

The contribution of economics to the value chain of urban conservation

Christian Ost and Ruba Saleh

Abstract

This paper aims to provide a comprehensive perspective to heritage economics, and the contribution of that field to urban conservation. Cultural economics, and in particular heritage economics, is often envisioned as a margin discipline to help conservation specialists in assessing additional outcomes and benefits to the expected cultural values from preserving heritage. This paper is built on the conservation paradigm (consistent with the urban agenda in a sustainable context) which considers economics as primary goal of conservation, on the basis that sustainable conservation projects are better legitimized when they match economic, social, and environmental objectives. The scope of this paper is tangible (built heritage) and intangible heritage. The approach is the value chain of all activities directly and indirectly related to the conservation of cultural heritage, namely: the creation of value, conservation and co-production of value, dissemination, and transmission/fruition & engagement.

Keywords: Cultural heritage, urban conservation, built heritage, intangible heritage, value chain, business model

Introduction

Acting with economy is adopting a frugal virtue. Economics, as a social science, is about the careful use of limited resources in a world where the satisfaction of growing needs is the main challenge. In other terms, it is about managing scarcity and non-renewable resources, among them cultural heritage of course, being unique, difficult to be substituted, and impossible to be re-created when lost. According to such a definition, heritage conservation is also clearly an economic choice (Klamer & Zuidhof, 1998). As a discipline, economics aims to help understand how to make the most effective choices in terms of resources allocation to fulfill needs. Therefore, economics is about achieving goals in the most effective way, whatever goals we take (the neo-classical theory suggests the maximization of profit, but many alternative goals are relevant: jobs, welfare, even the quality of life). Accordingly, it can achieve the objectives of cultural heritage and conservation, aiming to help decision-makers to conserve, protect, and restore unique cultural resources in order to achieve cultural goals in the first place, but also additional social, economic, and environmental goals in a sustainable development perspective (Ost and Carpentier, 2017).

Heritage economics is a strong component in the definition of the value chain of heritage conservation. The value chain is based on the process of production for goods and services, viewed as a systemic sequence of stages of activities by any organization, made up of units and subsystems of inputs and outputs which are interconnected to maximize added value (and minimize costs) at each stage of the process, as well at the comprehensive level.

Today, the definition of cultural heritage goes beyond the built heritage, and beyond formal and official recognition by public authorities or acknowledged NGO's. In line with the UNESCO recommendation on Historic Urban Landscape (UNESCO, 2011), cultural heritage is made up of different layers of tangible and intangible cultural assets which all contribute collectively to the cultural values of an ensemble that provides also social, economic, environmental benefits to a wide range of stakeholders. This holistic view of cultural heritage is particularly complex to be analyzed in urban context, and for not officially recognized assets (Bandarin & van Oers, 2012; Bandarin & Van Oers, 2014; Pereira Roders, 2019).

Accordingly, the value chain of cultural heritage is indeed very complex, because the corresponding assets are at the same time sources, drivers, enablers, transmitters, and outcomes of the value process. The systemic organization of the value chain implies many actors, stakeholders, and communities at large.

We may consider the value creation process of cultural heritage as a mostly continuous process, from its origin (construction of the physical fabric, first appearance of sources of traditions), to its recognition (either by official designation, or by collective appropriation), and to its conservation stage, where a new cycle of existence and (re)use starts again. Actually, this takes the form of short- and medium-term cycles of preventive conservation, maintenance, periodic restoration, adaptive reuse, embedded in the long-term time life of heritage; to the extent that the value chain becomes a permanent process, almost with no start and no end (chicken and egg process) where only the types and identification of values will change, and where only the users and beneficiaries of the heritage will change (Mason, 2002)

Cultural heritage as public good

Most of economic goods are individual (private) goods. They are excludable (you can prevent someone from using it), and rival (one individual's use excludes someone else's use). Based on the two criteria of excludability and rivalry, we make a typology of economic goods and services: private goods are excludable and rival; common goods are non-excludable and rival; club/toll goods are excludable and non-rival; public goods are non-excludable and non-rival.

In fact, most of cultural heritage provides easy/free access and collective/shared use. Hence, the access to the heritage is an indicator for excludability, from low access (no admission at all), to some access (admission fees, quotas if visits, or other restrictions), to high access (open public spaces).

In addition, the impact from heritage use on the carrying capacity of the heritage is good indicator for rivalry: from no constraint at all (abandoned places), to some constraint (underused places), and to very high constraint (crowded places, mass tourism).

Based on these two criteria, a definition of cultural heritage in economic terms can be made. Most of them will have some ‘publicness’, or could be considered as common goods, like places that we share. And the fact that cultural heritage can be considered as public good (because of its intrinsic cultural values) implies that its value assessment cannot just rely on methodologies that are common to most of private economic goods.

However, it is worthy to note that although cultural heritage should be recognized for its intrinsic « publicness », it does not imply that heritage is in fact public good in legal terms, or public ownership. In brief, all privately owned heritage monuments and buildings are private and public economic goods at the same time.

Mapping the value chain of cultural heritage

The concept of value chain has been defined by Michael Porter as a sequence of activities that any organization needs to develop to maximize its efficiency and creation of values along the supply-line, with the perspective of delivering to the market and the consumers the best possible product or service in a given industry. Ultimately the best value chain achieves the best performance in the market, and in turn provides to the firm a competitive advantage and a discriminating market power (Porter, 1985).

Mapping the value chain of the cultural heritage will be described on the basis of the inspiring stylized value chain for cultural sectors as described in the report of the European Commission on *Mapping the Creative Value Chains* (European Union, 2017). The mapping itself was improved based on the *ESSnet-Culture Framework Report* (ESSnet-CULTURE, 2012) and the *UNESCO Framework for Cultural Statistics* (UNESCO, 2009). The mapping of value chain described hereunder is applied to the cultural built heritage, and to the intangible heritage as per the Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003).

Figure 1 maps the value creation process for cultural heritage in terms of the different activities, the main actors involved and the interrelations between those actors. The chain of activities includes creation, conservation and co-production, dissemination, transmission/fruition and engagement. In this value chain, built heritage and intangible heritage represent the supply-side. Its noteworthy to mention that on the demand-side, the listed consumers are just indicative of the variety of stakeholders.

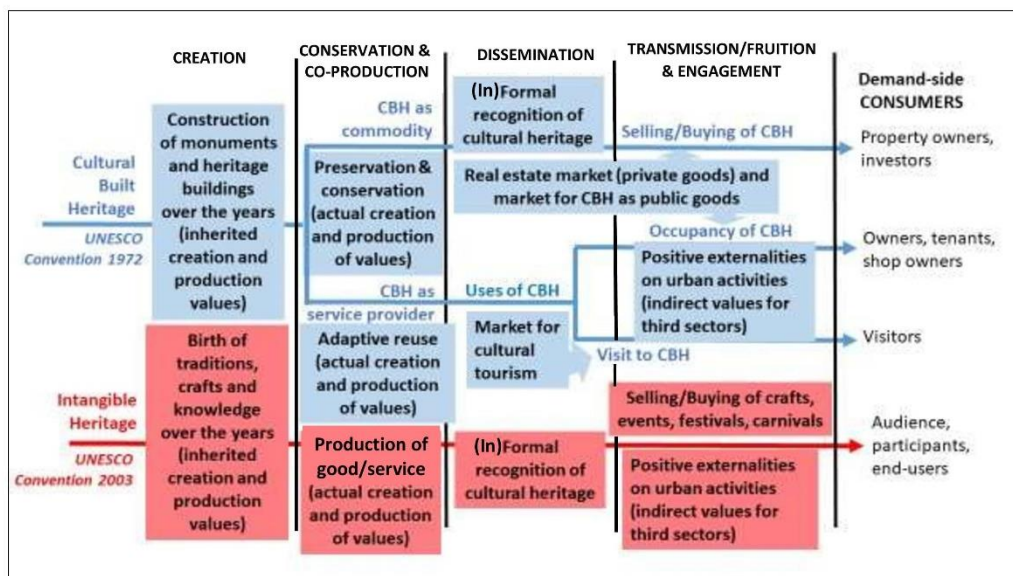


Figure 1: Value chain. Source: Authors.

Stage 1: Creation of value

The meaning of heritage refers to the capacity by successive generations to pass tangible and intangible assets to next generations. Because we deal with cultural items inherited from the past, the stage of creation of value is firstly related to former individuals and organizations which made the construction possible. Activities include the making of drawings and blueprints, the collection of funds, the ability to deal with material, resources, skills, tools and techniques, and the managerial process of creating intangible or built heritage. This important stage of creation and production refers mainly to the past, and the memory of it is part of the heritage.

It could be argued that the creation of cultural heritage does not just refer to a precise moment in time, but to a long-lasting process of diverse activities over time (the construction of cathedrals used to last over centuries and several generations, trees in historical gardens were planted to be fully grown up several decades later, traditions and narratives have been elaborated through successive generations). The last part of this long stage of creation occurs when the heritage is preserved and conserved to keep the embedded cultural values alive. Thus, the activity of conservation is only the contemporary part of the stage of creation and production of heritage. It implies that the creation of value is mostly a permanent process, or a cyclical one if we refer to the recurrent need to conserve/restore heritage buildings, and/or to adapt the buildings to yet another use or function. This interpretation is consistent with the coexistence of implicit cultural values being always there, and social or economic use values being reassessed and revisited. Accordingly, conservation/adaptive reuse are not only an additional production of value, but a creation of new values (as example, projects merged an ancient heritage building together with contemporary architecture, or a traditional narrative being revisited in modern terms).

When we consider a broad definition of cultural heritage that goes beyond the heritage with formal recognition, creation and production are the two facets of a same coin. When local users or the local community attach cultural values and recognition to the heritage by self-appropriation, they do it because they are committed to preserve it, and because they invest resources, time, emotions, and skills in its creation, production and maintenance. The formal recognition of cultural values that comes later (if any) only strengthen and magnify the initial values, as a dissemination/amplification of these cultural values.

A discussion about values

The discussion about value is overwhelming in cultural and heritage economics. Contrary to the belief that economic values are always quantitative and financial, cultural values can be expressed in economic terms if we agree on the premise that value is not only an intrinsic attribute to cultural items (like cultural values which are attached de facto to cultural objects), but a subjective way to express the same item in terms of the chosen perspective. In other words, economic values are just a specific layer of the multiple possible ways to assess a cultural object through separate lenses. This is consistent with the broad definition of cultural heritage by appropriation, when distinct stakeholders attach an interest (a stake) to the heritage, hence value this heritage in their own terms.

Economic approaches for value assessment may include a cost-approach of a cultural object that is based on the amount and value of resources needed to produce the piece of art (material, working hours, tools, skills). Unfortunately, as indicated, most of original creation and production of heritage has been done in the past and is unlikely to be measurable easily. Beside such cost-approach to the economic value, we may consider a market price approach, or transaction value to buy/sell the piece of art on the market (auction price). Here again, cultural economics has documented the many limitations of this approach, given the uniqueness of most of cultural objects, hence the difficult task to evaluating them through a near-perfect competitive market. In that case, the market price cannot be considered as fair estimate for the economic value of the good or service considered, considering that the market is not expected to provide the best allocation of resources in such conditions.

The common agreement on the economic valuation of cultural heritage is to value the piece of art, or the heritage building with its marginal value, i.e., the value of the flow of products and services that gives rise to (for example, the number of paid visits for the possibility to see the painting of Mona Lisa at the Louvres, or for the visit of a monument). Thus, an evaluation in terms of economic flow values rather than stock values.

Stage 2: Conservation and co-production of value

As indicated above, cultural heritage contributes to a chain of values at the stage of creation both in the past (construction of the building, debut of a tradition), and today (preservation/conservation). The production stage that follows, although closely entwined with the creation, must be considered given the complexity and variety of cultural heritage.

There is a two-tier approach for built heritage, whether it is considered as commodity (the physical fabric), or as service-provider (the use and the visit that it furnishes). Of course, the built heritage exists independently from the service which it could support (heritage is then abandoned, underused), while the services cannot be accommodated when the building disappears (if we consider that some services still could be displaced, but with a cost attached to this option). This dual approach implies that the production stage (how to make the creation available) differs when we consider the monument/heritage building, or the service provided by the heritage, as resources managed by the owner/tenant. As the former case entails a perfect match between creation and production (the monument is there, with cultural values attached to it, notwithstanding its use or not), the latter case envisions a demand-driven production, and ultimately a market for the service provided by the heritage. The heritage as commodity brings supply-driven values (there cannot be any visit if the monument is torn down), while the heritage as service-provider brings demand-driven values (there will be no visit, if there is no consumer willing to do it). And it is here where the opportunity cost comes into play, as we should consider alternative uses/options of managing the heritage (options include the 'not doing anything' option which may put the monument at risk).

The co-production of added value highlights the supply-side of cultural heritage, thus the definition of the heritage as a commodity. As far as the demand-side is concerned, the cultural heritage taken as service-provider produces added value to the extent that the market matches the needs of the stakeholders (see stage 3: dissemination).

The supply-side approach is dominant in the initial European-centred UNESCO approach of cultural heritage taken as iconic objects, like monuments with Outstanding Universal Value. Their mere existence is implicitly valued from a cultural perspective that legitimizes their preservation and explains the creation of added cultural values. The social and economic use of the heritage is just taken as an additional outcome which is welcome but does not alter the reality of heritage.

Today, emphasis is put on a broader definition of cultural heritage, but also on the use value attached to heritage buildings (UNESCO, 2016). The success story experienced by the world cultural heritage since the UNESCO Convention concerning the Protection of World Cultural and Natural Heritage adopted in 1972 (UNESCO, 1972), where more than a thousand listed heritage all over the world with universal outstanding value, brings the issue of the resources needed for their protection and conservation, and stresses the condition to find a (re)use to the heritage buildings. Thus, we observe a shift in the paradigm, towards an extended definition of cultural heritage, the recognition of intangible heritage, and the need to find a use for most of the heritage. Hence, a shift from a supply-driven approach to a demand-driven approach, or a shift from the production stage as main source of value to the stages of dissemination and transmission as sources of value. The centre of gravity of the chain of value has moved towards the market, the demand, the users, and the consumers.

A note on cultural capital

As cultural economist David Throsby said "It should not be difficult to accept that tangible cultural heritage...can be considered a form of [cultural] capital. Heritage items such as a painting by Rembrandt or a historic building can be seen as assets: both required investment of physical and human resources in their original manufacture and construction; both will deteriorate over time unless resources are devoted to their maintenance and upkeep; both give rise to a flow of services over time that may enter the final consumption of individuals directly (e.g. when people view the painting in a museum or visit the historic building) or that may contribute to the production of further goods and services (e.g., when the painting inspires the creation of new artworks or when the historic building is used as a commercial office space)" (Throsby, 2002:103).

When the value analysis takes into consideration the production stage, it adopts a perspective on cultural heritage as cultural capital, i.e., a stock of resources which give rise to new value chains over time. This definition exemplifies how creation and co-production of heritage are entwined and how successive cycles of value chains develop during the lifetime of the heritage.

Taken as cultural capital is estimated with the flow of products and services that the monument gives rise to (for example, its occupation measured by rents, and the visit to the monument measured by paid tickets). As cultural capital, a piece of art, monument, or heritage building, generates a flow of visitors and inspires young artists over time. Restoring those cultural objects means investing new resources to keep the value of the original cultural capital. The economic value of the monument.

A specific case: urban cultural capital

In urban context, cultural heritage is often considered in a holistic perspective. The urban cultural capital is made of different categories of urban cultural assets, not just physical and natural assets (pieces of art, buildings, monuments, museums, libraries, art galleries, public spaces, green areas, riverfront) but also human and intangible assets (arts and crafts, festivals, carnivals, street arts, traditions, expressions). A broader definition of cultural capital may also include cultural industries, schools, universities, research, creative, and innovation centers.

Like any form of capital (human, social, technological, financial), urban cultural capital is an asset that embodies or yields economic values, together or in addition to cultural values. Therefore, the cultural capital of a place can be considered as a potential asset which needs to be preserved and managed such as to generate a flow of values over time. The economic values of heritage are embedded in a dynamic process related to changes in its lifetime. Thus, heritage conservation is considered as the process of investing new resources in cultural capital to keep it generate cultural and economic values in the future. That definition of urban cultural capital is consistent with UNESCO recommendation of Historic Urban Landscape, aimed to analyze conservation as a dynamic process, where the effectiveness of the value chain is related to the integration of the urban cultural heritage and the urban factors in the same area.

Since it is in general hard to link specific outcomes to a single cultural asset, it is acknowledged that cultural capital contributes globally (macro-economically) to the area, or to the city as a whole. We can also assume that the propensity of cultural capital to generate outcomes for urban stakeholders is a function of its use, localization, and composition of cultural assets.

The Economic Landscapes represent the state-of-the-art of the city's heritage and cultural values. Thus, the supply-side of what the city provides in terms of cultural resources. In this regard, the Economic Landscapes can be visualized by overlapping two layers:

- The cultural layer of all natural, human, and cultural urban assets (cultural capital); and
- The economic layer of urban infrastructures and economic attributes which interplay with the cultural resources.

Assessing a value chain in urban context starts at micro scale (monument, heritage building), and then it is enlarged to meso scale (similar to protected areas, or buffer zones, where cultural and urban values interconnect), and finally to macro scale (contribution of an iconic heritage to a large area). Cultural capital in urban context contribute to urban outcomes, which can ultimately be balanced according to the paradigm of sustainable development (cultural, economic, social, environmental). In addition, cities compete for attracting new residents, visitors, businesses, jobs, skills, talents, and innovations. Among these factors, cultural assets have the capacity of increasing visibility and livability of cities, in order to attract cultural and creative industries, and in turn, technological innovations that will shape economic urban development (CHCfE Consortium, 2015; Sacco, Ferilli, & Blessi, 2018; UNESCO and the World Bank 2021).

The urban cultural heritage is complex and difficult to grasp in a value chain analysis. Values can be listed under three main categories: values implicit to the heritage, values related to services-provided, and values as positive externalities from the use of the heritage. Many of the actors concerned with urban cultural heritage are non-cultural actors, but urban actors who have very different objectives and value types. In the Historic Urban Landscape approach, the cultural heritage triggers several value chains from micro to macro areas, from individual to collective actors, from cultural values to values of sustainable urban development (adaptive reuse, regeneration of cities, contribution to welfare, happiness and well-being) (Ost, 2021).

Stage 3: Dissemination

The dissemination function refers primarily to distribution of heritage-related services towards the real estate market (values from occupation) and the cultural tourism market (visits), along with all the promotion, marketing and communicating activities that parallel the distribution and commercialization of cultural heritage. Different channels for the dissemination exist, involving different actors, both on the real estate market (i.e., realtors, brokers, agents) and the tourism market (i.e., agencies, guides, cultural entrepreneurs, local communities and associations).

Here again, the dual approach of heritage as commodity and as service-provider should be focused on, since there is a real estate market for the buying/selling of heritage buildings, and there is a real estate market for the occupation of heritage buildings long-term and on temporary basis, hence with different actors and value chains.

We mentioned before how central dissemination is along the cultural heritage value chain. Promoting and communicating about the cultural heritage is compelling, from the need for advocacy to preserving the heritage, to the educational need for explaining how heritage is part of common history and identity. In such context, the public formal recognition, protection and listing of heritage in the community (and in the world community as far as UNESCO is concerned), contribute a lot to match the supply of cultural values and the demand from end-users for the using/visiting the heritage. That the listing of cultural heritage as UNESCO World Heritage stands as the creation of tremendous value for the heritage, for the place where it is located, and for the people who will benefit from it, is undisputable. But the question is whether values are the result of the designation itself, or of the mere existence of the heritage beforehand. We can look at designation as the one-shot process that disseminates the universal outstanding value that was there implicitly (intrinsic value), and as a strong incentive for those who are in charge to manage it with care.

However, heritage recognition is often the result of an informal process: many heritage buildings benefit from the willingness and commitment of a group, or a local community, in order to preserve the attached values as attribute of local identity. Informal recognition and dissemination of intangible encompasses storytelling related to specific heritage sites, proverbs, rituals, all carefully carved through social interactions, and community perceptions. In this context, dissemination itself is not a clear top-down process, or rigorous promotion discipline, but the undefined implicit social system in the making. Informal dissemination is completed by informal transmission within the family nucleus, of the social groups, transmitted from generation to generation.

Tourism (sometimes in excess) is a direct follow-up of the process of formal recognition, which bears the paradox that official recognition aims to protect the heritage, but brings along waves of tourism that may threaten it, suggesting that the next stage of the value chain (transmission/fruition and engagement) should encompass strict regulations that includes economic market constraints (quotas, access restriction) and the creation of new revenue streams which would widen access without harming/impacting the heritage itself for example through digitization and catering for curated virtual visits (Prandi et al., 2019; Rizvic, Okanovic, & Boskovic, 2020).

The current shift of heritage conservation towards participatory approaches is also accompanied by a change in governance models, the designation being made mostly by experts and official authorities (governmental agencies and IGO's), and the appropriation being initiated at local level through a bottom-up process. This change in governance models inevitably implies that actors along the value chain will be modified accordingly.

Finally, the role of dissemination in the value chain of cultural heritage is highlighted by the necessity of matching the use of the heritage with the needs of the people, supply and demand of cultural heritage markets. Adaptive reuse is a good example of a rich value chain, from the creation/production of a restored building with a new function, towards the dissemination of values that match the building (supply) with the end-users (demand).

Stage 4: Transmission/fruition & engagement

The last stage of the value chain is about the access of end-users and consumers to the heritage and to its provided services. The occupation of heritage buildings and the visit of heritage monuments and sites requires a lot of considerations and has been largely documented and analyzed in recent years. Both built heritage and intangible heritage have different channels to complete the value chain for end-users and consumers. Heritage days, open monument days, events, carnivals, and festivals are mediums to

present cultural heritage to a variety of consumers. Access can be permanent (monuments in public spaces) and temporary (events and exhibitions in heritage buildings), free or paid admission, with ancillary services (guided tour, audio recording, store and souvenirs). From a value chain perspective, new digital technologies offer innovative products and sources of additional values (Virtual tour/experiences, Augmented Reality, 3D reconstruction, User Generated Content, gamification/apps, educational tools, etc...). Exhibition, reception, or transmission mostly rely on adequate consumer behavior analysis and segmentation. Knowledge about who is willing to visit a place and why, greatly helps to improve the experience of visitors, and the expected gain of the visit (Landoni et al., 2020). There is no doubt that new and innovative technologies (digitalization) has a profound impact on the stage of transmission and on the potential gain in value that actors should expect from it. In a period of high disruptive economic recession, as a result of the pandemic of 2020, the digitalization of the transmission/fruition and engagement of the built heritage may create new sectors, new values, and provide to new actors the opportunity of voicing different narratives related to contested sites; reviving lost intangible heritage; and developing profitable schemes in terms of social, education, leisure, and recreational activities (UNESCO, 2020).

Besides cultural tourism, cultural heritage addresses several needs for many stakeholders. An important task of the value chain analysis is the identification of stakeholders, because impacts from heritage conservation are often considered on a large scale, with a focus on the many individuals and collective categories of actors who have a 'stake' in heritage. Heritage stakeholders can be categorized in different ways: direct heritage stakeholders (visitors, heritage administrators, conservation specialists, site managers) and indirect stakeholders (public authorities, tourism managers, staff and employees, inhabitants and local businesses); consumers (visitors, users) and producers (contractors, craftsmen, local businesses); prosumers (active citizens willing to be part of the reflection, design and customization of the services and/or products according to his/her needs); private stakeholders (visitors, residents, owners, tenants, tourism managers, investors) and public stakeholders (local, regional and national governments, local and national communities taken as a whole the international community and future generations (commonly represented by UNESCO); cultural and non-cultural stakeholders; local and non-local stakeholders.

In matching a highly diversified supply of uses with the highly segmented demand-side of the ever-increasing cultural market, the value chain is about better integrating the sectors involved in the protection and preservation of heritage.

As indicated in the introduction, the market for cultural heritage does not rely on optimal conditions for a free and effective functioning. Most of cultural heritage conservation is considered as a public policy to preserve values of regional or national identity, universal outstanding value as far as UNESCO is concerned, and the transmission of values to the end-users of the heritage. This requires regulations, incentives, and other forms of market interventions that prevent the deterioration of the heritage. In a nutshell, the public characteristic of most of the recognized and listed heritage prevent the market to achieve the best allocation of resources in dealing with the conservation and the management of cultural heritage.

Business models as a tool for value chain boosting: the case of adaptive reuse

The aim of the value chain is to maximize, and capture added value from all activities along the chain. Hence, the next stage is to organize the supply-side of the market in a way that matches the consumer needs with an innovative proposition that achieves a competitive advantage. To make that process successful, risk-taking entrepreneurs rely on innovative business models aimed at delineating a road map for their project(s).

From an operational viewpoint, a sustainable business model equips cultural entrepreneurs and decision-makers with a tool to visualize the rationale of their business. In other words, it depicts:

- What values the business is creating,
- For whom,
- How and through which resources (cultural capital, human capital, financial capita)?
- Why? to achieve which goals? and how impactful the business is from an economic, social and environmental perspective?

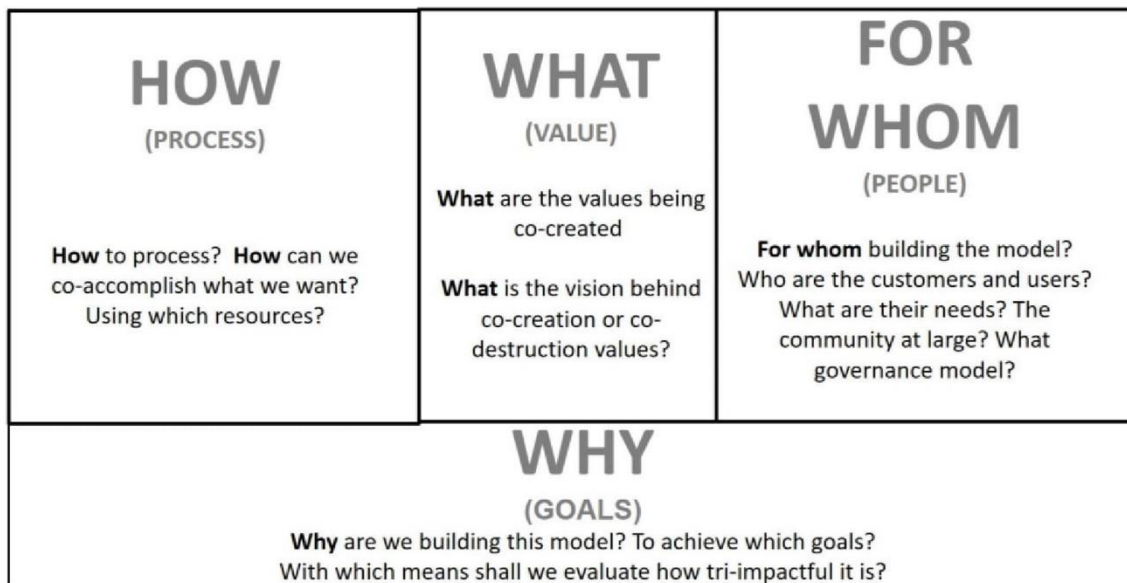


Figure 2: Structure of the adapted circular business model for cultural heritage adaptive reuse. Source: Authors.

In a nutshell, a sustainable business model refers to a plan for making profit, in our view, a tri-impactful profit (economic, social and environmental) (Upward & Jones, 2016). It identifies the products/services a cultural entrepreneur/ heritage communities intend to test/sell, the target market, and anticipates costs and benefits. Business model innovation allows cultural entrepreneurs and local communities to take advantage of changing customer/user demands and expectations (Butler & Szromek, 2019). The pandemic demonstrated that organizations unable to innovate and shift their business models, are either struggling or being displaced by newcomers who swiftly adapted to customers emerging needs (Kern, 2020).

Being heavily impacted by the pandemic, the heritage sector faces the challenge of experimenting innovative approaches to funding, resilience and sustainability (Polivtseva, 2020). Heritage managers and institutions are also reflecting on how to reinvent themselves through new tools and approaches. A meticulous analysis of existing value proposition, creation and delivery is the first step forward. It should be followed by a co-design process aimed at co-creating a strong competitive advantage.

One of the biggest challenges is how to develop revenue streams for the adaptive reuse of cultural heritage while guaranteeing universal accessibility? This is why a sustainable business model for the adaptive reuse of cultural heritage should take into consideration both the co-creation and co-destruction values.

Co-creation values should address the following questions: What are the needs you are aiming to meet or problems to solve in order to improve quality of life and wellbeing? How to enhance existing values and revitalize them? What is so UNIQUE in what you are proposing (visionary vision)? How does the project create use values, non-use values and externalizes? How sustainable are these values? How will you create a shared and inclusive narrative about your value proposition? How might you enhance your value proposition from the outset by designing for adaptability and continuous co-evolution?

While the alternative possible reuses of the heritage building/assets, or the reuse of the valuable ground for a new building should be assessed in terms of the potential co-destruction values as follows:

- Loss of values on micro, meso, and macro scale due to the adaptive reuse decision (loss of authenticity and integrity);
- Negative side-effects (gentrification, mass tourism, loss of intangible assets; social conflicts, etc...);
- Opportunity cost of the decision of adaptive reuse (loss of local jobs and commerce, loss of biodiversity, etc...);

-Dismantlement of some heritage buildings and the succeeding new development projects on the same ground raise the common question of new vs old and the concomitant issue of comparing co-creation and co-destruction.

Crises and shocks i.e., the current pandemic, shrinking public funding, challenges of globalization, enhanced audience empowerment (i.e., User Generated Content) and opportunities/challenges of new technologies are new exogenous factors to the value chain. Because of the pandemic, in the few coming years we will witness increased pressure on supply chains and delivery of creative goods and services. This is why, it is timely to upskill and make use of innovative business models. These models should be co-designed in a participatory and cooperative manner, embrace agile ways of working and contribute to human, cultural and environmental flourishing.

Conclusions

Acting with economy is adopting a frugal virtue. The basic principle of economics as applied to cultural heritage encompasses the allocation of valuable resources to the many individuals and collective needs in a society. Like all resources, they are finite and scarce, hence their conservation is essential, making clear that the finality of economics may accompany the finality of conservation of cultural heritage. By conserving the heritage, we not only conserve scarce resources, but we accumulate value over time. Heritage, considered as cultural capital, is a process of accumulation of cultural values over the course of its lifetime –the duration of such lifetime bringing itself methodological challenges in a context that often favors obsolescence, replacement and waste of economic resources.

Thus, it is no surprise that heritage economics has become mainstream at the same time when the world realizes how sustainability, circularity, recycling, re-use become indispensable. Heritage economics offers a new perspective to conservation, based on the paradigm that economics is not just an impact category for conservators, but a condition to make conservation the most efficient process. Mainstream does not mean universally adopted, and we will need to develop in the future new methodological tools, new decision models, and innovative financial and governance systems.

At the core of heritage economics is the use of cultural heritage (in broad sense, quantifiable use of square meters, and qualitative use for emotions and aesthetic experiences). In fact, use is the bridge that connects the protection and preservation of ancient buildings for its cultural values, and the dynamic integration of heritage for the needs, and better quality of life in the local community. In brief, heritage reuse helps to disseminate and transmit unique values of sustainability and solidarity to many stakeholders. From a decision-making perspective, the use (and in particular the reuse) aims to co-preserve existing values and to co-create additional values, to maintain the cultural capital of the community, and to allow a sound transmission across generations.

The paper has exemplified a value chain that identifies many heritage-related activities, and many types of use of heritage: use of buildings, use of intangible heritage (traditions, rituals, knowledge, artistic works), use of heritage places, use of complex landscapes made of integrated values and human-centered exchanges. This is the purpose of a dynamic value chain with which cultural or non-cultural decision-makers will test feasibility and viability of projects, that may preserve the heritage by adaptive reuse and successful integration within the urban environment.

The conclusion of the paper is that the value chain of tangible and intangible heritage encompasses multiple stakeholders, and a wide range of consumer-oriented activities. However, the value chain described in this paper is open to further reflection and discussion, since conservation activities are embedded in a particularly complex systems of private and public goods, commodity and service markets, real estate and cultural tourism sectors, plus a variety of economic actors.

References

- Bandarin, F., & van Oers, R. (2012). The Historic Urban Landscape: Managing Heritage in an Urban Century. In *The Historic Urban Landscape: Managing Heritage in an Urban Century*. <https://doi.org/10.1002/9781119968115>
- Bandarin, F., & Van Oers, R. (2014). Reconnecting the City: The Historic Urban Landscape Approach and the Future of Urban Heritage. In *Reconnecting the City: The Historic Urban Landscape Approach and the Future of Urban Heritage*. <https://doi.org/10.1002/9781118383940>
- Butler, R. W., & Szromek, A. R. (2019). Incorporating the value proposition for society with business models of health tourism enterprises. *Sustainability (Switzerland)*. <https://doi.org/10.3390/su11236711>
- CHCfE Consortium. (2015). *Cultural Heritage Counts for Europe*. Krakow.
- ESSnet-CULTURE. (2012). European Statistical System Network on Culture - Final Report. *EssnetCulture, European Statistical Network on Culture Final Report*.
- European Union. (2017). *Mapping the Creative Value Chains. A study on the economy of culture in the digital age*. Retrieved from <https://op.europa.eu/en/publication-detail/-/publication/4737f41d-45ac-11e7-aea8-01aa75ed71a1>
- Gravagnuolo, Antonia, Fusco Girard Luigi, Ost Christian, and S. R. (2017). Evaluation criteria for a circular adaptive reuse of cultural heritage. *BDC. Bollettino Del Centro Calza Bini*, 17(2).
- Gravagnuolo Antonia, Saleh Ruba, Ost Christian, and F. G. L. (2018). Towards an evaluation framework to assess Cultural Heritage Adaptive Reuse impacts in the perspective of the Circular Economy. *Urbanistica Informazioni*, (278 s.i), 28–31.
- Kern, P. (2020). The impact of the COVID-19 pandemic on the Cultural and Creative Sector. *Report for the Council of Europe*.
- Klamer, A., & Zuidhof, P.-W. (1998). The Values of Cultural Heritage: Merging Economic and Cultural Appraisals. In R. Mason (Ed.), *Economics and Heritage Conservation*. Retrieved from https://www.getty.edu/conservation/publications_resources/pdf_publications/pdf/econrpt.pdf
- Landoni, P., Dell'era, C., Frattini, F., Messeni Petruzzelli, A., Verganti, R., & Manelli, L. (2020). Business model innovation in cultural and creative industries: Insights from three leading mobile gaming firms. *Technovation*. <https://doi.org/10.1016/j.technovation.2019.102084>
- Mason, R. (2002). Assessing Values in Conservation Planning: Methodological Issues and Choices. In M. De la Torre (Ed.), *Assessing the Values of Cultural Heritage* (pp. 5–30). Los Angeles: The Getty Conservation Institute.
- Ost, C. (2021). Revisiting Heritage Conservation in its Social and Economic Background. In A. Pottgiesser, Uta; Fatoric, Sandra; Hein, Carola; de Maaker, Erik and Pereira Roders (Ed.), *LDE Heritage Conference on Heritage and the Sustainable Development Goals: Proceedings* (pp. 282–289). Retrieved from <https://books.bk.tudelft.nl/index.php/press/catalog/book/781>
- Ost christian and Carpentier Francis. (2017). New Paradigm for Cultural Heritage in Europe. *Journal of Contemporary Italian Culture*, II(Special Issue Carta di Italia), 258–265.
- Pereira Roders, A. & B. F. (2019). *Reshaping Urban Conservation. The Historic Urban Landscape Approach in Action*. <https://doi.org/10.1007/978-981-10-8887-2>
- Polivtseva, E. (2020). *The moment for change is now COVID-19 learning points for the performing arts sector and policy-makers*. Retrieved from <https://www.ietm.org/en/publications/the-moment-for-change-is-now-covid-19-learning-points-for-the-performing-arts-sector>
- Porter, M. E. (1985). Competitive strategy: Creating and sustaining superior performance. *Creating and Sustaining Competitive Advantage*.
- Prandi, C., Melis, A., Prandini, M., Delnevo, G., Monti, L., Mirri, S., & Salomoni, P. (2019). Gamifying cultural experiences across the urban environment. *Multimedia Tools and Applications*. <https://doi.org/10.1007/s11042-018-6513-4>
- Rizvic, S., Okanovic, V., & Boskovic, D. (2020). Digital storytelling. In *Springer Series on Cultural Computing*. https://doi.org/10.1007/978-3-030-37191-3_18

- Sacco, P. L., Ferilli, G., & Blessi, G. T. (2018). From Culture 1.0 to Culture 3.0: Three socio-technical regimes of social and economic value creation through culture, and their impact on European cohesion policies. *Sustainability (Switzerland)*. <https://doi.org/10.3390/su10113923>
- Throsby David. (2002). Cultural Capital and Sustainability Concepts in the Economics of Cultural Heritage. In Della Torre Marta (Ed.), *Assessing the Values of Cultural Heritage* (pp. 101–117). Los Angeles: The Getty Conservation Institute.
- UNESCO. (1972). UNITED NATIONS EDUCATIONAL , SCIENTIFIC AND CULTURAL ORGANISATION CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL Adopted by the General Conference at its seventeenth session English Text. *Heritage*.
- UNESCO (2003). *Convention for the Safeguarding of the Intangible Cultural Heritage 2003*.
- UNESCO (2009). 2009 UNESCO Framework for Cultural Statistics. In *UNESCO Institute for Statistics*.
- UNESCO. (2011). Recommendation on the Historic Urban Landscape. In *Records of the General Conference - 31st Session*.
- UNESCO. (2016). *Culture urban future: global report on culture for sustainable urban development*.
- UNESCO. (2020). *Culture in crisis. Policy guide for a resilient creative sector*.
- UNESCO and the World Bank. (2021). *Cities Culture Creativity. Leveraging culture and creativity for sustainable urban development and inclusive growth*.
- Upward, A., & Jones, P. (2016). An Ontology for Strongly Sustainable Business Models. *Organization & Environment*. <https://doi.org/10.1177/1086026615592933>