# Values and interventions: dynamic relationships in international doctrines

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# Abstract

**Purpose** – Even if there is a wealth of research highlighting the key role of values and cultural significance for heritage management and, defining specific interventions on built heritage, seldom the relation to their leading values and values hierarchy have been researched. How do values and interventions relate? What values trigger most and least interventions on heritage? How do these values relate and characterize interventions? And what are the values hierarchy that make the interventions on built heritage differ?

**Design/methodology/approach** – This paper conducts a systematic content analysis of 69 international doctrinal documents – mainly adopted by Council of Europe, UNESCO, and ICOMOS, during 1877 and 2021. The main aim is to reveal and compare the intervention concepts and their definitions, in relation to values. The intensity of the relationship between intervention concepts and values is determined based on the frequency of mentioned values per intervention.

**Findings** – There were three key findings. First, historic, social, and aesthetical values were the most referenced values in international doctrinal documents. Second, while intervention concepts revealed similar definitions and shared common leading values, their secondary values and values hierarchy, e.g. aesthetical or social values, are the ones influencing the variation on their definitions. Third, certain values show contradictory roles in the same intervention concepts from different documents, e.g. political and age values.

**Originality/value** – This paper explores a novel comparison between different interventions concepts and definitions, and the role of values. The results can contribute to support further research and practice on clarifying the identified differences.

Keywords Intervention, Intervention concepts, Values, Cultural significance, International doctrine, Built heritage

Paper type Research paper

# 1. Introduction

Over half a century ago, international governmental and nongovernmental organizations such as The United Nations Educational, Scientific and Cultural Organization (UNESCO), Council of Europe (CoE) as well as International Council on Monuments and Structures (ICOMOS) emerged to tackle common challenges in heritage conservation and management. In order to ensure heritage is well-managed and enjoyed by the society of present and future generations, the organizations define as well as

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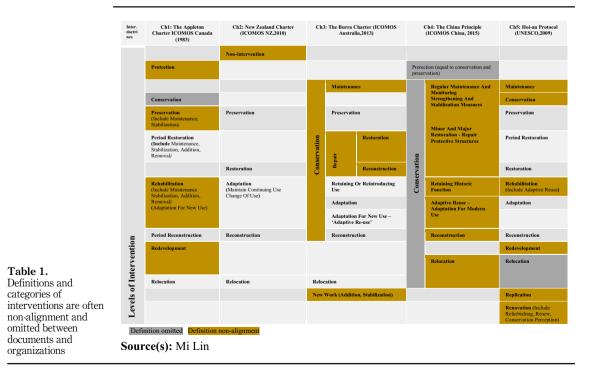


adopt international doctrinal documents to face one of the challenges – interventions of built heritage. These documents then have "the fundamental role of offering statements or principles and guidelines for the conservation and management of places of cultural significance" (Taylor, 2004), and therefore be seen to have a professional ethics role in guiding the conduct of heritage conservation practice (Taylor, 2004). Jokilehto (2007) once mentioned that international doctrinal documents are the outcome of a reflection based on practice, e.g. increasing focus on the natural and ecological aspects during the 1970s and become documentary evidence for the cultural evolution that has taken place over the years (lokilehto, 2007).

However, these documents are not always perfect. Although the conservation concepts and policies are subject to continuous evolution over time (Jokilehto, 2007), in fact, there are two main problems concerning interventions: definitions and categories.

First, the definitions are different between documents and organizations. Although international doctrinal documents have defined that interventions have different levels, scales, and activities (ICOMOS Canada, 1983), the **definition** of the interventions often evolved between documents and/or was omitted (Table 1).

Take "conservation" and "preservation" for an example, interventions like "conservation" appeared only as the title of the Appleton Charter (ICOMOS Canada, 1983), but neither show up nor being defined in the document. "Conservation" is also sometimes mentioned as an umbrella concept that includes other interventions (ICOMOS Australia, revised 2013; ICOMOS China, 2015), which is different from other documents. What is more diverse, the China Principle (ICOMOS China, 2015) used "conservation," "protection," and "preservation"



interchangeably; Cultural Tourism Charter (ICOMOS, 1999) was found to mention that "preservation" is an alternative term to "conservation" in some English-speaking countries. Besides "conservation" and "preservation," certain concepts have been put in gray area which cannot be aligned between documents, such as "rehabilitation" (ICOMOS Canada, 1983), "adaptation" (ICOMOS New Zealand, 2010; ICOMOS Australia, revised 2013), and adaptive reuse (ICOMOS Australia, revised 2013). These interventions which are seldom related and/or further defined, often lead to misunderstandings or misinterpretation in both research and practice.

Second, values and cultural significance are expected to influence the appropriate category/level of intervention (ICOMOS Canada, 1983). Cultural significance is decoded by the conveyed values (Pereira Roders, 2007) and attributes (Veldpaus, 2015). Values justify why heritage is listed and the attributes characterize the resources (tangible and intangible) that convey such values. Even if there is a wealth of research highlighting the key role of values and cultural significance at the processes of decision-making in heritage planning and management (De la Torre, 2002; Mason, 2002; Pultar, 1997; Taher Tolou Del *et al.*, 2020; Augustiniok, 2020), as well as defining specific intervention concepts on built heritage, e.g. conservation, restoration, reconstruction (Henket, 1998; Pereira Roders, 2007; Douglas, 2006), seldom the relation to their leading values was researched, nor compared over time and place.

Many academics highlight the range of values influence, such as during the conservation process (Fielden, 1982), where values are expected to be prioritized integrated, or ranked (Mason, 2002). Sometimes, values are assumed to conflict with each other (Riegl, 1902; ICOMOS, 1994; De la Torre, 2002), because they are influenced by the stakeholders' diverging interests (Mason, 2002). Some researchers focus on one category of intervention with specific values, as when using adaptive reuse to promote social values (e.g. Kenneth and Lucian, 2019) or when researching the balance between architectural and monument values in adaptive reuse (e.g. Augustiniok *et al.*, 2020).

Without a proper definition, the tendentious interpretations often put the role of some intervention concepts as best practices into question (Meskell, 2019). For example, "preservation" and "restoration" have been used as strategies for gentrification by the government under political and economic agendas (Meskell, 2019). "Conservation" and "adaptive reuse" were sometimes considered to compromise too much the contemporary needs and bring negative impact to the place (UNESCO Bangkok, 2009). While some documents addressed that "conservation" forms an integral part of good management of places of cultural significance (ICOMOS Australia, revised 2013) and "conservation" does not mean to rule out certain intervention concepts, as Jokilehto (2019) once mentioned that "conservation does not exclude 'reconstruction' when it is well motivated and correctly executed" (Jokilehto, 2019, p. 71). These are only few examples that show the importance of a proper definition of intervention and a new approach of defining the interventions might be needed.

In order to find out the relation between interventions and values and further contribute to the definition process of intervention concepts, this paper will first explore the overall distribution of values per intervention concept. Second, it will reveal what values trigger specific intervention concepts. Third, which values lead these differ from other interventions, including a comparison between Council of Europe, ICOMOS, and UNESCO perspective. Through the use of a qualitative approach and systematic content analysis, the intensity of the relationship is determined based on the frequency of mentioned values per intervention.

# ICHMSD 2. Research methodology

### 2.1 International doctrinal documents

This paper conducted a systematic content analysis of international doctrinal documents, a mixed method, integrating qualitative analysis and quantitative statistics, to systematically collect, analyze, and present the narrative embedding intervention concepts in international doctrinal doctrinal documents.

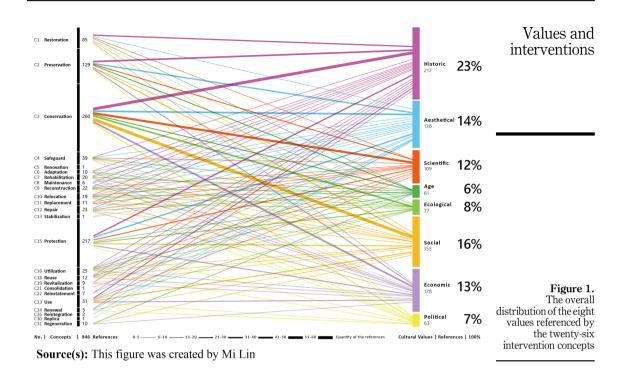
This research selected the concept "intervention," as the general concept to address all the variations in man-made activities applied to build heritage, in order to ensure its survival over time, against the natural process of degradation (Pereira Roders, 2007), e.g. conservation, restoration, and rehabilitation. A larger sample of 519 international doctrinal documents was selected due to their reference to cultural heritage. They were examined by searching the keyword "intervention," and "intervention concepts" - "conservation," "preservation," "protection," "restoration," "adaptation," "adaptive reuse," "reconstruction," "rehabilitation," "revitalization," "regeneration," and "values" as well as value-related contents (as the description in Table 1) in the glossary and terminology sections. If those sections were not available, the definitions of the intervention concepts were deduced by the content analysis of the integral documents. As "values" were seldom found referenced in the definition or glossary section of the intervention concepts, consequently, the relationship between intervention concepts and values was overall left undisclosed. Some exceptions such as the aesthetical values were mentioned in the definition of "replication" in the Hoi An Protocol (UNESCO Bangkok, 2009) and "repair" in Principles for the Conservation of Wooden Built Heritage (ICOMOS, 2017a).

After the examination process, this research selected and analyzed 69 international doctrinal documents, adopted during 1877–2021, revealing a broad geographical spread by their origin, ranging from Europe to Asia and Pan-Pacific. They are respectively, nine (13%) international doctrinal documents adopted by United Nations of Educational, Scientific and Cultural Organization (UNESCO), 36 (52%) by The International Council on Monuments and Sites (ICOMOS), and 21 (30%) by the Council of Europe (CoE). Two documents considered as ICOMOS have been also prepared with other organizations, as, e.g. The International Committee for the Conservation of the Industrial Heritage (TICCHI). Six documents (11.5%) were adopted by other organizations – as the Society for the Protection of Ancient Buildings (SPAB), ICOM Architecture, Organization of American States (OAS), European Council of Town Planners (ECPT-CEU), and Architect's Council of Europe. They were the first international doctrinal documents on cultural heritage, prior to these international organizations.

#### 2.2 Intervention concepts

Interventions and intervention concepts are used as synonyms in this paper. Thirty-three intervention concepts (C1-C33) were selected for the present analysis, based on ongoing research on international doctrinal documents adopted by UNESCO, ICOMOS, and Council of Europe. Figure 1 shows on the left side, all 33 concepts from the least to the most impactful – going from prevention to demolition – and, on the right side, their relationship with the eight values.

Among the 33 intervention concepts, nine concepts – "cleaning" (C25), "demolition" (C17), "recycle" (C32), "prevention" (C33), "redevelopment" (C20), "refurbishment" (C29), "modernization" (C14), "retouching" (C27), and "reinforcement" (C28) – were not found conveying any value. Therefore, these concepts were excluded from this research analysis and the rest of the 24 concepts will be presented in the findings.



For presenting the findings, this paper was intended to select the most referenced ten terms from the documents selected, however, according to the findings, only historic, economic and the common leading values were being included, absent aesthetical and scientific values. In order to carry out a more comprehensive discussion on the findings, this paper decided to present all the concepts found with value-related contents.

## 2.3 Cultural values

Although several typologies of values systems of heritage conservation have been defined in several studies (e.g. Riegl, 1902; Mason, 2002), seldom a theoretical framework, with concepts and definitions has been developed (Pereira Roders, 2007; Tarrafa Silva and Pereira Roders, 2010). This theoretical framework on cultural values has been applied worldwide to both urban and architectural scales ever since developed in 2010 to compare perspectives from stakeholders (Silva and Roders, 2012), support policy evaluation (Veldpaus and Roders, 2014), literature analysis in residential neighborhoods (Spoormans et al., 2020), social media analysis (Bai et al., 2022; Foroughi et al., 2022) and as baseline to fieldwork in cities as Galle (Boxem et al., 2012) and Willemstad (Speckens et al., 2012). This theoretical framework consists of eight main primary values and 30 secondary values (Table 2) to guide their identification: historic. aesthetical, scientific, ecological, social, economic, political, and age values. To further clarify, this theoretical framework only applies to the urban and architectural scales. Certain important attributes, such as setting, landscape, and visibility issues which related to a broader range as in natural and rural scales, were not considered within this paper (see Table 3).

	Sacondary values	501	References
	Secondary va	Shi	Actic clucs
Primary values	Social	Spiritual Emotional, individual	Beliefs, myths, religions (organized or not), legends, stories, testimonial of past generations Memory and personal life experiences
		Emotional, collective	Notions related with cultural identity, motivation and pride, sense of "place attachment," and communal value
	Economic	Allegorical Use Non-use	Objects/places representative of some social hierarchy/status The function and utility of the asset, original or attributed The asset's expired function, which has its value on the past, and should be remained by its existence (of materials), option (to make some
	Political	Entertainment Allegorical Educational	use of it or not), and bequest value (for future generations) The role that might have for contemporaneous market, mainly for tourism industry Oriented to publicizing financial property. Using it for political targets (e.g., birth-nations myths, glorification of political leaders.
		Management Entertainment	etc.) Made part of strategies and policies (past or present) It is part of strategies for dissemination of cultural awareness, explored for political targets
	Historic	Symbolic Educational Historic-artistic Historic-	Emblematic, power, authority, and prosperous perceptions stem from the heritage asset Heritage asset as a potential to gain knowledge about the past in the future through Quality of an object to be part of a few or unique testimonial of historic stylistic or artistic movements, which are now part of the history Quality of an object to be part of a few or unique testimonial that retains conceptual signs (architectural, urban planning, etc.), which are
		conceptual Symbolic Archaeolooical	now part of history Pact that the object has been part/related to an important event in the past Connected with ancient civilizations
	Aesthetical	Artistic Notable	Original product of creativity and imagination Product of a creator holding his signature
		Conceptual Evidential	Integral materialization of conceptual interiors (imply a conceptual background) Authority accounting to a docide more of the History of Art or Articulation
	Scientific	Workmanship	Autenue exempta of a treader, part of the fusion y of Art of Autenue Original result of human labor, craftsmanship
		1 ecnnological Conceptual	skunumess in recimiques and materials, representing an outstanding quanty of work Integral materialization of conceptual intentions (imply a conceptual background)
	Age	Workmanship	Craftsmanship value oriented towards the production period
		macuruy Existential	riece of memory, remeaning the passage inves of past generations Marks of the time passage (patina) present on the forms, components and materials
	Ecological	Spiritual	Harmony between the building and its environment (natural and artificial) Hardefenders of conference its designees and second
		Existential	uctinutkation of ecological ideologies on its uesign and consultation Manufactured resources which can either be reused, reprocessed, or recycled

C1,C12 C1,C2,C23							
C1,C2,C23	CI	0	C1,C12	0	0	0	0
	C1,C2,C23	0	<b>C</b> 2	0	0	0	0
~	C18	0	0	0	0	0	0
C3,C15	C3,C15	C3,C15	0	0	0	0	0
C15	C15	C15	C15	C15	C15	C15	C15
C1,C11	C1,C11	C1,C21	0	0	C3,C23	0	0
C15	C15	0	0	0	0	0	0
C8	C23	0	0	0	0	C15	0
C1,C2,C3,C4,C12,C15,C16,C23 C1,C2,C3,C12,C15,C16,C23 C15	3 C1,C2,C3,C12,C15,C16,C	23 C15	CI	C4	C1,C2,C15,C23	C1,C2,C15,C16,C23 C1,C23	3 C1,C23
C2,C6,C7,C15	C2,C6,C7,C15	0	0	0	0	C6,C7	C7
C2,C7,C15	C7,C15	0	0	0	C7,C15	0	0
C2 C4,C15	0 C3,C15	0 <b>C3,C15</b>	° Ç	0 <b>C3,C4,C15</b>	0	0	0 0
C2 C2	5 5 5	0 <b>C</b> 3	<b>C2,C7</b> 0	0 <b>C</b> 2	C2,C3 C3,C23,C31	<b>C2,C3</b> 0	° 3
0	8	0	0	0	C15	C8,C15	0
C2	C3	<b>C</b> 3	3	C2	C2,C19	C2,C7,C19	C2
0 C2	0 <b>C2</b>	0 C1,C2	0	0 <b>C2,C11</b>	C19,C23 C2,C3	0 0	° 20
C1,C9	60	63	63	C2,C9,C23	C1,C9,C23	0	C1,C2,C9
C3,C19	3	3	0	C3	C2,C3,C19	C2,C3,C19	0
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CHMSD	Political	0	<b>C15</b> 0	0	0 0 <b>C15</b>	0	0	0 <b>3</b> 0	C3,C15 C2 C9	0 0	С7	C15 C3,C15	C1 C15 (contrinued)
	Economic	0	<b>C15</b> 0	C31	C1,C4,C15,C18 0 C15	C1,C3,C7	C23	• <del>3</del> •	C3,C15,C18,C23 0 C31 C3	0 0	C2,C15	C15 C3,C15	CI CI5 CI5
	Social	0	<b>C3,C15</b> 0	C31	C4,C15 0 C15	0	0	0 <b>C3</b>	C3,C15 0 C3 C3	3 3 3	C2	C6,C12,C15 C3,C15	C1 C15
	Ecological	0	<b>C3,C15</b> 0	0	C4 0 C15	0	0	0 <b>C3</b> 0	<b>C3,C15</b> 0 C15,23 0	0 <b>C3</b>	0	C6,C15 C3,C15	C1 C15
	Age	0	<b>C15</b> 0	C7,C31	0 0 <b>C15</b>	C2,C3,C7	0	<b>٥ ئ</b> ٥	C3,C15 0 0 0	0	C7	<b>0</b> 0	C1,C11 C15
	Scientific	0	<b>C3,C15,C23</b> 0	0	C4 C3,C15 C3,C15	0	C23	<b>C2,C3,C15</b> C3 0	3,C15 0 0 0	00	C15	<b>C12,C15</b> 0	C1,C11 C15
	Aesthetical	0	<b>C3,C15,C23</b> 0	0	C4 C3 C15	0	C23	<del>و 2</del> ه	<b>C3,C15</b>	00	0	<b>0</b> 0	C1,C2,C4,C12 C15
	n Historic	C2,C15	C3,C15,C23 C2	0	C4 0 C3,C15,C23	0	C23	<b>C2,C3,C15</b> C3 0	C3,C15 C3,C8 C2 C1,C9	0 0	0	<b>C12,C15</b> 0	C1,C2,C11,C12 C15
	Organization	ICOMOS	Canada CoE ICOMOS	CoE	CoE ICOMOS CoE	CoE	CoE	CoE ICOMOS ICOMOS	CoE ICOMOS CoE ICOMOS	ICOMOS ETCP-CEU	UNESCO	ICOMOS	ICOMOS
	Short ref./Concept (C1-33)	D22 1983 The	Appleton Charter Canada D23 1985 Convention CoE D24 1987 Washington ICOMOS	Charter D25 1987 No. R (87)	24 D26 1989 No. R (89) 6 D27 1990 Charter D28 1990 No. R (90)	20 D29 <b>1991 No. R (91) 6</b> CoE	(a 1991 Recommendation	No. K(91) (b D31 1992 Convention D32 1993 GUIDELINE D33 1994 The Nara Document on	Authenticity D34 1995 No. R (95) 9 CoE D35 1996 Principle (a CON D36 1996 Declaration CoE D37 1996 The Declaration of	San Antonio (b D38 1996 Charter (c D39 1998 NEW CHARTER OF	ATHENS D40 1998 Suzhou	Declaration D41 1999 Charter (a D42 1999 Cultural Tourism Charter	(b D43 1999 Principle (c D44 1999 The Hague Convention
able 3.	Sho Doc (C1-	222 198	223 198 224 198 24 198	25 198 25 198	226 1 <b>96</b> 228 1 <b>96</b> 228 1 <b>96</b>	20 29 199	(a D30 1991 Recor	Do 195 196 No. 283 196 Do	Au 335 199 335 199 337 199 De	Sar 338 199 CH	AT 240 199	De D41 195 7199	Coi 136 541 136 547 136

Doc (C1-33)	Organization Historic	1 Historic	Aesthetical	Scientific	Age	Ecological	Social	Economic	Political
D45 2001 Resolution D46 2003 Principle of	CoE ICOMOS	0 C1,C2,C3,C9,C15,C24	0 C2,C3,C15,C24,C26	0 <b>C2,C3,C15</b>	<b>C</b> 3 0	00	C3 C3,C24	0 C3	0 <b>C3,C2</b> 4
D47 2003 The New	ETCP-CEU	0	ß	0	0	0	0	0	0
D48 2003 Zimbabwe	ICOMOS	0	0	0	0	0	0	0	0
D49 2003 Indonesia	ICOMOS	<b>C</b> 3	0	0	0	0	C3,C10	C3,C10	C
D50 2003 Nizhny T-21 Ch-24-24	ICOMOS	C3	C15	C15	0	C6,C15,C18 C15,C18	8 C15,C18	C3,C6,C31	0
D51 2005 Xian	ICOMOS	0	0	0	0	0	0	0	0
Declaration D52 2005 Faro	CoE	C16	C16	C16	C16	C16	C16	C16,C23	C16
D53 2005 VIENNA MEMORANDIA	UNESCO	C15	C15	C15	0	C15	C3,C15	C3,C15	0
D54 2008 Québec	ICOMOS	0	0	0	0	0	C4,C23	C23	0
D55 2008 CULTURAL ICOMOS	L ICOMOS	C23	0	0	0	0	C10,C23	C10,C23	0
D56 2008 QUÉBEC DECLARATION	ICOMOS	0	0	0	0	0	C2	0	0
(intan.) (c D57 2009 Hoi An	UNESCO	C3,C4	C11,C30	0	0	0	C18	C18	C3,C5,C9
Frotocols D58 2010 New Zealand Charter	Bangkok ICOMOS New Zealand	c1,c2,c10	C1,C2,C10	C1,C2,C10	C1,C2,C10	C1,C2,C10 C1,C2,C10 C1,C2,C10	C1,C2,C10	C1,C2,C10	C1,C2,C10
(revised 2010) D59 2011 Madrid	ICOMOS	0	0	0	0	0	0	C8	0
D60 2011 HUL D61 2011 The Dublin	UNESCO	C2,C3 C3	C2,C3 C3	C3 C3,C23	<b>C2,C3</b>	ទួន	C2,C3 C3,C10	C3 C3,C10,C23	<sub>0</sub> ت
Principles (b D62 2011 The Valletta ICOMOS	ICOMOS	C3,C4,C15	C4,C15	C3,C4,C15	C4,C15	C4,C15	C3,C4,C15	C3,C4,C15	C4,C15
Principles (c D63 2011 The Paris Declaration (d	ICOMOS	C2,C3,C15	C2,C3,C15	C2,C3,C15	C2,C3,C15		C1,C2,C3,C15,C18	C2,C3,C15 C1,C2,C3,C15,C18 C1,C2,C3,C15,C18 C2,C3,C15	C2,C3,C15
									(continued)
Table 3.									Values and interventions

Introduct Aesthetical Scientific Age Ecological   CIO 0 0 0 0 0   CIO 0 0 0 0 0   CI.C.S.C.S.CI.S.CI.S.CI.S.CI.S.CI.S.CI.	Table 3.	Short ref./Concept Doc (C1-33) Organization	D64 2013 The Burra ICOMOS Chatter (revised Australia	2013) D65 2015 China ICOMOS	Principle China D66 2017 Document ICOMOS-	D67 2017 Principle (b) ICOMOS D68 2017 SALALAH   ICOMOS	GUIDELINES (a D69 2021 Guidelines ICOMOS	Source(s): This table was created by Mi Lin
Scientific Age   0 0   0 0   0 0   0 0   0 0   0 0   2.5,C12 C13,C12   2.2,C12 0   C3,C13,C18 C15   Scientific Age		un Historic	C10	C1,C2,C3,C9,C10,C15,C22,C2	C2	C2,C3,C12 C2,C12	C3,C6,C15,C18 Historic	
Age 0 3,C23 C1,C12 0 C15 Age		Aesthetical	0	3 C1,C2,C3,C12,C15,C22	0	C2,C11,C12 C12	C3,C6,C15 Aesthetical	
C12		Scientific	0	C1,C3,C12,C13,C3	0	C3,C12 C2,C12	C3,C15,C18 Scientific	
Ecological C.3,C9 C2 C3,C15 Ecological Ecological		Age	0	23 C1,C12	0	<b>C3,C11,C12</b> 0	C15 Age	
		Ecological	C3,C9	0	C2	5 5 2	C3,C15 Ecological	
		Economic	0	C8,C15,C23	0	C10 C2	C15 Economic	
Economic 0 C8,C15,C23 0 C10 C15 Economic	JCHMSD	Political	0	C2,C9	0	° C	C3,C15 Political	

The method included three steps:

- The author extracted the sentences which involved the terminology of intervention concepts and values, including contents implying their explanations, interpretation, and definition from the international doctrinal documents.
- (2) The extracted contents were structured and classified in pre-coding according to the theoretical framework on cultural values (Pereira Roders, 2007) (see Table 2).
- (3) Analysis and comparison of the structured data, to reveal (1) the frequency of mentioning the values within the 69 documents, and (2) Comparing the relationships between values and the selected intervention concepts from different international doctrinal documents and organizations.

# 3. Findings: the dynamic relationship between values and intervention concepts

By applying the theoretical framework on cultural values (Pereira Roders, 2007), different relationships were found between intervention concepts and values during the analysis of selected documents. Most international doctrinal documents (over 80%) tend to define the concepts based on what (attributes) to target during the intervention and how (actions) to do such intervention. Only few relate interventions directly to values.

#### 3.1 Overall values across thirty-three intervention concepts

Results reveal that historic (23%), social (16%), and aesthetical (14%) values are the most referenced values across the 33 intervention concepts (see Figure 1). When ranked on frequency, age (6%), political (7%), and ecological (8%) values are the least referenced. Although the historic values were the most referenced values (217 references), the aesthetical values were the ones found related to more intervention concepts (19 out of 33).

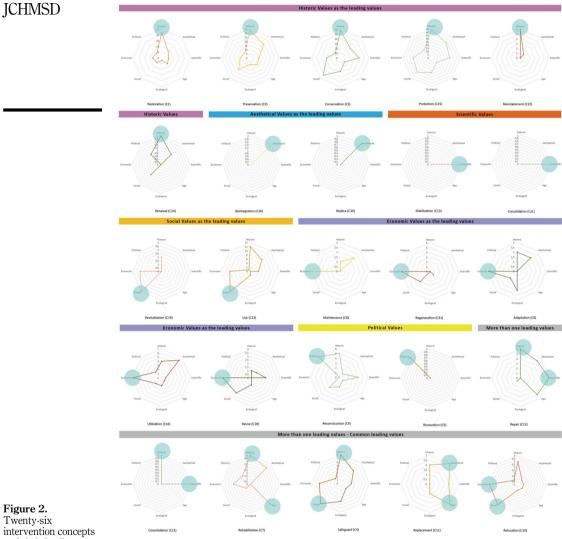
As for the rest of the 24 concepts, the quantity of their references differs greatly across concepts, ranging from between the highest-ranking "conservation," mentioning values in 260 references, and the lowest ranking "stabilization" and "replication" with only one reference.

#### 3.2 Intervention concepts and their leading values

In order to compare the intervention concepts according to their hierarchies, this section categorized the intervention concepts under the logic of their leading value. Besides age and ecological values, all other values have their own group of intervention concepts (Figure 2). Nevertheless, six intervention concepts were found to have more than one value sharing the first ranking – common leading value, therefore another category is created for discussion.

3.2.1 Historic values as the leading values. Among all the intervention concepts researched within this paper (Table 2), there are six intervention concepts that mentioned historic value as the leading values, they are: "conservation" (C3), "preservation" (C2), "restoration" (C1), "protection" (C15), "reinstatement" (C22), and "renewal" (C24). What is worth mentioning, besides "reinstatement" and "renewal," the other four intervention concepts have mentioned all eight values but with diverse value preferences.

According to the analysis, aesthetical values have been related the most to "preservation" (C2) in 15 documents. Remarkably, in "preservation," since aesthetical values were first identified in The Athens Charter (IMO, 1931), it was found paired with historic values in all (14) documents (IMO, 1931; OAS, 1967; CoE, 1968a; CoE, 1968b; CoE, 1975a; CoE, 1975b; UNESCO, 1976; ICOMOS-IFLA, 1981; ICOMOS, 1999c; ICOMOS, 2003a; ICOMOS New Zealand, 2010; UNESCO, 2011; ICOMOS, 2011d; ICOMOS China, 2015; ICOMOS, 2017b),



Twenty-six intervention concepts and their leading values

Source(s): Figures created by Mi Lin

concerning from "character and external aspect of the cities" (IMO, 1931), "groups and areas of historical or artistic interest" (OAS, 1967) to "architectural surfaces" (ICOMOS, 2003a).

Leading values

Although this phenomenon also happened to "restoration" (C1) in all seven documents (SPAB, 1877; ICOMOS, 1964; OAS, 1967; ICOMOS, 1999c; ICOMOS New Zealand, 2010; ICOMOS China, 2015), the historic value (22 references) is still referenced almost three times more than the aesthetical value (8 references) in "restoration."

With a similar value hierarchy shared with "preservation" in historic, aesthetical and social value, "protection"(C15) also has a relatively higher focus on the scientific and economic value both in seventeen documents, especially concerning the protection of "cultural property" (UNESCO, 2010), "industrial, technical and civil engineering heritage in Europe" (CoE, 1990), and "fortifications and military heritage" (ICOMOS, 2021).

Social value was found related the most to "conservation" (C3) in 23 documents. Especially, the Recommendation on the Historic Urban Landscape (UNESCO, 2011) was the first and only international doctrinal document identified referencing social values more than historic values. Moreover, besides the 1985 convention concerning the protection of architectural heritage in Europe, documents with value-related contents in "conservation" are found to mention the site, cultural landscape, landscape, and place, which has a broader scale than built heritage. As the scales and categories of the attributes in conservation become broader – from single monuments to the historic urban landscape, tangible to intangible – more values were mentioned within one single concept.

"Reinstatement" (C22) and "renewal" (C24) were found in only one document. However, while "reinstatement" is mainly focusing on historic value (ICOMOS China, 2015), "renewal" has more diverse values – aesthetical, social, and political – preferences "tradition of renewal" in specific regions of the world (ICOMOS, 2003a).

*3.2.2 Aesthetic values as the leading values.* Two intervention concepts ranked aesthetic value as the first as well as the only value, and each of them was found in one selected document. "Reintegration" (C26) was identified mentioning aesthetic reintegration (ICOMOS, 2003a) when concerning wall painting. "Replication" (C30) was identified for maintaining aesthetic unity and harmony (UNESCO Bangkok, 2009).

3.2.3 Scientific value as leading value. Two intervention concepts were found having scientific value as leading value.

"Stabilization" (C13) is found in one document (ICOMOS China, 2015), which addresses a technical approach should require under this concept. "Consolidation" (C21) is found in only one document (ICOMOS, 1964) that mentioned: "where traditional techniques prove inadequate, the consolidation of a monument can be achieved by the use of any modern technique for conservation and construction, the efficacy of which has been shown by scientific data and proved by experience."

3.2.4 Social value as the leading value. Two intervention concepts – "use" (C23) and "revitalization" (C19) – have been identified with social value as the leading value. Although sharing a similar hierarchy in social, historic, and economic value, "revitalization" has less values identified than "use." With three documents (UNESCO, 1976; CoE, 1976; ICOMOS, 1982a) identified in "revitalization," "use" was found referencing social value in ten documents (ICOMOS, 1964; OAS, 1967; CoE, 1975b; CoE, 1976; ICOMOS, 1982a; CoE, 1996; ICOMOS, 2008a; ICOMOS, 2008b; ICOMOS China, 2015; ICOMOS, 2017a). In the document of Cultural Route, it was considered social and economic interests promoted by sustainable "use" (ICOMOS, 2008b).

Although ranked second, the historic value was found related to fewer documents than the economic value in both concepts. Only one document (ICOMOS, 1982b) found referencing historic value in "revitalization" and seven documents in "use" (IMO, 1931; OAS, 1967; CoE, 1985; CoE, 1990; CoE, 1991b; ICOMOS, 2008b; ICOMOS China, 2015). It is worth mentioning that historic value is found highly concentrated in The Norm of Quito (OAS, 1967).

Economic value in "use," was first identified in The Norm of Quito (OAS, 1967), and later in 1991 Recommendation (CoE, 1991b) as "Use of the heritage ... encourage the most appropriate use to be made of the protected heritage of this period, whether it be used for cultural or ... for economic ... purposes," and then until the Dublin Principle, it addressed, "the continued use of the industrial heritage would bring economic sustainability" (ICOMOS, 2011b). While in "revitalization," economic value is found in two (out of three documents with historic value) (UNESCO, 1976; ICOMOS, 1982b) which simultaneously mentioned social value in the same document.

3.2.5 Economic value as the leading value. Five intervention concepts have been identified with economic as their leading value.

"Adaptation" (C6) was found relating to economic value in two documents (CoE, 1968a; ICOMOS, 2003d), but at the same time relating to many other values in different documents. One with the historic and aesthetical values in the other two documents (CoE, 1968a; ICOMOS, 2021) documents, the other one with ecological value in two documents (ICOMOS, 1999a; ICOMOS, 2003d) addressing avoiding energy waste and concerning environmental change.

"Maintenance" (C8) mentioned economic value in three documents (ICOMOS, 1976; ICOMOS, 2011a; ICOMOS China, 2015), specifically addressing timely maintenance can reduce long-term repair costs (ICOMOS, 2011a) and bring economic benefits (ICOMOS, 1976). Although ranked as the second, aesthetic value has different functions within the two referenced documents (ICOMOS, 1976; ICOMOS, 1990). The former one mentioned maintenance is related to the aesthetical quality in urban scale, while the latter emphasized aesthetic value should not be the only selected reason to do the maintenance.

"Utilization" (C16) was identified only in two documents (ICOMOS, 1976; CoE, 2005) with economic value. Besides economic value, The Norm of Quito also emphasized the historic and aesthetic values, treating "archaeological, historic and artistic monuments" as "economic resources."

"Reuse" (C18) mentioned economic value in four documents (CoE, 1989; CoE, 1995; UNESCO Bangkok, 2009; ICOMOS, 2011d) which addressed "reuse" monuments and historical buildings are "economically viable" (UNESCO Bangkok, 2009) and might be a "cost-effective way of ensuring the survival of industrial buildings." Three documents mentioned social value (ICOMOS, 2003d; UNESCO Bangkok, 2009; ICOMOS, 2011d) as in social benefit (UNESCO Bangkok, 2009), psychological stability (ICOMOS, 2003d) and socioeconomic regeneration (ICOMOS, 2011d) could be obtained after "reuse." What is intriguing, aesthetical value was firstly and only identified in The Charter of Athens (CIAM, 1933), and its meaning was different from today as it refers to "style."

"Regeneration" (C31) mentioned economic value in three documents (CoE, 1987; CoE, 1996; ICOMOS, 2003d), especially addressing "economic regeneration in decayed area" (ICOMOS, 2003d). Two documents (CoE, 1975b; ICOMOS, 1987) mentioned social value. Only one document (CoE, 1987) mentioned age value concerning the old industrial town.

Within this group, the value hierarchies show that "adaptation," "maintenance," and "utilization" share similar character because of aesthetical value; "reuse" and "regeneration" share similar character because of social value.

3.2.6 Political value as the leading value. Two concepts were found to reference political value as leading value - "renovation" (C5) and "reconstruction" (C9). What's intriguing, the term "renovation" was never found in the selected ICOMOS documents but found in only one document (UNESCO Bangkok, 2009) with value-related contents – political value. In "reconstruction," four documents mentioned political values (ICOMOS, 1982b; ICOMOS, 1996b; UNESCO Bangkok, 2009; ICOMOS China, 2015), and two documents (ICOMOS, 1982b; ICOMOS, 1990) mentioned scientific value. Both two values were found highly concentrated in The Declaration of Dresden (ICOMOS, 1982b). Contradictory, in "reconstruction," the political value was addressed in The Declaration of Dresden (ICOMOS, 1982b) as the reasons for initiating their reconstruction as in "the spiritual values of monuments and the desire to acknowledge them both intellectually and politically"; while in Hoi An Protocol (UNESCO Bangkok, 2009), it is forbidden to become the reason for leading the "reconstruction" and "renovation" "in order to legitimize regimes and to substantiate ethnic or religious claims." "Reconstruction" was also mentioned as an intervention concept which brings scientific value through "experimental research" (ICOMOS, 1990) and a way to develop "new technology and craftsmanship" (ICOMOS, 1982b). Also, on some occasions, in "reconstruction," the social value could be found to overwrite historic value, as an example for housing, the building would be demolished and reconstructed in a copy of the previous style (ICOMOS, 1982b).

3.2.7 More than one leading value – Common leading values. Five intervention concepts were found to have common leading values.

"Repair" (C12) has historic and scientific value sharing the first ranking. However, historic value was mentioned in two more (six) documents than the scientific value (SPAB, 1877; OAS, 1967; ICOMOS, 1999a; ICOMOS, 1999c; ICOMOS, 2017b; ICOMOS, 2017a). Four documents mentioned scientific value (ICOMOS, 1999a; ICOMOS China, 2015; ICOMOS, 2017b; ICOMOS, 2017a). Unlike some documents (OAS, 1967; ICOMOS, 1999a; ICOMOS, 1999c) addressing "repair" would remain or continue the historic and scientific value of the built structures, The Manifesto (SPAB, 1877) and Salalah Guidelines (ICOMOS, 2017a) emphasized that "repair" will reduce the historic value (SPAB, 1877) and both two values for archaeological sites (ICOMOS, 2017a). Aesthetic value was mentioned in five out of seven documents (OAS, 1967: ICOMOS, 1999c; ICOMOS China, 2015; ICOMOS, 2017b; ICOMOS, 2017a). On the contrary, while The China Principle (ICOMOS China, 2015) were addressing that "repair" should not redo the wall painting for "cosmetic purpose," The Salalah Guidelines (ICOMOS, 2017a) allowed "cosmetically repair" for standing structures. Age value is mentioned in three out of seven documents (SPAB, 1877; ICOMOS China, 2015; ICOMOS, 2017b). What makes this concept complex is, although, in the earliest record, The Manifesto (SPAB, 1877) emphasized that "repair" would leave a "gap in the history"; when concerning built structure under the specific cultural context, the latter two documents (ICOMOS China, 2015; ICOMOS, 2017b) clarified that "repair" can only remove the "decayed" and "extremely old" parts and substitute the similar one from other built structures. Meanwhile, the technique of "repair" can also bring social and scientific value while keeping the traditional craftsmanship (ICOMOS, 1999a).

Although the historic and social value are both ranked as the first in "safeguard"(C4), historic value was found related to more (five) documents (OAS, 1967; UNESCO, 1972; CoE, 1989; UNESCO Bangkok, 2009; ICOMOS, 2011c). As social values were only mentioned in three documents (CoE, 1989; ICOMOS, 2008a; ICOMOS, 2011c) and especially concentrated in The Valletta Principle (ICOMOS, 2011c), what is worth to mention, ecological value also have been identified in more (four) documents (OAS, 1967; UNESCO, 1972; CoE, 1989; ICOMOS, 2011c) concerning the natural environment (UNESCO, 1972), geographical factors (OAS, 1967), and traditional cultural diversity of the site (ICOMOS, 2011c).

In "rehabilitation"(C7), although historic and age values are ranked as the first, historic value was referenced by only two documents and often found paired with aesthetic value when they address "rehabilitation" of groups and areas of historical or artistic interest (CoE, 1968a; Coe, 1968b). Five documents mention age value. Age value is described as "old lodging" (CoE, 1975a), "old building" (CoE, 1996; CoE, 1991a), and could "provide the inhabitants with a sense of continuity of civilization from the past into the future" (UNESCO, 1998) by "rehabilitation."

In "replacement" (C11), more documents (three out of five) mentioned aesthetical value while aesthetical and age values were both ranked as first. Especially in two documents (UNESCO Bangkok, 2009; ICOMOS, 2017b), they mentioned aesthetical value should not be the reason for replacement. Age value was mentioned by another two documents (out of five), however, they were addressed differently. One mentioned the original, natural decay (ICOMOS, 1999c) should not be replaced, while the other said, in some cultures, aged building parts (ICOMOS, 2017b) could be substituted from other built structures.

In "relocation" (C10), all (five) the documents mentioned and ranked economic and social values as the first. Especially in one of the two documents concerning industrial heritage, Nizhny Tagil Charter addressed that "relocation' can only happen "by objectively proved overwhelming economic or social needs" (ICOMOS, 2003d). And The Dublin Principles

JCHMSD (ICOMOS, 2011b) copied the same statement from it later on. Most of the documents (three out of five) mentioned historic value, such as historical location (ICOMOS Australia, revised 2013), historical information (ICOMOS China, 2015) would lost during the "relocation." Only one document, The Burra Charter was identified with all values when it addressed: "The ongoing association of a structure or feature of cultural heritage value with its location, site, curtilage, and setting is essential to its authenticity and integrity" (ICOMOS Australia, revised 2013).

## 4. Discussion

Values precedence has been found in the international doctrines affecting the definitions of specific intervention concepts.

The findings have shown consistency with Mason's theory (2005) that values were found to coexist with, oppose, and overwrite each other within a single intervention concept. Consequently, the role of the values affects the definition. Within an intervention concept, the same value could act in contradictory roles under different situations and cultural contexts, such as the example of age values in "repair." Interestingly, besides encouraging to maintain values, some values were treated as a threshold, such as aesthetical values, which should not become the only reason to dominate the aim, as it will bring harm to the heritage. This leads to diverse intervention decisions while certain value is being kept in some cases, but removed in others.

To further clarify, while having the same leading values, the second and values hierarchies are the one that brings the variant to the intervention concepts. The result has proved that "conservation" is different from "preservation" and "protection." This means that the statements in The Cultural Tourism (ICOMOS, 1999b) and The China Principle (ICOMOS China, 2015) of these concepts can be used interchangeably is improper. Furthermore, while "preservation" and "protection" showed more identical values hierarchies. This finding has shown that defining the terminology from a linguistic point of view in the heritage field is not enough.

To reflect in a broader sense, three points have found to be proved and further discussed within this paper. First, according to the theory of Jokilehto (2007), since the objectives and policies of "conservation" have evolved between documents, this phenomenon also reflect on the relationship between the values and intervention concepts. The findings of this paper have shown that when the targeting heritage scales or categories of the attributes in "conservation" have become broader – from single monuments to the historic urban landscape, tangible to intangible – consequently, more values were mentioned within one single concept. Intervention concepts mentioned with more values at the same time might also mean that they are more complex in their definitions.

Second, values precedence are dynamic and can lead to divergent definitions from time to time. Especially, the Recommendation on the Historic Urban Landscape (UNESCO, 2011) was the first and only international doctrinal document identified referencing social values more than historic values. The social value was the first time highly referenced by "conservation" and surpassed other values. This could possibly mean that when there are more stakeholders, e.g. local community or broader heritage scale involved, the definition might also shift or imply other values. Meanwhile, new values were found when new technologies or methods were developed. Nevertheless, although the natural and ecological aspects were mentioned gradually after the 1970s (Jokilehto, 2007), the intervention concepts were not found many relations to ecological value, only concepts like "protection" and "adaptation" with scarce contents. While concept like "rehabilitation" which was assumed to locate in the same grey area of the intervention categories as "adaptation" and "reuse" by some documents was found

to only relate to historic and age values. The lacking of ecological-values perspective might lead us to contemplate whether the intervention concepts need new criteria for categorization.

Third, tendentious interpretation is possibly to be clarified by identifying the definition of intervention concepts from the value perspective. The issue raised by Meskell (2019) that certain interventions implemented under the name of "preservation" and "restoration" driven by political and economic reasons could actually mean "renovation" and "reconstruction" or others according to the finding of this paper. This means that the government might address the actions under wrong intervention concepts either as propaganda or simply ignorance. This finding shows the unclear definition of the intervention concepts is one of the reasons that leads to the misjudgment culture.

## 5. Conclusion

This research demonstrates values precedence within different intervention concepts in international doctrines. Rather than discriminating specific interventions upfront, one can better understand first the leading values involved, and eventually, further, reveal patterns of strategies and actions on built heritage.

However, reaching the alignment of the intervention definition by tackling a single aspect – value – is not enough. Other aspects such as attributes, actions etc. will be considered together as the next steps of this research. As this paper only focused on the urban and architectural scales, further research could scope on the broader range such as the natural and rural scale. Additionally, new concepts from outside of the scope of this paper should also be considered. Future research is also suggested to focus on distinguishing the values between the internal and external context of the cultural significance, which found both have certain influences on the decision-making of intervention concepts.

Last but not the least, even though this paper has developed a possible way of analyzing the values relating to certain interventions, it is important to always look at the context of the assessed significance and intervention concepts. This also reminds conservation and architectural experts about the importance of constantly revisiting the definition and making reflection from both theory and in practice.

By identifying the relationship between the interventions and values, this paper promotes a more open discussion and comparison between the different interventions, and their definitions; building up a greater understanding of the diversity of redesign projects globally.

#### The List of International Doctrinal Documents

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