

GOOD PRACTICE

Systemic Governance in Cultural Heritage

The case of the Santa María Cathedral

Vitoria-Gasteiz – Basque Country (Spain)

2018

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CONTENT

EXECUTIVE OVERVIEW	4
INTRODUCTION	8
1.1. PURPOSE	8
1.2. REFERENCE FRAMEWORK	8
1.2.1. CREADIS3: Strategy and objectives.....	8
1.2.2. CREADIS3 in the Basque Country.....	9
1.3. BUENA PRACTICA: La Catedral Santa María	10
1.3.1. Focus.....	10
1.3.2. Resources needed	10
1.3.3. Evidence of success.....	10
1.3.4. Difficulties encountered.....	11
1.3.5. Potential for learning or transfer.....	11
1.4. LAYOUT OF THE DOCUMENT.....	11
SYSTEMIC GOVERNANCE IN CULTURAL HERITAGE: STRATEGIC FRAMEWORK	12
2.1 INTRODUCTION	12
2.2. FRAMING SYSTEMIC CULTURAL HERITAGE	14
2.2.1. Dimensions of heritage.....	14
2.2.2. Dimensions of learning in heritage.....	16
2.2.3. Dimensions of participation.....	17
2.2.4. Dimensions of innovation	18
2.2.5. Dimensions of governance	19
2.3. THE QUADRANTS OF SYSTEMIC GOVERNANCE.....	21
2.3.1. Quadrant 1: Conservation and Protection.....	21
2.3.2. Quadrant 2: Research and development (R&D)	21
2.3.3. Quadrant 3: Social and cultural inclusion.....	22
2.3.4. Quadrant 4: Urban and regional development	23
SYSTEMIC GOVERNANCE IN PRACTISE:	25
THE CASE OF THE SANTA MARÍA CATHEDRAL.....	25
3.1. INTRODUCTION: THE INTEGRAL PERSPECTIVE.....	25
3.2. THE SANTA MARÍA CATHEDRAL: A CHRONOLOGY	26
3.3. THE SANTA MARÍA CATHEDRAL: THE EMERGING SYSTEMIC GOVERNANCE	28
3.3.1. Institutional Governance	29
3.3.2. Scientific Governance	30
3.3.3. Social Governance	32
3.3.4. Urban Governance.....	34
LESSONS LEARNED	36
4.1. FROM MANAGEMENT TO GOVERNANCE.....	36
4.2. FROM SHORT-TERM TO LONG-TERM	36
4.3. FROM DISCIPLINE TO MULTIDISCIPLINE.....	37
4.4. FROM MONUMENT TO SOCIETY	37
REFERENCES	38

EXECUTIVE OVERVIEW

Purpose

The purpose of this good practises study is to offer a systemic perspective of governance and its capacity to generate innovative ecosystems in the field of Cultural Heritage, using one case in particular: The comprehensive restoration of the Santa María Cathedral, Vitoria-Gasteiz (Basque Country, Spain).

The report has been carried out within the framework of the CREADIS3 project, funded by INTERREG EUROPE (2017-2021) and led by the Basque Government. The CREADIS3 project addresses the type of innovation that boosts territorial development using non-technological means. Innovation is required in order to stand up to economic, social and environmental challenges, and not only innovation which is rooted in the technological sectors, but also in the combination of these sectors with culture-based creativity.

In this framework, the restoration of the Santa María Cathedral, the construction of which began in the 12th century, has been selected as a good governance practise in the area of Cultural Heritage. The quality of the Master Plan for the Comprehensive Restoration of the Cathedral (1996-1998) has been widely recognised by the European Union, the Vatican and the Spanish Ministry of Culture, receiving the Europa Nostra award in 2002. Finally, in 2015, the Cathedral was included in the list of UNESCO World Heritage Sites as an asset linked to the northern *Caminos de Santiago* (Ways of St James).

This report puts forward the notion of *systemic governance* as an emerging concept from the restoration experience of the Santa María Cathedral. Systemic governance is an approach which enables us to understand the different dynamics and levels at which innovation, learning and social participation processes are created in the field of Cultural Heritage.

New governance

Governance in Cultural Heritage is far from a new phenomenon. The closed governance model has traditionally been the dominant one. This perspective is based on a top-down approach and centralised management. The closed governance model develops collaboration and cooperation relationships between institutions and organisations which are associated with the agenda of the cataloguing, restoration, conservation and protection of heritage. It's a model which favours the *context of the production of knowledge* in the field of heritage. In the closed governance model, learning is structured around communities of experts and institutional interests associated with cultural heritage are predominant.

Over the last few years, the closed model has been making way for open governance models organised around the multi-agent and multi-level management of heritage. The perspective of participatory governance emerges triumphantly from this model, which drives a bottom-up and decentralised approach towards the management of heritage. The open governance model develops cultural and social participation mechanisms connected with the agendas surrounding social cohesion and sustainable development. It's a model which favours the *context of the application of knowledge* in the field of heritage. Thus, the learning models are structured around mixed communities (experts - non experts) and the social and economic interests associated with cultural heritage are predominant.

The experience created by the Santa María Cathedral has enabled the integration of the closed models (top-down) and the open models (bottom-up) of heritage management to form a new governance model: systemic governance.

Systemic governance relates cultural heritage with learning, and innovation with participation. Structured into quadrants (figure 1), systemic governance identifies four governance dynamics: 1) Institutional governance facilitates institutional relationships focussed on the conservation and protection of cultural heritage. In this quadrant, closed innovation is dominant, along with contributory participation through means of institutional learning. 2) Academic governance structures scientific and technological relationships associated with research and development which streamline the knowledge formalised in the field of cultural heritage. In this quadrant, collaborative innovation is dominant, along with interactive participation through means of learning communities. 3) Social governance structures social, economic and cultural relationships associated with the social participation of civil society in the field of cultural heritage. In this quadrant, open innovation is dominant, along with experimental participation through means of communities of practice. 4) Urban governance structures relationships between cultural heritage and sustainable urban development. In this quadrant, sustainable innovation is dominant, along with transformational participation through means of sustainable communities.

Figure 2. SYSTEMIC GOVERNANCE IN CULTURAL HERITAGE (Integrated model)

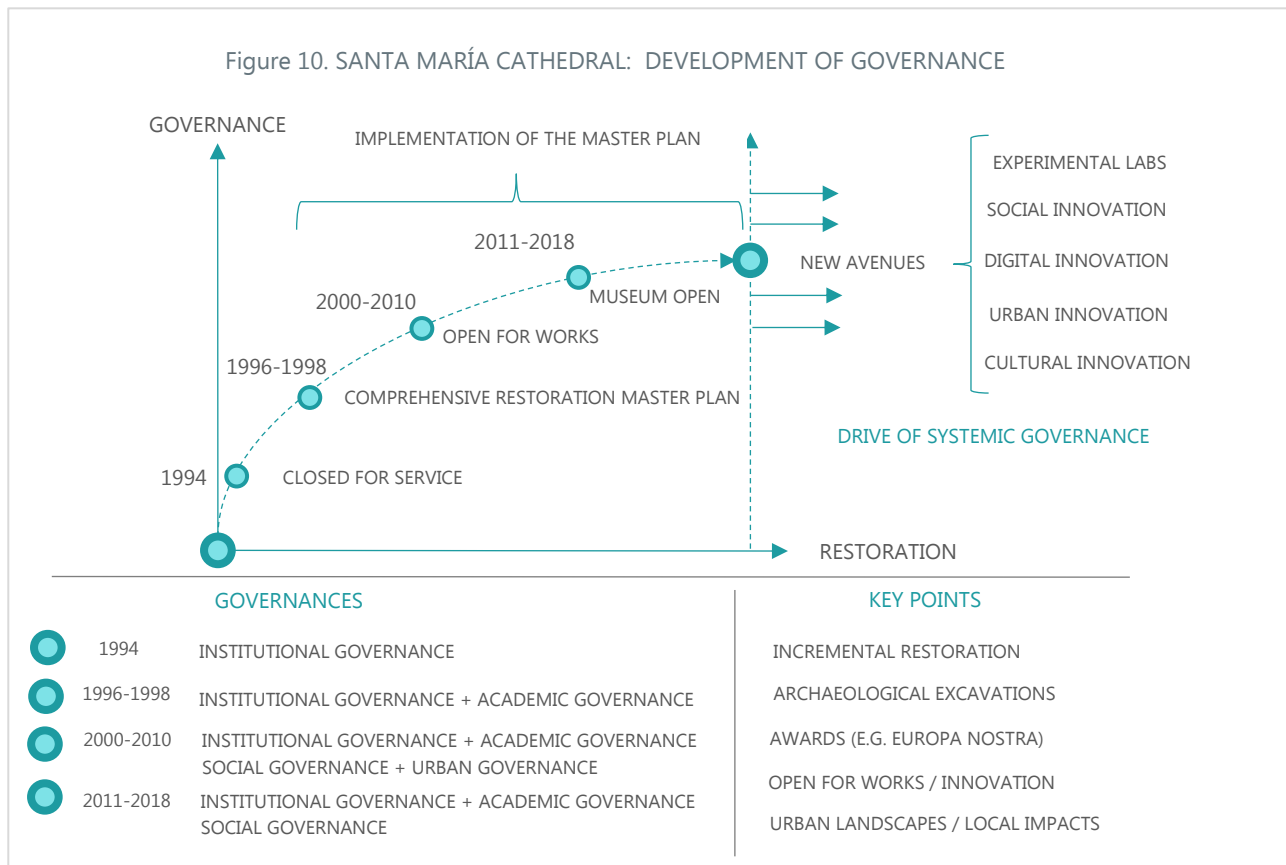


INNOVATION		PARTICIPATION	
CLOSED	A	1	CONTRIBUTORY
COLLABORATIVE	B	2	INTERACTIVE
OPEN	C	3	EXPERIMENTAL
SUSTAINABLE	D	4	TRANSFORMATIVE

Inasmuch as the quadrants relate innovative processes (with different levels of openness) and participation processes (with different levels of intensity), they are able to *stabilise interactions*, creating ecosystems. The stability of these ecosystems depends on the heterogeneity of the agents concerned, their strategic objectives, the knowledge capacities developed and the resources available in the long-term.

Good governance practises

The systemic governance model has been designed (extrapolated) from the restoration experience of the Santa María Cathedral. The development of the Master Plan has shown, with different degrees of success, the dynamic of these four governances (figure 10).



Institutional Governance: The institutional governance was structured around coordination of the Cathedral’s recuperation and restoration activities in a collaboration between the Provincial Government of Araba, the City Council of Vitoria-Gasteiz and the Bishopric of Vitoria-Gasteiz. The governance has been institutionalised thanks to the creation of the Santa María Cathedral Foundation. The implementation and coordination of the Master Plan for Comprehensive Restoration of the Cathedral was the axis of this governance.

Scientific Governance: The scientific governance was structured around the coordination of the scientific and technical activity for the integral diagnosis and implementation of the restoration work along with the historical, social and urban valuation of the Cathedral. The scientific governance combined 6 different disciplines and sub-disciplines, developing relevant technical and academic knowledge (doctoral theses, master theses and scientific articles). The Cathedral as an “open learning system” was the axis of this governance.

Social Governance: The social governance was structured around the coordination of an awareness and social appropriation strategy for the Cathedral. The “open for works” Programme allowed the public to continue to visit while the building was being restored to its eventual musealisation (cultural programme). Social inclusion, patrimonial revaluation and the cultural programme were the axis of this governance.

Urban Governance: The urban governance was structured as an urban organisational model under the project “Vitoria-Gasteiz: City of the Three Cathedrals” which, together with the discovery and restoration of the City walls, shaped an overall strategy of urban reconnection (new walkways), social activism (new inclusions) and patrimonial valuation (new cultures) of the city of Vitoria-Gasteiz’s historic quarter.

Lessons learned

Cultural Heritage is, first and foremost, a public responsibility. In the majority of cases, this responsibility is implemented in a centralised manner. The case of Santa María Cathedral has been successful thanks to the implementation of a decentralised, multi-agent and multi-level management model. Structured around a collaboration between the Provincial Government of Araba, the City Council of Vitoria-Gasteiz and the Bishopruc of Vitoria-Gasteiz; and managed by the Santa María Cathedral Foundation, the Cathedral has been restored thanks to an open learning system.

The Cathedral as an *open system* allows the introjection of the context and projection towards the surroundings. Thus, the open system perspective has facilitated coordination and interaction between different subsystems, simultaneously and progressively: a) The architectural work (restoration and historic valuation), b) The engineering work (diagnosis of structures and monitoring of the building), c) The archaeological work (excavation and historicisation), d) The social participation work (“open for works” and musealisation), e) The urban projection work (the perspective of the three cathedrals and the city wall), f) The decision making process (creation of the Santa María Cathedral Foundation). This open, multi-agent and multi-level system promotes the transition from management models (focussing on projects and their resources) towards governance models (focussing on relationships and their dynamics).

Lessons from systemic governance:

A) To understand Cultural Heritage as an *open system* which is constantly being updated and interacting with the surroundings. Systemic governance develops new management models which deliberately promote learning, participation and innovation in different ways and at different intensities. Intermediary, decentralised and multi-agent structures are the models that fit with this governance.

B) To understand cultural heritage as *application contexts*, based on the deliberate interaction and learning between different types of disciplines. Systemic governance develops a simultaneous and sequential model of disciplinary convergences. Long-term participatory planning is the right model for the management of this governance.

C) To understand cultural heritage as an *inclusive innovation* system based on interaction between intensities of social participation and ways of learning to generate long-term sustainable transformations. The development of sustainable communities is the right model for the management of this governance.

1

INTRODUCTION

1.1. PURPOSE

The purpose of this good practises study is to offer a systemic perspective of governance and its capacity to generate innovative ecosystems in the field of Cultural Heritage, using one case in particular: The comprehensive restoration of the Santa María Cathedral, Vitoria-Gasteiz (Basque Country, Spain).

This report explores the notion of *systemic governance* as an emerging concept from the restoration experience of the Santa María Cathedral, located in the historic centre of the city of Vitoria-Gasteiz. Systemic governance is a new focus which allows us to integrate the different dynamics and levels at which innovation, learning and participation processes are created in the field of Cultural Heritage.

Different lessons from the experience can be obtained from the emerging systemic governance of this case. A) To understand cultural heritage as an *open system* which promotes constant up-date and interaction with the context; B) To understand cultural heritage as an *application context* which allows the convergence and interaction of different types of scientific and technical disciplines, C) To understand cultural heritage as an *inclusive innovation* system based on interaction between social participation and learning.

1.2. REFERENCE FRAMEWORK

1.2.1. CREADIS3: Strategy and objectives

The CREADIS3 project is supported by INTERREG EUROPE with 1.400.000 euros and will be developed between 2017-2021. CREADIS3 addresses the issue of innovation driving territorial development through non-technological forms of innovation. To tackle economic, social and environmental challenges, innovation is needed, not only based on the technological sectors but in allying these sectors to culture-based creativity.

The main objective of CREADIS3 is to align territorial public policy agendas to support the development of more efficient CCI policies in territories aiming to generate innovation and economic development in European regions. It is declined in 6 sub-objectives along 2 priority themes: Improving institutional governance and Boosting CCIs contribution to regional development.

CREADIS3 will produce an integrated report on Good Practices on Governance and creative ecosystems, organise 6 study visits and 1 B2B event, deliver 6 Action Plans tailored for partners' territories and respective policy instruments addressed, a Policy Toolkit and an international conference.

These outputs will support the establishment of sustainable Smart Specialisation Creative Districts with the following characteristics:

- Better governance models aligning territorial public policy agendas to offer tailored support to CCI
- Increased synergies between culture and economic development policy instruments
- Better policy measures to integrate CCIs in the local innovation ecosystems Increased partners' attractiveness for creative talents and enterprises
- Increased cross-collaboration and cross-fertilisation initiatives between CCIs and other sectors of economy, education and research to drive innovation
- Better policies to support internationalisation of local creative SMEs
- Reinforced role for CCIs in ESIF and RIS3

1.2.2. CREADIS3 in the Basque Country

During the identification of RIS3 priority sectors, three priorities have been defined in the Basque Country that affect different sectors with a strong specialization and skills: a) Advanced Manufacturing, b) Energy, and c) Bio-health convergence. In addition to these three priorities, 4 other opportunity territories have been identified, one of which is Culture and Creative Industries.

The development of this new territory of opportunity (Creative Industries) has been assigned to the Department of Culture and Language Policies of the Basque Government. In this context, the participation as lead partner in CREADIS3 project is fundamental.

Therefore, the CREADIS3 priority and collaboration framework is to articulate better culture and economic policies for effective CCIs innovation policies. For this aim, the close relationships and collaboration with our public and private stakeholders, from culture and economy areas, is a key element for the Basque Country.

Cross sectorial policies are also one of the main challenges: innovative tools to cross CCIs with the rest of priorities and opportunity territories identified in the Basque RIS3 are needed, so exchanging knowledge and experiences with the rest of CREADIS3 partners of about this subject, will be of great value.

And even looking to the future, the Basque Country can't forget about its past, and its strong cultural identity, that are also one of its main actives as a nation. Taking all this into account, three are the main pillars to be carried out during the project:

- Innovation in CCIs Public Policies: the focus of this action is to promote new forms of governance in the public policy in the sector connecting old and new stakeholders in the cultural and creative industries at regional level.
- Cultural Heritage: the focus of this action is to promote and disseminate the cultural heritage, both tangible (like the Santa Maria Cathedral in Vitoria-Gasteiz, Guggenheim Museum in Bilbao), and intangible (e.g. Basque culture and language).
- Gastronomy: the focus of this action is to promote the gastronomy as a creative sector boosting a wide range of R&D facilities and industries developing around this sector (BCC -Basque Culinary Centre, and the Gastronomy policy promoted by the Provincial Council of Gipuzkoa).

1.3. BUENA PRACTICA: La Catedral Santa María

1.3.1. Focus

The focus of this good practices is linked to research, conservation and development plan of the heritage site of Santa María Cathedral under visitor's eyes.

Since 1996, research and restoration work have been carried out in the Cathedral, focused on an increase of the social behaviour of the conservation works.

The Foundation has established a programme to carry out activities focused on enhancing value and raising public awareness of all interventions. They are grouped together under the motto OPEN FOR WORKS to show that the comprehensive intervention process is visible every step of the way, including planning, execution and results explained to the public.

Furthermore, related activities are generated leading to greater identification with the cultural heritage site, such as conferences, courses and social events.

The intervention process is structured in three phases:

1. Historical and architectural research of the monument following the Master Plan, 1996-2008
2. Rehabilitation of the building and site functions following the Restoration Draft, 2006-2020
3. Ongoing conservation and activities under the Conservation and Development Plan (2020-2040) will be drawn up classified into four lines of social progress:
 - innovation in the objectives and methods for enhancing value and raising public awareness of cultural heritage
 - technology applied to the different restoration and awareness-raising activities
 - inclusivity of all social sectors, especially those in functional or financial difficulty
 - sustainability of the different economic and environmental parameters

1.3.2. Resources needed

The budget in 2017 reached 1,916,000 €: Provincial Council 39.87%; City Council 9.40%; Bishopric 9.40%; Basque Government 7.83% and the remaining 33.50% was a result of revenue from private sponsors. The Foundation staff: 5 people work in management task; 18 people for the visiting services and 15 on restoration works.

1.3.3. Evidence of success

During the practice to date, over one and a half million visitors have been registered who have learned about the cathedral and its conservation, guided by specially trained staff.

Some 94,000.00 people take the guided tour each year and some 10,000 people attend the different cultural activities yearly. More than 250 cultural events have been held based on the history, conservation and cultural significance of the building and the city.

1.3.4. Difficulties encountered

Keeping a monument that is undergoing building work open in its entirety requires strict safety and accessibility conditions in order to protect visitors. Coordination between the activities is necessary to provide the practice with legal and economic security.

1.3.5. Potential for learning or transfer

1. The organisation of open activities in settings that are usually closed, such as structural repair works on monuments or the archaeological excavation of its subsoil, is innovative as it overcomes the exclusivity and isolation in which specialists usually carry out their work and extends the social environment of reference for the site
2. The new Development and Conservation Plan may serve as a model for the introduction of lines of social innovation in heritage intervention and management
3. Opening all activities to the public may be an example of transparency and democratisation of heritage intervention processes
4. The improvement of the physical and cultural accessibility achieved during the interventions is a reference point for expanding the target public, with the inclusion of groups at risk of exclusion.
5. Participation in projects at European (ECHOES Cluster) and international level (Monuments Trust of San Juan in Puerto Rico)

1.4. LAYOUT OF THE DOCUMENT

The document is organised into four sections. In the first section, the systemic governance model is presented. The model offers a perspective of four governances (institutional, scientific, social and urban) which make up the dynamic of Cultural Heritage. In the second section, the systemic governance model is presented put into practise, by describing the emerging dynamics from the case of the Santa María Cathedral. In the third section, the lessons learned from the whole process are given.

2

SYSTEMIC GOVERNANCE IN CULTURAL HERITAGE: STRATEGIC FRAMEWORK

2.1 INTRODUCTION

Governance is a multi-agent and multi-level management strategy which recognises the role of public, private and social actors (cultural organisations and active citizens) and develops participation mechanisms along the entire Cultural Heritage management cycle (identification, cataloguing, recuperation, restoration, conservation, protection, maintenance and development) (Council of Europe, 2005; Council of the European Union, 2014; Sani, 2015; Union European, 2018).

Governance in Cultural Heritage is far from a new phenomenon (Barile & Saviano, 2015; Bertacchini, Saccone, & Santagata, 2011; Sani, 2015; Shipley & Kovacs, 2008). The closed governance model has traditionally been the dominant one. This perspective is based on a top-down approach and centralised management (Sani, 2015). The closed governance model develops collaboration and cooperation relationships between institutions and organisations which are associated with the agenda of the cataloguing, restoration, conservation and protection of heritage. It's a model which favours the *context of the production of knowledge* in the field of Heritage. In the closed governance model, learning is structured around communities of experts and institutional interests associated with cultural heritage are predominant.

Over the last few years, the closed model has been making way for open governance models organised around the multi-agent and multi-level management of Heritage (Council of the European Union, 2014). The perspective of participatory governance emerges triumphantly from this model, which drives a bottom-up and decentralised approach towards the management of Heritage. The open governance model develops cultural and social participation mechanisms connected with the agendas surrounding social cohesion and sustainable development (Hosagrahar, Soule, Girard, & Potts, 2016; Sani, 2015). It's a model which favours the *context of the application of knowledge* in the field of Heritage. Thus, the learning models are structured around mixed communities (experts - non experts) and the social and economic interests associated with cultural heritage are predominant.

The experience created by the Santa María Cathedral has enabled the integration of the closed models (top-down) and the open models (bottom-up) of heritage management to form a new governance model: systemic governance.

Systemic governance relates cultural heritage with learning, and innovation with participation. Structured into quadrants (figure 1), systemic governance identifies four governance dynamics: 1) Institutional governance facilitates institutional relationships focussed on the conservation and protection of cultural heritage. In this

quadrant, closed innovation is dominant, along with contributory participation. 2) Academic governance structures scientific and technological relationships associated with research and development which streamline cultural heritage. In this quadrant, collaborative innovation is dominant, along with interactive participation. 3) Social governance structures social, economic and cultural relationships associated with the social participation of civil society in the field of cultural heritage. In this quadrant, open innovation is dominant, along with experimental participation. 4) Urban governance structures relationships between cultural heritage and sustainable urban development. In this quadrant, sustainable innovation is dominant, along with transformational participation.

Inasmuch as the quadrants relate innovative processes (with different levels of openness) and participation processes (with different levels of intensity), they are able to *stabilise interactions*, creating ecosystems (Fish, Church, & Winter, 2016). The stability of these ecosystems depends on the heterogeneity of the agents concerned, their strategic objectives, the knowledge capacities developed and the resources available in the long-term.

Figure 2. SYSTEMIC GOVERNANCE IN CULTURAL HERITAGE (Integrated model)



INNOVATION		PARTICIPATION	
CLOSED	A	1	CONTRIBUTORY
COLLABORATIVE	B	2	INTERACTIVE
OPEN	C	3	EXPERIMENTAL
SUSTAINABLE	D	4	TRANSFORMATIVE

2.2. FRAMING SYSTEMIC CULTURAL HERITAGE

2.2.1. Dimensions of heritage

The current concept of cultural heritage appears to inherit pre-established notions as intrinsic characteristics of a determined civilisation which must contribute to conforming current societies in their identifying cultural aspects (Ahmad, 2006; Munjeri, 2004; Vecco, 2010). This model is organised upon axes that depend on this inheritance, making the distinction between the patrimonial object and the meaning or value that each society can attribute to it both difficult and contradictory. This can produce the paradox of imposing onto objects what the society (or certain societal groups) need to hear in order to be able to evaluate them. The risk associated with the model is that of falling into an identity which is self-referential and lacking in dynamism which tends to fossilise objects whilst we constantly try to remember our inherited culture, turning them into mere reflections of our social reality, upon which it's impossible to advance.

In its broadest sense, heritage can be defined as a set of assets inherited from the past (...) of any nature, to which each society attributes, or in which each society recognises, a cultural value. This is a dynamic definition as the cultural values are ever changing which implies that the very concept of heritage finds itself under permanent construction and that the elements that make up said heritage form an open group, susceptible to modification and, above all, to new incorporations (Azkarate, Ruiz de Ael, & Santana, 2004).

In this regard, an attempt to overcome the identity paradox through reflection on the axes upon which the idea of cultural heritage currently moves is proposed:

Tangibility/ intangibility. The tangibility axis establishes a dichotomy between material heritage, with physical objects, and immaterial heritage, with cultural events, which confuses the value of the object, always intangible, with its own physical condition. In order to overcome this confusion, a new reference axis needs to be established which caters for the objects for what they are, material or immaterial, valuing them for their capacity to relate to or provoke reminiscence in the society which possesses them, following the path of considering valuation to be the true axis upon which heritage shows itself to be an increasing 'intangible' value.

Variability. At the same time, this appreciation of the object as a receptacle and motor for relations marks out the direction of the identity axis, which demands consistency in terms of the materiality of the object which avoids the loss of cultural references, thus opposing the possibility of valuing the substance of the object according to the value that can be attributed to it at any given time. In order to overcome this paradox, the function of identifying the patrimonial object needs to include variable values together with constant parameters to define (calculate) its social and cultural position at any time.

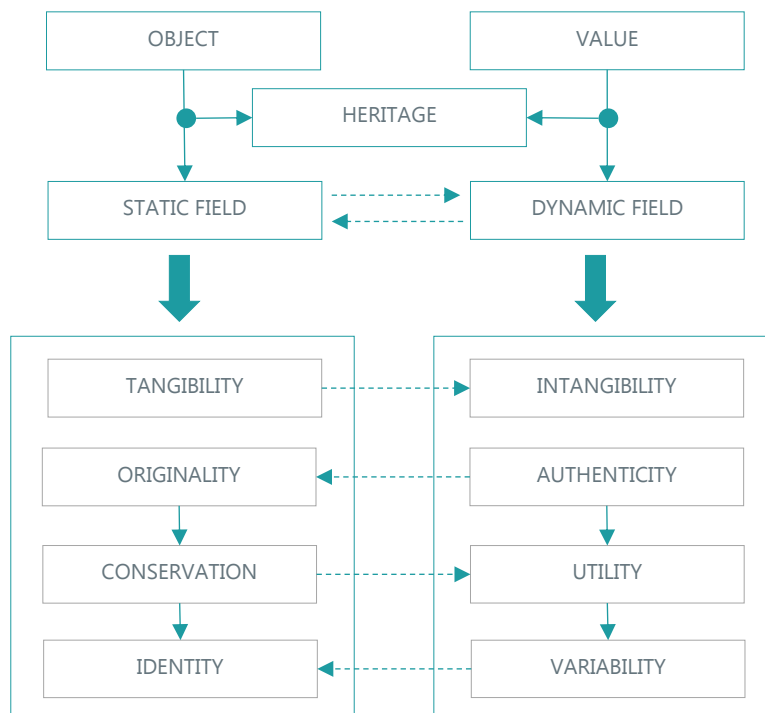
Conservation / use. A similar axis, albeit one which focusses more on the materiality of the object, is the one which links its comprehensive (or fundamentalist) conservation with the possible uses that it can offer, once again conducive to the exclusive alternative of either conserving useless objects or drastically altering them so that they can be reused. Once more, it is necessary to recognise the variability of the terms of this function in order to obtain action situations and frameworks that enable progress in the revitalisation of objects without destroying their materiality.

Originality/ authenticity. In parallel to the previous axis, now focussing on the object's social apprehension or perception, we find the latent dichotomy between the idea of its originality, which sees it as an established remnant, almost a fossil, of the past and that of authenticity, which relates it with the function that it has been carrying out over time, more unstable and dynamic and, ultimately, the true shape mould for its own materiality. Once again, overcoming the dichotomy requires focussing on the evolution of a primordial

(original) object which is altered by means of a fluid process but one which is marked by actions aimed at its perpetual renovation (authentication).

In summary, in all of these aspects it must be recognised that the dichotomies or latent paradoxes in the ideas that we generally have regarding the conservation and valorisation of cultural heritage are irresolvable in themselves and only permit a gradual view which determines, at all times, one point of these axes - and others - in order to become operational. The antagonistic terms of the dichotomies must become the ends of the axes, graded according to different variables with different important factors in each situation. It won't be possible to establish a point of operation as a fixed focus, neither for different objects nor for different moments in each object, we must continually deal with the movement along these axes regarding what is happening, before and after our own interventions. At the risk of an irremediable incapacitation of cultural heritage as provider of active values, the need to revitalise it and constantly update it involves the re-elaboration of criteria in order to evaluate it according to critical and necessarily unstable methods.

Figure 2. CULTURAL HERITAGE AS A DYNAMIC SYSTEM



Source: Own elaboration

2.2.2. Dimensions of learning in heritage

The “*learning in heritage*” concept suggests that learning occurs both in formal structures, and non-formal and informal ones, and by means of different learning strategies (González, 2012). Four types of strategies can be identified: a) Learning *about* cultural heritage, b) Learning *through* cultural heritage, c) Learning by *experiencing* cultural heritage, d) Learning by *deciding* between the cultural heritage polities.

On the other hand, learning can be seen to be a social process of the transfer of knowledge between communities. Communities link institutions, organisations and people with specific competences which come together to promote processes of change while they learn (Wenger, 1998). In institutional literature, *learning communities* are defined as groups of people who place special value on specific aspects of cultural heritage, who want, within the framework of public action, to sustain and transmit these values to future generations (Council of Europe, 2005; Gesche-Koning, 2018).

Communities of polities: This is the learning which is generated by the making of institutional decisions by polity makers in interaction with groups of interest from civil society. The decision making takes place under institutional restrictions (legal, financial, regarding competence...) therefore the learning is generated in an informal, tacit and experiential manner. *Peer to peer* interactions between polity makers, and culture organisational managers, constitute an interactive source of learning and the privileged mechanisms in this learning are the knowledge of experiences, success cases and good practises (Busenberg, 2001; Freeman, 2006).

Learning Communities: This is the learning generated by the academic and technological community linked to cultural heritage. Learning communities are aimed at the context of application and are interdisciplinary. They are made up of people with a relatively uniform identity (generally academics and university graduates). The privileged learning mechanisms which invigorate this type of community are the exchange of documents and content, collaborative projects and the transfer of knowledge via training and collaborative learning (Hod, Bielaczyc, & Ben-Zvi, 2018; Loes & Pascarella, 2017; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006).

Communities of practise: A community of practise constitutes one group of people who continually participate in activities of a common interest. Communities of practise are experimental and have a heterogeneous identity (their members come from different domains). These communities have three characteristics: a) They're geared towards problem solving. The search for viable solutions based on a heterogeneity of perspectives provokes progress in social knowledge; b) Communities of practise share a practise, exploring solutions and co-building a common knowledge; c) Communities of practise, as they share a practise and construct a common knowledge, form a group identity and, through this process, change the identity of their members. Communities of practise applied to cultural heritage are a source of construction of new cultural identities (Lave & Wenger, 1991; Probst & Borzillo, 2008; Wenger, 1997, 1998).

Sustainable communities. Sustainable communities refer to heterogeneous social groups which organise, plan and develop projects and activities linked to promoting environmental sustainability, social inclusion, the development of infrastructures (above all urban ones) and the implementation of sustainable and responsible polities. Sustainable communities are strongly linked to cultural heritage, through which sustainable development can be promoted. These communities are common in the cultural tourism and urban development sectors (Innes & Booher, 2000; East, 2005; Keitumetse, 2016; Van der Ryn & Calthorpe, 1991).

2.2.3. Dimensions of participation

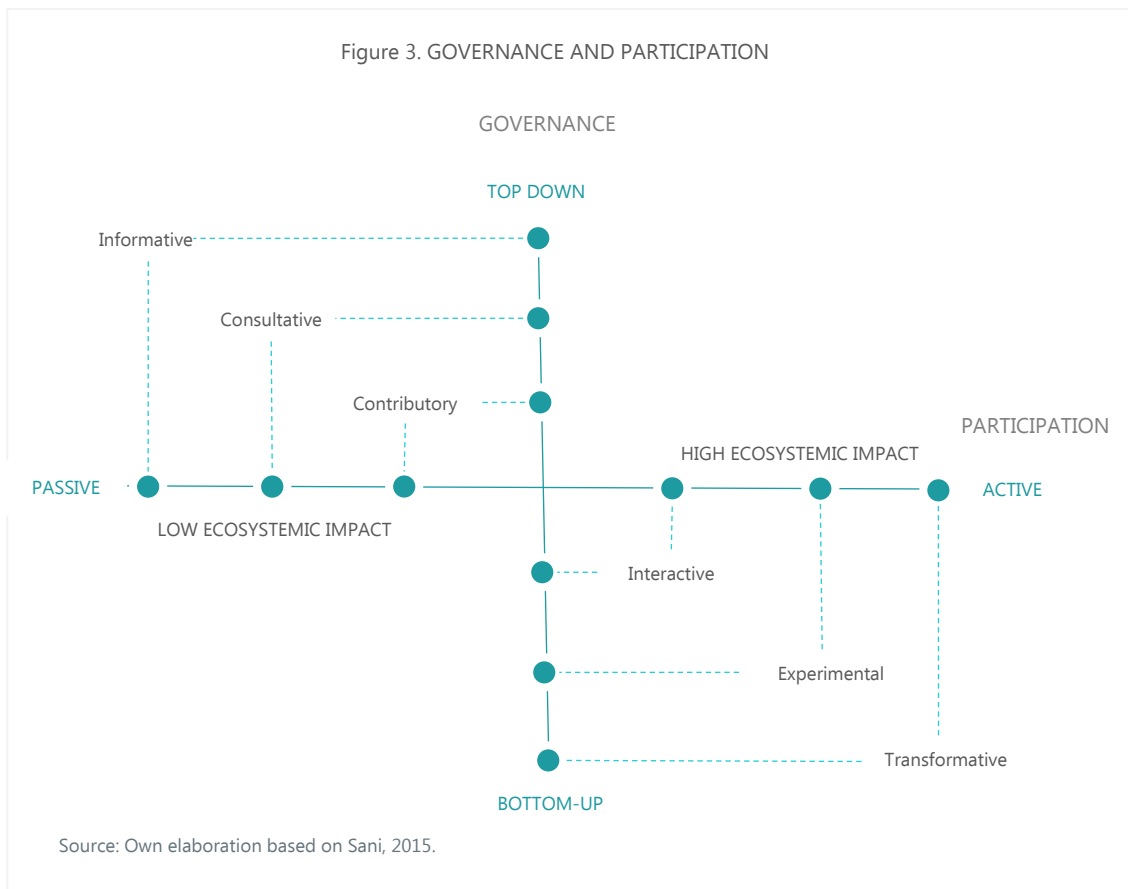
Participatory governance focuses on democratic commitment, especially through deliberative forms, based on the development of citizen competencies (Fung & Wright, 2001). In the field of Cultural Heritage, participatory governance promotes the participation of different audiences and *stakeholders* in the protection, recuperation and socialisation of cultural heritage. However, the participation of these processes is of differing intensities which structure different modes of governance (top-down and bottom-up) (Sani, 2015). At least six different participation intensities can be identified in the field of Cultural Heritage which have a greater or lesser ability to generate ecosystem impacts (figure 3).

Informative participation: This is a passive mode of participation where communities and *stakeholders* in cultural heritage receive information which is structured around cultural heritage.

Consultative participation: This is a passive mode of participation where communities and *stakeholders* in cultural heritage are consulted in terms of decisions to be taken or implemented regarding cultural heritage.

Contributory participation: This is a passive mode of participation where communities and *stakeholders* in cultural heritage are invited to contribute (in a structured manner) on decisions to be taken or implemented regarding cultural heritage.

Interactive participation: This is an active mode of participation where communities and *stakeholders* in cultural heritage co-design parts of the actions or strategies to be implemented regarding cultural heritage.



Experimental participation: This is an active mode of participation where communities and *stakeholders* in cultural heritage test and prototype experiences and solutions to promote new actions or strategies regarding cultural heritage.

Transformative participation: This is an active mode of participation where communities and *stakeholders* in cultural heritage scale and develop new organisations and networks around the social and urban impact of cultural heritage.

2.2.4. Dimensions of innovation

Innovation can be understood as the generation of products, processes and/or services which allow a problem to be solved, be it social, technological, public or environmental. In order to explore innovation in Cultural Heritage, there's a model based on the "innovation cone" which goes from closed innovation to sustainable innovation (figure 4).

The model suggests a relationship between innovation and collaboration; innovation and social participation. Thus, each type of innovation is structured according to a collaboration and participation system of a different intensity.

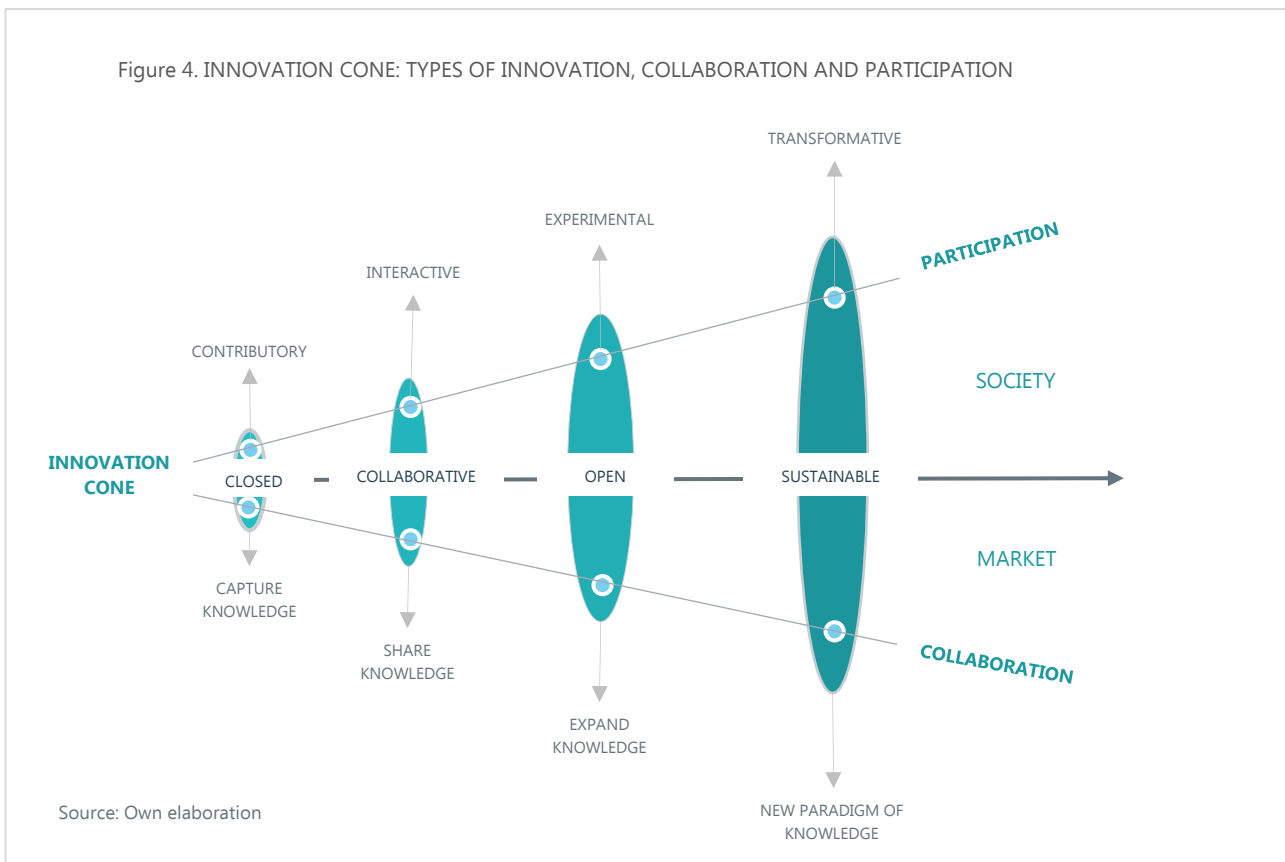
Closed innovation: This type of innovation stands out as it almost exclusively uses the resources and knowledge available in the organisation itself when developing innovations. The development model of internal R&D departments shows the paradigm of this approach. In this research model, the best and possible innovative ideas of the organisation itself can be selected, which is subject to internal restrictions (such as the technological base which is available, the skills of the organisation's personnel, the time available, etc.). It's a linear innovation model which seeks to protect and control the development of innovation within the organisations. Closed innovation looks to *capture* external knowledge and develop limited social participation processes (consultative) (Chesbrough & Appleyard, 2007; Kovács, Looy, & Cassiman, 2014; Lichtenthaler, 2008)

Collaborative innovation: This type of innovation develops a strategic bond with one or two organisations of the *same nature* (same market, institutional field or research field). It's a temporary bond which encourages specific innovation by combining different competences and sharing heterogeneous knowledge. Collaborative innovation offers contributory mechanisms of social participation, structuring participation spaces (such as innovation by users) (Baldwin & von Hippel, 2011; Blomqvist, 2006; Sørensen & Torfing, 2011)

Open innovation. This type of innovation encourages collaborative innovation by creating strategic bonds of a *different nature* (companies, universities, the public sector, NGOs, etc.) to combine resources (knowledge, investment, etc.) with the aim of prompting a key innovation. The open innovation model facilitates the creation of *spin-offs* and *start-ups* which boost innovation derived from the key innovation, multiplying the impact and extending knowledge. Open innovation is naturally interactive and offers experimental social participation spaces (Chesbrough & Appleyard, 2007; Kovács et al., 2014; Lichtenthaler, 2008).

Sustainable innovation. This type of innovation is structured around a complex innovation process between: public, private and social organisations / institutions of a different nature. In its solutions (products, processes or services) sustainable innovation incorporates four key dimensions: social integration, economic development, the protection of the environment and the future of the impact (social responsibility). Sustainable innovation is naturally *transitional*, that is, it facilitates transition towards sustainable ecosystems. In this context, it promotes experimental systems and transformative social participation while developing a

new paradigm of knowledge (Ayuso, Rodríguez, & Ricart, 2006; Roth, 2009; Schot & Geels, 2008; Loorbach, 2010).



2.2.5. Dimensions of governance

Governance can be understood as the deliberate development of socio-political interaction spaces, thanks to which different types of agents (public, private, social) can explain their differences and structure (unstable) arrangements to find solutions to problematic or controversial situations (Unceta, Castro-Spila & García-Fronti, 2017). There are different modes of governance in cultural heritage.

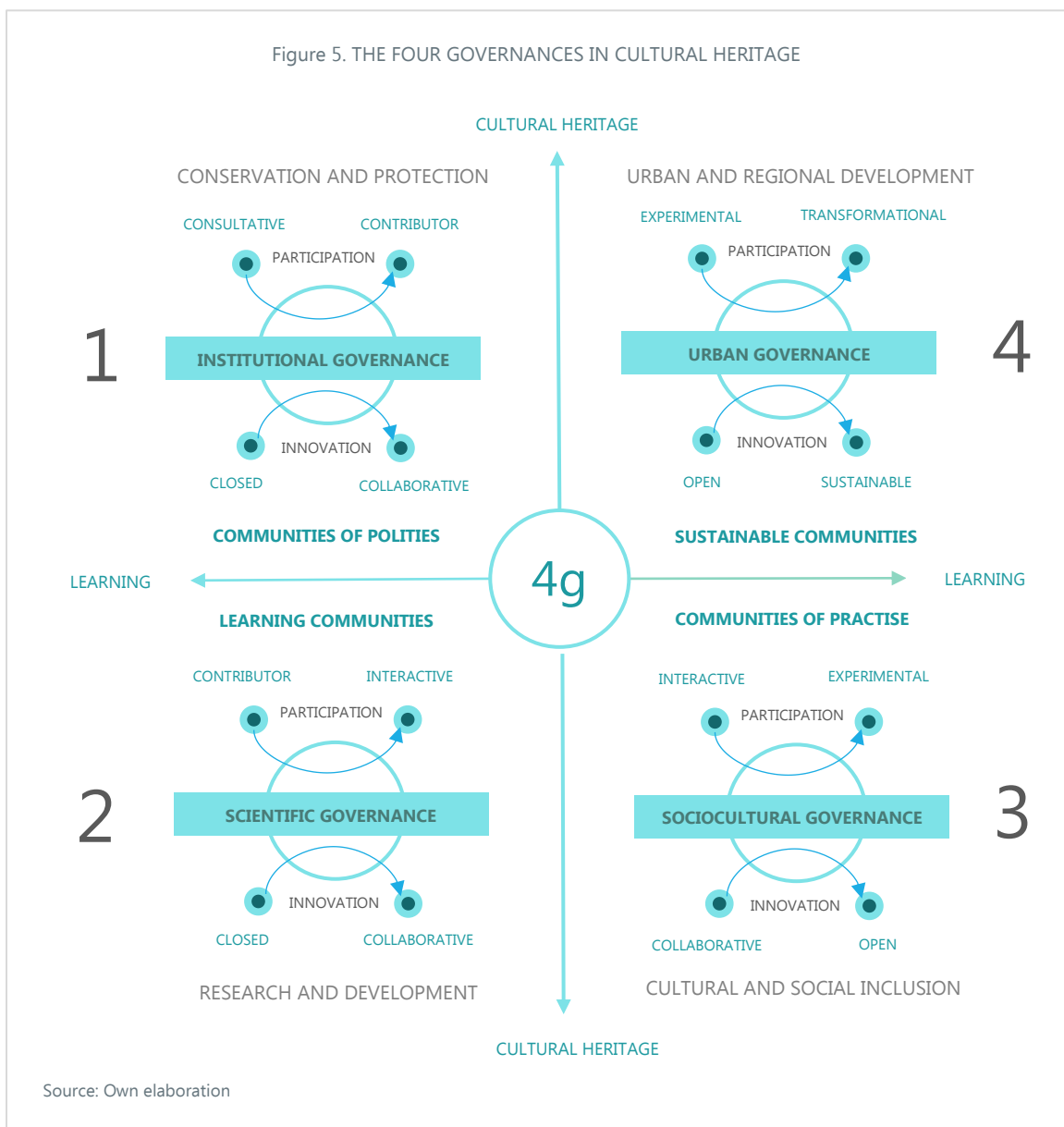
Institutional governance: Institutional governance refers to the management of the institutional links generated surrounding the comprehensive cycle of the Heritage. This type of governance is driven, in a privileged way, by the public sector and joins together different types of agencies linked to the Heritage (international institutions, socio-cultural organisations, universities, companies, citizens). In institutional governance, closed innovation is dominant, along with the contributory participation generated around institutional learning.

Scientific governance: Scientific-technological governance refers to the management of the academic and technological links generated surrounding the integral cycle of the Heritage. This type of governance is driven, in a privileged way, by universities and technological centres, joining together different types of agencies linked to the Heritage (institutions, socio-cultural organisations, universities, companies, citizens). In scientific-technological governance, collaborative innovation and interactive participation are dominant, generating learning environments structured into learning communities.

Social governance: Sociocultural governance refers to the management of the social links generated surrounding the comprehensive cycle of the Heritage. This type of governance is driven, in a privileged way, by citizens and by sociocultural organisations, joining together different types of agencies linked to the Heritage (institutions, socio-cultural organisations, universities, companies, citizens). In sociocultural governance, open innovation and experimental participation are dominant, generating learning environments structured into communities of practise.

Urban governance: Urban governance refers to the management of the strategic links generated surrounding the comprehensive cycle of the Heritage. This type of governance is driven by a range of organisations and citizen groups joining together different types of agencies linked to the Heritage (institutions, socio-cultural organisations, universities, companies, citizens). In urban governance, sustainable innovation and transformational participation are dominant, generating learning environments structured around sustainable communities.

Figure 5 shows the four governances and their dynamics of progression from one type of participation to another and from one type of innovation to another.



2.3. THE QUADRANTS OF SYSTEMIC GOVERNANCE

2.3.1. Quadrant 1: Conservation and Protection

Conservation and protection is the most developed dimension institutionally in the field of Cultural Heritage. In this quadrant, expert knowledge is dominant (restorers, architects, archaeologists, etc.) who provide technical criteria regarding the use and conservation of the Heritage.

Participation, on its part, is structured in passive ways such as information, consultation or contribution (evaluation of patrimonial sites).

Regarding innovation, this quadrant has a closed or collaborative dimension, focusing on the relations between institutions and experts who apply technical-professional methods, or digital technologies which require a passive and user community which doesn't participate in the process but is the end consumer.

In this quadrant, institutional governance is dominant, that is, the development of collaborative relationships between institutions and organisations with the aim of guaranteeing the conservation and protection of Heritage. This type of governance generates relationships that have a *low impact on the creation of an ecosystem* because it is limited to expert knowledge (linked to the protection or recuperation of heritage), it offers a passive model of social participation and connects with organisations and institutions which are exclusive to the field of the heritage. The type of technology that is used to generate innovations is consistent with the notion of *user* of which a low level of participation is required.



2.3.2. Quadrant 2: Research and development (R&D)

Research and development in the field of Cultural Heritage has a long history. Very diverse disciplines and sub-disciplines work together in the conservation, protection and development of the Heritage. Thus, disciplines such as chemistry, architecture, archaeology, anthropology, sociology, economy, tourism and engineering coexist in the Heritage's multidimensional space.

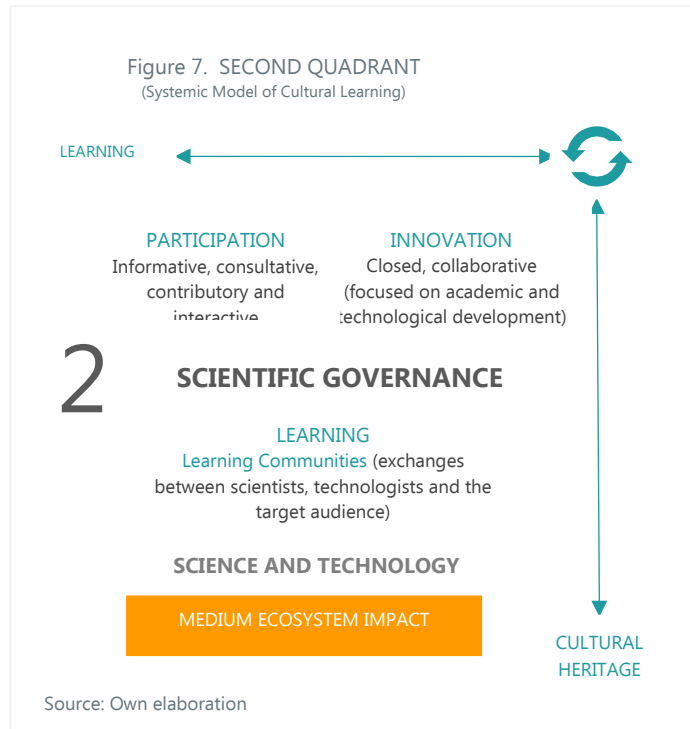
In this quadrant, expert knowledge typical of scientific and technological knowledge is dominant, structured around established research models. In this quadrant, academic research works in both the conservation, restoration and protection of the Heritage (monuments, historic buildings, etc.) and in its social revitalisation. Even when there are efforts to encourage active participatory models in the development of academic and

scientific work (e.g. participatory archaeology) (information, consultation and contribution) are dominant in relation with the general public.

The innovation is structured around the development of new conservation techniques of the tangible heritage and the application of digital technologies in order to improve the users' experiences. Very few innovations introduce social technologies, such as experimental systems.

The learning in this quadrant occurs thanks to the development of learning communities. These communities function in contexts surrounding the application of knowledge and are of an interactive nature. It's within the framework of these communities that vertical learning processes are generated, such as the promotion of the academic master and doctorate.

one could say that the passive participatory models



This quadrant is characterised by scientific governance, that is, the governance model links systems of collaboration between university disciplines, public institutions and cultural and technological organisations specialising in Heritage. In this quadrant, the impacts surrounding the creation of ecosystems are intermediate (medium-low) given that expert knowledge is dominant, social participation is limited to passive practises even when interactive practises can be present, and innovations revolve around the technical and scientific dimension, based on networks which are essentially academic.

2.3.3. Quadrant 3: Social and cultural inclusion

Social and cultural inclusion is not a new dynamic in the postulates of Cultural Heritage. For some years now, Cultural Heritage has been undergoing a process of revitalisation, not only as a space for conservation and protection, but also one of social cohesion and integration.

In this quadrant, learning is dominant thanks to the development of communities of practise of a non-expert and experiential character. Communities of this type have few formulation degrees and are situational, that is, develop to the extent that a transformation and social integration practise is implemented. The integration or cohesion processes combine the tangible and intangible dimensions of Heritage. This type of communities, inasmuch as they are



structured in the long-term, guarantee the future sustainability of the social cohesion dynamics.

The innovation types which are developed in this quadrant are associated with social innovation, open innovation (cooperative) and the hybrid innovations (when participatory digital technologies are included in the innovative processes).

This quadrant is boosted by social governance, the modality that encourages communities of practise and organisational (social, cultural, public and academic) networks that work together to drive collaborative and open innovations, fostering social experimentation for the development of the Heritage.

Finally, in this quadrant, the impacts linked to the creation of ecosystems have an intermediate character (medium high), situational and collective learning is dominant, combining the tangible and intangible dimensions of Heritage. Social innovation, open innovation and hybrid innovation belong in this quadrant, all of them generating new cooperation and collective learning relationships through social and cultural experimentation.

2.3.4. Quadrant 4: Urban and regional development

Urban development and its relationship with Cultural Heritage has been established on a recurring basis both in academic studies and institutional ones.

In the fourth quadrant, the urban governance model is the most complex given that it involves a diversity of heterogeneous dynamics. In fact, participation has active and intensive modalities (interactive, experimental and transformative) which combine with the generation of open and sustainable innovations, linking expert and non-expert knowledge in order to resolve urban problems through Heritage.

Urban sustainability doesn't only focus on environmental problems or economic development, it also encourages new cultural processes which enable the long-term sustainability of sustainable development. This is the privileged position of Heritage and its sustainable communities. It involves activating and updating what is urban into a comprehensive system, marked by historical, geomorphological and social relationships which express a set of layers of meaning and sense. By introjecting these dimensions, urban development can become sustainable.

A systemic dimension is adopted by the urban governance of Heritage, combining tangible and intangible dimensions of the Heritage to encourage new urban development models. Sustainable innovation structures long-term processes of change in a responsible manner.



In this quadrant, learning is structured through sustainable communities which learn thanks to experimentation and responsible innovation, promoting the development of new urban infrastructures (material and immaterial). Experimental laboratories tend to be privileged instruments or the exploration of new development paths.

Finally, this quadrant suggests that the impacts regarding the development of ecosystems are high when they manage to link expert/non-expert knowledge (social operationalisation of scientific-technological models), tangible/intangible heritage (strategic and sustainable joining of the heritage), social/sustainable innovation (social inclusion with long-term responsible models), experimental/transformational participation (when social, economic, institutional experimentation transforms the cultural conditions of the appropriation of urban dynamics).

3

SYSTEMIC GOVERNANCE IN PRACTISE: THE CASE OF THE SANTA MARÍA CATHEDRAL

3.1. INTRODUCTION: THE INTEGRAL PERSPECTIVE

The comprehensive restoration of the Santa María Cathedral in Vitoria-Gasteiz came about as a citizen requirement: the Cathedral had significant problems regarding the support and stability of its structure, manifesting a range of stonework deformations and lesions which were so severe that, facing the serious risk of collapse, it was closed for worship (1994) and a public tender began in order to assign its study and restoration process.

From the beginning, there were suspicions that the building had suffered, chronically, serious structural problems, with severe deformations of its sections and multiple cracks in its stonework and that this structural problem had brought about the execution of a series of consolidation works, the effect of which hadn't been to freeze said movements but, on many occasions, had served to reactivate or transfer them. As a result, it was decided that the exhaustive knowledge of the history of the old cathedral was to be one of the keys in the diagnosis and that said knowledge required the participation of many disciplines under a strategy that had to be interdisciplinary.

Once the commission to proceed with the drafting of a Master Plan of the Comprehensive Recuperation of the Cathedral (1996) was received (Azkarate, Cámara, Lasagabaster, & Latorre, 2001), and in contrast to what was habitual at the time, the reaction was to form new paths and call upon new values. Above all else, it was necessary to abandon the idealistic concepts of architecture to consider a historic building as: a) a document; b) a site where we see its structure elevated but its roots sink into the subsoil; c) ultimately, as a product stratified by the action of man for centuries. In essence, it required the desecration of the object - of the monument - which doesn't exist in itself as a style which is frozen in time, but as the materialisation of a fragmented historical memory which needs to be biographically restored beforehand.

Conventional projects in the restoration of Built Heritage frequently rest on endogenous budgets which organise the research into compartments separated by narrow disciplinary borders. In the face of this point of view, a dynamic and flexible organisation was created for the Santa María Cathedral, creating a team of geologists, chemists, engineers, among others, who could respond to the challenge in an interdisciplinary manner.

Having accepted that scientific knowledge is simply a social construction in itself, the team that drafted the Master Plan were very clear on the fact that the results should be disclosed, where possible, right from the beginning of the restoration process. Thus, "open for works" was born (1999) which was not only an advertising success but, above all, a declaration of principles regarding the social responsibility of scientific

research. This way, priority was given to the commitment that arises from the context of application: ultimately, to a new social contract which modified and broadened the initial objectives, a social contract which was flexible, open (managers, guides, communication specialists) and based on social evaluation (not only academics, but the citizens involved in the process).

Soon, other problems were detected which weren't of an architectural nature but were sociological and needed to be tackled simultaneously: the old cathedral wasn't the only element to have suffered progressive deterioration; the same had happened with its urban environment, a historical centre which had been suffering from relentless socio-economic deterioration for generations. Adding to this the existence of a new Neo-Gothic cathedral in the prestigious area of the city, there was no other consequence than the loss of value of an urban environment which, being the city's historical centre, was paradoxically becoming its social periphery. Therefore, recovering the memory and returning part of its lost prestige to the Centre became one of the most important objectives.

The discovery - during archaeological excavations carried out in the cathedral's subsoil - of the original city walls was an important contributory factor. The researchers soon realised that the old walls, the remains of which had been discovered in the subsoil of the Santa María Cathedral still remained in a good part of the higher perimeter of the city, although semi-hidden by subsequent buildings and forgotten by citizens. Their study, recuperation and valuation (2005-2008) spread to the rest of the city's Historic Centre, a philosophy and way of doing things which had been born ten years earlier in the construction of the cathedral.

Thus, the comprehensive focus of the restoration of the Santa María Cathedral is based on three main dynamics: a) Encouraging research into knowledge application contexts, based on interdisciplinary teams, b) Developing a social perspective of the social appropriation of the Heritage, based on social innovation; c) Promoting the comprehensive articulation of the Heritage regarding a systemic perspective of urban development, based on sustainable innovation.

3.2. THE SANTA MARÍA CATHEDRAL: A CHRONOLOGY

The Santa María Cathedral is Gothic in style and is located in the highest part of the City of Vitoria-Gasteiz. The church originates from the 12th century and is contemporary with the founding of the city in 1181 by Sancho el Sabio (Sancho VI of Navarra). The city was founded from settlements which date from the 8th century.

Around 1200, the original church was expanded by Alfonso VIII as part of the restoration of the city after a devastating fire. The expansion of the original church had the double purpose of Catholic place of worship and defensive structure for the city. In fact, the Cathedral was part of the medieval (defensive) wall and parts of the building are of a military nature. The church acquired the status of Cathedral with the birth of the Diocese of Vitoria in 1862.

The Cathedral constitutes a body of heterogeneous buildings constructed in different eras and with different uses. The different interventions on the building have given it a particular style but, at the same time, are the origin of the structural construction problems. There are records of architectonic interventions in 1647, 1856 and 1870 which try to correct the Cathedral's structural problems.

In 1960, the Cathedral undertook an important intervention with the original idea of resolving said problems and recuperating the original Gothic look. But the recuperation of the Gothic aesthetic aggravated the structural problems. Almost 30 years after its last intervention, the Cathedral closed its doors to the public in 1994 due to fears it might collapse.

In 1991, the Provincial Council of Álava (Provincial Government), through the Department of Urbanism and Architecture, decided to intervene structurally in order to initiate a restoration process and safeguard the Cathedral which was in ruins.

In 1992, an international research group was created to draw up a diagnosis along with recommendations for the recuperation and restoration of the monument.

In 1994, the diagnostic tests were finalised and it was recommended that the place of worship be closed while historical plans and documents were unearthed in order to better understand the structural complexity of the building. This diagnosis was an input for the elaboration of the Master Plan for the Comprehensive Restoration of the Santa María Cathedral in Vitoria-Gasteiz.

From 1996-1998, the Master Plan for the Comprehensive Restoration of the Cathedral was elaborated. While the complementary studies were being carried out (historical plans and documentation), preventative and reversible interventions were implemented in order to ensure the stability of the hazardous areas of the Gothic place of worship (1997-1998).

In 1999, the Santa María Cathedral Foundation was created in order to implement the Master Plan of the restoration. The foundation is sponsored by the Provincial Council of Álava, the City Council of Vitoria-Gasteiz and the Bishopric of Vitoria.

In 2000, the Foundation launched an innovative social archaeology programme: "Open for works". The programme developed an open restoration strategy where, while archaeologists, architects and restorers worked on recuperating the Gothic place of worship, citizens could visit and understand the restoration work of a Gothic cathedral. Thus, a pioneer programme which motivated a vision of cultural heritage with a drive of social cohesion, cultural development and economic impact at an urban level was promoted.

In 2002, the technical and social experience of the restoration of the cathedral received the Europa Nostra award, the highest recognition granted by the European Union for the restoration and conservation works of cultural heritage.

In 2008, the foundation was restructured into three functional areas: Technical Area, Area for the Management of Knowledge and Dissemination and Economic-Financial Area. This structure allows the specialised management of the institutional dimensions, the technical dimensions and the social and cultural dimensions of the restoration of the Cathedral.

Between 2009-2015, in addition to the restoration works, the foundation developed a cultural programme consisting in congresses, seminars and conferences with literary figures such as Paulo Coelho, Ken Follett, Arturo Pérez-Reverte, José Saramago among others.

In 2015, the Santa María Cathedral in Vitoria-Gasteiz was included in the list of UNESCO World Heritage Sites as an asset linked to the northern *Caminos de Santiago* (Ways of St James).

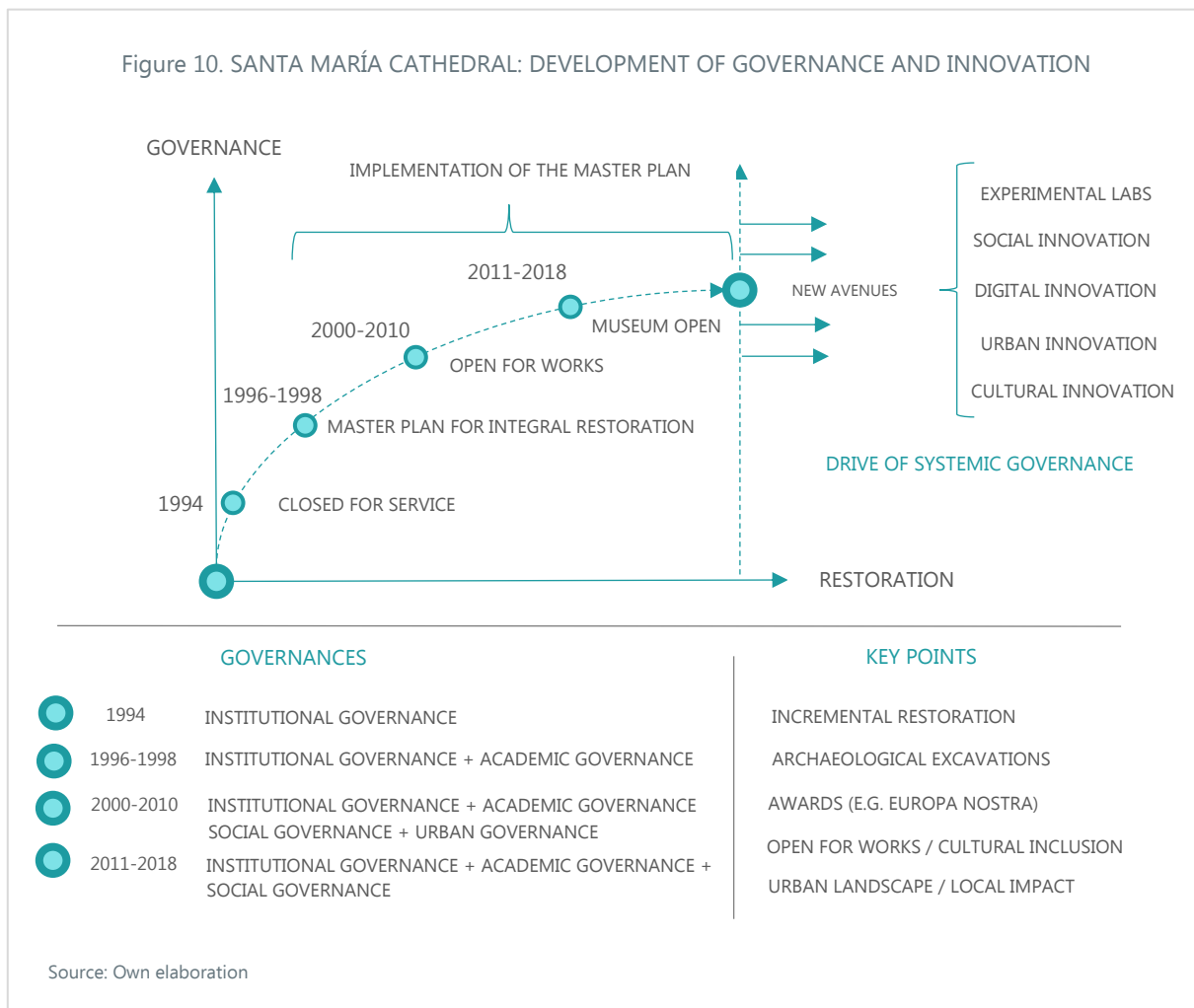
The Santa María Foundation is currently exploring new expansion models based on the principles that guided its restoration: facilitating and revitalising the social and cultural appropriation of Heritage, on the basis of a comprehensive perspective which fosters urban development based on social innovation and sustainable innovation.

3.3. THE SANTA MARÍA CATHEDRAL: THE EMERGING SYSTEMIC GOVERNANCE

The systemic governance model has been designed (extrapolated) thanks to the experience obtained in the implementation of the Master Plan for Comprehensive Restoration of the Santa María Cathedral.

In figure 10, you can see the trajectory and the development of the systemic governance. The milestones in the development of the Comprehensive Restoration Plan encouraged different types of governance. The trajectory of systemic governance was an emerging process which came from a complex networking process of agents and resources surrounding the recuperation of the Cathedral.

Emergence is a key concept of complex systems. Emergence suggests that the continual interaction of the elements in a system structure new patterns in relation to the long-term. The restoration process of the Santa María Cathedral was developed over more than 20 years. This is enough time for the generation of new interactions regarding the Cathedral within a sociocultural territorialised environment. Systemic governance is the result of these new interaction patterns.



3.3.1. Institutional Governance

The institutional governance was structured around the coordination of the Cathedral’s recuperation and restoration activities in a collaboration between the Provincial Government of Araba, the City Council of Vitoria-Gasteiz and the Bishopric of Vitoria-Gasteiz. The governance has been institutionalised thanks to the creation of the Santa María Cathedral Foundation which is in charge of implementing the Master Plan for the comprehensive restoration of the Cathedral (1996-2020).

The challenge for institutional governance has consisted in developing the mechanisms which facilitate consensus agreements between material restoration and cultural recuperation. The tension between the material restoration and cultural recuperation of the Cathedral is a long process, lasting 30 years, of which 20 years have already passed.

From the perspective of the model, institutional governance has progressed from closed innovation (promoted, at first, solely by the provincial government) to collaborative innovation, structured on a partnership between the City Council, the Bishopric and the Provincial Government, who end up converging into the Santa María Cathedral Foundation Trust.

Participation went from being an informative strategy to a consultative one. The public were informed about the restoration activities on the Cathedral through the press. At the same time, the technical and academic diagnostic processes on the state of the building opened up a consultative line of participation with architects, engineers and university academics. A line which has remained permanent during the whole restoration cycle. The capacity to generate institutional ecosystems has been limited, given that work focussing on the restoration of the Cathedral has had to be prioritised over more complex collaborations at an institutional level.



BOX 1

INSTITUTIONAL GOVERNANCE

Problem

The main problem regarding this good institutional governance practise is meeting the challenge of managing the institutional relationships between the Bishopric of Vitoria-Gasteiz, the Provincial Government of Araba, the City Council of Vitoria-Gasteiz and the University of the Basque Country/Euskal Herriko Unibertsitatea (UPV/EHU) as a strategic partner in the implementation of the Cathedral’s restoration and recuperation process.

Solutions:

The creation of the Santa María Cathedral Foundation was the solution found. The Foundation is a structure which is able to manage the economic-financial dimension of the restoration; manage and coordinate the implementation of the Master Plan for Comprehensive Restoration and coordinate the sociocultural dimension linked to the Cathedral’s cultural valuation (“open for works” and musealisation).

Mechanisms

The institutional governance mechanisms and instruments used in this good practise can be summarised as two:

- The design and implementation of a Master Plan for the Comprehensive Restoration of the Santa María Cathedral in Vitoria.
- The creation of the Santa María Cathedral Foundation as a management and governance structure

Appropriation

The restoration and recuperation of the Cathedral links different *stakeholders* together differently.

- Bishopric of Vitoria-Gasteiz. For the Bishopric, reconstructing the temple and avoiding its collapse was of fundamental importance. Developing the institutional agreements necessary in order to guarantee access to long-term resources was also key.
- Public Administration. The restoration and recuperation of Heritage is an institutional responsibility established by Law (Law 7/1990 – Basque Government). The Administration has every interest in managing the restoration process of the Cathedral.
- Public University. The work teams (archaeologists, architects, historians, restorers, etc.) had a unique opportunity to explore and develop knowledge linked to the recuperation and rehabilitation of Cultural Heritage.
- Civil Society. The recuperation of the Cathedral is a symbol of cultural and urban identity, as well as a space for economic development (cultural tourism) and social appropriation of good heritage.

Results

The result expected/obtained in the implantation of institutional governance was to structure the collaboration between public, religious and academic institutions for the restoration and recuperation of the Cathedral.

- Guaranteeing the inclusiveness and sustainability of institutional management: Inclusiveness and sustainability imply the development of long-term consensus mechanisms in order to guarantee adequate interaction between institutions to implement the Master Plan.
- Guaranteeing efficiency in the application of the Master Plan: Efficiency implies the development of mechanisms (legal, financial and academic) which allow the implementation of the Master Plan within the planned deadlines and at the lowest possible cost.
- Guaranteeing the social responsibility of the management of the institutional management: Social responsibility implies the creation of mechanisms which allow society (and its different groups) to participate in the Cathedral as a patrimonial and cultural experience.

Improvements

In the future, some improvements are possible:

- Evaluation Model: To design and implement a comprehensive model to evaluate the impact (social, cultural, economic and institutional) of the Santa María Cathedral.
- Grading strategy: To design and implement a grading strategy of the Santa María Cathedral institutional governance model.
- Institutional learning: To encourage the development of institutional learning protocols in order to codify the decision-making processes when open and inclusive models for the recuperation of heritage are implemented.

3.3.2. Scientific Governance

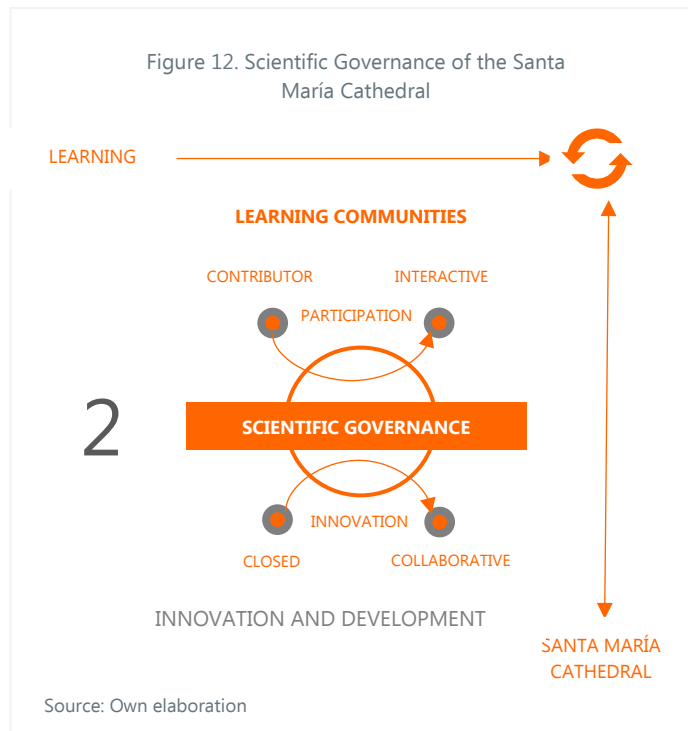
The scientific governance was structured around the scientific and technical coordination for the diagnosis and implementation of the restoration and conservation work. The scientific governance combined 6 different disciplines, developing technical and academic knowledge (doctoral theses, master theses and scientific articles) (1997-2010).

The challenge for scientific governance has consisted in developing the convergence strategies between different disciplines and organising the material restoration process and the cultural recuperation of the

Cathedral based on an open system. The main protagonist was the University of the Basque Country which is where the majority of the research groups involved in the restoration of the Cathedral came from.

The innovation model has been mainly closed, that is, focussed on academic interactions and university technologies. However, the Open for Works Programme unveiled a social perspective in the academic interactions aimed at generating products and methods based on a collaborative model.

The participation model has followed the path of innovation, going from one contributory system (between disciplines, institutions and civil society) to an interactive model, typical of collaborative innovations. Horizontal (collaboration between academics) and vertical (training students using doctoral and master theses) interactions are the classic modes of operation of learning communities. This level of governance's capacity to generate ecosystems has been intermediate. From the academic and scientific activities developed, 200 academic items (among them theses, articles, conferences and seminars) have been produced and over 60 researchers have been involved, to varying degrees.



Box 2

SCIENTIFIC GOVERNANCE

Problem

The Master Plan for the Comprehensive Restoration of the Cathedral implied a complex process of works, social openness and urban protection with the participation of archaeologists, architects, restorers, historians, technical personnel, among others. The convergence of all of these disciplines in the same *application context* made it necessary to develop an interdisciplinary management model which enabled disciplinary convergence and divergence.

Solution

To create a strategy of academic collaboration seeing the Cathedral as an “open system”. This perspective allows each discipline to have autonomy of intervention (according to disciplinary parameters) and, at the same time, facilitates the exchange of relevant information with other disciplines for decision-making in the material restoration and social revaluation of the building. Thus, it is possible to promote different processes in a simultaneous and sequenced manner: a) The engineering work (diagnosis and monitoring), b) The architectural work (restoration and cultural valuation), c) The archaeological work (excavation and historicalisation), d) The social participation work (open for works and musealisation), e) The urban projection work (the perspective of the three cathedrals and the city wall).

Mechanisms

There were two scientific governance mechanisms and instruments used in this good practise:

- The Cathedral as an “open system”. This mechanism allows the introjection of the context and projection towards the surroundings. The open system facilitates autonomy and disciplinary convergences whilst

managing the simultaneous and sequential nature of the material restoration processes and sociocultural revaluation.

- The Master Plan, structural axis of the restoration and valuation activities, was a powerful coordination tool of the open system.

Appropriation

The Cathedral's strategy as an open system enabled different appropriations.

- **Academy.** The strategy of considering the Heritage as an open system has been a model for structuring an open science programme. The model has been and can be adopted by different academic groups in an interdisciplinary perspective.
- **Institutions:** Public institutions can adopt this perspective in order to promote a new Open Heritage approach.
- **Civil society:** The programme "open for works" was an initiative of academic origin which propelled social integration in the restoration process of the Cathedral.

Improvements

In the future, some improvements are possible:

- **Evaluation Model:** To design and implement a model to evaluate the impact of scientific governance as an open science model.
- **Grading strategy:** To design and implement the grading protocols of the scientific governance model as a model of science in action.

3.3.3. Social Governance

The social governance was structured around the coordination of an awareness and social appropriation strategy for the restoration of the Cathedral. To develop this strategy, the "open for works" Programme was created which allowed the public to continue to visit while the building was being restored to its current musealisation state. Cultural inclusion and patrimonial revaluation were the axis of this governance.

The challenge regarding social governance consisted in developing the Open for Works model and the cultural programme. The participation driven by the Santa María Foundation went from being informative to contributory. The contribution of cultural organisations, artists and other patrimonial centres was decisive for promoting the early musealisation strategy.

The open for works programme generated a new mode of participation: "*formative participation*". This type of participation, as well as encouraging social inclusion, generates new competences in visitors to the cathedral as they explore the scientific and technological restoration process from the inside. In terms of the scientific environment, the programme can be classed as "science in action" as the visitors understand,

first hand, how the restoration (architecture) and excavation (archaeology) processes are implemented while



the history of the cathedral as part of the history of the city is updated. *Open for works* is an *open science* programme where civil society participates in the scientific and technical process of re-valuing Cultural Heritage.

From the point of view of innovation, the open for works programme is structured as collaborative innovation which manages a network of relationships with cultural organisations and artists. Thus, the capacity to generate a social ecosystem has been active but limited. The transition from formative to experimental participation, and from collaborative to open innovation, would have an enormous impact on the generation of a creative and sociocultural ecosystem.

Box 3

SOCIAL GOVERNANCE

Problem

Traditionally, the restoration process of a historic building, especially a Cathedral, implies the building taking on the status “closed for works”. The problem that needed solving was how to carry out the restoration and archaeological excavations, in complete safety, without closing the Cathedral to the public. Traditionally, the restoration of a Cathedral can take 10 years before it can be visited by the public. This approach narrows the problem down to a matter for experts and technicians and excludes society from the recuperation process of the cathedral.

Solution

The solution was called: “Open for works”. The Open for Works Programme was thought up as a cultural innovation which facilitated visits from the public while work on the Cathedral was in progress. This way, the programme developed a system of cultural visits to the Cathedral while work on it continued. Visitors had the opportunity to learn and understand how the comprehensive recuperation process (archaeological and architectural) of the place of worship was carried out. In order to guarantee the physical safety of the visitors, safety devices, walkways and bridges were designed which allowed them to watch and learn from the process without putting them at any risk at all.

Mechanisms

There are two social governance mechanisms and instruments used in this good practise:

- The design and implementation of the Open for Works Programme for the cultural and social inclusion of the public (local and visiting tourists) during the restoration process of the Cathedral.
- The development of the musealisation process of the Santa María Cathedral.
- The development of the cultural programme (the Cathedral as a platform for accessing culture)

Appropriation

The Open for Works Programme, the musealisation of the Cathedral and the development of the Cultural Programme links the different *stakeholders* together differently.

- **Civil society.** The Programme has a direct impact on civil society. Not only is it a strategy for cultural inclusion, but also for the social valuation of Heritage.
- **Artists:** The programme involves the participation of artists who perform concerts, recitals, lectures, poetry readings, theatrical performances, open-air cinema, workshops, children's storytellers... among other cultural activities. This programme saw the participation of literary figures such as Paulo Coelho, Ken Follett, Arturo Pérez-Reverte, José Saramago among others.
- **Academy:** Open for works was a successful programme which reconfigured the ways of implementing the restoration processes of historic buildings by architects, archaeologists and technicians, involving the civil society in the process.
- **Cathedral Foundation:** The Programme values the role of the Santa María Cathedral Foundation as a dynamic platform for the early musealisation of the Cathedral in order to promote its social importance.

Improvements

In the future, some improvements are possible:

- Evaluation Model: To design and implement a model to evaluate the impact of the musealisation strategy of the Santa María Cathedral.
- Grading strategy: To design and implement a grading strategy of the Santa María Cathedral social governance model.
- To promote an open innovation programme which allows the transition from *formative participation* to *experimental participation* to promote a new system of citizen competencies with the Cathedral as a platform of competencies included in culture.

3.3.4. Urban Governance

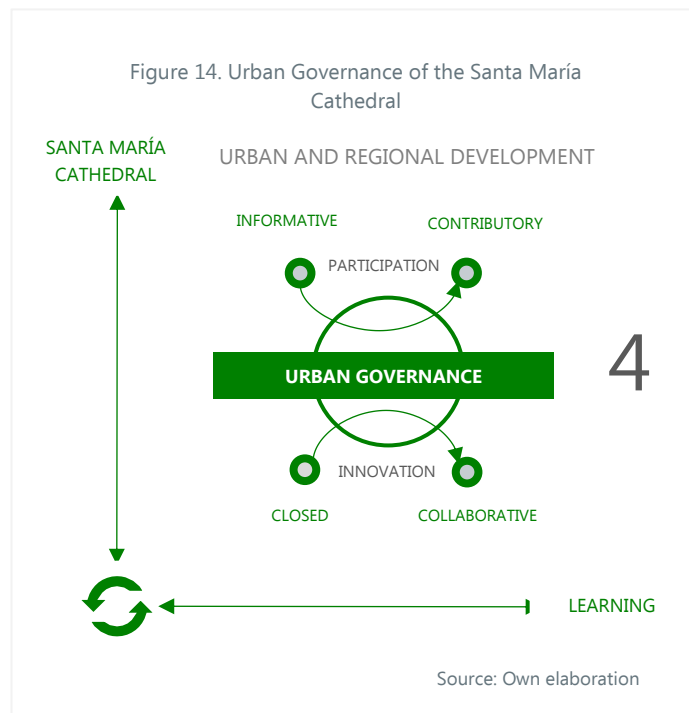
The urban governance was structured as an urban organisational model under the project “Vitoria-Gasteiz: City of the Three Cathedrals” (Azkarate & De la Fuente, 2015) which, together with the discovery and restoration of the Vitoria-Gasteiz City walls, shaped an overall strategy of the social importance of Cultural Heritage.

The challenge of urban governance has consisted in promoting the restoration and revaluation of the Cathedral as an urban development strategy.

In a strategic sense, the Cathedral is part of a systemic focus on urban development. The focus “Vitoria-Gasteiz: City of the three cathedrals”¹, structures a systemic perspective of urban development which enables the identification of growth patterns, environmental factors, social flows and urban fabrics. All of these interactions generate development patterns which are key in order to encourage sustainable urban development strategies.

Beyond this strategic approach, the restoration process of the Santa María Cathedral contributed to the revitalisation of the Historic Centre of the City of Vitoria-Gasteiz, transforming it from a passive element into an active element, a benefit for all of the citizens. However, there are still structural problems in the historic centre such as establishments with people at risk of social exclusion, disconnection and isolation from the rest of the city, provoking a loss in economic and social function, despite being one of the city’s landmarks.

From the perspective of participation, the cathedral’s role has been informative, with contributory participation experiences. And the urban innovation model promoted by the cathedral follows patterns of closed innovation, with tendencies towards collaborative innovation. These considerations suggest that the impact of the creation of an innovative ecosystem in the historic centre is low. But this is reasonable, given that the Foundation’s activities and those of the cathedral itself must be inserted into a strategic plan with a



¹ The Santa María Cathedral (the old one), Mary Immaculate Cathedral (the new one) and the Cathedral of Armentia, which disappeared in the 11th century.

greater scope in terms of urban revitalisation and reconversion, which exceeds the competences of the Santa María Cathedral Foundation.

Box 4

URBAN GOVERNANCE

Problem

Sustainable urban development has been conceptualised from different perspectives. In general, the main trend in urban development focusses on the economic and environmental dimension, as well as social inclusion. Even when the role of culture is recognised as a mechanism for social cohesion and integration, there's still the problem of identifying the role of Cultural Heritage clearly as a central focus of sustainable urban development.

Solution

The strategy of the Three Cathedrals in Vitoria-Gasteiz enables the structure of a revitalisation triangle in the historic centre and the reconnection of urban areas. It's a strategy which connects patrimonial points and relates them to produce three effects: a) Urban revitalisation areas (enlightenment, business, etc.), b) Local revitalisation points thanks to the open recuperation of the heritage (promoting responsible cultural tourism); c) Formative and experimental participation for the development of social inclusion actions.

The relation between the restoration of the Santa María Cathedral and the recuperation of the city wall are an example of revitalisation through the connection of key patrimonial points.

Mechanisms

There are two urban governance mechanisms and instruments:

- To formalise the systemic strategy based on the connection of patrimonial points in order to revitalise urban areas
- To disseminate the eco-systemic impacts between the restoration of the Cathedral and the restoration of the city wall as a clear example of the systemic effect of Cultural Heritage.

Appropriation

The Systemic Programme of Connected Heritage can be appropriated by different agents:

- **Civil society.** The Programme has a direct impact on civil society. The revitalisation of urban areas (revival of districts and spaces) facilitates economic development and social inclusion.
- **Academy:** The impact regarding the academic development of a systemic programme is relevant. Not only because it allows certain disciplines to be revitalised, but it also creates interdisciplinary spaces thanks to the notion of Heritage as an open system.
- **Institutions:** The Programme needs an institutional impulse (legal, economic and competence-based) in order to develop the systemic strategy for urban development.

Improvements

In the future, some improvements are possible:

- Formalise the impact of urban development produced by the restoration of the Santa María Cathedral and the restoration of the wall as a demonstration effect of the systemic strategy of the connection of patrimonial points.
- Launch a Systemic Programme of Connected Heritage: design, activities, implementation strategies and evaluation of the impact.

4

LESSONS LEARNED

4.1. FROM MANAGEMENT TO GOVERNANCE

The management of projects is a typical tool which relates objects with short-term objectives. It's a management model which is widely used in the management of heritage. If the projects manage resources and objects in the short term, the governance manages relationships and dynamics in the long term.

The Santa María Cathedral is an example of systemic governance. Systemic governance is an approach which allows the complexity of the relationships and interactions which structure cultural heritage to be managed. Systemic governance is made up of three key dimensions: the modes of learning, the modes of innovation and the modes of participation. On the other hand, systemic governance is structured by the dynamic of four types of governance: institutional governance, scientific governance, social governance and urban governance.

LESSON 1: To understand Cultural Heritage as an *open system* which is constantly being updated and interacting with the context. Systemic governance develops new management models which deliberately promote learning, participation and innovation in different ways and at different intensities. Intermediary, decentralised and multi-agent structures are the models that fit with this governance.

4.2. FROM SHORT-TERM TO LONG-TERM

The systemic focus of cultural heritage can only be developed in the long-term. The systems generate sub-systems and allow new relationship patterns to emerge thanks to interactions which are sustained over time. This is a fundamental condition of the systemic focus, innovations require time to emerge and structure themselves if the learning and social participation strategies develop simultaneously.

The experience of the Santa María Cathedral shows that it's possible to manage these interactions if they have long-term public support. Support from the public administration and the Bishopric in this case has been innovative and permanent.

LESSON 2: To understand heritage as a *sustainable system*, based on long-term open planning with the aim of managing the short-term. Systemic governance enables the management of the transactions (between the short and long-term) anticipating impacts (negative and positive). Responsible innovation is the right model for the management of this governance.

4.3. FROM DISCIPLINE TO MULTIDISCIPLINE

The conception of Heritage as an open system is a management model which facilitates the autonomy of intervention (according to disciplinary parameters) and, at the same time, facilitates the exchange of relevant information with other disciplines for decision-making in the material restoration and social revaluation process of the building.

The Santa María Cathedral leaves us with a clear lesson, Heritage as an “open system” is an interdisciplinary focus which allows different processes to be driven in a simultaneous and sequenced manner in the application context: a) The architectural work (restoration and historic valuation), b) The engineering work (diagnosis of structures and monitoring of the building), c) The archaeological work (excavation and historicisation), d) The social participation work (“open for works” and musealisation), e) The urban projection work (the perspective of the three cathedrals and the city wall). In a sequenced manner, these works converge in a concrete context of application (the restoration of the Santa María Cathedral).

LESSON 3: To understand cultural heritage as an *application context*, based on the deliberate interaction and learning between different types of disciplines. Systemic governance develops a simultaneous and sequential model of disciplinary convergences. Long-term participatory planning is the right model for the management of this governance.

4.4. FROM MONUMENT TO SOCIETY

Traditionally, the *monument* is defined as a static patrimonial space. It expresses a reified past which should be valued due to what it represents. It is of historical significance. In the systemic approach to cultural heritage, monuments are dynamic, they are updated in the present, they are open works. The systemic perspective introjects the context and has an impact on the surroundings.

The Santa María Cathedral is a good practise from this perspective. The Open for Works Programme leaves three clear lessons: a) It's possible to develop a systemic focus regarding Heritage, b) It's possible to carry out scientific and technical activities while facilitating citizen participation in an environment which is completely safe for people, c) A systemic and participatory focus regarding heritage revitalises culture, updates history and has an impact on the present.

LESSON 4: To understand cultural heritage as an inclusive innovation system based on interaction between intensities of social participation and ways of learning to generate long-term sustainable transformations. The development of sustainable communities is the right model for the management of this governance.

5

REFERENCES

- Ahmad, Y. (2006). The scope and definitions of heritage: From tangible to intangible. *International Journal of Heritage Studies*, 12(3), 292–300.
- Ayuso, S., Rodríguez, M., & Ricart, J. (2006). Using stakeholder dialogue as a source for new ideas: A dynamic capability underlying sustainable innovation. *Corporate Governance*, 6(4), 475–490.
- Azkarate, A., Cámara, L., Lasagabaster, J. I., & Latorre, P. (2001). *Plan Director para la Restauración de la Catedral de Santa María de Vitoria-Gasteiz. 2 vol. anexo planimétrico*. Vitoria-Gasteiz: Diputación Foral de Álava.
- Azkarate, A., & De la Fuente, A. (2015). Cultural heritage as a factor in the urban regeneration of Vitoria-Gasteiz. In A. Rodríguez & J. Juaristi (Eds.), *Transforming cities : opportunities and challenges of urban regeneration in the Basque Country*. Reno: Center for Basque Studies.
- Azkarate, A., Ruiz de Ael, M., & Santana, A. (2004). *El patrimonio arquitectónico. Plan Vasco de Cultura*. Servicio Central de Publicaciones del Gobierno Vasco, Vitoria-Gasteiz.
- Baldwin, C., & von Hippel, E. (2011). Modeling a Paradigm Shift : From Producer Innovation to User and Open Collaborative Innovation. *Organization Science*, 22(6), 1399–1417.
- Barile, S., & Saviano, M. (2015). From the management of cultural heritage to the governance of the cultural heritage system. In *Cultural Heritage and Value Creation: Towards New Pathways* (pp. 71–103). Cham: Springer International Publishing.
- Bertacchini, E., Saccone, D., & Santagata, W. (2011). Embracing diversity, correcting inequalities: Towards a new global governance for the UNESCO world heritage. *International Journal of Cultural Policy*, 17(3), 278–288.
- Blomqvist, K. (2006). Collaboration capability—a focal concept in knowledge creation and collaborative innovation in networks. *International Journal of Management*, 2(1), 31–48.
- Busenberg, G. J. (2001). Learning in organizations and public policy. *Journal of Public Policy*, 21(2), 173–189.
- Chesbrough, H. W., & Appleyard, M. M. (2007). Open Innovation and Strategy. *California Management Review*, 50(1), 57–76.
- Council of Europe. (2005). *Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro Convention, 2005)*, Bussels.
- Council of the European Union. (2014). *Council conclusions on participatory governance of cultural heritage*. Brussels.
- Innes, J., & Booher, D. E. (2000). Indicators for Sustainable Communities: A Strategy Building on Complexity Theory and Distributed Intelligence. *Planning Theory & Practice*, 1(2), 173–186.
- Fish, R., Church, A., & Winter, M. (2016). Conceptualising cultural ecosystem services: A novel framework for research and critical engagement. *Ecosystem Services*, 21, 208–217.
- Freeman, R. (2006). *Learning in public policy. The Oxford handbook of public policy*. Oxford.
- Fung, A., & Wright, E. O. (2001, March 17). Deepening democracy: Innovations in empowered participatory governance. *Politics and Society*, 29 (1), 5–41.
- Gesche-Koning, N. (2018). *Research for CULT Committee – Education in Cultural Heritage*. Brussels.
- González, J. Š. (2012). *Trends in practical cultural heritage learning in Europe. The Nordic Centre of Heritage Learning*, Sweden.

- Hod, Y., Bielaczyc, K., & Ben-Zvi, D. (2018). Revisiting learning communities: innovations in theory and practice. *Instructional Science*, 46(4), 489–506.
- Hosagrahar, J., Soule, J., Girard, L. F., & Potts, A. (2016). Cultural heritage, the UN sustainable development goals, and the new urban agenda. *Bollettino Del Centro Calza Bini*, 16(1), 37–54.
- Keitumetse, S. O. (2016). Towards Sustainable Communities: Community-Based Cultural Heritage Resources Management (COBACHREM) Model. In *African Cultural Heritage Conservation and Management* (pp. 89–111). Cham: Springer International Publishing.
- Kovács, A., Looy, B. Van, & Cassiman, B. (2014). Exploring the Scope of Open Innovation : A Bibliometric Review of a Decade of Research, *Scientometrics*, 10(4), 951-983.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, England: Cambridge University Press.
- Lichtenthaler, U. (2008). Integrated Roadmaps for Open Innovation. *Research-Technology Management*, 51(3), 45–49.
- Loes, C. N., & Pascarella, E. T. (2017). Collaborative Learning and Critical Thinking: Testing the Link. *The Journal of Higher Education*, 88(5), 726–753.
- Loorbach, D. (2010). Transition management for sustainable development: A prescriptive, complexity-based governance framework. *Governance*, 23(1), 161–183.
- Munjeri, D. (2004). Tangible and intangible heritage: From difference to convergence. *Museum International*, 56(1–2), 12–20.
- Probst, G., & Borzillo, S. (2008). Why communities of practice succeed and why they fail. *European Management Journal*, 26(5), 335–347.
- Roth, S. (2009). New for whom? Initial images from the social dimension of innovation. *International Journal Innovation and Sustainable Development*, 4(4), 231–251.
- Sani, M. (2015). *Participatory governance on cultural heritage*. European Expert Network of Culture, Brussels.
- Schot, J., & Geels, F. W. (2008). Strategic niche management and sustainable innovation journeys: theory, findings, research agenda, and policy. *Technology Analysis & Strategic Management*, 20(5), 537–554.
- Shiple, R., & Kovacs, J. F. (2008). Good governance principles for the cultural heritage sector: Lessons from international experience. *Corporate Governance*, 8(2), 214–228.
- Sørensen, E., & Torfing, J. (2011). Enhancing collaborative innovation in the public sector. *Administration & Society*, 43(8), 842–868.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional Learning Communities: A Review of the Literature. *Journal of Educational Change*, 7(4), 221–258.
- Unceta, A., Castro-Spila, J. & García-Fronti, J. (2017). The three governances in social innovation. *Innovation: The European Journal of Social Science Research*, 30(4), 406-420.
- Union European. (2018). *Participatory governance of Cultural Heritage*. Luxembourg: Publications Office of the European Union.
- Van der Ryn, S., & Calthorpe, P. (1991). *Sustainable Communities: A New Design Synthesis for Cities, Suburbs and Towns* (Sierra Clu). San Francisco.
- Vecco, M. (2010). A definition of cultural heritage: From the tangible to the intangible. *Journal of Cultural Heritage*, 11(3), 321–324.
- Wenger, E. (1997). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.
- Wenger, E. (1998). Communities of practice: Learning as a social system. *Systems Thinker*, 9(5), 2-10.