provides integration of archaeological remains into the contemporary life of the society. All interventions alter and shape the characteristics of IAH by defining its new appearance and meaning. Considering that 'restoration of restoration'[285] and maintanace are necessary for transferring IAH to next generations, IAH is treated again and again in its new lifecycle. Therefore, the interventions do not form a linear process, rather a cycle as shown in Figure 3.48. As a result, the interventions starting from excavation generate a cycle, in which excavation is an unrepeatable action and the conservation interventions are applied periodically. In this thesis, it is called as the 'intervention cycle'.

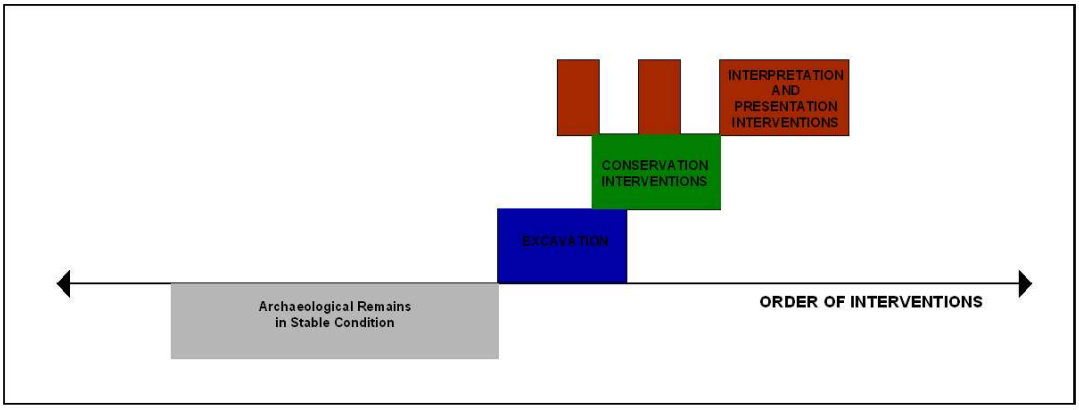


Figure 3.47. Order of Interventions

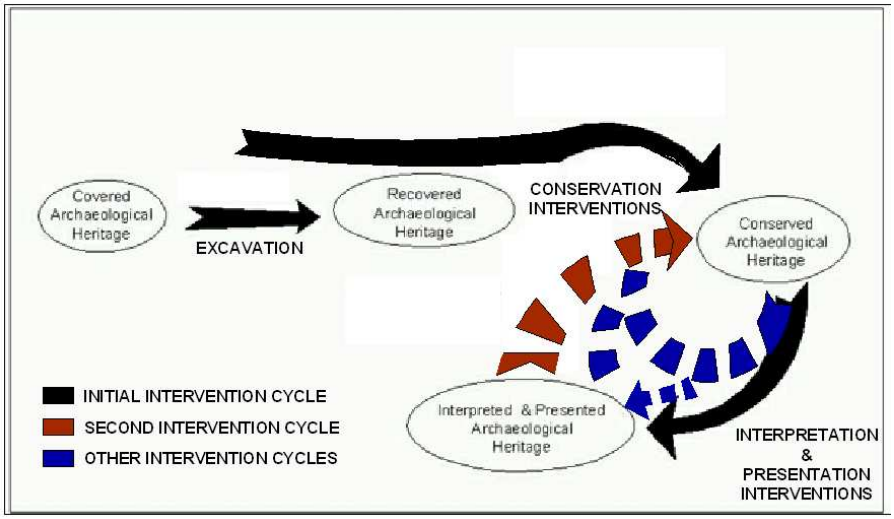


Figure 3.48. Intervention Cycles for IAH starting from prior to excavation

[285] Restoration of restoration is related with treating archaeological edifice, which was intervened before, in order to consolidate some problems in intervened archaeological edifice.

3.3. HOW IMMOVABLE ARCHAEOLOGICAL HERITAGE IS CHANGED: QUALITY & PATTERN OF CHANGE

The changes in IAH have specific nature and show some certain characteristics. Understanding the characteristics of change requires explaining in what way IAH is changed. In that respect, the change patterns and the quality of change are explained below.

Change Patterns

There are certain patterns of changes caused through interventions. The change patterns occur and re-occur throughout the intervention cycle. It is important to understand the change patterns, since they are standard outcomes of the process of changes. Throughout the intervention cycle, excavation always causes the same types of change 'transformation' and 'loss' in the archaeological edifice. The conservation interventions overlapping and following excavation have various effects on the change patterns as explained in the following section. For instance, some intervention approaches such as anastylosis and restoration causing transformations in various aspects such as form, material, construction technique, architectural value, document value and information value within the limits of scientific information generate the pattern by placing 'transformation' at the center. In another case, the intervention emphasizing preservation of archaeological remains as they are found during the excavation process causes transfers of the characteristics of IAH. Therefore, the interventions providing transfers of archaeological remains by emphasizing information on archaeological remains in-situ generates another change pattern by placing 'transfer' at the center. The interpretation and presentation interventions change the appearance by adding new characteristics and installations and adding some values such as social value and economic value. Besides, in some cases, it adds functional value to some archaeological edifices. In that respect, the interpretation and presentation interventions always cause the same type of change, in other words a common change type, 'gain'.

In this context, it is possible to define certain change patterns. There are two main groups of change pattern; 'transfer' and 'transformation'. Here, transfer refers to move the characteristics of IAH as they are starting from excavation stage until the end of the interpretation and presentation interventions. On the contrary, transformation refers to change the characteristics of IAH different from existing ones starting from excavation stage until the end of the interpretation and presentation interventions. In this change pattern, IAH is generally metamorphosed into a standing structure by adding new characteristics and information. These main groups have certain sub-groups categorized in relation with the effects of intervention on the information content such as 'addition' and 'loss'. Besides, there is a specific group causing transformation through some interventions based on hypothetical information. In order to define this group and distinguish it from other types of transformation, the word 'distortion' is preferred.

Change Pattern 1. Change placing ‘transfer’ at the center

In some cases, the interventions that cause the change type by placing ‘transfer’ at the center are classified into two groups; transfer of the existing characteristics and transfer of the existing characteristics while adding new information.

Transfer of the existing characteristics (i.e. Didyma Apollo Temple; the Late Roman and Archaic Lydian houses at Sardis and etc.): In this change pattern, some characteristics of IAH are transferred as they are until the end of initial intervention cycle. Excavation is overlapped and followed by conservation interventions, which place ‘preservation as found’ at the center. For instance, the interventions in the Apollo Temple in Didyma cause transfer of the existing characteristics, which were revealed through excavation.

Transfer of the existing characteristics while adding new information (i.e.Terrace House II at Ephesus and etc.): Some intervention approaches based on ‘preservation as found’ and supported by re-erection of some architectural and building elements result with this type of change pattern. The intervention causes transfer of many existing characteristics and upgrading of few others by adding new information. Here, it is called ‘transfer of the existing characteristics while adding new information’. For instance, many characteristics of the Terrace House II are transferred as they are found, while few columns were re-erected, the walls are heightened and etc. In this case, the main type of change is the transfer of the characteristics.

Change Pattern 2. Change placing ‘transformation’ at the center

This change pattern have some certain types, which is categorized into three groups; transformation, transformation of the existing characteristics while loosing existing information and transformation while distorting scientific information.

Transformation (i.e. the so-called Hadrian Temple and etc): There is another change pattern, which provides transformation of some characteristics such as design, architectural value, and document value, while some others such as cultural layers and document value are transferred as they were found. In that case, the change pattern ‘transformation of the existing characteristics’ is generated. For instance, the intervention in the so-called Hadrian Temple transformed archaeological evidences into a standing structure, while transferring existing evidences of other cultural layers.

Transformation of the existing characteristics while loosing existing information (i.e.Celsus Library in Ephesus, the Latrine in Hierapolis and etc.): In some cases, some characteristics such as form, document value and information value are transformed, while some others such as some cultural layers and virginity value are lost. This change pattern is based on certain conservation interventions, which provides architectural integrity while causing loss in

the evidences of some cultural layers, which is authentic and nonrenewable. For instance, the interventions in the Celsus Library causes transformation in form, material, architectural value, information value, aesthetic value and many others while causing loss in virginity value and some cultural layers.

Transformation while distorting scientific information (i.e. Bath Gymnasium Complex in Sardis and etc.): The change pattern is the results of re-erection of architectural elements out of the limits of scientific information. Several characteristics such as design, architectural value, information value and historical value are distorted due to the changes in the based on hypothetical information. Besides; the document value is lost without new information content is gained. In that respect, it shows a particular pattern called as 'transformation while distorting scientific information'. For instance, the intervention in the Bath Gymnasium Complex causes distortions in several characteristics and loss in cultural layers.

Quality of Change: Change as a 'Progress'? or a 'Regress'?

As explained above, the interventions cause various changes in the archaeological edifice. In some cases, they do not transform archaeological edifice into an improved or more developed state by transforming values and adding new scientific information. Besides, they cause loss in some existing characteristics and information. On the contrary, some interventions transform archaeological edifice into a developed state. In that respect, the changes cased through interventions do not always end with 'good' results. There is a necessity for explaining how good or bad the results of interventions are. Here, it refers to the quality of change, which relates to how good or bad interventions affect the characteristics of archaeological edifice. The quality of change associates with three standards: 'progress', 'moderate level' and 'regress'.

Progress

It is related with developing IAH into an improved state by adding scientific information as much as possible. The interventions adding new information without causing loss in existing ones are also called as progress. In that respect, progress is associated with addition of new information while transferring existing ones and/or replacing new ones. Two change patterns (transfer of the existing characteristics while adding new information and transformation) cause transformation of IAH into an improved state. In that respect, it is possible define them as a progress. For instance, the Terrace House II and the so-called Hadrian Temple giving information on different past cultural layers, architectural characteristics and contemporary interventions show a 'progress'. However, each change does not have the same level of progress.

Moderate quality

In some cases, the intervention approaches cause transfer of existing information without adding new ones and, some others cause loss in existing information and add new ones instead of it. These changes cause not a progress or a regress; rather they cause changes in ‘moderate level’.

The change patterns (transformation while loosing existing information and transfer of the existing characteristics) cause change in moderate level. For instance, the interventions on the Celsus Library, which causes loss of information on cultural layers and emphasizes information on architectural characteristics, led to a change quality in ‘moderate level’.

Regress

It refers to return archaeological edifice to a less advanced or worse state. Here, the quality of change, which results with loss in scientific information and addition of speculative information, is referred as a ‘regress’. Transformation while distorting scientific information is a change pattern, which led archaeological edifice in a worse state and generate a ‘regress’.

3.4. EVALUATION

As explained above, is necessary to consider interventions in relation with various issues such as factors, objectives and types. The interventions are not only ‘technical issues’; rather among the significant tools in defining and shaping the meanings and characteristics of IAH in its new lifecycle. Considering that interventions act as tools for making changes, the change generally does not only deal with a particular archaeological edifice, rather various layers, which comprise variety of evidences such as additions, removals of some cultural layers, and conversion of a particular structure into another structure. For instance, the Latrine in Hierapolis had the evidences of both latrine and its conversion into storeroom during the excavation and was found in demolished state. Then, it was re-erected and, the evidences of its use as a storeroom were removed during its re-erection. In that respect, the changes in the Latrine causes loss in the evidences of some cultural layers and are related with all the evidences of cultural layers, not just a particular type of structure, the Latrine. In that respect, the interventions give opportunity to shape and frame the characteristics of not only a certain type of a structure but shaping all the evidences of IAH and defining its new characteristics. Thus, interventions are tools for defining IAH and its new characteristics for the contemporary society. Besides, there are some issues and effects of interventions that are not sufficiently considered in the preservation discourse. These issues are explained as follows:

- interventions as phases of the change in IAH,

- interventions as factors for developing conflicts,
- interventions as tools for evaluating the relationship between principles of change and values,
- interventions as tools for 'value formation process'.

Interventions as phases of the change in IAH

Considering the state of IAH prior to excavation, it has specific characteristics due to its untouched qualities and virginity. However, this state of IAH is always changed through excavation and, archaeological remains are recovered and revealed. In that respect, excavation initiates and acts as a new stage in the new lifecycle of IAH. Conservation interventions generally overlapping with excavation causes changes in IAH. For instance, archaeological remains in-situ is transferred with its existing characteristics through some conservation interventions. In some other cases, it is transformed into a standing architectural product. Therefore, conservation interventions act as another stage in new lifecycle of IAH. In addition, the interpretation and presentation interventions cause changes in IAH by adding new characteristics. As a result of these interventions, IAH gain new characteristics. Thus, the interpretation and presentation interventions also act as another stage. Therefore, throughout this process, the state of IAH usually differs from the previous one and, interventions act as phases of a process, in which IAH is shaped. As a result, there is a great necessity for defining interventions as phases of changes in new lifecycle of IAH in order to understand the changes caused through interventions.

Interventions as a factor for developing conflicts

In some circumstances, interventions develop conflicts. The conflict is generally related with two issues; the first, conflict between values, which is explained above, and the second, conflict between the goals of intervention and efficiency of intervention. In some cases, the conflict between the goals of intervention and efficiency of intervention develops in time, whether there was not conflict in the time of implementation of intervention. For instance, the protective shelter over the Terrace House II made of composite material of polyetralourthylene (PTFE) and fiber glass was chosen due to its qualities such as waterproof, weather-proof, dirt-deflecting, UV-resistant and etc.[286] However; it looses its original qualities in time due to pollution on its surface and darkening. Therefore, the changes in the original qualities of the protective shelter have negative effects on the wall paintings and frescoes. In that respect, the protective shelter, which causes damages to authentic remains, does not fulfill the requirements of the main goal. As it is exemplified,

[286] Krizinger, F., 2006, The Terrace Houses in Ephesos, The New Shelter, In Z. Ahunbay and Ü. İzmirligil eds. Management and Preservation of Archaeological Sites, İstanbul, p.39.

there is possibility for developing conflict between the goals of intervention and efficiency of intervention. Therefore, it is important to predict the changes in the efficiency of intervention in time in order to anticipate possible conflicts. As a result, interventions sometimes act as a factor for developing conflicts.

Interventions as tools for evaluating the relationship between principles of change and values

Although the principles of change are not directly related with the values, there is an arrangement between the principles of change, which control how the changes in physical characteristics happen, and values. For instance, the approach in conservation interventions in the Latrine in Hierapolis, which emphasize re-erection of the architectural product of the particular period, cause inconsistency in intervention in terms of cultural layers. Therefore, it causes transformation in architectural value, document value, information value, education value, while it causes loss in existing information types and addition of some new information types. Thus, the conservation interventions do not ensure legibility in cultural layers. In another case, the Terrace House II, some walls are preserved as they are found during the excavation process. Besides, the fragments of some columns are re-erected and the walls are heightened. Therefore, it causes inconsistency in terms of the extent of interventions. In that respect, the intervention approach ensures and heightens the legibility in design, while it causes inconsistency in design.

In another case, the conservation interventions in the Bath-Gymnasium Complex at Sardis, which is re-erected in relation with hypothetical information, do not ensure reliability in change, while causing distortions in values. Thus, the principles of change having indirect relations with values affect the extent and content of information and the values as well. As a result, there is a need to consider the principles of change and values together in order to evaluate the changes in the characteristics of IAH as a whole.

Interventions as tools for 'value formation process'

As explained above, interventions do not sufficiently considered and evaluated in terms of their effects on values. The approach 'value formation process' predicting conflicts in values, changes in value types prior to application of interventions gives opportunity to revise the intervention approach. Besides, it permits revising the proposed change as a 'progress'. Therefore, it is necessary and significant to evaluate interventions in terms of the approach 'value formation process' in order to understand the effects of interventions on values and improve the quality of interventions. Thus, it is necessary to explain interventions as tools for 'value formation process'.

CHAPTER 4

SEARCHING FOR NEW APPROACH FOR INTERVENTIONS

As explained, interventions serve for various issues such as phases of change in IAH, tools for defining IAH and tools for 'value formation process'. They have great roles throughout the new lifecycle of IAH. Therefore, it is necessary to define a new approach, which provides to view the roles of interventions as tools for defining IAH. Besides, there is a need for developing an utilizable approach, which describes how IAH is defined and how IAH become different throughout its new lifecycle starting from excavation. It requires integrating change into this new approach. In that respect, the new approach associates with integrating change into the process, and the integration has certain basis and criteria, which needs to be defined. Besides, it is necessary to identify the criteria that shape the new approach and verify the approach through the case study in the following part.

4.1. THE CRITERIA FOR SHAPING NEW APPROACH FOR EVALUATING INTERVENTIONS

As explained in chapter 2, the interventions are mainly based on three criteria (legibility, consistency and reliability), which are defined as the principles of change, in current practice. However, defining principles of change and evaluating interventions through these principles are not sufficient for understanding the process, throughout which IAH is changed and shaped. In that respect, there is a need for explaining the criteria, on which the approach is based, below.

To evaluate the changes in IAH as a whole

In current practice, the interventions are generally shaped in relation with the interpretation of the experts and the significance given by them. Some certain characteristics of IAH are emphasized in relation with the choices of experts, while some others are ignored and viewed as 'insignificant'. In this context, it is possible to mention that the changes including what is lost and transformed are not generally considered sufficiently and ignored. Therefore, there is a need for developing an approach, which evaluates the changes in IAH as a whole in terms of not only 'gain', but also 'transformation' and 'loss'.

To view interventions as phases of the process

The interventions are generally viewed as individual actions, which are designed and evaluated separately from each other. Considering that the characteristics of IAH are shaped through not only a certain intervention type, but also series of interventions starting from excavation, it is necessary to evaluate these specific actions as a whole. It requires viewing each intervention as a phase in the whole process. In that respect, it is necessary to develop a comprehensive approach, which views interventions as phases of the process.

To insert the method 'value formation process'

In current practice and theory, the values are generally viewed as the factors shaping interventions. As explained above, the values viewed as significant are emphasized. However, the loss in values, loss in information content and value conflicts are not considered sufficiently in making decisions on interventions. Besides, the formation of the values throughout the new lifecycle of IAH is not considered sufficiently and integrated into the current practices. Therefore, there is a great need for integrating the changes in values into the new approach. In this respect, it necessitates to insert the method 'value formation process' into this new approach.

Defining how IAH is changed through interventions

It is significant to emphasize again that interventions are generally accepted as 'technical issues' in the preservation discourse. Considering that interventions act as the tools for defining and shaping the meaning and appearance of IAH, how IAH is changed and the results of the changes are not generally explained and evaluated. However, there is a great necessity for evaluating the results and impacts of interventions and designing an approach defining how IAH is changed through interventions. In that respect, it requires developing an approach, which explains the results and impacts of interventions in terms of how IAH is changed through interventions.

4.2. IDENTIFICATION OF THE NEW EVALUATION APPROACH 'NEW FORMATION PROCESS'

The new approach is related with certain criteria as explained above. It is a truism that archaeological heritage belongs to all human society (past cultures, current society and next generations). Considering that IAH has been identified in relation with the contemporary socio-cultural and socio-economic context, there is a great need for developing a critical approach to contemporary human approaches to IAH in order to understand what is transmitted to next generations and what is ignored. Besides, interventions following and

overlapping each other generate a new process, in which IAH is formed and defined, starting from excavation. In that respect, it is possible to define this new approach as a ‘new formation process’.

The ‘new formation process’ is based on the notion that understanding how the evidences of past cultures are defined through interventions in new lifecycle of IAH. In that respect, it is related with evaluating contemporary human approaches to archaeological remains. It attempts to understand the judgments and decisions on definition of IAH in order to identify its meaning for current society. It is an approach, through which the tools of changes in IAH, is discussed in terms of various issues and concepts such as the construction of meaning and appearance of IAH, what is transformed, lost and gained. In this ‘new formation process’, the interventions are defined as the phases of change. Defining interventions as phases of change is significant in order to improve effectiveness of interventions and integrate change into process. Developing an approach by putting the change at the center necessitates describing the states of archaeological edifice prior to implementation of intervention and after its implementation in order to make comparison between different states of IAH and explain effects of each intervention.

The approach ‘new formation process’ necessitates evaluating interventions step by step. The study develops the evaluation approach based on three main steps. Considering that each intervention acts as a phase in the process, as a first step, there is a necessity for describing interventions as the phases of the process. In the second step, the definition of interventions as tools for the ‘new formation process’ requires explaining the changes in the characteristics of IAH. Explaining changes in the characteristics depends on evaluation changes in physical and functional characteristics (form/design, material, construction technique, cultural layers and function) in terms of the principles of change as explained in chapter 2 and explaining the changes in values through ‘value formation process’. As a last step, it necessitates to evaluate the changes in terms of the quality of change and patterns of change in order to integrate the impacts of interventions into the approach ‘new formation process’. In that respect, the approach ‘new formation process’ and its steps are as follows:

Step 1. **Phases of Changes**

The phases of change directly match with describing the states of archaeological edifice in relation with prior and after application of interventions. The states of IAH are described starting from its current state until its state prior to excavation. This method of description is essential because it is not possible to develop this method for a recently started excavation of IAH. The states of archaeological edifice are grouped into four phases in order to understand the effects of each intervention type. The phases are examined layer by layer starting from the current state to early phase as follows:

Phase 1

The current state, of the archaeological edifice, which bears the evidences of interventions of conservation, interpretation and presentation. This phase corresponds to the final state of IAH at the end of the initial intervention cycle.

Phase 2

The second phase is related with the state of IAH throughout and after excavation.

Phase 3

Considering the change in IAH is started through excavation, there is a great need to describe its state prior to excavation. Therefore, the state of IAH prior to excavation matches with the third phase.

Phase 4

The last phase is related with the ancient design(s) of IAH in order to check the accurateness and reliability of the current design, if it is necessary.

Step 2. Explaining the changes in the characteristics

The explanation of the changes in the characteristics of IAH necessitates checking the changes in the physical and functional characteristics through principles of change and evaluating the changes in values through the 'value formation process'.

Explaining the changes in the physical and functional characteristics for each state

Explaining changes requires understanding the changes in the form/design, material, construction technique, cultural layers and function of IAH in relation with the principles of change. In that respect, there is a need to explain the levels of legibility, consistency and reliability of changes. However, each principle is not valid for each characteristic as shown in Table 4.1. For instance, the principle 'legibility' is valid for each characteristic. The principle 'consistency' is not valid for the construction technique, which differs in relation with some certain issues such as the state of existing elements, its structural stability. Besides, the reliability is valid for design/form and cultural layer, not for others.

Table 4.1. The validity of each principle in relation with physical and functional characteristics

	Design/Form	Material	Construction Technique	Cultural Layer	Function
LEGIBILITY	Applicable	Applicable	Applicable for interpret. & present. int.	Applicable	Applicable
CONSISTENCY	Applicable	Applicable	N.A	Applicable	N.A
RELIABILITY	Applicable	N.A	N.A	Applicable	N.A

Explaining the changes in values for each state

The 'value formation process' is applied by defining the value categories, change patterns in values and the relationships between changes in different values. As a result, the quality of change in values is evaluated.

Step 3. Evaluation the changes in IAH throughout its new life cycle

After describing and explaining changes in IAH, the results and impacts of the interventions are evaluated as a whole in order understand the changes in the authentic remains. The results are evaluated under two topics; patterns of change and quality of change. In that respect, it is necessary to verify the approach 'new formation process' through cases. This evaluation approach is applied to five archaeological edifices on the Curetes Street at Ephesus in order to check the validity of the approach 'new formation process'. IAH, which are treated through different intervention approaches, are chosen and, the changes are explained below.

4.3. INTERVENED ARCHAEOLOGICAL EDIFICES ON THE CURETES STREET

The archaeological edifices locating on the Curetes Street are selected in order to understand the changes in IAH scale and in the scale of Curetes Street in Ephesus. In that respect, the main characteristics of the Curetes Street are explained prior to evaluating the changes in each IAH in order to understand the whole, in which archaeological edifices are located.

Curetes Street

The valley between Panayırdag and Bülbüldag leading from the Library Square to government center, which was called as the Embolos in Antiquity, is commonly known as the Curetes Street at present[287] (Figure 4.1). It is out of the Hippodamian city plan and cuts it diagonally.[288] It is necessary to give a brief description on the historical development of the Curetes Street in order to evaluate the changes caused through interventions.

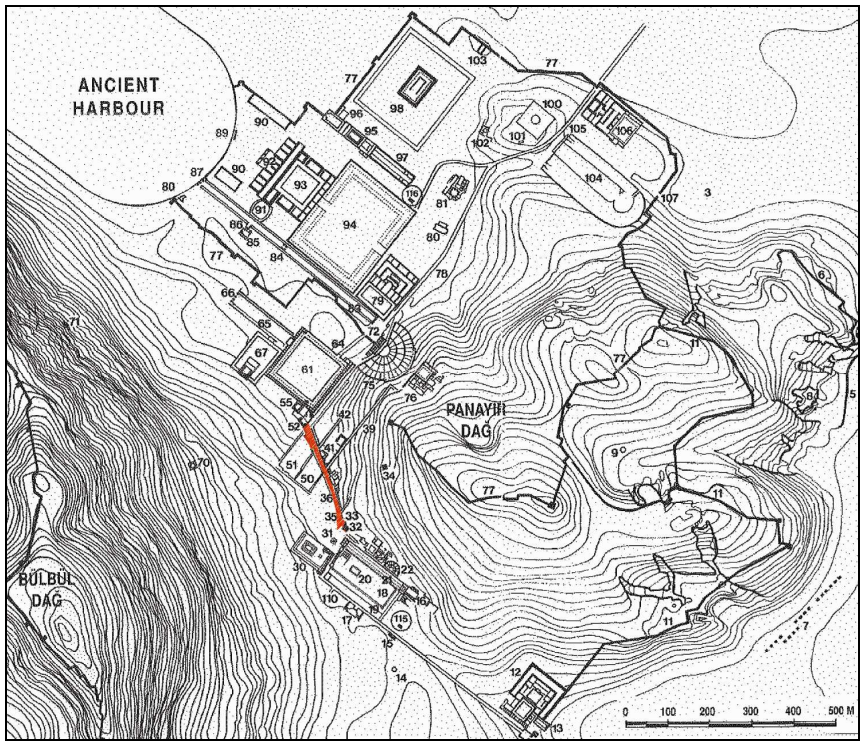


Figure 4.1. The location of the Curetes Street in Ephesos
(Source: Wiplinger, G. & Wlach, G, 1996:59)

In the Hellenistic-Roman city, the street had a ritual importance and used as way of the Artemission procession.[289] At the time of Augustus, it was a burial site with the graves, and its construction was probably finished at the end of Trajan's reign. The buildings and the street was repaired by using the spoils from the Prytaneion. According to the inscription, the

[287] Scherrer, P., 2004, The city of Ephesos from the Roman period to Late Antiquity. In H. Koester (ed.) Ephesos metropolis of Asia, An Interdisciplinary approach to its archaeology, religion and culture, USA, First Harvard Divinity School, p.6.
[288] Thür, H., 2004, The Processional way in Ephesos as a place of cult and Burial. In Ephesos metropolis of Asia, An Interdisciplinary approach to its archaeology, religion and culture, USA, First Harvard Divinity School, p.159.
[289] Scherrer, P., 2000, ibid., p.114.

street was called 'the magnificent ground of the city' after rebuilding in the Byzantine period[290]. The street and the buildings on the street was repaired and rebuilt many times.[291] For instance, the heroon at the southwestern end of the street, which was Hellenistic origin, was converted into fountain in the Byzantine period.[292]

The interventions starting from the beginnings of the 20th century has been applied in six periods in relation with the directors of the archaeological research as shown in Figure 4.2. The early interventions were mainly based on the excavations of the archaeological edifices in the time of Heberday as shown in light orange in Figure 4.2. Between 1904 and 1906, J.Keil excavated the west end of the Curetes Street. On the south side of the street, the Gate of Hadrian, the Heroon and the Octagon were discovered. On the north side of the street, the column drums of white marble that include the lists of the Curetes priests was found as shown in red.[293] In the following years, Miltner excavated the part in front of the Bath of Scholasticia between 1956-8.[294] Throughout the excavations, the so-called temple of Hadrian, the Fountain of Trajan, the so-called Alytarchus Stoa and the Terrace House I were discovered. Parallel with the excavations, the so-called Temple of Hadrian was re-erected in 1957-8. In the following years, the excavation was continued in various archaeological edifices, and the Terrace House I and II have been excavated. The Fountain of Trajan and the Memmius Monument were re-erected in 1962 and 1963 respectively[295]. Parallel with other interventions, the conservation interventions focused on the Library of Celsus between 1970 and 1978. Then, conservation interventions were applied on the South Gate of the Agora (1979-86), the so-called Alytarchus Stoa (1978-80) and the Terrace House II (1978-86).[296] The project based on the production of a sense of three-dimensional space of original design was applied on two upper housing units. Then, it was interrupted in 1986, after the construction of a protective structure over residential units 1 and 2. In 1999, the current protective shelter was constructed over Terrace House II. [297] The Curetes Street including various archaeological edifices, which are generally recovered and conserved, is the main axe for the presentation of the Ephesus.

Among thirteen recovered archaeological edifices (the Memmius monument, the gate of Herakles, the Terrace Houses I and II, the so-called Alytarchus Stoa, the Heroon, the Octagon, the Gate of Hadrian, the Altar of Artemis at the Triodos, the Celsus Library, the South Gate of the Agora, the Fountain of Trajan and the so-called Hadrian Temple), the

[290] Scherrer, P., 2004, ibid., p.6-21.
[291] Thür explains the changes in the street. For instance, it is explained that the structures of the lower *agora* were changed extensively (2004:177-184).
[292] Thür, H., 2004, ibid., p.159.
[293] Wiplinger, G. & Wlach G., ibid, p.38.
[294] Wiplinger, G. & Wlach G., ibid, p.66.
[295] Wiplinger, G. & Wlach G., ibid, p.76.
[296] Wiplinger, G. & Wlach G., ibid. 100.
[297] Krizinger, F. 2000, In F. Krizinger (Ed.) Ein Dach für Ephesos, A roof for Ephesos,Efes için bir çatı: Der Schutzbau für das Hanghaus 2, The Shelter for Terrace House 2,Yamaç ev 2 Koruma Binası, Wien, Sonderschriften des Österreichischen Archäologischen Institutes 34, p.60-62.

conservation interventions have been applied to seven archaeological edifices; the Memmius monument, the Terrace House II, the Gate of Hadrian, the Celsus Library, the South Gate of the Agora, the Fountain of Trajan and the so-called Hadrian Temple comprehensively. Among these archaeological edifices, the changes caused through interventions are examined in five archaeological edifices; the Terrace House II, the so-called Temple of Hadrian, the Celsus Library, the Fountain of Trajan and the Memmius Monument below (Figure 4.3).

4.3.1. Understanding Changes in the Terrace House II

Looking towards the Curetes Street, the Terrace Houses are located in the north slope of the Bülbüldag, and among two insulae, the Terrace House II is the one at the west. It is located behind the honorific monuments; the Octagon and the Androclos Heroon. It is composed of seven residential units. Its entrance is on the east part of the north façade.

Phases of Changes: Descriptions of the states of the Terrace House II

Phase 1: Description of the current state of the Terrace House II

Terrace house II is an insulae composed of seven residential units on a total area of about 4000 ms², which is covered with the protective shelter (Figure 4.4, Figure 4.5). The residential unit including various spaces, building elements and architectural decoration are mainly interpreted and presented as they found. Besides, some architectural elements such as columns and walls are standing under the protective shelter. In addition, there are new installations such as walkways, stairs, and presentation panels in the residential unit.

Throughout the site survey, it is observed that various interventions are applied. Today, the protective shelter has an impressive character within the site as shown in Figure 4.4. The protective shelter is a modern construction of stainless steel and polycarbonate in order to preserve the spaces rich in frescoes and wall paintings from the effects of atmospheric conditions. It is chosen as a good solution due to its advantages in terms of optimal ventilation and high aesthetic quality[298] as the result of the architectural competition in 1995. The interventions based on conservation of archaeological remains through protective shelter is an extension of an approach, which views building elements such as fresco paintings, glass mosaics as the intrinsic elements of a contextual whole and preserve ancient ruins as a whole[299]. This approach is rooted to the end of the 1960's; when there was a great necessity for preserving the fresco paintings tending to damage up to the next

[298] Krizinger, F., 2000, ibid, p.36-39.
[299] Krizinger, F. 2002. The Terrace Houses in Ephesos: The New Shelter, in Z.Ahunbay and Ü.İzmirligil (eds.) Management and Preservation of Archaeological Sites, İstanbul, Yapı Endüstri Merkezi, p. 36.

excavation season.[300] For instance, the famous Socrates frescos were removed[301] in order to ensure its protection prior to construction of the protective shelter.

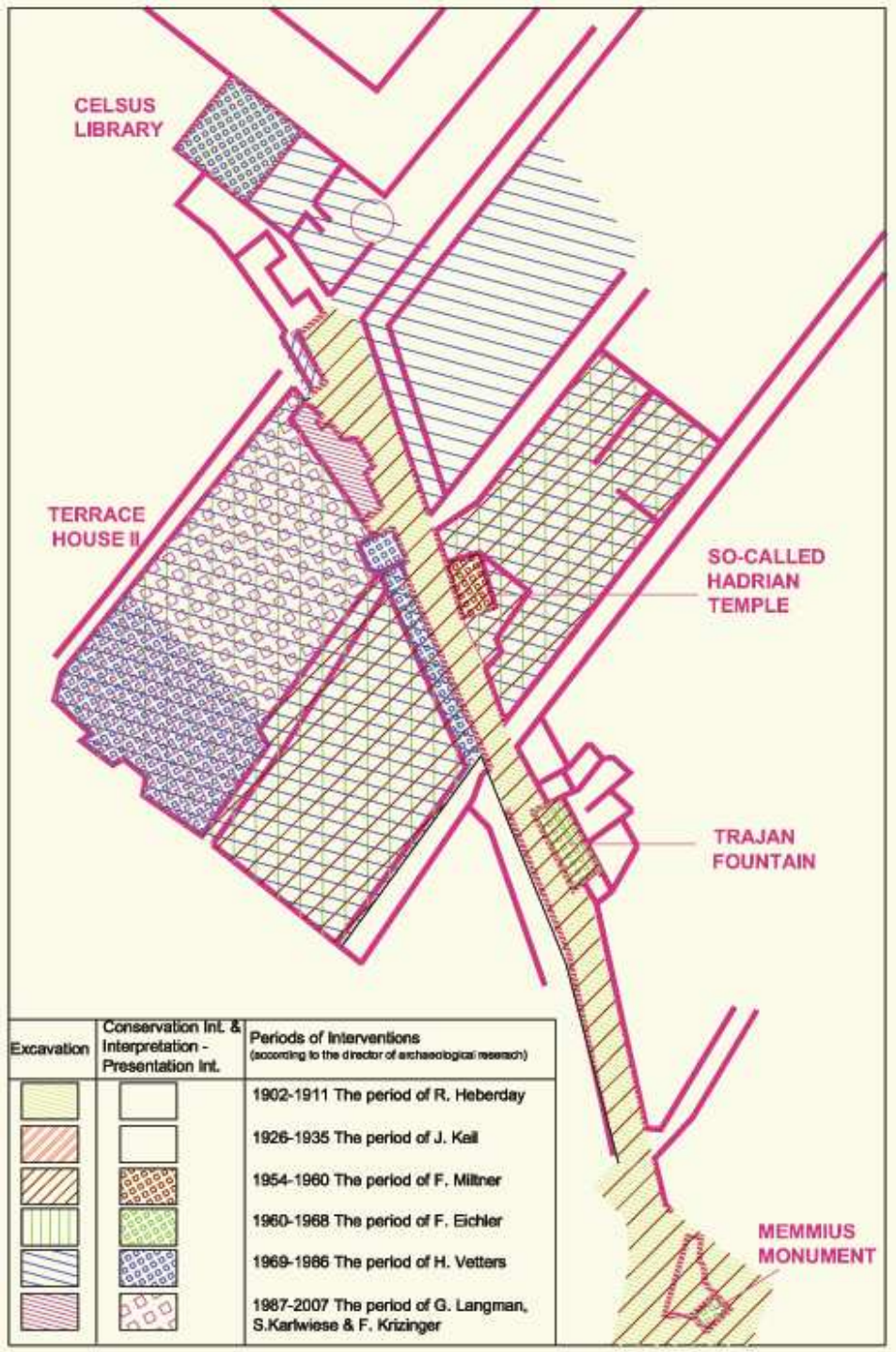


Figure 4.2. The periods of the interventions on IAH on the Curetes Street
(Source: developed from the map obtained from Scherrer, P., 2000)

[300] Dawid, M.& Dawid, P.G., 1972-1975, Restaurierungarbeiten von 1965-1970, in Ojh Band L, Wien, Rudolf M. Rohrer Verlag, p. 549.
[301] Krizinger, F. 2002, ibid.

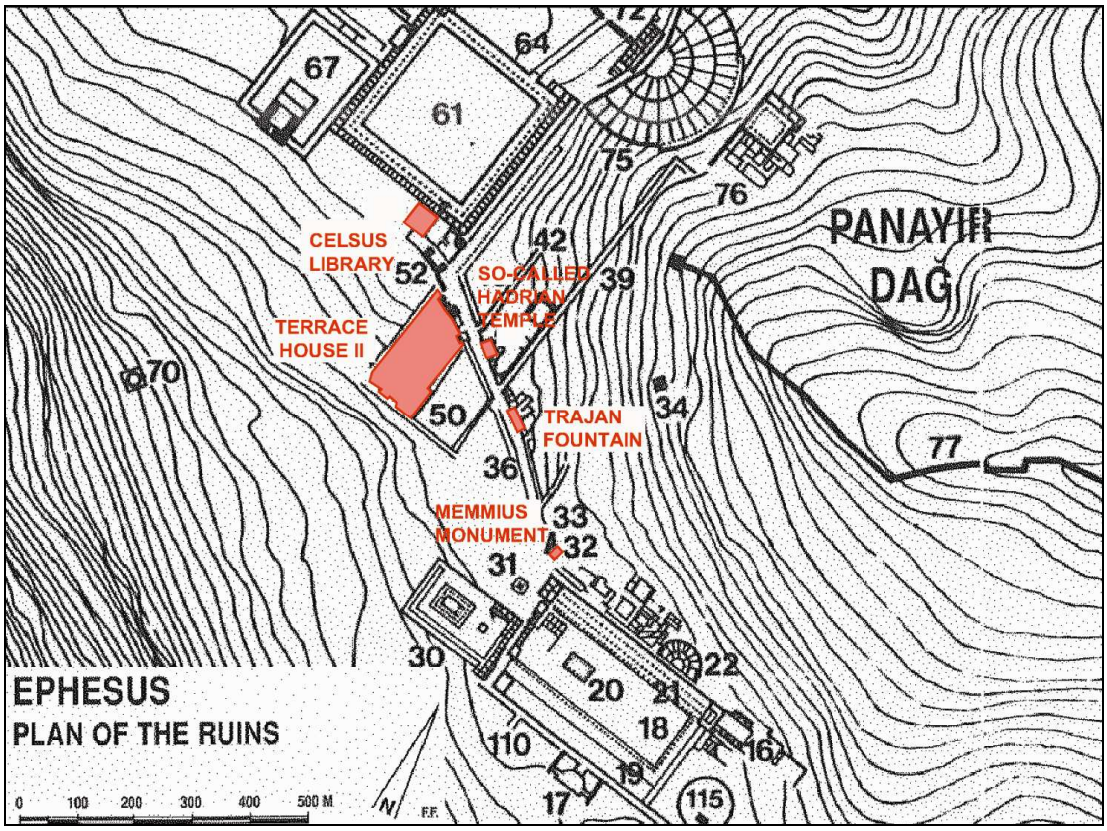


Figure 4.3. Five archaeological edifices on the Curetes Street (Source: Scherrer, P., 2000)

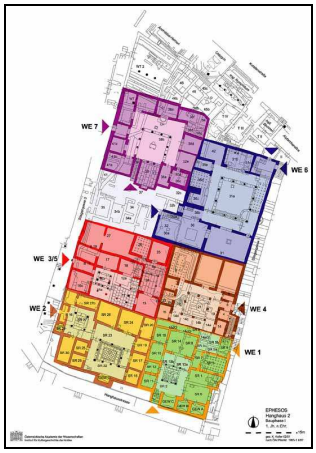


Figure 4.4. Protective Shelter covering the Terrace House II, 2008

Figure 4.5. The plan scheme of the residential units (Sources: Retrieved March 28, 2009 from http://www.oeaw.ac.at/antike/ephesos/hh/hh2/hh2befund/hh2befundabbd1_g.html)

In 1980's, the roof based a proposal on the ground plans of the original rooms was developed by Wiplinger and was constructed over the residential unit 1 and 2. However, it was interrupted in 1986 due to mainly its aesthetic effects, negative impacts on climatic conditions and use of reinforced concrete. After this interruption, the current protective shelter is the final product of major efforts, which has been result with the construction of various temporary roofs built over the remains. Today, the protective shelter covers the whole insulae entered from the entrance of the residential unit 6 on the Curetes Street (Figure 4.6). In the entrance, there is an employee, who serves for welcoming visitors and collecting the entrance-fee (Figure 4.7).It is observed that various interventions are applied for conserving authentic remains. For instance, some marble panels tending to detach from the wall are fixed with band (Figure 4.8). In some cases, the walls tending to lean are supported with wooden elements (Figure 4.9). Besides, the multiple layers and their evidences are preserved as they are found such as in the residential unit 3, the parts between the columns of the inner courtyard filled in later periods (Figure 4.10).

Starting from the 1960's, various conservation interventions have been applied parallel to the excavation. During the excavations in 1960's, some architectural decorations were recovered with slight problems. For instance, the works on the frescoes began in 1967 with temporary measures for the exposed parts until the end of excavation. At the same time, the precautions were taken for keeping the humidity away from the walls.[302] On the contrary, some interventions such as re-erection of some columns, which were found in fragments, were applied.

For the interpretation and presentation of the insulae, various interventions are applied. A new walkway in glass and steel was constructed in recent years. The walkway starts from the residential unit 6 (entrance), which is next to the Curetes Street and goes on the residential unities 3 and 5 on the middle terrace. Then, it goes to the residential unit 4 on the middle terrace. The walkway leads to the residential unit 2 on the upper construction terrace and ends at the residential unit 7. The new walkway permits viewing different residential units as much as possible. However, the interventions providing to view insulae as a whole without separating individual residential units cause confusion in understanding the residential units individually and the authentic spatial organization in them (Figure 4.11). In addition, some presentation panels (Figure 4.12), which gives information on different cultural layers, architectural characteristics of the residential units, construction process of the protective shelter and conservation interventions, are inserted within the insulae.

[302] Dawid M., & Dawid, P.G., ibid., p. 551.

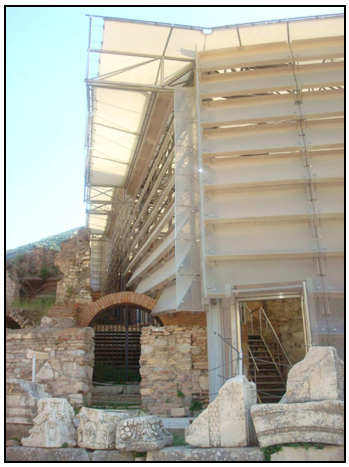


Figure 4.6. The entrance of the Terrace House II on the Curetes Street

Figure 4.7. The employee serving for welcoming visitors and collecting the entrance-fee

Figure 4.8. The marble panel fixed with band, 2008.

Figure 4.9. Supporting the arch tending to demolish, 2008.

Figure 4.10. Conservation of the inner courtyard with the changes of the later periods, 2008.

As a result, the Terrace House II is interpreted as among the most impressive example of the domestic culture in the Mediterranean Region in relation with its interior decoration. Therefore, it has architectural value in terms of its interior decoration. For instance, the residential unit 6 having outstanding decoration elements such as fresco paintings, marble paneling, mosaics and stucco vault have aesthetic value (Figure 4.13). According to the specialists, the architectural furnishing of the ground floor has an outstanding cultural and art

historical importance in terms quality, variety and unity. Besides, these building elements reflecting the artistic requirements and tastes of the occupants and the high standard of culture and appreciation of art[303] have artistic and aesthetic value. In seven residential units of the Terrace House II in Ephesos, the biggest coherent complex of the emperor-temporal mural painting of Asia Minor has kept in a very good preservation state.[304] The peristyle hall, which was transformed into a hall including an illusionistic garden-painting and a central water fountain, is unique for Ephesos.[305]

Phase 2: Description of the state of the Terrace House II throughout and after excavation

Today, the archaeological research has still continuing parallel with the conservation interventions. According to the information given by the research team, the excavation was focused on the Terrace house II with the discovery of the Sokrates paintings[306], which has outstanding artistic and aesthetic value. The excavations were executed between 1969 and 1983 under the direction of H.Vetters. The huge rubble deposits overlaying the ruins had been taken away. During the excavation years 1967 and 1968, 4000-5000 m^3 soil was taken away.[307] Throughout the excavations, the residential units are based on the Greek peristyle house tradition arranged in individual rooms around the central, open inner courtyard.[308]

Throughout the excavations, various fresco paintings, glass mosaics and portrayals were discovered in the individual rooms. The residential units have rooms with heating systems, running water and latrines. The walls are richly decorated with marble panels in various colors. The upper parts are painted, and the niches are covered with glass mosaics.[309] It is interpreted that the findings of the residential units indicate four big construction phases. The Terrace House II was built around the 1st century A.D. and was destroyed due to the earthquake in 262 A.D. It is thought that there was no immediate rebuilding. The excavations show that some residential units were in use through rebuilding and renovations up to the end of the 4th century, and some others were used until the beginning of the 7th century.[310] Some areas at the north-western corner, comprising two large blocks of marble in situ show uses of the area for industrial purposes in the Byzantine period. Considering the change in the archaeological edifice is started through excavation, there is great need to describe its state prior to excavation. Therefore, the third phase associates with its state prior to excavation.

[303] Krizinger F., Outschar, U. & Wiplinger, G., 2000, The Terrace House 2, In P. Scherrer (ed.), 2000, ibid., p.110.
[304] Projekt "Wandmalerei Hanghaus 2". Retrieved November 8, 2008 from http://www.oeaw.ac.at/antike/ephesos/hh/hh2/hh2wandmalerei/hh2wandmalerei.html.
[305] Thür, H.,2005, Das Hanghaus 2 in Ephesos, Die Wohneinheit 4. Baubefund, Ausstattung, Funde. Retrieved September 11, 2008 from http://www.peintureantique.net/blackboard/DasHanghaus2EphesosEN.pdf.
[306] Landstatter, S., 2002., Die Chronologie des Hanghauses 2. In F. Krizinger (ed.), Das Hanghaus 2 von Ephesos, Studien zu Baugeschichte und Chronologie, p.13.
[307] Landstatter, S., 2002, ibid.
[308] Krizinger F., Outschar, U. & Wiplinger, G., 2000, ibid., p.106.
[309] Krizinger F., Outschar, U. & Wiplinger, G., 2000, ibid., p.109-110.
[310] Krizinger, F. 2002, The Terrace Houses in Ephesos, The New Shelter, in Z.Ahunbay and Ü.İzmirligil (eds.) Management and Preservation of Archaeological Sites, İstanbul: Yapı Endüstri Merkezi, p. 37.

Figure 4.11.Walkway within the Terrace house II, 2008

Figure 4.12.Presentation panel for the Terrace house II, 2008

Figure 4.13. The stucco vault, Pan and the head of a satry in the Residential Unit 6 (Source: Scherrer, P., 2000, p.113).

Phase 3: Description of the state of Terrace House II prior to excavation

According to the photograph taken during the excavation (Figure 4.14), it is completely covered with rubble deposits and only some parts of the remains were visible.

Figure 4.14. The Terrace House II during the excavation (Source: Wiplinger, G. & Wlach, G., 1995, p.68)

Phase 4: Description of the states of the Terrace House II in the past

Although there were many findings and remains of different construction phases, it is no possible today to reconstruct building plans completely.[311]

Explaining the changes in the Terrace House II

Explaining the changes in the physical and functional characteristics

I. Legibility

Form/Design: The archaeological edifices and spaces are generally preserved as they are found during the excavation process apart from some interventions such as re-erection of columns, completion of the vault and heightenin the walls. It is also possible to distinguish new erected parts from the authentic parts. The protective shelter is legible in terms of its architectural design and the process, in which based on shared decisions and information with authorities, public and other stakeholders. The information given through presentation interventions also supports transparency in this design process. Besides, it is generally possible to read how the spaces and fragments were treated. It is possible to observe the authentic purposes of the spaces, which includes original architectural elements. However, the interpretation and presentation interventions, which create a new circulation path within the whole insulae, do not allow understanding the authentic accesses to each residential unit and circulation within the spaces. Therefore, there is legibility in the interventions of conservation and presentation in terms of design. However, there is a confusion and illegibility in the spatial organization of individual residential units.

Material: There is clarity in the interventions applied for preventing damages. The conservation interventions such as preventive measures, consolidation of architectural elements and walls are readable due to use of new materials and evidences of damages on authentic elements. The material used in the protective shelter also provides legibility in material. Besides, the interpretation and presentation interventions having a particular architectural language based on the use of new materials such as glass and steel are legible.

Construction Technique: The construction techniques of the conservation interventios are partially legible.

Cultural Layers: Different cultural layers starting from the Hellenistic period exist interpreted and presented through both authentic materials and new installations. The conservation,

[311] Landstatter, S, 2002. ibid., p.13.

interpretation and presentation interventions provide clarity in different cultural layers. While there are evidences and information on the conservation interventions, there is no evidence and information on how archaeological edifices and remains were found prior to excavation.

Function: The authentic function of the Terrace House II is legible due to existence of various architectural elements within the space and detailed information on the ancient domestic culture. In that respect, there is legibility in authentic function.

II. Consistency

Form/Design: Various conservation interventions have been applied for preventing some threats, consolidating, re-assembling and re-erection of some architectural elements such as the columns, walls and the vault. While some elements are re-assembled, some others are completed with new elements in order to ensure legibility. Therefore, there is no consistency in design/form in terms of the extent of interventions. The extent of change in the form/design differs for each element. On the other hand, the design of the interpretation and presentation interventions having the same architectural language provides consistency.

Material: The common use of brick for consolidating walls, vault and completing column shaft indicate that there is consistency in the use of material (Figure 4.15). The interpretation and presentation interventions, in which new materials such as glass and steel are used, are also consistent in material.

Figure 4.15.Consistent treatments on the top of the walls

Cultural Layers: While some walls were heightened and some columns were re-erected, the evidences of some cultural layers were generally preserved as they are found. Therefore, all

cultural layers were not treated in the same manner. In that respect, there is not consistency in cultural layer.

III. Reliability

It is possible to state that not much information is added on the Terrace House II and its components, which are generally preserved as they were found. Besides, the current state of the Terrace House II gives opportunity to read addition of few new parts. In that respect, the conservation interventions are based on authentic sources of information; therefore, there is reliability in interventions. However, the new walkway proposing authentic spatial organization is not reliable. Therefore, the change is reliable in conservation interventions, but IAH is not reliable in terms of authentic spatial organization.

As a result of the interventions, the Terrace House II is generally legible in terms of the changes in all characteristics, apart from authentic architectural design of each residential unit, which is presented through the new walkway. There is inconsistency in the extent of conservation interventions in order to increase legibility in some spaces. The changes caused through interventions are generally consistent in conservation interventions, interpretation and presentation interventions. Apart from some parts, which are inconsistent with the general approach, the interventions are generally legible and ensure reliability. However, the new walkway causes distortion in reliability in terms of the access to residential unit; therefore, it is not reliable.

Explaining the changes in the Terrace House II through 'Value Formation Process'

The Terrace House II has outstanding artistic value, aesthetic value, and architectural value in terms of the architectural quality of the spaces and the residential units, which are described as the documents and among the most significant example of the domestic culture in ancient Mediterranean Region.[312] Excavation revealing archaeological edifices causes transformation in artistic value, aesthetic value, and architectural value. Mural paintings in a very good state of preservation in Asia Minor are interpreted as unique example; therefore they have rarity value in terms of its uniqueness. Some conservation interventions provide transferring the remains as a document of the past and representative of the domestic architecture. The others cause transformation in architectural value. In that respect, two conservation intervention types cause enrichment in architectural value without causing loss in the content of the document value. The interpretation and presentation interventions add social value, economic value, recreation and tourism value (Table 4.2).

[312] Krizinger, F., 2002., ibid., p.36.

Evaluation of the Changes in the Terrace House II

Although there is slight level consistency in conservation interventions, there is high level legibility in the Terrace House II. Some architectural and building elements such as columns, vault, which are completed and re-erected through new materials cause inconsistency in the intervention approach, while the values and physical characteristics of the spaces and residential units are enriched. The intervention approach causes transfer of the document value while new information is added. This type of change ensures conveying as much as information on the archaeological edifices. Besides, the protective shelter causes impressive effects and impression value is gained. Considering the change is not only related with the outcome product, but also the process. The transparent design and decision-making process on the protective shelter is an unique example of its type in Turkey. The interpretation and presentation intervention enrich the information about its uses and changes the past. In addition, it makes the remains legible for unspecialized eyes. However, current access to the residential units does not permit to view spaces with authentic relations.

The protective shelter over the Terrace House II aiming to conserve authentic remains has great effects on the appearance of the archaeological edifices and their perception within the site. However, the deterioration in the wall paintings and frescoes caused by inefficiency of the protective shelter provides appropriate climate conditions. It does not ensure the main goal, which led to conserve remains through protective shelter. The protective shelter loosing its authentic features for providing appropriate climate conditions in time does not work properly. Therefore, the conflict between the goals of intervention and efficiency of the protective shelter is developed in time.

On the other hand, the changes in some values such as function value, age value, rarity value, the values indicating the cultural connection with contemporary society and some others such as picturesqueness value and virginity value show general tendency as shown in the Table 4.2. In addition to the archaeological value and scientific research value, the architectural value, information value and educational value are values being in a state of flux throughout new lifecycle of the Terrace House II. In conclusion, there are some basic impacts of the interventions as explained below.

Table 4.2. Value categories and the change patterns for the Terrace House II

Value Types	Value cat. prior to excavation	Value cat. after excavation	Value cat. after conservation interventions	Value cat. after presentation interventions
Archaeological research value	transient	transformation	transformation	transformation
Scientific research value	transient	transformation	transformation	transformation
Architectural value	transient	transformation	transformation	transformation
Informational value	transient	transformation	transformation	transformation
Educational value	transient	transformation	transformation	transformation
Authenticity value	transient	transformation	transformation	stationary
Impression value	transient	transformation	transformation	stationary
Aesthetic value	transient	transformation	transformation	stationary
Artistic value	transient	transformation	transformation	stationary
Enviromental Value	transient	transformation	transformation	stationary
Document value	transient	transformation	stationary	stationary
Historical value	transient	transformation	stationary	stationary
Originality value	transient	transformation	stationary	stationary
Location value	transient	transformation	stationary	stationary
Homogeneity value	transient	transformation	stationary	stationary
Social value	nonexistent	nonexistent	nonexistent	gain
Economic value	nonexistent	nonexistent	nonexistent	gain
Rarity value	nonexistent	gain	stationary	stationary
Virginity value	transient	loss	stationary	stationary
Picturesqueness Value	transient	loss	stationary	stationary
Identity value	transient	transient	transient	stationary
Legendary value	transient	transient	transient	stationary
Spiritual/religious value	transient	transient	transient	stationary
Symbolic value	transient	transient	transient	stationary
Political value	transient	transient	transient	stationary
Memory value	transient	transient	transient	stationary
Functional value	nonexistent	nonexistent	nonexistent	nonexistent
Age value	nonexistent	nonexistent	nonexistent	nonexistent
Plurality value	nonexistent	nonexistent	nonexistent	nonexistent

	transient, transformation, transformation, transformation
	transient, transformation, transformation, stationary
	transient, transformation, loss, stationary
	transient, transformation, stationary, stationary
	nonexistent, nonexistent, nonexistent, gain
	nonexistent, gain, stationary, stationary
	transient, loss, stationary, stationary
	transient, transient, transient, stationary
	nonexistent, nonexistent, nonexistent, nonexistent

- In the construction of the Terrace House II, existing characteristics, which legitimize it as ‘heritage’, are transferred and some new characteristics are added in relation with architectural features by causing inconsistency in conservation interventions within the limits of scientific information and medium level of legibility.

- The interpretation and presentation intervention ensures integration of archaeological edifice into the life of the current society. However, new walkway giving information on the spaces and distorting the original design of the residential units cause illegible changes in design.

- The changes caused through protective shelter, which do not fulfill the requirements of the main goal in time, develop conflicts between the goals of intervention and the efficiency of protective shelter. Besides, there is a great necessity to consider the efficiency of intervention in relation with the changes in time and evaluate the effects of intervention on the archaeological edifice in time. Therefore, it requires evaluating efficiency of the intervention proposals and its effects not just for a moment, but also within a process.

In conclusion, the change pattern includes the transfer of the existing characteristics while new information is added. The general trend in the loss of picturesqueness value and virginity value and transformation in the values such as document value, information value and architectural value also appear in the Terrace House II. However, inconsistency in the conservation interventions results with transfer of the document value while transforming architectural value, information value, aesthetic value, artistic value, authentic value by adding new information. Besides, the interpretation and presentation interventions, which do not allow perception the residential units in terms of authentic spatial organization, are not reliable in terms of the proposed access and circulation. The intervention approach causing transfer of existing characteristics with adding few new ones within the limits of scientific information cause changes in moderate level. However, the changes caused through protective shelter, which do not ensure its main goal, result with regress. The change causes development in the authentic remains by adding new scientific information on several issues such as the past cultural layers and the architectural features. However, the loss in the efficiency of the protective shelter in time has negative impacts on the authentic remains. In that respect, the interventions cause regress in terms of the conservation state of the authentic remains, while they causes progress in terms of the legibility of IAH and scientific information on it.

4.3.2. Understanding changes in the so-called Hadrian Temple

The so-called Hadrian Temple is located on the Curetes Street next to the stairs going up to the Bath of Scholasticia (Figure 4.3). Its entrance is on the south façade facing the Curetes Street.

Phases of Changes: Descriptions of the states of the so-called Hadrian Temple

Phase 1: Description of the current state of the so-called Hadrian Temple

The so-called Temple of Hadrian consisting of a porch with a 'Syrian pediment' at the south façade and a cella at the back are still standing at present. The standing position is the result of restoration applied by the architect K. H. Gösch in the time of Miltner (1956).[313] The design project was undertaken according to the last antique state after the treatments done in the end of the 4th century, not the Hadrian time (Figure 4.16).[314] The porch was re-erected with the remaining architectural elements, fragments and several additions. It comprises two pillars at the corners and two columns in the middle, which carry the 'Syrian pediment' supported by Corinthian order and a back wall. The columns, of which some small fragments are found[315], were completed with concrete involving the white cement having similar color with original marble elements and re-erected with insertion of iron bars. The same material is used for the corner pillars. The architrave supported by the pillars and columns have an inscription and ornamentation. Missing parts at the architrave were completed in simplified details by giving the contours of the form (Figure 4.17). The Syrian pediment is composed of the marble elements including a keystone having a female bust. The broken parts of the marble elements were not completed. The back wall of the porch is composed of authentic marble elements and masonry, which is constructed with rubble stone, brick pieces and covered with concrete revetments. The door is framed with authentic marble elements at the middle of the back wall. There are relief friezes on both sides of the door, in which scenes from the foundation myths of the Ephesos are represented. The casts in white cement were used instead of the damaged original pieces[316] (Figure 4.18).

The cella has a rectangular form and is an enclosed space without a superstructure. The south wall, which separates the portico and the cella, are built in rubble stone supported by concrete lintels at various levels. The other walls are of rubble stone similar to the south wall. The so-called Hadrian Temple is not used for contemporary purposes and serves as a gigantic sculpture on the Curetes Street. In addition to the standing porch and the cella, it is presented through a presentation panel and audio guiding equipment, which is optional. The

[313] Hueber, F., Erdemgil S., & Büyükkolancı, M. 1997, Ephesos, Gebaute Geschichte (Gebundene Ausgabe), Mainz am Rhein, Zabern, p.86.
[314] Miltner, F., 1959, XXIII. Vorlaufiger Bericht über die Ausgrabungen in Ephesos, in ÖJH Band XLIV, Wien, Rudolf M. Rohrer Verlag, p. 373.
[315] Miltner, F., 1959, ibid., p.374.
[316] Miltner, F., 1959, ibid., p. 373.

information given through the presentation panel includes the name and construction date of the so-called temple in Turkish and German. Some values of the so-called Temple are emphasized. The decorative zone including friezes or plaster ornaments and the laurel on the plasters are interpreted as remarkable[317] examples. The archaeological edifice, as the combination of the relieves displaying the foundation myth of the city, the late Roman aspects of the small building and the images of the Tetrarchs, is interpreted as the evidence of "…integration of private and public attitudes in Imperial and late Roman Ephesus"[318]

Figure 4.16. The entrance façade of the so-called Trajan Temple, 2008.

Figure 4.17. Missing parts at the architrave are completed in simplified details, 2008.

Figure 4.18. Use of casts in white instead of the damaged original pieces, 1957 (Source: Wiplinger, G. & Wlach, G., 1995, p.72).

[317]Outschar, U., 2000, The Temple of Hadrian, in P. Scherrer, Ephesus, The New Guide, İstanbul, Ege Yayınları, p.118.
[318] Outschar, U., 2000, ibid., p.118.

Phase 2: Description of the state of the so-called Temple of Hadrian throughout and after excavation

Throughout the excavations undertaken in the Bath of Scholasticia, a structure was found between the pillar way and the stair[319] as shown in the Figure 4.19. Miltner describes it as a prostylos in antis and its facade was nearly complete[320]. According to the photographs taken during the excavation, some parts of the cella walls was standing (Figure 4.20), and the relief on the back wall of the porch was found. As mentioned, there were four honorary bases with the statues of the Tetrarchen on the facade, which are interpreted as later installations.[321]

Phase 3: Description of the state of the so-called Temple of Hadrian prior to excavation

The so-called Temple of Hadrian was completely covered prior to excavation. As untouched archaeological edifice, it had a picturesqueness view. Therefore, it had picturesqueness value and virginity value.

Phase 4: Description of the states of the so-called Temple of Hadrian in the past

The building of the so-called Temple was dedicated to the Emperor Hadrian. The partial restitution proposing the authentic design of the so-called Hadrian Temple in the Hadrian times was drawn by Karl Heinz Göschl (Figure 4.21, Figure 4.22). Four honorary bases with the statues of the Tetrarchen, which are in front of the columns and pillars, are dated to around 300 AD[322] (Figure 4.23). It is suggested that the so-called Hadrian Temple was possibly rebuilt after an earthquake. Throughout the rebuilding, different frieze blocks have been inserted into the back wall of the porch.[323] The frieze, which apparently contained the scenes from the foundation legend of the Ephesos, is not entire; there is at least no middle block with the representation of that divinity.[324] Then, it was demolished again and remained in a demolished state until its excavation.

[319] Miltner, F., 1959, XXII. Vorlaufiger Bericht über die Ausgrabungen in Ephesos, in ÖJH Band XLIV, Wien, Rudolf M. Rohrer Verlag, p. 264.
[320] Miltner, F., 1959, ibid., p. 264.
[321] Miltner, F., 1959, ibid., p. 266.
[322] Outschar, U., 2000, ibid., p.118.
[323] Aurenhammer, M., 2005, Sculptures of Gods and Heroes from Ephesos, In H. Koester (ed.) Ephesos metropolis of Asia, An Interdisciplinary approach to its archaeology, religion and culture, USA, First Harvard Divinity School, p.269.
[324] Aurenhammer, M., 2005, ibid., p.270.

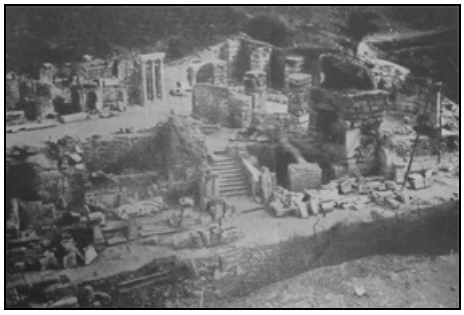
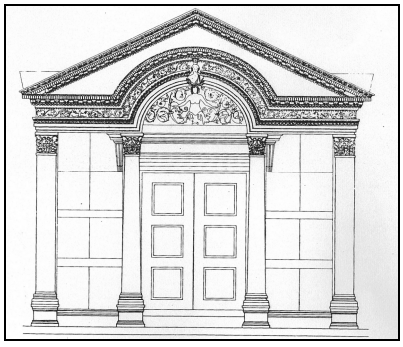


Figure 4.19. The so-called Hadrian Temple after excavation (Source: taken from Miltner, F. 1959, XXII. Vorlaufiger Bericht über die Ausgrabungen in Ephesos, Ojh Band L, Wien, Rudolf M. Rohrer Verlag, p.254) (243-315)

Figure 4.20. The so-called Temple of Hadrian throuhout excavation, 1956 (Source: Miltner, F. 1959, p.271)



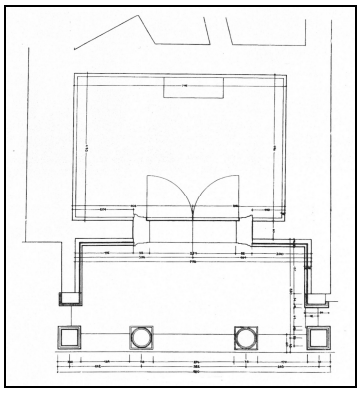


Figure 4.21. The proposal for the south façade of the authentic design of the so-called Temple of Hadrian (Source: Miltner, F., 1959, p.271)

Figure 4.22. The proposal for the plan of the authentic design of the so-called Temple of Hadrian (Source: Miltner, F.,1959, p.277-78)

Figure 4.23. The honorary basis of the Theodosius with inscription (Source: Miltner, F., 1959, p.282)

Explaining the changes in the so-called Hadrian Temple

Explaining the changes in the physical and functional characteristics

I. Legibility

Form/Design: It is possible to read that the current state of the cella and the porch and to distinguish new parts from the authentic parts, among which ornamented parts was constructed in simplified details as shown in Figure 4.17. There is clarity in the dimensions, overall plan scheme and the details of the so-called Hadrian Temple. Therefore, there is clarity in design (Figure 4.24). The interpretation and presentation interventions provide accessibility and give information on the spatial organization. However, the information on the history of the archaeological edifice such as how it was built, how it was destroyed and rebuilt is not conveyed through interpretation and presentation interventions. Therefore, the change provides legibility in the so-called Hadrian Temple and the conservation interventions, but not legible in terms of the process of change starting from excavation.

Material: There is clarity in the areas, where new materials are used. The use of a type of concrete having similar color to authentic remains at the façade and tie beams in concrete (with black cement) indicates new parts added by the conservation interventions. It is possible to distinguish the authentic parts having patina from new parts. The information on the location, where new material is added, is read from the structure itself (Figure 4.25). The interpretation and presentation interventions based on the insertion of the information panels of also ensure legibility. As a result, the change in material is legible.

Construction Technique: There is also legibility in the use of construction technique, which is based on rubble stone supported with concrete tie beams at the walls of the cella and the use of a type of concrete mixture for the missing parts at the porch. In that respect, there is legibility in the construction technique.

Cultural Layers: The so-called Hadrian Temple includes evidences and traces of different cultural layers such as the architectural fragments of the structure of the Hadrian times and four honorary bases with the statues of the Tetrarchen in front of the columns and pillars. Therefore, it ensures legibility in cultural layers. However, the interpretation and presentation interventions not conveying information on past cultural layers do not provide legibility in cultural layers.

Function: The current state of the so-called Hadrian Temple, which does not serve as an architectural product, does not allow understanding its authentic use. Therefore, it is not

legible in terms of the authentic function. However, the so-called Hadrian Temple serves as a representive of the façade architecture surrounding the Curetes Street.

Figure 4.24. The rear part of the south wall of the cella showing clarity in design, material and etc.

Figure 4.25. The south wall of the cella showing clarity in the use of new material.

II. Consistency

Form/Design: The cella walls and the porch, as the outcome product of restoration, are treated in the same extent. However, there is inconsistency in the details of new parts. While the ornamented missing parts facing the Curetes Street are completed through simplified details, the same approach is not applied for the ornamented missing parts looking the rear façade. In that respect, there is consistency in the extent of the conservation interventions, but inconsistency in the details of some parts. As a result, the change caused through conservation interventions has moderate level of consistency.

Material: There is consistency in use of material. In that respect, the conservation interventions are consistent. The change in material has high level of consistency.

Cultural Layers: There is consistency in treating different cultural layers through conservation interventions. The interpretation and presentation interventions giving information on its initial construction and lack of information on later additions are not consistent.

III. Reliability

It is possible to state that the conservation interventions providing architectural integrity are based on the information coming from the structure itself. In that respect, the interventions giving accurate information on the authentic characteristics of the so-called Hadrian Temple are reliable. The interpretation and presentation intervention also gives reliable information. Therefore, there is high level of reliability in interventions.

As a result, the change caused through conservation interventions on the so-called Hadrian Temple is reliable with almost high level legibility and has moderate level of consistency in interventions. However, the change in the interpretation and presentation intervention has low level legibility.

Explaining the changes in the so-called Hadrian Temple through 'Value Formation Process': The current state of the so-called Hadrian Temple has architectural value as a standing architectural product of Antiquity. Besides, the temple has document value and architectural value as the evidence of integration of private and public attitudes in the Imperial and late Roman Ephesus as defined by Outschar. The decorative zone including relieves interpreted as the remarkable[325] example has artistic value, aesthetic value and impression value. Some other value types show the same change patterns such as continual transformation of the archaeological research and scientific research as shown in the Table 4.3 below. Through excavation, the picturesqueness value and virginity value are lost. Besides, the artistic value, aesthetic value, impression value, architectural value, document value, authenticity value are transformed. The architectural value on the construction techniques of the architectural elements is transformed into the architectural value as the evidence of the architectural design of the structure. The current state including evidences of various cultural layers provide transfer of the evidences of the cultural layers. The information on the evidence of demolishment is transformed into the evidences on the changes in the edifice throughout its past lifecycle. In addition, the interpretation and presentation interventions cause basic change patterns.

[325]Outschar, U., 2000, ibid., p. 118.

Table 4.3. Value categories and change patterns for the so-called Temple of Hadrian

Value Types	Value cat. prior to excavation	Value cat. after excavation	Value cat. after conservation interventions	Value cat. after presentation interventions
Archaeological research value	transient	transformation	transformation	transformation
Scientific research value	transient	transformation	transformation	transformation
Informational value	transient	transformation	transformation	stationary
Educational value	transient	transformation	transformation	stationary
Architectural value	transient	transformation	transformation	stationary
Authenticity value	transient	transformation	transformation	stationary
Environmental Value	transient	transformation	transformation	stationary
Document value	transient	transformation	stationary	stationary
Aesthetic value	transient	transformation	stationary	stationary
Artistic value	transient	transformation	stationary	stationary
Impression value	transient	transformation	stationary	stationary
Location value	transient	transformation	stationary	stationary
Historical value	transient	transformation	stationary	stationary
Social value	nonexistent	nonexistent	nonexistent	Gain
Economic value	nonexistent	nonexistent	nonexistent	Gain
Virginity value	transient	loss	stationary	stationary
Picturesqueness Value	transient	loss	stationary	stationary
Identity value	transient	transient	transient	stationary
Legendary value	transient	transient	transient	stationary
Spiritual/religious value	transient	transient	transient	stationary
Symbolic value	transient	transient	transient	stationary
Political value	transient	transient	transient	stationary
Memory value	transient	transient	transient	stationary
Originality value	transient	transient	transient	stationary
Functional value	nonexistent	nonexistent	nonexistent	nonexistent
Rarity value	nonexistent	nonexistent	nonexistent	nonexistent
Age value	nonexistent	nonexistent	nonexistent	nonexistent
Homogeneity value	nonexistent	nonexistent	nonexistent	nonexistent
Plurality value	nonexistent	nonexistent	nonexistent	nonexistent
	transient, transformation, transformation, transformation			
	transient, transformation, transformation, stationary			
	transient, transformation, stationary, stationary			
	nonexistent, nonexistent, nonexistent, gain			
	transient, loss, stationary, stationary			
	transient, transient, transient, stationary			
	nonexistent, nonexistent, nonexistent, nonexistent			

Evaluation of the Changes in the so-called Temple of Hadrian

Excavation causes certain change pattern by causing loss in picturesqueness value and virginity value, while transforming other ones. It provides acquiring information on the architectural product of the past cultures in various issues such as how it was constructed, how it was used, converted, and demolished.

The conservation intervention approach that aims to preserve the last antique state of the so-called Hadrian Temple at the end of the 4th century[326] ensures transfer of the existing evidences of different construction phases, while re-erecting the so-called Hadrian Temple. In that respect, there is transformation in various values such as architectural value, document value and authenticity value. The moderate level consistency and high level legibility in the change in design provide enrichment of the architectural characteristics. The interpretation and presentation interventions do not add new information on the information given by conservation interventions and do not have contribution for making the so-called Hadrian Temple legible. Some values such as functional, age, rarity, picturesqueness, virginity and the ones indicating the cultural connection with contemporary society show general tendency independent from the principles mentioned above. In conclusion, there are some basic impacts of the interventions as explained below.

- Conservation intervention based on the principle of 're-erection according to the last antique state' transfer different cultural layers and transforms architectural and information values. This change ensures almost high level consistency and legibility in both design and cultural layers.

- The interpretation and presentation intervention, which gives little information, has almost null effects on understandings of the changes, interventions and architectural features of the so-called Hadrian Temple.

The main change pattern put 'transformation' at the center. Besides, it provides transfer as much as information on different cultural layers in the past and the architectural characteristics. It causes great increase in the information content by transferring existing characteristics and transforming the architectural characteristics of the so-called Hadrian Temple. In addition, the interventions causing changes in the characteristics of the so-called Hadrian Temple by adding scientific information and transferring some parts of the existing information revealed during the excavation process causes progress without developing conflicts in values.

[326] Miltner, F., 1959, ibid., p. 373.

4.3.3. Understanding Changes in the Celsus Library

The Celsus Library is on the Library Square, which is located on the intersection of two main axes, the Curetes Street and the Marble Street. It is adjacent to the south gate of Tetragonas Agora, the South Gate of the Agora at the north and the Hellenistic Peristyl House at the south (Figure 4.3). Its entrance is on the east façade facing the Library square.

Phases of Changes: Descriptions of the states of the Celsus Library

Phase 1: Description of the current state of the Library

The Library, which is re-erected through restoration in 1970's, is partially standing on a rectangular plot of land. The façade at the East, which stands on nine steps, has two storeys (Figure 4.26). At the ground floor, there are three axially symmetrical doorways placed between four pavilions with four statues. There are inscriptions on the bases that flank the steps outside. The columns have smooth shafts and composite capitals with the Attic bases. At the first floor, there are three window openings corresponding to the door openings at the ground floor. It is composed of alternately projecting and receding elements, which divides the façade into pavilions and aligned bays. Three pavilions, which are broader than the ones in the ground floor, are flanked by single columns. There are eight columns grouped in pairs in each storey, and each column rests on a pedestal individually. Two single columns located at two ends have separate entablature.

At the east façade, 80% of the authentic elements exist[327] and form a coherent whole. There are many damaged architectural elements, missing parts and elements. Some missing elements were reproduced with concrete, steel and covered with marble. On the other hand, some missing parts were not carved.[328] The missing elements were completed by using simplified form of the details (Figure 4.27). The texture of the missing ornamented elements of the ground floor is given through a different detail than the original ornamentation. The colors of the missing parts are similar with the original elements (Figure 4.28). The pieces belonging to broken architectural elements were cleaned and joined through epoxy, polyester and steel elements. The missing parts were completed by a type of concrete mixture in white cement. Some outer parts were covered with marble-like panels. The missing part of the inscriptions, on which Celsus's testament was written, was completed by sculptors. A few missing elements including three column capitals in the ground floor and a column base were completely copied from the authentic ones.

[327] Hueber, F.J., 1978, Bericht über die Wiederaufrichtungsarbeiten an der Celsusbibliothek, unde über die Bisheringen Ergebnisse der Untersuchung der Bausubstanz, In E. Akurgal, The Proceedings of the Xth International Congress of Classical Archaeology, Ankara- İzmir 23-30/IX/1973, Ankara, TTK Basımevi, p.980.
[328] Strocka, V.M., 1979, Efes'teki Celsus Kitaplığı Onarım Çalışmaları, In Belleten 43 (172), translated by Coşkun Özgünel Belleten, v.XLIII, n. 172, p.816.

The Library has a rectangular plan, which has an apse on the middle axis of the west wall (Figure 4.29). There is a high platform along the south, west and north walls in almost one meter wide (Figure 4.30). Apart from the east wall, the walls were re-erected up to almost second floor. On the rear façade of the east wall, the original blocks, which were destroyed due to fire and earthquake, were not placed on the building. The wall is constructed of concrete and existing architectural elements are inserted on this concrete wall. At the south wall, there are three niches and a door at the west end. Besides, there are two niches at the each sides of the apse at the west wall, and three niches, a door at the north wall. The door located at the east end of the north wall is an access to the burial chamber including the sarcophagus of the donor. In addition, the authentic design of the floor pavement is based on use of rectangular marble slabs. The missing parts are completed with alternating use of broad white and narrow black marble slabs. It is stated that the authentic elements were not vertically placed on top of each other; rather there was an oblique relation between them. Therefore, they were placed on top of each other respecting this relationship.[329]

Figure 4.26. The east façade of the Library.

Figure 4.27. Simplified form in the details.

Figure 4.28.The colors of the missing parts similar with original elements

[329] Hueber, F., Erdemgil S., & Büyükkolancı, M., 1997, ibid., p.82.

Stone, brick, alternating use of stone and brick, concrete are the main construction materials. The authentic elements of the entrance façade, which includes the statues, steps, columns, and authentic floor pavement, are of fine-cut marble. The walls at the west, north, south are of roughly cut stone up to the upper levels of the niches. The upper parts at the west and north walls are in dark red brick. Alternating use of rough stone and brick is used at the south wall. Besides, there is a part, which is of rough stone, next to this alternating part. The east wall is re-erected by using a type of concrete mixture and marble architectural elements. The missing parts of the floor pavement are completed with alternating use of white and black concrete. All the authentic elements bear the traces of time including the cracks, broken parts and patina.

Various construction techniques are applied in the re-erection of the Library. The entrance façade (east wall) was constructed with reinforced concrete in order to ensure structural stability, and authentic marble elements were inserted into this reinforced concrete construction. In the completion of brick walls at the west and north, brick wall construction technique is used similar to the authentic technique. Two different construction techniques are observed in the south wall: the first, alternating use of brick, rough stone and the second; rough stone construction. The floor pavement is constructed with marble slabs in different sizes.

The interior space of the Library is enclosed by the walls almost up to the beginning of the first-storey. The current state does not give information about the height and characteristics of the original space and its decoration. The West façade re-erected up to original building height act as the significant element of the Library Square. In addition, the projecting pavilions, the openings of the door, window and the niches including the statues gives the image of the spatial characteristics of the Library as an element of the urban environment. The interior of the Celsus Library is used as a visitor center, in which information on Ephesus is given and visitors are gathered. The information panels placed in the niches give information about the history of Ephesus and interventions on the library. The interior space is used as a kind of visitor center (Figure 4.31).

The re-erected Library has various values including architectural, location, education, economic, function and social values. The Celsus Library, as an individual structure,[330] is an exceptional example with its richly ornamented façade. Therefore, it has architectural value. The library with the burial chamber at the basement has among the libraries that served as a heroon and a library in the Roman Period such as the one in Prusa[331.] Therefore, it has

[330] The Roman Libraries generally connects a portico such as the one in the Building M in Side and Timgad. In that respect, the Celsus Library is called as an individual structure and seems as an exceptional of this common characteristic (Yıldız, 2003:372).
[331] Yıldız,N., 2003, Antikçağ Kütüphaneleri : Kalıntılar ve edebi kaynaklar ışığında mimarileri, içdüzenleri, çalışma sistemleri kitapların yazımı ve çoğaltılması, İstanbul, Arkeoloji ve Sanat Yayınları, p.390.

representative value. In addition, the Library, as a source of authentic and unique information and a tool for conveying information on the architectural features of the Library building of Roman period, has education value. Besides, it has economic value for acting as a source of income due to its high potential for attracting the attention of the tourists. The Library, in which information on Ephesus, construction techniques of the Antique architecture and conservation intervention of the Library is given, is used as the information center for the visitors. Therefore, it has function value. Due to its use as the information center, it is observed that tourists generally gather within the structure, have rest and speak with each other. In that respect, it has social value. The Library has distinctive characteristics in terms of its façade ornamentation.[332] In that respect, the façade of the Library has aesthetic value. Among the Antique libraries, the Library having distinctive characteristics in terms of its façade has rarity value.

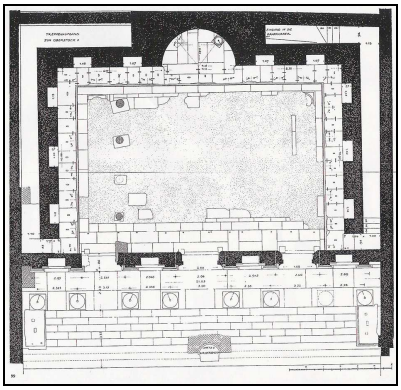


Figure 4.29. The plan of the Celsus Library

Figure 4.30. The interior hall of the Library

Figure 4.31. The presentation boards and use of interior hall by visitors

[332] Yıldız N., 2003, ibid., p.390.

Phase 2: Description of the state of the Library throughout and after excavation: In 1903/4, the architectural elements were discovered in fragmentary state around the façade throughout the excavation executed by Heberday. In the campaign in 1903, a structure showing the characteristics of imperial-decorated architecture and a structure from the second post Christian century were revealed.[333] A front wall of a fountain basin, which is formed by the 'Parther relieves', were revealed (Figure 4.32). A small apse containing a fountain was in the middle of this front wall today.[334] Only the first and second stone courses belonging to imperial-decorated structure were in their original place.[335]

Following this, the columns, which were parallel to the south wall, and a pillar were found. The last column, which is connected by a brick arch with the west wall, was still standing during the excavation (Figure 4.33). The portico and the brick walls above the southwest corner of the hall are the evidences of later uses. Wilberg explains that the doors on the east façade and the hall up to the upper floor were filled with construction rubble in the Christian times.[336] The façade was used as the background of a fountain. The evidences indicate that it was demolished due to an earthquake in later times.[337]

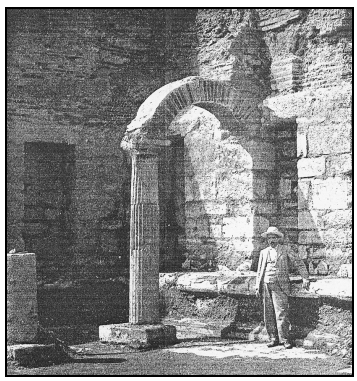


Figure 4.32.The 'Parther relieves' recovered through excavation
(Source: Braun, E., 1953, p.1)

Figure 4.33.The column and the brick arch recovered through excavation
(Source: Braun, E., 1953, p.41)

[333] Braun, E. (ed.), 1953, Forschungen in Ephesos V/1: Die Bibliothek, Wien, Österreichen Archaologischen Institut, p.1.
[334] Braun, E. (ed.), 1953, ibid., p.42.
[335] Strocka, V.M., 1979, ibid., p. 812.
[336] Braun, E. (ed.), 1953, ibid., p.42.
[337] Strocka, V.M., 1979, ibid., p. 814.

The Celsus Library has stone elements having high quality of workmanship. Among the other structures in the Ephesus, the stone workmanship of the Celsus Library is over the stone workmanship of the other structures. Its stone workmanship resembles to the stone workmanship of the Imperial structures in Rome.[338] Therefore, it has artistic value. The Library locating next to the intersection of two main streets (at the west end of the Curetes Street and the south end of the Marble Street) within the Ephesus, and being next to the south gate of the Tetragonas Agora has location value. After the excavation, the evidences of the conversion of the Library into fountain and the columns dividing the library hall were removed as shown in Figure 4.33.

Phase 3: Description of the state of the Library prior to excavation

The photograph shows that the evidences of some cultural layers such as the sculptures and a row of relieve were completely removed after its excavation as shown in Figure 4.34. On the other hand, the remains of the Celsus Library were completely covered prior to excavation in 1903 (Figure 4.35). In that respect, the Library has picturesqueness value, virginity value, which tends to change in relation with its excavation.

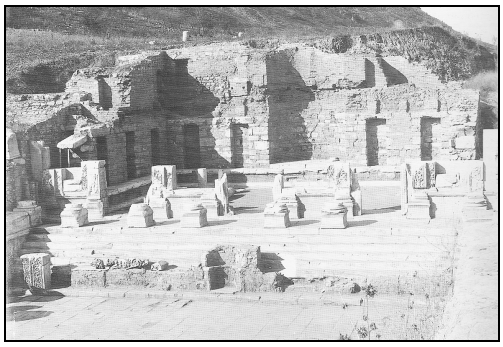


Figure 4.34. The state of the Library after removal of some evidences of cultural layers (Source: Wiplinger, G. & Wlach, G., 1995, p.34).

Figure 4.35. The debris layer covering the remains of the Library during excavation of the South Gate of the Tetragonos Agora (Source: Wiplinger, G. & Wlach, G., 1995, p.30).

[338] Strocka, V.M., 1979, ibid., p. 815.

Phase 4: Description of the states of the Library in the past

The imperial-decorated Celsus Library has the current plan scheme summarized above with an interior space having galleries along three stories. In the initial construction phase, there were inscriptions on the basis flanking the steps outside. On the inscriptions, the information on the social position and official career of Ti. Celsus Polemaenus, who was the donor of the Library, were given. The interior space has cupboard-like niches in the walls used for placing book scrolls, and the niches in the upper stories were accessed from the galleries. The colored marbles were used for the interior decoration as marble paneling and revetments (Figure 4.36, Figure 4.37). It is mentioned that the library served until the earthquake of 262 AD. Then, it was demolished and burned. The Library was converted to fountain by building the water basin with large marble slabs with relieves. Finally, its destruction is dated to the Middle Ages.[339]

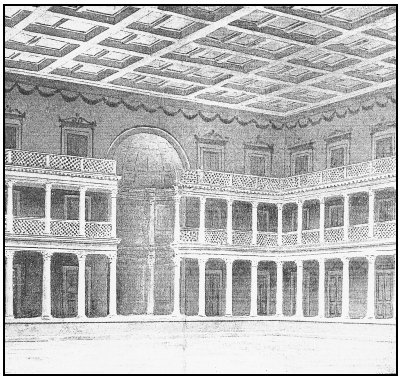


Figure 4.36. Restitution of the Library Section (Source: Braun, E., 1953, p.36)

Figure 4.37. Proposal for the ancient view from the interior hall of the Celsus Library (Source: Braun, E., 1953, p.37)

Explaining the changes in the Celsus Library

Explaining the changes in the physical and functional characteristics

I. Legibility

Design/Form: The design of the Celsus Library is legible in terms of its façade characteristics due to various factors such as existing of large amount of fragments and architectural

[339] Outschar,U. 2000, ibid., p.132.

elements, using simplified details in new parts, which are easily distinguished from authentic parts. Besides, new forms giving the effects of the original ornamented parts provide legibility in detail (Figure 4.38).In that respect, the current state of the façade gives almost complete picture about its design. However, the design of the interior space, which is outlined through the walls standing up to the beginning of the second storey, is not legible as the façade. In that respect, the change in the Library provides moderate level legibility in design.

Material: The consistent use of concrete in missing parts and new elements provides legibility in material in the east façade. Uses of brick in different color tones than the original ones and use of concrete on the rear façade of the east wall also ensure legibility. Besides, the use of material in architectural decoration as marble paneling and revetments is also legible. Therefore, there is high level legibility in material.

Construction Technique: The legibility in construction technique is provided by the structure itself and information given through the presentation panels.

Cultural Layers: Considering that there are evidences of various cultural layers that include the remains of a Hellenistic wall, an element on the archaic sacred way and next to it, the blocks from an archaic structure[340] and the portico parallel to the south wall, conversion of the Library into fountain by adding the Parthian relieves and others (Figure 4.32) were removed and/or lost through interventions. Therefore, some cultural layers are not readable today. The small apse next to steps, as the evidence of the conversion of the Library into fountain, is not necessary to provide legibility of this conversion and historical fact. The removal of the remains causes illegibility in some layers. On the other hand, there is legibility in conservation interventions through the structure itself and the information given through presentation panels. In that respect, the change caused in the cultural layers has low level legibility.

Function: The place of the Library was used for several authentic functions such as heroon, library, and fountain. Among these functions, the use of the place as library is emphasized and represented. Therefore, it is partially legible in function.

II. Consistency

Design/Form: The common method for completing ornamented missing part is to give the general outline and similar texture by using concrete. Besides, the missing parts of the walls are completed through concrete repeating the authentic pattern. In that respect, there is consistency in design.

[340] Strocka, V.M., 1979, ibid., p. 818.

Material: The east wall and interior floor shows that there is consistency in the use of material. The south and west walls were heightened with new bricks. In the south wall, new bricks and stones are used. In that respect, there is consistency in the use of material.

Cultural Layers: Part of the cultural layers revealed through excavation is removed through interventions. Therefore, there is no consistency in treating different cultural layers.

III. Reliability

The current state of the Celsus Library and the interventions are generally based on the authentic information sources. Therefore, there is reliability in change caused through interventions.

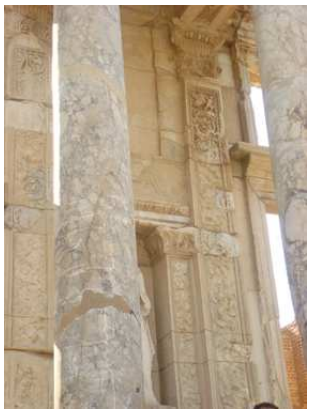


Figure 4.38. New forms providing legibility in detail.

Explaining the changes in the Celsus Library through 'Value Formation Process': Excavation causes the same changes in values similar to other archaeological edifices; the Terrace House II and the so-called Temple of Hadrian. The historical value, location value are transformed through excavation. The conservation intervention causes transformation in the document value, aesthetic value, artistic value and rarity value and continual transformation in architectural value, informational value, educational value and impression value, while it causes loss in originality value. There is a transformation in the content of document value causing loss in the evidences of some cultural layers and addition of authentic architectural characteristics of the Celsus Library. Besides, social value, economic value and functional value are added through interpretation and presentation interventions. The other values such as virginity value, picturesqueness value, identity value and legendary value show general change pattern as shown in Table 4.4.

Table 4.4. Value categories and change patterns for the Celsus Library

Value Types	Value cat. prior to excavation	Value cat. after excavation	Value cat. after conservation interventions	Value cat. after presentation interventions
Archaeological research value	transient	transformation	transformation	transformation
Scientific research value	transient	transformation	transformation	transformation
Architectural value	transient	transformation	transformation	transformation
Impression value	transient	transformation	transformation	transformation
Informational value	transient	transformation	transformation	transformation
Educational value	transient	transformation	transformation	transformation
Document value	transient	transformation	transformation	stationary
Aesthetic value	transient	transformation	transformation	stationary
Artistic value	transient	transformation	transformation	stationary
Authenticity value	transient	transformation	transformation	stationary
Rarity value	transient	transformation	transformation	stationary
Environmental Value	transient	transformation	transformation	stationary
Originality value	transient	transformation	loss	stationary
Historical value	transient	transformation	stationary	stationary
Location value	transient	transformation	stationary	stationary
Social value	nonexistent	nonexistent	nonexistent	gain
Economic value	nonexistent	nonexistent	nonexistent	gain
Functional value	nonexistent	nonexistent	nonexistent	gain
Virginity value	transient	loss	stationary	stationary
Picturesqueness Value	transient	loss	stationary	stationary
Identity value	transient	transient	transient	stationary
Legendary value	transient	transient	transient	stationary
Spiritual/religious value	transient	transient	transient	stationary
Symbolic value	transient	transient	transient	stationary
Political value	transient	transient	transient	stationary
Memory value	transient	transient	transient	stationary
Age value	nonexistent	nonexistent	nonexistent	nonexistent
Homogeneity value	nonexistent	nonexistent	nonexistent	nonexistent
Plurality value	nonexistent	nonexistent	nonexistent	nonexistent
	transient, transformation, transformation, transformation			
	transient, transformation, transformation, stationary			
	transient, transformation, loss, stationary			
	transient, transformation, stationary, stationary			
	nonexistent, nonexistent, nonexistent, gain			
	transient, loss, stationary, stationary			
	transient, transient, transient, stationary			
	nonexistent, nonexistent, nonexistent, nonexistent			

Evaluation of the Changes in the Celsus Library

Considering that interventions generally provide reliable changes in the Celsus Library, the interventions starting from excavation have various effects on the construction new appearance and meaning of the Celsus Library in its new lifecycle. Excavation revealing the Celsus Library acquires information on the past uses of IAH starting from the Hellenistic periods. The conservation interventions cause great transformation in IAH and construct it as a representative of the Roman façade architecture. Then, the use of the interior hall of the Celsus Library as a kind of information center is provided the interpretation and presentation interventions. In that respect, the main issues related with the formation of the Celsus Library in its lifecycle are explained below.

- The conservation approach that expresses the architectural value in terms of the Roman façade architecture and the rare example of its type causes legible and consistent transformation within the limits of scientific information. However, the evidences of some cultural layers, which are ignored and lost, cause irreversible losses in originality value and in the content of information related with the document value and some cultural layers. In that respect, the approach, which signifies the Library, as a source of information about Roman façade architecture, defines the meaning of the Celsus Library in terms of its façade characteristics, not as the product of multi-layered place. Some characteristics, which legitimize archaeological edifice as ‘heritage’, are lost through conservation interventions due to lack of consistency in cultural layers, which are the main evidences of the past uses.

- The changes in the Library of Celsus through conservation approach cause a conflict between the originality value and the architectural value. Besides, the transformation in the type of information in the ‘document value’ cause loss in some evidences and parts of the Celsus Library, which are unique, authentic and irreplaceable. In that respect, this type of change develops the conflict between ‘preserving the place’ and ‘preserving an authentic design’, which is to be questioned and considered.

- The interpretation and presentation interventions giving information on the conservation interventions especially provide legibility in some extent. However, the lack of information on some cultural layers causes irreversible losses in the evidences of these cultural layers, which legitimize the ‘place’ of the Celsus Library as ‘heritage’. However, the authentic function of the Celsus Library as a library and heroon has moderate level of legibility in contrast to the legibility provided in the architectural design of the Library through conservation interventions.

In this context, the change pattern in the Celsus Library places the 'transformation' at the center. Besides, it includes the conflict between the originality value and architectural value. Therefore, the intervention approach replacing existing characteristics with new ones cause a change in the quality of 'moderate level'.

4.3.4. Understanding Changes in the Trajan's Fountain

The Trajan Fountain, as among the major public monuments of the ancient city, is placed in the central section of the Curetes Street (Figure 4.3).

Phases of Changes: Descriptions of the states of the Trajan Fountain

Phase 1: Description of the current state of the Trajan Fountain

The current appearance of the fountain is the result of its re-erection in 1962[341], which is planned by Miltner and applied by H.Pellionis and W.Mach[342] (Figure 4.39). The fountain has a rectangular plan including a main pool, which is surrounded through a columnar façade in 'U' shape, and a narrow secondary basin running along the south façade. The columns' pedestals and composite capitals were generally re-erected in their original location by inserting short concrete stumps, instead of the columns shafts. Re-erected two rows of column pedestals and capitals indicate existing of two-storey façade. At the ground floor, the architrave blocks and friezes are placed on top of the capitals. At the east wing, there are circular columns, which do not have capitals (Figure 4.40), and at the west wing, the architrave blocks, friezes are directly placed on the wall of the main pool. There are pilasters on the rear wall corresponding to each column.

At the first floor, the central tabernacle and pediment were re-erected by gathering column pedestals (in octagonal form) and the capitals in Corinthian order with short concrete stumps similar to the ground floor. There is a triangular pediment at the top of the central bay (Figure 4.41). The small part of the giant statue of the emperor is on the original location at the centre of the façade. However, the architectural elements of the side bays are not re-erected.[343] Missing parts were completed with concrete in black cement, and new elements were reproduced with concrete (Figure 4.42). The form of the missing parts was completed in simplified forms, and the missing pedestals were completed in the same form with the original ones.

The Trajan's Fountain giving information on water delivery of the ancient times is studied in terms of its water management system by Quatember in recent years, as part of the

[341] Wiplinger, G. & Wlach G., ibid., p.96.
[342] Keil, J., 1964, Ephesos: Ein Führer Durch Die Ruinenstatte und Ihre Geschicte, Vienna, p. 122
[343] Keil, J. 1964, ibid., p. 122.

Embolos project.[344] In that respect, the Trajan's Fountain has scientific research value. Quatember's statement 'future excavation planned for the 2005 campaign should confirm some of the hypotheses…'[345] on execution of excavation and archaeological research after its initial excavation indicates that the fountain has still archaeological research value and scientific research value. The fountain dedicated to the Roman emperor Trajan and the goddess Artemis by the Ephesian Tiberius Cladius, who "…was archiereus (high priest) of the state cult and neokoros from 89 to 91[346], and his wife[347]", acts as the evidence of the historical issue. Therefore, it has information value and document value. The structure is "…one of the three great Ephesian fountain installations whose columnar facade is designed in the tradition of the theatrical scaenae frons but enriched by additional projecting side wings".[348] Therefore, it has representative value in terms of its architectural characteristics.
The interpretation and presentation interventions includes a presentation board (Figure 4.42) and audio guide similar to the so-called Temple of Hadrian and other edifices. The content of the information given through these installations are also on the name and construction date.

Figure 4.39. The façade of the Trajan Fountain, 2008

Figure 4.40. The circular columns at the east wing of the Trajan Fountain, 2008

Phase 2: Description of the state of the Trajan Fountain throughout and after excavation: The Fountain was discovered on the north side of the street.[349] Throughout the excavations,

[344] Quatember, U., 2006, The Water Management and Delivery System of the Nymphaeum Traiani at Ephesus, In G.Wiplinger, Cura Aquarum in Ephesus, Proceedings of the Twelfth International Congress on the History of the water management and hydraulic Engineering in the Mediterrenean Region, Ephesus/Selçuk, Turkey, October 2-10, 2004, Leuven, Paris, Dudley, MA, Peeters, p.73.
[345] Quatember, U., ibid.
[346] Thür, H., 2004, ibid., p. 184.
[347] The epigraphical evidence is the evidence for the dedication (Quatember, U.,ibid., p.73)
[348] Thür, H., 2000, Nymphaeum Traiani, in P. Scherrer (ed.), Ephesus: The New Guide, Turkey: Ege Yayınları, p.116.
[349] Miltner, F. 1959, İbid., p. 326.

a plan scheme framed on three wings and some bases were discovered. Numerous architecture pieces indicating a structure with two-storeyed façade, various statues and a giant statue of the Emperor Trajan were found[350] (Figure 4.43). Besides, various pieces of statues were found. For instance, a male figure belonging to the western narrow side was discovered[351] (Figure 4.44). Some architecture pieces obviously dating to the late-antique period were also discovered. The naked Dionysos sculpture, which is interpreted as part of the revision in the structure in late Roman times, was found.[352]

Figure 4.41. The central tabernacle and the pediment of the Trajan Fountain

Figure 4.42.The presentation board on the wall

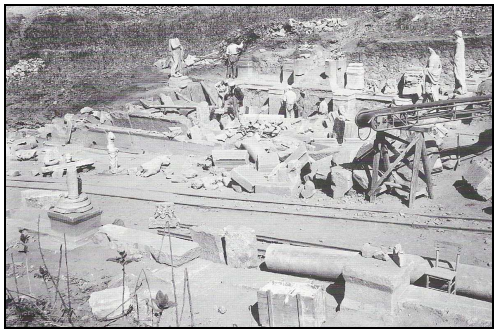


Figure 4.43. The state of the Trajan Fountain in 1957 (Source: Wiplinger, G. & Wlach, G., 1995, p.67).

Figure 4.44. The sculpture of Nerva found during excavation (Miltner, F, 1959, p.344).

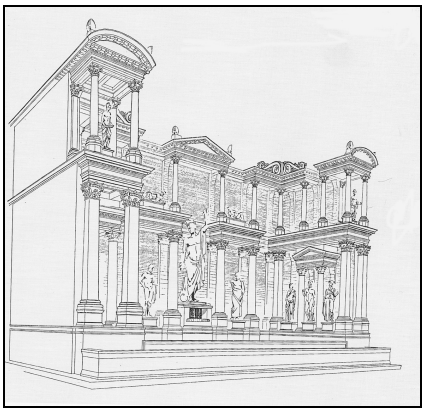
[350] Miltner, F. 1959, ibid., p. 328.
[351] Miltner, F. 1959, ibid., p. 332-33.
[352] Aurenhammer, M., 2004, İbid., p.273.

Phase 3: Description of the state of the Trajan Fountain prior to excavation:

The information on the state of the fountain prior to excavation was not reached. It is possible to state that the Trajan Fountain was probably covered prior to excavation.

Phase 4: Description of the states of the Trajan Fountain in the past:

The fountain was built by the beginning of the second century. According to the inscription on the frieze and architrave of the ground floor, the fountain was dedicated to the Emperor Trajan. It was built by Tiberius Cladius Aristion between 102 and 112 AD. K. H. Göschl supposed that the fountain has a two storied columnar façade in the tradition of theatrical scaenae frons with projecting side wings (Figure 4.45) and a long, rectangular plan scheme comprising a basin surrounded at three sides[353] (Figure 4.46). At the ground floor, the column pairs were united the pavilions. At the first floor, the middle bay is wider than the others and is covered by an entablature with a triangular pediment, which forms a two-storey high niche. In this niche, a doubled life-size statue of the Emperor Trajan was placed. At the corners, the intercolumniation is emphasized by horizontal volutes. There are round pediments at the short edges of the projecting wings looking towards the Curetes Street. Besides, there are various statues such as Dionysus, Nerva, and Aphrodite decorating the façade.[354] The insertion of sculptures into the fountain similar to some other structures such as the so-called Temple of Hadrian and the Bath of Scholasticia is interpreted as the rebuilding of the structure after its collapse due to the earthquake (probably in 362 AD).[355]



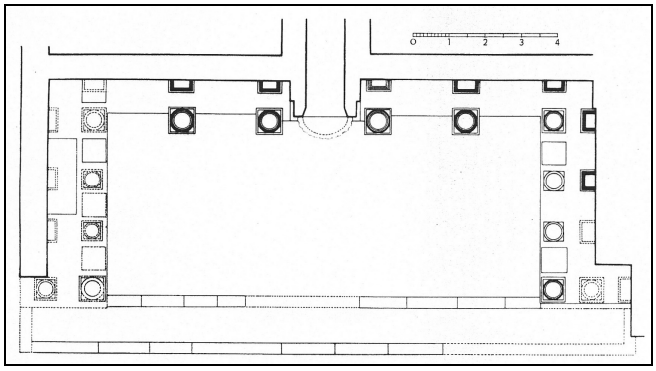


Figure 4.45. The restitution of the Trajan Fountain's façade by H. Pellionis (Source: Scherrer, P., 2000, p.117).

Figure 4.46. The plan of the Trajan Fountain by H.Pellionis (Source: Miltner, F., 1959, p.342)

[353] Thür, H., 2000, ibid., p.116.
[354] Miltner, , F., 1959, ibid., p. 326-32 & Thür, H., 2000, ibid., p.116.
[355] Miltner, F., 1959, ibid., p. 340.

Explaining the changes in the Trajan Fountain

Explaining the changes in the physical and functional characteristics

I. Legibility

Design/Form: The existing architectural elements joined through small concrete stumps do not allow reading the authentic design of the fountain, which is lack of information on various architectural features such as the high of the columns and the statues. Therefore, the design has low level of legibility.

Material: The consistent and common uses of concrete (with black cement) for missing parts and elements provide distinguishing new and authentic material. Therefore, the change provides legibility in material.

Construction Technique: It is possible to read that some architectural elements were joined through iron bars and concrete due to damages in material. In that respect, there is legibility in the construction techniques of some parts.

Cultural Layers: According to the interpretation, the fountain has two construction phases. [356] There are various elements belonging to the initial construction phase. However, the evidences of the latter construction phases including various statues and demolishment due to earthquake are not represented in current structure. Therefore, there is legibility in one cultural layer. In that respect, the changes caused in cultural layers have moderate level of legibility.

Function: The information on the authentic function of the Trajan Fountain is mainly given through the presentation panel, on which the name of the archaeological edifice is written. In that respect, the changes caused through interventions are not enough for providing legibility in the authentic function. They have moderate level of legibility in function.

II. Consistency

Design: It is legible that the common approach is to complete the missing elements without referring a particular form. At the east wing, the architrave blocks are located on the capitals. However, at the west wing, the architrave blocks are placed on the wall of the fountain basin. Therefore, there is inconsistency in the location of the elements. As a result, the consistency in design is in moderate level.

[356] Miltner, F., 1959, ibid., p.340.

Material: The common use of concrete for all missing parts provides consistency in the material.

Cultural Layers: Considering that interventions provide removal of the statues belonging to the second construction phase and lack of evidences on both existing of statues and second construction phase, there is no consistency in cultural layers.

II. Reliability

The information on the height of the columns is missing[357]. In that respect, the information conveyed through the structure is not accurate and, the conservation intervention is not reliable.

Explaining the changes in the Trajan Fountain through 'Value Formation Process':
The excavation causes similar types of changes in the values with other archaeological edifices. The conservation intervention based on re-assembling and re-erection of the architectural elements causes different types of changes in architectural value, authenticity value, information value and education value. The intervention causes a type of change, which depends on transferring individual architectural element by giving information on the relationship between them. The architectural value emphasizing characteristics of each architectural element transforms into something, which cannot be interpreted as 'architectural value'. Therefore, a type of transformation, which causes distortions in architectural value, is formed. There is also distortion in authenticity value, information value and education value related with this abnormal change. Therefore, there is a transformation resulting with distortion in architectural value, authenticity value, informational value and educational value. In addition, originality value is lost. As a result, re-erection of the architectural elements results with distortion in the architectural value, authenticity value, informational value and education value (Table 4.5).

Evaluation of the Changes in the Trajan Fountain

Re-erection of the architectural elements in the sake of showing their relationship cause transformation in some characteristics such as form, material, construction technique and demolishment layer without providing legibility in design. Therefore, it is possible to state that this type of re-erection causes a type of change, which is based on transformation while distorting scientific information, and some values that include architectural value, document value, authenticity value, informational value and education value. In that respect, some main issues related with the change in the Trajan Fountain are given below.

[357] Knibbe, D. & Thür, H., 1995, Via Sacra Ephesiaca II: Grabungen und Forschungen 1992 und 1993, Wien, Österreichisches Archäologisches Institut, p. 89.

Table 4.5. Value categories and the change patterns for the Trajan Fountain

Value Types	Value cat. prior to excavation	Value cat. after excavation	Value cat. after conservation interventions	Value cat. after presentation interventions
Archaeological research value	transient	transformation	transformation	transformation
Scientific research value	transient	transformation	transformation	transformation
Informational value	transient	transformation	transformation	transformation
Educational value	transient	transformation	**transformation (including distortion)**	transformation
Architectural v.	transient	transformation	**transformation (including distortion)**	stationary
Authenticity v.	transient	transformation	**transformation (including distortion)**	stationary
Impression v.	transient	transformation	transformation	stationary
Document v.	transient	transformation	transformation	stationary
Aesthetic value	transient	transformation	transformation	stationary
Artistic value	transient	transformation	transformation	stationary
Environmental Value	transient	transformation	transformation	stationary
Originality value	transient	transformation	loss	stationary
Rarity value	transient	transformation	stationary	stationary
Historical value	transient	transformation	stationary	stationary
Location value	transient	transformation	stationary	stationary
Social value	nonexistent	nonexistent	nonexistent	gain
Economic value	nonexistent	nonexistent	nonexistent	gain
Virginity value	transient	loss	stationary	stationary
Picturesqueness value	transient	loss	stationary	stationary
Identity value	transient	transient	transient	stationary
Legendary value	transient	transient	transient	stationary
Spiritual/religious value	transient	transient	transient	stationary
Symbolic value	transient	transient	transient	stationary
Political value	transient	transient	transient	stationary
Memory value	transient	transient	transient	stationary
Age value	nonexistent	nonexistent	nonexistent	nonexistent
Functional value	nonexistent	nonexistent	nonexistent	nonexistent
Homogeneity value	nonexistent	nonexistent	nonexistent	nonexistent
Plurality value	nonexistent	nonexistent	nonexistent	nonexistent
	transient, transformation, transformation, transformation			
	transient, transformation, transformation, stationary			
	transient, transformation, loss, stationary			
	transient, transformation, stationary, stationary			
	nonexistent, nonexistent, nonexistent, gain			
	transient, loss, stationary, stationary			
	transient, transient, transient, stationary			
	nonexistent, nonexistent, nonexistent, nonexistent			

- The archaeological research and scientific research conducted on the water management systems indicate that although the initial intervention cycle is finished, the archeological edifice still has potentials for researches throughout its new lifecycle.

- Re-erection of the facade elements without column shafts gives information and picture, which shows the relationship between architectural elements of a particular order, rather than the picture of authentic architectural design. Therefore, there is almost low level legibility in design.

- This type of change causes loss in the evidences of some cultural layers and the authentic architectural design of a particular period. In that respect, it does not provide to give information within the limits of scientific information and causes distortions in various aspects. Therefore, the present state of the Trajan Fountain gives speculative information.

- The interpretation and presentation interventions, which are limited with the name of the archaeological edifice and date of the first construction phase, do not inform about the probable characteristics and architectural features of the Trajan Fountain. Besides, the information on the contemporary interventions is not conveyed. Therefore, the interpretation and presentation interventions do not provide legibility in any of authentic state of the Trajan Fountain.

The change caused through interventions transforms the Trajan Fountain into something 'new' without providing authenticity and integrity in architectural design and conveying scientific information. Therefore, the interventions cause a change in the quality of 'regress'.

4.3.5. Understanding Changes in the Memmius Monument

The Monument is situated at the end of the Curetes Street and on the north part of the Domitian Square (Figure 4.3). There is a Hydreion next to the northwest façade of the Memmius Monument.

Phases of Changes: Descriptions of the states of the Memmius Monument

Phase 1: Description of the current state of the Memmius Monument

The current state of the Memmius Monument is the result of the re-erection applied in 1963-4 by A. Bammer[358]. The structure is placed on the massive foundation constructed with rusticated ashlars blocks (Figure 4.47). It has nearly square ground plan with four steps in

[358] Wiplinger, G.& Wlach, G., ibid., p. 98.

marble. The broken architectural elements including architrave blocks, sculptured panels and the parts of the frames are gathered and re-erected on the steps.

The architectural elements, which do not form integrity, are combined by using concrete (with black cement) blocks. The concrete blocks are used like glue for joining fragments and erecting some architectural elements. At the east façade, the architrave block and geison block were joined. The sculptured panels were placed on top of these elements. The broken sculptured panels, which were fixed on a concrete block, were re-erected on the stylobate (Figure 4.47). At the south façade, a part of the recessed spherical niche and part of the window frame was re-erected. Besides, some parts of the caryatids and the pilasters at the southwest corner are re-assembled (Figure 4.48). At the east façade, the sculptured panels are fixed on a concrete block and framed with two cornice block at the top and bottom. As it is explained, some architectural elements such as the caryatids, the concave door, and the Attika reliefs were assembled. However, it is not possible to restore the building in its original figure due to changes in the structure.[359]

The interpretation and presentation interventions and the content of the information are similar with the so-called Temple of Hadrian and the Trajan Fountain. The presentation panels are on the south facade. The broken parts of the sculptured panels are presented on the stylobate and next to the Memmius Monument (Figure 4.49).

The Memmius Monument, which is located at the east end of the Curetes Street, where it joins with the Domitian square, has a location value. Bammer explains that the caryatids and the triumphal curves serve as a symbol of the political statement.[360] In that respect, the monument is an evidence of the use of architecture for conveying political messages in the Roman period. Therefore, the monument has document value as a standing monument and architecture of its time.

[359] Bammer, A., 1972-1975, Architektur, in Jahreshefte des Österreichischen Institutes in Wien, Band L, Baden bei Wien, Rudolf M. Rohrer Verlag, p.393.
[360] Bammer, A., 1973, Die politische Symbolik des Memmiusbaues, ÖJh 50, 1972-73, p.222.

Figure 4.47. View from the east and south facades of the Memmius Monument, 2008

Figure 4.48. The south façade of the Memmius Monument, 2008

Figure 4.49. The west façade of the Memmius Monument, 2008

Phase 2: Description of the state of the Memmius Monument throughout and after excavation: Throughout the excavations, numerous pieces were found in the immediate surroundings of IAH as shown in Figure 4.50. For instance, a relief pillar with the representation of a woman's head was discovered.[361] The blocks with figures are interpreted as "…the members of Memmius' family and personifications of his characteristics virtues".[362] The architrave fragments with the Latin inscription from stone masonry with limestone were discovered. Besides, there is a grown cliff from red limestone. The lime mortar was used in nuclear masonry.363

[361] Bammer, A., 1971, Das Monument Des C.Memmius, Forschungen in Ephesos, Band VII, Vienna, p.9.
[362] Outschar, U., 2000, The Memmius Monument, in P. Scherrer (ed.), Ephesus: The New Guide, Turkey: Ege Yayınları, p.96.
[363] Bammer, A., 1971, ibid, p. 11.

Phase 3: Description of the state of the Memmius Monument prior to excavation: According to the photograph taken during the excavation, the Memmius Monument was most probably covered prior to excavation (Figure 4.51).

Figure 4.50. The Memmius Monument during excavation (Source: Braun, E., 1971, p.11)

Figure 4.51. The ruins of the Memmius Monument during excavation (Source: Source: Braun, E., 1971, p.13)

Phase 4: Description of the states of the Memmius Monument in the past: According to the researchers, an honorific monument was built for C.Memmius in the third quarter of the first century.[364] Different proposals for its ancient architectural design have been developed.[365] The initial proposal, which is contemporary with the conservation intervention approach, is taken into consideration in order to evaluate the changes. In Bammer's proposal, the structure is in two-storey and has three display sides at the east, south and west. There is an attic at the upper part, which is divided with pilasters. Besides, there were sculptured panels with figures and recessed spherical niches framed by the arches. The caryatids with basket capitals were supported by the arches (Figure 4.52, Figure 4.53).[366]

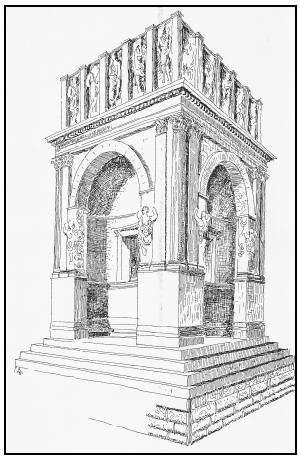
[364] Scherrer, P., 2004, ibid., p.6.
[365] The initial proposal was developed by A. Bammer (FiE VII). The final proposal was developed by U. Outschar (Öjh 1990, pp.57-85).
[366] Outschar, U., 2000, ibid., p. 96.

Explaining the changes in the Memmius Monument

Explaining the changes in the physical and functional characteristics

I. Legibility

Design: The architectural fragments and elements fixed on concrete blocks do not form a comprehensive integrity in the architectural design of the Memmius monument. Therefore, it is not legible in design.



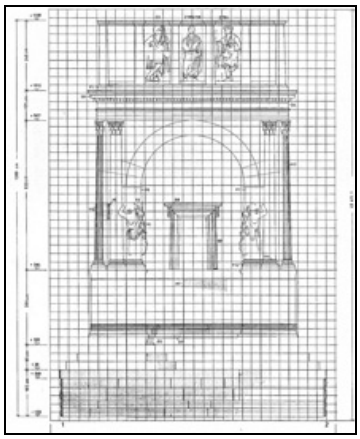


Figure 4.52. Bammer's proposal for the authentic design of the Memmius Monument (Source: Bammer, A., 1972-1975, p.220).

Figure 4.53. Bammer's proposal for the façade of the Memmius Monument (Source: Bammer, A., 1972-1975, p.221).

Material: Common and consistent use of concrete (with black cement) provides distinguishing new and authentic parts. In that respect, there is legibility in material.
Construction Technique: There is also legibility in the construction technique.

Cultural Layers: The principle is not valid for the Memmius monument, which is composed of a single layer.

Function: The present state of the Memmius monument does not have contribution in clarity of its authentic function. Therefore, it is not possible to understand the authentic function of the building, on which information is only given through presentation panel.

II. Consistency

Design: The architectural fragments and elements were re-erected by using concrete blocks, which do not refer to any authentic characteristics of the Memmius Monument. Therefore, it provides consistency in design.

Material: Concrete (black cement) is the common material and used in a consistent manner for new and missing parts. Therefore, there is consistency in material.

Cultural Layers: The principle is not valid for Memmius monument, which is composed of a single layer.

III. Reliability

As it is known, different design proposals have been developed for the Memmius monument. The first proposal (Figure 4.52, Figure 4.53) was developed by Bammer and contemporary with the conservation interventions. The other proposal developed by Outschar contradicts with Bammer's proposal (Figure 4.54). In that respect, the reliability in change is defined in terms of Bammer's proposal. Considering that Bammer explains that it is not possible to restore the original figure of the Memmius Monument due to changes and its historical destiny[367], it is possible to state that there is not enough information for developing a reliable intervention approach for the Memmius monument. Therefore, it is not reliable.

Figure 4.54. Outschar's proposal (Source: Scherrer, P., 2000, p. 97)

[367] Bammer, A.., 1972-1975, ibid., pp.393.

Explaining the changes in the Memmius Monument through 'Value Formation Process': The change in the values of the Memmius Monument is very similar with the Trajan Fountain. Re-erection of the architectural elements and fragments by fixing them with concrete blocks causes transformations in the architectural value, authenticity value, informational value and educational value, while it causes distortions in the information content and accurateness. In that respect, re-erection based on speculative information does not cause a change, which takes the Memmius monument one step further. Rather, it results with a change causing distortion. Therefore, there is a transformation resulting with the loss in authenticity value, distortion in the informational value and educational value (Table 4.6).

Evaluation of the Changes in the Memmius Monument

Throughout the new lifecycle of Memmius monument, excavation causes transformation in some characteristics. Besides, interpretation and presentation intervention almost do not add new information. The conservation intervention causes losses in some existing characteristics such as demolishment layer, information content of the document value and etc. Therefore, the change caused through interventions cause distortions in existing meaning and appearance. Besides, new state proposed for the Memmius Monument does not give accurate information similar to the Trajan Fountain. It is possible to explain the issues in relation with changes caused through interventions as follows:

- Re-erection of few architectural elements on the building, which do not provide architectural integrity, cause transfer of the existing characteristics without providing integrity and reliability in architectural design.
- Therefore, it does not provide legibility in architectural design while causing loss in archaeological remains in-situ.
- The interpretation and presentation interventions being limited with the name and construction date do not support and ensure legibility of the Memmius Monument in terms of various characteristics and issues such as design, cultural layers and the process of interventions.
- The information conveyed through the Memmius Monument, as the outcome product of the interventions, is speculative. In that respect, the change is not based on scientific information. The change in the Memmius Monument distorts its meaning and characteristics.

Table 4.6. Value categories and change patterns for the Memmius Monument

Value Types	Value cat. prior to excavation	Value cat. after excavation	Value cat. after conservation interventions	Value cat. after inter. & presentation interventions
Archaeological research value	transient	transformation	transformation	transformation
Scientific research v.	transient	transformation	transformation	transformation
Informational value	transient	transformation	**transformation (including distortion)**	transformation
Educational value	transient	transformation	**transformation (including distortion)**	transformation
Architectural value	transient	transformation	**transformation (including distortion)**	stationary
Authenticity value	transient	transformation		stationary
Impression value	transient	transformation	transformation	stationary
Environmental v.	transient	transformation	transformation	stationary
Document v.	transient	transformation	transformation	stationary
Originality v.	transient	transformation	stationary	stationary
Rarity value	transient	transformation	stationary	stationary
Historical value	transient	transformation	stationary	stationary
Location value	transient	transformation	stationary	stationary
Aesthetic value	transient	transformation	stationary	stationary
Artistic value	transient	transformation	stationary	stationary
Social value	nonexistent	nonexistent	nonexistent	gain
Economic value	nonexistent	nonexistent	nonexistent	gain
Virginity value	transient	loss	stationary	stationary
Picturesqueness v.	transient	loss	stationary	stationary
Identity value	transient	transient	transient	stationary
Legendary value	transient	transient	transient	stationary
Spiritual/religious v.	transient	transient	transient	stationary
Symbolic value	transient	transient	transient	stationary
Political value	transient	transient	transient	stationary
Memory value	transient	transient	transient	stationary
Age value	nonexistent	nonexistent	nonexistent	nonexistent
Functional value	nonexistent	nonexistent	nonexistent	nonexistent
Homogeneity value	nonexistent	nonexistent	nonexistent	nonexistent
Plurality value	nonexistent	nonexistent	nonexistent	nonexistent
	transient, transformation, transformation, transformation			
	transient, transformation, transformation, stationary			
	transient, transformation, stationary, stationary			
	nonexistent, nonexistent, nonexistent, gain			
	transient, loss, stationary, stationary			
	transient, transient, transient, stationary			
	nonexistent, nonexistent, nonexistent, nonexistent			

In the change of the Memmius monument, the change pattern causes transformation while distorting scientific information. Considering that the Memmius monument is transformed into something ‘new’, which does not convey scientific information, the interventions cause a change in the quality of ‘regress’.

4.4. Evaluation

As explained above, the change caused through interventions has various effects in the formation of archaeological edifices on the Curetes Street throughout its new lifecycle. In this stage of the study, there is a great need for evaluating the results of the case study in order to understand and explain the changes comprehensively both in structure scale and the Curetes Street scale.

4.4.1. Evaluating Interventions in IAH scale

As explained above, the interventions have many effects on various issues such as the characteristics of IAH, its meaning and quality of change. They cause changes in different pattern and quality. In that respect, it is necessary to evaluate the interventions in the archaeological edifices on Curetes Street in terms of ‘new formation process’. The evaluation is based on with the following issues:

- Interventions as phases of change,
- interventions as tools for defining IAH and its new characteristics,
- Interventions as factors for developing conflicts,
- interventions as tools for evaluating the relationship between principles of change and values.

Interventions as Phases of Change

The case study demonstrates that the interventions starting from excavation causing changes in the appearance and meaning of the archaeological edifices define it in its new lifecycle. For instance, the interventions in the Terrace House II providing preservation of the evidences of past cultures and conveying information on the interventions including excavation and history of the protective shelter provide clarity in different states of IAH. In another case, the so-called Temple of Trajan, interventions cause changes in relation with the last antique state of the Temple. Besides, the interventions on the Celsus Library emphasizing architectural design of the Roman facade characteristics cause loss in information in relation with the evidences of some cultural layers. Therefore, the current state

of the Celsus Library does not provide clarity in its states in the past and the phases of changes. On the other hand, interventions in the Trajan Fountain and the Memmius Monument cause transformation out of the limits of scientific information and do not provide legibility in any state of the edifice by distorting archaeological remains in-situ. As explained above, interventions defining different states of IAH give information on how IAH is formed and shaped. In that respect, each intervention defines a particular phase of the change caused through interventions. As a result, the case study indicates that interventions act as the phases of change.

Interventions as tools for defining IAH and its new characteristics

IAH on the Curetes Street indicates that interventions have great roles in shaping and defining new characteristics of IAH. For instance, the interventions on the Terrace House II shape its new appearance and meaning by preserving most of the evidences of different cultural layers as found. In the case of the Celsus Library, the evidences of different periods and evidences of conversion of the Library into fountain, is transformed into an edifice representing the facade architecture of Roman period. In that respect, the interventions define new characteristics of the Celsus Library and define its new meaning and appearance. Besides, the interventions on the Trajan Fountain cause distortions in its appearance and meaning by providing its representation based on the hypothetical information and loss in the evidences of the second construction phase. The interventions on the so-called Hadrian Temple transfer the evidences of the cultural layers and transform fragments into a standing structure, which acts as the representative of the ancient architectural design. Therefore, the so-called Hadrian Temple is defined with its authentic characteristics, which legitimize it as ‘heritage’, through the interventios. As a result, the interventions are not only technical issues, but define and shape the characteristics of IAH by causing changes in terms of various issues such as removal of evidences of different cultural layers and representing its authentic architectural design.

Intervention as a factor for developing conflicts through change

The conflicts are among the main issues related with the changes caused through interventions. The conflict is related with two issues; the first, values and the second, the goals of intervention and efficiency of intervention in time. As explained in the Celsus Library, the transformation of information value, education value, document value through loosing the evidences of some cultural layers and loss in originality value causes loss in the meaning and appearance, which is unique and non-renewable. These losses in the values, which legitimize the place of the Celsus Library as ‘heritage’, develop conflicts between values. In other cases, the Terrace House II and the so-called Hadrian Temple, the intervention approaches transfer existing characteristics and emphasize some characteristics without developing conflicts between values. As a result, it is possible to state that interventions are

one of the main tools for developing conflicts in values. Therefore, it is necessary to evaluate the effects of different intervention approaches on IAH, whether a conflict is developed or not.

As shown with the protective shelter over the Terrace House II, another type of conflict develops between the goals of intervention and thr efficiency of the protective shelter in time. The changes caused through protective shelter have great effects on the appearance of IAH and its perception within the site. Some effects, which are viewed as negative impacts, are accepted in the sake of the main goal that is based on the conservation of the wall paintings and frescoes. However, the current state of the protective shelter, which does not provide appropriate climate conditions for the conservation of the wall paintings and frescoes, does not fulfill the requirements of the main goal and cause damages to authentic remains. In that respect, there is conflict between the goals of intervention and efficiency of intervention in time. Therefore, it is significant to test the validity of the intervention proposal whether it has potential to fulfill the requirements of main goals in time or not.

Interventions as tools for evaluating the relationship between principles of change and values

As shown in the Terrace House II and the so-called Hadrian Temple, although there is inconsistency in the extent of conservation interventions, the conservation intervention approaches, which transfer all cultural layers and upgrade some characteristics, provide legibility within the limits of scientific information. Besides, they convey as much as information on IAH by providing changes in values and increasing the amount of information. On the other hand, the conservation intervention approach on the Celsus Library providing legibility and consistency within the limits of scientific information emphasizes information on a specific period by causing loss on the information of other cultural layers. In that respect, the case study indicates that there is a specific relationship between consistency, legibility and changes in values.

4.4.2. Evaluating the Changes in the Curetes Street scale

In the early years of the excavation, the Curetes Street was composed of scattered architectural fragments and elements in untouched state within a picturesque landscape. Apart from some column bases and pedestals surrounding the street, the facades enclosing it were completely covered as shown in the Figure 4.55.

Figure 4.55. View from the Curetes Street from the west throughout its excavation (Source: Wiplinger, G. & Wlach, G., 1995, p.67).

Among thirteen recovered archaeological edifices on the Curetes Street, the west end of the street is surrounded by standing structures including the Celsus Library, the South Gate of the Agora and the Gate of Hadrian. These standing edifices give an impression on how the street was in the ancient times. Therefore, this portion of the street, especially the Library square, which gives an overall idea on the architecture of a particular period with the surrounding archaeological edifices, their facades and scales, has high information, architectural and education values (Figure 4.56). On the contrary, the loss in some cultural layers prevents to give information on various issues such as the conversion of the Library into fountain in the Byzantine period and the demolishment layers. Therefore, the part of the Street was formed in relation with the architectural characteristics of particular period by loosing some characteristics of other periods. The transformation in the archaeological edifices at the Library Square emphasizing architectural characteristics of a particular period

and removing evidences of some other cultural layers causes a change in the quality of ‘moderate level’. In Addition, the balance between ‘transfer’ and ‘transformation’ is not provided.

The change in the Terrace House II in street scale represents completely different characteristics and quality in comparison to the changes in structure scale. The Terrace House II covered with the protective shelter causes great changes in the characteristics of the Curetes Street in terms of various characteristics such as design, material and scale. The current state of the protective shelter, which has been lost its transparency and becomes opaque, has negative effects on the impression of authentic setting. Besides, the huge area covered by the protective shelter completely changes the appereance and effect of the Street surrounded with archaeological remains. However, the Octagon and the Heroon act as a barrier in the front of the Terrace House have positive effects on the Street. The so-called Alytarchus Stoa acts as an important urban element facing the street by the interventions causing transformation. The change in the so-called Trajan temple transforms it a standing structure and among the most attractive structures on the Curetes Street, which represents both façade characteristics and plan scheme of the ancient edifice. The archaeological edifices located in the area between the so-called Trajan Temple and the Gate of Hadrian is transferred with existing characteristics. Therefore, this portion of the Curetes Street (Figure 4.57) is both transformed and transferred. In that respect, the change in this portion of the street is different from the one at the west end of the Curetes Street. The interventions do not transform this portion of the Street into an improved state due to the negative effects of the protective shelter over the Terrace House II. In that respect, the change is in moderate quality.

At the east part of the Curetes Street, there are various IAH including two archaeological edifices; the Memmius Monument and the Trajan Fountain, on which interventions are applied. In that respect, the change in this portion of the Street (Figure 4.58, Figure 4.59) depends on the changes caused through the interventions on these edifices. Considering that the change in the Memmius Monument and the Trajan Fountain causes distortions in the characteristics and information related with archaeological edifices, therefore, the change is in quality of the regress in this portion of the Street.

As a result, the changes in the different portions of the Curetes Street show differences in terms of the quality of change. While the west end of the Street and the portion next to the west end of the Street (including the Terrace House II, the Octagon, the Heroon and the Gate of Hadrian) causes the change in the moderate quality, the change in the east portion is in the quality of regress. In that respect, it is possible to state that the quality of the change in the Curetes Street (Figure 4.60) is almost in the moderate quality at present.

Figure 4.56. The state of the Library Square after the changes caused through interventions, 2008.

Figure 4.57.The state of the Alytarchus Stoa and the Terrace House II after changes, 2008

Figure 4.58.The east portion of the Curetes Street including the Trajan Fountain after the changes, 2008

Figure 4.59.The east end of the Curetes Street including the Memmius Monument after changes, 2008

Figure 4.60.The present state of the Curetes Street, 2008

CHAPTER 5

CONCLUSIONS AND SUGGESTIONS

This chapter comprises the conclusions reached at the end of the study and recommendations and suggestions for further studies.

5.1. Evaluations

Interventions have been generally viewed as ‘technical issues’ throughout the history of preservation discourse. There has been great emphasis on certain concepts and principles such as authenticity, reliability and integrity. Today, change is viewed as a common approach for understanding certain issues in various disciplines such as physics, chemistry, biology and economics, and preservation as well. In the last decade, change came to be considered in the management plans of certain sites such as Stonehenge and Avebury in the UK and Chan Chan in Peru. In that respect, it has become unavoidable to recognize the potentials that change offers for understanding/explaining/predicting impacts of interventions on archaeological edifices. Besides, the developments in preservation, which consider and evaluate IAH in a broader context such as site scale and regional scales, make it necessary to embrace new approaches and methods. After taking various lessons and gaining experience on the interventions on IAH, there is a need for developing new approach, which provides systematic evaluation of interventions. Based on this background, the ‘new formation process’ approach is developed in order to understand how IAH is shaped and defined in its new lifecycle.

Related with the formation of the characteristics of IAH in its new lifecycle, the ‘new formation process’ actually introduces a new method for interventions on IAH in the preservation discourse. This new method enables researchers and conservation specialists to approach IAH by considering not only what is ‘significant’ and gained but what is ‘insignificant’, lost and transformed. In this context, this study discusses how IAH is framed and shaped in its new lifecycle starting from the excavation process until interventions concerning interpretation and presentation. It is a method that encourages learning from the relationships of interventions and the characteristics of IAH.

In this context, this thesis provides a discussion platform on the subject of 'how IAH is shaped and defined through interventions in its new lifecycle' by putting 'change' at the center of the issue. As a first step of the study, the questions of 'what is changed and how it has taken place in preservation discourse' have been examined. In this step, several concepts defined in the preservation discourse are evaluated as the principles of change, followed by an explanation of common types of change. The second step of the study is based on the questions of 'what changes', 'what causes change in IAH' and 'how IAH is changed', and the definition of the new method: 'new formation process'. The third step is based on checking the validity of the approaches on the case study and evaluating the results of the findings. It is obvious that all those examples are the results of 'new formation process', through which interventions act as phases, therefore it is necessary to evaluate and define the 'new formation process'.

Evaluation of the 'new formation process'

In preservation discourse, interventions have generally been evaluated through legal international documents and the outcome product. But in addition to this, there is a great need for developing approaches in assessing the impacts of interventions on IAH comprehensively In that respect, it is necessary to formulate a comprehensive and systematic approach that combines these different aspects of evaluation, starting from prior to excavation. In this context, this thesis suggests that the interventions need to be evaluated by combining these different aspects (the principles mentioned in the legal international documents, evaluation of outcome product and the impacts of interventions) by putting the 'change' at the focus of the study. From another perspective, considering that IAH is integrated with contemporary life in a way never done before, the process of formation is considered as a new one. In that respect, this study develops a new method and approach called the 'new formation process'.

The 'new formation process', as explained in chapter 4, is not just a method; rather it is an approach, which defines a new way of dealing with interventions. As a method, it attempts to evaluate interventions by focusing the change in IAH not only as an outcome product, but also as a process. In this context, the method is based on three steps; describing the phases of the process; explaining the changes in the characteristics of IAH; and evaluating the changes in IAH. It is based on the notion of constructing evidences of past cultures through interventions. As an approach, the 'new formation process' is related with identifying meaning of IAH for the society of today in relation with the current socio-cultural and socio-economic context and ensuring its sustainability. Thus, it is associated with evaluating contemporary human approaches to archaeological remains throughout the formation of IAH. It is a critical approach, through which the responsibility of contemporary society is

discussed considering the balance between ‘transfer’ and ‘transformation’. On the other hand, as widely accepted, the notion that ‘archaeological heritage is common to all human society’ is at the center of the approach ‘new formation process’. The process is composed of various interventions not only for constructing IAH but for providing its sustainability as well. Therefore, it is a continuous process that defines the meaning and appearance of IAH and provides its sustainability throughout its new lifecycle.

Defining ‘new formation process’ requires understanding the process, throughout which IAH is recovered and shaped. Prior to excavation, IAH is generally in a ruined state and untouched in a landscape. Starting from excavation, there is a change in the state of IAH, and a new process is initiated, in which conservation interventions construct the archaeological edifice and define new meanings and appearance for IAH. Also, interpretation and presentation interventions provide insertion of IAH into the contemporary life of the current society. In this context, interventions generate a new process, in which IAH is formed and constructed. Considering that IAH does not only belong a certain region, country and time, it can be said that all human society including past cultures, the current society and next generation are the owners of IAH. Therefore, there is a great need for developing a critical approach to contemporary human approaches to archaeological remains and the process, in which they are shaped. In this context, the ‘new formation process’ is developed to understand the impacts of interventions on IAH and the effects of the decisions of the decision-makers on IAH.

The ‘new formation process’ deals with the process, throughout which the characteristics of IAH are changed and defined. It is related with authentic remains, evidences of past cultures and ‘new’, which are inserted into IAH through interventions. In that respect, starting from excavation, the interventions overlapping and following each others serve as phases of the process, rather than individual actions. Defining interventions as phases of the process is significant to in order to improve effectiveness of interventions and integrate change into process. This process is not limited with the initial intervention cycle throughout which archaeological edifice is defined and shaped. The archaeological edifice needs to be maintained and intervened throughout its new lifecycle. However, in the second intervention cycle, the interventions have great contribution not for defining and shaping, rather sustaining archaeological edifice. In that respect, the ‘new formation process’ approach views interventions as phases of a process and provides evaluation of the interventions as a whole throughout new lifecycle of IAH.

As shown in the case study, interventions have great effects on the amount, content and accurateness of information. For instance, the intervention approach in the Celsus Library deals with only conveying accurate information on the facade architecture of Roman period, while the products of Byzantine period is lost. In the condition that the evidences of the

Byzantine period are inaccessible, the evaluation on the changes in the Celsus Library would be incorrect. In that respect, use of authentic sources of information and the amount of information are significant inputs in reaching correct conclusions when trying to understand change and the 'new formation process' of IAH. Thus, it is necessary to evaluate the conclusion of the case study in terms of the accessible sources of information.

The information conveyed through the Fountain of Trajan and the Memmius Monument has hypothetical basis. It is related with neither authentic design nor authentic cultural layers. In that respect, the information conveyed through interventions is in various levels in relation with its amount, content and accurateness. In that respect, there is necessity to examine the intervention options in relation with the changes in the content of information in order treat within the limits of scientific information and convey as much information as possible on different issues such as the architectural characteristics, past cultural layers and contemporary interventions.

There is a great need to examine and review the changes proposed through interventions in terms of the quality of change in order to find the optimum intervention option. For instance, the new walkway in the Terrace House II proposes a new circulation in the whole insulae without considering the authentic space organization of each residential unit. Therefore, this intervention does not cause reliable changes in the perception of the residential units and distorts its authentic characteristics. In that respect, it causes a 'regress'. Therefore, the interventions should be examined through the 'new formation process' approach, which enables to understand the change and to evaluate the intervention in terms of the quality of change. It proves that the quality of change should be defined parallel to the main objectives of the interventions in order to reach expected results. In addition, the case study shows that the changes caused through interventions are multi-dimensional and complex, with no perfect solutions. However, it is possible to develop different intervention options that address to different levels and quality of change in IAH.

It is possible to make a definition or draw the outline of 'new formation process' since the changes caused through interventions in IAH show some general characteristics. Starting from excavation, the interventions have great contribution not for defining and shaping new characteristics of IAH, rather ensure sustainability. In that respect, 'new formation process' ensures to view the changes caused through interventions as a problem of change management, which needs to be supported by authentic sources of information and its accurateness. Therefore, it gives the opportunity to explain several basic change patterns, which are standard outcomes of a series of interventions.

It is a truism that the changes in values caused through excavation, interpretation and presentation interventions are common for all archaeological edifices. On the other hand, the changes caused through conservation interventions have different levels of change quality in

values. Besides, certain interventions cause certain changes in the quality of values. For instance, in the case of the so-called Hadrian Temple, transformation is at the center, and transfers of existing cultural layers are provided. At the end, the changes in values are in the quality of 'progress'. In another case, the changes in the values of the Celsus Library show a quality in moderate level through emphasizing certain information on architectural and façade characteristic of Roman period and ignoring the information on the evidences of other periods, which have great contributions for legitimizing the Celsus Library as 'heritage'. Besides, the changes caused through conservation interventions develop the conflict between originality value and architectural value. As it is demonstrated, the 'value formation process' allows predicting the conflicts between values and finding optimum choices. Considering that preservation of archaeological edifice does not only relate to transmitting physical characteristics, but values as well, the 'value formation process' gives opportunity to evaluate the decisions on interventions and inform decision-makers about not only what is 'gained' but also about what is 'lost'. In this context, it is possible to state that the 'value formation process' gives opportunity to predict certain impacts of interventions on values prior to their implementation.

In addition, 'value formation process' proves the hypothesis that 'interventions cause loss of some values, while some others are gained and transformed'. It makes it possible to define specific relationships between some value types. For instance, there is loss in picturesqueness value and virginity value, while some values such as archaeological research value, document value, architectural value, historical value and etc. are transformed. In some cases, the originality value is lost through some conservation intervention approaches, which provides integrity in architectural design while removing some cultural layers. Therefore, there is a loss in originality value, while architectural value, document value, information value are transformed. In that respect, the interventions have potentials to cause loss in some values, while some others are transformed.

5.2. Suggestions for future studies

As explained above, it is necessary to view interventions not as just 'technical issues', rather as among the main tools defining and shaping new appearance and meaning of IAH. This study proves that interventions deserve to be considered and viewed in relation with the change in order to ensure sustainable approaches to IAH. There is need to develop new tools, methods and strategies, which consider interventions in relation with the change. It is possible to suggests that 'new formation process' could have three main fields of application in preservation; in the evaluation of interventions as explained in this dissertation, in the creation of sustainable approaches to IAH and archaeological sites and in the management of interventions not only in IAH scale, but the archaeological site scale. There is no doubt that the realization of this will contribute to ensure sustainable environment, as discussed in

the preservation discourse. In that respect, below are several recommendations for future studies.

The thesis proves that interventions are not only ‘technical issues’, rather they are the evidences of various issues such as decisions and interpretations of the contemporary society, material technologies and construction techniques of their time, among other issues. Therefore, interventions are the evidences of contemporary human approaches to archaeological heritage. Among the main effective way of understanding and interpreting the evidences of contemporary human approach is to examine their impacts on IAH and defining different states of IAH throughout the process, in which IAH is shaped. Decision-making on interventions on IAH requires considering not only individual actions, but sustainable approaches to excavation, conservation, interpretation and presentation interventions throughout new lifecycle of IAH. In addition, it necessitates predicting and recognizing the positive and negative impacts of a series of interventions. In that respect, this thesis suggests that the ‘new formation process’ can be applied in order to determine the possible impacts of interventions on IAH and develop sustainable approaches for intervening IAH prior to their implementation.

As explained above, values are the basis for being ‘heritage’ and also the main factors that shape interventions. Therefore, the significance given on particular types of values directly shape the type of the conservation intervention approach. The thesis has indicated that some values legitimizing IAH as heritage are lost, transformed and gained through interventions. Also, interventions develop conflicts with values. It is hoped that the ‘value formation process’ approach gives opportunity to predict and define the changes in values such as which values are transferred, which ones are lost and transformed prior to implementation of interventions. In addition, the ‘value formation process’ will give chance to view conflicting values, therefore, it gives opportunity to prevent conflicts and revise existing intervention option. In this context, it is possible to learn from the value-interventions-change triplet by making decisions on interventions through a ‘value formation process’ approach.

It is hoped that this thesis will provide a basis for further discussions on the notion of ‘change’. The series of interventions acting as tools for change and phases of change generate a problem of ‘change’. The change that continues throughout the new lifecycle of IAH needs to be considered not only in terms of activities but also as the effects of decision-makers, concepts and funds. Besides, there is a necessity to analyze, evaluate, plan, implement, and review the interventions in terms of the change. In that respect, interventions become an issue of change management, rather than individual actions. It is necessary to re-consider interventions in the context of developing appropriate change models and effective change management strategies. In this context, the study raises various questions, which provide background for designing effective change management strategies. It is hoped

that the questions help decision-makers to initiate and manage change correctly. There are many questions to be asked, however, the questions given here are the ones that can provide insight into the change caused through interventions.

- What outcomes, results and change patterns are needed for the interventions on IAH?
- Is it possible to define a particular change strategy?
- How can a wide and appropriate change strategy for a particular IAH be defined?
- What types of interventions are essential for making change as a 'progress'?

This study suggests that the interventions must also respect and seek to strike a balance between 'transfer' and 'transformation'. Ensuring balance between 'transfer' and 'transformation' provides improvement in the decisions related with conservation, interpretation and presentation interventions and upgrades the quality of change. Besides, it gives opportunity for evaluating proposed changes as a whole without wasting any values. Therefore, it is hoped that a study developing tools for integrating balance between 'transfer' and 'transformation' into interventions will provide a basis for further discussions and practices.

The study indicates that some interventions develop conflicts, which cause irreversible damages in the existing characteristics of IAH. In current practice, the conflicts caused through interventions are not sufficiently considered in the preservation discourse. However, preventing conflicts is not against the change caused through interventions, it rather enables to avoid conflicts in values and to ensure transfer of some existing characteristics of IAH, which legitimize it as 'heritage'. On the other hand, prediction and avoidance of developing conflicts between the goals of intervention and the effectiveness of the interventions over time makes it possible to find the most optimum intervention choice. Thus, it is necessary to avoid and prevent conflicts developed through interventions in order to provide an improvement in the intervention approach and elevate the quality of change. In that respect, it is hoped that this dissertation will help decision-makers to develop appropriate tools and relevant change strategies in order to prevent conflicts caused by interventions.

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PROFESSIONAL EXPERIENCE

Assistantship:

2000 - Research Assisstant in METU
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Conference Papers and Presentations:

2008. *Child and Architecture* presented in the VI.th National Child Culture Symposium, 13-15 October 2008, Ankara, Turkey.

2008. *Defining a Value System for Archaeological Heritage* presented in the 6th International Conference on Structural Analysis of Historic Construction, 2-4 July 2008, Bath, UK.

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