



CATÓLICA
ESCOLA DAS ARTES

PORTO

CULTURAL MAPPING OF THE ACTIVITIES OF ARTISTIC AND
CULTURAL PRODUCTION IN THE CITY OF PORTO

VISUAL ARTS SECTOR

Dissertation presented to Universidade Católica Portuguesa
for obtaining the Master's degree in Creative Industries Management

Ana Luísa da Costa e Sousa

Porto, September 2022



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Adviser: Professor Luís Teixeira

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Acknowledgements

Agradeço aos professores do Mestrado em Gestão de Indústrias Criativas, pela transmissão de conhecimento e acompanhamento ao longo destes dois anos.

Ao Professor Luís Teixeira, pela orientação e apoio no trabalho desenvolvido no âmbito do projeto de investigação e da presente dissertação. Assim como a todos os professores envolvidos no projeto, pela disponibilidade e partilha de conhecimento.

Aos colegas do mestrado, pelo trabalho desenvolvido durante o primeiro ano e pelos laços criados.

Aos colegas do gabinete, que cedo se tornaram amigos.

À Luana Santos, com quem tive a oportunidade de partilhar esta experiência, pela amizade e companheirismo.

Aos amigos, pela motivação e apoio.

À minha família, em especial aos meus pais, por serem fonte inesgotável de apoio e compreensão, e por cuidarem sempre. E à minha avó, por tornar tudo mais leve.

Agradeço especialmente ao Pedro, por tudo.

A presente dissertação foi desenvolvida no âmbito do projeto HAC4CG, cofinanciado pelo Fundo Europeu de Desenvolvimento Regional (FEDER) através do Programa Operacional Regional do Norte, ao abrigo do Aviso de Abertura de Candidatura nº NORTE-45-2020-75 -Sistema de Apoio à Investigação Científica e Tecnológica - “Projectos de I&D&I Estruturados” - Horizonte Europa.

Resumo

A presente dissertação foi desenvolvida no contexto do projeto de investigação HAC4CG (CITAR - UCP), cujo tema principal se prende com as alterações climáticas. Em específico, no âmbito da Linha de Investigação 2, que visa o mapeamento da produção artística e cultural da cidade do Porto, para a avaliação do seu impacto e distribuição territorial e inventariação de práticas sustentáveis. O foco do trabalho elaborado incide no setor das Artes Visuais no Porto, relacionando-se diretamente com dois temas: mapeamento cultural e indústrias culturais e criativas.

As origens dos exercícios de mapeamento cultural remontam aos anos 60/70, aplicados ao estudo das comunidades indígenas e realizados com o intuito de comunicar e aplicar o seu conhecimento (Ribeiro et al., 2020) no desenvolvimento de políticas (Bennet & Mercer, as cited in Currie & Correa, 2021). Quanto às ICC, nos últimos 20 anos o reconhecimento do seu impacto (Ponzini et al., 2014) a nível económico (Lee & Gilmore, 2012) e no desenvolvimento das regiões (Linde et al., 2020) tem potenciado políticas baseadas na evidência e, consequentemente, a promoção de exercícios de mapeamento cultural aplicados às ICC (Ponzini et al., 2014).

No que diz respeito ao contexto português, o último estudo com foco na Região Norte data de 2012. Este facto, aliado às inúmeras evidências das potencialidades do SCC justifica a relevância da presente investigação. Propõe-se, assim, caracterizar o panorama atual do setor das Artes Visuais na cidade do Porto assim como a sua produção artística e cultural.

Numa primeira abordagem ao projeto foi realizada uma Revisão de Literatura, com recurso ao protocolo Prisma Extension for Scoping Reviews, assegurando uma revisão transparente e a replicabilidade dos processos. Construída a partir das bases de dados Scopus e Web of Science, a Scoping Review contemplou 27 publicações com foco no mapeamento cultural das ICC. A análise estatística e narrativa destes artigos permitiu a compreensão do conceito de mapeamento cultural, das suas metodologias e consequente aplicação no estudo das Artes Visuais no Porto.

Finalizada a Revisão de Literatura, foi realizado o mapeamento da produção artística e cultural das Artes Visuais no Porto. Primeiramente, procedeu-se à caracterização do setor, através das bases de dados da Sabi e do INE e do relatório Estatísticas da Cultura (2021). A análise teve em conta o número de empresas, emprego, Valor Acrescentado Bruto e dinâmica de comércio internacional, a um nível local (Porto e Lisboa), sub-regional (Áreas Metropolitanas do Porto e Lisboa), regional (Região Norte e Área Metropolitana de Lisboa) e nacional.

Seguiu-se o aprofundamento da informação obtida através da Sabi a partir da construção de um questionário dirigido a 131 entidades das Artes Visuais sediadas na cidade do Porto. Este instrumento deu origem a uma amostra de 19 entidades, a partir da qual se procedeu à caracterização das empresas, da sua atividade (regular/ projetos) e à identificação da presença do tema das alterações climáticas na sua atividade (inventariação de boas práticas).

Palavras-chave: Mapeamento Cultural; Indústrias Culturais e Criativas; Artes Visuais; Porto

Abstract

The present dissertation was developed in the context of an ongoing research project – HAC4CG (CITAR - UCP), focused on the theme of climate change. Specifically, it was produced as part of Research Line 2, which aims to map the artistic and cultural production in the city of Oporto, assessing its socio-economic impact and geographical distribution, as well as inventorying sustainable practices. Specifically, this dissertation focuses on the Visual Arts Sector in Oporto. Two main themes are approached in the present work: cultural mapping and the cultural and creative industries.

The origins of cultural mapping exercises remote to the 60s/ 70s, applied to the study of Indigenous communities as a means for communicating their knowledge (Ribeiro et al., 2020) to the development of policies (Bennet & Mercer, as cited in Currie & Correa, 2021). As for the CCI, in the last 20 years, the recognition of their impact (Ponzini et al., 2014) on the economy (Lee & Gilmore, 2012) and the development of regions (Linde et al., 2020) has been reinforced. Which, in turn, has increased the demand for evidence-based policies and, consequently, the promotion of cultural mapping exercises focusing on the CCI (Ponzini et al., 2014)

As for the Portuguese context, ten years have passed since the last study focusing on the North Region. Which, alongside the existing evidence on the potentialities of the CCS, justifies the relevancy of the present research. This dissertation, therefore, aims to provide a current picture of the Visual Arts sector, as of its artistic and cultural production, in the city of Oporto.

The Review of the Literature was the first step taken when approaching the project. In order to do so, the protocol Prisma Extension for Scoping Reviews was followed, assuring a transparent review and the replicability of the processes. The Scoping Review included 27 publications, obtained through search in Scopus and Web of Science databases. The statistical and narrative analysis of the articles allowed for the understanding of the concept of cultural mapping, its methodologies, and applicability to study of the Visual Arts sector in Oporto.

The mapping of the entities based in Oporto that form the Visual Arts Sector and of their artistic and cultural production followed. First, the sector was characterised based on the Sabi and INE databases and the report Estatísticas da Cultura (2021). The analysis concerned the number of companies, employees, GVA and international market on a national, regional (North Region and Lisbon Metropolitan area), sub-regional (Oporto and Lisbon Metropolitan Areas) and local (the city of Oporto and Lisbon) level.

For the study of the Visual Arts sector in Oporto, the data obtained from Sabi database was further deepened through a questionnaire survey sent to 131 entities. This step gave origin to a sample of 19 entities, analysed for the characterisation of the companies and their activity (regular/ projects), as for the identification of the presence of the theme of climate change in their activities (inventorying sustainable practices).

Keywords: Cultural Mapping; Cultural and Creative Industries; Visual Arts; Oporto

Abbreviations

CCI: Cultural and Creative Industries

CCS: Cultural and Creative Sector

CAE: Classificação das Atividades Económicas Portuguesas

DRCN: Direção Regional de Cultural do Norte

DGARTES: Direção-Geral das Artes

EC: Estatísticas da Cultura

INE: Instituto Nacional de Estatística

LMA: Lisbon Metropolitan Area

MA: Metropolitan Area

NR: Non-response

OpMA: Oporto Metropolitan Area

WoS: Web of Science

SR: Systematic Review

ScR: Scoping Review

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Introduction

The present dissertation has been produced in the context of a research project promoted by CITAR - Centro de Investigação em Ciência e Tecnologia das Artes, UCP Porto. The main theme of HAC4CG - *Heritage, Art, Creation for Climate Change. Living the city: catalysing spaces for learning, creation, and action towards climate change* is climate change, aiming to mobilise citizens' participation and involvement in this issue. The work was developed as part of research line 2¹ - *Engaging Citizens through Art Creation*, Work package 2, in which the main goal was to study how the CCI can contribute to the answer to climate change, promoting societal behaviour changes and reinforcing the resilience and capacity of adaptation to the market (through the creation of a Creative Hub Network). The achievement of this objective implied the mapping of the cultural and artistic production in the city of Oporto, a work collaboratively developed with my colleague Luana Santos, a student of the Master's in Sound and Image. My focus within this project was the Visual Arts, the theme of this dissertation, and the object of study of my colleague was the Performing Arts.

The project, therefore, approaches the cultural and creative industries as a medium for promoting social change and dealing with the complex problems faced by today's societies. This type of perspective goes in line with the "transformation in the perception of the role of culture in the economic and social realm" that occurred in 1986 (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2009, p.11). Accordingly, cultural planning policies that approach culture as a driver for development and regeneration date to the 1980s and 1990s, giving origin to "cultural industries strategies and quarters" and the initiative "European Cities of Culture" (Evans & Foord, 2008, p.71).

In the case of creativity, during the 21st century policymakers began to recognize its relevance, linked to regeneration, change (Florida, 2000; Landry, 1995, as cited in Lee & Gilmore, 2012, p.8) and economic value (Lee & Gilmore, 2012, p.7).

Over the last two decades, the impact of cultural and creative industries (and of cultural heritage) on the development of regions (both social and economically² (Linde et al., 2020)) has been recognised on a national and international level (Ponzini et al., 2014, p.75).

UNESCO (2009) identifies two trends responsible for the increasing importance given to the CCI: digitalisation and globalisation (p.12). These two phenomena impacted the cultural production chain: "These transformations in the creation, production, distribution and consumption of culture mean that the cultural sector has grown in relative and absolute terms, often outstripping traditional areas of the economy" (UNESCO, 2009, p.13). Societal changes also altered the perception and relevance of culture, say higher levels of education, income and

¹ The project is composed of three research lines.

² On an economic level, cultural industries assume a strategic and competitive role in a "post-industrialised economy" (KEA, 2006, p.187), "based on knowledge and experience" (ESSnet-Culture, 2012, p.132). Accordingly, these industries constituted a popular "strategic choice" in Europe and North America, "revitalizing the economy of urban centres through cultural and social developments offering attractive jobs, particularly to young people" (UNCTAD, 2008, p.5).

leisure time. Modern societies are characterised by an increasing “demand for cultural content consumption and for cultural participation” (KEA, 2006, p.31 - 32).

The growing importance attributed to these industries enhanced the development of evidence-based policies focused on the CCI, obtained through mapping exercises (Ponzini et al., 2014). These CCI studies promoted by local governments aimed both “to evidence their value to local economic development and to provide better information on which to plan support and sector development through local networks, marketing and training initiatives” (Lee & Gilmore, 2012, p.8). The main reports resulting from these researches were analysed in Chapter 2.1, serving as the basis for the proposed delimitation of the visual arts sector.

Before proceeding to analyse the Visual Arts Sector in Oporto, it is interesting to reflect on the origin of the concepts of “cultural industries” and “creative industries”.

The term “culture industry” was initially proposed by Adorno and Horkheimer (Frankfurt School) in the post-war period (United Nations Conference on Trade and Development [UNCTAD], 2008, p.11). It was employed with a negative connotation as culture and industry were seen as two opposites (UNCTAD, 2008, p.11). The product of the culture industries, created through industrial means, was aimed at mass consumption and therefore determined by demand (Adorno, 1975, p.12). The “aura” (p.81) and authenticity of the artistic creation were therefore lost through reproduction (Benjamin, 2012, p.77).

A more positive approach emerged in the seventies, assessing the “cultural industries” in the context of the economy of culture (KEA, 2006, p.47)³. According to UNCTAD’s report (2008), although various perspectives prevail in the approach of culture as an industry⁴, the most conceptual definition is generally described as “the cultural industries are simply those industries that produce cultural goods and services” (p.11).

Regarding the concept of creative industries, its origin is estimated to date back to 1994, in Australia (UNCTAD, 2008, p.11). The term emerged with the cultural policy “Creative Nation”, which aimed to respond to the “revolution in information technologies and the ensuing wave of global mass culture.” (KEA, 2006, p.46)

The expression gained more exposure three years later, in Europe, due to the UK’s Government (Department of Culture, Media and Sport) Creative Industries Task Force (UNCTAD, 2008, p.11). Aimed at studying the creative industries as “economic drivers”, this initiative originated the Creative Industries Mapping Documents, from 1998 and 2001 (KEA, 2006, p.46). According to ESSnet-Culture’s report (2012), the concept of creative industries was employed to “provide economic legitimacy for cultural policies that favoured creativity from an economic point of view” (p.132).

These cultural policies focused on creative industries, promoted since the end of the 20th century (ESSnet-Culture, 2012, p.132), are formulated based on studies of the CCI. Departing

³ The French approach, by Département des Etudes de la Prospective et des Statistiques (Ministry of Culture and Communication), is referred to by KEA as an example of the studies employed in this period (KEA, 2006, p.47).

⁴ The authors provide an overview of two key perspectives: the French and UNESCO’s.

from different approaches - “statistical, economic, sociological or political”, these reports propose different conceptualisations of the creative sector (Segers & Huijgh, 2006, as cited in ESSnet-Culture, 2012, p.132) and different models of delimiting it. The co-existence of multiple models also translates to the difficulty of attempting to define the creative sector (UNCTAD, 2008, p.11-12).

Regarding the Portuguese context there were various studies on the CCI produced between 2008 and 2018. The consultancy Augusto Mateus & Associados is responsible for the first national study on the theme (2010)⁵, and two other reports published in 2013⁶ and 2016⁷ (Cortez, 2020, p.41). The Portuguese studies on the CCI will be further explored in Chapter 2.1, as they served as the basis for understanding which CAE represented the activities of the Visual (and Performing) Arts sector.

As for the North Region, the latest studies undertaken are from 2008 (“Desenvolvimento de um Cluster de Indústrias Criativas na Região do Norte – Estudo Macroeconómico”, promoted by Serralves Foundation) and 2012 (“Mapeamento do Setor Cultural e Criativo no Norte de Portugal”, by EOSA Consultores).

The fact that ten years have passed since the last study focusing on the North Region alongside the existing evidence on the potentialities of the CCS justifies the relevancy of researching these industries. This dissertation, therefore, attempts to provide a current picture of the Visual Arts sector, as of its artistic and cultural production, in the city of Oporto.

The dissertation follows a structure divided into four main parts. The first section, corresponding to Task 1 of the research project’s work package 2, consists of a Scoping Review of the Cultural Mapping of CCI. The second Chapter presents the steps undertaken for the mapping of the artistic and cultural production of entities of the Visual Arts based in Oporto. This section includes the process of delimitation of the sector and the construction of a questionnaire survey.

The analysis of the questionnaire’s results and the characterisation of the sector based on INE, SABI and Estatísticas da Cultura (2021) (framework for the data obtained) were included as an independent chapter (3), although part of Task 2.

The last section of the present work includes a reflection on the difficulties faced when attempting to undertake this type of study and the conclusions drawn from the work developed.

Methodology

As mentioned, work package 2 was composed of two main tasks necessary to fulfil the goal of executing a cultural mapping exercise on the activities of artistic and cultural production in the Oporto.

⁵ “O Setor Cultural e Criativo em Portugal”, Augusto Mateus & Associados (2010).

⁶ “A Cultura e a Criatividade na Internacionalização da Economia Portuguesa”, Augusto Mateus & Associados (2013).

⁷ “A Economia Criativa em Portugal. Relevância para a Competitividade e Internacionalização da Economia Portuguesa”, Augusto Mateus & Associados (2016).

Task 1, corresponding to mapping and assessment methods, had as its main goal the understanding of the instrument of cultural mapping and its applications to the field of CCI. PRISMA Extension for Scoping Reviews (PRISMA-ScR) was the protocol followed for constructing a Review of the Literature on the theme. Its specific objectives were to understand the state of the art regarding the cultural mapping of CCI; understand the exercise of cultural mapping as of its specifics (methodologies, object of study, tools); and to delimitate the methodology to be used in the mapping and evaluation of the activities of artistic and cultural production in the city of Oporto.

For applying this protocol and analysing data from the publications, it was necessary to define research questions (statistical analysis) and to construct an analysis grid (narrative analysis).

The following research questions were defined by Luana Santos for the characterisation of the scientific production on the topic.

1. What is the type of issued studies focusing on cultural mapping and their distribution and impact across time, geography (of authors), source, publisher, and funding entity?
2. What is the subject area of each research?
3. How is the methodology defined considering:
 1. object/ subject of analysis?
 2. dimension of the included data?
 3. research methods?
 4. data presentation?
4. What is the aim of the research?
5. What is the medium for the dissemination of scientific information?

I, in turn, developed an analysis grid for systematising the definitions of cultural mapping and its related concepts and components. It aimed to provide a deep understanding and delimitation of the concept of cultural mapping (origins, aims, methodologies and associated concepts); identify the authors and concepts that form the base of scientific production; provide an inventory of the proposed definitions (identification of consensual and divergent elements); identify and characterise key concepts related to cultural mapping; and understand the variety of approaches and applications of cultural mapping exercises.

Task 1 Understanding the instrument of cultural mapping and its applications in the field of CCI⁸	
Instrument	Scoping Review of the Literature on Cultural Mapping.
Specific Objectives	<ol style="list-style-type: none"> 1. Understand the state of the art regarding the cultural mapping of CCI. 2. Understand the exercise of cultural mapping as of its specifics (methodologies, object of study, tools). 3. Delimitation of the methodology to be used in the mapping and evaluation of the activities of artistic and cultural production in the city of Oporto.
Methodology	PRISMA for Scoping Reviews protocol. Database search and analysis: Scopus and Web of Science. Narrative analysis of data/ review of the literature. Qualitative and quantitative analysis of data.

Table 1: Methodology – Task 1

Task 2 addressed case studies - cultural mapping exercise of activities of artistic and cultural production in Oporto. Being part of a bigger scale project and focusing specifically on the Visual Arts, the specific aims of task 2 had to be adapted for the present dissertation. Therefore, the main goal was to characterise de Visual Arts entities located in Oporto and its specific objectives included: to define and delimitate the visual arts sector; identify its corresponding activities (CAE); characterise the sector on a national, regional (Lisbon MA and North Region), sub-regional (Lisbon MA and Oporto MA) and local level (Oporto and Lisbon); identify the entities that form the visual arts entities based in Oporto; and to analyse their geographical distribution and socioeconomic impact.

⁸ The methodology, eligibility criteria and search in the database were defined before I joined the project.

Task 2 Characterise the Visual Arts entities located in Oporto	
Instrument	Cultural mapping exercise: artistic and cultural production of the Visual Arts Sector in the city of Oporto
Specific objectives	<ol style="list-style-type: none"> 1. Define and delimitate the Visual Arts sector. 2. Identify its corresponding activities (CAE). 3. Characterise the sector on a national, regional (Lisbon MA and North Region), sub-regional (Lisbon MA and Oporto MA) and local level (Oporto and Lisbon): number of companies, business turnover, GVA, number of employees and international market. 4. Identify the entities that form the visual arts sector based in the city of Oporto. 5. Analyse their geographical distribution and socioeconomic impact.
Methodology	Bibliographic analysis: reference studies (national and international level) Database search and analysis: SABI and INE Questionnaire survey Qualitative and quantitative analysis of primary and secondary data

Table 2: Methodology – Task 2

Research project work dynamic

Before moving forward, it is also important to provide an overview of the work dynamics during the 11 months of this research scholarship for context of the work produced.

Although the work was developed collaboratively, implying that every task performed was shared between the two researchers, as I joined the project within a month's distance from my colleague Luana Santos the process of the review of the literature had already started. This resulted in the definition of the methodology, eligibility criteria and search in the database being done prior to my collaboration. I entered the project in the phase of selection and analysis of the publications to be included in the review of the literature. Luana, therefore, assumed the first approach to this task, being responsible for the description of the methodology, the abstract and the statistical analysis sections of the Scoping Review. I was, in turn, in charge of the narrative analysis and the summary of each selected article (Appendix 3). Collaboratively, we developed a chapter dedicated to the limitations and potentialities of cultural mapping (Appendix 1) as well as the discussion section (Appendix 2). It must be regarded that the work individually produced was always based on discussion and shared between the two.

In the case of Task 2, balancing our inputs in the project, I assumed the first approach to the task. This translated into a first selection and analysis of studies of reference for delimiting the sector. As well as a first proposal of the Visual and Performing arts domains of activity, as of its correspondent CAE (based on CAE Rev.3 and the Portuguese studies). This process was reviewed and discussed with Luana Santos and validated with Professor Luís Teixeira. In the end, each researcher focused on their object of study and further developed a proposal for delimiting the sector. Therefore, Chapter 2.1 will only focus on the Visual Arts delimitation.

The initial retrieval of information from the Sabi database and from the list of DGARTES and DRCN support programmes results, as well as the first review and selection of entities, was my responsibility. This task was also reviewed and discussed with Luana Santos. Having concluded a first proposal for the list of entities to be included from each CAE, the following tasks were developed collaboratively.

In pairs, we tested the inclusion of other additional CAE, such as, for example, antiques, activities of sound recording and music editing or drinking spaces with dancing spaces. By jointly analysing all the entities retrieved from these other CAE through the SABI database, it was possible to decide if the inclusion of different CAE would be significant.

Before reaching the final list of entities suitable for the study, we dedicated time to exploratory research and analysis of other directories/ funding programmes, such as PLAKA or GLARTENT. Finally, we reviewed all the previous decisions and opted for the final list of the Visual and Performing Arts entities to be contacted for the study.

From here, we worked together in the construction of the questionnaire survey, the development of the project's website and the process of contacting the entities (by email and phone calls). When the deadline for the submission of answers was over, we analysed the database and divided the answers between Visual and Performing arts, in line with our dissertation's theme. The definition of the objectives for the result's analysis and the construction of the first SPSS database, common to both domains, were done collaboratively. However, when faced with the challenge of categorising the open-answer questions and given the specifics of each object of study, we decided to pursue the remaining analysis individually. Each of us searched for the most adequate theoretical reference for categorising the responses and developed an analysis of the answers obtained.

This dynamic ensured that all the process was validated and based on discussion.

1. Review of the Literature: Scoping Review

As mentioned before, this section corresponds to Task 1 of the research project. Although it has been developed in collaboration with Luana Santos, there were also individual components. Some of the sections of my colleague's responsibility will be included in this Chapter for context, but it will be given priority to the components of my authorship. The remaining sections produced by Luana Santos can be found in Attachment 1. This Review of the Literature results, therefore, in an adaptation of a bigger-scale work produced for Task 1 of Work package 2 - Research Line 2.

1.1. Introduction

The main goal of the review of the literature was to understand the instrument of cultural mapping and its applicability to studying the CCI. Two types of analysis were undertaken - a narrative and a statistical, with specific objectives and research questions (Methodology section – Table 1) for encompassing the concept of cultural mapping, cultural and creative industries, its methodologies and scientific production on the topic. The following section justifying the choice of the protocol followed for the construction of the review of the literature corresponds to a work-in-progress article, produced in the context of HAC4CG, jointly developed by Luana Santos, Professor Luís Teixeira and me (Santos et al., 2022). More specifically, it consists of the article's Discussion and Conclusions section (p. 218 - 219).

The decision to use the Prisma protocol for the construction of a systematic review was based on the fact that, by requiring the description of all the steps, these guidelines ensure the transparency of the process (Altman and Simera; Moher et al., as cited in Tricco et al., 2018, p.467). As well as the preservation of the investigation and its subsequent findings' value as its applicability to decision and policy making (Liberati et al., 2009).

Doubts were raised on whether to implement a SR or a ScR within the reach of cultural mapping CCI. After comparing the requirements of each protocol and its practical application, SCR proved to be the most suitable protocol for the intended research. It allowed the treatment of the encountered heterogeneous body of knowledge in methods and disciplines (Tricco et al., 2018, p. 467).

The first attempt at synthesising evidence about cultural mapping was to follow the SR protocol. However, it was not thought to be suitable to study the encountered information as the area of expertise is broad (since cultural mapping is a matter of interest to various subject areas like Social Sciences, Arts and Humanities, Economics or Computer Science), the literature is published in a wide range of sources, and has porous conceptual boundaries (compromising the comparison between papers' methods and results).

PRISMA SR guidelines are primarily focused on reporting the effects of interventions (Moher et al., 2009, p. 334) or on “evaluating aetiology, prevalence, diagnosis or prognosis” (Page et al. 2021, p.2), hence usually applied in clinical or laboratory practices where population, context and study design must be detailed. By requesting a clear identification of the methods used, SR guidelines foster the collection of a sample with comparable characteristics. Humanities and

Arts, among other fields, are not exact mathematical sciences and do not usually have this kind of precision when reporting their research procedures. Thus, in most of the papers analysed regarding the topic, the methodologies were unclear or non-explicit, making it difficult to compare the results and provide accurate findings. Assessing the bias of the papers' methodologies and results, as well as the effect measures and certainty assessment topics for SR was unattainable. These are not required in the case of conducting a ScR.

In addition, the major difference between the two approaches is related to the synthesis of data. Whereas SR privileges the synthesis of information gathered from sources eligible in accordance with narrow research questions, explicit methodologies, and samples; ScR departs from broader questions (Tricco et al., 2018, p. 467) and therefore can encompass a larger selection of papers. SR presupposes a more accurate description of the process for data collection, selection and results presentation, while ScR synthesises information but also contemplates a description and interpretation of the results according to the studies' objectives or research questions. All things considered, it proved to be more effective to apply PRISMA-ScR to our investigation.

1.2. Methods

The following components of the Scoping Review result in an adaptation of the methodology's section, developed by Luana Santos for Task 1. The original version can be found in her Master's Thesis. Moreover, as the original review of the literature produced in the context of the research project was initially developed following the protocol for SR, some of the items will not be included in this chapter as they become optional for ScR.

1.2.1. Eligibility criteria

There were excluded from the database's retrieved list the publications that did not assume the form of articles or conference papers, were not written in the Portuguese or English language or whose full-text versions could not be accessed. On the other hand, there were included articles that undertook/ analysed a cultural mapping exercise on CCI; analysed methodologies or processes applied in cultural mapping; or analysed places, activities or actors that were part of a socioeconomic activity for-profit or not-for-profit. From this process, there were selected 114 papers for further analysis.

1.2.2. Information Sources

For obtaining the publications for the construction of the Scoping Review, the keyword "cultural mapping" was searched by Luana Santos both in Scopus (27th October 2021) and Web of Science (9th December 2021) databases, accessed through Universidade Católica Portuguesa.

1.2.3. Search

Luana Santos developed this first step of the research, including the search and selection of sources of evidence, reviewed by professor Luís Teixeira, as I only joined the project later in

November. As mentioned, the keyword “cultural mapping” was the search concept used for both databases.

The first search in Scopus, free of any filtering, resulted in a total of 689 documents. By delimiting the selection to only include articles written in English or Portuguese, the number was reduced to 670 results. Moreover, by limiting the included articles by the presence of the term “cultural mapping” in the title, abstract and/ or keywords fields, the first selection was archived. The 133 obtained articles were lacking further analysis for understanding if the selection criteria were met. The same strategy⁹ was performed in Web of Science, originating 76 results.

1.2.4. Selection of sources of evidence

Based on a Microsoft Excel document with all the retrieved articles, and following the protocol, Luana Santos removed 42 studies as they did not result in conference papers or articles (4 short surveys, 19 reviews, 3 notes, 1 letter, 14 book chapters, and 1 book). 53 of the 167 retrieved journal articles and conference papers were indexed in both databases. There were also excluded 2 documents as their full-text version could not be accessed, and one additional article written in Spanish. The final selection was composed of 111 publications.

Departing from these, and as I joined the project, the work was divided between the two researchers. Individually, each read the articles and decided if they should be included in the final selection, taking note of the reasons for excluding or including the articles. Later, in pairs, these options were confronted and discussed.

As mentioned before, both the research questions and eligibility criteria were developed by Luana Santos, a work supervised and validated by professor Luís Teixeira before I entered the investigation. This discrepancy gave rise to some doubts and disagreement on the selection of articles. The ones that revealed a higher level of uncertainty were further discussed and, if after this process there were still doubts remaining, the publications were given another read.

The final selection of articles that formed the base of the Scoping Review included 27 publications, 9 of which were common to both databases. The following diagram, developed by Luana Santos, details all the previously described steps:

⁹ The term "cultural mapping" (Topic) was searched and further restricted to the topic (title, abstract, author keywords, and Keywords Plus) and limited to Portuguese and English.

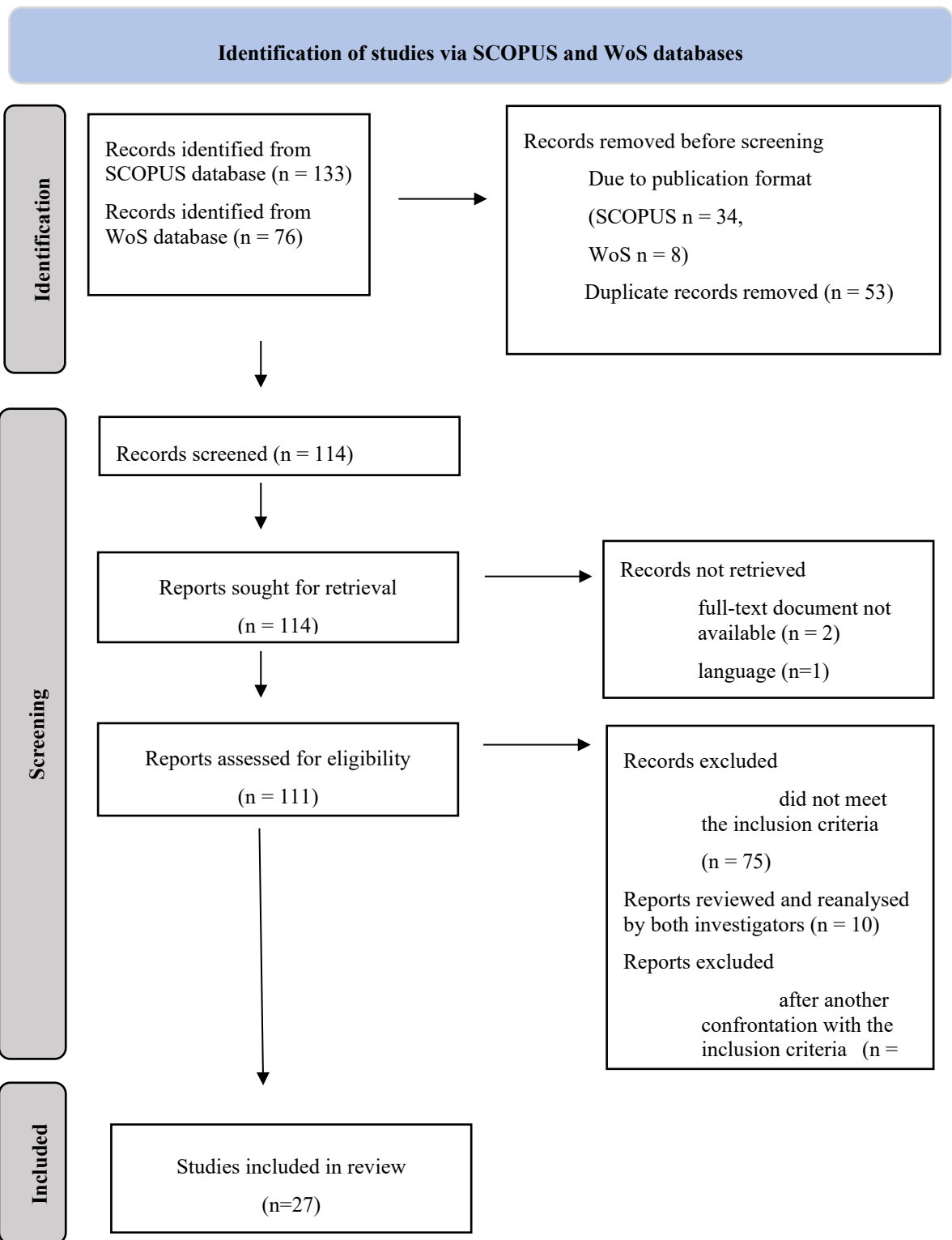


Figure 1: Scoping Review Diagram

1.2.5. Data charting process

This step was also part of the initial tasks assigned to Luana Santos. She created a table for an initial extraction of data, later used as a base for both our independent and collaborative work. It was first independently fulfilled with information from the articles. Then, through discussion, the final filling of the table was completed. Some discrepancies and doubts regarding the information to be included in each category led to the improvement of the coding, as some changes in the name and aggregation of categories were needed. The discussion process ensured that the most relevant information was not left out from the Scoping Review.

Given that cultural mapping is multidisciplinary and broad, it was also relevant to systemize all the proposed/ cited definitions of the concept. For the accomplishment of this task, I also developed an excel table to retrieve the information from the articles following a specific theme and concept:

- attempts/ references to define cultural mapping;
- related concepts (historical context, applications and typologies);
- potentialities and limitations present in this type of practice;
- concepts related to culture (cultural and creative resources, cultural heritage, cultural and creative assets, cultural sustainability and cultural identity);
- mapping/ cartography (maps, critical cartography and counter-mapping);
- related concepts (CCI, cluster, cultural district, creative economy, sustainable development, cultural and creative tourism, technology, sense of place and civic university);
- GIS¹⁰ and its potentialities/ limitations;
- Concept of ontology;
- Cultural and creative industries.

1.2.6. Data items

For the statistical analysis of data, the publications were divided into six non-exclusive groups, according to their aim and content: 1) elaborate or implement a cultural mapping exercise of cultural places, activities, and/or actors that belong to the CCI; 2) review or analyse one or more case studies of cultural mapping of cultural places, activities and/or actors that belong to the CCI; 3) review or analyse existing cultural mapping methodologies or ontologies; 4) suggest new or improved cultural mapping methodologies or ontologies; 5) review or analyse existing cultural mapping technologies; 6) suggest new or improved cultural mapping technologies.

Luana Santos defined several categories (coding protocol) to retrieve the information from the studies under the research questions (Methodology section – Table 1), a process discussed and reviewed between the two researchers:

RQ1: publication's details - author, year of publication, country, source title, publisher, funding, citations, open access status;

¹⁰ Geographical Information System: technology used in cultural mapping exercises.

RQ2: subject area (retrieved from the databases), keywords;

RQ3:

- 3.1. type, classification model, criteria for sample selection, quality (tangible, intangible, or both), paradigm (top-down, bottom-up, or mixed);
- 3.2. region of focus (local, national, international), the scale of analysis (subfield, field, industry, not specified), production chain stage (production/ supply, or consumption/ demand);
- 3.3. research methods;
- 3.4. method for data presentation, tools applied;

RQ4: aim;

RQ5: investigation output/ dissemination medium.

As for the narrative analysis, besides including and organising the information according to the previously mentioned defined categories/ key concepts, I retrieved information on 1) author; 2) cited/ referenced by; 3) transcription of the direct or indirect citation; 4) if it was a perspective on the work of another author (not a citation); 4) proposed definition of the article's author.

1.2.7. Synthesis of results

The analysis of the information obtained from the 27 selected studies that form the base of the Scoping Review on Cultural Mapping and the CCI was divided, as mentioned, into two main parts. Luana Santos was responsible for the statistical analyses of the information for answering the research questions. I was, in turn, in charge of the narrative analyses of all the concepts related to the subject area. This way, it was assured that the study encompassed both the methodological components of the exercise of cultural mapping and its theoretical referential.

Although these two analyses depart from the same selection of articles and therefore share the first procedures of the protocol, they are based on a different charting table (see *Data Charting Process*) and follow a distinct approach. The narrative analysis assumes a more theoretical approach and a slightly different objective: to provide an overview of the concept of cultural mapping, its origins, related key concepts (culture and maps), and its relation to the cultural and creative industries as to cultural planning.

Moreover, based on the information retrieved from these two analyses, both researchers developed a section dedicated to the limitations and potentialities of cultural mapping, which is not included in this dissertation but can be found in Appendix 1 for context.

1.3. Results

1.3.1. Selection of sources of evidence

As mentioned, in total there were selected 27 publications (21 journal articles and 6 conference proceedings). Appendix 3 provides a summary of each of the selected articles, considering their main issue and objective. Based on the reference strategy used by Uchendu, Nurse, Bada, and

Furnell (2021), Luana Santos proposed the organisation of the articles based on Paper Identification Numbers (IDs) (p.6) for easier reference throughout the analysis.

Paper IDs	Study
P1	Evans, G. (2016)
P2	Porrello, A., Talone, A., & Collovini, D. A. (2010)
P3	Dubois, V., & Méon, J. M. (2013)
P4	Horlings, L. G. (2015)
P5	Murray, S. (2017)
P6	Evans, G., & Foord, J. (2008)
P7	Freitas, R. (2016)
P8	Fitri, I, Ratna, R Sitorus, & M. A. (2017)
P9	Sharma, T., & Singh, N. (2018)
P10	Duxbury, N. (2019)
P11	Yunus N.M.M., Endut E., & Said S. Y. (2021)
P12	Ribeiro, V., Pereira, M., Matos, O., Alves, J., Remoaldo, P., Gôja, R., & Freitas, I. (2020)
P13	Gibson, C., Brennan-Horley, C., & Warren, A. (2010)
P14	Ponzini, D., Gugu, S., & Oppio, A. (2014)
P15	Lee, D., & Gilmore, A. (2012)
P16	Gerundo, C., & Adad, G. N. (2019)
P17	Panagiotopoulou, M., Somarakis, G., & Stratigea, A. (2020)
P18	Jeannotte, M. S. (2016)
P19	Currie, M., & Correa, M. M. (2021)
P20	Hultman, J. (2007)
P21	Nugroho, C., Nurhayati, I. K., Nasionalita, K., & Malau, R. M. U. (2021)
P22	Basov, N., & Kholodova, D. (2021)
P23	Taylor, K. (2013)
P24	Othman, R. N. R., & Hamzah, A. (2013)
P25	Cabeça, S. M., Gonçalves, A. R., Marques, J. F., & Tavares, M. (2019)
P26	Assumma, V., & Ventura, C. (2014)
P27	Linde, J. V. D., Snowball, J., & Jooste, T. (2020)

Table 3: Paper IDs

1.3.2. Characteristics of sources of evidence

According to the data from the statistical analysis, Scopus had an average of 10 citations per article, whereas Web of Science registered an average of 6 citations per article. The two most cited articles were P6 (61 citations/ Scopus) and P4 (42 citations/ Scopus and WoS).

1.3.3. Results of individual sources of evidence

As mentioned before (see *Data Items*), from the 27 selected articles obtained through Scopus and WoS two different types of analysis were developed. For the statistical analysis, the information was aimed at answering the research questions. In the case of narrative analysis, the data search had the aim of understanding the instrument of cultural mapping, its proposed definitions, related concepts and approaches. Through the analysis (see *Synthesis of results*) the most relevant information obtained was further explored.

1.3.4. Synthesis of results

Since my colleague Luana Santos was responsible for the statistical analysis of the sources of evidence, that section of the Scoping Review can be found in Attachment 1. The following sections will focus on the narrative analysis/ theoretical context of cultural mapping, based on attempts to define the cultural mapping and/or references to other authors' proposals present in 22 of the 27 selected publications (Appendix 4). Its main goals were:

1. Deep understanding and delimitation of the concept of cultural mapping (origins, aims, methodologies and associated concepts).
2. Identification of authors and concepts that form the base of scientific production.
3. Inventory of proposed definitions (identification of consensual and divergent elements).
4. Identification and characterization of key concepts related to cultural mapping.
5. Understanding the variety of approaches and applications of cultural mapping exercises.

1.3.5. Narrative analysis

Although a narrative analysis was specifically produced for the Scoping Review of Task 1 - HAC4CG, a different version including information that had to be left out from the final document was developed for the subject Research Seminars, part of the curricular programme of the Master's in Creative Industries Management. The following sections correspond to this second analysis, as it includes additional components such as types, trajectories and paradigms of cultural mapping, its tools, aims and main outcomes.

Cultural mapping: an analysis of the concept

As mentioned, with the intent of fully understanding the concept, there were analysed the attempts of defining the concept or references to other authors' proposals present in 22 of the 27 selected publications.

Given the variety of definitions identified, it is possible to affirm that the concept of cultural mapping is as wide and broad as the object that it aims to study (culture), lacking strict boundaries for its definition. However, there are a few touching points between the existing definitions. Gerundo & Adad (2019) consider the following components as common to most proposals "(...) identifying the cultural mapping as a tool to identify, catalogue, classify and

analyse cultural resources of a territory, conducted, using geographical information systems (GIS)”. (p.184)

Drawing on this observation, and besides the heterogeneity of the publications, it was possible to identify common concepts amongst most of them:

Concept	Referenced in the article by
Cultural Resources	Porrello et al. (2010); Fitri et al. (2017); Duxbury (2019); Yunus et al. (2021); Ribeiro et al. (2020); Gerundo & Adad (2019); Panagiotopoulou et al. (2020); Taylor (2013); Othmam & Hamzah (2013); Cabeça et al. (2019)
Cultural Assets	Freitas (2016); Fitri et al. (2017); Currie & Correa (2021); Taylor (2013)
Community/ Communities (Both as assuming an active role in the interpretation of the cultural resources and as the object of study)	Porrello et al. (2010); Freitas (2016); Fitri et al. (2017); Duxbury (2019); Yunus et al. (2021); Ribeiro et al. (2020); Gerundo & Adad (2019); Currie & Correa (2021); Taylor (2013); Othmam & Hamzah (2013); Cabeça et al (2019); Panagiotopoulou et al. (2020).
Development (Approaching cultural mapping as a means for the economic, social or cultural development of the territory studied)	Porrello et al. (2010), Freitas (2016), Duxbury (2019), Lee & Gilmore (2012), Gerundo & Adad (2019), Cabeça et al. (2019) Assumma & Ventura (2014)).

Table 4: Cultural Mapping Concepts

The approach of cultural mapping as an instrument for organising and synthesising information is also a common perception. A very close version of the following citation was referenced multiple times, namely by Porrello et al. (2010), Duxbury (2019), Yunus et al. (2021), Ribeiro et al. (2020), Gerundo & Adad (2019), Panagiotopoulou et al (2020), Othman & Hamzah (2013) and Cabeça et al. (2019): “a process of collecting, recording, analysing and synthesising information to describe the cultural resources, networks, links and patterns of usage of a given community or group” (Stewart, 2007, p.8 as cited in Duxbury, 2019, p.18)

Hultman (2007) offers a slightly different approach to the concept, comparing the exercise of cultural mapping to magic, as it reveals some aspects of reality while uncovering others. It is, from the author’s perspective, also related to the concept of change and transformation. (p.321-322)

Based on the identified definitions, cultural mapping can be defined as a systematic (Duxbury et al., 2015, as cited in Freitas, 2016 and Fitri et al., 2017; Othman & Hamzah, 2013) or an investigative (Porrello et al., 2010) tool (Gerundo & Adad, 2019; Turner et al. 2015, as cited in Fitri et al., 2017); a process (Langton, 1994, as cited in Porrello, 2010; Stewart, 2007 as cited in Duxbury, 2020, Yunus et al., 2021 and Cabeça et al., 2019; Creative Cities Network, 2010 and Freitas, 2016 as cited in Ribeiro et al., 2020; Duxbury 2015, as cited in Panagiotopoulou, 2020; Cabeça et al., 2019); an approach (Cultural mapping toolkit, 2010, as cited in Othman & Hamzah, 2013) or methodology (Cabeça et al., 2019) for the identification, classification and analysis of information regarding cultural resources (UNESCO, 1995, Langton, 1994, as cited

in Porello et al., 2010; Clark and Young, 1995, as cited in Fitri et al., 2017; Duxbury, 2015 as cited in Fitri et al., 2017) or cultural assets (Duxbury et al. 2015, as cited in Freitas, 2016, Fitri et al., 2017 and Currie & Correa, 2021; UNESCO, as cited in Taylor, 2013).

Whether assuming a tangible or intangible form (Clark and Young, as cited in Fitri et al., 2017 and Porrello et al., 2010; 1994 monograph, as cited in Taylor, 2013); it combines a whole range of heterogeneous data, from various sources (Sharma & Singh, 2018; Lee & Gilmore, 2012). Geographic Information Systems (GIS) enable the processing and representation of all this heterogeneous information (Gerundo & Adad, 2019; Othman & Hamzah, 2013), although not being completely neutral (Sieber, 2000, as cited in Hultman, 2007) nor objective (Latour, 1993, as cited in Hultman, 2007). That's also the role of ontologies, which, according to Sharma & Singh (2018), "(...) provide universal schema to represent data from heterogeneous sources" (p. 1).

Cultural mapping exercises provide an analysis of the relations between culture and space (Murray, 2017); cultural assets (Duxbury, 2015, as cited in Yunus et al., 2021); and the community and place (UNESCO, 1995, Langton, 1994, as cited in Porrello et al., 2010; Stewart, 2007, as cited in Duxbury, 2020, Yunus et al., 2021 and Cabeça et al., 2019; Creative Cities Network, 2010 and Freitas, 2016, as cited in Ribeiro, 2020; Duxbury, 2015, as cited in Panagiotopoulou, 2020; Cabeça et al., 2019).

The generated information/ database (Othman & Hamzah, 2013) can provide a basis for cultural planning (Evans & Foord, 2008) as for the development of policies focusing on the cultural and creative industries (Matarasso, 1999, Pratt, 2004, as cited in Ponzini et al., 2014); for heritage management (Crawhall, 2007, as cited in Panagiotopoulou, 2020) and conservation of cultural resources (1994 monograph and UNESCO Bangkok website, as cited in Taylor, 2013); planning processes and strategies (Duxbury et al. 2015, as cited in Freitas, 2016 and Fitri et al., 2017); for promoting economic, social and regional development (Clark, Sutherland, and Young, 1995, as cited in Freitas, 2016; Pillai, 2013, as cited in Duxbury, 2019; Lee & Gilmore, 2012; Duxbury et al., 2015 and Rashid, 2015, as cited in Gerundo & Adad, 2019; Assuma & Ventura, 2014); and result in a tool for tourism attractiveness/ development (Lee & Gilmore, 2012; Taylor, 2013; Langton, 1994, as cited in Porrello et al., 2010).

On the other hand, it can serve the purpose of promoting cultural dialogue and empowering communities/ "community building" (Duxbury et al., 2015 as cited in Currie, & Correa, 2021, p.4). Resulting, when employed a participative approach (Duxbury et al., 2015, as cited in Currie & Correa, 2021)/ "consultation process" (Duxbury et al., 2015 and Rashid, 2015 as cited in Gerundo & Adad, 2019, p.184), in an "activity that supports communities and stakeholder groups in identifying and placing value on cultural resources" (Langdon, 1994, Nummi and Tzoulas, 2015 as cited in Panagiotopoulou, 2020, p.7). It can also constitute a means of expression of the communities and their sense of place (Taylor, 2013) and enable the creation of a narrative about a territory (Cabeça et al., 2019). When approaching cultural mapping as a process, it heightens "participatory planning" (Duxbury et al., 2015 as cited in Cabeça et al., 2019, p.43) and constitutes a development tool (Freitas, 2016 as cited in Cabeça et al., 2019).

In sum, cultural mapping is described as a method for collecting and analysing information, producing knowledge that can be applied in various contexts, say public policies or economic,

social, or cultural development. Hence, it constitutes both a field of research and practice for generating insights (Duxbury; Saper, 2015 as cited in Duxbury, 2019, p.17).

Key concepts: culture and maps

For a full understanding of the concept of cultural mapping, there must also be considered the terms that constitute it: culture and mapping.

When it comes to mapping and cartography itself, maps result in a visual description of space (Caquard & Cartwright, 2014, as cited in Ribeiro et al., 2020), aiming to capture the “reality of geographic features, both political and natural” (J. B. Harley, 1988; 1989 as cited in Currie & Correa, 2023).

A range of authors offers a critical perspective (critical cartography), enhancing how mapping implies a transformation of the object of study (Hultman, 2007) and results in an interpretation of reality (Pickles, 2004, p. 67, as cited in Currie & Correa, 2025), based on subjectivity (Dodge, Kitchin, & Perkins, 2012, as cited in Currie & Correa, 2021). Moreover, maps are static and preserved in time, not truly translating the dynamic of culture, and displacing it from its context (Ingold, 2000, p. 226, as cited in Murray 2017, p.7).

Nowadays, maps are used to identify both the tangible and intangible dimensions of culture (Currie & Correa, 2021, p.5), attributing a leading role to emotions and perceptions (Pánek & Benediktsson, 2017, as cited in Cabeça et al., 2019, p.43), and assuming a narrative potential (Ribeiro et al., 2021).

The concept of culture lacks a closed and widely adopted definition. According to Bikerland (2007), it results in “(...) a contested and open concept. It is a descriptive, empirical and analytical concept.” (Birkeland, 2007 as cited in Horlings, 2015, p.258).

Gerundo & Adad (2019) and Taylor (2013) present a few perspectives on culture. Accordingly, Tylor (1871) attempted the first definition, describing it as “that complex whole which includes knowledge, beliefs, arts, morals, law, customs, and any other capabilities and habits acquired by [a human] as a member of society.” (Tylor, 1871 as cited in Gerundo & Adad, 2019, p.183).

Taylor (2013) contributes with two other definitions: culture as a “(...) repertoire of collective habits of thinking and acting that give particular meanings to existence” (Horne, 1986 as cited in Taylor, 2013, p.3) and as the “(...) whole complex of distinctive spiritual, intellectual, emotional and material features that characterise a society or social group. It includes the arts and letters as well as human modes of life, value systems, creativity, knowledge systems, traditions and beliefs.” (ASEAN Declaration on Cultural Heritage, 2002, as cited in Taylor, 2013, p.3)

Both authors refer to Williams (1961). Williams’ proposal sees culture as a “process of intellectual, spiritual and aesthetic development; a particular way of life relating to people, a period in history or humanity in general in material and spiritual senses; artistic activity” (Williams, as cited in Taylor, 2013, p.3).

Ultimately, the concept of culture assumes a broad scope, referring to practices, beliefs and means of life that characterise communities as artistic and cultural expressions.

Related concepts

The variety of concepts identified in the analysed publications that related to cultural mapping illustrates the broadness of the field. The following scheme aims to illustrate their connection. It considers cartography and culture, the concepts that constitute it; planning, as it serves as a basis for policy development; and the areas of application of the knowledge obtained through cultural mapping exercises.

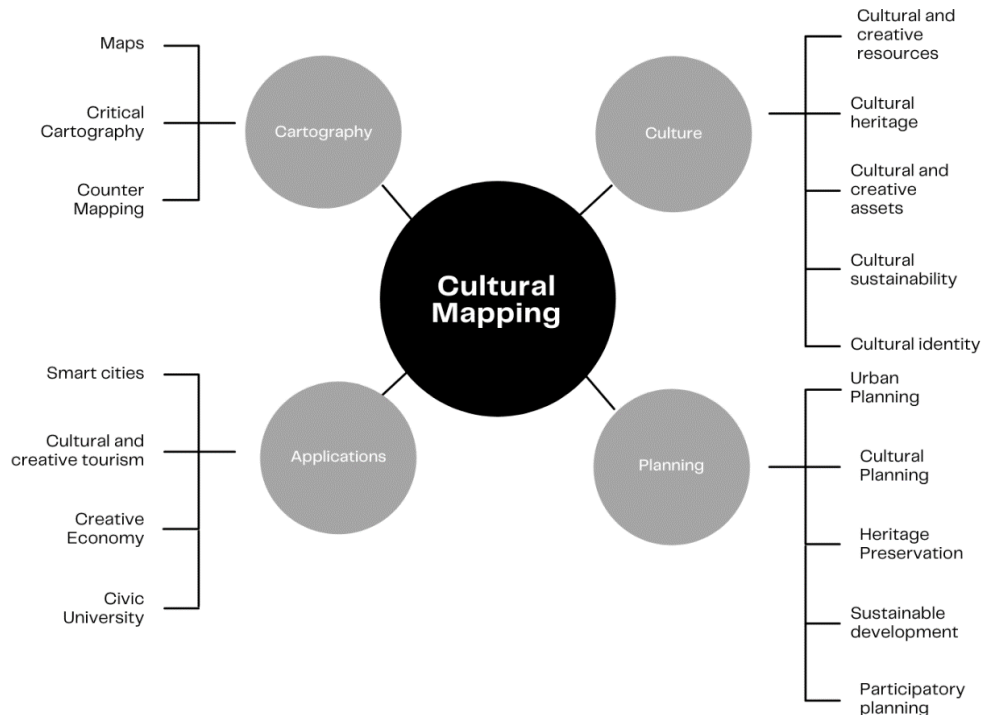


Figure 2: Cultural Mapping related concepts

These concepts translate into the process of cultural mapping. It stems from cartography (first exercise of cultural mapping: counter-mapping) and makes use of its tools (maps). Its object of study is culture (identification and analysis of cultural and creative resources/ assets, cultural heritage, and cultural identity), promoting cultural sustainability. The results of the cultural mapping exercise can serve as a basis for planning (urban planning, cultural planning, participatory planning, heritage preservation and sustainable development) as to strategies for promoting smart cities, cultural and creative tourism, the creative economy and civic university.

Having addressed the concept of cultural mapping as its related terms, the characterization of the components of cultural mapping follows.

Historical background

Cultural mapping exercises have been a target of growing attention since the late 20th century (Crawhall, 2008 as cited in Fitri et al., 2017). Its origin, although not precise, remotes to the 60s/70s. According to Ribeiro et al. (2020), and based on Crawhall's (2009) perspective, it was first used in the 60s, and applied to the field of geography, as a means of communicating the knowledge of Indigenous peoples (Ribeiro et al., 2020, p. 59). Currie & Correa (2021) identify the 70s as the temporal mark of the first cultural mapping practice, aimed at studying Indigenous

communities in Canada, being employed later in Brazil, Australia and eventually spreading globally (Currie & Correa, 2021, p. 17).

This process of cultural mapping involving the Indigenous people and attempting to link local knowledge to policy making (Bennet & Mercer, as cited in Currie & Correa, 2021, p.3) is referred to as *counter-mapping* (Mesquita, 2013, as cited in Duxbury, 2019, p.19). According to Currie & Correa (2021), cultural mapping was later used in urban contexts, aiming for development and sustainability (Crawhall, 2007 as cited in Freitas, 2016, p. 10) and as a response to social exclusion and marginality (Assumma & Ventura, 2014, p. 495).

Due to the rising of the internet (Porrello et al., 2010) and new spatial representation technologies (Ribeiro et al., 2020), the range of cultural mapping exercises widens.

Types, trajectories, and paradigms

Cultural mapping exercises can assume five types of trajectories. According to Duxbury et al (2015), as cited in Cabeça et al. (2019), Duxbury (2019), Freitas (2016) and Ribeiro et al. (2020), cultural mapping can follow a path that aims for community empowerment and counter-mapping; cultural policy, a participatory process for the development of the cultural and creative sector; municipal governance, referring to local cultural planning; mapping as an artistic practice, which implies the artists' contribution; and academic inquiry, related to the questioning of mapping exercises and methodologies (Cabeça et al. 2019, p.43).

Parallely, Ribeiro et al. (2020) and Freitas (2016) identify the two types of approaches that guide the exercise of cultural mapping (bottom-up/ top-down) that, in turn, relate to the two types of existing cultural mapping exercises: asset mapping and community identity mapping (Ribeiro et al., 2020; Fitri et al., 2017; Taylor, 2013).

Reed, Fraser and Dougill (2006) proposed this distinction between bottom-up and top-down approaches, which main differences rely on:

- the type of object of study: usually top-down approaches focus on the tangible components of culture while the bottom-down aim to map the intangible cultural resources (Freitas, 2016, p.11).
- the type of indicators used for analysis: top-down, by focusing on tangible cultural resources, usually relies on quantitative indicators, whereas bottom-up approaches provide a qualitative analysis of intangible resources (Freitas, 2016, p.11).
- the type of management underlying the process: top-down being conducted by central management (experts) and bottom-up applying a decentralised and participatory approach, involving the community (Freitas, 2016, p.11).
- the aim of the exercise and application of the information retrieved: top-down being “(...) driven by a concern with efficiency, instrumentality and outputs (...)”. (Freitas, 2016, p.11). And bottom-up focusing on understanding the concerns of local communities for planning (Freitas, 2016, p.11) and the impacts that policies have on them (Sigala & Christou, 2014, as cited in Ribeiro et al., 2020, p.58).

- range and context of the object of study: “bottom-up approaches are more integrated with several sectors, examining the processes, results, and impacts. It is guided by holistic perspectives and encompasses the purposes of empowerment and participation.” (Sigala & Christou, 2014, as cited in Ribeiro et al., 2020, p.58).

Therefore, according to Freitas (2016), the top-down can be characterised as a more utilitarian and instrumental approach, that studies culture based on an underlying strategic aim; and the bottom-up as a humanistic approach, that studies culture in a local context (Freitas, 2016, p.15, based on the perspective of Duxbury, 2020).

It is important to highlight that the existing exercises of cultural mapping are not necessarily exclusively situated in the top-down/ bottom-up approach, only focusing on tangible and quantitative elements in top-down approaches and on intangible and qualitative elements in bottom-up approaches. As Currie and Correa (2021) state: “(...) there is not a hard dualism at work here, as some projects may capture both types of data, while intangible outputs can be converted into numerical indicators for decision-making, though this can reduce the richness, specificity and complexity of this information.” (p.5)

As mentioned before, these two approaches relate to the two types of cultural mapping identified by Evans (2015), as cited in Ribeiro et al (2020), and are in alignment with the perspective of Fitri et al (2017) and Taylor (2013): “(a) asset mapping, which provides information about identities and records of tangible cultural resources using GIS, and (b) community identity mapping, for exploring intangible cultural resources based on inhabitants’ stories, traditions, and sense of place in low-density areas” (Evans, 2015, as cited in Ribeiro et al., 2020, p.2).

Tools

This multidisciplinary exercise implies the use of different tools and methodologies. Across the analysed publications, GIS (Geographic Information System) was one of the most widely used tools in mapping exercises. It was originally employed in the 60s, by cartographers, geographers and planners for the analysis of the territory (Crawn as cited in Fitri et al., 2017).

GIS in addition to providing the establishment of connections between different data (Hultman, 2007), is defined by Gibson et al. (2010) as:

“(...) a collection of people, hardware, software and spatial data supporting research, information management and retrieval – usually through computer programs that allow information in map form to be analysed statistically (through an embedded database) and spatially (through software extensions designed to perform particular geometric algorithms)” (p.326)

The authors use the term GIT (Geographic Information Technologies) for encompassing Global Positioning Systems (GPS), Web 2.0 mapping (Google Earth/ Google Maps) and Proprietary GIS software (ESRI; ArcGIS; MapInfo; Professionals) (Gibson et al., 2010, p.327)

Other methodologies are being employed in the exercise of cultural mapping. This is the case of participatory photo mapping, associated with “digital photos and participatory research” (Dennis et al., 2009 as cited in Ribeiro et al., 2020, p.57), or, due to the growing use of social media, geotagged social media photos, applied in tourism research (Hao et al., 2016, as cited in Ribeiro et al., 2020, p.57). Crowdsourcing is also a method for the collection of data and different points of view, enhancing the community’s participation and involvement (Panagiotopoulou et al., 2020, p.9).

Object of study

Based on the publications analysed, the next section will address the main components studied through cultural mapping, namely cultural heritage, cultural resources and assets, creative resources and assets and the cultural and creative industries.

Cultural heritage comprehends material and non-material activities and values (Othman & Hamzah, 2013, p.6), cultural manifestations (Bouchenaki, 2003 as cited in Othman & Hamzah 2013, p.577 - 578), and traditions and living expressions (UNESCO, 2010, as cited in Othman & Hamzah, 2013, P.578). The intangible component of cultural heritage is very much discussed amongst the articles, with UNESCO being widely cited and defining it as: “(a) Oral traditions and expression, including language as a vehicle of the intangible cultural heritage; (b) Performing arts; (c) Social practices, rituals and festive events; (d) Knowledge and practices concerning nature and the universe; (e) Traditional craftsmanship” (UNESCO, 2003 as cited in Jeannotte, 2016, p.35).

Establishing a connection between **intangible cultural heritage** and **cultural resources**, Duxbury (2019) highlights that while intangible cultural heritage is concerned with the “intellectual”/ immaterial component of culture (Crawhall, 2001, as cited in Duxbury, 2019, p.22), cultural resources assume a practical component, a “current application” (Duxbury, 2019), that can be exploited by the community (Crawhall, 2001, as cited in Duxbury, 2019, p.22).

The fact that each of the publications that presented a cultural mapping exercise/ study case proposed a categorization for the cultural resources analysed confirms the existence of various definitions for **cultural resources** (Gerundo & Adad, 2019). Even so, according to the authors, all the existing definitions converge in the establishment of a relationship between cultural resources and the territory (p.183). From the author's point of view, these cultural resources simultaneously characterise the territory (“landscape, city, architecture, monuments, works of art”) and use it as background for the expression of intangible cultural resources (“traditions, uses, activities, social relations, performances”) (Gerundo & Adad, 2019, p.183).

Cultural resources can assume, as mentioned before, a tangible (ex.: “galleries, craft industries, distinctive landmarks, local events and industries” (1994 monograph Mapping Culture, as cited in Taylor, 2013, p.4) or intangible form (ex.: “memories, personal histories, attitudes and values.” (1994 monograph Mapping Culture, as cited in Taylor, 2013, p.4). According to Jeannotte (2016), tangible cultural resources are usually the object of study in the cultural

mapping exercises employed by municipalities to serve as the basis for the development of policies since the intangible cultural resources are more difficult to situate on a map and to incorporate into planning processes (Jeannotte, 2016, p.36).

This ambiguity of definitions is also applicable to the concept of **cultural assets**. The paper by Lee & Gilmore (2012) is a clear example of this, as each of the study cases analysed proposes a different approach to cultural assets. According to Duxbury (2019), the combination of tangible cultural assets, which include “physical spaces, cultural organisations, public forms of promotion and self-representation, public art, cultural industries, natural and cultural heritage, architecture, people, artefacts, and other material resources”; and intangible cultural assets, encompassing “values and norms, beliefs and philosophies, language, community narratives, histories and memories, relationships, rituals, traditions, identities, and shared sense of place”, allows for the (self)definition of communities regarding its “cultural identity, vitality, sense of place, and quality of life” (Duxbury, 2019, p.21).

On the other hand, **creative resources** are regarded as “(...) both the goods and services that are the principal products of an expressive act (...) as well as to the workers who produce those goods or services” (Tepper, 2002, p.167, as cited by Lee & Gilmore, 2012, p.7), associated with the creative industry. As stated by the authors, creative assets have been increasingly referenced and studied in cultural mapping exercises, associated with the economic value of creative resources, of “cultural production” (Lee & Gilmore, 2012). The authors refer to the perspective of Tepper (2002) to define assets and how they relate to creative activities: “asset” refers to the fact that the creative workers, goods, and services have economic value for consumers, investors, firms, and governments and that such value can, in principle, be measured and accounted for.” (Tepper (2002), p. 167, as cited in Lee & Gilmore, 2012, p.7).

Just like culture and cultural mapping, all these concepts lack strict boundaries for their definition. When it comes to cultural resources and cultural assets, the concepts are being employed, regarding the publications analysed, mostly in an indistinctive way and in the same context. Even though the concept of resource and asset does not have the same meaning, the terms are used interchangeably.

Moreover, the **cultural and creative industries** have also been the object of study through cultural mapping exercises, say, for example, in the study by Augusto Mateus that analyses the Portuguese cultural and creative sector (Freitas, 2016, p.13) and its contributions to the economy. Or, in the cases explored by P4 and P27, the study on the concentration of cultural production and consumption, namely clusters and districts (Ponzini et al., 2014, p. 75).

Their importance has been reinforced over the last 20 years, recognized as providing an important contribution to innovation (Ponzini et al., 2014) and the economy (creative economy¹¹) (Lee & Gilmore, 2012), as for the development of regions (Linde et al., 2020),

¹¹ The Creative Economy, according to Murray, citing *A Manifesto for the Creative Economy*, encompasses “those economic activities which involve the use of creative talent for commercial purposes” (Bakhshi et al., 2013, p.34, as cited in Murray, 2017, p. 7).

resulting in a consequent demand for evidence-based policies (Ponzini et al., 2014). This has led to the employment of cultural mapping exercises focusing on the creative industries, promoted by local governments with two main goals: “aiming both to evidence their value to local economic development and to provide better information on which to plan support and sector development through local networks, marketing and training initiatives” (Lee & Gilmore, 2012, p.8).

These creative industries are characterised by Murray (2017) in the study of Cardiff’s Creative Economy, as being driven by knowledge and skill and as a dynamic sector, comprising hybrid activities/ entities that do not fit in the sector’s classification (pp. 6,7,10). In regards to the professionals working in these industries, Gibson et al (2010) described the sector as encompassing “large amounts of informal and intermittent employment” (Gibson et al., 2002; Karttunen, 2001; Throsby, 2001 as cited in Gibson et al., 2010, p.33). Murray (2017) considered it to be formed by professionals that are “complex and often hidden” (p.7).

Aims

Cultural mapping exercises are employed with different objectives in sight, whose results can be applied in a variety of contexts.

Culture can be studied to enhance urban regeneration (Florida, 2000 and Landry, 1995 as cited in Lee & Gilmore, 2012) and for the development of rural (Cultural Industries Growth Strategy in 1998 as cited in Linde et al., 2020) and urban areas (Peck, 2004 and Gibson & Klocker, 2005, as cited in Hultman, 2007), as of historic towns (Colletta, 2013 as cited in Fitri et al., 2017) and regions (Panagiotopoulou et al., 2020).

Moreover, cultural resources can be studied and identified aiming for the touristic development of regions (Assumma & Ventura, 2014; Cabeça et al., 2019; Gerundo & Adad, 2019; Hultman, 2007; Panagiotopoulou et al., 2020; Ribeiro et al., 2020; Yunus et al., 2021), linking culture and tourism: cultural tourism, which implies travelling to experience other cultures (Taylor, 2013); and creative tourism, more related to an interactive and participatory experience in the activities of the region, which are specific (and therefore distinctive) of that destination (Ribeiro et al., 2020; Cabeça et al., 2019).

Also, culture is assessed as an indicator for the measuring success of the political agenda (Lee & Gilmore, 2012) and as the fourth pillar for sustainable development (Duxbury & Jeanotte, 2010; UNESCO, 2014; Duxbury & Gillette, 2007, as cited in Horlings, 2015; United Nations General Assembly, 15 March 2012 as cited in Jeannotte, 2016).

Outcomes

The results of cultural mapping exercises can be employed in a variety of contexts, allowing for both social and cultural development. Porrello et al. (2010) list the outputs of cultural mapping exercises, namely (p.4-5):

- **“Documentation about cultural resources”**: which enables the identification of the type of (intangible) resources that need different policy approaches (Crawhall, 2001, as cited in Duxbury, 2019, p.22); the interpretation of the territory/ space (Walker, 2015, as cited in Yunus et al., 2021; Veronnezzi Pacheco and Carvalho, 2015 and Longley, Duxbury, 2016 as cited in Duxbury, 2019); and the identification of gaps (Ortega Nuere and Bayón, 2015, as cited in Duxbury, 2019 and Cabeça et al., 2019).
- **“Community empowerment”**: associated with practices of participatory policy (Mercer, 2006, as cited in Porrello et al., 2010), the enhancement of the communication capacity of indigenous people and minorities (Bennet & Mercer, 1998 as cited in Currie & Correa, 2021) and the protection of their rights and territories (UNESCO, 2003, as cited in Duxbury, 2019).
- **“Effective management of cultural resources”**: cultural mapping as a basis of knowledge on cultural resources, that can, in turn, be applied to social, cultural, tourism (Panagiotopoulou et al., 2020) and economic development (Porrello et al., 2010); strategic development (Ribeiro et al., 2020) and decision-making process (Othman & Hamzah, 2013, p.585); cultural planning¹² (Assumma & Ventura, 2014; Evans & Foord, 2008; Ponzini et al., 2014; Porrello et al., 2010 and Fitri et al., 2017) and heritage management (Turner et al. as cited in Fitri et al., 2017); the preservation of cultural diversity (Porrello et al., 2010); urban/ spatial planning (Gerundo & Adad, 2019); urban regeneration (Currie & Correa, 2021); and “place-based competition” (David Harvey, 1989, as cited in Lee & Gilmore, 2012, p.26);
- **“Economic development of the community”**: in relation to the previous section, cultural mapping is seen as a “technique to shape a community and a tool for the integration of cultural diversity for social and economic development.” (Porrello et al., 2010, p.3); at the same time, it promotes social awareness towards local cultural resources, applied in “geographical attraction” (Hultman, 2007, p.330) and marketing strategies of territories (city marketing) (Hultman, 2007, p.319; Ribeiro et al., 2020, p.58);
- **“Transmission of local knowledge systems”**: which applies, not only but also to the study of indigenous people and the promotion of community cohesion (UNESCO, 2003; Crawhall, 2007 as cited in Duxbury, 2020, p.22); and the exploration and protection of “place-embedded cultural traditions and knowledges into the future” (Duxbury 2020, p.22);
- **“Promotion of intercultural dialogue”**: which relates to the protection of cultural diversity (UNESCO as cited in Porrello et al., 2010, p.2 and Taylor, 2013, p.4); the dissemination and promotion of culture (Porrello et al., 2010, p.3); the valorisation of the knowledge held by the minorities (Taylor 2013, p.8); the raising of awareness of cultural diversity (UNESCO 2007, as cited in Taylor, 2013, p.5).

¹² Cultural planning results in the management and development of policies for strategic usages and exploration of cultural resources, aiming for “urban and community development” (Colin Mercer, as cited in Gerundo & Adad, 2019, p.183) as for the development of cultural activity (Von Eckardt, 1982, as cited in Evans & Foord, 2008).

Moreover, two other important outcomes of cultural mapping are identified by the authors, related to network establishment between “cultural groups and activities” (Duxbury, Garrett-Petts, & MacLennan, 2015 and Gibson, Brennan-Horley, & Warren, 2010, as cited in Ribeiro et al., 2020, p.58) and sustainable development (Porrello et al., 2010; Jeannotte, 2016, as cited in Duxbury, 2019 and Cabeça et al., 2019; Assuma & Ventura, 2014).

1.4. Discussion¹³

1.4.1. Summary of evidence/ Conclusions

From the narrative analysis, it was possible to conclude that a variety of voices and perspectives prevails regarding the concept of cultural mapping and the extent of its applicability. Although it was not possible to reach a consensual and closed definition for cultural mapping, there were some authors, say Duxbury (2015), Evans (2008) or Stewart (2010) and entities of reference, like UNESCO that appeared as more frequently cited. Concepts such as community, cultural resources and development, as the idea of inventorying/ collecting, were common among the definitions present in the articles.

Moreover, it was possible to understand that cultural mapping comprehends a full range of methods, applications, and points of view, resulting in a multidisciplinary field that can be applied to multiple subject areas. This is translated in the type of study employed in the papers analysed, ranging from a focus on the cultural and creative industries (Currie & Correa, 2021; Murray, 2017) as well as the clustering of creative entities and activities (Linde et al., 2020) and Cultural Districts (Ponzini et al., 2014); and also, for the understanding of the existing cultural resources aiming for touristic development of regions (Assuma & Ventura, 2014; Cabeça et al., 2019; Gerundo & Adad, 2019; Hultman, 2007; Panagiotopoulou et al., 2020; Ribeiro et al., 2020; Yunus et al., 2021).

The portrayal of the field based on the analysis of the selected articles points to cultural mapping as being characterised by lacking strict boundaries, which led to a hard attempt of systemizing all the definitions of the concept. This is also applicable to the object it aims to study: culture, a concept without a closed definition (Horlings, 2015), and the creative industries, a sector of difficult delimitation.

This analysis also enhanced a deep understanding of cultural mapping, its origins, approaches, and trajectories (top-down/ bottom-up) as of its main outcomes, such as the basis for policymaking and community empowerment.

1.4.2. Limitations

This section is based on the topic “Reporting bias assessment”, produced by Luana Santos for the Review of the Literature - Task 1.

¹³ This step of the Scoping Review corresponds to the Discussion section of the article developed for the subject of Research Seminars - Master’s in Creative Industries Management.

The limitations of the Scoping Review relate to the decisions made along the process. First and foremost, the object of study is characterised by its broadness and porous conceptual borders, hampering its analysis; the selection of articles is based on searching through two databases, whereas if other databases were to be used, it would have originated a different result; there were articles left out of the analysis as the term cultural mapping had to be included in the title, abstract or keywords; the analysed journal articles were heterogeneous and associated with different areas of knowledge, which hampered the coding of the information retrieved; various types of documents were not included as the analysis only contemplated conference papers and journal articles; the researchers did not initiate the task on the same time, which gave rise to doubts; the Scoping Review encompassed articles written in Portuguese and English, as both researchers could only understand and interpret these two languages; finally two articles were excluded as they could not be accessed, meaning that their content could have been appropriate for research.

1.5. Funding

The present investigation is part of “HAC4CG - Heritage, Art, Creation for Climate Change. Living the city: catalyzing spaces for learning, creation, and action towards climate change” (NORTE-01-0145-FEDER-000067) project: Research Line 2, co-financed by the European Regional Development Fund (FEDER), under the terms of the NORTE-45-2020-75 - Support System for Scientific and Technological Research - “Structured R&D&I Projects” - Horizon Europe.

2. Methodology followed for the mapping of the Visual Arts entities based in Oporto

2.1. Visual Arts Sector delimitation

The first challenge when studying the Visual Arts sector was to understand which domains were part of it. It required the analysis of the existing international models of classification of the CCI, and of the national studies on the subject. This step was of particular relevance as, according to UNCTAD's report (2008), "There is no single definition of "creative industries" but there are different approaches to classifying them depending on the purpose of the analysis" (p.136).

Table 5 presents the models of classification identified in the Portuguese studies focusing on the CCI.

Model	Serralves Foundation (2008) (p.19)	Augusto Mateus & Associados (2010) (p.33 – 44)	Eosa Consultores (2012) (p.31)	Augusto Mateus & Associados (2016) ¹⁴ (p.12 – 15)
Symbolic texts model (Hesmondhalgh, 2002)	x		x	
Concentric Circles Model (David Thorsby, 2001) (KEA, 2006)	x	x	x	x
WIPO copyright model (WIPO, 2003)	x		x	x
UIS trade-related model (UIS, 2005)	x		x	
Americans for the Arts model (Americans for the Arts, 2005)	x		x	
DMCS		x	DCMS / British Council	x
UNCTAD		x		x
European Cultural Foundation (2005)		x		
OECD		x		x

Table 5: Models of classification present in the Portuguese studies

In the study promoted by **Serralves Foundation (2008)** the analysis and selection of models of reference are based on an article by David Thorsby "Modelling the Creative/ Cultural Industries". The authors provide a succinct description of the criteria used by the studies for delimiting the cultural industries. **Mateus & Associados (2010)** analyse in detail numerous studies of reference, describing their approach, definition and delimitation of the cultural and creative sector (example: WIPO, UNESCO (1986) or Eurostat Leadership Group on Cultural Statistics (1995)). **EOSA Consultores (2012)** analyse the distinct models used in the study of

¹⁴ Augusto Mateus & Associados proposal is based on UNCTAD's "Creative Economy Report" (2010 and 2013) (p.12 – 15).

the CCI and identify the activities included in each of the sub-sectors/ domains. **Mateus e Associados (2016)** provide a synthesis of the main international methodologies used in reference studies.

Two additional documents by David Thorsby were studied: “The concentric circles model of the cultural industries” and “Modelling the cultural industries”. In the first document, Thorsby (2008) analyses the model proposed by DCMS (2011), the copyright model (WIPO, 2003), the Symbolic Texts Model (giving the example of Hesmondhalgh’s (2002) perspective) and the model developed by UNESCO’s Institute for Statistics (2007). The author also provides a deep analysis of the concentric circles model, first enunciated by him in 2001, and developed both by KEA (2006) and The Work Foundation (2007) (p.148). In the second article, Thorsby (2008) investigates the different existing models aiming to identify the core group of industries common to all proposals. He also reflects on how different models of delimiting the cultural sector impact its analysis. The models referred to are, once again, the DCMS Model, the Symbolic Texts Model, the Concentric Circle Model, WIPO’s Copyright Model, the UNESCO Institute for Statistics (UIS) Model and the Americans for the Arts Model (p.220 – 221)

Taking all of this into consideration, these were the selected models for analysis: DCMS (2001), Copyright (WIPO, 2003), Concentric Circles (KEA, 2006), UNCTAD (2008), OECD (2007), UNESCO (2009), and ESSnet-Culture (2012) (a model that proposes an update of LEG Culture (2007).

DCMS (2001)						
Advertising	Architecture	Arts and Antiques Market	Crafts	Design	Designer Fashion	Film
Interactive Leisure Software	Music	Performing Arts	Publishing	Software	Television and Radio	

Table 6: DCMS model

Source: Department for Digital, Culture, Media & Sport. (2001)

The DCMS (Department for Digital, Culture, Media & Sport) model, proposed in 2001, reflects one of the first attempts to study the CCI aiming to assess their contribution to a competitive economy (Mateus, 2010, p.38) and as a base for policy making (DCMS, 2001, p.4). The model considers the cultural and creative sector as being composed of 13 creative activities (Mateus, 2010, p.38). DCMS (2001) proposed definition of the Creative Industries goes as follows: “those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property” (p.5).

Copyright (WIPO, 2003)	
Core Copyright	Partial Copyright Industries
Press and Literature	Apparel, textiles and footwear; Jewellery and coins; Other crafts; Furniture; Household goods, china and glass; Wallcoverings and carpets; Toys and games; Architecture, engineering, surveying; Interior design; Museums
Music, Theatrical Productions, Operas	
Motion Picture and Video	
Radio and Television	
Photography	
Software and Databases	
Visual and Graphic Arts	
Advertising services	
Copyright Collecting Societies	
Interdependent industries	Non-dedicated Support Industries
TV sets, Radios, VCRs, CD Players, DVD Players, Cassette Players, Electronic Game Equipment, and other similar equipment	General wholesale and retailing; General transportation; Telephony and Internet
Computers and Equipment	
Musical Instruments	
Photographic and Cinematographic Instruments	
Photocopiers	
Blank Recording Material	
Paper	

Table 7: Copyright model.

Source: World Intellectual Property Organization, 2003, p.73

WIPO's guide (World Intellectual Property Organization, 2003) was developed as an instrument for measuring the size and economic contribution of copyright industries, as a result of a growing interest in assessing its impact. Amongst the guide's objectives, there is an intent to review the previous studies on the matter (copyright) and to develop an instrument/ toolkit for the study of the copyright industries, allowing the production of comparable data through uniformized methodologies (p.6-7).

WIPO's proposal for delimiting the sector divides it into four categories: the core copyright industries, the interdependent copyright industries, the partial copyright industries, and the non-dedicated support industries. Hence, this delimitation is based on the level of copyright in the industry's activities - "The approach has been to separate the industries that are fully or predominantly based on copyright from other industries which depend to a less extent on copyright protected materials" (WIPO, 2003, p.26)

Moreover, according to UNCTAD (2008), WIPO's categorization is based on: "(...) industries that actually produce the intellectual property and those that are necessary to convey the goods

and services to the consumer. A further group of “partial” copyright industries comprises those where intellectual property is only a minor part of their operation (p.12).

Concentric Circles (KEA, 2006)		
CIRCLES	SECTORS	SUB-SECTORS
Core arts field	Visual Arts	Crafts; Paintings; Sculpture; Photography
	Performing Arts	Theatre; Dance; Circus; Festivals.
	Heritage	Museums; Libraries; Archaeological sites; Archives.
Circle 1: Cultural Industries	Film and Video	
	Television and radio	
	Video games	
	Music	Recorded music market; Live music performances; revenues of collecting copyright societies in the music sector
	Books and press	Book publishing - Magazine and Press publishing
Circle 2: Creative Industries and Activities	Design	Fashion Design, Graphic Design, Interior Design, Product Design
	Architecture	
	Advertising	
Circle 3: Related Industries	Pc Manufacturers, Mp3 Player Manufacturers, Mobile Industry, etc...	

Table 8: Concentric Circles Model
Source: KEA, 2006, p.56

KEA’s report (2006) was developed in the context of Lisbon’s Agenda (2000), which aspired to transform the EU into the most “competitive” and “knowledge-based” economy. The study aimed to demonstrate and evaluate the “socio-economic impact” of the cultural and creative sector, and consequently its contribution to this political goal (p.1).

Amongst the study’s objectives there is the proposal of a new definition of the cultural sector; the analysis of its socio-economic impact based on “statistical data and case studies”; the analysis of its prospects of growth considering the tendency of “globalisation and the relentless spread of new information technology”; and finally, the analysis of the contribution of the sector to Europe’s “social and economic potential”, and consequently to the Lisbon’s Agenda targets (KEA, 2006, p.24).

The report outlines the sector into three circles, approaching the economy of culture as a “radiation process”. It departs from a core set of industries (“non-industrial cultural products”), expanding to a first circle that includes the cultural industries (“whose outputs are exclusively cultural”) and to a second circle encompassing the creative industries and activities (“activities whose outputs are functional but which incorporate elements from the two previous layers into the production process”) (KEA, 2008, p.53).

The model proposed by KEA includes a third circle, based on WIPO’s approach, which represents the related industries. These are not part of the cultural and creative sector but are “strongly linked to it” as they depend on cultural and creative products (p.54).

UNCTAD (2008)		
Heritage	Cultural sites	Archaeological sites, museums, libraries, exhibitions, etc
	Traditional cultural expressions	Arts and crafts, festivals and celebrations
Arts	Performing Arts	Live music, theatre, dance, opera, circus, puppetry, etc.
	Visual arts	Paintings, sculptures, photography and antiques
Media	Audiovisuals	Film, television, radio, other broadcasting
	Publishing and printed media	Books, press and other publications
Functional Creations	New media	Software, video games, digitalized creative content
	Design	Interior, graphic, fashion, jewellery and toys
	Creative services	Architectural, advertising, creative R&D, cultural & recreational

Table 9: UNCTAD Model

Source: UNCTAD (2008, p.14)

UNCTAD’s Creative Economy Report (2008) was the result of a collaboration between UNCTAD, UNDP, UNESCO, WIPO and ITC (p.3), focused on the “development dimension of the creative economy” (p.5 - 6).

The report’s main goal is “to provide the conceptual and policy framework for understanding the creative economy”, allowing for the development of instruments that can serve as a base for “informed” policies. (UNCTAD, 2008, p.7)

The report departs from UNCTAD’s 2004 creative industries definition of “any economic activity producing symbolic products with a heavy reliance on intellectual property and for as wide a market as possible” (UNCTAD, 2008, p.13).

The model distinguishes CI activities between “upstream” from “downstream”. The first set includes the visual and performing arts, considered “traditional cultural activities”. The second

is linked to the market, encompassing activities such as “advertising, publishing or media”. The cultural industries are considered a “subset of the creative industries”. (UNCTAD, 2008, p.13)

As Table 10 illustrates, the creative industries are grouped into four domains, further divided into nine other groups (p.13).

OECD (2007)						
Advertising	Video, film and photography	Publishing / Written media	Art and antiques trade	Crafts	Museums	Other heritage institutions
Architecture	Music and the visual and performing arts	Radio and TV (Broadcasting)	Design (including Designer Fashion)	Libraries (includes archives)	Historic and heritage sites	Computer games, Software, Electronic publishing

Table 10: OECD Model

Source: Gordon, J. C., & Beilby-Orrin, H., 2007, p-14

OECD report (Organisation for Economic Co-operation and Development, 2007) was developed for understanding the “the feasibility of producing reliable international comparative measures of the culture sector”, aiming to develop a universal approach to study the cultural sector (Gordon & Beilby-Orrin, 2007, p. 5-7). It assumes a statistical approach, departing from FCS (UNESCO Framework for cultural statistics) and LEG (European Commission Leadership Group).

The proposed model of delimitation departs from the UK and Canadian approaches (Gordon & Beilby-Orrin, 2007, p.13). According to KEA’s report (2006), the criteria used in the OECD report for delimiting the sector into 14 industries is based on the concept of “content industries”, responsible for the production of “information content products”. (p.53)

UNESCO (2009)

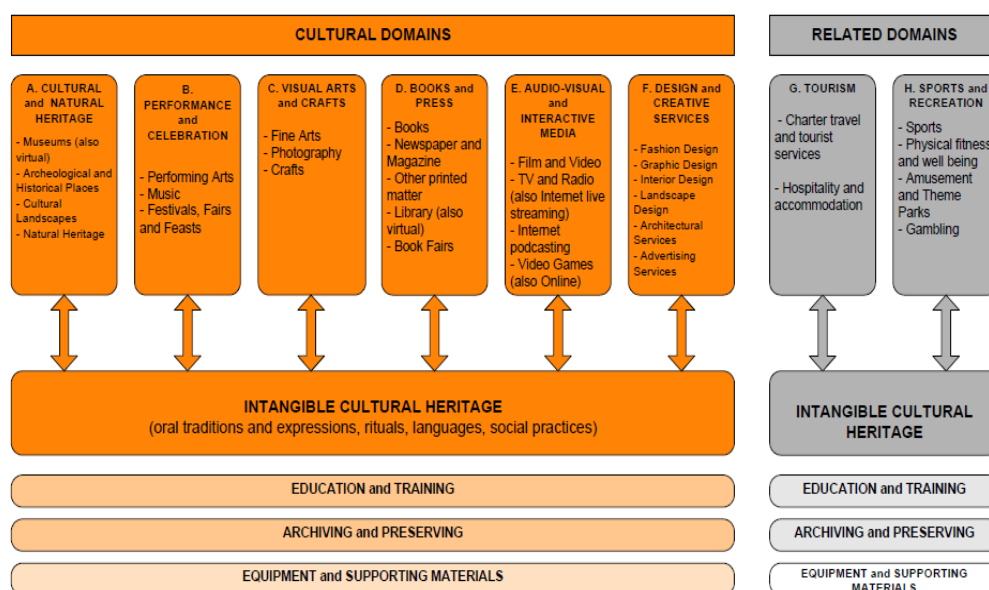


Figure 3: UNESCO CCI delimitation model

Source: United Nations Educational, Scientific and Cultural Organization., 2009, p.24

UNESCO's report (2009) updates the first Framework for Cultural Statistics developed in 1986, reflecting both the evolution of the concept of culture and its measuring (p.11). It is statistical-oriented (KEA, 2066, p.50), as it aims to assist the construction and dissemination of internationally comparable cultural statistics, providing the “conceptual foundations for evaluating the economic and social contributions of culture” (UNESCO, 2009, p.11).

The framework departs from UNESCO's Universal Declaration on Cultural Diversity definition of culture: “Culture should be regarded as the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs” (UNESCO, 2001 as cited in UNESCO, 2009, p.18).

The model of delimitation is based on the culture cycle¹⁵ and defines two mutually exclusive and hierarchical domains: cultural domains (“goods and services that are involved in all of the different phases of the culture cycle model”) and related domains (“linked to the broader definition of culture, encompassing social and recreational activities”) (UNESCO, 2009, p.23 - 24).

UNESCO considers three additional domains as important for the “production” and “transmission of culture”: education and training; archiving and preservation; equipment and supporting materials. They are classified as “transversal” in every cultural domain. (UNESCO, 2009, p. 23).

¹⁵ According to UNESCO (2009), “The culture cycle captures all of the different phases of the creation, production, and dissemination of culture. In this approach, culture can be viewed as resulting from a cognate set of processes.” (p.19)

ESS-net Culture (2012) (European Commission)					
10 Cultural domains					
Heritage <i>Museums; Historical places; archaeological sites</i>	Archives	Libraries	Books and press	Visual Arts <i>Plastic/ Fine Arts; Photography; Design</i>	
Performing Arts <i>Music; Dance; Drama; Circus; Cabaret; Combined Arts; Other live shows</i>	Audiovisual and Multimedia <i>Film; Radio; Television; Video; Sound Recordings; Multimedia works (including video games)</i>	Architecture	Advertising ¹⁶	Art Crafts	
6 Functions					
Creation	Production/ Publishing	Dissemination/ Trade	Preservation	Education	Management/ Regulation

Table 11: ESSnet-Culture updated version of the European statistical framework

Source: Bina et al., 2012, p.44

ESSnet-Culture Report (2012) consists of an updated version of the document “Cultural Statistics in Europe” (European Commission, 2007¹⁷), produced by LEG-Culture (p.18). It is based both on LEG-Culture and UNESCO Framework for cultural statistics (Bina et al., 2012, p.28).

Focusing on cultural statistics, its main objective is to update the definition of the cultural field as well as the LEG-Culture framework, and to develop a new framework compatible with UNESCO’s framework (2009) (Bina et. al, 2009, p.5).

ESSnet-Culture divides the sector into ten cultural domains¹⁸ and six cultural functions, based on the European statistical framework (p.29). There are two key characteristics of this proposal: the domains do not follow a hierarchical order nor reproduce the concentric circles, with other domains irradiating from the core; and although not describing a cultural cycle (p.45), the six identified functions are sequenced in a way “that put artistic creation at the core of the framework” (Bina et. al, 2009, p.28).

Finished the analysis of the models of reference, it was then necessary to select which to use for the study of the Visual Arts sector. Since the main goal was not to characterise the whole

¹⁶ Both advertising and art crafts result in two additional domains in relation to Leg-Culture proposal (Bina et al., 2012, p.44)

¹⁷ Document’s main goal: uniformization of cultural statistics – “implement a system of comparable cultural statistics” (ESSnet-Culture, 2012, p.17).

¹⁸ Cultural domains are defined as: “set of practices, activities or cultural products centred on a group of expressions recognized as artistic ones” (ESSnet-Culture, 2012, p.55).

cultural sector but to understand Visual Art's domains, the models by ESSnet-Culture (2012), UNCTAD (2008), KEA (2006) and WIPO (2003) were chosen as references. These explicitly indicate which domains are considered Visual Arts and therefore served the purpose of the study.

Table 12 displays the main differences regarding the activities considered part of the Visual Arts.

Visual Arts	KEA, 2006	UNCTAD 2008	ESSnet-Culture 2012
Crafts	x		
Paintings	x	x	
Sculpture	x	x	
Photography	x	x	x
Antiques		x	Fine Arts

Table 12: Visual Arts proposed domains

Similarities:

- Painting and Sculpture: KEA (2006) and UNCTAD (2008).
- Photography: KEA (2006), UNCTAD (2008) and ESSnet-Culture (2012).

Key differences:

- Crafts: KEA (2006).
- Design: ESSnet-Culture (2012) and WIPO (2003) (Graphic Design)
- Plastic/ Fine Arts: ESSnet-Culture (2012).
- Antiques: UNCTAD (2008)¹⁹

WIPO's model (2003) implies an individual analysis since it does not follow a structure comparable with the other three models. WIPO categorises "Photography" as an independent group of industries, not included in the visual arts and positioned in the same copyright industry as the visual and graphic arts ("Core Copyright"). In the industry of Photography, there are included "studios and commercial photography" as well as "photo agencies and libraries". In the case of the Visual and Graphic Arts, it encompasses "Artists", "Art galleries, other wholesale and retail", "Picture framing and other allied services" and "graphic design" (WIPO, 2003, p.73).

As this study focuses on the city of Oporto, it was of reinforced importance to understand not only the international, but also procedures of this type of investigation on a national level. Therefore, there was also analysed the study by Eosa Consultores (2012), an adaptation of the concentric circles model (2013); the report promoted by Serralves Foundation (2008), which corresponds to the DCMS (2004); and Augusto Mateus & Associados (2010 and 2016), based on KEA (2006). Since these studies depart from the previously mentioned models, their proposal of analysis was not considered for delimiting the sector but rather when identifying

¹⁹ The DCMS (2001) model also considers the Arts and Antiques Market.

the corresponding CAE. Nevertheless, it remains interesting to reflect on their approach to the sector, detailed in the following table, which also includes the analysis by Estatísticas da Cultura (2021).

Visual Arts	Eosa Consultores (2012) (Concentric Circles)	Mateus & Associados (2010)	Estatísticas da Cultura (2021)	Serralves Foundation (2008) (DCMS)
Exhibition spaces	Included	Included (CAE galleries)		Not included
Painting	Included	Included (CAE artistic and literary creation)	Included	Not included
Sculpture	Included	Included (CAE artistic and literary creation)	Included	Not included
Photography	Not included (considered as an independent sector of the Core Arts)	Not included (considered as part of the cultural industries: included in the sub-sectors cinema and video)	Included	Not included
Design	Not included (considered as part of the creative sector)	Not included (considered as part of the domain of the creative activities, and as an independent subsector - design)	Included	Not included (considered as two different sub-sectors: design and fashion design)
Antiques		Not included (considered as part of the domain of the nuclear cultural activities and as part of the subsector of Historical and Cultural Heritage - CAE antiques market)		Included
Engraving			Included	

Table 13: Comparison of the Visual Arts domains included across the Portuguese studies

Similarities:

- Exhibition spaces: EOSA Consultores (2012) and Mateus & Associados (2010)
- Painting: EOSA Consultores (2012), Mateus & Associados (2010) and Estatísticas da Cultura (2021)
- Sculpture: EOSA Consultores (2012), Mateus & Associados (2010), Estatísticas da Cultura (2021)

Differences:

- Photography: included in Estatísticas da Cultura (2021); not included in Mateus & Associados (2010) nor EOSA Consultores (2012)
- Design: included in Estatísticas da Cultura (2021), not included by EOSA Consultores (2012), Mateus & Associados (2010, 2013, 2016), Serralves Foundation (2008)
- Antiques: Serralves Foundation (2008) (based on DCMS)

Similarly to the model proposed by WIPO, the methodology followed by Mateus & Associados (2013) is not comparable with the other models in the same terms. It is possible, though, to understand that artisanal products, compared to crafts (proposed by KEA, 2006), are considered Heritage, and that design is not included in the Visual Arts, but in functional creations - category Arts (“Artes”). In the 2016 report of the same consultant, the visual arts are included in Nuclear Cultural Activities, alongside performative arts, visual and literary creations, and cultural and historical heritage. Design is, once again, excluded from the visual arts, being categorised as Creative Activities, along with architecture, advertising, software services and creative components present in other activities.

The same happened with the study promoted by Serralves Foundation (2008). As mentioned, DCMS’ model (2001) divides the sector into 13 key activities, namely Advertising, Architecture, Arts and Antiques Market, Crafts, Design, Designer Fashion, Film, Interactive Leisure Software, Music, Performing Arts, Publishing, Software, Television and Radio. Meaning that Crafts (included in KEA’s report 2006) are not considered Visual Arts, although the antiques market (also included by UNCTAD 2008) is considered as part of the sub-sector. Design is also excluded from the Visual Arts.

It is important to highlight that Eosa Consultores (2012) proposes the inclusion of exhibition spaces, painting and sculpture as Visual Arts, analysed based on CAE 9003. However, as exhibition spaces correspond to CAE 47784²⁰, which is left out of the analysis, this activity is not actually encompassed by the report.

Considering the methodologies followed in the Portuguese studies as well as the models of delimitation proposed in the international studies of reference, painting and sculpture were identified as the common activities amongst all proposals. Design, Photography, Antiques market, Crafts and Exhibition spaces are not consensual domains. This translates, in accordance with Thorsby (2008), in “The Concentric Circles Model of the Cultural Industries”, the difficulty of delimiting the cultural and creative sector. For the author, “(...) defining the cultural or creative industries remains a matter of some debate, and no clear agreement exists yet as to exactly which industries should or should not be included in the cultural sector of the economy” (Thorsby, 2008, p.147).

²⁰ CAE 47784: Other retail sale of new goods in specialised stores corresponds to CAE 52488, proposed by Augusto Mateus & Associados (2010) as representing exhibition spaces.

DESIGN		PHOTOGRAPHY	
Included	Not included	Included	Not included
WIPO (2003)	DCMS (2001)	UNCTAD (2008)	DCMS (2001)
ESS-net Culture (2012)	KEA (2006)	KEA (2006)	WIPO (2003)
Estatísticas da Cultura (2021)	UNCTAD (2008)	ESS-net Culture (2012)	OECD (2008)
	OECD (2008)	Estatísticas da Cultura (2021)	UNESCO (2005)
	Mateus & Associados (2010)		Mateus & Associados (2010)
	EOSA Consultores (2012)		EOSA Consultores (2012)
ANTIQUES		CRAFTS	
Included	Not Included	Included	Not Included
DCMS (2001)	UNESCO (2005)	KEA (2006)	DCMS (2001)
UNCTAD (2008)	Mateus & Associados (2010)		UNCTAD (Heritage)
OECD (2008) Serralves Foundation (2008)			OECD (2008)
EXHIBITION SPACES			
Included			
EOSA Consultores (2012) / Concentric Circles Model			
Mateus & Associados (2010) (CAE corresponding to galleries)			

Table 14: Comparison of the Visual Arts domains included among the considered studies

All things considered, the decision was to include as many activities as possible, aiming to keep a broad scope. There were, therefore, analysed the entities whose activities related to Crafts, Painting, Sculpture, Photography, and Antiques Market. A delimitation based on the proposals by KEA (2006) and UNCTAD (2008).

Visual Arts	Crafts	Painting	Sculpture	Photography	Antiques
KEA (2006)	x	x	x	x	
UNCTAD (2008)		x	x	x	x

Table 15: Visual Arts domains included by the two studies of reference

It must be taken into consideration that this is our proposal for delimiting the Visual Arts sector and therefore is not error-free. Thorsby, in “The concentric circles model of the cultural industries” (2008) states that “(...) there is no “right” or “wrong” model of the cultural industries, simply a range of alternative constructions based on different sets of assumptions and employing different mechanisms for putting the parts together. But the choice of a model by means which to interpret the structural characteristics of cultural production has important implications for the formulation of cultural policy”. (p.156)

This last idea on the impact of the chosen model of delimitation on the study will be further explored in Chapter 3.1.

The following step was to understand which CAE corresponded to the activities and domains of the Visual Arts, and therefore represented the sector. This phase defined which CAE to search on the Sabi database, and the posterior analysis of the sector’s socioeconomic impact.

For this task, the national studies were prioritized as our main goal was to characterise the Portuguese context. There were taken into consideration the CAE analysed in the studies by Eosa Consultores (2012), Serralves Foundation (2008) and by Augusto Mateus e Associados (2010 and 2016). Moreover, the document *Classificação Portuguesa das Atividades Económicas_Rev. 3 (2007)*²¹ and *Estatísticas da Cultura (2021)* were also analysed for the identification of the existing Portuguese CAEs and those related to the Visual Arts.

Table 16 illustrates the four selected CAE for encompassing the Visual Arts sector²²:

Visual Arts	Correspondent CAE
Crafts	47784: Other retail sale of new goods in specialised stores
Painting	9003: Artistic and Literary Creation
Sculpture	9003: Artistic and Literary Creation
Photography	74200: Photographic Activities
Exhibition Spaces	47784: Other retail sale of new goods in specialised stores (galleries)
Antiques	4779: Retail sale of second-hand goods in stores

Table 16: *Visual Arts domains correspondent CAE*

This table includes an extra activity in comparison to the first delimitation of the sector. This is the case of galleries and exhibition spaces, analysed by Mateus & Associados (2010) and *Estatísticas da Cultura (2021)*.

The following section, dedicated to the construction of a questionnaire survey will encompass the process of selection of entities to be included in the study. This corresponds to the subsequent step taken after the process of delimiting the sector.

²¹ Available at: https://www.ine.pt/ine_novidades/semin/cae/CAE_REV_3.pdf

²² Translation based on Instituto Nacional de Estatística (n.d.) – Sistema de Metainformação (Classificações).

2.2. Selection of entities for the study

Having all the correspondent CAE identified, they were then searched in the Sabi database for obtaining the list of cultural entities of the Visual Arts, based in Oporto. Although this was a process developed for the two domains – Visual and Performing Arts, this section will only focus on the Visual Arts sector.

As mentioned before, CAE 47784, 9003, 74200 and 4779 were selected for encompassing the Visual Arts sector. These were searched in the Sabi database, originating a list of all the entities working in each CAE. After filtering the data, a total of 48 entities were considered as part of the Visual Arts sector, and therefore, included in the study.

Visual Arts Sector				
CAE	4779: Antiques	9003: Artistic and Literary Creation	47784: Galleries/ exhibition spaces	74200: Photographic activities
Total	79	44	417	85
Selected	11	12	13	10

Table 17: Selection of entities for each Visual Arts CAE

Although these were the CAE defined as corresponding to the Visual Arts, since this work is part of a project that also focuses on the Performing Arts, it was possible to understand the impact of also considering CAE from this sector.

From CAE 94991 (Cultural or Recreational Associations), 2 out of 9 entities related to the Visual Arts. The same happened to CAE 85520 (Cultural Education), from which 2 out of 29 entities promoted training on the Visual Arts. Regarding CAE 9001 (Performing arts) there was only one entity identified that, although having a formative offer that focuses on dance also included the teaching of fine arts. It was therefore considered that the impact of not including these CAEs in the analysis would not be significant.

Also, not part of the Visual Arts Sector and identified as Heritage in the analysed models, is the case of Museums (CAE 3102). A total of 6 entities working in this CAE were retrieved from the Sabi database, but only 2 of them could be considered as part of the Visual Arts. Given the ecosystem we were trying to characterise, we decided to exclude these two entities from the study.

CAE 5819 (Other publishing activities) also revealed to be unsuitable for the study as none of the identified entities retrieved through SABI focused on Visual Arts activities. Mateus & Associados (2016) include this CAE in the Edition subdomain, also excluding it from the Visual Arts.

It is also interesting to reflect on the CAEs analysed in Estatísticas da Cultura (2021). According to the report, the Visual Arts sector includes “photography” and “works of art (paintings, engravings, sculptures, drawings); Crafts are considered an independent sector, divided into manual manufacture and ornamental items, and jewellery (metals and precious stones and semi-precious); and Antiques are part of Cultural Heritage. These nuances concerning the proposed delimitation of the sector will be explored in further detail in Chapter 3.1.

Considering the informality of the sector and aiming to obtain a rigorous picture, the search on the Sabi database was then complemented by exploring the results of DRCN²³, DGARTES²⁴ and PLAKA’s support programmes²⁵. Public directories/ projects were also consulted, such as the list of Visual Arts entities identified by Leal, M. (Yucunet map) or Glartent. Moreover, CC Bombarda’s website was also considered, as it discloses a list of companies based in Oporto related to the project. Lastly, this step included an exploratory search through social media, google/ google maps (keyword: “Visual Arts Porto”), as well as strolling around the city. From this process, a total of 97 extra entities were identified as part of the visual arts²⁶, reaching a total of 145 entities belonging to the Visual Arts.

DRCN	DGARTES	YUCUNET	GLARTENT	CC BOMBARDA FRIENDS	PLAKA	SOCIAL MEDIA/ EXPLORATORY SEARCH
6	13	21	28	3	4	22
Total: 97						

Table 18: Selection of entities per source

The final selection of entities to be included in the study, both regarding the visual and performing arts, implied visiting their website and social media, besides merely identifying its CAE. This process was done for every entity found, providing a better understanding of its activities. In the case of CAE 74200, entities exclusively dedicated to commercial photography were excluded. On the other hand, there were considered companies focused on artistic photography or, although assuming a commercial-oriented nature, also explored artistic components.

From this step, and through SABI, it was also retrieved the name of the company’s brand; website (for understanding of the activities promoted); address (to validate if the company was based in Oporto); and contacts (for inviting to participate in the study).

Later in the process, it was also retrieved information on the state of the company (active, dissolved, on sale, insolvency, temporarily inactive, fusion or dead). There were only

²³ Documents analysed: Programa de apoio aos Agentes Culturais (2021); Programa de Apoio ao Associativismo (2013 - 2022) and Relatório de Atividades (2023 - 2021).

²⁴ All the existing documents from 2020 were analysed. In the case of 2021, since some of the results were not available at the time of the research (March 2022) or included entities that were not based in Oporto/ previously identified or whose information could not be found, there were analysed: Programa de Apoio a Projetos: programação; internacionalização; Representação oficial portuguesa na 59ª Exposição Internacional de arte – La Biennale di Venezia; Criação e Edição – artes visuais; Apoio complementar ao programa Europa Criativa and Programa de apoio em parceria: arquivos de dança, teatro e cruzamento disciplinar; Arte sem limites – criação e acessibilidade à oferta artística;

²⁵ Programmes analysed: Shuttle and Inresidence (2021).

²⁶ For the Performing Arts, the following directories and sources of information were additionally considered: Performart’s members; Teatro Campo Alegre’s artistic residencies; Cultura em Expansão; Portal da Dança; and Meloteca.

considered active enterprises for the study. Information on the primary and secondary CAE was also searched for the division of entities between Visual and Performing Arts.

In total, there were found to exist 497 entities of the Visual and Performing Arts suitable for the study.

2.3. Questionnaire survey

As we reached a list of agents responsible for the cultural and creative production of the Visual Arts Sector, based in the city of Oporto, it was then time to construct the questionnaire survey.

According to Batista et al. (2021), a questionnaire survey is a technique/ strategy for collecting data (Coutinho, 2011, Morgado, 2013 as cited in Batista et al., 2021, p.15). There are two types of surveys: questionnaire surveys and interview surveys, varying according to the level of the researcher's intervention and the directness of the questions. (Carmo & Ferreira, 2008, p.139, as cited in Batista et al., 2021, p.15).

Questionnaire surveys are used to inquiry groups of individuals to characterise the population. They generate comparable data, allowing for generalisations (Gonçalves, 2004, Carmo & Ferreira, 2008, Coutinho, 2011 as cited in Batista et al., 2021, p.17). The questionnaire itself results in the tangible form of this technique, in its instrument (Batista et al., 2021, p.15).

2.3.1. Questionnaire's construction

The questionnaire was collaboratively developed with my colleague Luana Santos, aimed at the entities working in Visual and Performing Arts. It had one mandatory question: the acceptance or decline of participating in the study and the consent to the usage of personal data. Its fulfilment was planned to take no longer than 15 minutes. The full version of the questionnaire can be found in Appendix 5.

The instrument was composed of open and closed questions, resulting in a mix questionnaire (including both qualitative and quantitative data) (Hill, 2014, as cited in Batista et al., 2021, p.18). This decision permitted combining potentialities of closed questions, more easily coded/ analysed and more attractive to the replier (Carmo e Ferreira, 2008, Thayer-Hart et al., 2010, Hill, 2014, and Coutinho, 2011 as cited in Batista et al., 2021, p.32), with the benefits of open questions, enhancing a deeper and more precise level of answer (Thayer-Hart et al., 2010 as cited in Batista et al., 2021, p.32). Slattery et. al, (2011) refer that using closed questions enhances the comparison of results and higher efficiency in reporting data (based on Aday & Cornelius, 2006). Open questions, on the other hand, allow for a higher level of "accuracy and individuality", although resulting in a hindrance to the comparison of data (Geer, 1991, as cited in Slattery et al., p.833)

The main goal of this questionnaire survey was to characterise the current panorama of the Visual and Performing Arts Sector in the city of Oporto, enabling the evaluation of its socioeconomic impact, heterogeneity and geographical distribution.

Accordingly, and based on the objectives of the investigation line, the questionnaire was composed of three main sections. The first part aimed to characterise the entities, the second its artistic and cultural production (regular activity and projects), and the third to understand the presence of the theme of climate change in the entity’s activities (inventory of sustainable practices). The questions departed from the Business Model Canvas (Osterwalder & Pigneur, 2013) and, in the case of projects, from the Project Charter (PMBOK)²⁷ (Malik, 2022). They were kept, as recommended by Batista et al. (2021, p.23) and Slattery et al. (2011, p.834), as clear, simple, and short as possible.

Table 19 illustrates the structure of the questionnaire survey:

First section: entity’s characterization	
BMC-based questions:	Extra questions that answer the investigation’s objectives:
Customer segments	Name of the company
Value Proposition: values of the company/ differential factor	Position of the respondent
Channel of communication with the clients	Address (for further analysis of geographic distribution)
Business turnover (encompassing cost structure and revenue stream)	Company’s contacts
	If the entity was represented or part of another company
	Typology of the company
	For how long the company exists
	Area of activity
	CAE (by frequency)
	Human resources (people on contract of unspecified duration and external HR)
	Company's organisation/ departments/ key functions
	Opening dynamic (permanently open; seasonal; sporadic)
Second section: activities of cultural and artistic production	
2.1. Company's activities	
BMC-based questions:	Extra questions that answer the investigation’s objectives:
Regular/ relevant partnerships (key	Specification of the type of activities previously identified

²⁷ A Project Charter is a document used in Project Management to create and manage a project: “A Project Charter is a document issued by the project initiator or sponsor that formally authorizes the existence of a project, and provides a project manager with the authority to apply organizational resources to project activities.” (PMBOK Guide, as cited in Malik (2022, June 19)).

partners)	
	Type of services provided (based on the production chain: creation, production, curatorship, support, training, exhibition, dissemination, space concession)
	Localization of the shows in the last 12 months (NUTS II)
	Number and type of activities promoted in the last 12 months
2.2. Company's projects	
Questions that depart from Project Charter	
In the last 5 years, has the entity been involved in/ promoted any relevant project?	
Name of the project	
Activity domain (dance, theatre, circus, live music, puppetry, cabaret, painting, sculpture, photography, crafts)	
Level of involvement in the project (coordinator, very active partner, less active partner)	
Date of the beginning of the project (month and year)	
Duration of the project (less than 1 month, 1-3 months, 3-6 months, 6-12 months, superior to 12 months)	
Types of services provided (based on the production chain)	
Project's location	
Team and functions	
Target audience	
Synthesis of the project: Objectives/ aim/ goal; Key activities; Expected results	
Number and functions of external workers (if applicable)	
Budget (0 – 5000€; 5000€ – 20000€; 20 000€- 50 000€; 50 000€ – 100 000€; 100 000€-200 000€; 200000€ – 500 000€; 500000€ – 1000 000€; above 1000 000€)	
Funding (public national/ international, private national/ international or by selling the company's services and products)	
Third section: climate change	
Presence of the theme of climate change in the entity's activities and projects	

Table 19: Questionnaire survey structure

Finishing the fulfilment of the questionnaire, entities were invited to, in case of interest in further information on the development of the project, provide their names and email.

The questionnaire was developed using Google Forms. Sammut et al (2021), based on Pederson & Nielson (2016) and Sappleton & Lourenço (2016), mention that web surveys imply fewer

costs and are not geographically limited, therefore reaching a wider audience (p.2). Moreover, they allow for its fulfilment at a time of best convenience for the respondent (Batista et al., 2021, p.30). On the other side, they might exclude those who do not have easy access to computers or email addresses (Couper, 2007, as cited in Sammut et. al, 2021, p.2). Also, as Batista et al. (2021) refer, web questionnaires depend on respondents' motivation and internet access (p.30).

The constructed instrument was validated by two teachers before sending it. One of the professionals has a background in psychology and another in the evaluation of the impact of creative industries. They advised reducing the number of open questions, as the analysis of the results would be of added difficulty. Also, to avoid mandatory questions, which could lead to demotivation and reduced participation.

When a final version of the questionnaire was reached, it was then shared with professionals working in the visual and performing arts sector, although not based in Oporto, for testing the question's level of clarity. This was the phase of the pre-test (Ghiglione & Matalon, 2001 as cited in Batista et al., 2021, p.24).

Finished the testing phase, the questionnaire link for the Google Forms was sent the 497 selected entities. This list was then reviewed, and 59 entities were removed (confirmed inactive through Sabi or not based in Oporto, part of other contacted entities, or not actually working in the Visual or Performing Arts in accordance with the CAE later redefined). Moreover, after the process of sending the emails, 16 of them resulted in an error. Even so, from these 16 entities, 8 of them posted on their social media in the year of 2022 and were therefore considered still active. 2 companies were also excluded as they answered the email invitation justifying why they should not be considered for the study (focus of the activity/ inactive). Also, although 4 of the entities retrieved from the Performing Arts CAE (94991, 82300 and 85520) developed work related to the Visual Arts, the proposed delimitation was followed, and these entities were excluded. Only 3 cultural associations were still included as they were found through DGARTES and DRCN and also assume a primer function of galleries. Further, excluding the 3 entities that replied to the questionnaire that are not based in Oporto, **421** entities were classified as belonging to the Visual and Performing Arts (Visual Arts: **131**). Even so, as this number excludes the 4 entities dedicated to visual arts activities, but included in CAE of the Performing Arts, it is possible to affirm that there were found to exist **425** entities dedicated to the Visual and Performing Arts, based in Oporto.

The first email (Appendix 6) inviting participation in the study was sent on April 27th. As we continued finding more entities/ directories through exploratory search, a second invitation email was sent to around 100 entities on May the 3rd and a third on May the 5th.

From the first step of sending the emails, 16 of them were not delivered. To overcome this difficulty, an alternative company's email/website contact form or phone was searched for.

Since only the telephone numbers of various entities were found and their emails were needed, a few days were dedicated to contacting them. From this process, 12 other entities were included in the study (plus four other entities contacted through their website's contact form). From this step, it was also possible to conclude that 3 of the contacted entities did not have a valid phone

number attributed, 2 of them were associated with the wrong number, and one of the companies had already closed. 9 of them did not answer our call. This process led to a fourth sending of emails on May 6th.

Later on the 12th of May, companies belonging to CAE 4779 were included (antique market) in the study along with a new set of entities found through exploratory research. Moreover, as we were trying to reach the maximum number of entities possible, approximately ten professionals working in the area were asked to assume the role of the project's ambassadors, sharing the questionnaire within their network.

On May 16th an email (Appendix 7) was sent to the first set of entities, reinforcing the invitation to participate as well as the study's importance. The same was done two days later (May 18th), directed to the remaining entities that had been first contacted later in the process.

We were aware of the questionnaire timing limitations, as the deadlines for proposals for public funding programmes were happening at the same time. It was therefore agreed that the final date for acceptance of answers should be extended due to another week until the 27th of May. Hence, the last email (Appendix 8) was sent on May 20th, communicating that the deadline had been extended.

According to Sammut et. al (2021), based on Crawford et al. (2001) and Van Mol (2017), when two different emails reminding the participation in the study are sent, the response rate is higher although the impact of the second email is smaller (p.19). The structure and title of the emails remained very similar, which might have impacted the interest in participation as people might have assumed that the same email was being sent multiple times. The authors state that a change of words from one reminder to the other increases the response rate by around 30% (Sauerma and Roach, 2013, as cited in Sammut et. al, 2021, p.20). Also, a pre-notification was not sent, which could have helped motivate people to participate in the study (Sammut et. al, 2021, p.20).

After the closing of the questionnaire, on the 13th of June, an entity requested to participate in the project. A copy of the questionnaire was created through google forms and the entity was allowed to participate. However, it revealed not suitable for the study as it was not based in Oporto, but in Matosinhos.

2.3.2. Difficulties

Since this process was done in collaboration with Luana Santos, I also accessed and dealt with the filtering of entities of the performing arts from all the previously mentioned information sources. This led to some difficulties, as some of the companies were classified as CAE that did not correspond to the proposed sector's delimitation but whose activity related to the visual arts.

As mentioned before, CAE 94991 (Cultural or Recreational Associations) and CAE 85520 (Cultural Education) were excluded from the Visual Arts delimitation. Based on the number of entities retrieved from SABI that corresponded to Visual Arts' activities (CAE 94991: 2/9; CAE 85520: 2/29), it was concluded that their inclusion would not reflect the real contribution of the sector to the economy.

This decision was done after the sending of the emails, which had consequences and gave rise to exceptions. It is true that the number of the Visual Arts entities working in CAE 85520 corresponded to 7%, which ends up being a higher percentage than CAE 47784 (from a total of 417 businesses, 15 were considered as part of the Visual Arts). However, as this CAE is also considered by the analysed models²⁸ as not part of the Visual Arts, it was excluded from the proposed delimitation. The greatest consequence of this decision was that entities posteriorly excluded were invited to participate in the project. These were retrieved from the search on the Sabi database (CAE 9499, 82300 and 8552) as from the additional research (Chapter 2.2).

From these excluded CAE five of the contacted entities focused on Cultural Education/ Cultural or Recreational Associations responded to the questionnaire. As changing the CAE to be included in the Visual Arts' model of delimitation would affect all the conclusions obtained and the characterization of the sector (Chapter 3.1), as well as the entire dissertation, these answers were analysed separately. An exception was made for three cultural associations, found through DGARTES and exploratory research. They were only included as besides working as associations, their main activity is related to Visual Arts exhibitions, functioning as galleries.

Regarding the construction of the questionnaire itself, as neither my colleague nor I had previous experience, our biggest concern was to develop a rigorous instrument. We departed from other surveys (such as *Estatísticas da Cultura* (2021)) and took into consideration the characteristics of both domains to produce the questionnaire. The fact that the same questionnaire was used for both Visual and Performing Arts, as well as the need to prioritise closed questions led to a few limitations. This was the case of questions that were too directed to the Performing Arts and could have presented a wider scope. An extra open option (“other”) was included in most of the closed questions, assuring that there were no constraints in the filling of the questionnaire.

2.3.4. Responses obtained

The sending of the e-mail to 497 entities originated a total of 76 answers. Seven of them were excluded from the study: one did not consent to the fulfilling of the questionnaire and the sharing of personal data; two replied twice to the questionnaire, so the answers were merged; and three of the entities were based in Vila Nova de Gaia and Matosinhos, not Oporto. Therefore, there were considered 71 valid questions. Regarding the Visual Arts sector, a total of 19 answers²⁹ were collected. Five additional answers were separately analysed as their main activity focused on Cultural Education and Cultural or Recreational Associations.

The 497 contacted entities were, as previously mentioned, later filtered and resulted in a total of 421 valid entities belonging to the proposed delimitation of the Visual and Performing Arts (Chapter 2.3.1). Since this first selection was later refined and excluded entities unsuitable for the study or already inactive, the second and final list was considered for effects of calculation

²⁸ Eosa Consultores (2012) studies this CAE as part of the domain “Cultural Education”, not as Visual Arts, being analysed alongside Libraries, Museums, Archives and historical heritage (p. 126).

²⁹ One of the entities replied twice to the questionnaire. Since it was submitted within a month's distance and by the same person, these two responses were merged and counted as one.

of response rate. Of the 421 entities, 131³⁰ belong to the Visual Arts, resulting in an answer rate of 14.50%. It must be added that out of the 4 entities that answered the questionnaire without being contacted, 1 was considered as part of the Visual Arts.

Given the fact that the selected entities for the study have, on average, 3 human resources (according to SABI), a small percentage of answers was expected. This, combined with the deadlines for national public funding overlapping the duration of the activity, resulted in an answer rate below 20%.

Moreover, even though Performart shared the questionnaire amongst their members/ network, the dissemination of the questionnaire was done entirely through the institutional student email and our “ambassadors”. This led to a lower reach.

One of our biggest priorities was to provide a clear explanation of the project so that the professionals in the area could understand the importance of their contribution. A website³¹ was developed to provide background information on the questionnaire and the emails were kept as clear and concise as possible so that the message would not be lost. Even so, according to Sammut et. al (2021), based on Zhang et al. (2017), as this type of data collection method is widely used in university and market study contexts, people are facing survey fatigue, resulting in decreasing survey response rates (p .2).

³⁰ This number does not consider the 5 entities whose contact resulted into error and whose activity has not been communicated on social media in the last year, the 1 entity of the Visual Arts that replied to the invitation email informing that it was no longer active, nor the 1 entity that replied to the questionnaire based in Matosinhos.

³¹ Available at: <https://artes.ucp.pt/HAC4CG/>

3. Mapping of the activities of artistic and cultural production in the city of Oporto: Visual Arts Sector

3.1. Visual Arts in Portugal: sector characterisation on a National, Regional and Sub-regional level

The characterisation of the sector, based on INE, Estatísticas da Cultura (2021) (produced by INE) and Sabi, will provide context for the data obtained through the questionnaire. Hence, five key indicators were analysed: the number of companies working in the sector, their business turnover, gross value-added (GVA), the number of employees and the dynamics of the international market.

These variables cannot be compared among the three sources of information, as the Sabi database was last updated on the 6th of September 2022, the data from INE is from 2020 and the data from Estatísticas da Cultura from 2020 is provisional (some of the information is only available for 2019). Moreover, Estatísticas da Cultura (2021) only considers two of the five CAE proposed as encompassing the Visual Arts Sector (CAE 47784, 4779, 74200 and 9003), therefore data from INE and SABI regarding the Visual Arts cannot be compared with the numbers of the Cultural and Creative Sector.

Therefore, from Chapter 3.1.1 to 3.1.5, the characterisation of the sector is based on INE and Estatísticas da Cultura. Chapter 3.1.7 provides an overview of these indicators regarding two key cities: Oporto and Lisbon, based on the Sabi database.

Estatísticas da Cultura (2021) does not include Exhibition Spaces (47784) when analysing key sector variables such as the number of companies, business turnover, GVA, number of employees and international market. The report does present a chapter dedicated to this type of spaces, including data on the number and typology of galleries and other exhibition spaces, their location and promoting entity, as well as on the number and type of works of art and artists showcased. As this information would not be easily compared to the one retrieved from INE and includes additional and relevant data for the sector contextualization, it was considered relevant to create a chapter dedicated to galleries and other exhibition spaces (Chapter 3.1.8).

Therefore, the proposed analysis covers national, regional (NUTS II³²: North Region and Lisbon Metropolitan area), sub-regional (NUTS III: Oporto³³ and Lisbon³⁴ Metropolitan Areas), and local (the city of Oporto and Lisbon) levels. The information on a local level was retrieved from Sabi. INE and Estatísticas da Cultura were the sources for the remaining levels of analysis.

³² NUTS: Nomenclature of Territorial Units for Statistical Purposes (translated from PORDATA: “Nomenclatura das Unidades Territoriais para Fins Estatísticos” (Fundação Francisco Manuel dos Santos, n.d.))

³³ According to AMPorto Website (n.d), Oporto MA is composed of the following municipalities: Arouca, Espinho, Gondomar, Maia, Matosinhos, Oliveira de Azeméis, Paredes, Porto, Póvoa do Varzim, Santa Maria da Feira, Santo Tirso, São João da Madeira, Trofa, Vale de Cambra, Valongo, Vila do Conde and Vila Nova de Gaia.

³⁴ According to Portal Autárquico (n.d.), Lisbon MA is composed by Alcochete, Almada, Amadora, Barreiro, Cascais, Lisboa, Loures, Mafra, Moita, Montijo, Odivelas, Oeiras, Palmela, Seixal, Sesimbra, Setúbal, Sintra and Vila Franca de Xira.

Before proceeding with the analysis it is important to recall that the proposed delimitation of the Visual Arts sector includes CAE 47784, 9003, 74200 and 4779.

3.1.1. Number of companies working in the sector

According to Estatísticas da Cultura (2021), based on the information from Sistema de Contas Integradas das Empresas (SCIE), in 2020 (provisional numbers), the cultural and creative sector³⁵ was composed of 70 406 companies. EC only considers two of the proposed Visual Arts CAE. Therefore, the proportion of visual arts entities among the total cultural and creative activities on a national level is, according to this report, 12,6% (total of 8 841 companies). If activities of design (CAE 7410) and Cultural Education (CAE 8552) had been considered (total of 7 689 companies), the percentage would rise by 10.9 p.p., ascending to 23.5% (total of 16 530 companies).

However, according to INE, and considering the Visual Arts sector as encompassing CAE 47784, 4779, 74200 and 9003, in 2020 there were a total of 17 962 companies working in the Visual Arts sector. 17.58% of which were based in Oporto MA and 35.75% in Lisbon MA.

Chart 1 illustrates the asymmetric distribution of enterprises working in the Visual Arts sector, as Lisbon MA concentrates the highest number of companies. In total, both Oporto MA and Lisbon MA aggregate more than half of the companies working in the Visual Arts (in 2014 this number ascended to 54,04% and in 2020 to 53.36%).

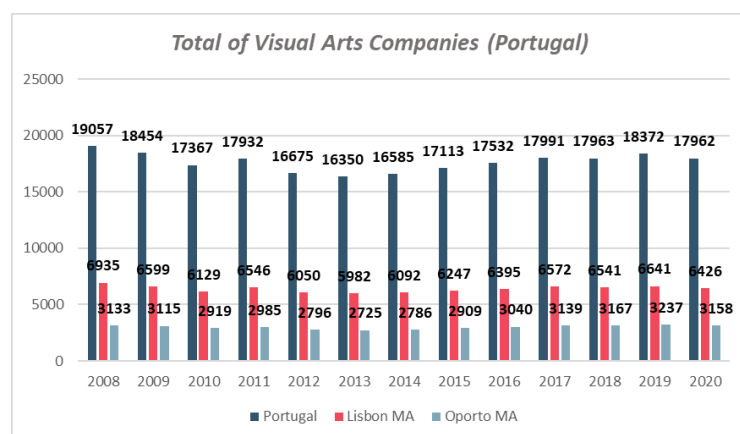


Chart 1: Number of Visual Arts Companies (2008-2020)

Source: INE - *Sistema de contas integradas das empresas: Empresas por Localização geográfica e Atividade económica.*

According to INE, Oporto MA represents 58.46% of the companies operating in the North Region. By taking this region into account and not only Oporto MA, the percentage of companies working in the visual arts is very similar to the figures for Lisbon MA. In proportion to the national values, the number of companies based in the North Region differs by 5.71 p.p.

³⁵ INE and Sistema de Contas Integradas das Empresas consider as cultural and creative activities the following CAE: 1811, 1812, 1813, 1814, 1820, 3212, 3220, 4761, 4762, 4763, 5811, 5813, 5814, 5821, 5911, 5912, 5913, 5914, 5920, 6010, 6020, 6391, 7111, 7311, 7410, 7420, 7430, 7722, 8552, 9001, 9002, 9003, 9004, 9101, 9102 e 9103. Only two of these CAE are part of the Visual Arts (7420 and 9003). CAE 47784 (galleries) and 4779 (antiques) are not considered either by EC or INE as cultural and creative activities.

(2020) relative to Lisbon MA (total of 6934 enterprises). In total, these regions concentrate almost 70% (65.85%) of the companies in the Visual Arts sector.

The proportion of companies working in the Visual Arts Sector in relation to the national level (%)							
	2008	2009	2010	2011	2012	2013	2014
North Region	28,50	29,01	29,21	29,02	29,30	29,13	29,10
Oporto MA	16,44	16,88	16,81	16,65	16,77	16,67	16,80
Lisbon MA	36,39	35,76	35,29	36,50	36,28	36,59	36,73
Total OpoMA and LMA	52,83	52,64	52,10	53,15	53,05	53,25	53,53
	2015	2016	2017	2018	2019	2020	
North Region	29,28	29,44	29,53	29,75	29,76	30,07	
Oporto MA	17,00	17,34	17,45	17,63	17,62	17,58	
Lisbon MA	36,50	36,48	36,53	36,41	36,15	35,78	
Total OpoMA and LMA	53,50	53,82	53,98	54,04	53,77	53,36	

Table 20: Number of Visual Arts companies in proportion to the national level (2008-2020)

Source: INE - Sistema de contas integradas das empresas: Empresas por Localização geográfica e Atividade económica.

Based on INE, it is possible to visualise the variation in the number of companies over the period of 2008 to 2020.

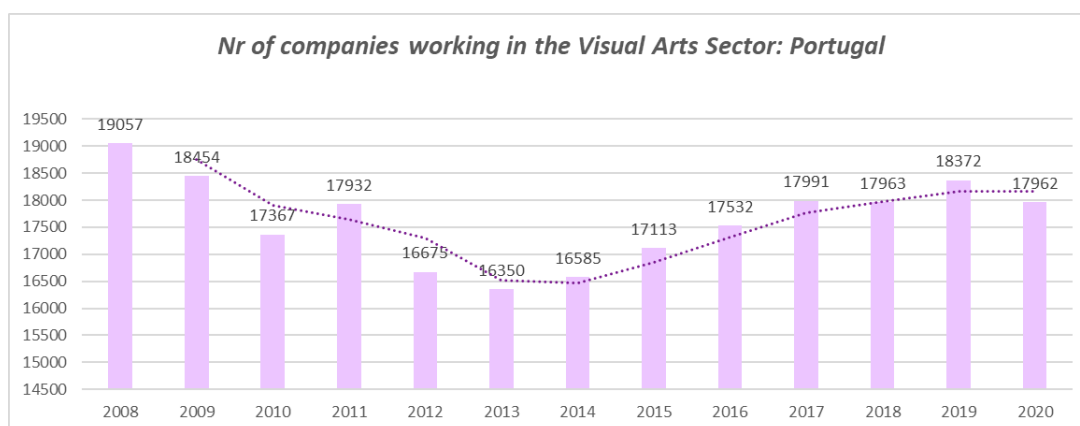


Chart 2: Number of companies working in the Visual Arts Sector on a national level (2008-2020)

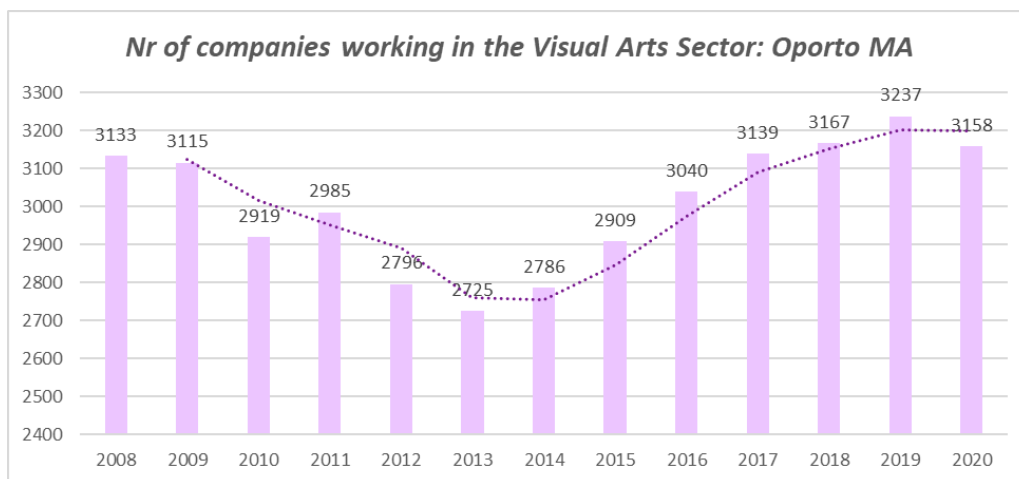


Chart 3: Number of companies working in the Visual Arts Sector based in Oporto MA (2008-2020)

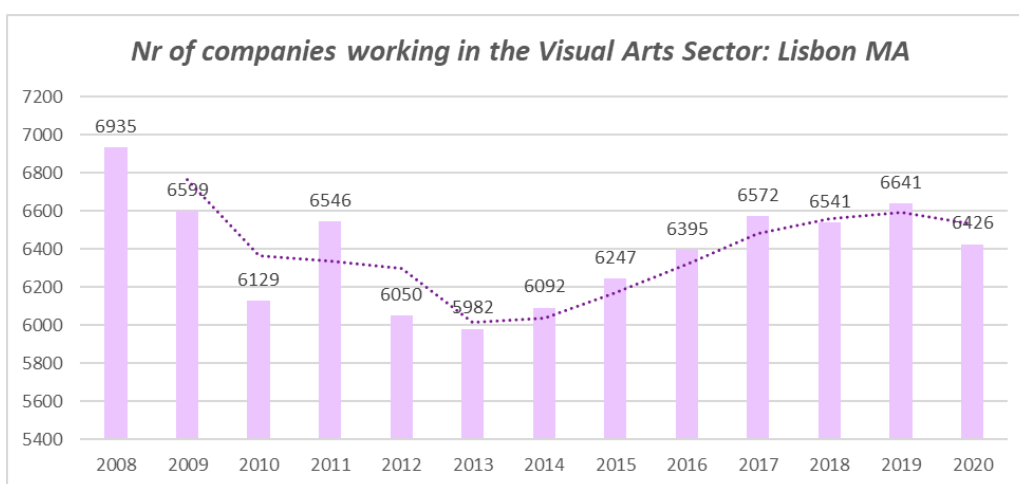


Chart 4: Number of companies working in the Visual Arts Sector based in Lisbon MA (2008-2020)

Source of Chart 2, 3 and 4: INE, Sistema de contas integradas das empresas - Empresas por Localização geográfica e Atividade económica

Between 2008 and 2010 there was a continuous decrease. Both nationally and in Oporto MA and Lisbon MA. From 2014 to 2017, there is, at a general level, a growth in the number of companies, even though 2018 was marked by a decrease at the national level and in Lisbon MA. Conversely, in the year 2018, the number of companies based in Oporto MA grew (+28). In 2019, there is a general increase of companies at all levels of analysis. 2020, marked by the Covid-19 pandemic, represents a decrease in the number of companies. At a national level, there was a decrement of 410 companies, 79 in Oporto MA and 215 in Lisbon MA.

A different point of analysis worth focusing on is understanding how these companies are distributed based on their CAE. According to INE, on a national level, the highest percentage (44%) of the companies' activities is classified according to CAE 47784 (galleries and crafts), followed by CAE 9003 (Artistic and Literary Creation) (32%) and CAE 74200 (Photographic activities) (17%). Lastly, CAE 4779 (antiques) represents 6% of the companies working in the sector

Oporto MA follows a very similar distribution. CAE 47784 represents the biggest percentage (44%) (9 p.p. above Lisbon MA), followed by CAE 9003 (29%) (14 p.p. less than Lisbon MA), 74200 (19%) (3 p.p. above Lisbon MA) and CAE 4779 (7%) (1 p.p. above Lisbon MA).

The picture is slightly different regarding Lisbon MA. In this case, the highest percentage of companies works in CAE 9003 (43%), followed by CAE 47784 (35%), CAE 74200 (16%) and CAE 4779 (6%).

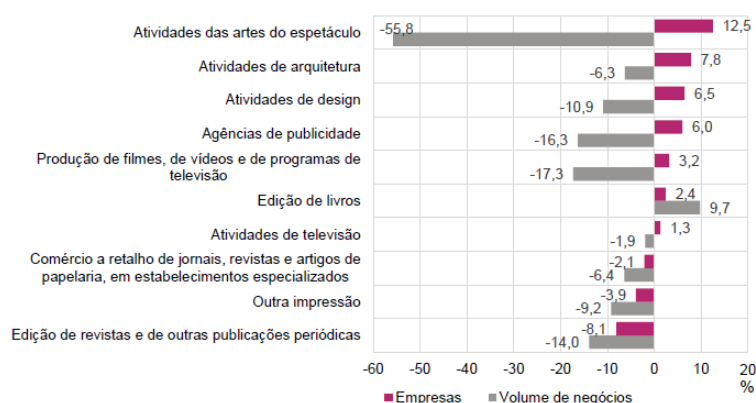
3.1.2. Business turnover

According to Estatísticas da Cultura (2021), based on Sistema de Contas Integradas das Empresas, in 2019³⁶ the total business turnover of the CCS reached 6.9 billion euros, an increase of 6.1% in relation to the previous year (p.11).

In 2019, although the majority of companies working in the CCS focused on activities of the visual (9%) and performing arts (1/4), their turnover only represented 1.2% and 5.6%, respectively, of the total turnover of the sector. (Estatísticas da Cultura, 2021, p.54)

Figure 5 provides a general overview of the business turnover of the activities of the CCS (provisional numbers). This indicator suffered a decrease in every domain of activity, except for book editions (+9.7%) (p.55).

Gráfico 3.1: Variação anual do número de empresas e volume de negócios de algumas atividades do sector cultural e criativo (%), 2020



Fonte: INE, I.P., Sistema de contas integradas das empresas

Figure 4: Annual variation of the number of companies and business turnover of the cultural and creative sector activities

Source: Estatísticas da Cultura (2021), p.55

Looking specifically at the Visual Arts business turnover, in 2020, according to INE, the sector produced a total of 1 632 813 638€.

³⁶ The total business turnover of the cultural and creative activities in reference to 2020 is not available.

The proportion of Business Turnover in relation to the national level (%)							
	2008	2009	2010	2011	2012	2013	2014
North Region	29,01	29,42	29,85	30,01	29,78	29,29	29,92
Oporto MA	16,08	15,85	16,10	15,50	15,32	14,99	No info CAE 9003
Lisbon MA	46,69	31,87	31,75	31,63	33,43	34,55	34,34
OpMA + LMA	62,77	47,72	47,86	47,13	48,75	49,54	-
North Region	2015	2016	2017	2018	2019	2020	
Oporto MA	31,43	32,76	32,41	32,75	33,28	35,05	
Lisbon MA	15,96	16,79	18,17	18,99	20,32	21,24	
OpMA + LMA	33,47	32,73	33,96	34,49	34,69	30,81	
North Region	49,43	49,52	52,13	53,48	55,01	52,05	

Table 21: Visual Arts business turnover in proportion to the national level (2008-2020).

Source: INE - Sistema de contas integradas das empresas: Volume de negócios das empresas por Localização geográfica e Atividade económica.

Looking in particular at the percentage of the Visual Arts sector's turnover produced by Oporto MA and Lisbon MA, and according to INE, it is possible to conclude that these two areas generate more than half of the sector's turnover (52.05%). In 2020 Oporto MA was responsible for 21.24% (whereas the North Region concentrated 35.05%) and Lisbon MA for 30.81%.

Looking in particular at the percentage of the turnover of the Visual Arts sector produced by the Oporto MA and Lisbon MA, it is possible to conclude that these two areas generate more than half of the sector's turnover (52.05%). In 2020 Oporto MA accounted for 21.24% (while the North Region concentrated 35.05%) and Lisbon MA for 30.81%.

Chart 5, based on INE, illustrates the evolution of turnover in the Visual Arts sector between 2008 and 2020 at national level and in relation to Lisbon and Oporto MA. At national level, 2009 registers a decrease that lasts until 2012. In 2014 the value rose, continuing this tendency until 2019. The following year marks a decline in all levels of analysis.

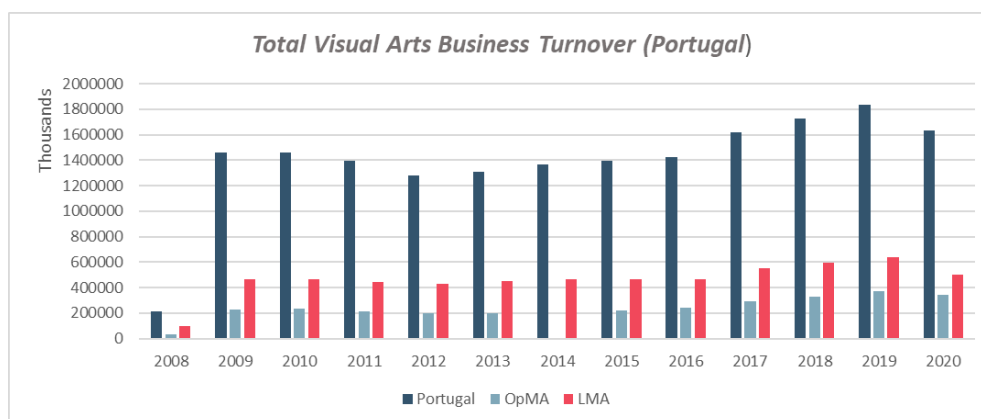


Chart 5: Total of the Visual Arts business turnover (2008 – 2020)

Source: INE - Sistema de contas integradas das empresas: Volume de negócios das empresas por Localização geográfica e Atividade económica.

3.1.3. Gross value-added (GVA)

The gross value-added (GVA) represents the “wealth created through production, after deducting the value spent with services and raw materials necessary to the production process” (PORDATA)³⁷. This indicator, according to INE and illustrated in Chart 6, decreased from 2008 to 2012 on a national level. The contrary happened from 2013 onwards. 2020, the most atypical year, reflects a decline.

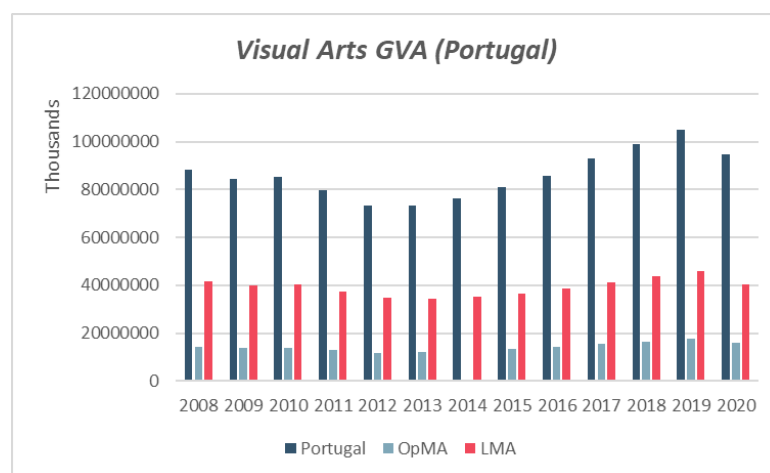


Chart 6: Visual Arts Gross Value-added (2008-2020)

Source: INE - Sistema de contas integradas das empresas: Valor acrescentado bruto das Empresas por Localização geográfica e Atividade económica.

The proportion of Visual Arts Gross Value-Added in relation to the national level (%)							
	2008	2009	2010	2011	2012	2013	2014
Norte	26,47	26,69	26,91	27,03	27,37	28,33	28,52
OpMA	16,13	16,18	16,10	16,12	16,06	16,44	no info 9003
LMA	47,34	47,21	47,31	47,18	47,48	46,77	46,21
LMA + OpMA	63,47	63,39	63,42	63,30	63,54	63,22	
Norte	2015	2016	2017	2018	2019	2020	
OpMA	28,67	28,86	28,93	29,08	29,36	30,32	
LMA	16,39	16,52	16,61	16,66	16,86	17,11	
LMA + OpMA	45,28	44,83	44,35	43,99	43,81	42,85	
	61,67	61,35	60,96	60,65	60,66	59,95	

Table 22: Visual Arts Gross Value-added in proportion to the national level (2008-2020)

³⁷ Translated from PORDATA, based on INE: “O valor acrescentado bruto (VAB) é a riqueza gerada na produção, descontando o valor dos bens e serviços consumidos para a obter, tais como as matérias-primas” (Fundação Francisco Manuel dos Santos, n.d.).

Source: INE - Sistema de contas integradas das empresas: Valor acrescentado bruto das Empresas por Localização geográfica e Atividade económica.

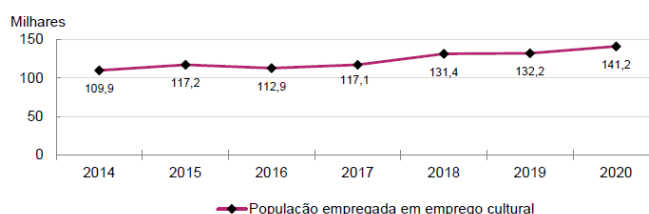
According to INE, and as illustrated in Table 22, in 2020 Lisbon MA was responsible for the highest share (42.85%) of the sector GVA. The North Region represented 30,31% and Oporto MA 17,11%. It is interesting to reflect that, in total, Oporto MA and Lisbon MA accounted for more than 60% of the sectors' GVA (except for 2020: 60%).

3.1.4. Number of employees

When it comes to cultural employment, according to Estatísticas da Cultura (2021), based on “Inquérito ao Emprego” (INE), in 2020 there were a total of 141.2 thousand people working in the cultural and creative sector. The lowest number registered was in 2012 (103.9 thousand employees) (p.46). The economic crisis that lasted from 2010 to 2013, justifies these numbers, as in 2013 the rate of unemployment rose to 17.1% (Reis et al., n.d.).

Accordingly, in 2020 the total of cultural employees represented 2.9% of the total employment (p.46). This number has been relatively steady, varying between 2.6 and 2.9 from 2016 to 2019. As Figure 6 illustrates, the last four years have been of growth, after a decrease of 4.3% p.p between 2015 and 2016.

Gráfico 2.1: População empregada em emprego cultural (N.º), 2014-2020.



Fonte: INE, I.P., Inquérito ao emprego

*Figure 5: Cultural Employment
Source: Estatísticas da Cultura, 2021, p.46*

2019	Nr enterprises	Nr people at service	Expenditures on employees (1000 Euros)	Business turnover (1000 Euros)	Gross Value-added (1000 Euros)
North	18429	35472	378038	1772759	625325,753
Lisbon MA	27877	-	-	-	-
Portugal	65514	120092	1405680	6945154	2507686,635

Table 23: Visual Arts number of enterprises, employees, expenditures on employees, business turnover and Gross Value-added (CAE 9003 and 7420)

Source: Estatísticas da Cultura (2021), attached excel document - table 3.1.2, based on Sistema de Contas Integradas das Empresas (INE)

As Table 23 illustrates, according to Estatísticas da Cultura (2021) and considering CAE 7420 and 9003, in 2019 there were 35 472 people employed (29.54% of the total of the CCS employees) in the North Region. This region invested 378 038 000€ in wages (26.89% of the total money invested in expenses with employees of the CCS). On the other hand, Lisbon MA concentrated 42.55% of the total cultural and creative companies and 9 448 more enterprises than the North Region. EC does not provide the number of people working in the cultural and creative field nor the amount of money invested in salaries for Lisbon MA, hampering a comparison between regions regarding these indicators.

9003: Artistic and Literary Creation				
2019	Nr enterprises	Nr people at service	Expenditure on employees (unit: 1000 €)	Business Turnover (unit: 1000€)
North	1416	1493	1991	15135
Lisbon MA	2934	3191	8633	53662
Portugal	5926	6324	12278	84652

Table 24: CAE 9003 – number of enterprises, employees, expenditure on employees and business turnover. Source: Estatísticas da Cultura (2021), attached excel document - table 3.10.1 and 3.10.2, based on Sistema de Contas Integradas das Empresas (INE)

7420: Photographic Activities				
2019	Nr enterprises	Nr people at service	Expenditure on employees (unit: 1000€)	Business Turnover (unit: 1000€)
North	1115	1711	11017	40926
Lisbon MA	1057	1313	6900	26671
Portugal	3191	4399	23920	87137

Table 25: CAE 7420 – number of enterprises, employees, expenditure on employees and business turnover. Source: Estatísticas da Cultura (2021), attached excel document - table 3.8.2, based on Sistema de Contas Integradas das Empresas (INE)

Looking individually at the Visual Arts CAE represented in Estatísticas da Cultural (2021), in 2019, 3.66% (North Region: 1.42%; Lisbon MA: 1.09%) of the cultural employees worked in companies related to photographic activities (CAE 7420) and 5.3% (North Region: 1.24%; Lisbon MA: 2.66%) to artistic and literary creation (CAE 9003).

As for the North Region, the companies related to photography employed 38.90% (1 711) of the people working in this domain. A percentage of 10.32 p.p. above Lisbon MA (29.84%). When it comes to companies of artistic and literary creation, they employed 23.61% (1 493) of the total employees (26.85 p.p. below Lisbon MA (50.49%).

In terms of money invested in wages, the North Region was responsible for 46.06% of the national expenses with employees (+ 17.22 p.p. than Lisbon MA) regarding CAE 7420. As for CAE 9003, the North Region accounted for 16.21% of the sector's expenses with employees, whereas Lisbon MA invested 70.30% (+54.09 p.p).

Taking these numbers as a reference, it is possible to affirm that concerning CAE 9003, both the North Region (1,05) and Lisbon MA (1,09), employed, on average, 1 person per company. The same happened on a national level (average of 1.07). As for CAE 7420, the North Region employed, on average, 2 people per company (1.53). The country's (1,38) and Lisbon MA (1.24) average of employees was 1.

3.1.5. International market

According to Estatísticas da Cultura (2021), since 2016 the values of importations of cultural goods have always been higher than exportations. Even so, 2016 and 2020 mark the lowest difference between these two variables (deficit of 16 015€ and 183 431€, respectively). (p.94)

According to Quadro Resumo (p.38), the total exports of cultural goods represented 0.31% of the country's total exports in 2020. This number has ranged between 0.29% and 0.33% from 2016 to 2020, never reaching a percentage superior to 1%.

CULTURAL GOODS EXPORTATION	Unit	2020	2019	2018	2017	2016
Total	1000 €	168 763	195 415	167 956	180 097	148 936
<i>In total percentage of goods exportations</i>	%	0,31	0,33	0,29	0,33	0,30

Table 26: Cultural goods exportation

Source: Estatísticas da Cultura (2021), Quadro Resumo (p.38), based on INE, I.P., Comércio Internacional (versão de 9-09-2021)

When looking at cultural goods imports, in 2020, the percentage of cultural goods in relation to the countries' total imports was 0.52% (352 194 000€). The number ranged between 0.51% and 0.55%, with 2017 representing the highest percentage (0.54) and 2016 the lowest (0.51).

CULTURAL GOODS IMPORTATION	Unit	2020	2019	2018	2017	2016
Total	1000 €	352 194	424 293	417 469	376 883	311 951
<i>Int total percentage of goods importations</i>	%	0,52	0,53	0,55	0,54	0,51

Table 27: Cultural goods importation

Source: Estatísticas da Cultura (2021), Quadro Resumo (p.38-39), based on INE, I.P., Comércio Internacional (versão de 9-09-2021)

According to Quadro Resumo, EC considers photography and art objects (painting, sculpture, engravings and drawings) as products of the Visual Arts. In 2020 these two cultural goods were responsible for 7.25% of the total of cultural goods exports (photography: 0.10% and art objects 7.16%). 2016 marks the highest number of exports, ascending to 13 596 000€. On the contrary,

2019 represents the lowest number of exports, with a decrease of 381 000€ in relation to the previous year. 2020 represented an increase of 414€ in relation to 2019 (p.38).

The analysis of the international market must also encompass the antiques market and crafts, as these domains are included in our proposal for delimiting the Visual Arts sector. In 2020, these domains represented, in total, 41,52% of imports (Antiques market: 1 995 000€; Crafts: 68 079 000€). Considering these two additional domains, based on data from Estatísticas da Cultura (2021), in 2020 the Visual Arts accounted for 48.8% of total cultural goods exports (p.38).

Regarding the imports, according to Estatística da Cultura (2021), in 2020, 4.75% of the total cultural goods imports were Visual Arts products (16 756 000€). If also including crafts (25 954 000€) and antique market (2 050 000€), then 11.86% of the total cultural goods imports in 2020 were visual arts products (Estatísticas da Cultura – Quadro Resumo, p.38 - 39).

According to Estatísticas da Cultura (2021), in 2020 the European Union (EU 27) was the main origin (82,5%) and destination (65,3%) of these goods (p.95).

3.1.8. Galleries and other exhibition spaces: Estatísticas da Cultura

Estatísticas da Cultura (2021) dedicates Chapter 7 to the Visual Arts, providing an overview of key indicators such as the number of exhibition spaces, works of art and authors showcased (p.139).

Accordingly, and based on the annual inquiry to the Art Galleries and Other spaces of temporary exhibition (INE), in 2020, Portugal was composed of 831 spaces classified as art galleries or exhibition spaces (p.140). As Chart 7 illustrates, the number has been steady since 2013. The most noticeable increase happened from 2012 to 2013 (+247). There are two decreases: one from 2018 to 2019 (-34); and the biggest since 2016 from 2019 to 2020 (-158).

As of their geographic distribution (2020), 27.08% (total 225) of these galleries were in the North Region, whereas 26.59% were based in Lisbon MA (total 221). Therefore, the North Region and Lisbon MA differed in 4 galleries/ exhibition spaces.

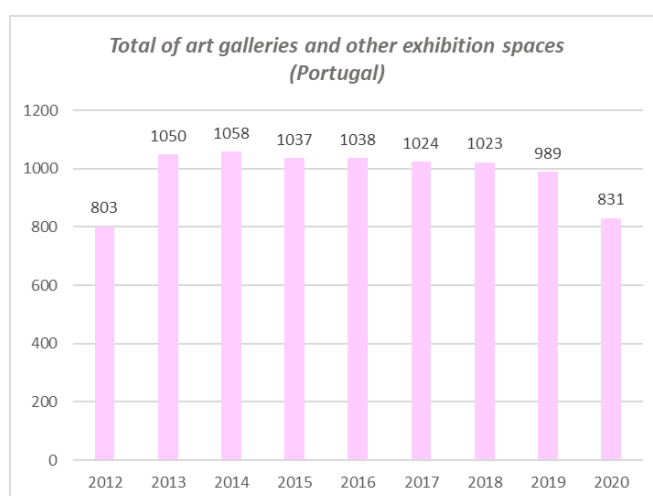


Chart 7: Number of art galleries and other exhibition spaces on a national level (2012 – 2020)

Source: Estatísticas da Cultura (2021): attached excel document - table 7.1.1, based on INE, I.P. - Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporárias

The majority of the exhibition spaces in the country, in reference to 2020, assumed a not-for-profit nature (92%). The parcel of the exhibition spaces for-profit (8%) was predominantly composed of commercial art galleries (52) rather than other exhibition spaces (12).

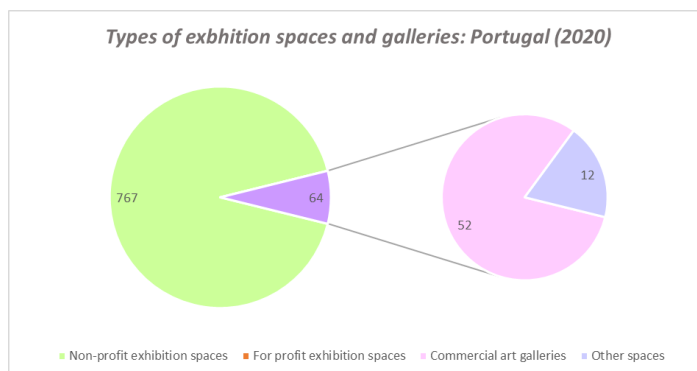


Chart 8: Type of exhibition spaces and galleries on a national level

Source: Estatísticas da Cultura (2021), attached excel document - table 7.1.3, based on INE, I.P. - Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporárias

Focusing on the North Region, 94% of exhibition spaces in 2020 were not-for-profit driven (14p.p. more than in Lisbon metropolitan area). Only 6% of these spaces assumed a for-profit nature - 11 commercial art galleries and 2 other exhibition spaces.

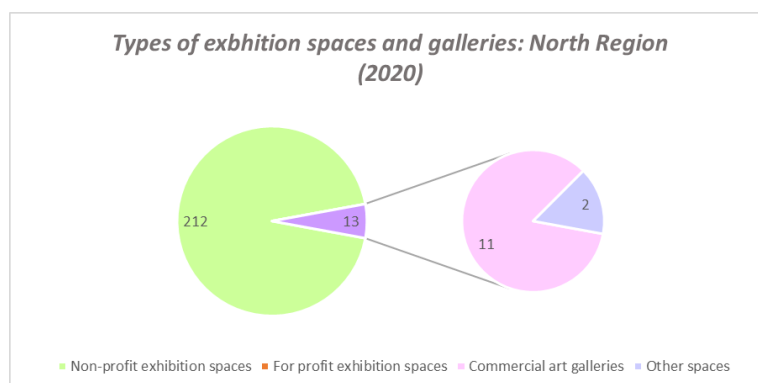


Chart 9: Type of exhibition spaces and galleries located in the North Region

Source: Estatísticas da Cultura (2021), attached excel document - table 7.1.3, based on INE, I.P. - Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporárias

As for Lisbon MA, 82% of the exhibition spaces in 2020 were not-for-profit, whilst 18% were for-profit. Amongst the for-profit exhibition spaces, 35 were commercial art galleries (24 more than in the North Region) and 5 assumed another form of typology.

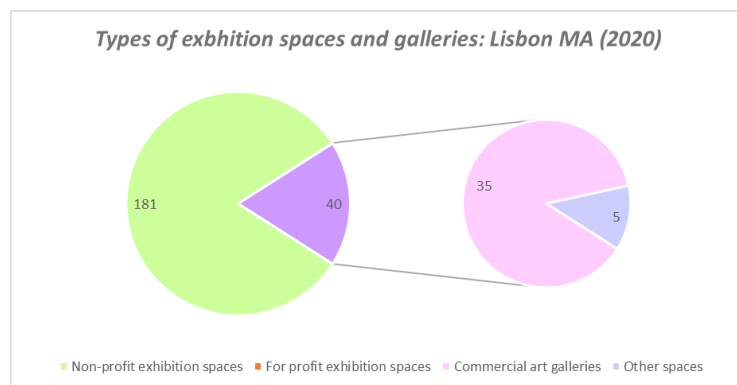


Chart 10: Type of exhibition spaces and galleries located in Lisbon MA

Source: Estatísticas da Cultura (2021), attached excel document - table 7.1.3, based on - INE, I.P. - Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporárias

It is also interesting to reflect on the types of infrastructures in which these activities took place. According to the provided data regarding 2020, most of exhibition spaces were located in museums (32, 31%), followed by buildings/ own spaces (29.60%) and libraries (15.04%).

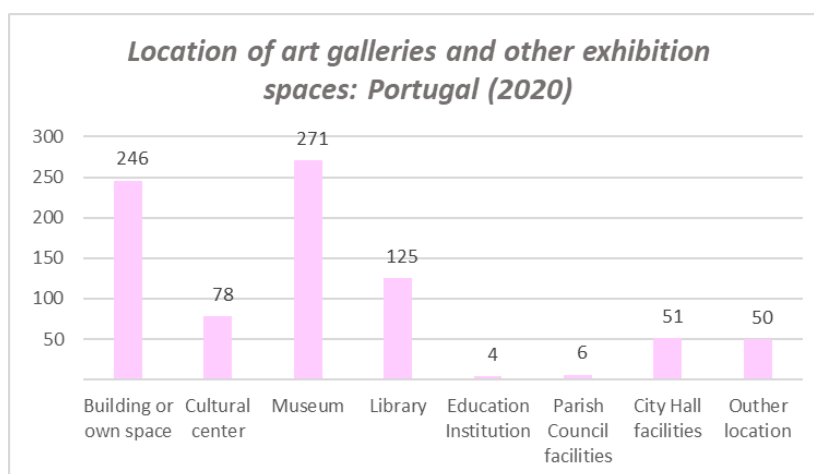


Chart 11: Location of art galleries and other exhibition spaces on a national level

Source: Estatísticas da Cultura (2021), attached excel document - table 7.1.5, based on INE, I.P. - Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporárias

As for the total of exhibitions promoted in Portugal, according to Estatísticas da Cultura (2021), 2016 registered the highest number (7731). As expected, 2020 had the lowest number of exhibitions (3748) since 2012, justified by the Covid-19 pandemic restrictions.

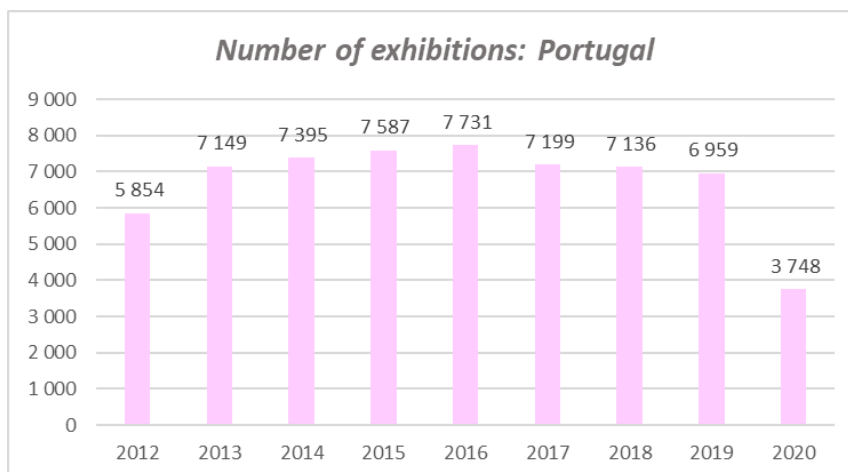


Chart 12: Total of exhibitions promoted in Portugal (2012 – 2020)

Source: *Estatísticas da Cultura (2021)*, attached excel document - table 7.1.1, based on INE, I.P. - *Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporárias*

Looking at the number of exhibitions, works of art exposed and authors represented on a national level, in 2020 there were a total of 3 748 exhibition shows, from which 2 201 were individual and 1547 collectives. Most exhibitions focused on individual artists (58.72%), whilst 41.28% focused on collectives.

Of the exhibitions promoted in the North Region, 6.36% (660) focused on individual artists, 1.67 p.p. less than Lisbon MA (58.06%), and 43.64% showcased the work of a collective (511), 74 p.p. more than in Lisbon MA (41.94%)³⁸.

It is also interesting to look at the number of exhibitions on a national level, based on the promoting entity. In 2020, 49% (1 783) of the exhibitions were promoted by local administration, 33% (1 191) by a single individual or collective person not-for-profit and 10% (364) by a single or collective person for-profit.

³⁸ The formula for Lisbon MA analysis is based on the number of collective/ individual exhibitions promoted in relation to the total of the region's exhibitions.

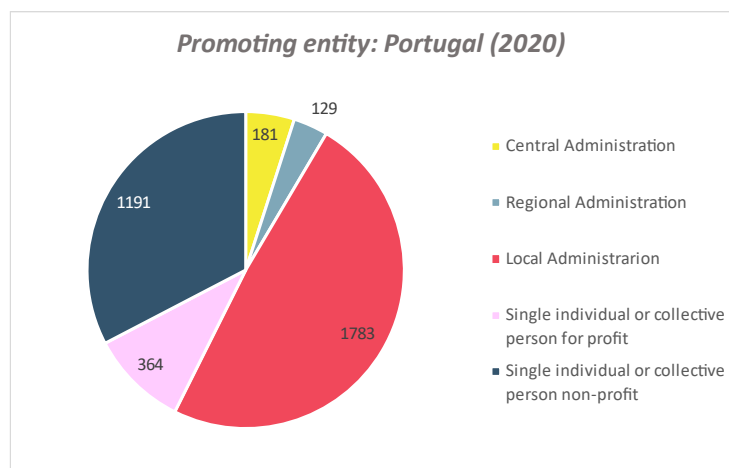


Chart 13: Type of exhibition promoting entity – Portugal (2020)

Source: Estatísticas da Cultura (2021), attached excel document - table 7.1.6, based on INE, I.P. - Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporárias

Focusing specifically on the North Region (Chart 14), local administration was responsible for the highest percentage of exhibitions (56%), followed by a single individual or collective person not-for-profit (31%). The third biggest promoters were single individual or collective person for-profit (10%). On the other hand, in Lisbon MA (Chart 15) the biggest promoters were singular or collective people not-for-profit (40%), followed by local administration (32%) and singular or collective people for-profit (19%).

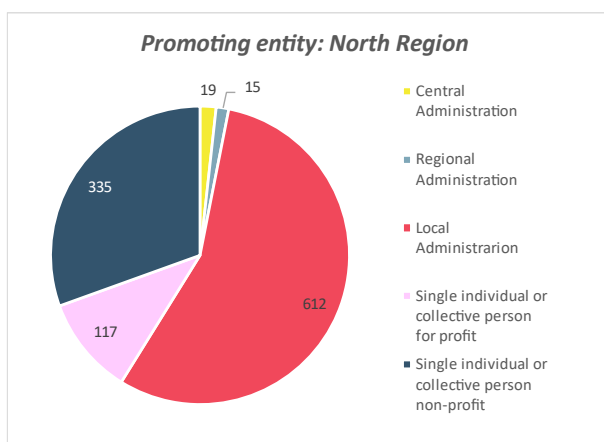


Chart 14: Type of exhibition promoting entity – North Region (2020)

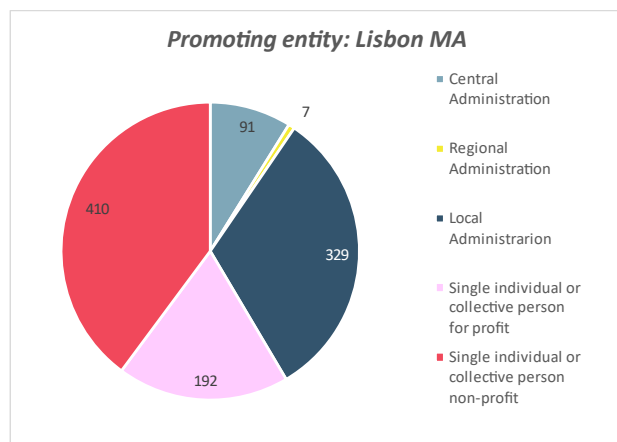


Chart 15: Type of exhibition promoting entity – Lisbon MA (2020)

Source: Estatísticas da Cultura (2021), attached excel document - table 7.1.6, based on INE, I.P. - Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporárias

Comparing the number of authors with the works of art exhibited, according to Estatísticas da Cultura (2021), the total of pieces of art showcased is always superior.

From 2012 until 2014 the number of works of art exhibited grew, decreasing from 2014 to 2015 and from 2016 to 2017. 2020 marks the most substantial difference from the previous year, as the Covid-19 Pandemic restrictions impeded the promotion of events requiring physical

presence. As for authors showcased, the number remained very similar throughout the years. 2020, once again, was the exception, representing a decrease of 25 132 authors in comparison to 2019.

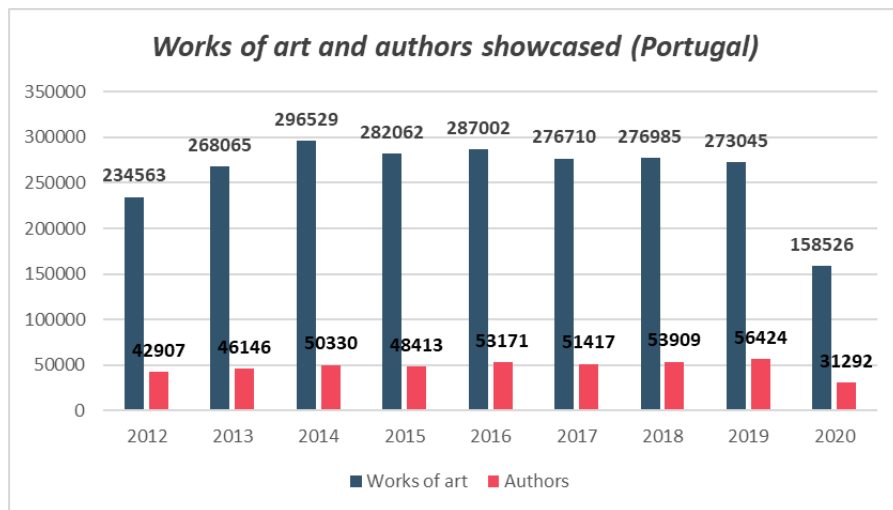


Chart 16: Total of works of art and authors showcased on a national level (2012 – 2020)

Source: Estatísticas da Cultura (2021), attached excel document table 7.1.1, based on INE, I.P. - Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporária

Estatísticas da Cultura (2021) also provides a general overview of the county in regards to the typology of the works of art featured in exhibitions. In 2020 the most represented domain was painting (16%), followed by photography (15%) and “Other” (14%).



Chart 17: Typology of works featured in exhibitions on a national level

Source: Estatísticas da Cultura (2021), attached excel document - table 7.1.1, based on INE, I.P. - Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporária

In the North Region, the most featured work was “Other” (19%), followed by Painting (14%) and Photography (13%).

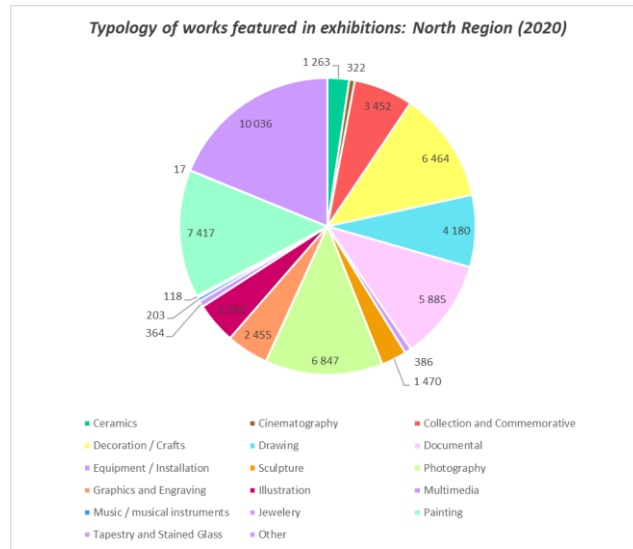


Chart 18: Typology of works featured in exhibitions – North Region (2020)

Lisbon MA placed the focus on Painting (18%), followed by Other (18%) and photography (15%).

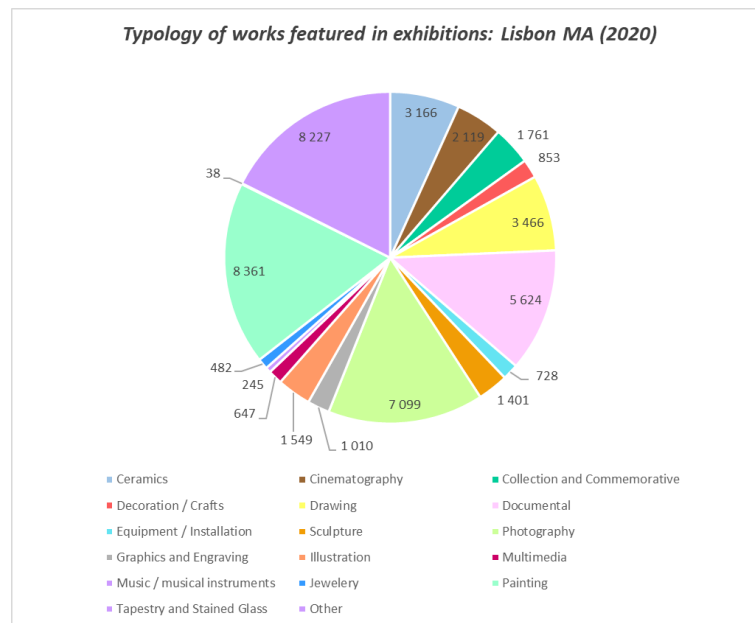


Chart 19: Typology of works featured in exhibitions – Lisbon MA (2020)

Source of Chart 18 and 19: Estatísticas da Cultura (2021), attached Excel Document - Table 7.1.1, based on INE, I.P. - Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporárias

The attached document to Estatísticas da Cultura (2021) – Table 7.1.4 also provides data on the type of work of art featured in the exhibitions, in relation to the type of exhibition space on a national level. Generally speaking, the not-for-profit exhibition spaces were responsible for showcasing 96.14% (152 413) of the total work of art exhibited in 2020. The exhibition spaces for-profit exhibited a total of 6 081 works (3.84% of the total works exhibited), of which, 4 851 pieces through commercial art galleries and 1 262 through other exhibition spaces.

In not-for-profit exhibition spaces, Photography (15%) was the most represented typology of work, followed by Painting (15%) and “Other” (14%).

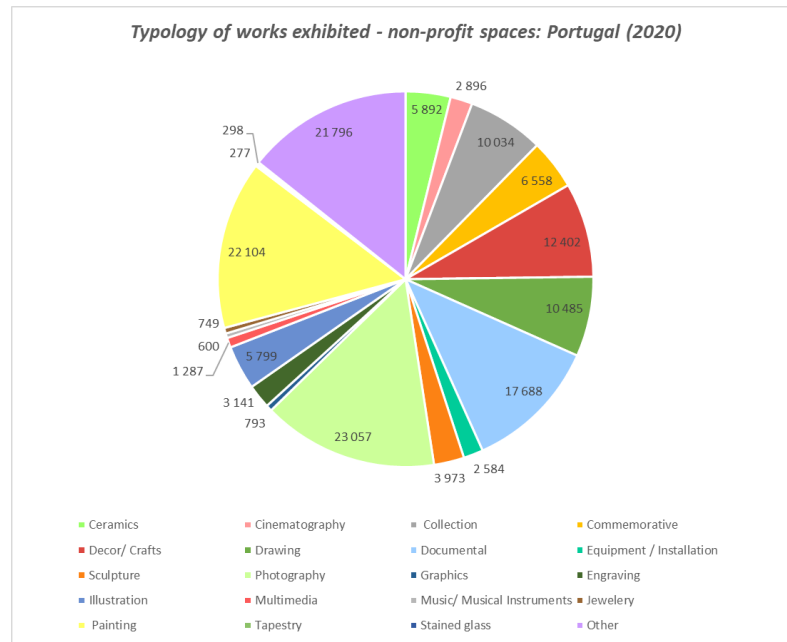


Chart 20: Typology of works of art exhibited in not-for-profit spaces on a national level (2020)

Regarding the commercial art galleries, the most exhibited work of art was Painting (60%), followed by Sculpture (10%) and Photography (7%). Other exhibition spaces for-profit highlighted Decor/ Crafts (27%), followed by Painting (19%) and Ceramics (17%). In total, the exhibition spaces for-profit prioritised Painting (52%), followed by Sculpture (9%) and Photography (7%).

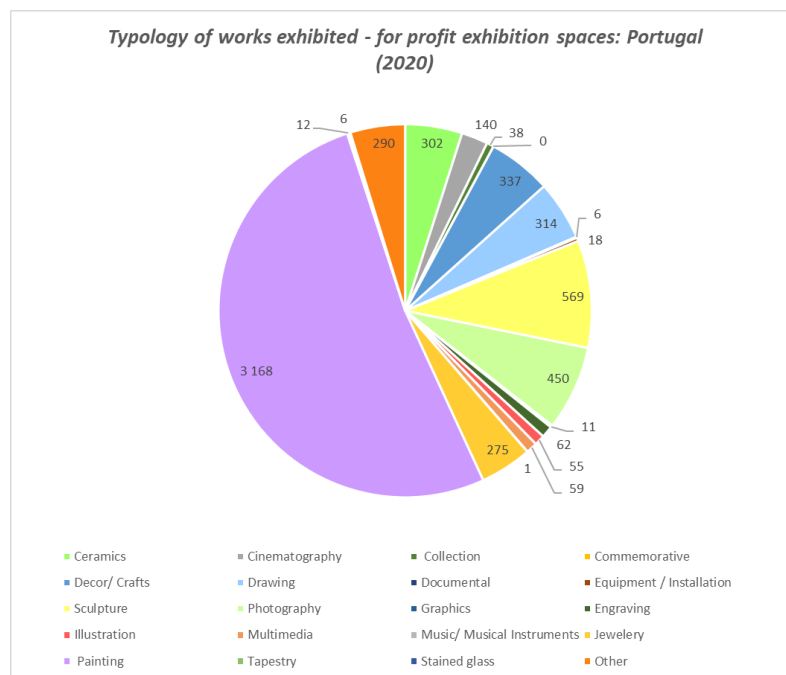


Chart 21: Typology of works of art exhibited in spaces for-profit on a national level (2020)

Source of Chart 20 and 21: *Estatísticas da Cultura (2021)*, attached excel document, Table 7.1.4, based on INE, I.P. - *Inquérito às Galerias de Arte e Outros Espaços de Exposições Temporárias*

3.1.7. Key cities: Oporto and Lisbon

The following section analyses the business turnover and the number of employees working in companies in the Visual Arts sector based on the Sabi database. The information referring to Portugal, Oporto and Lisbon was retrieved by searching through CAE 47784, 9003, 74200 and 4779³⁹. Since the study of the Visual Arts sector in Oporto implied the selection of the enterprises retrieved from SABI (Chapter 2.2), the final list of entities will also be analysed.

There were applied two types of filters for the information retrieved based on the state of the company: active companies; and active or temporarily inactive companies. For comparison, data without any filtering was also included, encompassing active, dissolved, on sale, insolvency, temporarily inactive, fusion or dead enterprises. The average of the two key indicators concerning the ten and three biggest companies of each geographic level is displayed in Table 28.

It is also important to reflect on the number of companies considered for the study from each CAE in comparison to the total of entities retrieved without selection, as this impacts the

³⁹ Data from Sabi was first retrieved on the 27th of June 2022. However, the filter first applied for the state of the company included active, acquired, temporarily inactive and companies that had suffered a fusion. As this filter would not provide a rigorous picture of the companies working in the sector, this information was updated on the 7th of September 2022, only considering active and temporarily inactive companies. As the analysis of the selected companies for the study (Oporto) had already been completed on June 27th and the remaining work would be affected, it was decided to maintain the analysis regarding these entities. Otherwise, the information on SABI would be altered as it was last updated on September 6th.

characterisation of the sector. Out of 305 active/ temporarily inactive companies working in the selected CAE, only 46 were considered for research.

Even though the decision of selecting and analysing each entity enhanced a more rigorous characterisation of the Visual Arts enterprises based in the city of Oporto, it implied decision-making and discussion between the two researchers. Ultimately, this process is subjective and not free of error. It implied managing substantial amounts of data regarding the Visual and Performing Arts and the decision of including/ excluding entities, which could have led to different results if done by other researchers.

Looking at the weight of the proposed delimitation of the Visual Arts sector and excluding the process of selection of entities from each CAE, the ten biggest companies based in Lisbon (without the process of filtering and selection) produced an average business turnover of 4 736 570€ and employed an average of 78 employees. It must be highlighted that amongst these ten companies only two are, in fact, part of the Visual Arts Sector. The three biggest enterprises were responsible for an average turnover of 6 377 821€, and employed, on average 174 people.

Focusing on the final selection of entities based in Oporto, in 2020, the ten biggest companies produced an average of 370 145€ business turnover. The top three companies, in turn, produced 533 146€. The values registered in 2020 are the lowest between 2018 and 2020 (2019: top 3: 790 519€/ top 10: 537 177€; 2018: top 3: 847 564€/ top 10: 724 084).

In terms of employment, in 2020, 2019 and 2018, the average number of employees of the ten biggest companies was 3. As for the top three companies, the average number of employees in 2020, 2019 and 2017 was 5 people.

If the process of filtering and selecting entities for each CAE had not been done, the average turnover of the companies working in the sector would ascend to 2 934 789€ (top 10) / 7 240 321 (top 3), a reality much distant from the described above. This means that measuring the economic contribution of the selected CAE to the CCS without filtering the enterprises that actually develop activities of the Visual Arts would result in an overvalued estimation. For example, CAE 47784 includes all the companies dedicated to the retail sale of new products in specialised stores, encompassing a larger number of entities besides galleries and crafts.

Contrary to what would be expected, the filtering regarding the state of the company did not affect the indicators considered.

Table 28: Average of the 10 and 3 biggest companies in terms of business turnover and number of employees

2020	Lisbon		Average of the 10 biggest companies in terms of		Average of three biggest companies in terms of		Oporto		Average of the 10 biggest companies in terms of		Average of three biggest companies in terms of		Portugal		Average of the 10 biggest companies in terms of		Average of three biggest companies in terms of	
	Nr companies	Business Turnover (€)	Nr employees	Business turnover (€)	Nr employees	Nr companies	Business Turnover (€)	Nr employees	Business turnover (€)	Nr employees	Nr companies	Business Turnover (€)	Nr employees	Business turnover (€)	Nr employees			
Active	669	4736570	78	6377821	174	274	2934789	31	7240321	71	4835	22191600	230	46528327	482			
Active, Temporarily Inactive	860	4736570	78	6377821	174	351	2934789	31	7240321	71	6159	17659980	230	43269886	482			
No filter*	1652	4736570	78	6377821	174	642	2934789	31	7240321	71	11505	22191600	230	46528327	482			
						Selected entities for the study (based in Oporto)**												
						46	370145	3	644993	5								

*No filter: Active, Dissolved, On sale, Extinct, Acquired, Legally closed, Insolvency, Temporarily inactive, Fusion, Dead

Proportion nr of companies in relation to national level (%)		
Filter	Lisbon	Oporto
Active	13,8	5,67
Active, Acquired	13,96	5,70
No filter	14,36	5,58
		Selected entities for the study (based in Oporto)**
		0,7*

*0.7% in relation to the number of Active, Acquired, Fusion, and Temporarily Inactive companies on a national level

**The search for the selected entities for the study based in Oporto, was undertaken on the 27th of June 2022.

Source: Sabi

3.2. Characterisation of the Visual Arts entities in Oporto: Questionnaire survey results

Following the structure of the questionnaire survey (Appendix 5), the first section of the analysis of results will focus on the company's characterisation, then on its activity - divided into regular activity and projects, and finally on the presence of the theme of climate change.

As mentioned before, the analysis of the five respondents whose activity relates to CAE 85520 was done separately and corresponds to the last paragraph of each of the following sections.

3.2.1. Company's characterisation (Q3 - Q21)

Looking at the geographic distribution of the 19 studied companies working in the Visual Arts sector, the parish of Bonfim (6) concentrates the highest number of enterprises, followed by Santo Ildefonso (4), Cedofeita (3) and Massarelos (2). The remaining entities are distributed across Lordelo do Ouro (1), Paranhos (1), Ramalde (1) and Miragaia (1).

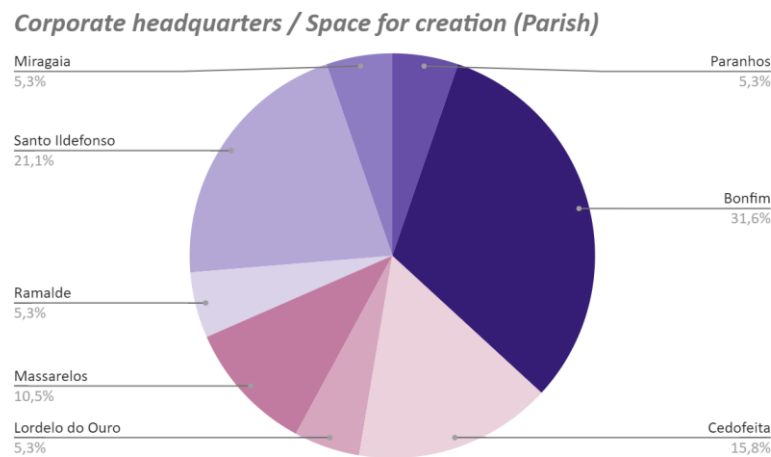


Chart 22: Location of the company's headquarters by Parish

According to Câmara Municipal do Porto (n.d.) website, an administrative restructuring of the municipality took place in 2013, merging some of the parishes. This gave origin to three unions of parishes: Parish Union of Aldoar, Foz do Douro and Nevogilde; Parish Union of Cedofeita, Ildefonso, Sé, Miragaia, São Nicolau and Vitória; and Parish Union of Lordelo do Ouro and Massarelos. After this procedure, Oporto Municipality was divided into seven parishes.

Considering this reorganisation, the Parish Union of Cedofeita, Santo Ildefonso, Sé, Miragaia, São Nicolau and Vitória concentrate the highest number of companies (8), followed by Bonfim (6) and the Parish Union of Lordelo do Ouro and Massarelos (3). The remaining companies are based in Paranhos (1) and Ramalde (1).

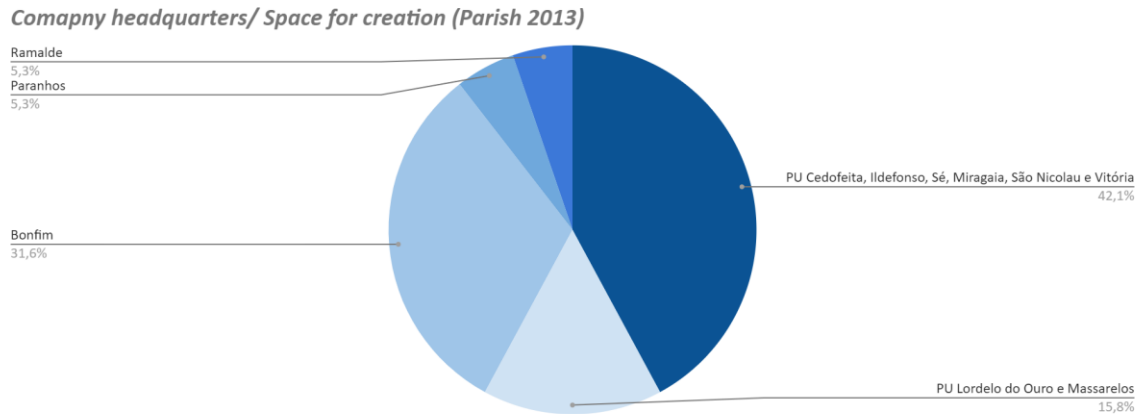


Chart 23: Location of company's headquarters by Parish (after the administrative reorganization)

If CAE 85520 (Cultural Education) had been considered as Visual Arts and therefore included five additional entities to this study's sample, this distribution would be reinforced, as three of the respondents are based in Bonfim, one in Cedofeita and one in Aldoar. Having the 2013 reorganisation in consideration, then three of them are based in Bonfim, one in the Parish Union of Cedofeita, Ildefonso, Sé, Miragaia, São Nicolau e Vitória and one in the Parish Union of Aldoar, Foz do Douro and Nevogilde.

In terms of structure (Q5), the majority of the companies studied are not integrated or represented by other entities (78.9%). The remaining entities (21.1%) are represented by galleries (the case of one visual artist) or cultural associations.

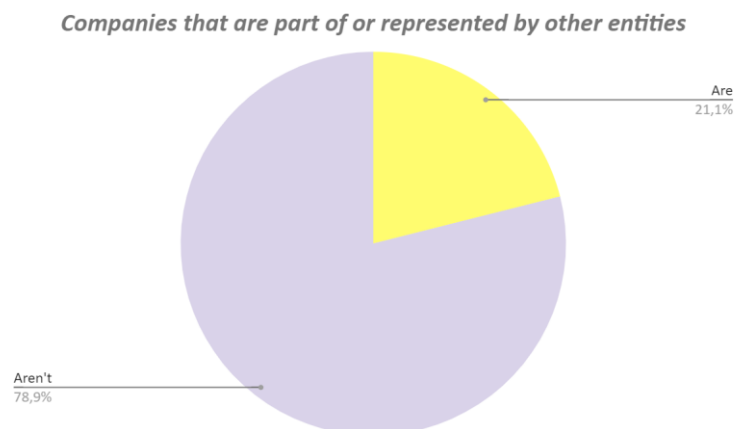


Chart 24: Company's structure

When it comes to the typology of companies (classification based on eportugal.gov.pt, n.d.) (Q9), the sample is mostly composed of Individual Company: Sole proprietorship by shares (5), followed by Collective Company: Association (4) and Collective Company: Private Limited Company (3) and Individual Company: Individual Entrepreneurs (3). The remaining companies are Individual Company: Individual Limited Liability Establishment (1), Collective Company: Public Limited Liability Company (1). Two of the respondents were classified as Other (one is

a shared space/ atelier/ studio, not a company; and the other defines itself as an artistic project, not a company).

Of the five excluded entities focused on Cultural Education, two are Singular Companies: Individual Entrepreneurs, one is an Collective Company: Association, one a Collective Company: Private Limited Company and the remaining company is a Collective Company: General Partnership.

Focusing on the companies' longevity (Q10), half of the companies that replied to this question are established in the market for over 10 years, followed by companies created between 5 and 10 years ago (16.7%). This means that the majority of respondents are more mature.

Of the five entities related to CAE 85520, three are situated between 5 - 10 years and the other two are above 10 years old.

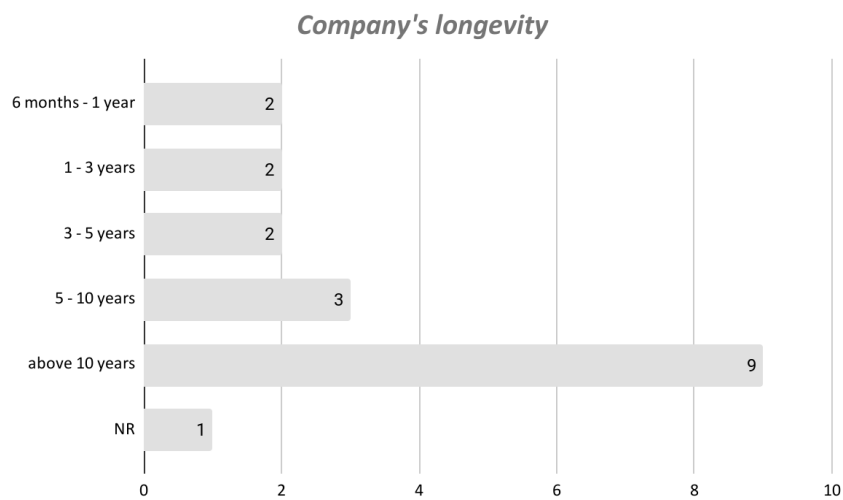


Chart 25: Company's longevity

It is also interesting to reflect that since the beginning of the Covid-19 Pandemic in Portugal (March 2020), four companies have been created (6 months - 1 year; 1 to 3 years). The most present domains among these companies were Painting (4), Sculpture (4) and Photography (4). There were other domains referred to, categorised as "Other", namely: illustration, design, and contemporary art/ disciplinary crossings.

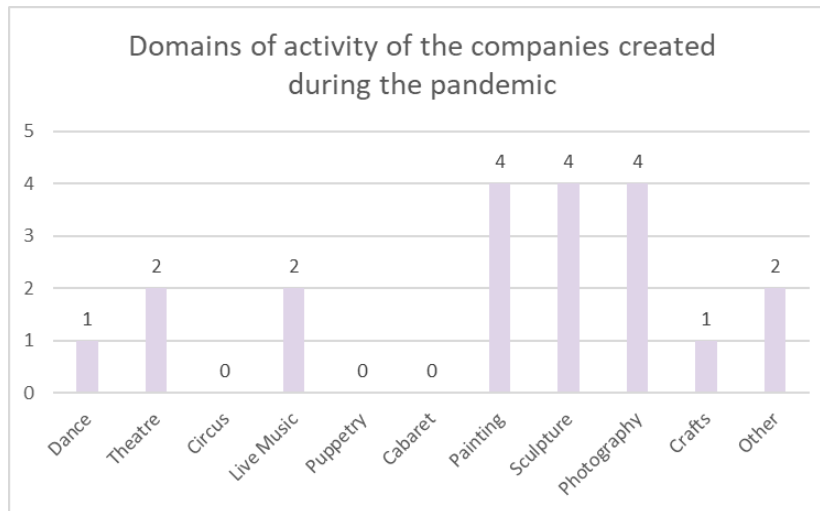


Chart 26: Companies created during the pandemic – domains of activity

Looking at the whole sample (19 respondents), when it comes to the company's area(s) of activity (Q11), the most frequently mentioned was Photography (89.47%), followed by Painting (84.21%) and Sculpture (78.95%).

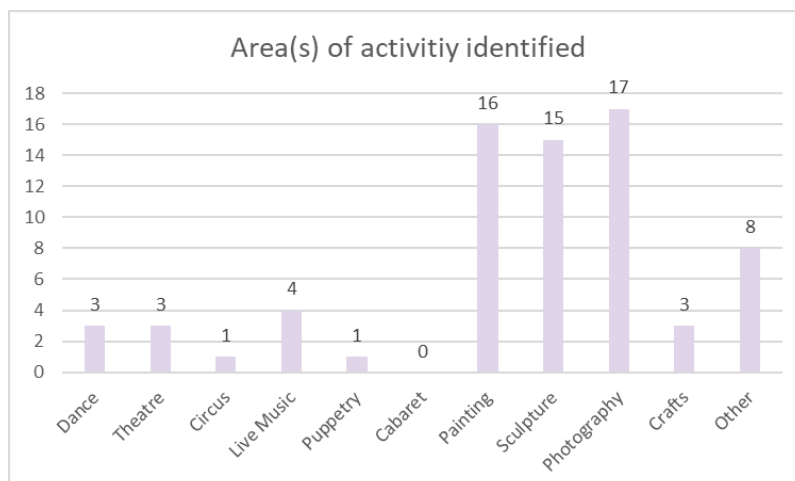


Chart 27: Company's area of activity

On average there were identified four areas of activity, as 89.47% (17) of the respondents identified more than one area. This means that, out of 19, only two entities (10.53%) specialise in one area of activity. In this case, they both focus on Photography.

Looking at the areas identified by each entity, Sculpture, Photography and Painting were simultaneously mentioned, among other areas, by 79.68% (14) of entities. The remaining, although not mentioning these three areas altogether, still identify Photography (3), Painting (1) and Painting and Sculpture simultaneously (1). Therefore, the majority of respondent entities opt to diversify, working on more than one area of activity.

It is also relevant to understand how these domains of activity spread throughout the city and where they are most strongly concentrated. As mentioned before, the parish of Bonfim concentrates the highest number of companies working in the Visual Arts, also making it the most diverse in terms of artistic domains. The entities whose main activity relates to Painting (5), Sculpture (5) and Photography (5) are mostly concentrated in Bonfim. The parish of

Cedofeita is essentially composed of companies working in Painting (3), Sculpture (3) and Photography (3). In the case of Santo Ildefonso, it is mainly composed of entities dedicated to Photography (4), followed by Sculpture (3) and Painting (3). Crafts are present both in Bonfim (1) and Cedofeita (1).

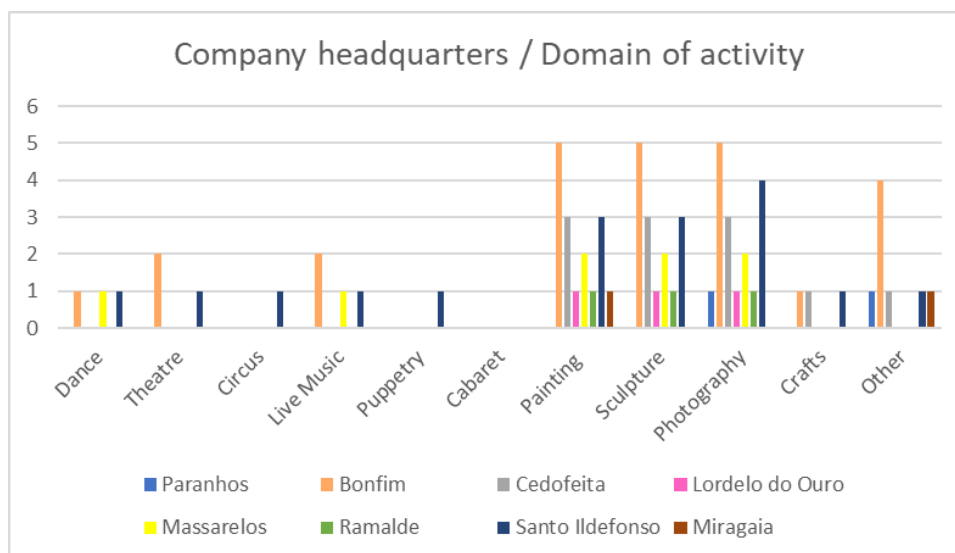


Chart 28: Company's headquarters per domain of activity

Among the enterprises whose main activity relates to Cultural Education, Painting was referred to by every entity. Drawing was the second most mentioned domain (3), followed by Sculpture (2). Photography was also mentioned (1). Classified as Other there were also mentioned porcelain painting (1), plastic arts for children (1), art history (1). Not considered a domain of activity, but an activity itself, painting and drawing courses (1) and exhibition space (1) were also mentioned.

Additional to the identification of the area(s) of activity, entities were asked to describe how frequent each CAE of the performing and visual arts was practised (Q12). This question had two main goals: to understand how the companies classified their activity; and to verify the adequacy of information previously searched on SABI/ directories for defining the company's activity. Since this was a multiple-choice type of question, a complementary open question was also included: "If applicable, add other classification to the company's activity" (Q13).

This question had one flaw. It did not include CAE 4779, corresponding to antiques market (Visual Arts), which could invalidate the analysis of this question. Even so, as none of the respondents had a focus on antiques and this activity was not referred to in the open-answer field for the identification of other non-represented CAE (Q13), it was considered that this default would not affect the results.

The following table illustrates the frequency of each CAE:

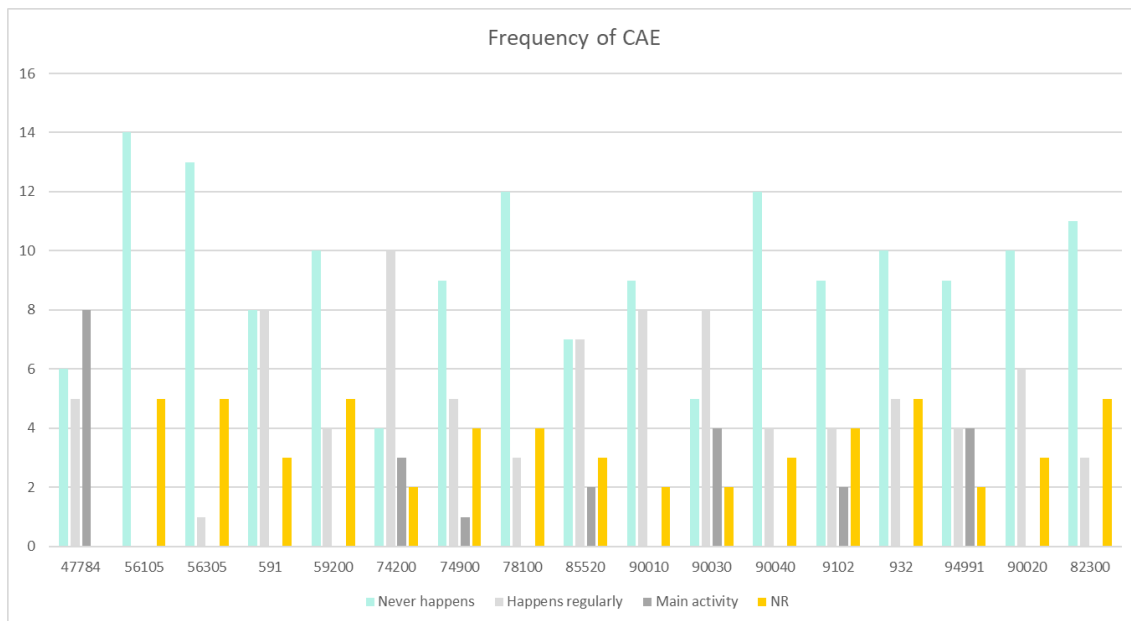


Chart 29: Company's CAE frequency

Amongst all classifications, CAE 47784 - the activity of galleries (8) was the most referred to as the respondents' main CAE. CAE 9003 - Artistic and Literary Creation (4) and 94991 - activities of Cultural or Recreational Associations (4) were the second most frequently selected as the main CAE. CAE 74200 - Photographic activities (3) was the third most mentioned main classification. Amongst the respondents, 47.37% identified more than one main CAE.

There were other CAE that, although not considered as part of the Visual Arts (Chapter 2.1), were also mentioned as the company's main activity. CAE 9102 - Museums activities and 85520 – Cultural education were referred by two entities each. One of the entities identified CAE 74900 - Artist's agency. Even so, enterprises were still considered suitable for the study if they included other main CAE related to the Visual Arts, described an activity of the Visual Arts in the Q13, or resulted in an entity originally retrieved from SABI that corresponded to the Visual Arts CAE.

It is important to note that six of the entities did not identify any main CAE. This might be justified by the difficulty in defining and delimiting the Visual Arts sector's activity. From this group, only one entity also fulfilled the field "Other CAE, if applicable" (Q13), describing its activity as "a not-for-profit artistic project", as well as an "artwork/ installation, gallery and performance".

Among the five entities that identified an additional classification of activity (Q13), the following activities were referred to: "Space rental for photographic/ video productions, workshops and presentations", "rental of photographic equipment", "artists' conversations and reunions", "showcasing of emergent artists", "support and development of plastic arts through exhibitions and with a focus on the city of Oporto".

As for the frequency "never happens", the most mentioned CAE were related to the Performing Arts: 56305 - Others beverages establishments, with dance floor (13 entities), 78100 - Activities of employment placement agencies (Casting of Artists) (12), 90040 - Operation of arts facilities (12), and 82300 - Organisation of trade shows, conventions and similar event (11),

59200 - Sound recording and music publishing activities (10), 9002 - Support activities to performing arts (10) and 932 - Amusement and recreation activities (10).

Regarding the frequency “happens regularly”, the three most mentioned CAE were 74200 - Photographic activities (10), followed by 591 - Motion picture, video and television programme activities (8), 90010 - Performing arts (8) and 9003 - Artistic and Literary Creation (8), and 85520 – Cultural Education (7). This selection translates to the interdisciplinarity of the entities working in the field.

Among the entities of Cultural Education CAE 47784 (1), 74200 (1) and 94991 (1) were selected as “happens regularly”. The most frequent CAE was 85520, both as “Main Activity” (3) and as “happens regularly” (1). The second most referred CAE was 90030: 1 “Main activity”, 2 “happens regularly” and 1 “never happens”. Two extra activities were described in Q13: painting and drawing lessons for children and adults and fine arts supplies store.

Moving on to the study of the company’s dimension, the following section includes the analysis of the questions regarding the enterprise’s business turnover (Q14), human resources, both employees with a contract of unspecified duration (Q15) as external human resources (Q16), and its key departments and functions (Q17).

Regarding business turnover, as Chart 30 illustrates, 31.25% of the respondents’ business turnover is between 5 000€ and 20 000€. 25% of the entities’ turnover does not exceed 5 000€. The same percentage is located between 50 000€ and 100 000€. 12.5% of companies are positioned between 20 000€ and 50 000€ and only one company⁴⁰ is situated on the scale 1 000 000€ or superior.

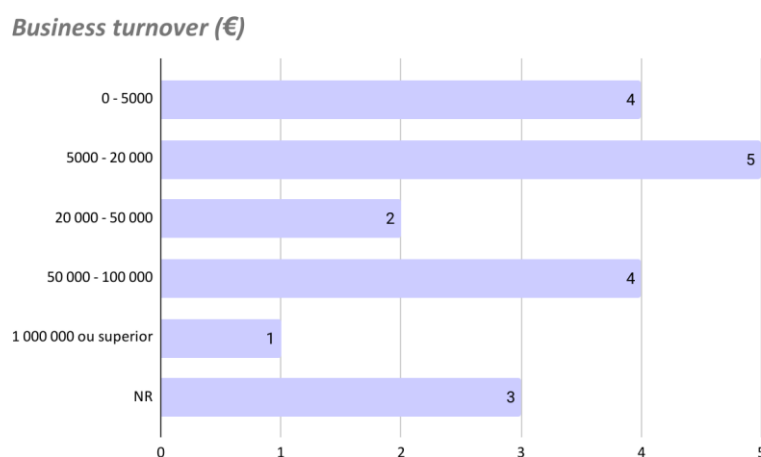


Chart 30: Company’s business turnover

It must be considered that two of the 4 companies placed on the first level of the scale are between 1 and 3 years old, meaning that their first years of business were impacted by the Covid-19 Pandemic. Even so, the other two entities created during the pandemic are already situated in the second level of the scale (5 000€ - 20 000€).

⁴⁰ As it will become clearer throughout the analysis, there is one responding entity whose dimension and dynamic are very different from the remaining companies, as the great majority is of smallest scale.

Of the five excluded companies focused on Cultural Education, two are situated on a scale from 0 to 5 000€, two on 5 000€ to 20 000€ and one on 20 000 to 50 000€.

As to the number of human resources on a contract of unspecified duration, 42,11% of the companies have no internal human resources in these conditions. The highest number of this type of human resources is 2 (31.58%), except for the entity with very distinct characteristics. This enterprise, which also presented a business turnover situated in the scale 1 000 000€ or superior, employs 95 people on a contract of unspecified duration in just one unit of the whole structure (Culture).

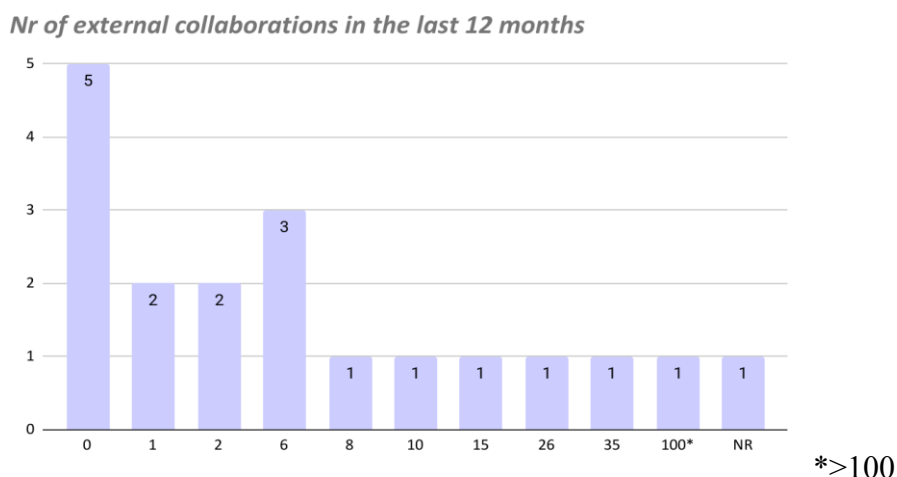


Chart 31: Human resources on a contract of unspecified duration

This means that having the entity with 95 employees in consideration, the companies of the sector employ, on average 6 (5.84) people. However, by excluding this entity, the number decreases to 1 (0.89).

On the other hand, focusing on the number of external human resources, of the 18 respondents, the majority (27.78%) of companies (5) did not acquire any external professionals in the last 12 months. 55.56% (10) of companies acquired between 1 and 15 external employees in the last 12 months. The highest number of external employees whose services were acquired was 35, except for the previously mentioned company that acquired over 100 external collaborators in the last 12 months.

Chart 32: External Human Resources



On average, 12 (12.11) external professionals collaborated with the studied companies. Excluding the company with over 100 professionals externally acquired, this number reduces to 7 (6.94).

These numbers relate to what has been previously mentioned in the Scoping Review. According to Gibson et al (2010), the creative sector encompasses “large amounts of informal and intermittent employment” (Gibson et al., 2002, Karttunen, 2001, Throsby, 2001 as cited in Gibson et al., 2010, p.33). As this constitutes, as described by Murray (2017), a dynamic sector (p.7), most professionals work with various companies, not being exclusive to one employer. Interestingly, in this case, the difference between the average of external professionals of the internal human resources is not as high as expected, only differing in one employee.

Of the five entities focused on Cultural Education, two have no human resources on these conditions and three have one employee on a contract of unspecified duration. As for external human resources, there were mentioned: 0, 1, 4, 6 and 12. This would decrease the average of external professionals to 6 (6.41) and maintain the average of internal human resources on a contract of unspecified duration in 1 (0.83) employee, without the company with over 100 external employees.

Finally, when it comes to the structure of the companies working in the Visual Arts, 93.75% (15) of the entities that answered this question (16) identified more than one department. In fact, the average number of departments identified was 5 (4.63), 4 (4.33) without the biggest company in the sample. In 56.25% (9) of cases, companies identify both Curatorship and Direction simultaneously.

The most frequent department mentioned was therefore Curatorship (13), followed by Direction (11). Programming (10), Production (9) and Maintenance (9) were also very present among the entities, alongside Communication and Marketing (8).

Company structure: key departments

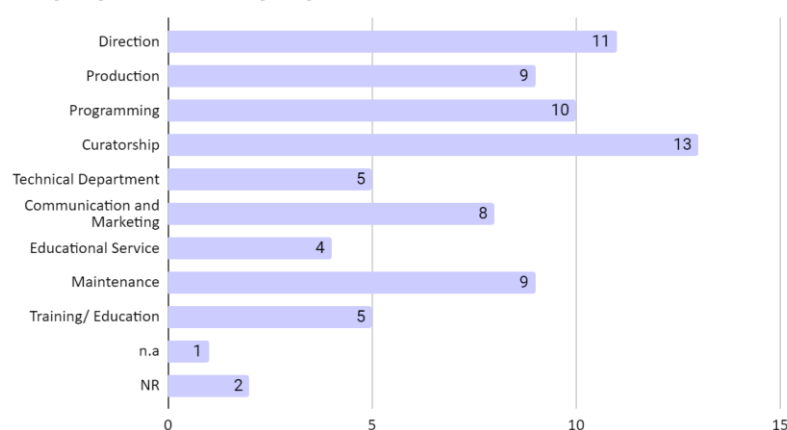


Chart 33: Company's structure

It is interesting to reflect on the fact that, not considering the biggest company in the sample, the average number of employees on a contract of unspecified duration (1) is lower than the average number of departments (4). This means that most of the companies' key departments are concentrated in one person, alongside external professionals (average of 7).

Amongst the five excluded entities of Cultural Education, Training was mentioned by every company (5), followed by Direction (3), Production (3), Technical Department (3) and Communication and Marketing (3). Programming, Educational Service and Maintenance were mentioned by 2 entities. Only one entity identified Curatorship.

Moving on to the analysis of the company's customers (Q18) and how they communicate with them (Q19), it will allow the understanding of how the sector implements its projects and artistic/ cultural activities and how it relates to the audience.

Customer segments

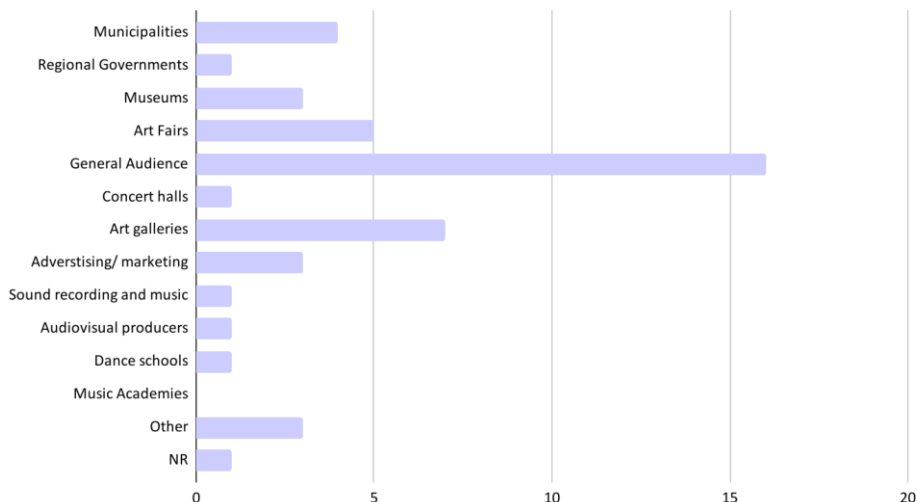


Chart 34: Company's main customer segments

As Chart 34 illustrates and based on the 18 obtained answers (1 NR), the General Audience (88.89%) is the main customer of the companies' services, activities and products. The subsequent most mentioned segments were Art Galleries (38.89%) and Art Fairs (27.78%).

Municipalities are also a relevant customer segment (22.22%). Amongst “Other” (16.67%) there were identified other companies and brands, the entity's associates and frequent contacts as well as the city’s artistic community.

On average there were identified 3 (2.78) customer segments, as 72.22% of the entities that answered this question identified more than one client segment. This translates to the necessity to diversify and serve more than one customer segment.

As for the five entities dedicated to Cultural Education, “General Audience” was a unanimous answer, mentioned by all the entities.

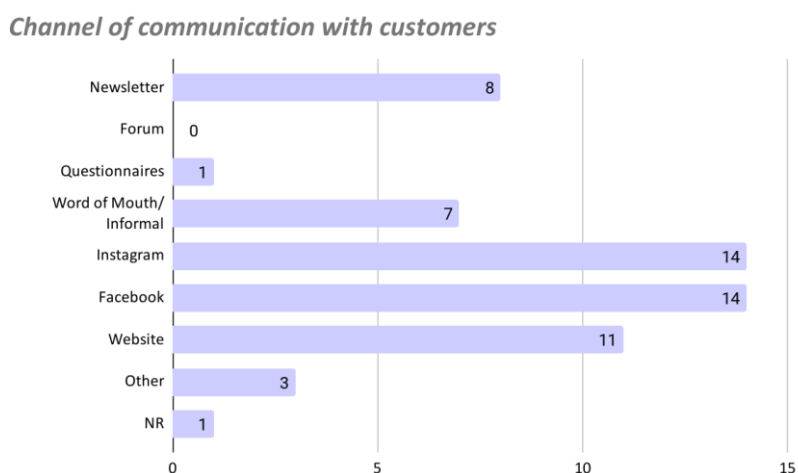


Chart 35: Company’s main channel of communication

As for the channels used to communicate with customers, social media was the most frequently mentioned means of communication (Instagram: 77.78%, Facebook: 77.78%). The company’s digital presence and own means are the general preference, as 61.11% identified having a website. In fact, 73.33% (11) of companies identified both Instagram and Facebook simultaneously and 38.88% (7) Instagram, Facebook and Website. The “Other” category includes advertising/ publicity, direct and personal approaches/ contacts and an international BD.

On the other hand, the number of companies using newsletters (8) is very close to the number of enterprises that use informal conversations (7) as their channel of communication with customers. This can be justified by the wide use of newsletters by small businesses, decreasing their efficiency and positioning in relation to the competitors⁴¹(Krisch, 2022). Informal conversations/ word-of-mouth is an important marketing tool. By experiencing the company’s services and recommending them to friends, people become ambassadors of the brand, resulting in efficient publicity⁴² (Todorov, 2021). Informal conversations with target audiences can also

⁴¹ According to Krisch (2022), based on Statista (2021), “Consumers spend an average of 10 seconds reading brand emails.”.

⁴² According to Todorov (2021), “Word-of-mouth is even more effective than paid ads, resulting in five times more sales”.

be very successful as the information disclosed is personalised and has the person's interests in consideration.

On average, there were identified 3 (3.22) channels of communication with clients, as 88.89% (16/18) of companies identified more than one channel.

Regarding the entities whose activity is included in CAE 85520, the channels of communication used are very similar to the analysed sample. The two most mentioned were social media (Instagram: 5; Facebook: 5), a transversal choice to all the companies, followed by Website (4). Newsletter was mentioned by three entities and informal conversations by two. One of the entities focused on Cultural Education also mentioned questionnaires, which is a common procedure amongst educational institutions to evaluate the perceived quality of teaching.

Another key variable in the characterisation of companies is their values (Q20)⁴³, meaning how the enterprise positions itself on the market and consequently differentiates itself from the competition.

Company's values

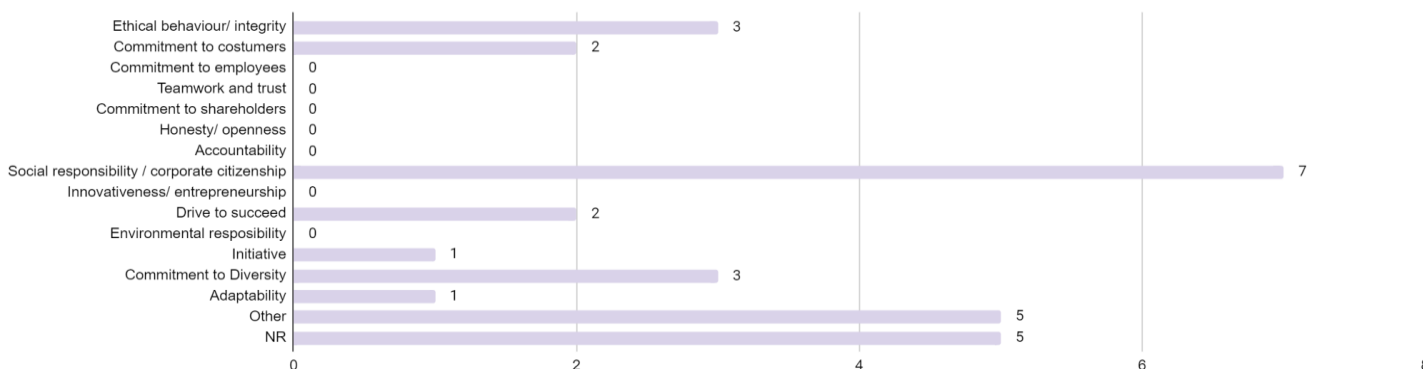


Chart 36: Company's values

Half of the entities that answer this question (7/14), identified, amongst other values, the concern with social responsibility/ corporate citizenship. Ethical behaviour/ integrity and Commitment to Diversity were also mentioned by 21% (3) of respondents. In the Other category (36%) there were described values such as "empathy", "disclosure of fine arts", "emotional", "artistic, emotional and intellectual", "emotional and educational", "ludic" and "creativity".

One of the entities answered that its values were described on its website, specifically in the section "about us": "disclosing artists and practices that are not accessible to the generalised audience" as well as "disclosing African Art, which does not cease to resist and proliferate". This can be categorised as Commitment to Diversity and Social responsibility/ Corporate citizenship (in the sense of creating new audiences and broadening access to this type of art).

In the case of the entities focused on Cultural Education, there were two non-responses to this question. There were mentioned the following answers: "financial and emotional", "dedication,

⁴³ Since Q20 was an open-answer type of question, the answers were categorised based on "Deriving Value from Corporate Values", by Kelly, Kocourek, McGaw and Samuelson (2005), p.3.

creativity, honesty and personalised teaching”, “Space dedicated to the teaching of arts to all ages” (which translates diversity and, at the same time, promotion of the arts, broadening the community of interested people and practitioners) and “strengthening of the individual’s creative and psychosocial relationships”.

The final question regarding the companies’ characterisation focused on their opening dynamics (Q21) and had one non-response. The great majority assume a permanent activity (14). The remaining dynamics spread homogeneously, as two of the entities assume to have a seasonal opening periodicity (artistic studio and gallery) and the other two a sporadic (individual artist and artistic project).

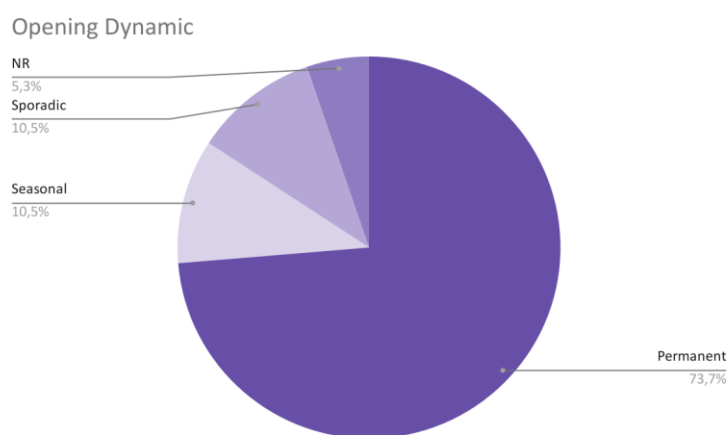


Chart 37: Company’s opening dynamics

The five entities dedicated to Cultural Education assume a dynamic of permanent opening.

3.2.2. Characterisation of the activities of artistic and cultural production: regular activity (Q22 – Q26)

The first question regarding the company’s regular activity characterisation was aimed at reaching a deeper knowledge of its areas of activity. Entities were, therefore, asked to specify the type of the previously identified domains of activity (Q11). Of the 15 answers obtained, four were excluded as they described services (information required in Q23). Of the 11 valid answers, there were mentioned the following activities:

Photography	5	Painting	3
Photography: Commercial	1	Drawing	3
Photography: Portrait	1	Sculpture	2
Photography: Architecture	1	Design	1
Photography: Documental	1	Illustration	2
		Ceramics	1

Table 29: Company’s regular activity – specific typology of the area of activity

Given that entities were previously asked to identify the area of activity (Q11) and further to describe the type and number of activities promoted in the last 12 months (Q26), the respondents were expected to specify the type of activities promoted in each area of activity. Given that Painting, Sculpture, Photography and Crafts were options of Q11, few entities actually provided more detailed information in relation to the previous question. Additionally, to the mentioned areas (Q11), there were described specific types of photography (commercial, portrait, architecture, and documentary), as well as drawing, illustration, design, and ceramics. And other types of activities (6), such as: “Urban Art”, “Collage”, “Graphic arts”, “disciplinary crossings - contemporary art, music and underground cinema”, “exhibitions in the form of performances, painting, sculpture, design, architecture, and experiences”, “Rough Art (Arte Bruta)”, “Popular Art”, “Tribal Art”, “Artistic creation workshops”, “Contemporary Art” and “Plastic Arts”.

As to the entities focused on Cultural Education, the majority described their services (teaching, exhibition and selling of art supplies) alongside their area of activity. Among these responses there were mentioned the following specific areas: “Realist Art”, “painting - oil, acrylic and watercolour”, “drawing”, “art theory”, “contemporary drawing, painting and sculpture”, “observational drawing and painting”, “watercolour painting, acrylic painting and drawing”, “watercolour, oil, acrylic and mixed techniques” and “contemporary art”.

This question did not provide the expected additional information on the branch of the artistic area explored by the entity. Question 26 attempted to go even further in collecting information on the company’s activity. In order to understand if the current activity differed from the company’s regular activity, to understand the impacts of the pandemic, and to obtain an actual picture, entities were asked (Q26) to describe the number and type of activities promoted in the last 12 months. Table 30 illustrates the number of activities promoted in the last 12 months by 15 of the enterprises:

Number of activities	Number of companies
<10	7
10	2
>10	2
>20	1
>40	1
>100	2

Table 30: Number of activities promoted in the last 12 months

As to the specification of the type of activity, there were mentioned various activities, such as “studio and equipment renting”, “photographic productions”, “exhibitions” (solo and collective), “workshops”, “painting of murals”, “concerts”, “dinners”, “cycles of cinema”, and a “photography biennial”.

The four obtained answers from the entities focused on Cultural Education were very descriptive and specific. One of the answers identified the theme of every course provided,

which will not be explored in this section, but included: 4 annual courses in the post-labour schedule, 6 classes of painting atelier, 3 workshops and 3 classes of the workshops for children and youngsters. Other entity referred to having promoted 7 art exhibitions as well as various painting and drawing courses. A third entity mentioned “dozens of workshops and regular atelier classes”. One of the entities only described the number of activities promoted: 4.

Looking at the type of services (Q23) of the respondents (18), 94.44% (17) offer more than one service. In fact, there were identified, on average, 5 (4.56) types of services. When asked to specify the type of service provided, 88.89% (16) referred to Exhibition, 83.3% (15) to Curatorship and 66.67% (12) Creation.

The most frequent identified simultaneous selections were Curatorship and Exhibition (77.78%) (14). Adding an extra stage of the production stage, 50% (9) include in their services, simultaneously, Creation, Curatorship and Exhibition.

Comparing the number of services identified with the number of departments, 42.11% (8/19) of entities identify a higher number of departments in relation to the number of services. 10.53% (2/19) identify the same number and 36.84% (7) identify a higher number of services in relation to departments.

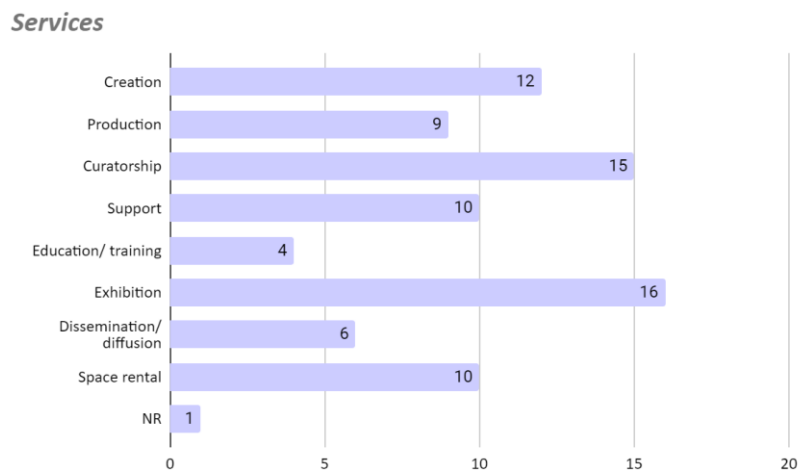


Chart 38: Company's regular activity - services

Of the five entities focused on Cultural Education, three focused on only one service: Creation (1) and Education/ Training (2). One entity offered two services - Creation and Education/ Training and one entity diversified to seven different services - Creation, Production, Curatorship, Education/ Training, Exhibition, Dissemination/ Diffusion and Space Rental. Therefore, Education/ Training was the most referred service (4), followed by Creation (3).

Another key aspect for characterising the dynamics of the sector is to understand the type of partnerships developed and how they contribute to an entity's artistic and cultural production.

In this case, entities were asked to describe their partnerships' contributions, besides only identifying them (Q24). Even so, they opted to simply indicate their partnerships, which meant that their contribution and purpose had to be interpreted from the answers. Furthermore, this

question had a high number of non-responses (10), with only 9 entities providing information on this topic. As one of the answers was excluded, 8 answers were considered valid.

Amongst these partnerships there were identified four main groups: other galleries and cultural associations, which can be interpreted as programming partnerships; cultural centres, cultural equipment and Visual Arts events (festivals, biennials and art fairs), interpreted as partnerships for providing exhibition spaces; an autarchy and a foundation were also mentioned, which translates a funding partnership; and finally, a partnership with artists, that is, a partnership for creation.

None of the entities focused on Cultural Education responded to Q24,

Additional relevant information for the understanding of the scope of the entity's activities is identifying how they spread geographically (Q25). As Chart 39 illustrates, the great majority of companies (68.2%) are based in Oporto and its field of work spreads mostly throughout the North Region. Only a small percentage (9.1%) also acts in Lisbon Metropolitan Area. The remaining Regions (Centre Region, Alentejo, Algarve, Autonomous Region of Azores and Madeira) were not mentioned. 13.6% of companies also referred to other geographical areas, namely Oporto, Spain and Belgrade.

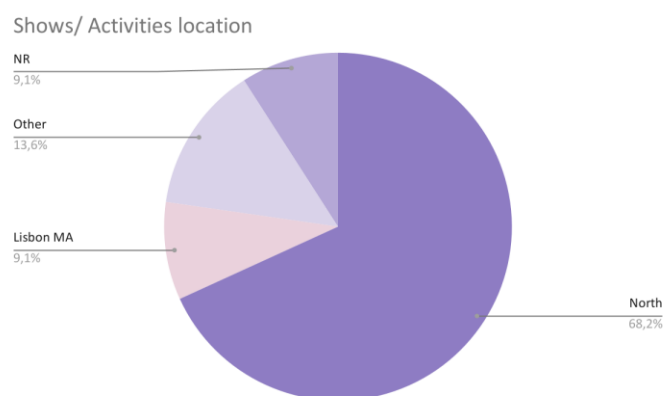


Chart 39: Location of the company's activities

As to the five entities of CAE 85520, of the three answers obtained, the North Region was the selected location of the promoted activities.

3.2.3. Characterisation of the activities of artistic and cultural production: projects (Q27 - Q74)

As part of the company's activity characterisation, entities were asked to describe projects in which they have enrolled/ promoted (Q27). The goal of this section of the questionnaire was to understand if the domains/ areas of activity (Q29, Q45, Q61) and the services offered (Q33, Q49, Q65) were altered through projects, the entity's level of involvement (Q30, Q46, Q62), and if the projects considered as most relevant were recent or mature (Q31, Q47, Q63). Moreover, this section also intended to understand how these projects impacted the company on an internal level, namely in terms of human resources (Q35, Q51, Q67) and if additional external professionals were allocated (Q40, Q56, Q72). To understand the impacts of the project concerning its audience and reach, entities were asked to identify their projects' public (Q36,

Q52, Q68) and geographic scope (Q34, Q50, Q66). Lastly, for the understanding of the project itself, entities were invited to describe its aims (Q37, Q53, Q69), key activities (Q38, Q54, Q70) and expected final results (Q39, Q55, Q71) as well as the project's budget (Q41, Q57, Q73). The final question of this section was related to funding (Q42, Q58, Q74), which would allow for the characterisation of these dynamics, both in terms of frequency and typology.

Firstly, it was important to understand which of the entities represented in the sample actually promoted/ were involved in projects (Q27).

In the last 5 years, has the entity been involved/ promoted any relevant project?

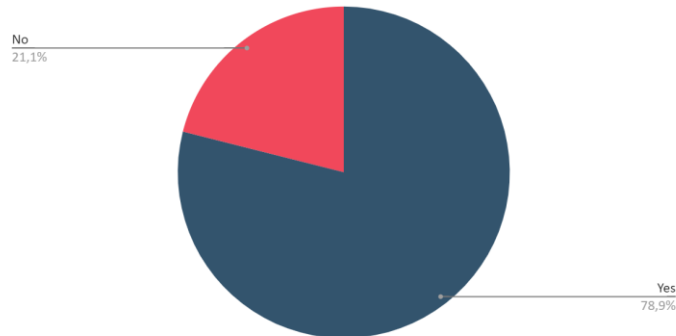


Chart 40: Involvement in projects

80% (15) of companies enrolled/ promoted extra projects besides their regular activity. Amongst the remaining 21.1%, there is a cultural association and three galleries. These galleries were founded during the covid-19 pandemic (two were created between 6 - 12 months ago and one between 1 - 3 years ago).

One of the entities, although replying affirmatively to the Q27, did not fulfil the remaining questions on projects. Therefore, although this question includes this entity, the remaining sections will not.

As to the companies focused on Cultural Education, one of the entities answered yes, but did not respond to any of the questions on projects. The remaining entities did not promote any project (3) and one did not respond.

Amongst the companies that identified having promoted or being involved in a project in the last five years and that answered the following questions on the project, 8 identified one project, 4 two projects and 2 three projects. One of the entities, as mentioned, did not respond. Therefore, it is possible to conclude that more than half (57.1%) of respondents only described one project.

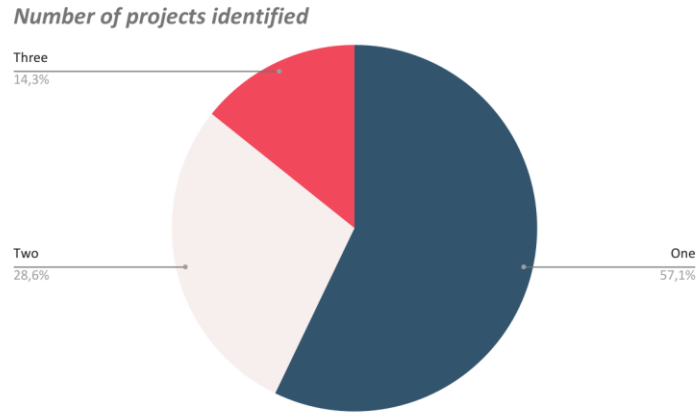


Chart 41: Number of projects identified

Besides the previously mentioned excluded entity, there were two more companies excluded from the quantitative analysis regarding projects. These two entities identified more than one project but filled in all the fields destined for project 1 with information on those projects simultaneously. This made it impossible to separate the data and categorise it individually, hampering a quantitative analysis. This means that the previous quantitative analysis on projects includes these entities, but the remaining questions do not. Therefore, there were considered 17 valid projects, corresponding to 12 answers.

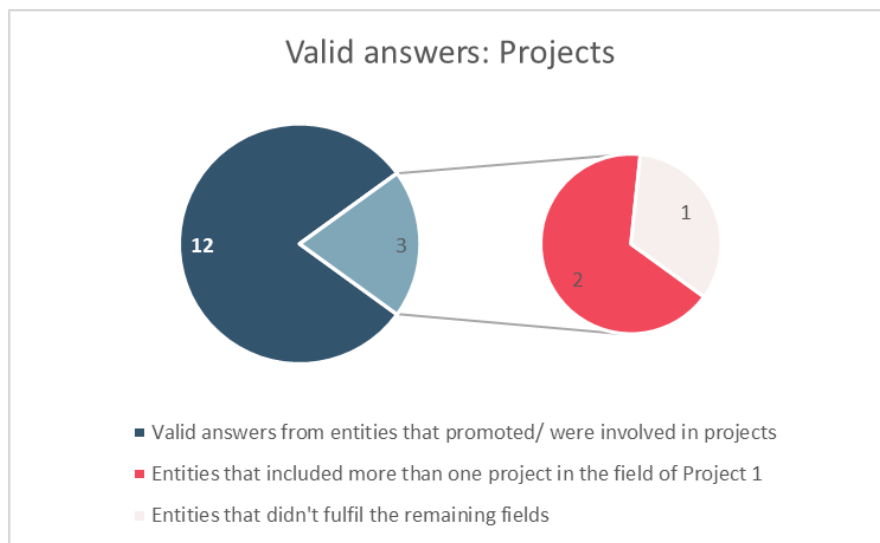


Chart 42: Total of valid answers to the questionnaire survey's section on projects

Looking at the level of involvement in the described projects (Q30, Q46, Q62), the majority (88.24%) of entities opted to identify projects of which they were coordinators (15). The remaining 11,76% (2) mentioned projects in which they were very active partners, not coordinators.

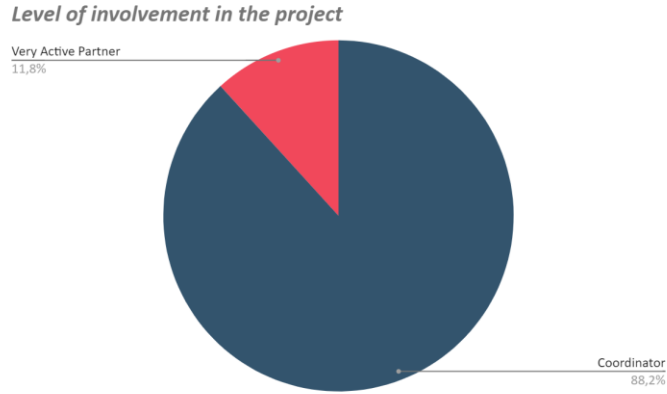


Chart 43: Level of involvement in the described projects

Of the two excluded entities, one assumed the role of “less active partner”. This is the only entity among the sample that opted to describe projects with this level of a partner’s involvement. The other entity was the coordinator of the three described projects.

As to the date of the projects (Q31, Q47, Q63) and their duration (Q32, Q48, Q64), most of the described initiatives were promoted in the last two years (1 project is from 2020, 5 from 2021 and 1 from 2022). There were also 3 projects mentioned from 2012, 1 from 2015, 1 from 2017 and 3 from 2018. One of the excluded entities described 1 project from 2019 and 2 other projects with an annual periodicity.

The majority (58,82%) of projects identified in the question on the project’s duration were initiatives that lasted up to six months (10). 31.29% of projects lasted over a year (6).

In this case, one of the excluded entities also described projects that lasted up to six months. The other described two annual projects, one during a specific month and the other of regular frequency.

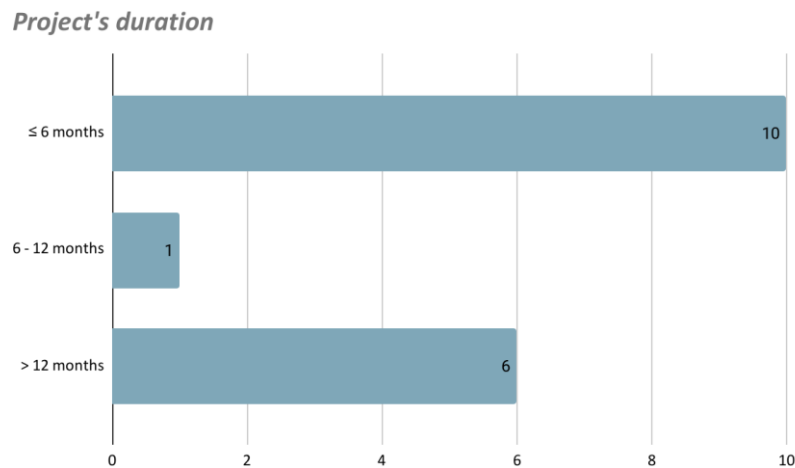


Chart 44: Duration of the projects described

The following two variables were aimed at understanding if the entity diversifies its areas of activity (Q29, Q45, Q61) and services provided (Q33, Q49, Q65) through projects.

The answers regarding the project’s domain/ area of activity were very similar to the previously identified areas of activity (Q11). Once again, the most frequent artistic domains across all 16 projects were Photography, Painting, Sculpture and Other.

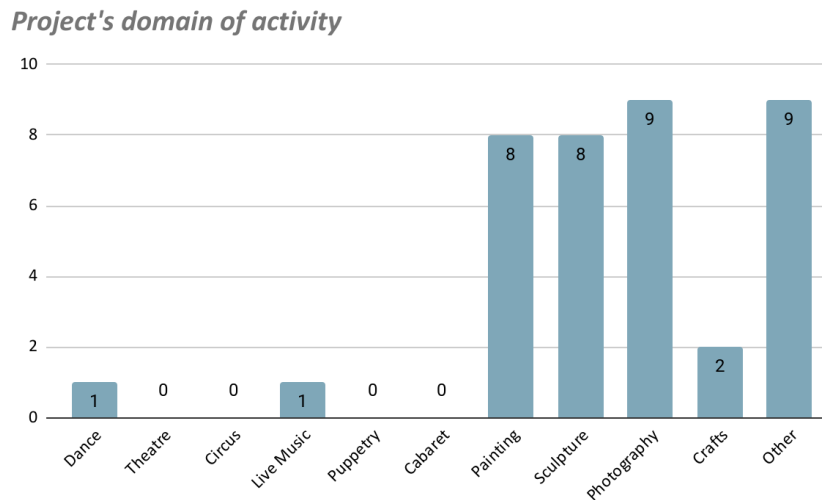


Chart 45: Domain of activity of the projects described

On average, there were simultaneously identified 2 (2,29) domains of activity amongst the 17 considered projects, as only 58,82% (10) of projects concentrated on more than one domain. The most mentioned domains (57,94%) were Photography and Other (9), which include domains such as Video, Design, Plastic Arts, Installation, Performance, Urban Art, Public Art, Art Education and Mediation. The second most mentioned domains (47,06%) were Painting and Sculpture (8).

In this case, Painting, Sculpture and Photography were simultaneously mentioned by 23.53% (4) of companies.

In 58,82% (10) of cases, companies identified a higher number of artistic domains in comparison to their regular activity than to the projects they promote/enrol in. 35,29% (6) identified the same number of artistic domains in both questions and 5,88% (1) identified one additional domain in projects compared to their regular activity.

One of the excluded entities also promoted projects whose domains relate simultaneously to Painting, Sculpture and Photography. The artistic domains of the other excluded entity’s projects were Dance, Theatre and Thought (“Pensamento”).

Moving to the analysis of the services provided through projects, Chart 46 illustrates their distribution.

Projects: Services

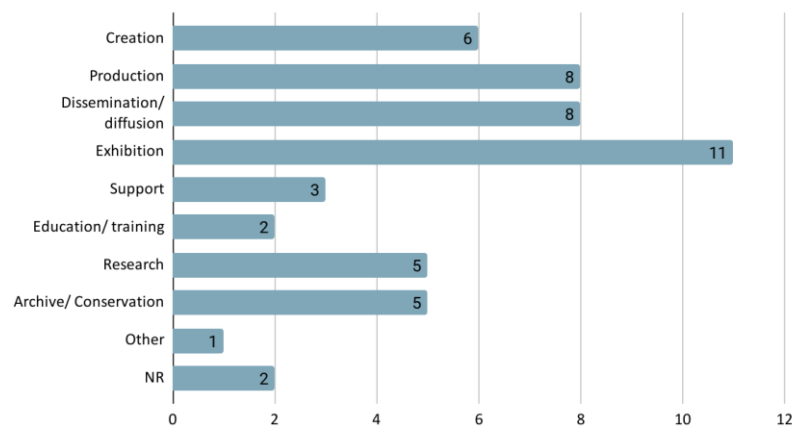


Chart 46: Projects services

In the previous question regarding the company's services (Q23), the most frequently mentioned were Exhibition, Curatorship and Creation. In this case, the most referred were Exhibition (64,71%), followed by Production and Dissemination/ Diffusion (47,06%).

Looking at the type of services identified in projects in relation to the services provided on a regular basis, 52.94% (9) of companies identified a higher number of regular services. In fact, 41,18% (7) of companies did not diversify their services in projects, providing essentially the same services in projects as in their regular activity. Only 29.41% (5) of entities identified additional services in projects.

Of the two excluded companies, one identified Exhibition and Space Concession as the two provided services in projects, not diversifying from the services regularly provided. The services in projects are the same as those regularly practised. In fact, the number of regular services is superior to the type of services provided through projects.

The other excluded company identified Creation, Production, Dissemination/ Diffusion, Training and Research as services provided through projects. Despite the number of regular services being superior to the ones practised through projects, there is one additional service in projects concerning the company's regular activity. It is the case of Research.

Moving on to understanding how the entity reorganised internally for the promotion/ involvement in projects, it was important to understand the project's team (Q35, Q51, Q67) and if any external human resource was allocated (Q40, Q56, Q72).

In terms of the diversity of functions of each employee in the context of projects, from the 10 valid questions (2 were excluded), 50% (5) described a higher number of functions assumed compared to the number of employees identified. These answers were also compared with the number of external professionals allocated in the project, as Q35/51/67 was formulated as "Team and functions performed" and could induce errors. Amongst the 5 answers identifying a higher number of functions in relation to human resources, none of them acquired any external services.

In the cases where only the function was described or the same number of roles and human resources were identified, there were mentioned the following roles: "Visual Artist",

“production, video, photography and interviews”, “creation and production of the annual event” and “curator”.

As to the human resources that accumulate more than one function, there was an artist that described in Q17 (company’s departments) as being responsible for the 12 entity’s departments. This means that in the case of projects, given that no external human resource was allocated, the same artist assumed all the described functions: “Artist, gallery owner, curator, promoter, photographer, editor” (Project 1) and “Artist, curator, editor” (Project 2). In the remaining cases, employees accumulated functions such as “production, promoter and communication”, “design and communication”, “artist, author and coordinator” or “curator and artistic director”.

In terms of external human resources, on average there were 2 (2.33) external professionals working on the projects promoted/ in which the entities were involved. This number only considers the entities that answered Q40/56/ 72 (8 NR). None of the two excluded entities fulfilled this question.

Focusing on the external impact of projects in terms of audience (Q36, Q52, Q68), the great majority (60%) of described projects were aimed at the general audience. This included, besides the “general audience”, the local community, young people at risk and institutionalised elderly. The project whose audience was specialised included the academic community (fine arts) and the artistic community.

The two excluded companies also described projects aimed at the general audience.

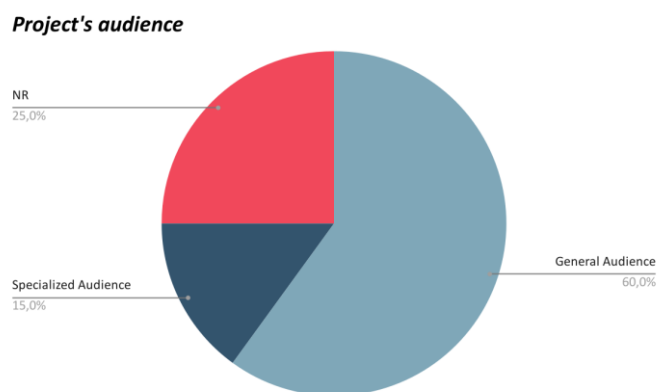


Chart 47: Described project’s target audience

20% (3) of the entities that filled this question (15) identified projects aimed at more than one audience whereas 60% (9) of projects specialised in just one public.

Moving on to the project’s geographic reach (Q34, Q50, Q66), amongst the companies that answered this question (1 NR), the great majority (83,3%) identified projects with a national scope. The Other category includes online/ virtual space.

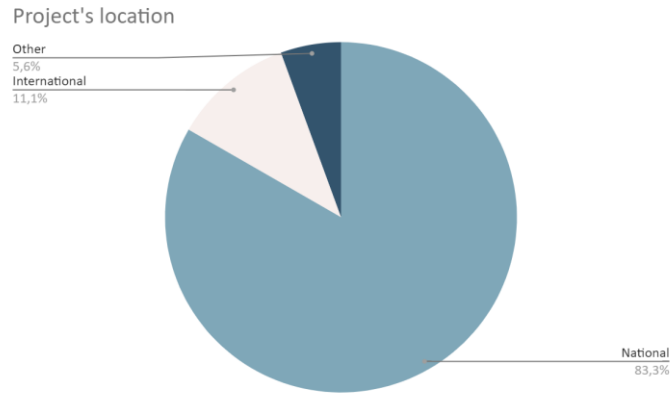


Chart 48: Project's location – National or International level

As to the city where the projects took place, the most mentioned location (58.82%) was Oporto (10/17), the entity's headquarters.

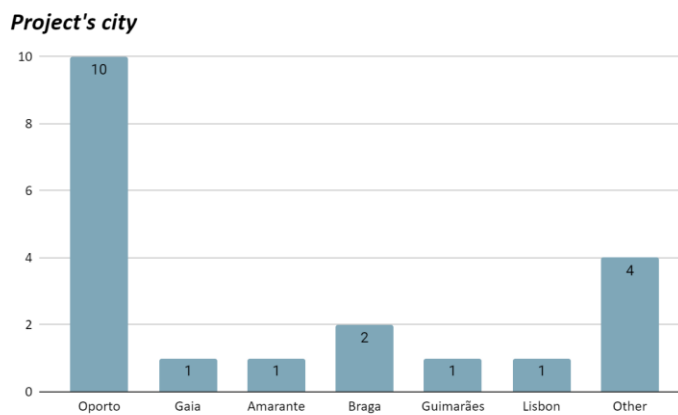


Chart 49: Project's location - city

The Other category (4), representing 23,53% of answers, includes online/ virtual space, Lazarim (parish of Lamego), Belgrade (Serbia) and Avilés (Spain). This means that the scope of the project's activities remains very similar to the company's regular services. The two excluded companies also described projects promoted on a national level, specifically in the city of Oporto.

The entities were also asked to describe the project's aims (Q37, Q53, Q69), key activities (Q38, Q54, Q70), expected final results (Q39, Q55, Q71) and budget (Q41, Q57, Q73).

Amongst the 13 answers to Q37, Q53, Q69⁴⁴, the most referred objectives were Exhibition and Creation. The two previously excluded entities also described "Exhibition" as their main goal.

⁴⁴ Q37, Q53 and Q69 were open-answer types of questions. The responses were categorised based on the European Commission framework for the CCI's Value Chain analysis – "Mapping the Creative Value Chains: A study on the economy of culture in the digital age: final report" (2017).

Project's goals

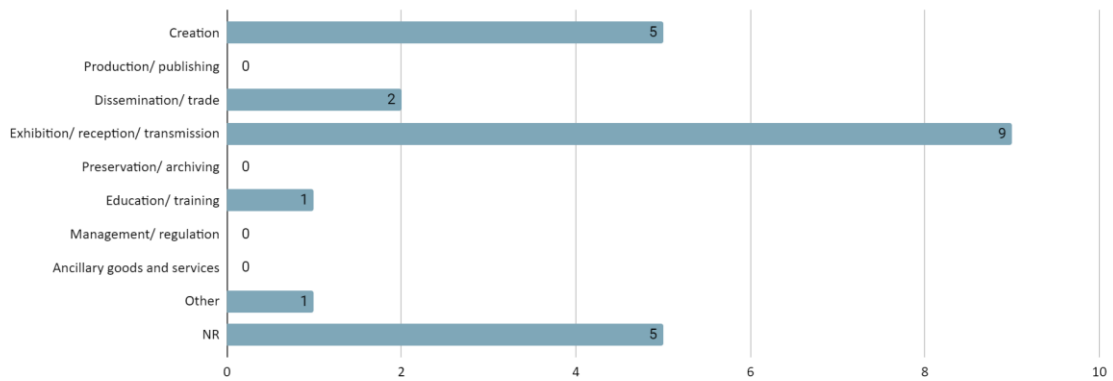


Chart 50: Described project's main objectives

Q38, Q54, Q70, focusing on the project's key activities, had a total of 6 non-responses. Of the 9 valid answers⁴⁵, the category Exhibition/ Reception/ Transmission was mentioned by every entity. The same happened to the two excluded entities, also describing activities of exhibition in projects. The Other category includes activities such as “conception” and “organisation”.

Q39, Q55, Q71⁴⁶ had a total of nine answers. 88.89% (8) of projects were expected to create and captivate new audiences. 55.56% (5) of projects had the attraction of new talents as an expected result. Amidst these answers, there was described the intent to “expand the scope of social and artistic intervention of young artists in Oporto”, to promote the “sharing of knowledge and experience regarding plastic arts” as “video art”, to grow in recognition and to set the entity's positioning in the artistic sphere (both applicable to new audience as to new talents), and to connect “national and international artists”.

Project's expected results

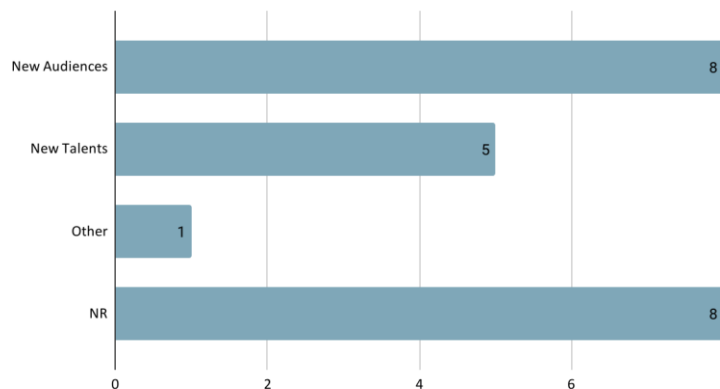


Chart 51: Described project's expected results

The projects focused on finding new audiences include answers such as “broaden the community of project's supporters”, “archive bigger visibility and economic return of the artists

⁴⁵ Three of the answers were excluded as they described the domains of activity - “Art”, “Culture”, “Photography”, “Plastic Arts”, not the project's key activities.

⁴⁶ Q39, Q55, Q71 were open answers. The responses were categorised into “New audiences”, “New talents” and “Other”.

and producer”, to represent an artist's work in an international art fair, as well as to “raise awareness of both the audience and official institutions for this type of artistic expression”.

Four of the identified projects identified these two expected results simultaneously. The answer categorised as Other includes the audiovisual registration of the event. The two excluded companies also identified projects aimed at creating new audiences.

Attempting to understand the described project’s scale, entities were asked to indicate the project’s budget through a multiple-choice scale question (Q41, Q57, Q73).

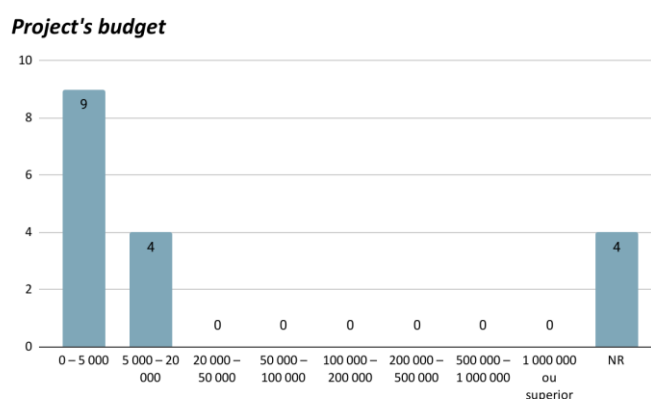


Chart 52: Project’s budget

The 13 described projects (4 NR) had a budget between 0€ and 20 000€, although the majority (69.23%) of the project’s budget did not exceed 5 000€.

The two previously excluded companies are the most heterogeneous in comparison to the sample. One of them (the exception entity already identified in the previous sections of the analysis) described their projects as having a budget of 1 000 000€ or superior. The other excluded company placed their projects on a budget between 100 000€ and 200 000€. Having this in consideration, the picture would be slightly different, assuming the following distribution:

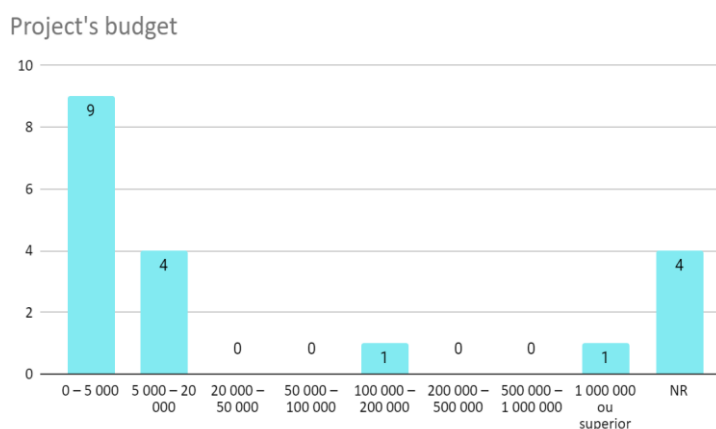


Chart 53: Project’s budget distribution including the two excluded entities

The final question regarding the project's characterisation was related to funding (Q42, Q58, Q74).

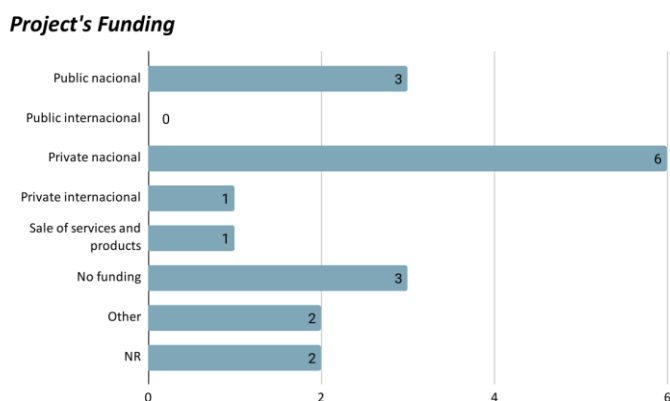


Chart 54: Typology of project's funding

Of the 15 answers obtained on this topic, 40% (6) of the project's funding is private and national. None of the entities benefited from international public funding. On the other hand, one of the described projects was internationally funded by a private entity. The two excluded entities also had their projects funded on a national level and by private entities. One of them additionally mentioned national public funding.

The Other category includes “sponsorship and private investment” and “private funding”, meaning that this variable can be analysed in the following way:

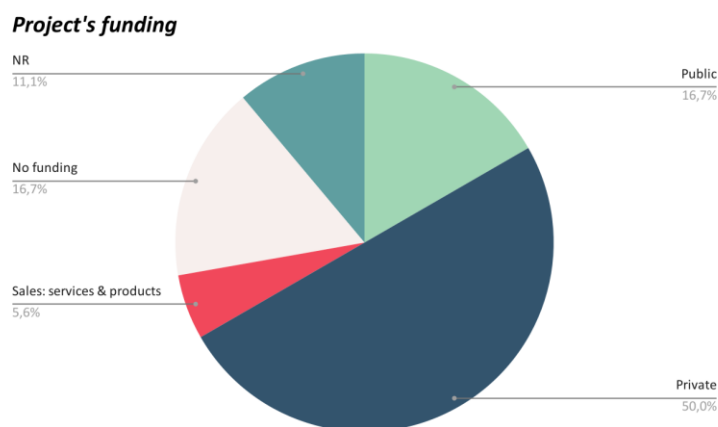


Chart 55: Typology of project's funding – Private, Public, Sales or No funding

Having this distribution in consideration, 50% of the projects were financed through private funding and only 16.7% of projects were developed using public funding.

3.2.4. Presence of the theme of climate change in the entity's activity

The last question of the questionnaire aimed to approach the theme of the investigation project, besides providing clues on which entities should be further researched. Companies were asked to identify if the theme of climate change was present in their activity (Q75). From these answers, it is possible to identify which companies should be interviewed for obtaining deep information about their practices and produce an inventory of sustainable artistic production.

From the 12 entities that answered this question, 4 did not have this theme present in their activities, one assumed it was not explicitly explored, and one described that although not being explored in the present moment it will be in future projects. Amongst the ones that assumed the presence of this theme in their work (6), the most frequently identified context were exhibitions (theme of exhibitions) and in the artist's works (theme and materials used). One of these entities described producing the maximum using the minimum, which was not the aim of this question.

As to the entities whose activity relates to CAE 85520, there were 4 answers obtained (1 NR), three of which did not explore this theme in their activities. One of the respondent entities described having this theme explored sometimes as some of its students developed artworks about climate change.

3.2.5. Non-responses analysis

It is also relevant to analyse the non-responses to the questionnaire, as it impacts the conclusions drawn.

Non-responses

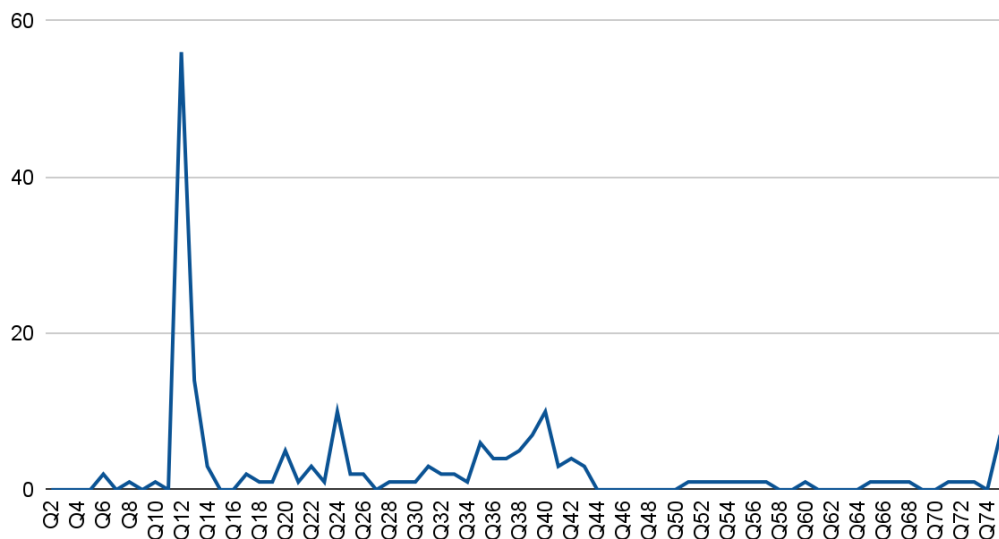


Chart 56: Distribution of non-responses

As Chart 56 illustrates, Q12 has a higher number of non-responses, which asks the respondent to identify the frequency of each CAE. Q13, an optional question, follows. This question was only to be answered if the proposed classifications were not sufficient to define the company's activity. Q24 and Q40 both have 10 non-responses, corresponding to the identification of partnerships and external collaborators in projects. This last question is also optional, and only applicable if external professionals have been hired to work on the project. The final question of the questionnaire (Q75) also has a high number of non-responses (7), meaning that the motivation decreased as the respondent continued to fulfil the questionnaire.

Section 1: company’s characterisation (Q2 - Q21)

From Q2 to Q5, as well as Q9 and Q11 there were zero non-responses. Being the most objective questions, they require basic information on the company, easily accessed by the entity’s representative. These include the position occupied in the company by the respondent, the company’s name, address if the entity is part of/ represented by a different company, the company’s typology and which are its main areas of activity. Q9 and Q11 are multiple-choice (exclusive), which simplified the process of answering.

In the case of Q10, regarding the company’s longevity, it had one non-response. This entity does not consider itself as a company but as a co-working space/ atelier. Therefore, it did not answer any questions with the word “company”/ aimed at companies, namely: customers (Q18), the channel of communication with customers (Q19), company’s values (Q20), opening dynamic (Q21), services (Q23), partnerships (Q24), and number and typology of activities (Q26).

When it comes to questions Q6 to Q8, corresponding to the company’s contacts and social media, there were 2 non-responses. This can mean that the entities did not wish to share their phone number, as this is a more sensitive question in terms of sharing data. One of the entities did not fill in the information on the website, which can be explained by the fact that this information can be easily found by searching in a browser.

The questions regarding the CAE (Q12) have, in total 56 non-responses. This can be justified by the fact that since this was a shared questionnaire, aimed both at entities of the Performing and Visual Arts, most of the CAE included did not apply to companies focused on the Visual Arts (except for disciplinary crossings). The CAE with the biggest number of non-responses (5) were 56105 (Restaurants with dance floor), 56305 (Others beverages establishments, with dance floor), 59200 (Sound recording and music publishing activities) and 82300 (Organisation of trade shows, conventions and similar event). The non-responses can mean that the company does not consider its activity as included in these CAE. In fact, except for one entity, all the companies that left questions unanswered in this section did not select the frequency option “never happens”. The question “add other classification of the type of activity developed, if applicable” (Q13) had a total of 14 non-responses since it was optional and should only be answered if the previously described CAE were not sufficient to characterise the company’s activity.

CAE	56105	56305	591	59200	74200	74900	78100	82300
NR	5	5	3	5	2	4	4	5
CAE	85520	90010	90020	90030	90040	9102	932	94991
NR	3	2	3	2	3	4	4	2

Table 31: Total of non-responses per CAE

Q14, regarding the company’s business turnover, had a total of three non-responses. This can be justified by the fact that the entity did not feel comfortable disclosing this type of

information. Additionally, one of the non-respondent entities describes itself as a not-for-profit artistic project/ installation/ performance/ gallery.

The questions on human resources had one non-response regarding external professionals and zero non-responses in comparison to employees on a contract of unspecified duration.

As mentioned before, one of the entities considered itself as a space, not a company, therefore it resulted in the only non-response to the questions related to companies. In the case of the question on the company's key departments (Q17), besides this entity, there was one additional non-answer.

As to the question on the company's values (20), it had a total of 5 non-responses. This can be explained by a level of informality in the studied structures. The components of the Business Model Canvas can be subjectively present in the entity's dynamic, but not explicitly assumed and defined.

Section 2: company's regular activity (Q22 - Q26)

The first question of this section (Q22), asking to specify the type of activity regularly promoted, had 3 non-responses. One of them was the previously mentioned entity that describes itself as a working space, followed by a gallery and an art workshop promoter⁴⁷. The option of not answering this question can be justified by the fact that the previously identified domains of activity were considered sufficient to characterise the entities' activity.

In the case of regular partnerships (Q24), there were a total of 10 non-responses. This can be explained by, contrary to what is to be expected, the studied entities do not have regular partnerships (probably sporadic/ specific for projects and activities), or they do not feel comfortable disclosing this type of information.

The questions on the location of shows (Q25) as well as the number and type of activity promoted in the last 12 months (Q26) had both two non-responses. The previously mentioned entity (working space) did not answer any of these two questions. In the other two, in the case of Q25, as the question was directed to the performing arts (it should have been written as "location of activities", not "shows"), it might have led to confusion and to the assumption that it was not supposed to be answered by companies working in the Visual Arts. In the case of Q26, as this time period includes a year of mandatory lockdowns, still very much affected by the Covid-19 pandemic, it is possible that this entity has not maintained a regular activity during this time period and therefore did not answer the question.

For the question of whether the company had promoted/ been involved in projects in the last five years (Q27), there were zero non-responses.

⁴⁷ Although this entity could be considered as Cultural Education, and therefore not suitable for the study, it was retrieved through SABI, included in CAE 9003.

Section 3: Projects (Q26 - Q74)

Regarding the questions focusing on projects, there was one entity that, although identified as having promoted/ being involved in projects, did not answer any of the subsequent questions. Therefore, there is one non-response to the questions: project's domain of activity (Q29, Q45, Q61), entity's role in the project (Q30, Q46, Q62), and project's location (Q34, Q50, Q66).

Considering all the answers of the three projects that could be described, there were 3 non-responses to the question on the project's month and year (Q31, Q47 and Q63), 2 on its duration (Q30, Q46, Q64), 2 on the services provided (Q33, Q49, Q65) and 2 on its location (Q34, Q50, Q66). These questions require basic information on the project, so the non-responses may be justified by a lack of immediate access to information. One of the entities did not assume the role of coordinator but active partner, which could imply contacting other partners and waiting for their response, a process that the company might have opted to avoid.

In one of the cases regarding the month/ year (Q31, Q47 and Q63), the entity that did not answer was the project's coordinator, meaning that it probably did not have easy access to information at the moment of fulfilment of the questionnaire. In the case of one entity that did not answer the question on the duration of the projects (Q30, Q46, Q64), since two of its projects were annual, the options provided⁴⁸ might not have encompassed these types of projects.

As to the question on the number and functions of the team members working on the project (Q35, Q51, Q67), there were a total of 8 non-responses. This can mean that the project's team remains the same as the company's human resources. Amongst the non-responses, 4 of the entities assumed the role of coordinator in the described project, 2 of active partners and 1 of a less active partner. The access to information is different for each level of involvement in the project. Since half of the non-responses were from entities that promoted the project, the explanation might reside in the lack of access to information when filling out the questionnaire.

When it comes to the project's audience (Q36, Q52, Q68), there were 6 non-responses. This can be justified by a decrease in motivation to fill the questionnaire as it approaches the end, by a non-existing previous definition of the project's target audience or by lack of access to documentation. The same applies to the question on the project's goals (Q37, Q53, Q69), activities (Q38, Q54, Q70) and expected results (Q39, Q55, Q71), with 5, 6 and 9 non-responses, respectively. This type of information is required when developing a Project Charter, meaning that the process of developing projects can be characterised by a lack of formal structure.

Since the question on the number and functions of external human resources would only apply if external workers had been allocated (Q40, Q59, Q72), it gathered the highest number of non-responses besides Q12. This can be interpreted as, contrary to what would be expected, no external professionals being allocated to the described projects.

The final two questions on projects: budget (Q41, Q57, Q73) and funding (Q42, Q58, Q74) had 5 and 4 non-responses, respectively. Two of the non-responses on the project's budget are attributed to the previously mentioned not-for-profit entity. The remaining non-responses

⁴⁸ Options provided: inferior to 1 month, 1-3 months, 3-6 months, 6-12 months or superior to 12 months.

follow the same justification as the question on the project's goals and expected results. It can also be related to the fact that these two can result in sensitive questions to answer.

Section 4: Presence of the theme of climate change on projects (Q75)

The last question of the questionnaire (Q75), on the presence of the theme of climate change in the entity's activities and projects⁴⁹, had a total of 7 non-responses. This can be explained by a decrease in motivation for filling out the questionnaire towards the end. Moreover, as this is a truly relevant issue, entities might have opted not to answer instead of describing not approaching this theme in their artistic activities.

⁴⁹ This is considered the last question of the questionnaire even though at the end of the questionnaire the respondents were invited to provide their email and name in case of interest in receiving more information on the research project's developments (Q76 and Q77).

Discussion

This last section of the dissertation will be dedicated to reflecting and drawing some conclusions on the work developed.

First and foremost, it is important to highlight that, even though we were given guidance and input from an experienced researcher and professionals in the area, neither my colleague nor I had previous experience in this type of research. This project, therefore, results in an exploratory exercise.

It must also be taken into consideration that the task we aimed to achieve was demanding, as both the CCI and Cultural Mapping consist of broad concepts that lack well-defined boundaries. These characteristics translated into the difficulty in systemizing all the existing perspectives on Cultural Mapping (Task 1) as well as in delimiting the Visual Arts sector and understanding the domains that constitute it (Task 2). In short, the object of study was hard to encompass and define, hampering its analysis. As mentioned by Murray (2017), “people working in the creative economy are a complex and often hidden population” (p.7).

Throughout the research project, we faced various challenges.

Starting with the Review of the Literature, as my colleague and I began collaborating on the project within a month’s difference, various decisions had already been made and the work had already been organised and initiated when I joined the project. This led to some discrepancies when selecting the articles for the Scoping Review and when retrieving information. Through discussion, these issues were overcome.

As for the protocol used for developing the review of the literature, the first option (Prisma Protocol for Systematic Reviews) was revealed unsuitable due to the specifics of the object of study - broad, with porous conceptual boundaries. However, as some of the most problematic items to complete become optional in the Prisma extension for Scoping Reviews, this second protocol was chosen to encompass the object of study. This extension was the most adequate as Scoping Reviews are aimed at studying heterogeneous bodies of knowledge (Tricco et al., 2018, p. 467) and are less focused on the detailed description of the studies’ methodologies, which was the main limitation of the data retrieved from the analysed publications.

Moving forward to Task 2, the first step of mapping the activities of cultural and artistic production of the Visual Arts sector in the city of Oporto was to understand which domains should be considered as part of the Visual (and Performing) Arts (Chapter 2.1). Since the focus was not on the whole cultural and creative sector, but on one sub-sector, only four of the models of reference previously studied during the first year of the master’s served as the basis for this dissertation’s proposal of delimiting the sector. The reports by ESSnet-Culture (2012), UNCTAD (2008), KEA (2006) and WIPO (2003) were the selected models as they explicitly indicated which types of domains and activities composed the visual arts sector. In the end, KEA (2006) and UNCTAD (2008) were the two models followed for studying the Visual Arts sector.

In the case of the Portuguese studies on the topic, they were used in the subsequent step of understanding which CAE corresponded to each domain of the Visual Arts.

Both these phases faced some limitations. In the case of the reference models, the existence of multiple proposals hampered decision-making, as none of them classifies as “right or wrong” (Thorsby, 2008, p.156). The selection of CAE gave rise to some doubts when putting the theory into practice, as some entities ended left out of the study (see Chapter 2.2). In essence, the decisions made when selecting the domains and CAE that constitute the Visual Arts sector impact and determine its consequent socio-economic analysis. Nevertheless, it must be also taken into consideration that proposing a delimitation to the sector can never be an easy assignment, as the boundaries of the Visual Arts sector are subjective and based on interpretation.

The selection process of entities for the study (Chapter 2.2) involved searching for the selected CAE in the SABI database and complementing the research with information from DRCN, DGARTES and PLAKA, as well as public directories/ projects. Given the object of study and its complexity (Murray, 2017), only relying on the SABI database for decision-making regarding the selection of Visual Arts CAE gave rise to some limitations in the study. This was the case with CAE 94991 (Cultural or Recreational Associations) and CAE 85520 (Cultural Education). Looking at SABI, only an insignificant number of entities of both these CAE were related to the Visual Arts (CAE 94991: 2/9; CAE 85520: 2/29). And therefore, their inclusion in the study would not reflect the real economic impact of the sector, resulting in an overestimated evaluation. But, as the decision to exclude these two CAE was posterior to the sending of the questionnaire, 5 respondents were part of these CAE. Meaning that instead of a sample of 24 entities, the questionnaire survey had a total of 19 valid answers. The five excluded companies dedicated to teaching Visual Arts had to be separately analysed, as their inclusion would affect all the economic characterization of the sector developed in Chapter 3.1.

In the cases of extra entities, searched outside SABI, the main difficulty was to identify the corresponding CAE, which could not always be done and hampered the categorization between Visual Arts and Performing Arts. In this situation, the decision was to respect the description of the entity presented on the website/ social media and when this information was not available, to explore the entity’s shared content, attempting to understand what type of activities were being promoted.

The questionnaire survey (Chapter 2.3), developed for a deeper understanding of the artistic and cultural activity of the companies working in the sector, also had flaws and gave origin to difficulties in its analysis. Firstly, this instrument was aimed at both the Visual and the Performing arts. This decision resulted in some of the questions being formulated in a way that might have been perceived as too directed for the Performing arts. Consequently, it might have induced the respondent of the Visual Arts into error.

Secondly, as the aim was to obtain the biggest amount of information possible for accurate characterization of the sector, there were many open-answer questions. This, in turn, hampered the analysis and the categorization of the responses as most entities have a hard time defining themselves and their activities (for example: the question on the company’s values).

At the same time, although this decision might have implied a more demanding analysis, it encompassed the informality of the sector and gave more freedom for entities to describe themselves. This, in combination with the fact that this was a shared questionnaire for the Visual

and Performing Arts, also allowed for the analysis of artistic and cultural activities that lay within the limits of various domains or explore disciplinary crossings.

In the case of the questionnaire's response rate, it was impacted by both internal and external factors. Specifically, the decisions on the structure of the emails (same title and similar structure throughout every email sent) and its frequency, but also by the timing of the invitation/ duration of the activity, which overlapped with deadlines for national public funding.

Part three of this dissertation, including the characterization of the sector for framing the questionnaire's results (Chapter 3.1) and the analysis of the responses obtained (Chapter 3.2), also faced difficulties. In the first place, the information retrieved for characterising the sector was not comparable. The three used sources of information presented data that had been updated in different periods: SABI's data was last updated on the 6th of September 2022, INE's data was from 2020 and Estatísticas da Cultura's data from 2020 was provisional. Besides, the data retrieved from Estatísticas da Cultura regarding the cultural and creative sector/ activities could not be compared to a specific level of analysis and variables of the Visual Arts obtained through SABI and INE, as only two of the CAE analysed were part of the proposed delimitation of the Visual Arts. Therefore, the information on the cultural and creative sector obtained from Estatísticas da Cultural excludes CAE 47784 (galleries) and 4779 (antiques), not comparable with the remaining data. The scale of analysis was also different: INE and Estatísticas da Cultura - North Region and Lisbon MA (NUTS II), and Oporto MA and Lisbon MA (NUTS III); SABI – Oporto and Lisbon. Even so, it was possible to obtain an overview of the sector and to take as reference data regarding various levels of analysis.

The biggest difficulty, transversal to every step of the methodology, relates to the availability of information, hampering the understanding of the entity's dynamics and activity. For example, non-existing websites or social media that could assist in understanding the company's activity. Or, in the case of the SABI database, although it has been updated multiple times during the period of the study, the first searches of the company's contacts for the sending of invitations for the study included the wrong email addresses. These were later updated through phone calls, from which some of the phone numbers were also concluded to be wrong or non-existing.

There were some setbacks encountered throughout the development of the present study. Nonetheless, it was possible to obtain a picture of the Visual Arts sector in the city of Oporto and to reach a deep understanding of the concept of cultural mapping.

The Review of the Literature (Task 1) allowed for the understanding of what cultural mapping consisted of and the type of methodologies and tools used in this type of exercise. The information obtained from this step supported the definition of the methodology to be followed in the cultural mapping exercise focused on the Visual Arts sector in the city of Oporto. It also permitted obtaining an overview of the topic before proceeding with the practical application of this tool.

In the case of the mapping exercise of the cultural agents based in Oporto dedicated to the Visual Arts (Task 2), it was possible to develop an analysis on various levels. The key indicators were chosen to characterise the sector in the city - number of companies, their business turnover and number of employees, as Oporto MA - number of companies, their business turnover, gross

value added (GVA), number of employees and the dynamics of the international market, were contextualised with data on a national, regional and sub-regional level and compared to Lisbon.

It is interesting to reflect on the three variables with comparable data amongst SABI, INE and Estatísticas da Cultura. In the case of the number of companies working in the sector, in 2020 the North Region concentrated 30.07% of companies regarding the national level, Oporto MA 17.58% and Lisbon MA 35.78%. According to SABI (2022), there are a total of 351 active/temporarily inactive companies working in the Visual Arts based in Oporto, 860 in Lisbon and 6159 in Portugal. These numbers are quite distant from the data from INE (2022), as the level of analysis and date of the information differ. In 2020, 17962 companies were working in the Visual Arts on a national level, 5402 in the North Region, 6426 in Lisbon MA and 3158 in Oporto MA.

Looking at the business turnover, based on INE, it was concluded that in 2020 both Oporto (21.24%) and Lisbon MA (30.81%) were responsible for more than half of the total national Visual Arts turnover. According to SABI, in 2020 the average business turnover of the ten biggest companies (active/ temporarily inactive) based in Oporto was 2 934 786€, which was 1 801 784€ lower than Lisbon's ten biggest companies (4 736 570€). On a national level, this number corresponded to 17 659 980€. It is important to highlight that of the group of selected entities for the study, the average business turnover of the three biggest companies was 6 44 993€ and of the ten biggest companies 3 70 145€, slightly above the city's average. More specifically, amongst the sample of entities (19) studied through the questionnaire, the most mentioned scales of business turnover were between 5 000 - 0 000€ (5), 0 - 5 000€ (4), and 50 000 - 100 000€ (4).

Finally, onto the number of employees, and only considering the two CAE of the Visual Arts represented in EC (2021), in 2019 there was, on average, 1 employee per company of CAE 9003, at all levels of analysis; CAE 7420 had an average of 2 employees per company in the North Region, and of 1 in Lisbon MA as on a national level. In contrast, when looking at the numbers obtained from SABI from 2020 and considering CAE 47784, 9003, 74200 and 4779, the ten biggest companies⁵⁰ based in Lisbon employed, on average, 78 people (three biggest: an average of 174 employees), in Oporto 31 professionals (three biggest: 71 employees) and on a national level 230 employees. When looking specifically at the selected entities for the study, this number decreases to 3 in the case of the ten biggest companies and to 5 when considering the top three. In fact, the studied sample of 19 entities has, on average, 1 employee on a contract of unspecified duration (as 8 of them identified having none). This number does not include a bigger scale company, of which a selected visual arts entity is part, and which therefore differentiates itself from the remaining entities of the sample. Considering this entity, then the average number of employees on a contract of unspecified duration rises to 6 people. Interestingly, contrary to what would be expected as the sector is characterised by “intermittent employment” (Gibson et al., 2002, Karttunen, 2001, Throsby, 2001 as cited in Gibson et al., 2010, p.33), out of the 18 respondents, 5 did not acquire any external human resources in the last 12 months. Even so, on average 12 external professionals (7 without the bigger scale company), collaborated with the studied entities.

⁵⁰ There were considered active and temporarily inactive companies.

What is more, from the constructed questionnaire it was possible to obtain further information on a sample of 19 entities working in the Visual Arts and based in Oporto (plus the 5 answers analysed separately) (Chapter 3.2). The following paragraphs constitute mere insights into the dynamics of the sector, as the sample is not wide enough for generalising the analysis and conclusions on the whole Visual Arts sector.

In terms of geographic distribution, it was concluded that the parish of Bonfim⁵¹ concentrated the highest number of enterprises, followed by Santo Ildefonso and Cedofeita (from the 19 obtained answers). This was a very interesting result. The parish of Cedofeita would be expected to allocate most of the entities since, according to Silva (2020), the street of Miguel Bombarda is part of the “block of Miguel Bombarda - Porto Art District”⁵², resulting in a Creative Hub focused on the visual arts and responsible for the well-known “Inaugurações Simultâneas”⁵³ since 2007 (p.109 - 110). It can also mean that the Oriental Area of the city is being further explored and promoted on a creative and cultural level (example: Matadouro de Campanhã) (“Masterplan Estratégico da Zona Oriental do Porto – Relatório Final”, by Quaternaire Portugal, 2019, p.106)

Focusing on the questions aimed at characterising the company, in terms of structure, only 21.1% identified being represented or part of other entities, namely galleries and cultural associations. The two most mentioned typologies of companies (including the five separately analysed entities) were Individual Company: Sole proprietorship by shares, followed by Individual Companies: Individual Entrepreneur, Collective Companies: Associations and Collective Companies: Private Limited Company. When it comes to the company’s longevity, the sector is mostly composed of entities above 10 years old. It was also concluded that the main customer segment of the studied entities is the General Audience, followed by Art Galleries and Art Fairs.

The question on the company’s values had a total of 5 non-responses. This can be interpreted as translating a lack of definition, as entities may have the components of the Business Model Canvas present in their dynamic, but not explicitly identify them.

Looking specifically at the respondent’s regular activity that is the activities of cultural and artistic production, it was possible to understand the number and type of activities promoted and the type of services provided (average of 5 services per company; most referred: Exhibition, Curatorship and Creation).

Understanding the dynamics of work amongst the entities was also a goal of the questionnaire. However, more than half (10/19) of the entities did not answer the question on the type and contribution of partnerships. There were identified as partners: galleries and cultural associations; cultural centres, cultural equipment and Visual Arts events (festivals, biennials and art fairs); an autarchy and a foundation; and artists. These partnerships translate different

⁵¹ Geographic distribution analysed based on the division of parishes prior to the administrative restructuring in 2013.

⁵² According to Silva (2020), the “Miguel Bombarda bloc” includes the streets of Miguel Bombarda, Rosário, Breiner, Dom Manuel II, Adolfo Casais Monteiro and Torrinha (p.110).

⁵³ According to Silva (2020), this project has de support of Oporto Municipality – Ágora Cultura e Desporto, promoted through a dynamic of collaborative communities (p.110).

contributions to the company's regular activity: programming, providing exhibition spaces, funding and creation.

The most frequently mentioned location of the company's activities was the North Region, limiting the impacts and the audience of activities. The regions of Centre, Alentejo, Algarve, and the Autonomous Region of Azores and Madeira were not mentioned by any of the entities. This can be explained by the fact that, according to *Estatísticas da Cultura* (2021), the North Region concentrates a higher number of galleries and other exhibition spaces, which in reality, translates into 4 additional galleries/ exhibition spaces in relation to Lisbon MA (221) (Centre Region: 196, Alentejo: 94; Algarve: 42; Autonomous Regions of Azores (23) and Madeira (830) (p.142).

Still part of the characterization of the activities of cultural and artistic production, entities were asked to describe projects in which they have been involved/ promoted, in the last 5 years. It was interesting to understand that the majority of the companies promoted/ enrolled in extra projects. Out of the 4 entities that did not, there were three galleries founded during the covid-19 pandemic, which can mean that they still have not invested in this type of dynamic.

Amongst the answers, 8 entities identified one project, 4 two projects and 2 three projects, of which the great majority assumed the role of coordinators. The entities opted to describe recent projects, promoted in the last two years. As to the services provided on projects, 52.94% (9/17) identified a higher number of regular services than the ones offered through projects. In fact, 41,18% (7/17) of companies essentially provided the same services in projects as in their regular activity. Only 5 entities identified additional services in projects, diversifying.

As to the internal dynamics of entities in the context of projects, from the 10 valid questions, 50% described a higher number of functions assumed in comparison to the number of employees identified. Regarding external human resources (8 NR), there were on average 2 external professionals contracted for projects promoted/ in which the entities were involved.

The great majority (60%) of the projects described were aimed at the general audience, also including the local community, young people at risk and institutionalised elderly. This question had a total of 6 non-responses, which can be justified by a decrease in motivation to fill out the questionnaire, a non-existing previous definition of the project's target audience or a lack of access to documentation.

Once again, and concerning the location of projects, 83.3% took place on a national level, with Oporto (10) being the most mentioned city. This means that the scope of the project's activities remains very close to the company's headquarters. This can be seen as positive since the activities of cultural and artistic production are being produced for the city and its community, but also as limiting its impacts, not promoting the activity on a national level and reaching a wider audience.

From the questionnaire survey, it was possible to understand the level of structure and planning of projects, by asking for their aims, key activities and expected results (components of the Project Charter (Malik, 2022)). These had high levels of non-responses, with 5, 6 and 9 non-responses, respectively. It was concluded that most projects were promoted for Exhibition and Creation, with key-activity Exhibition/ Reception/ Transmission being common to every

respondent. As to the expected results, 8/9 projects were expected to captivate new audiences and 5/9 to attract new talents.

In terms of the scale of the project's budget, the majority did not exceed 5 000€. This can also explain why most companies do not diversify the type of services provided and promote activities geographically limited to the city of Oporto/ North Region. There were two exceptions: the bigger scale company, with a budget of 1 000 000€ or superior; and one other entity with a budget between 100 000€ and 200 000€.

Finally, regarding the dynamics of funding, most projects benefited from national private funding. Interestingly, none of the entities identified having promoted their projects through public international funding.

As the theme of the research project is related to Climate Change, entities were also asked to identify if the theme of climate change was present in their activities and projects. This question had a total of 7 non-responses. Out of 12, 4 entities assumed not exploring this theme, 1 explored it in a non-explicit way and 1 intended to explore it in future projects. Amongst the entities that explore this theme (6), they promote it through exhibitions (theme of exhibitions) and the artist's works (theme and materials used).

Having finished recalling the main conclusions obtained through the Visual Arts sector's analysis, as well as the process of Review of the Literature on Cultural Mapping, it is time to reflect on the study's processes and future contributions.

Firstly, the objectives of the narrative analysis of the Scoping Review (Task 1) could not be completely archived as there is no closed definition for the concept of cultural mapping and it constitutes a broad field. Even though a variety of perspectives prevails, it was still possible to identify the most frequently cited authors and entities of reference. The remaining objectives were considered accomplished.

In the case of Task 2, although there were some difficulties related to the co-existence of multiple models of delimiting the sector, the used database and sources of information, as to the questionnaire itself, it was still possible to obtain an overview of the Visual Arts Sector in the city of Oporto. There were found to be 425 (421 if excluding the 4 entities included in CAE 94991, 82300 and 85520, defined as Performing Arts, dedicated to activities of the Visual Arts) entities of the Visual and Performing arts based in the city, 131 of which were dedicated to the Visual Arts (CAE 47784, 9003, 74200 and 4779)⁵⁴ (see footnote 33). Hereof, a sample of 19 entities was studied in more depth, allowing for the understanding of the sector's dynamics and what should be the next steps in the research.

From this research process, it is possible to conclude that a more sensitive instrument is required when studying a specific sector of the CCI. In the case of the Visual Arts, two worlds co-exist: for-profit and not-for-profit exhibition spaces. According to Estatísticas da Cultura (2021), in

⁵⁴ There were considered as Visual Arts four cultural associations found through DRCN and DGARTES that, although assuming the form of cultural associations, also function as galleries, having as their main activity the programming of exhibitions. One of them also explores other domains of the performing arts and disciplinary crossings, but it began with a focus on the Visual Arts.

2020 the majority of the exhibition spaces in the country assumed a not-for-profit nature (92%) (North Region: 94%, 14p.p. more than in Lisbon MA).

This second group, although assuming an important role in the promotion and disclosure of emerging artists, is not as easily found through databases focused on enterprises. For obtaining a rigorous picture of the field and its dynamics these entities must also be included in the study. Some of them could be found through exploratory research and in DGARTES, DRCN and PLAKA support programmes, but there were still entities left out. A more sensitive instrument such as interviews, focus groups or collaboration with the art schools and faculties in the city could have helped find more of these types of entities.

Moreover, following a different delimitation, including, for example, Design and Cultural Education, would have resulted in a different analysis of the economic contribution of the Visual Arts sector. For obtaining a full understanding of the impacts of the followed delimitation of the object of study it would be interesting to further investigate the CAE and domains of activity that were left out for comparison of results.

In sum, although this study results in exploratory research, the objectives defined were considered to have been met. This study aimed to contribute to the understanding of what entities exist, to the characterisation of their cultural and artistic production, and their geographic distribution. The production of this type of information can enhance collaboration, disclosure of funding needs and serve as a base for decision-making.

Mapping exercises are relevant as they serve as arguments and evidence that reinforce the importance and contribution of these industries on both a social and economic level. Or, even further, to answering contemporary problems, such as climate change as the arts can promote behavioural change, educate and raise awareness.

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Appendix

Appendix 1: Scoping Review - Limitations and Potentialities of Cultural Mapping Section

5. Cultural Mapping: limitations and potentialities

Taking into consideration the publications analysed, it is possible to understand the range of possibilities and applications of this tool, as well as the purposes and objectives that it can serve, ranging from the study of the Cultural and Creative Industries (Currie & Correa, 2021; Murray, 2017), the clustering of creative entities and activities (Linde et al., 2020) and Cultural Districts (Ponzini et al., 2014) to the understanding of the existing cultural resources aiming for touristic development of regions (Assumma & Ventura, 2014; Cabeça et al., 2019; Gerundo & Adad, 2019; Hultman, 2007; Panagiotopoulou et al., 2020a; Ribeiro et al., 2020; Yunus et al., 2021).

Nevertheless, and given the fact that the process of undertaking a cultural mapping exercise implies the making of decisions along the process, that will, in turn, affect the results obtained and its outcomes (Currie & Correa, 2021), it is important to highlight some limitations of cultural mapping, its approaches, and associated tools and methodologies.

These relate to the difficulty of encompassing and defining the object of study (culture; creativity; intangible elements); the required resources for employing this type of exercise; the use of statistical data; the nature, quality and access to secondary data; the selection criteria of participants and the group dynamic; limitations of the map itself, that aims to capture a dynamic reality through a static tool; or even, as it implies decision making and represents the authors perspective, the component of power present in cultural mapping exercises, not representing an innocent or neutral practice; or even the fact that cultural mapping is still not integrated in planning processes, conditioning the use of the knowledge produced in the development of policies,

On the other hand, cultural mapping potentiates the understanding of cultural dynamics; the documentation of cultural resources, producing knowledge that can be used for planning, investment and sustainable development; the dissemination of local knowledge; the identification of sense of place; and constitutes a democratic communication tool.

Generally, the decision on whether to proceed with cultural mapping can entail the following limitations:

1. “Hidden” cultural and creative activity that is not captured in assessments:

“Furthermore, the obsession with defending public service provision and arts funding in these measurement processes effectively ignores much cultural activity that occurs outside of these systems – in everyday, private, entertainment and community spheres”. (Paterson, 2006, as cited in Evans, 2016, p.4)

2. Relying on statistics for measuring CCIs: “In each case, business and employment statistics on creative industries were of very limited utility, being unreliable because of small numbers per category (a function of overall small population in these places, and resulting in what the Australian Bureau of Statistics call “randomizing” to protect anonymity, but which in practice produce “dummy” numbers), or simply showing next to no creative industry activity at all.” (Gibson et al., 2010, p. 338)

3. Statistical data is not standardized: “there is no standardised methodology used across the projects for compiling data, classifying and presenting it.” (Lee & Gilmore, 2012, p.9)

“these exercises are fraught with methods problems, most commonly the issue of applying standardised definitions for creative activities to national statistics data which all stakeholders – funders and policy makers, regionally and nationally, and including creative practitioners themselves – can agree on which usefully describe sets and sub-sets of activities at a local level.” (Lee & Gilmore, 2012, p.8)

“However, a word of warning whilst applying cultural consumption and profiling data derived from market and survey research (e.g., Experian) provides a useful indication of likely attendance in current arts and

cultural activities, there is a risk of transferring such evidence to less metropolitan areas and reinforcing cultural divides in provision and opportunity.” (Evans & Foord, 2008, p.89)

- 4. Nature of included data can lead to different conclusions and applications:** for example, “Whereas mapping census data or business counts emphasizes inner-city concentration and implies single workplaces, this method revealed the multiple spaces of creative life across the city (with substantial activity beyond the inner-city, in outlying suburbs, and between and across inner, middle and outer suburbs – cf. Felton, Collis, & Graham, 2010), and how these were connected in interviewees’ regular practice. “Mundane” sites of social networking were revealed (...).” (Gibson et al., 2010, p. 334)

“The type of data collected will in turn inform the kinds of knowledge claims the mapping project can make and the applications it can be put to.” (Currie & Correa, 2021, p.5)

- 5. Access to and quality of information:** “Some of the data cannot capture all of the cultural heritage resources due to the lack of information in terms of secondary data (published resources).” (Othman & Hamzah, 2013, p.585) “Despite careful research and analysis, the study has some limitations, which are acknowledged here. Firstly, not all the funding could be spatially classified because the details of the organization or event that had received the funding were not always specific enough to determine where they were located.” (Linde et al., 2020, p.116)

“Much useful data is held by cultural and government agencies, but is not made available for secondary research and analysis, often for reasons of “client confidentiality”.” (Evans & Foord, 2008, p.80)

“In the domain of cultural mapping the captured information, scattered over a large set of in-coherent sources (government publications, databases, web sites, surveys etc.) in different formats and can be accessed only in a fragmented manner as the interconnections between data sets are scanty. (Sarah Court and Gamini Wijesuriya, 2015)” (Sharma & Singh, 2018, p.1)

- 6. Data compatibility:** “Transferring data generated in Web 2.0 platforms into conventional GIS for later statistical or spatial analysis is technically difficult, if not impossible in some cases due to privacy concerns and the presence of code specifically designed to remain wholly controlled by website companies. (Elwood, 2009, p. 259)” (Gibson et al., 2010, p.330)

- 7. Capturing the intangible, non-quantifiable:** “the vast majority of work in this area is positivistic, focusing on available evidence of supply and demand, participation and physical infrastructure based on what is quantitatively measurable. (...) This means that there is very little space for cultural mapping activity which might provide a rather different picture of the cultural landscape, such as could be generated from ethnographic study, cultural memory, discourse, network, visual and textual analyses”.

“Predominantly, there has been a focus on gathering quantitative data for cultural mapping exercises at the expense of more textured qualitative information about how such assets are valued or used by local communities and visitors. Perceptions of the significance of assets have largely been effaced, in favour of simplistic surveys which promote inter-city competition through image management. Too often, research has failed to engage with communities, instead taking an instrumental and top-down approach.” (Lee & Gilmore, 2012, p.25)

“On the other hand, an exclusive focus on the tangible economic value of intangible expressions may entail a commodification of cultural expressions, such as the creative industries analysed in the first case, rendering them interesting and promoted only as long as they represent prospects of economic returns. This empties the intrinsic value of the expressions and their contribution to less measurable societal dimensions such as identity and memory.” (Freitas, 2016, p.15)

“One of the lessons that can be drawn from these examples is that intangible cultural assets and values cannot usually be captured by simple questionnaires or one-off consultations and require an approach to cultural mapping that may be the first step in a longer journey toward cultural sustainability.” (Jeannotte, 2016, p.4)

8. **Selection criteria for participants:** “Part of the challenge of engaging community members on an ongoing basis appears to be related to the criteria used to select participants.” (Jeannotte, 2016, p.40)
9. **Lack of cooperation:** “There are also several private heritage collections that could not be put on record due to the lack of cooperation from owners during the data collection process some of whom also wished for their collections to not be published.” (Othman & Hamzah, 2013, p.585)
10. **Complexity of culture:** “In mapping intangible culture, it is necessary to recognize that community narratives are outgrowths of contexts that are usually “messy”, non-linear, contested (even within the community), and ongoing. In other words, they are part of a cultural eco-system that is every bit as complex as the natural ecosystem in which it is embedded.” (Jeannotte, 2016, p.41)
11. **Classification of industry sectors:** “difficult to identify industry sectors resembling the creative industries as they have come to be understood internationally. More vernacular understandings of creativity are required, outside of standardized industry classification schemes, embedded in the social life of rural and industrial places”. (Gibson et al., 2010, p. 339)

“Defining the creative economy presents challenges for the kind of detailed mapping in our project. We started with the UK government's creative industry sectors and creative economy definitions, but found that these classifications frequently clashed with the views of those working in the creative economy about what they would consider to be within their industry.” (Murray, 2017, p.9)

“oversimplified definitions derived from categorizations which do not adequately capture complex activities, events, and spaces; the applicability of ‘big city’ categories that may misrepresent ‘cultural vitality’ in smaller places; the invisibility of some cultural activities; and the dilemma that some cultural activities are not conducive to mapping, such as festivals or events that move locations, or ‘virtual’ work. Danielle Deveau and Abby Goodrum (2015)” (Duxbury, 2019, p.20)

12. **Defining the object and scale of study:** “data collection for cultural and creative assets, amenities and activities is also riven with disparities between different classifications and their attendant meaning, and often data simply is not collected at a local level. This means that getting a clear and comparable picture of cultural amenities across local areas by a common taxonomy of art and cultural forms, professional, amateur subsidized and commercial, industry classifications and codes, venue-based and community settings and so on, is therefore a complicated and resource-intensive exercise, which often requires primary research and data collection.” (Lee & Gilmore, 2012, p.9) Although, “There has been a number of attempts to improve national data sets and standards by which cultural assets are related to specific geographies.” (Lee & Gilmore, 2012, p.25)

“How we define communities, neighborhoods and culture also requires an historic and geographic sensitivity, particularly when notions of cultural heritage, legacy “ownership”), access and users/non-users of cultural facilities also reflect social distinctions and divides (Chan & Goldthorpe, 2007).” (Evans & Foord, 2008, p.73)

“Any study that focuses on a small, limited geographical area may miss those people

who frequently move for work or work in a national or international setting.” (Murray, 2017, p.10)

“Language was very important when looking at how people described their work. Depending on the sector people would describe their work very differently. The term ‘maker’ is widely used in Craft whereas ‘freelance’ or ‘self-employed’ is more commonly used in other industries. Freelancers and small businesses often work in multiple areas and it was challenging to identify all these areas in our mapping. Often they were mapped based on their online presence, usually their website. Website information, however, can often be misleading or outdated. This is a limitation of a desktop research project that relies on Google searches of existing companies, organisations and freelance workers.” (Murray, 2017, p.10)

13. **Heterogeneity of cultural providers and consumers:** “Heterogenous nature of both providers and users/consumers – and their spatial relationships – makes any cultural mapping exercise complex and demands

a process of integration across sectors, art forms, types of cultural activity, and geography – and of course, across a population which may be diverse and require detailed stratification.” (Evans & Foord, 2008, p.79)

14. Unclear terminology for cultural clusters/ districts/ quarters: “Labels for the models describing spatial organization of cultural production and consumption are not particularly useful in classifying the differences among the so-called cultural clusters, districts or quarters. They are oftentimes inter- changed to describe similar phenomena (Cooke, 2005). Nonetheless, these labels provide interesting insights into the spatial organization of cultural institutions and production, making more evident and relevant links between cultural assets, creative activity and economic development, and urban-regional transformations.” (Ponzini et al., 2014)

15. Limitations of the process: time-limited, resource-consuming, conditioned by the production context and can render it difficult for the comparison between analyzed objects: “(...) bottom-up approaches may risk being time and resource intensive and create non-standardised data that prevents the region from being compared. (Fraser, Dougill, Mabee, Reed, and McAlpine, 2006)” (Freitas, 2016, p.12)

“The tools to undertake a wide-ranging inventory and the scope of assessments are restricted in practice, due to the time-limited nature of such cultural audits and planning exercises, the imperatives of local agencies (funding/funder-led), and a poor information and knowledge base (and knowledge management – i.e., of historic/trends, previous studies, crossectors, and data access and sharing).” (Evans & Foord, 2008, p.73)

“With continuing cuts to public sector budgets whilst the need for evidence to show cost-benefit and competitive advantage of strategic investment in places, cultural mapping using this type of approach will be difficult to sustain without national data standards and frameworks for collection and a more strategic and joined up approach to their use. Arrangements for the updating and ongoing usage of the datasets (once they have been established) are often missing or developed ad hoc as the projects unfold. This reflects the fact that most of the projects are a response to an immediate, pressing policy opportunity or need. Little thought has typically been given as to how the datasets may be sustained beyond the period of the initial policy stimulus. The lack of standardisation in data compilation is also an impediment to updating and sustaining these projects as it makes them less easily replicable. (Lee & Gilmore, 2012, p.25)

“Public sector cultural asset data tends to be easier and cheaper to collate – but painting a comprehensive picture requires public, private and voluntary sector data.” (Lee & Gilmore, 2012)

“Nevertheless, not everyone can access the GIS for several reasons, including its cost or able to operate it efficiently.” (Fitri et al., 2017, p.3)

16. Reproduction of studies: “the use of classifications in data collection methodologies are often adapted and modified or discontinued over time, making time series data to support ongoing assessment of movement against baselines even more problematical.” (Lee & Gilmore, 2012, p.10)

17. Atomic practice, not systematic: “With the exception of CultureMap, the projects are underpinned by “flat” datasets that are compiled once, rather than dynamic databases that are used and maintained on a frequent, ongoing basis.” (...) “Local authorities either do not have appropriate data or have not accumulated data in one place to make visible and accessible to planners and other users.” (Lee & Gilmore, 2012, p.9)

“Thus, for municipal representatives the mapping process seems to represent a discreet, one-time project while, for hired consultants, such as culture-man, its rationale and success is dependent on repetition. One mapping in one municipality has no meaning.” (Hultman, 2007, p.329)

“Cultural mapping largely continues to be viewed and implemented as ‘one-time’ projects. In a societal context where data to understand longitudinal changes and citizen-based monitoring is valued, it would seem that monitoring cultural changes and continuities over time would be a necessary dimension to informing cultural policy and planning. And if we view culture as encompassing an intrinsically dynamic, multi-layered, and complex array of resources, infrastructures, actions, relationships, expressions, knowledges, memories, and potentialities in our cities and regions, a multi-dimensional and dynamic approach to understanding its

shapes and changes seems essential. In short, cultural mapping projects would gain value through continuity over time. Such a practice should be linked to the integration of cultural mapping within long-term research programmes as well as within policymaking and planning processes, both of which are still very rare.” (Duxbury, 2019, p.25)

- 18. Static quality of maps:** culture changes dynamically all the time, though different actors and places. “No map can capture the dynamically changing cultural life of the city nor all that culture and art entails, as many of our participants pointed out. We prefer to understand the map as an ongoing, interpretive process, rather than a fixed, finalised product. Any application of the map should take its limitations – both epistemological and technical – into account.”(Currie & Correa, 2021, p.16)

“(…) a key concept in this process of cultural mapping will be transformation and change, although the mappers – the different categories of project participants – must make implicit and explicit statements to the effect that culture is fixed in space.” (Hultman, 2007, p.321)

“The creative economy is very fluid and people may move from job to job and may move to work in different locations.” (Murray, 2017, p.10)

“Ingold sees cartographical maps as attempting to create a holistic vision of cultural practice within an area but without the specificity and nuances of local culture and its movement. Maps once published are set in the moment of time captured in the cartography and are static with an inability to trace cultural routes and migrations. Cultural mapping as a practice needs to be aware of its displacement of lived culture in indexing the activities of a cartographically determined area. Ingold suggests that mapping as an action can fail to represent cultural movement between locales by presenting a fixed attachment of culture to a specific area.” (Ingold, 2000) (Murray, 2017, p7)

- 19. Mechanism of power on the part of those mapping:** “following Foucault, it can be argued that such positivist mapping can be seen as a means of establishing “knowledge” about culture, which acts as a mechanism of power on the part of those mapping; to map is to know, is to control “the formation of discourses and the genealogy of knowledge need to be analyzed, not in terms of types of consciousness, modes of perceptions and forms of ideology, but in terms of tactics and strategies of power.” (Foucault 2007, p. 182, as cited in Lee & Gilmore, 2012, p.25 - 26)

“As a result, those using a cultural map for policy-making or actionable decision making should account for the methodological choices made during the map’s construction.

Any instrumental use of the map should acknowledge the inherently partial and limited knowledge claims the map can make, due to the interpretive and contingent practices that gave rise to it.” (Currie & Correa, 2021, p.6)

“Thus, the mapping practice undertaken by the project is a form of power: the power to define, to visualize and not least to situate culture.” (Hultman, 2007)

- 20. Not an innocent or neutral practice:** “(…) mapping practices always do something to the mapped subject (cf. Perkins (2003) on maps as performative actors). Mapping means visualization and ordering, and thus the (re)arrangement of things in relation to each other.” (Hultman, 2007, p.321)

“(…) maps shape, rather than reflect, the territories their creators try to represent.”(Currie & Correa, 2021, p.2)

“Although the ontological statements considering space and culture implicit in the project rationale are to map culture in a seemingly objective way, a GIS is never a neutral tool. Rather, a GIS is the result of a social practice that ‘inevitably embeds value’ (Sieber 2000: 785).” (Hultman, 2007, p.326)

“Thus, to map cultural manifestations in order, eventually, to present a spatial identity is not descriptive but prescriptive and normative. The project definition of culture recounted earlier, takes on new meaning when it is interpreted normatively rather than pragmatically. Pragmatism implies objectivity and the sacrifice of a self-

serving or even romantic gaze for the cause of a greater good. A normative selection is the opposite of this since it prescribes what is to be and be seen.” (Hultman, 2007, p.330)

- 21. Abstraction and narrow scope of reality captured:** “Maps are formalised abstractions, but when they are presented as real objects, their effects are also very real. To see maps as scientific one-to-one representations of the world is a mimetic fallacy that ignores maps’ displacement from and bearing on the original object now being imitated (Huggan, 1989, p. 117).” (Currie & Correa, 2021, p.2)

“Given their complexity, bottom-up approaches have more difficulty in mapping national contexts fully and will tend to focus on the local level, whereas top-down approaches are able to generalise from a handful of indicators and capture broader dimensions of reality” (Freitas, 2016, p.11)

“Given their complexity, bottom-up approaches experience more difficulty in mapping contexts altogether and tend to focus on the local level whereas top-down approaches can generalize from a set of indicators and capture larger dimensions of the reality of the territory. (Bonsón, Royo, & Ratkai, 2015; Duxbury et al., 2015a; Freitas, 2016; Plieninger, Dijks, Oteros-Rozas, & Bieling, 2013).” (Ribeiro et al., 2020, p.59)

- 22. Ethics concerns:** “A challenge – and opportunity – for researchers using Web 2.0 technologies stems from the “tremendously heterogeneous” (Elwood, 2009, p. 257) knowledges they generate, and technical and ethical problems concerning how to access and use publicly generated spatial data in further research and analysis. (Elwood, 2009, p. 257)” (Gibson et al., 2010, p.330)

- 23. Publics’ interpretation of the information:** “This idea engages directly with the critical cartography literature: Dodge, Kitchin, & Perkins, for instance, conceive of maps as a set of transitory elements that result from a specific context and time and are shaped in part by the viewer’s own subjectivity (2012). The map itself is always only the sum of this process, manifesting with each viewing – maps should be understood in the context both of their production and their subsequent use.” (Currie & Correa, 2021, p.5-6)

“Such processes are dynamic and, difficult to communicate to less skilled stakeholders (Hansen and Prospero 2005).” (Panagiotopoulou et al., 2020, p.8)

- 24. Integration within planning processes:** “As Graeme Evans (2015) and others have observed, **cultural mapping is not yet integrated and regularized within planning processes**, and cultural mapping projects largely exist on the margins of these processes as one-time special initiatives (Duxbury, 2019, p.26)

“If culture is to be a more integrated part of urban and community planning and development processes, cultural mapping projects must be integrated into more regularized systems, with direct links between mapping and planning/decision-making processes (HÄYRYNEN, 2015; see also ALLEGRETTI et al., 2014).” (Duxbury, 2019, p.25)

- 25. Guidance manuals lack in providing practical guidance after the cultural mapping exercise is complete.** “Advice and guidance on undertaking cultural baseline (mapping) and planning, takes various forms and is designed to serve different purposes, scales and users – policy, practitioners, technical. However, most of the cultural planning “toolkits” produced to date, generally combine step-by-step guidance on cultural audit, assessment and mapping stages, but contain less on planning, forecasting and scenario building, or on links to arts policy and strategies around key art form development (Evans, Foord, Shaw & Curson, 2007). These resources are generally in printed report form (downloadable as pdfs), with checklists and inventories, but are not inter-active, or linked to maps or databases. They are therefore useful guidance manuals (e.g., Thames Gateway North Kent [TGKN], 2006) but are not really planning “toolkits” (as many are called).” (Evans & Foord, 2008, p.79)

- 26. Incorporation of the results obtained into planning processes:** “(...) incorporate qualitative, complex, community-based inquiry and findings in policy and planning processes.” (Duxbury, 2019, p.24)

“While effective in articulating the unique characteristics of place, however, such narratives cannot readily be converted to metrics, which often means that decision makers quickly move onward to maps that focus on tangible cultural assets, as in the case of the Town of Georgina.” (Jeannotte, 2016, p.40)

“Intangible cultural resources, sometimes referred to as “identity mapping”, tend to receive much less attention in municipal cultural mapping projects as they cannot easily be pinpointed on a conventional map and are hard to fit into municipal planning initiatives.” (Jeannotte, 2016, p.36)

27. Influence and applicability of the results: “(...) ensure policy, planning, and political processes take up and consider the findings.” (Duxbury, 2019, p.24)

“(…) bottom-up approaches often have no influence because politicians ignore their results, especially if they do not converge with macro-level approaches and development models.” (Ribeiro et al., 2020, p.58 - 59)

Potentialities:

1. Understand cultural dynamics: “other researchers have promoted ethnographic methods (Drake, 2003; Short-hose, 2004) including interviewing, snowballing through contacts and participant observation, as means to get “inside” creative industries and to better understand their embeddedness in place and networks of social relations. Such methods provide rich explanation of the internal dynamics and social logics of creative production, but having stemmed from text-based recorded interviews, produce data that lack the geographical co-ordinates necessary to be mapped in the manner of employment or business location data – and thus remain comparatively “aspatial”, with no numerical or statistical component.” (Gibson et al., 2010, p. 334)

“(…) highlight the dynamic lives of places in their complexity, diversity, and richness” (Duxbury, 2019, p.26)

2. Identify and record cultural resources: “Results of this study show that CMA is a systematic approach for the identification and recording of cultural resources. This approach allows researchers to identify cultural heritage resources using GIS tools. Through multimedia enriched web-bases, cultural mapping also enhances the identification and exploration of the community’s identity by mapping intangible cultural resources such as traditional values and unique histories that combine to define a community’s identity and sense of place. It can also be used to identify the relationship between two types of cultural heritage assets.” (Othman & Hamzah, 2013, p.585)

3. Critical cartography: “By subjecting maps to cultural analyses and cartographic semiotics, critical cartographers, cultural geographers and non-representational theorists view the iconography of maps in complex relationships with the political, religious and cultural struggles during the time of their creation (Cosgrove, 2008).” (Currie & Correa, 2021, p.2)

“These scholars deconstruct maps to reveal the power and knowledge structures behind their creation and to understand their political and social force in the world and on their viewers (J.B. Harley, 1989).” (Currie & Correa, 2021, p.2-3)

“Participatory mapping ‘inherently critique[s] the dominant, or conventional, historical geography’, and discusses ‘the larger social and political meaning of the mapping project.’” (Offen, 2003, as cited in Cabeça et al., 2019, p.43)

“For audiences in government, GIS proved a way to package up research in ways that

suited its quantitative imperatives (obsessed as governments are with auditing, counting, ranking creative places etc.; Christophers, 2007), and yet from our perspective, also nurture a critical, questioning perspective on assumptions about creative industries, what they constitute, and where they are found. This was critical cultural research communicated in a manner digestible to policy makers, made empirical.” (Gibson et al., 2010, p.338)

4. Disseminate local knowledge: “The maps capture a level of detail about these intertwined elements that only can come from people who live in an area” (Georgina Community Maps website, as cited in Jeannotte, 2016, p.40)

“Assigning weights or values to a community's intangible culture can only be done by the people who live there, and it is noteworthy that all the communities described in the case studies attempted to do so. Finally, all the communities profiled closely tied their intangible cultural narratives to place.” (Jeannotte, 2016, p.40)

“The processes through which many cultural maps are created are community-engaged and participative and are sensitive to multiple ways of knowing, experiencing, and articulating the pluralist cultural meanings of specific places.” (Duxbury, 2019, p.26)

5. **WebGIS can facilitate public access:** “Web GIS becomes cheaper and easier for disseminating geospatial data and processing tools (Alesheikh, Helali and Behroz, 2002)” (Fitri et al., 2017, p.3)
6. **Identify sense of place:** “Geographical Information Technologies – as a means to produce maps – can make the invisible visible, tracing contours of emotional and affective links to city spaces and re-representing these in a format beyond words and numbers, as maps that elicit spatially registered responses in viewers.” (Gibson et al., 2010, p.345)
7. **various interpretations:** “(...) challenge our understanding of maps themselves, producing poetic, artistic, abstract, subjective renderings of geographic space that veer from Cartesian norms and positivist claims (Cosgrove, 2008; Wood, 2006).” (Currie & Correa, 2021, p.5)

“The map itself can embed spatial and chronological information, description, narrative, sound, moving and still images, quantitative and qualitative data through a visual interface that carries affective and stylistic qualities as well as ‘basic’ information. (Longley; Duxbury, 2016)” (Duxbury, 2019, p.26)

8. **Democratic communication tool:** “Since its foundations in the 1970s, cultural mapping offers a democratic approach to regional cultural policy – both in terms of who can define and access culture and shape cultural policy and in terms of what gets counted and funded as part of the cultural landscape.” (Currie & Correa, 2021, p.3)

“The projects are helping partnerships between cultural agencies and local authorities to identify shared priorities and discuss joint investment decisions. In particular they persuade those developing evidence-based policies to take culture seriously – by compiling and presenting asset data (often allied with consumption data) in a systematic way and in a medium that is familiar to those policy makers.” (Lee & Gilmore, 2012, p.25)

“Cultural mapping can create opportunities for dialogue between a community and local authorities, offering “diverse sources of information [that] can overcome the limitations of expert opinions”. (Bettencourt; Castro, 2015, p. 28, as cited in Duxbury, 2019, p.24)

“These cultural mapping projects can serve as an advocacy tool that can bring together cultural professionals, civil society, and government (ESSAADANI, 2015); provide a collaborative space for users, planners, managers, and researchers in the field of culture to work together (ATTARD, 2015); and can point to themes and areas requiring additional policy attention (KESSAB, 2015).” (Duxbury, 2019, p.23)

“Cartography has become a form of communication used by the general public, providing ‘volunteered geographical information’ (VGI – or ‘user-generated content’ (UGC): content produced by average users) (Goodchild, 2007) that might enable the study of how people experience and make sense of things (Straumann, Çöltekin, & Andrienko, 2014; Chua, Servillo, Marcheggiani, & Moere, 2016) and lead us to rethink the relationship between human users/consumers and digital cartographic information (Craine & Aitken, 2009).” (Cabeça et al., 2019, p.43)

“Recent maps use new spatial representation technologies to locate and trace personal, collective, or a bit of both types of stories. Users (individual or sometimes collective) can easily add annotations related to their individual experiences on the map.” (Ribeiro et al., 2020, p.59)

“Furthermore, Web developments have permitted the exploitation of interactive Web-based GIS, as a bi-directional communication approach (Hansen and Prosperi 2005) that can ensure equal access to information; render participation wider and more substantial due to the better grasping of spatial data and related problems;

create new perspectives for social inclusion; and strengthen democratic procedures that support effectiveness of spatial decision-making processes and successful implementation of their outcomes.” (Panagiotopoulou et al., 2020, p.8)

- 9. Broaden the scope of the study:** “The maps are useful not only for cartographic expressions, but also for illustrating our memories through annotations or comments.” (Caquard & Cartwright, 2014) (Ribeiro et al., 2020, p.59)

“Mapping personal stories with online cartography is a popular activity because of the substantial number of Google Maps users who retrace individuals’ journeys.” (Ribeiro et al., 2020, p.59)

- 10. Include different perspectives:** “Electronic maps, Crawhall also points out, can keep these multiple contexts in play, overlaying different participant perspectives, whether those of academics, public authorities, community members or cultural producers.” (Currie & Correa, 2021, p.3)

“(projects that focus on capturing intangible, qualitative data) bring together a range of voices to create intersubjective knowledge about a geographic community” (Currie & Correa, 2021, p.5)

“In relation to indigenous people and local communities a significant advantage of cultural mapping is that it may be used to bring to the attention of dominant decision makers (state, influential social groups, private sector) the voice of subordinated or marginalised groups which otherwise is usually not heard, or more to the point, not listened to.” (Taylor, 2013, p. 8)

“These new ICT-enabled perspectives have pushed forward the growth of participatory democracy in urban planning, a transition that implies a more intense use of Web-based interaction among decision-makers, planners, and local communities.” (Panagiotopoulou et al., 2020, p.8)

- 11. Present tangible and intangible culture:** “The theoretical literature on cultural mapping shows how cultural maps engage, sometimes simultaneously, these different epistemological registers: on the one hand, humanistic and intangible forms of knowledge about the qualitative, conceptual and affective dimensions of culture, versus more instrumental, utilitarian, managerial intelligence in service of cultural development and economic policy. (Duxbury et al., 2015; Freitas, 2016)” (Currie & Correa, 2021, p.4)

- 12. Planning for city regeneration:** “Many cities have also adopted cultural mapping for planning in light of population shifts and gentrification; these projects often reflect the popular view that cultural assets encourage city regeneration.” (Currie & Correa, 2021, p.4)

- 13. Guide development, planning and investment decisions:** “It can provide information that does not represent a ‘final answer’ or ‘end result’ but must be seen, instead, as “discussion openers” that open up new perspectives on mapping results and local development (NUMMI; TZOULAS, 2015, p. 172; see also PILLAI, 2015)” (Duxbury, 2019, p.24)

“In turn, integrating participative cultural mapping approaches meaningfully into cultural and community planning and policy processes will enable citizens to collaboratively co-construct maps that can serve as the scaffolding for local knowledge development and a deeper understanding of place, and the foundations for collective planning and action.” (Duxbury, 2019, p.26)

“Such broad-spectrum mapping of the local ‘culture’ can provide vital information to the policy-makers about the best way to respond more effectively to local needs while maximizing opportunities.” (Assuma & Ventura, 2014, p.497)

“The data created establishes database of cultural resource information to support decision-making purposes. It also can be integrated into municipal plans (e.g. land use, economic and tourism development) (...)” (Othman & Hamzah, 2013, p.585)

“The two initiatives saw cultural mapping as the essential step for mobilizing the local actors to develop and innovate their cultural system.” (Ponzini et al., 2014, p.83)

“The projects are helping partnerships between cultural agencies and local authorities to identify shared priorities and discuss joint investment decisions. In particular they persuade those developing evidence-based policies to take culture seriously – by compiling and presenting asset data (often allied with consumption data) in a systematic way and in a medium that is familiar to those policy makers. It appears that doing this has also helped project partners to get to grips with spatial planning.” (Lee & Gilmore, 2012)

“At best, the quantitative audit approach prevalent here provides a clearer picture for policy makers and funders to see the gaps, to apply the data to tools in their command such as standard charge, (...) to support decision making and investment and evaluate what works, as well as have a basis for understanding performance in the future. They can also provide a baseline for other qualitative information to be added and integrated, (...)” (Lee & Gilmore, 2012, p.26)

- 14. Sustainable development:** “Following this approach, mapping is a practical tool for the community to ensure sustainability” (Ribeiro et al., 2020, p.58)

[the data created can be] “used as an indicator in measuring the sustainability of the historic city.” (Othman & Hamzah, 2013, p.585)

- 15. Enhance regional prospects as a tourist destination:** “The CMA provides a “one-stop” resource information and also promotional tool to all of the cultural assets in the study area. It supports the local cultural sector by offering information about the culture of the area to local residents and visitors alike.” (Othman & Hamzah, 2013, p.585)

“Cultural mapping as it is currently utilised is clearly emblematic of a particular mode of place-based competition, which has been so dominant within a neoliberal framework. In the 1980s, David Harvey (1989) famously pointed out the rise of the “entrepreneurial city: and the rise of inter-city competition as the key means for city planners to facilitate growth. As a tool of contemporary governance, cultural mapping as it is most commonly used (and epitomised in the mapping exercises studied above), represents a new mode of inter-regional competitiveness through specific forms of cartographic methodology. Therefore, what is novel about the development of contemporary cultural mapping is the application of new forms of mapping technology, and database mining in order for regions and sub-regions to compete for the visitor economy and investment on the basis of cultural cartography. The perceived benefits of such maps as a form of economic boosterism for regional planners, and development agencies, then, are clear.” (Lee & Gilmore, 2012, p.26)

- 16.** “Geographic Information Systems (GIS) mapping is an ideal tool for the **identification of CCI clusters** and linking them to other development indicators (...)” (Linde et al., 2020, p.113)

Appendix 2: Scoping Review – Discussion Section

6. Conclusions

In the last 15 years there seems to be a growing interest in framing, researching and understanding cultural mapping in Cultural and Creative Industries. This interest is mostly expressed in Europe, and especially in the UK. However, the impact of publications has been decreasing in the last five years.

The journals "Cultural Trends" and "City, Culture and Society", and their respective publishers Routledge and Elsevier, have had the greatest impact and concentration of publications on the area of research. Almost half of publications were published via open access.

When it comes to the concept itself, cultural mapping is characterized by its broadness, lack of strict boundaries and difficulty of definition. This is also applicable to the object it aims to study: culture, a concept without a closed definition (Horlings, 2015) and the creative industries, characterized by informality and dynamism (Murray, 2017) and of very difficult delimitation and categorization, which is proven by the disparity of classification models presented in the articles.

Although a variety of voices and perspectives prevails regarding the concept of cultural mapping, there are key authors, say, for example, Duxbury (2019), Evans (2008) or Stewart (2010) and entities of reference, like UNESCO, that are common between the articles, as well as key concepts, like community, cultural resources, the idea of inventorying/ collecting or of development.

Regarding the level of the object of analysis, the review or analysis of methodologies or ontologies is the most frequent investigation method. The delimitation of the level of analysis mostly relies on models created, adapted or modified by the authors for the purpose of the study, and include both tangible and intangible aspects of culture. In fact, and as to be expected due to the complexity of the retrieved data (Freitas, 2016), the great majority of bottom-up exercises focused on a local level. This focus on both components of culture responds to the necessity of, in order to encompass the complexity of culture, undertaking an in-depth holistic study.

The study of a specific field or the industry as a whole are the most frequent analysis scales. Production and consumption are equally included. The criteria for selecting the sample to be included in each of the studies are mainly geographical (especially at the local level - smaller scales of geographic analysis), methodological/state of the art or social.

Regarding the procedures of inquiry (or research designs) the systematic review focused on observing the specific research methods of data collection and data analysis. It was found that in most articles there is an unclear explanation of the methodology used and associated procedures. Information is quite dispersed across the papers. Only a few refer in a structured way to the methods of collecting and analyzing data. By not clearly exposing the methodologies, the reproduction of studies and their contribution are compromised.

This can be seen as a reflection, on a small scale, of cultural mapping field itself, where information is "scattered over a large set of in-coherent sources (...) in different formats and can be accessed only in a fragmented manner as the interconnections between data sets are scanty." (Sharma & Singh, 2018, p.1)

Looking at the aims of the articles analyzed, it is possible to understand the growing importance of evidence-based policies (Ponzini et al., 2014) since the majority of the articles intended to document cultural resources; that this concept has been a central theme of discussion, as more than half of the papers aimed to raise theoretical questions and contribute to the ongoing debate; and finally that there is, in fact, growing importance given to cultural planning (Assumma & Ventura, 2014) and the development of policies based on information/ knowledge and of culture and creativity as drivers for economic development and effective management, with papers aspiring to contribute to effective management and economic development.

There is also a growing interest in participatory planning processes (Panagiotopoulou et al., 2020), since half of the articles focus on case studies/ do mapping exercises based on a bottom-up model, allowing for the study of the

intangible components of culture, and not relying solely on expert-led approaches, with a more instrumental vision of culture (Freitas, 2016).

Finally, as the aims and subsequent applications of the knowledge produced in a cultural mapping exercise will have an impact on the process and results of the exercise employed (Currie & Correa, 2021, p.5), it is also important to understand if the studies are financed or not, and if they translate the visions and intentions of the entity who funds it. Looking at the 27 papers, only half identified the type of funding, with the large part being financed by public entities, which translates the tendency for developing evidence-based policies and concrete answers to local needs.

Cultural mapping and CCIs are studied by a multiplicity of authors and different areas of study, with distinct terminologies, production contexts, methodologies and objectives, therefore resulting in a transdisciplinary field. The crossover between article methodologies was not shown to be advantageous for perceiving patterns. Rather, it just made the disparity evident.

Researchers Luana Santos and Ana Sousa sought to contribute to the systematization of the study of cultural mapping applied to CCIs through the proposal of a grouping of keywords, the survey of limitations and potentialities in practice and, overall, a systematic review that allows to understand the state of the art of CCIs mapping. This document can be useful to researchers working in this scientific area as well as to wider publics, providing the basis to new research perspectives and building of conclusions.

Appendix 3: Scoping Review - Summary of each selected articles

Title	Issue	Objective	Type
<p>Participation and provision in arts & culture – bridging the divide</p>	<p>The indicators used in the surveys that have been employed to serve as a basis for the development of cultural policies and that aim to provide a picture of the diversity in arts, libraries and museums usage and participation (focus: minorities), lack spatial reference, which prevents obtaining a genuine perception of the arts attendance and consumption.</p>	<p>provide an overview of the cultural planning exercises in the last 30 years in the UK, focusing on the provision of arts and culture; understand the impacts and effectiveness of cultural planning policies in terms of provision; analyse the cultural attendance of three types of cultural facilities to understand the frequency of attendance, diversity, and geographical proximity to the audience; therefore providing a clearer picture of the indicators that are not being taken into account when defining provision policies.</p>	<p>analyses information from practical cases of mapping implemented in the past</p>
<p>Cultural mapping: The semantic web as a survey tool for the construction of the cultural plan</p>	<p>Both the field of cultural heritage and the Web are characterised by their broadness and decentralisation, combining information from various sources and formats. The importance of integrating the information provided through an ontology is reinforced in this context, providing a single base of knowledge, transversal to various domains.</p>	<p>Understand how the exercise of cultural mapping, currently assessed as the antecedent step of cultural planning can be exploited and applied to the field of urban development; provide a theoretical contribution assessing the potential instruments for the development of the field of cultural mapping; reflect on the contributions of the Semantic Web for the field of cultural heritage, as it enables the organisation, management and process of information; to propose a new ontological vocabulary for the area of investigation.</p>	<p>analyses a mapping methodology; presents a new or improved/ adapted mapping methodology</p>
<p>The Social Conditions of Cultural Domination: Field, Sub-field and Local Spaces of Wind Music in France</p>	<p>Wind Music is positioned in the lowest level of music hierarchy in France; it is seen as illegitimate and associated with lower-income backgrounds. It, therefore, lacks recognition and interest from media and scholars as of cultural promotion, being left out of the cultural circuit.</p>	<p>A theoretical contribution to the debate on symbolic domination and cultural hierarchy; analysis of the social organisation of wind music and how cultural domination is felt in its various levels; through a three-level analysis: study wind music in relation to the music field, as a sub-field itself, and address the social relationships and interactions between practitioners and their environment; analyse the concept of symbolic</p>	<p>does a mapping exercise</p>

		domination, cultural hierarchy, and the social organisation of the cultural practice;	
Values in place; A value-oriented approach toward sustainable place-shaping	The sustainable development of regions and communities can be promoted through place-based approaches; however, there's still not enough understating on to which extent values, embedded in culture, weight in processes of place-shaping and which methodologies should be employed for the analysis and mapping of values.	contribute to the theoretical debate; advocate for a value-oriented approach in place-shaping processes; understand the cultural dimension and the role of values in sustainable development; revision of multidisciplinary literature; analyse how values are embedded into places and permeate the process of place-shaping, dividing the analysis between an economic, intentional and symbolic approaches to sustainability; catalogue relevant methods for the analysis and mapping of values; understand the relationship between people's values and the way they perceive and attribute significance to a place (sense of place).	analyses a mapping methodology
Creative Cardiff: Utilising cultural mapping for community engagement	The University of Cardiff, encouraged by the UK Research Excellence Framework, aims to assess the impact of the produced research in relation to the community and the business sector. The goal of the article is to study the presence of the Creative Economy in the city, a growing sector, namely by a process of cultural mapping of the creative industries (as well as the professionals working in the field), aiming to promote and reinforce the relations between the University and the creative sector (civic university) that can foster innovation and professional opportunities for students.	Identify the number of entities and professionals included in the DCMS creative economy groups; understand its relation to DCMS employment statistics regarding the UK; spatially identify the location of the sector's entities; provide a knowledge basis for the development of Creative Cardiff network; reinforce the importance of cultural mapping as a tool for the establishment of creative relationships; understand how the model used for the cultural mapping of the creative economy can be applied to various contexts;	does a mapping exercise

<p>Cultural mapping and sustainable communities: planning for the arts revisited</p>	<p>historic context of cultural planning in the UK: lack of specific provisioning guidance and quantitative planning standards due to the heterogeneous source of arts provision (public, private and non-profit and community-based organisations) and the inexistence of comparable data regarding cultural amenities; the international context that places reinforced importance on cultural planning and the role of culture, combined with the increase of population and new housing growth areas (whose access to culture) calls for the necessity of planning and provisioning in a more structured way.</p>	<p>provide an overview of the historical evolutions of planning standards in the UK, comparing them with cultural planning, as of the current approaches and concepts employed for the description of cultural provision; provide a critical overview of the approaches to cultural planning and provisioning focusing on culture in the context of housing growth areas; propose a framework for “populating the cultural map”, that presents the key factors and links between “supply and demand” and “drivers of change or growth” that need to be contemplated when undertaking a cultural mapping exercise; reflect on cultural mapping methods and data.</p>	<p>analyses information from practical cases of mapping implemented in the past; analyses a mapping methodology; presents a new or improved/ adapted mapping methodology; analyses a mapping technology</p>
<p>Cultural mapping as a development tool</p>	<p>understand the potentialities and challenges of employing cultural mapping exercises with a view to archiving development, as tools (instrumental approach applied in cultural policy research and community development).</p>	<p>analyse two Portuguese cultural mapping exercises (a bottom-up, participatory approach that aims to cover the intangible components of culture; and a top-down approach that seeks to understand the economic potential of cultural and creative industries), using a three dimensional model of analysis that takes into consideration the type of development model, the level of analysis and the view of culture that underlines the exercise; understand the link between the methodologies used in cultural mapping and the goals and outcomes intended when employing the exercise.</p>	<p>analyses information from practical cases of mapping implemented in the past; analyses a mapping methodology</p>
<p>Cultural Mapping of the Heritage Districts in Medan, North Sumatra</p>	<p>Despite the richness of Medan’s cultural heritage (architectural and urban heritage), the region lacks a conservation plan to safeguard its cultural resources; the urban development planning and the management of cultural heritage are not being properly articulated</p>	<p>present a cultural mapping exercise applied to seven districts in the city of Medan (both tangible and intangible cultural resources), taking into account its challenges and underlying processes; highlight the importance and significance of Medan’s cultural heritage; provide a basis of information for the development of conservation policies for the region.</p>	<p>does a mapping exercise</p>

<p>Cultural Mapping of Villages in India Using CIDOC-CRM</p>	<p>Cultural mapping exercises deal with and manage a whole range of data, from various sources and with different formats. The same happens in the context of Indian heritage, characterised by heterogeneity. Ontologies provide a semantic integration of the heterogeneous information, but for the purpose of studying the cultural heritage of villages in India, the existing CIDOC CRM and ISO standard do not provide the necessary specialisation to capture and represent the intangible and tangible of these heritage resources.</p>	<p>to propose an abstraction of CIDOC CRM specifically developed for the cultural mapping of the tangible and intangible components of cultural heritage in different communities, residing in Indian villages; present real examples of appliance of the ontology into the study of Indian village</p>	<p>presents a new or improved mapping technology</p>
<p>Cultural mapping: Addressing the challenge of more participative and pluralist cultural policies and planning</p>	<p>Considering the approaches to cultural mapping exercises and their usage for the development of policies and plans, there is the need to understand how to incorporate the qualitative information obtained through community-based cultural mapping exercises into the planning and policy process and how to ensure that the knowledge and insight retrieved is considered and valorised by policymakers. Moreover, although cultural mapping is used as a basis for the development of effective policies, the intangible components of culture are not still being taken into consideration, lacking political dimension.</p>	<p>provide an overview of the cultural mapping field; give insights and address the goals and questions faced by today's researchers</p>	<p>analyses a mapping methodology</p>
<p>Cultural mapping and heritage trail in kuala kangsar</p>	<p>Kuala Kangstar popularity amongst tourists has been increasing due to its heritage and historical elements.</p>	<p>To identify and classify Kuala Kangstar heritage assets (to undertake an exercise of cultural mapping); develop a Heritage Trail (a route) for the interconnection between all the 22 assets identified through the presented cultural mapping; to promote the assets identified for the positioning of the region as a heritage site and a tourist destination.</p>	<p>does a mapping exercise; analyses a mapping methodology</p>

<p>Geo-Crowdsourcing Contributions for Cultural Mapping</p>	<p>increasing demand for a better quality of cultural tourism destinations' offers as for an interactive experience with local culture; increasing interest in creative tourism; as tourism results in an innovation driver for regions, there's the need to develop for innovative and differentiated touristic products and activities, as to attract visitors; therefore the role of technology is reinforced in the creation of creative and innovative projects that can, in turn, contribute to the development of cultural tourism destinations;</p>	<p>contribute to the theoretical debate; provide an extensive literature review on the methodologies used in cultural mapping studies; dive into an exploratory investigation on the potentialities of crowdsourcing tools in the creative tourism sector and the extent of their application for the collecting of visitors' perceptions and satisfaction regarding tourism events; exploratory research based on the case study of Amares (event Econtrarte Amares 2017).</p>	<p>does a mapping exercise; analyses a mapping methodology; analyses a mapping technology</p>
<p>Geographic information technologies for cultural research: Cultural mapping and the prospects of colliding epistemologies</p>	<p>understand the extent and range of the applicability of Geographic Information Technologies in cultural research.</p>	<p>present an overview of geographic information technologies; disclose how these technologies were applied in the three projects undertaken by the authors regarding the study of the creative city and policymaking in Australia; demonstrate the range of subjects and cultural components that can be studied through maps, as both representation of information as research tools, and Geographic Information Technologies.</p>	<p>analyses information from practical cases of mapping implemented in the past; analyses a mapping methodology; analyses a mapping technology</p>

<p>Is the concept of the cultural district appropriate for both analysis and policymaking? Two cases in Northern Italy</p>	<p>The international importance given to the role of cultural heritage and creative industries as drivers of development fosters evidence-based policymaking, which relies on the cultural mapping of the geographical concentration of cultural and creative activities (clusters). There is a lack of clarity between the usage of the term cultural district both as an instrument for identifying the clustering of cultural and creative activities (production and consumption) and as a policy measure itself/ step in cultural planning.</p>	<p>contribute to the theoretical debate; question the appropriacy of aggregating the two meanings under the same concept; analyse the specific case of Italy, elaborating on two regional initiatives in Northern Italy, that represent two different approaches to cultural mapping, varying in terms of policy goals, analytical approach, process management, and policy instruments.</p>	<p>analyses information from practical cases of mapping implemented in the past; analyses a mapping methodology</p>
<p>Mapping cultural assets and evaluating significance: theory, methodology and practice</p>	<p>Despite the growing importance of cultural mapping as a basis for policymaking and cultural planning, enhancing the development of regions, the focus in literature production has been placed on cultural planning and cultural mapping; there's a lack of literature production on the practical application of methodologies of cultural mapping, in a local and regional level, in the field.</p>	<p>to fill the gap in the literature regarding the concrete application of cultural mapping methods; explore the concept of cultural mapping in the context of cultural policy; critical analysis of four cultural mapping exercises employed in the context of cultural provision and consumption, taking into consideration their goals, context, definitions, geographic scales and methodologies.</p>	<p>analyses information from practical cases of mapping implemented in the past; analyses a mapping methodology</p>
<p>Promoting Cultural Resources Integration Using GIS. The Case Study of Pozzuoli</p>	<p>Pozzuoli region's landscape, rich in natural and cultural resources, lacks proper conservation and safeguarding policies; there is not an integrated management and connection between these two types of resources, which prevents the obtaining of a general perspective on the importance, need for valorisation, and understanding of the region's heritage.</p>	<p>to valorise and understand the region's cultural and natural heritage; to provide a basis for the development of public policies that promote the economic, cultural, touristic and sustainable development of the region; gather knowledge for the development of a cultural strategy, capable of valorising Pozzuoli's heritage; to employ an exercise of cultural mapping (inventory) for the identification and interpretation of cultural resources within their context; develop a narrative on the region's cultural and natural resources in order to attract visitors and exploit its touristic potential.</p>	<p>does a mapping exercise; presents a new or improved/ adapted mapping methodology</p>

<p>Smartening up Participatory Cultural Tourism Planning in Historical City Centers</p>	<p>In a context characterised by the development of technologies of information and communication, which has given rise to the emergence of participatory planning processes and impacted cultural tourism, it is important to understand how cities can take advantage of the tools available for the sustainable exploration of their cultural resources, with a view to archiving cultural, economic and touristic development; how to exploit the potential of ICT in the context of cultural tourism.</p>	<p>to develop an integrated framework that combines ICT-enabled, planning related principles, cultural mapping, crowdsourcing, data management tools, and spatial models in order to reach heritage-led development goals; illustrate the added value of technologies of information and communication to the cultural tourism sector; provide a materialisation of the ideas and positions the authors stand for through a case study: ExpATHENS, a web application that proposes a cultural route, participatory and in connection with the local economy, for the museums of Athens.</p>	<p>presents a new or improved/ adapted mapping methodology; presents a new or improved mapping technology</p>
<p>Story-telling about place: Engaging citizens in cultural mapping</p>	<p>Although in Ontario, Canada, there is already an established methodology for the mapping of tangible cultural resources, employed by various municipalities, when considering the mapping of intangible cultural resources, the process is still under development. Nevertheless, communities still undertake cultural mapping exercises in an effort to conserve their own intangible cultural resources.</p>	<p>to highlight and explore the efforts of the communities in mapping their intangible cultural assets (tell stories of place), regarding a cultural mapping protocol; reflect on the methodological challenges inherent to this type of projects; to reflect and provide insights on the type of methodology necessary and the importance of the community engagement when undertaking exercises of cultural mapping regarding intangible cultural resources.</p>	<p>analyses a mapping methodology</p>
<p>Tangibles, intangibles and other tensions in the Culture and Communities Mapping Project</p>	<p>There's the need to understand how Edinburgh's cultural spaces relate to the community and local context in terms of accessibility, arts equity and cultural access;</p>	<p>Theoretical contribution: reflecting on the type of data (tangible/ intangible) and methodology for analysis (qualitative/ quantitative) as well as the aims and applications of cultural mapping exercises (policy outcomes/ community building); provide a description and in-depth analysis of the study Culture and Communities Mapping Project, a project that aims to understand how the local communities relate and interact with Edinburgh's cultural spaces and result in a tool for promoting critical thinking amongst the artistic entities, policymakers and the sector's professionals towards a more inclusive city.</p>	<p>analyses information from practical cases of mapping implemented in the past; analyses a mapping methodology</p>

<p>Through the Protocol: Culture, Magic and GIS in the Creation of Regional Attractiveness</p>	<p>resort to the exercise of cultural mapping in order to promote the economic development and cultural positioning of four municipalities located in the regions of Sweden and Denmark.</p>	<p>present an inside critical perspective of a process of cultural mapping employed with a view to understand how culture can be incorporated in the regional touristic economy; uncover the work process behind the creation and positioning of place attractiveness; disclosure how culture is used and transformed when mobilised as a strategic resource in projects of regional development and as a driver for competitive advantage; characterise the process of cultural mapping when used as an instrument for regional development: the author employs the concept of magic to attempt to translate the process of cultural mapping as an act of power and also as a normative and technologically mediated instrument for shaping a region;</p>	<p>analyses a mapping methodology; analyses a mapping technology</p>
<p>Weaving and Cultural Identity of Batak Toba Women</p>	<p>The role of women weavers as guardians of cultural heritage and their importance to the community and its identity is not recognized nor valorized. The traditional practice of weaving is endangered as it is not economically valorized, the competition of industrialised forms of production is rising and the interest of young generations in learning this artistic practice is weakening. There's the need to develop strategies for the economic empowerment of these women as for the conservation of this intangible cultural asset.</p>	<p>provide an overview of the cultural mapping process focused on the study of the economic and social conditions faced by Batak Toba Women; undertake an inventory of artistic practices, with a view to the socio-economic development and heritage conservation; promote the sustainable development of women weavers;</p>	<p>does a mapping exercise; presents a new or improved/ adapted mapping methodology</p>
<p>Networks of context: Three-layer socio-cultural mapping for a Verstehende network analysis</p>	<p>based on the Verstehende approach, which interprets cultural context as being defined by individual's interpretations, the authors aim to study social ties, how they operate and how its cultural context can shape them</p>	<p>Propose a methodology (three-layer socio-cultural networks of individuals, signs, and material objects) for the analysis (data collection and processing) of the social ties in the cultural context; application of the proposed methodology in the study of five artistic collectives in order to understand how culture is influenced by social network ties and, in turn,</p>	<p>does a mapping exercise; presents a new or improved/ adapted mapping methodology</p>

		how the cultural context defines and constitutes social ties; reflect on the challenges and potentialities of the proposed methodology.	
Cultural Mapping: Intangible Values and Engaging with Communities with some reference to Asia	reflect on the role of tangible and intangible heritage and the mapping of these resources in order to construct local distinctiveness and to empower communities (by undertaking a participative approach).	establish a parallelism between UNESCO's Universal Declaration on Cultural Diversity and three real-life examples, namely Angkor, Thailand and Nepal; study the potential of cultural mapping as an instrument for the managing of tangible and intangible values; understand the extent of cultural mapping as a means for preserving/ contributing to local distinctiveness and authenticity.	analyses a mapping methodology
Interdependency of Cultural Heritage Assets in the Old Quarter, Melaka Heritage City	The conservation of Melaka city's intangible cultural heritage has been object of decreasing attention due to population changes, an increasing valorisation of a modern lifestyle, the lack of interest from younger generations regarding traditional knowledge, and focus on the development of intangible cultural heritage in comparison to the intangible components. Therefore, there's the need for developing strategies and methods for the conservation and protection of the city's intangible cultural heritage assets.	undertake a cultural mapping exercise to study the Old Quarter of Melaka City, identifying cultural resources (tangible elements), the local community's identity (intangible elements), and managing the information in a systematic approach; understand the interdependency between intangible and tangible cultural heritage resources.	does a mapping exercise; presents a new or improved/ adapted mapping methodology
Mapping intangibilities in creative tourism territories through tangible objects: a methodological	How to promote cultural and creative tourism, and therefore the attractiveness of small regions in Portugal; how to integrate the cultural, creative and tourism sectors for the development of regions.	understand the potential of local cultural resources and the role of cultural mapping of the objects valorised by communities in the promotion of touristic development; promote the exploration of tangible and intangible cultural resources (people's perception of places), as the historical,	analyses a mapping methodology

<p>approach for developing creative tourism offers</p>		<p>natural and cultural heritage of regions to foster the economic development</p>	
<p>Role of Cultural Mapping within Local Development Processes: A Tool for the Integrated Enhancement of Rural Heritage</p>	<p>Grecanic Area natural and cultural heritage, both tangible and intangible, is not being properly preserved, facing the risk of disappearing; the region has been facing major transformations during the last fifty years in terms of population, means of transport and the community's relationship with nature as tourism, urbanisation and environmental issues arise.</p>	<p>understand the potentialities of cultural mapping as a tool for the sustainable development of rural areas; analyse how heritage, communities and local identity are taken into account in the development of strategic planning and the setting of its priorities; starting from international cases, study how the Grecanic Area can be developed and its material and immaterial resources can be preserved and exploited (rural tourism); through a cultural mapping exercise, obtain an image of the region taking into account the community and the tourist's perspectives, that can serve as a basis for the development of a cultural plan; analyse how the creation of an Ecomuseum for the Grecanic Area can protect and develop its cultural heritage, involving the community and promoting the culture.</p>	<p>analyses a mapping method a new or improved/ adapted methodology</p>
<p>Mapping the spatial distribution of public funding for arts, culture and heritage in South Africa: Mzansi's Golden Economy and the Cultural and Creative Industries</p>	<p>understand the potential of using GIS in cultural research, as a means of analysing data from various sources, and for policy analysis, providing visual representations of the links between different variables.</p>	<p>use GIS for the mapping of the spatial distribution of public funding for arts, culture and heritage in South Africa, specifically the Mzansi Golden Economy (MGE) funding programme; study and analyse the clustering of cultural and creative industries and the concentration and geographic distribution of public funding; analyse the clustering of CI and public funding in relation to the socioeconomic context of regions, population density, household income and economic activity; analysis and presentation of the spatial distribution of cultural vibrancy, cultural resources and cultural clusters; provide policy suggestions based on the information obtained; analysis of the relation between the geographic distribution of cultural and creative industries and MGE funding</p>	<p>does a mapping exercise</p>

Appendix 4: Scoping Review – Cultural Mapping Definitions (Narrative analysis)

Cited Author	Referenced by	Point of View
Porrello, Talone, Collovini, Tommarchi Cultural mapping: The semantic web as a survey tool for the construction of the cultural plan		
UNESCO (Keynote speech, Clark, Sutherland & Young 1995. Cultural Mapping Symposium and Workshop, Australia)	Porrello, A., Talone, A., & Collovini, D. A. (2010), p.2	“Cultural mapping involves a community identifying and documenting local cultural resources. Through this research cultural elements are recorded – the tangibles like galleries, craft industries, distinctive landmarks, local events and industries, as well as the intangibles like memories, personal histories, attitudes and values. After researching the elements that make a community unique, cultural mapping involves initiating a range of community activities or projects, to record, conserve and use these elements. ...the most fundamental goal of cultural mapping is to help communities recognize, celebrate, and support cultural diversity for economic, social and regional development”.
(Legacies Now, Creative City Network of Canada (2006), Cultural mapping toolkit, p.19.).	Porrello, A., Talone, A., & Collovini, D. A. (2010), p.3	Marcia Langton (1994) considers the cultural mapping essentially a process of gathering, recording, analysis and synthesis of information, a method of depiction and description of resources, networks and ties in a group or community.
Porrello, A., Talone, A., & Collovini, D. A. (2010), p.2 (pdf n numerado)		(...) the cultural mapping in its primary shape is used as an investigative tool. Within the cultural planning an initial phase in which we make an inventory of cultural resources through a direct survey - which can be combined or omitted in case of previous analysis - is followed by a second phase of qualitative analysis which refers to the characteristics of place, lifestyles, social relations, etc. All these aspects, by their nature, need to be treated in a qualitative way. This second phase is the most pertaining to the cultural planning. Thus, the cultural mapping - the primary instrument of research - here becomes also a means of consultation, in order to highlight all of the traits that define the culture of a community or a city, as well as to engage citizens in decision making. In view of a social democratization and a democratization of culture the cultural mapping can be seen as an instrument of social and political inclusion of individuals or communities involved in the definition of cultural offerings and social services.

Langton, M, 1994, pp. 19-20	Porrello, A., Talone, A., & Collovini, D. A. (2010), p.3	"Cultural mapping evolves the identification and recording of an area's of indigenous cultural resources for the purpose of a social, economic and cultural development. Through cultural mapping, communities and their constituent interest groups can record their cultural resources and practices, as well as other intangibles, such as their sense of place and social value. Subjective experiences, varied social values and multiple readings and interpretations can be accommodated in cultural maps [...]. The identified values of place and culture can provide the foundations for cultural tourism and planning and eco-tourism strategies, thematic architectural planning and cultural industries development"
Samuel Murray Creative Cardiff: Utilising cultural mapping for community engagement		
Murray, S. (2017) p.6		Cultural Mapping allows for an explicit examination and visualisation of the relationships of culture and space. A map can define borders and boundaries as well defining the identity of an individual or group depending on who creates it and for what purpose.
Evans & Foord Cultural mapping and sustainable communities: planning for the arts revisited		
Evans, G., & Foord, J. (2008), p.75	Evans, G., & Foord, J. (2008), p.75	The authors synthesise the process of cultural mapping in three steps: Table 3, which corresponds to the "Stages in cultural planning", encompasses Stage 1 Cultural mapping; Stage 2. Cultural needs assessment; Stage 3. Cultural planning
Raquel Freitas Cultural mapping as a development tool		
Freitas, R. (2016), p.9		Cultural mapping is an instrument for collecting, locating and systematising information concerning the distribution of cultural expressions within a certain territory. It cannot be seen merely as a technical and neutral mechanism, as it is strongly influenced by the objectives of whoever performs and/or contracts it
Duxbury et al. (2015), p.2	Freitas, R. (2016), p.10	"cultural mapping is regarded as a systematic tool to involve communities in the identification and recording of local cultural assets, with the implication that this knowledge will then be used to inform collective strategies, planning processes, or other initiatives".
Clark, Sutherland, and Young (1995)	Freitas (2016), p.10	Clark, Sutherland, and Young (1995) use a community-based definition of cultural mapping, one that relies on combining the goals of identification and preservation of cultural diversity with economic, social and regional development.
Fitri, Ratna, Sitorus & Affan Cultural Mapping of the Heritage Districts in Medan, North Sumatra		

Clark and Young (1995)	Fitri, I, Ratna, R Sitorus & M. A. (2017) p.2	(A general definition of cultural mapping according to Clark and Young is "cultural mapping involves a community identifying and documenting local cultural resources. Through this research cultural elements are recorded - the tangibles like galleries, craft industries, distinctive landmarks, local events, and industries, as well as the intangibles like memories, personal histories, attitudes, and values."
Duxbury et al. (2015) p.2	Fitri, I, Ratna, R Sitorus & M. A. (2017) p.2	"cultural mapping is a systematic tool to involve; communities in the identification and recording of local cultural assets, with the implication that this knowledge will then be used to inform collective strategies, planning processes, or other initiatives."
Duxbury et al. (2015) p.2	Fitri, I, Ratna, R Sitorus & M. A. (2017) p.2	Furthermore, she [Duxbury, 2015] emphasized that cultural mapping provides new approaches to describe, account for, and come to terms with the cultural resources of societies and places. These resources are both tangible or quantitative and intangible or qualitative.
Fitri, I, Ratna, R Sitorus, and M. A. (2017), p.3		In sum, cultural mapping embraces a broad definition of cultural resources which is recommended to use a modern electronic and computer-based information technologies such as GIS during its process. In general, it helps increase awareness of resources both for residents and visitors, build networks and stronger collaboration across a broad range of cultural groups and activities and improve the base of information on cultural assets in a city to inform a wide range of planning decisions.
Turner et al. (2015)	Fitri, I, Ratna, R Sitorus & M. A. (2017), p.2	Turner et al. (2015) asserted that the term cultural mapping has gained popularities in recent years with multiple uses in modern contexts that include a wide variety of meanings. They recommended that cultural mapping as one of the tools for effective urban heritage management approach, which promotes comprehensive mapping of all heritage assets within an urban environment and its larger setting.

Sharma & Singh | Cultural Mapping of Villages in India Using CIDOC-CRM

Sharma, T., & Singh, N. (2018), p.1	Sharma, T., & Singh, N. (2018), p.1	The domain of cultural mapping deals with capturing and representing knowledge regarding diverse tangible and intangible aspects of cultural heritage, which involve hybrid data sets from incompatible sources with different terminologies and representational schemas.
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Nancy Duxbury | Cultural mapping: Addressing the challenge of more participative and pluralist cultural policies and planning

Duxbuty; Saper, 2015	Duxbury, N. (2019), p.17	The term cultural mapping refers to both an interdisciplinary field of research, encompassing an array of approaches used in diverse contexts as a tool and method of inquiry, organization, and presentation; and an insight-generating praxis, as a participatory planning and development tool embedded in "communal engagement and the creation of spaces to incorporate multivocal stories".
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Stewart, 2007, p. 8	Duxbury, N. (2019), p.18	At its core, cultural mapping is defined as “a process of collecting, recording, analyzing and synthesizing information in order to describe the cultural resources, networks, links and patterns of usage of a given community or group”
Janet Pillai (2013, p. 1)	Duxbury, N. (2019), p.18	Janet Pillai (2013, p. 1) refers to cultural mapping as providing “an integrated picture of the cultural character, significance, and workings of a place” in order to help communities recognize, celebrate, and support cultural diversity for economic, social and regional development.
Cristina Ortega Nuere and Fernando Bayón (2015)	Duxbury, N. (2019), p.18	Cristina Ortega Nuere and Fernando Bayón (2015) observe a dual role for cultural mapping: as a witness, providing an account of what is there, checking and recording existing practices and infrastructure, and as a tool to detect the gaps and to highlight and share the décalage (mismatch) between citizens wishes and the institutional planning.
	Duxbury, N. (2019), p.18	Mapping can be used to define and structure, to interrogate and probe, to challenge, and to imagine possibilities and alternatives.
Duxbury, N. (2019), p.18		Overall, the emerging field emphasizes the importance of linking academic and artistic inquiry with practice-based knowledge and systems, encouraging multidirectional knowledge flows and links to addressing social and other ‘real life’ issues.
UNESCO Bangkok Office (2015)	Duxbury, N. (2019), p.21 - 22	UNESCO’s views on cultural mapping have expanded from an initial focus on creating inventories to incorporate individual and collective interpretations of culture and how these cultural dimensions influence people’s perceptions of places. Cultural mapping is now viewed as going “beyond strict cartography to include not only land, but also other cultural resources and information recorded by alternative techniques”
	Duxbury, N. (2019), p.20	Mapping can be used to define and structure, to interrogate and probe, to challenge, and to imagine possibilities and alternatives.
Yunus, Endut & Yani Cultural mapping and heritage trail in kuala kangsar		
Stewart, S. (2010).	Yunus, Endut & Yani (2021), p.25	Cultural mapping is a process of collecting, recording, analysing and synthesizing information in order to describe the cultural resources, networks, links and patterns of usage of a given community or group.

Duxbury, N. (2015)	Yunus, Endut & Yani (2021), p.25	The purpose of a Cultural Mapping is to ensure that all heritage assets are being connected with each other and presented in infographic
	Yunus, Endut & Yani (2021), p.25	Cultural Mapping is the method and platform to identify the heritage assets on the site, inventorise all assets, connect them, produce the profiles, highlight their strength, potential and also weakness, and finally approach the community to get their feedback and responses.

Ribeiro, Pereira, Matos, Alves, Remoaldo, Gôja, Freitas | Geo-Crowdsourcing Contributions for Cultural Mapping

Redaelli (2019); Creative Cities Network (2010); Freitas (2016); Evans & Foord (2008)	Ribeiro, V., Pereira, M., Matos, O., Alves, J., Remoaldo, P., Gôja, R., & Freitas, I. (2020) p.56	Cultural mapping is an interdisciplinary methodology (Redaelli, 2019) and a process of collecting, recording, analysing, and synthesising information to describe the cultural resources, networks, links, and patterns of usage of a given community or group (Creative Cities Network, 2010; Freitas, 2016). It consists of an exercise and an autonomous resource or part of cultural planning and assessment needs. It maps projects that can involve community creativity and practice-based artistic interventions through artistic forms (Evans & Foord, 2008).
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Ponzini, Gugu & Oppio | Is the concept of the cultural district appropriate for both analysis and policymaking? Two cases in Northern Italy

Matarasso, 1999; Pratt, 2004	Ponzini, Gugu, & Oppio, (2014), p.75	(...) "i.e cultural mapping – a way to collect quantitative and spatial data in support of cultural and creative industries policies"
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Lee & Gilmore | Mapping cultural assets and evaluating significance: theory, methodology and practice

Lee, D., & Gilmore, A. (2012), p.4		Mapping in its most benign form implies the identification and location of particular features in relation to particular geographies and landscapes. It has therefore been a methodology mostly associated with planning and development of places, and in the cultural field most predominantly with cultural planning approaches
Lee, D., & Gilmore, A. (2012), p.6		In its present day formulation therefore, cultural mapping triangulates a range of data on resources – including physical assets and amenities, artists, organisations, festivals and communities of interests, economic resources, including creative businesses and tourism, relevant benchmarks for local area performance, indicators and other measures such as location quotients

Evans, 2008, p.75	Lee, D., & Gilmore, A. (2012), p.6	Evans suggests a three stage process to planning: cultural mapping, followed by the stages of cultural needs assessment, and finally cultural planning. Cultural needs assessment depends on a rich understanding of the population of places – both residents and visitors – in terms of their cultural activities, employment and education. It also provides an assessment of how these “needs” are impacted on by change and growth drivers, including housing, transport, employment, local services and social infrastructure and forecasts for how populations will change, including retention and attraction (Evans, 2008:75).
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Gerundo & Adad | Promoting Cultural Resources Integration Using GIS. The Case Study of Pozzuoli

Gerundo, C., & Adad, G. N. (2019), p.184	Gerundo, C., & Adad, G. N. (2019), p.184	As far as cultural mapping is concerned, there are many definitions in the scientific literature that, however, converge in identifying the cultural mapping as a tool to identify, catalogue, classify and analyze cultural resources of a territory, conducted using geographical information systems (GIS).
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Duxbury, Garrett-Petts, MacLennan, (2015); Rashid, M.S.A (2015)	Gerundo, C., & Adad, G. N. (2019), p.184	It is achieved through a wide consultation process of the local community, and is used for promotion and valorization strategies, planning processes or other initiatives aimed at social, economic and cultural development.
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Panagiotopoulou, Somarakis & Stratigea | Smartening up Participatory Cultural Tourism Planning in Historical City Centers

Duxbury et al. 2015, p.2	Panagiotopoulou, Somarakis & Stratigea (2020) p.6	(...) cultural heritage mapping as “a process of collecting, recording, analyzing, and synthesizing information in order to describe cultural resources”
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Crawhall 2007	Panagiotopoulou, Somarakis & Stratigea (2020) p.6	The concept of cultural mapping has been defined by UNESCO as a means to transform tangible and largely intangible (people’s memories, visions, and values) cultural resources into a medium that can be embedded into heritage management
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Langdon 1994; Nummi and Tzoulas 2015	Panagiotopoulou, M., Somarakis, G., & Stratigea, A. (2020), p.7	Cultural mapping, a means of qualitatively and quantitatively portraying cultures, is further described as an activity that supports communities and stakeholder groups in identifying and placing value on cultural resources. Communities map their own way of “sensing” the place and its related social values
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Currie & Correa | Tangibles, intangibles and other tensions in the Culture and Communities Mapping Project

Duxbury et al. (2015)	Currie, M., & Correa, M. M. (2021), p.4	"(...) the editors define cultural mapping as a participatory tool for communities to identify local cultural assets and define and visualise local culture. The outcomes and goals of these activities, however, vary. Cultural mapping can be used for community building, by making visible how local stories, practices, relationships, memories and rituals constitute place as meaningful."
Johan Hultman Through the Protocol: Culture, Magic and GIS in the Creation of Regional Attractiveness		
Pickles, (2006), p.349	Hultman, J. (2007), p.321-322	Mapping means visualisation and ordering, and thus the (re)arrangement of things in relation to each other. Following this, a key concept in this process of cultural mapping will be transformation and change, although the mappers – the different categories of project participants – must make implicit and explicit statements to the effect that culture is fixed in space. To help unwrap this paradox, a number of heterogeneous concepts and practices have been assembled. The first of these is magic. The reason for viewing the mapping process as a magical practice is that both mapping and magic are about visibility management – that is, techniques to render some things visible and others invisible (see Pickles 2006: 349).
Ken Taylor Cultural Mapping: Intangible Values and Engaging with Communities with some reference to Asia		
1994 monograph Mapping Culture	Taylor, K. (2013), p.4	A 1994 monograph Mapping Culture proposes that 'Cultural mapping involves a community identifying and documenting local cultural resources. Through this research cultural elements are recorded – the tangibles like galleries, craft industries, distinctive landmarks, local events and industries, as well as the intangibles like memories, personal histories, attitudes and values'
1994 monograph Mapping Culture	Taylor, K. (2013), p.4	'Cultural mapping is a way of defining what culture means to the community, identifying the elements of culture that add value (both social and economic), recording, preserving or building on these elements in new and creative ways.
UNESCO	Taylor, K. (2013), p.4	UNESCO Bangkok website defines that cultural mapping has been recognized by UNESCO as a crucial tool and technique in preserving the world's intangible and tangible cultural assets
Taylor, K. (2013), p.4		Essentially, the idea of "mapping culture" arises from a social, economic, or cultural need at the local or national level. Although it is not an end in itself, cultural mapping serves as a tool and methodology to answer this need
Taylor, K. (2013), p.5		We perhaps may explain the process of mapping as recording data which can be done in a number of ways including geographically (spatially through maps/plans), by film, videos, CD rom, brochures (as in heritage trails and tracks), tourism strategies, artworks, plays and songs, textiles, urban improvement and/or environmental planning. So a cultural map is a way of helping people find ways of expressing themselves and their sense of place and belonging.

Norashekin, Othman & Hamzah | Interdependency of Cultural Heritage Assets in the Old Quarter, Melaka Heritage City

Greg Baeker, 2010; Huron's Council, 2012)	Othman, R. N. R., & Hamzah, A. (2013), p.578	Prior to data collection, the Cultural Mapping approach was employed. It is a systematic tool used to identify and document local cultural assets.
Cultural mapping toolkit, 2010	Othman, R. N. R., & Hamzah, A. (2013), p.578	It is an approach which employs the processes of collecting, analysing, and synthesising information in order to describe and visualise the cultural resources.
Othman, R. N. R., & Hamzah, A. (2013), p.578		It is essentially used to create a central database where basic data for each of the cultural resources, such as location, name of the element, types of cultural resource, and geographic reference points or GPS coordinates are identified and then plotted on a map using GIS technology.
Othman, R. N. R., & Hamzah, A. (2013), p.585		Results of this study show that CMA [cultural mapping approach] is a systematic approach for the identification and recording of cultural resources. This approach allows researchers to identify cultural heritage resources using GIS tools. Through multimedia enriched web-bases, cultural mapping also enhances the identification and exploration of the community's identity by mapping intangible cultural resources such as traditional values and unique histories that combine to define a community's identity and a sense of place.

Cabeça, Gonçalves, Marques, Tavares | Mapping intangibilities in creative tourism territories through tangible objects: a methodological approach for developing creative tourism offers

Stewart, 2007, p.8; Pillai, 2013, p. 153	Cabeça, S. M., Gonçalves, A. R., Marques, J. F., & Tavares, M. (2019), p.42	Cultural mapping may be defined as a ‘process of collecting, recording, analysing and synthesising information in order to describe the cultural resources, networks, links and patterns of usage of a given community or group’ (Stewart, 2007, p. 8), providing ‘an integrated picture of the cultural character, significance, and workings of a place’ (Pillai, 2013, p. 153).
	Cabeça et al. (2019), p.42 - 43	Mapping is also an interpretation of a space, involving not only the work of collecting information, but also of transposing the data into a visual form through cartographic processes. To map is to construct a visual narrative about a place’s identity, through the community’s and groups’ eyes.
Kitchin, 2010	Cabeça et al. (2019), p.43	The main questions on cultural mapping – what to map? how to map it? – lead us to think about cultural mapping as both a methodology and a process (and a theory generator, according to Kitchin, 2010).

Duxbury, Garrett-Petts & Maclennan, 2015; Freitas, 2016	Cabeça et al. (2019), p.43	As a process, cultural mapping is a participatory planning (Duxbury, Garrett-Petts, & Maclennan, 2015), and a development tool (Freitas, 2016) available to local communities.
Cabeça et al. (2019), p.43		Cultural mapping involves the use of the appropriate forms of collection and presentation of data to convey its intended meanings
Assumma & Ventura Role of Cultural Mapping within Local Development Processes: A Tool for the Integrated Enhancement of Rural Heritage		
Assumma, V., & Ventura, C. (2014), P.497		The terms cultural and mapping create a valid tool to valorise the known and unknown in-situ resources, solving in the meantime problems and threats too many times ignored.
Assumma, V., & Ventura, C. (2014), p.495	Assumma, V., & Ventura, C. (2014), p.495	Cultural mapping consists in an innovative tool of knowledge, utilised in the local development processes to enhance territorial resources and to increase local growth in terms of environmental, social and economic sustainability

Appendix 5: Questionnaire survey

Mapeamento das Artes Visuais e Performativas na cidade do Porto

O presente inquérito visa caracterizar o panorama das artes visuais e performativas na cidade do Porto para avaliar o seu impacto no desenvolvimento do território e valorização dos cidadãos.

É uma fase intercalar crucial na prossecução do mapeamento das atividades de produção artística e cultural, à qual se seguirá a análise do seu impacto socioeconómico, heterogeneidade e distribuição territorial. É esperada a produção de uma base de dados, de acesso público, com a inventariação das atividades e entidades e um mapa/ catálogo online.

O inquérito apresenta-se dividido em duas partes: a primeira visa a caracterização das entidades e a segunda foca as atividades e projetos desenvolvidos (produção artística e cultural).

O tempo de resposta será de aproximadamente 15 minutos.

Contexto

A investigação insere-se nas tarefas específicas da Linha de investigação "Engaging Citizens through Art Creation" do projeto HAC4CG- Heritage, Art, Creation for Climate Change. Living the city: catalyzing spaces for learning, creation, and action towards climate change.

Para mais informação consulte <https://artes.ucp.pt/HAC4CG/>

*Obrigatório

Consentimento informado

A Universidade Católica Portuguesa (UCP) é responsável pelo tratamento dos seus dados pessoais, recolhidos e tratados exclusivamente para finalidades do estudo, tendo como base legal o seu consentimento [art. 6º, nº1, alínea a) do Regulamento Geral de Proteção de Dados].

O estudo é realizado por Luana Santos (lscardoso@ucp.pt), Ana Luísa Sousa (anlusousa@ucp.pt) e Luís Teixeira (lteixeira@ucp.pt), que poderá contactar caso pretenda esclarecer alguma dúvida, partilhar algum comentário ou exercer os seus direitos relativos ao tratamento dos seus dados pessoais. Poderá utilizar o contacto indicado para solicitar o acesso, a retificação, o apagamento ou a limitação do tratamento dos seus dados pessoais.

A participação neste estudo é confidencial. Os seus dados pessoais serão sempre tratados por pessoal autorizado vinculado ao dever de sigilo e confidencialidade. A UCP garante a utilização das técnicas, medidas organizativas e de segurança adequadas para proteger as informações pessoais. É exigido a todos os investigadores que mantenham os dados pessoais confidenciais.

Além de confidencial, a participação no estudo é estritamente voluntária: pode escolher livremente participar ou não participar. Se tiver escolhido participar, pode interromper a participação e retirar o consentimento para o tratamento dos seus dados pessoais em qualquer momento, sem ter de prestar qualquer justificação. A retirada de consentimento não afeta a legalidade dos tratamentos anteriormente efetuados com base no consentimento prestado.

A UCP não divulga ou partilha com terceiros a informação relativa aos seus dados pessoais.

A UCP tem um Encarregado de Proteção de Dados, contactável através do email compliance.rgpd@ucp.pt. Caso considere necessário tem ainda o direito de apresentar reclamação à autoridade de controlo competente – Comissão Nacional de Proteção de Dados.

1. Declaro ter compreendido os objetivos de quanto me foi proposto e explicado pelos investigadores. Aceito participar no estudo e consinto que os meus * dados pessoais sejam utilizados de acordo com a informações que me foram disponibilizadas.

Marcar apenas uma oval.

- Sim *Avançar para a pergunta 2*
- Não

Caracterização

Perfil do respondente
Por favor indique:

2. Cargo na entidade pela qual responde

3. Nome da entidade

4. Morada (sede/ local de trabalho/ espaço de criação)
Informação para mapeamento geográfico.

5. Integra/ é representado por alguma outra entidade?

6. Contacto da entidade
Telemóvel

7. Contacto da entidade
E-mail

8. Contacto da entidade
Website e/ ou redes sociais

9. Tipologia da empresa

Marcar apenas uma oval.

- Empresa singular: empresário em nome individual
- Empresa singular: estabelecimento individual de responsabilidade limitada
- Empresa singular: sociedade unipessoal por quotas
- Empresa Coletiva: sociedade em nome coletivo
- Empresa Coletiva: sociedade por quotas
- Empresa Coletiva: sociedade anónima
- Empresa Coletiva: sociedade em comandita
- Empresa Coletiva: cooperativa
- Empresa Coletiva: associação
- Outra: _____

10. Tempo de atividade

Marcar apenas uma oval.

- até 6 meses
- 6 meses - 1 ano
- 1 ano - 3 anos
- 3 anos - 5 anos
- 5 anos - 10 anos
- acima de 10 anos

11. Área(s) de atividade(s)

Marcar tudo o que for aplicável.

- Dança
- Teatro
- Circo
- Música ao vivo
- Marionetas
- Cabaret
- Pintura
- Escultura
- Fotografia
- Artesanato
- Outra: _____

12. Classifique o tipo de atividade realizada de acordo com a sua regularidade

Marcar tudo o que for aplicável.

	Nunca acontece	Acontece regularmente	Atividade principal
Galerias de arte comerciais: comércio a retalho de outros produtos novos, em estabelecimentos especializados	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restaurantes com espaço de dança	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Estabelecimentos de bebidas com espaço de dança	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atividades cinematográficas, de vídeo e de produção de programas de televisão	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atividades de gravação de som e edição de música	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atividades fotográficas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agenciamento de Artistas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atividades de procura, seleção, orientação e colocação de pessoal (casting)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organização de feiras, congressos e outros eventos similares	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ensino de atividades culturais	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atividades das artes do espetáculo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atividades de apoio às artes do espetáculo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Criação artística e literária	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exploração de salas de espetáculos e atividades conexas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atividades dos museus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organização de atividades de animação turística	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Associações culturais e recreativas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Acrescente outra classificação do tipo de atividade realizada, se aplicável.

14. Volume de negócios

Marcar apenas uma oval.

- 0 - 5 000 €
- 5 000 - 20 000 €
- 20 000 - 50 000 €
- 50 000 - 100 000 €
- 100 000 - 200 000€
- 200 000 - 500 000 €
- 500 000 - 1 000 000 €
- 1 000 000 ou superior €

15. Recursos humanos. Indique o número de trabalhadores a contrato sem termo nos últimos 12 meses.

16. Recursos humanos. Indique o número de profissionais externos que colaboraram nos últimos 12 meses.

17. Organização da entidade: funções-chave/ departamentos.

Marcar tudo o que for aplicável.

- Direção
- Produção
- Programação
- Curadoria
- Técnica
- Comunicação e Marketing
- Serviço Educativo
- Montagem e manutenção
- Formação
- Outra: _____

18. Identifique o(s) principal(ais) segmento(s) de cliente(s).

Marcar tudo o que for aplicável.

- Câmaras/ autarquias
- Governos Regionais
- Museus
- Feiras de Arte
- Público geral
- Salas de espetáculos
- Galerias de arte
- Publicidade/ marketing
- Estúdios de gravação de som e produção musical
- Produtores audiovisuais
- Escolas de dança
- Academias de música
- Outra: _____

19. Principal canal de comunicação com os clientes.

Marcar tudo o que for aplicável.

- Newsletter
- Fórum
- Inquéritos
- Conversas informais
- Instagram
- Facebook
- Website
- Outra: _____

20. Valores da entidade e fator diferenciador (emocional, intelectual, material/ financeiro, espiritual, social, outro).

21. Dinâmica de funcionamento relativamente ao público

Marcar apenas uma oval.

- Abertura permanente
- Sazonal
- Esporádica

Atividades

22. Especifique a(s) atividade(s) anteriormente indicada(s) (estilo de dança/ tipologia das peças teatrais/ tipologia das peças circenses/ género musical/ género fotográfico/ estilo de pintura, etc.)

23. Serviço(s) prestado(s)

Marcar tudo o que for aplicável.

- Criação
- Produção
- Curadoria
- Apoio
- Formação/ Treino
- Exibição/ Exposição
- Disseminação/ Difusão
- Cedência de espaço
- Outra: _____

24. Parcerias regulares/ relevantes e seu contributo.

25. Localização dos espetáculos nos últimos 12 meses.

Marcar tudo o que for aplicável.

- Norte
- Centro
- Área Metropolitana de Lisboa
- Alentejo
- Algarve
- Região Autónoma dos Açores
- Região Autónoma da Madeira
- Outra: _____

26. Número e tipo de atividades realizadas nos últimos 12 meses.

27. Nos últimos cinco anos a entidade esteve envolvida/ promoveu algum projeto relevante?

Marcar apenas uma oval.

- Sim *Avançar para a pergunta 28*
- Não *Avançar para a pergunta 75*

Projeto(s)

CONSIDERANDO OS ÚLTIMOS 5 ANOS, nesta secção por favor descreva até 3 projetos que considere mais relevantes para a atividade da sua empresa. Os projetos devem estar concluídos ou em fase final de desenvolvimento.

PROJETO 1:

28. Nome do projeto

29. Domínio de atividade

Marcar tudo o que for aplicável.

- Dança
- Teatro
- Circo
- Música ao vivo
- Marionetas
- Cabaret
- Pintura
- Escultura
- Fotografia
- Artesanato
- Outra: _____

30. Papel desempenhado no projeto

Marcar tudo o que for aplicável.

- Coordenador
- Parceiro muito ativo
- Parceiro pouco ativo

31. Data de início do projeto (mês e ano)

32. Duração do projeto

Marcar apenas uma oval.

- inferior a 1 mês
- 1 mês- 3 meses
- 3 meses - 6 meses
- 6 meses - 12 meses
- superior a 12 meses

33. Serviços prestados

Marcar tudo o que for aplicável.

- Criação
- Produção
- Disseminação/ Difusão
- Exibição/ Exposição
- Apoio
- Formação/ Treino
- Investigação
- Arquivo/ Conservação
- Outra: _____

34. Localização

35. Equipa e funções exercidas

36. Público-alvo

Faça uma breve síntese do projeto, tendo em conta:

37. - Objetivos/ Finalidade

38. - Atividade(s) chave

39. - Resultado(s) final esperado do projeto

40. Caso tenham sido alocados trabalhadores externos à equipa fixa indique o número e as funções exercidas.

41. Orçamento

Marcar apenas uma oval.

- 0 - 5 000 €
- 5 000 - 20 000 €
- 20 000 - 50 000 €
- 50 000 - 100 000 €
- 100 000 - 200 000€
- 200 000 - 500 000 €
- 500 000 - 1 000 000 €
- 1 000 000 ou superior €

42. Financiamento

Marcar tudo o que for aplicável.

- Público nacional
- Público internacional
- Privado nacional
- Privado internacional
- Venda de serviços e produtos
- Outra: _____

43.

Marcar apenas uma oval.

- Adicionar mais um projeto *Avançar para a pergunta 44*
- Continuar para a próxima secção *Avançar para a pergunta 76*

Projeto 2

44. Nome do projeto

45. Domínio de atividade

Marcar tudo o que for aplicável.

- Dança
- Teatro
- Circo
- Música ao vivo
- Marionetas
- Cabaret
- Pintura
- Escultura
- Fotografia
- Artesanato
- Outra: _____

46. Papel desempenhado no projeto

Marcar tudo o que for aplicável.

- Coordenador
- Parceiro muito ativo
- Parceiro pouco ativo

47. Data (mês e ano) de início da atividade

48. Duração da atividade

Marcar apenas uma oval.

- até 6 meses
- 6 meses - 12 meses
- 12 meses
- superior a 12 meses

49. Serviços prestados

Marcar tudo o que for aplicável.

- Criação
- Produção
- Disseminação/ Difusão
- Exibição/ Exposição
- Apoio
- Formação/ Treino
- Investigação
- Arquivo/ Conservação
- Outra: _____

50. Localização

51. Equipa e funções exercidas

52. Público-alvo

Faça uma breve síntese do projeto, tendo em conta:

53. - Objetivos/ Finalidade

54. - Atividade(s) chave

55. - Resultado(s) do projeto

56. Caso tenham sido alocados trabalhadores externos à equipa fixa indique o número e as funções exercidas.

57. Orçamento

Marcar apenas uma oval.

- 0 - 5 000 €
- 5 000 - 20 000 €
- 20 000 - 50 000 €
- 50 000 - 100 000 €
- 100 000 - 200 000€
- 200 000 - 500 000 €
- 500 000 - 1 000 000 €
- 1 000 000 ou superior €

58. Financiamento

Marcar tudo o que for aplicável.

- Público nacional
- Público internacional
- Privado nacional
- Privado internacional
- Venda de serviços e produtos
- Outra: _____

59.

Marcar apenas uma oval.

- Adicionar mais um projeto *Avançar para a pergunta 60*
- Continuar para a próxima secção *Avançar para a pergunta 75*

Projeto 3

60. Nome do projeto

61. Domínio de atividade

Marcar tudo o que for aplicável.

- Dança
- Teatro
- Circo
- Música ao vivo
- Marionetas
- Cabaret
- Pintura
- Escultura
- Fotografia
- Artesanato
- Outra: _____

62. Papel desempenhado no projeto

Marcar tudo o que for aplicável.

- Coordenador
- Parceiro muito ativo
- Parceiro pouco ativo

63. Data (mês e ano) de início da atividade

64. Duração da atividade

Marcar apenas uma oval.

- até 6 meses
- 6 meses - 12 meses
- 12 meses
- superior a 12 meses

65. Serviços prestados

Marcar tudo o que for aplicável.

- Criação
- Produção
- Disseminação/ Difusão
- Exibição/ Exposição
- Apoio
- Formação/ Treino
- Investigação
- Arquivo/ Conservação
- Outra: _____

66. Localização

67. Equipa e funções exercidas

68. Público-alvo

Faça uma breve síntese do projeto, tendo em conta:

69. - Objetivos/ Finalidade

70. - Atividade(s) chave

71. - Resultado(s) do projeto

72. Caso tenham sido alocados trabalhadores externos à equipa fixa indique o número e as funções exercidas.

73. Orçamento

Marcar apenas uma oval.

- 0 - 5 000 €
- 5 000 - 20 000 €
- 20 000 - 50 000 €
- 50 000 - 100 000 €
- 100 000 - 200 000€
- 200 000 - 500 000 €
- 500 000 - 1 000 000 €
- 1 000 000 ou superior €

74. Financiamento

Marcar tudo o que for aplicável.

- Público nacional
- Público internacional
- Privado nacional
- Privado internacional
- Venda de serviços e produtos
- Outra: _____

Alterações Climáticas

Climate change: Earth's giant game of Tetris



<http://youtube.com/watch?v=ztWHqUFJRTs>

75. O tema das alterações climáticas está presente nas atividades e projetos desenvolvidos? Como?

Informação de contacto

Caso pretenda receber informação sobre o desenvolvimento do projeto, por favor indique o seu contacto.

76. Nome

77. E-mail

Este conteúdo não foi criado nem aprovado pela Google.

Google Formulários

Appendix 6: Questionnaire Survey Invitation Email (27/04/2022)

Title: Convite à participação no estudo sobre o setor artístico e cultural no Porto

Email:

Boa tarde,

O Centro de Investigação em Ciência e Tecnologia das Artes (CITAR) da Universidade Católica Portuguesa convida-o a participar no inquérito dirigido às entidades das artes visuais e performativas da cidade do Porto com o objetivo de mapear as atividades de produção artística e cultural, avaliar o seu impacto no desenvolvimento do território e criação de comunidade.

No contexto do projeto **HAC4CG** (*Heritage, Art, Creation for Climate Change. Living the city: catalyzing spaces for learning, creation, and action towards climate change*), o inquérito insere-se na caracterização do panorama das artes visuais e performativas na cidade do Porto. Esta atividade decorre até **20 de maio de 2022**. A partir deste estudo, será produzida uma base de dados, de acesso público, com a inventariação das atividades e entidades e um mapa/catálogo online.

O **link** para aceder é o seguinte: <https://forms.gle/u8SQWknhE4sfCiaK6>. O tempo estimado de resposta é de 15 minutos.

Poderá consultar mais informação sobre o projeto em: <https://artes.ucp.pt/HAC4CG/>.

Agradecemos antecipadamente a sua participação, estando disponíveis para qualquer esclarecimento.

Cumprimentos,
A equipa

Ana Luísa Sousa - alsousa@ucp.pt | Bolseira de Investigação CITAR-UCP
Luana Santos - lscardoso@ucp.pt | Bolseira de Investigação CITAR-UCP
Luís Teixeira - lteixeira@ucp.pt | Coordenador da Linha de Investigação 2 do projeto HAC4CG e Investigador CITAR-UCP

Appendix 7: Questionnaire Survey Reinforcement Email (16/05/2022)

Title: Convite à participação no estudo sobre o setor artístico e cultural no Porto

Email:

Boa tarde,

O Centro de Investigação em Ciência e Tecnologia das Artes (CITAR) da Universidade Católica Portuguesa convida-o a participar no inquérito dirigido às entidades das artes visuais e performativas da cidade do Porto com o objetivo de mapear as atividades de produção artística e cultural, avaliar o seu impacto no desenvolvimento do território e criação de comunidade.

No contexto do projeto **HAC4CG** (*Heritage, Art, Creation for Climate Change. Living the city: catalyzing spaces for learning, creation, and action towards climate change*), o inquérito insere-se na caracterização do panorama das artes visuais e performativas na cidade do Porto. Esta atividade decorre até **20 de maio de 2022**. A partir deste estudo, será produzida uma base de dados, de acesso público, com a inventariação das atividades e entidades e um mapa/catálogo online.

O **link** para aceder é o seguinte: <https://forms.gle/u8SQWknhE4sfCiaK6>. O tempo estimado de resposta é de 15 minutos.

Poderá consultar mais informação sobre o projeto em: <https://artes.ucp.pt/HAC4CG/>.

Agradecemos antecipadamente a sua participação, estando disponíveis para qualquer esclarecimento.

Cumprimentos,

A equipa

Ana Luísa Sousa - alsousa@ucp.pt | Bolseira de Investigação CITAR-UCP

Luana Santos - lscardoso@ucp.pt | Bolseira de Investigação CITAR-UCP

Luís Teixeira - lteixeira@ucp.pt | Coordenador da Linha de Investigação 2 do projeto HAC4CG e Investigador CITAR-UCP

Appendix 8: Questionnaire Survey Deadline Extension Email (20/05/2022)

Title: Convite à participação no estudo sobre o setor artístico e cultural no Porto

Email:

Boa tarde,

O Centro de Investigação em Ciência e Tecnologia das Artes (CITAR) da Universidade Católica Portuguesa informa que, face aos inúmeros pedidos, o prazo para participação no inquérito foi alargado até à próxima sexta-feira, dia **27 de maio de 2022**. Se já respondeu, por favor ignore esta mensagem.

O inquérito dirige-se às entidades das artes visuais e performativas da cidade do Porto e tem como objetivo mapear as atividades de produção artística e cultural, avaliar o seu impacto no desenvolvimento do território e criação de comunidade. A partir deste estudo, será produzida uma base de dados, de acesso público, com a inventariação das atividades e entidades e um mapa/ catálogo online.

O **link** para aceder é o seguinte: <https://forms.gle/u8SQWknhE4sfCiaK6>. O tempo estimado de resposta é de 15 minutos.

Esta atividade insere-se no contexto do projeto **HAC4CG** (*Heritage, Art, Creation for Climate Change. Living the city: catalyzing spaces for learning, creation, and action towards climate change*).

Poderá consultar mais informação em: <https://artes.ucp.pt/HAC4CG/>.

Agradecemos antecipadamente a sua participação, estando disponíveis para qualquer esclarecimento.

Cumprimentos,

A equipa

Ana Luísa Sousa - alsousa@ucp.pt | Bolseira de Investigação CITAR-UCP

Luana Santos - lscardoso@ucp.pt | Bolseira de Investigação CITAR-UCP

Luís Teixeira - lteixeira@ucp.pt | Coordenador da Linha de Investigação 2 do projeto HAC4CG e Investigador CITAR-UCP

Attachments

Attachment 1: Scoping Review – Luana Santos Sections

Abstract

Background: While policymakers have had a great interest in debating Cultural and Creative Industries (CCIs) since the beginning of the 21st century (Ponzini et al., 2014), there is a lack of literature presenting the state-of-the-art of CCIs mapping. This paper will elaborate a systematic review with the twofold objective of situating, in a pragmatic and wide perspective, the research on cultural mapping by analyzing its production contexts, objectives, processes, and uses; understanding how cultural mapping can be used as a method and tool for evaluating the heterogeneity and territorial distribution of CCIs.

Methods: Based on the PRISMA 2020 guidelines, the eligible studies had to meet the following criteria: 1) map or analyze cases of cultural mapping of CCIs (places, activities, and/or actors); 2) review or analyze methodologies and/or processes applied in cultural mapping; 3) places, activities, and/or actors are part of a socioeconomic activity with profit or non-profit ends. The papers were excluded if they did not satisfy the above-mentioned inclusion criteria or if: 1) were not written in English or Portuguese; 2) the document type was other rather than a conference proceeding or journal article; 3) full-text version could not be accessed. The search was performed in two bibliographic databases – SCOPUS (on 27th October 2021) and Web of Science (WoS) (on 9th December 2021). An overall methodological procedure, based on the design of the study, the analysis of the data, and the contents of the study report sought to guarantee the bias control. Evidence was narratively as well as statistically synthesized.

Results: 27 eligible studies from the last 15 years (2007-2021) will be analyzed. The study will consider the distribution and content of publications on cultural mapping Cultural and Creative Industries across international journals and conferences. Researchers agreed on 101 out of 111 cases of eligible studies for systematic revision. This corresponds to an agreement rate (AR= number of observations agreed upon/ total number of observations) of approximately 0.91, respectable interrater reliability.

Discussion: Cultural mapping and CCIs are studied by a multiplicity of authors and different areas of study, with distinct terminologies, production contexts, methodologies, and objectives, therefore resulting in a transdisciplinary field. In the last 15 years, there seems to be a growing interest in framing, researching and understanding cultural mapping in CCIs. This interest is mostly expressed in Europe, and especially in the UK. However, the impact of publications has been decreasing in the last five years. The journals "Cultural Trends" and "City, Culture and Society", and their respective publishers Routledge and Elsevier, have had the greatest impact and concentration of publications on the area of research. Almost half of the publications were published via open access. Regarding the level of the object of analysis, the review or analysis of methodologies or ontologies is the most frequent investigation method. The delimitation of the level of analysis mostly relies on models created, adapted or modified by the authors for the purpose of the study, and include both tangible and intangible aspects of culture. It was found that only few articles presented a clear explanation of the methodology used and associated procedures.

Other: The organizational context of the investigation corresponds to the specific work plan of Task 1 of the WorkPackage2 of the Research Line 2 of the “HAC4CG- Heritage, Art, Creation for Climate Change. Living the city: catalyzing spaces for learning, creation, and action towards climate change” (NORTE-01-0145-FEDER-000067) project, co-financed by the European Regional Development Fund (FEDER), under the terms of the NORTE-45-2020-75 - Support System for Scientific and Technological Research - “Structured R&D&I Projects” - Horizon Europe.

2. Methodology

Systematic reviews are a standard approach to overview existing relevant research on specific and clearly defined questions. Close to a set of scientific methods aimed at limiting the risk of bias, systematic reviews aim at producing a scientific summary of the evidence in any area. (Petticrew, M., & Roberts, H., 2005)

To carry out this task, the PRISMA 2020 Statement, published in 2021, is used as the paper protocol. It consists of a guideline checklist and a flow diagram which are strictly followed to identify, select, and synthesize studies. (Page et al., 2021)

Eligibility criteria

Considering the aim of the review, the eligible studies had to meet the following criteria: 1) map or analyze cases of cultural mapping of CCIs (places, activities, and/or actors); 2) review or analyze methodologies and/or processes applied in cultural mapping; 3) places, activities, and/or actors are part of a socioeconomic activity with profit or non-profit ends.

The papers were excluded if they did not satisfy the above-mentioned inclusion criteria or if: 1) were not written in English or Portuguese; 2) the document type was other rather than a conference proceeding or journal article; 3) full-text version could not be accessed.

Information Sources

The search was performed in two bibliographic databases – SCOPUS (on 27th October 2021) and Web of Science (WoS) (on 9th December 2021). These databases are generally accepted as the most comprehensive data sources for various purposes, including records from fields such as science, technology, medicine, social sciences, arts and humanities, among others. These peer-reviewed bibliographic databases have an international multidisciplinary and transdisciplinary scope. Their different coverage of time and relevance to the topic ensured that appropriate material would be found. (Norris, M., & Oppenheim, C., 2007).

The access was available via Universidade Católica Portuguesa.

Search strategy

In the first stage, a scoping search was undertaken by researcher Luana Santos, and reviewed independently by Luís Teixeira, to assess the size and makeup of the literature available. Seeking to get to a research strategy that would answer the research questions, potential key terms and concepts were identified and explored. The exploration of the records identified was also combined with Boolean operators.

It was decided that the search scope of the review should include both cultural and mapping terms together to explore the international web of studies regarding the multidisciplinary field of cultural mapping. To ensure this, inverted commas were used around the term “cultural mapping”.

The concept “cultural mapping” was first searched in SCOPUS without any applied field restriction resulting in a broad range of 689 obtained documents. By limiting to documents published in English and Portuguese the search was reduced to 670 results. Despite cultural mapping being a specific concept, the search returned quite an extensive volume of results. To obtain a higher precision of identified records and a manageable output, the search was restricted to the title, abstract, and/or keywords fields. So, the expression “cultural mapping”, restricted to title, abstract, and/or keywords and limited to English and Portuguese languages, lead to 133 records.

The string used in SCOPUS was the following: TITLE-ABS-KEY (“cultural mapping”) AND (LIMIT-TO (LANGUAGE, "English") OR LIMIT-TO (LANGUAGE, "Portuguese")).

A similar search strategy was employed in WoS: "cultural mapping" (Topic) and English OR Portuguese (Language). The search was restricted to the topic (title, abstract, author keywords, and Keywords Plus) and limited to Portuguese and English, resulting in 76 records.

Selection process

Researcher Luana Santos exported SCOPUS and WoS searches as structured files that were imported to Microsoft Office Excel.

In accordance with the PRISMA statement, citations were identified and 42 studies were excluded since they corresponded to other typologies of documents (4 short surveys, 19 reviews, 3 notes, 1 letter, 14 book chapters, and 1 book). Of the 167 journal articles and conference proceedings identified (99 in Scopus and 68 in WoS) after other document types were removed, 53 are indexed in both databases, which represents 54% of results in Scopus and 78% in WoS. The full-text version of 2 studies could not be accessed, making their retrieval and analysis not possible. 1 document was removed because it was written in Spanish. Taking the sum of the two databases, 111 studies made up the sample sought for retrieval.

The management of bibliographic references was developed through the Mendeley program.

Study selection followed a three-stage process that involved two researchers, Luana Santos and Ana Sousa, working independently. Individually, the researchers manually screened titles and abstracts of all articles retrieved in order to assess their eligibility. In the limited number of words allowed in titles and abstracts, authors might not fully capture their research. So, the full text of all potentially eligible studies was screened to understand if it should be part of the review. In pair, the researchers confronted the studies selected and discussed them based on the eligibility criteria.

The research questions and eligibility criteria were elaborated by researcher Luana Santos and assessed by reviser Luís Teixeira prior to Ana Sousa entering the investigation, which lead to some uncertainty or disagreement about eligibility. A discussion over those studies for which eligibility criteria were uncertain was carried out to clarify methods and interpretation of the analysis. If needed, articles were read again.

In total, 27 research articles fulfilled the criteria outlined and thus were selected for review. Of this final selection, 9 studies are present in both databases.

Data collection process

To manage the eligible records, Luana Santos developed a coding protocol to describe the characteristics of the studies included in the research synthesis and create a dataset suitable for meta-analysis. Instead of detailing the narrative information of studies, it documents the procedures used to extract information in a structured quantitative and qualitative form. A data extraction sheet was designed and the researcher performed a pilot coding protocol test for a synthesis (Cooper, Hedges, Valentine, 2009), before coding the main sample. By revising the coding protocol, the ambiguity of some code categories was resolved and the researcher carried out an initial data extraction for all included studies.

Ana Sousa also independently followed the protocol and extracted data from studies, including additional information in the form. Then, in pair, the authors crossed the withdrawals and discussed discrepancies in retrieved data, which, in some cases, resulted in the renaming, aggregation, or disaggregation of coding categories. This ensured that the relevant information was covered for each study synthesis.

Data items

Eligible outcomes were broadly grouped under six typologies of defining features: 1) elaborate or implement a cultural mapping of cultural places, activities, and/or actors that belong to the Cultural and Creative Industries; 2) review or analyze one or more case-studies of cultural mapping of cultural places, activities and/or actors that belong to the Cultural and Creative Industries; 3) review or analyze existing cultural mapping methodologies or ontologies; 4) suggest new or improved cultural mapping methodologies or ontologies; 5) review or analyze existing cultural mapping technologies; 6) suggest new or improved cultural mapping technologies.

As noted, a wide range of cultural mapping definitions, implementations, or reviews was accepted. The following categories (coding protocol) were followed to collect information from each included study and answer the established research questions:

RQ1: author and publication details - author, year of publication, country, source title, publisher, funding, citations, open access status;

RQ2: subject area (as categorized in the databases), keywords;

RQ3:

3.1. type, classification model, criteria for sample selection, quality (tangible, intangible, or both), paradigm (top-down, bottom-up, or mixed);

3.2. region of focus (local, national, international), scale of analysis (subfield, field, industry, not specified), production chain stage (production/ supply, or consumption/ demand);

3.3. research methods;

3.4. method for data presentation, tools applied;

RQ4: aim;

RQ5: investigation output/ dissemination medium.

A single study may report one or more of the six typologies defined. In the circumstance where multiple typologies were analyzed for a result, the researchers extracted all available outcomes and associated the results. For example, if a study encompasses both typologies 1 and 2, the extracted data categories jointly include data from the original mapping process and from the case study. The “data collection” category, therefore, includes both a potential interview done for typology 1 and a direct observation performed for typology 2.

No restrictions were placed on the time frames that studies were designed to examine nor on the frequency of analysis. Both short and long-term, specific, or follow-up studies were considered.

Study risk of bias assessment

An overall methodological procedure, based on the design of the study, the analysis of the data, and the contents of the study report sought to guarantee the bias control, in eight dimensions:

1. Previous reading of relevant cultural mapping and CCIs concepts and studies before the start of the investigation to understand the field of study. This permitted a clear basis and greater transparency in formulating the problem and following the research key steps;
2. Different search strategies were tested and redefined before deciding what would represent a good compromise between relevance, variety, and number of results;
3. Usage of the two most respected platforms for analyzing worldwide peer-reviewed literature;
4. Pilot testing and revising the coding protocol;
5. Relevant information about studies was gathered reliably. Studies were read and accessed individually and the researchers did not mention or discuss any aspect before having a semi-closed setlist of the prospective eligible studies.
6. Pre-identified and later applied procedures and criteria for evaluating the suitability of studies and combining results;
7. The synthesis and presentation of results was guided by the research questions;
8. The researchers’ distinct and complementary profiles allow an independent evaluation of results. Luana Santos is a master’s student in Sound and Image, focused on the creative and artistic production, and Ana Sousa in Creative Industries Management, with a background in communication, that is to say, both have contact with cultural and creative activities from different perspectives and standpoints. Luís Teixeira, a senior researcher in the field of digital interactive and immersive media, was in charge of revising the paper.

Effect measures

Considering that the synthesis’ purpose is to provide an overview of the broad range of study results on cultural mapping, research outcomes were all treated in the same manner. That is, to effectively represent key study results

and support interesting analyses the information for the studies was gathered and synthesized using a single data table with one row per study. No synthesis breakdowns for discriminating different typologies were reported.

Synthesis methods

Given the diversity of issues covered, and as previously explained, there was an attempt to identify typologies of investigations as well as their aims. When studies reported results on multiple typologies, data dimensions would be combined within a given category.

The categories “group those characteristics judged to be substantially similar for the purposes of the synthesis, differentiate those believed to be importantly different and ignore those judged irrelevant or uninteresting”. (Cooper, Hedges, Valentine, 2009, p.150)

After completing and checking the information under consideration, the researchers embarked on a statistical analysis of data developed by systematically coding the results and characteristics of the studies. This enabled a comprehensive and objective overview of the information collected, providing a valuable picture of the nature of the literature.

A descriptive analysis of data will be discussed later in Section 4. Evidence was narratively as well as statistically synthesized. On their own, the multiple descriptors that characterize the studies have interesting information but there is also potential for analysis of the interrelationships or patterns among them.

Reporting bias assessment

1. The object of study has broad and porous conceptual borders. Due to variation in the conceptual breadth and distinctions within definitions, there might lead to differences in operations deemed relevant;
2. The literature search was made in the most relevant databases. However, different search sources might lead to systematic differences in the identified research;
3. A relevant number of records were lost by restricting the search to title, abstract, and/or keywords fields;
4. Heterogeneity of journal articles and conference proceedings, with non-equivalent concepts and methodologies;
5. Distinct types of documents (short surveys, reviews, notes, letters, book chapters, and books) laid outside the sample for systematic review;
6. Variation in the categories for coding information about each study and different procedures to summarize, analyze and report results might lead to differences in the analysis and influence the results;
7. Researchers did not start the work simultaneously. Luana Santos established the bases for the systematic review with the supervision of reviewer Luís Teixeira, which were later discussed with Ana Sousa;
8. Language limitation to English and Portuguese, the result of the researchers' capacity to read and understand in those languages.
9. Exclusion of two articles from the final selection due to inaccessibility. The researchers could not access the documents after an unsuccessful attempt to contact the authors. Therefore, the criteria for exclusion were not content-related.

Certainty assessment

As shown in the selection process and flow diagram, researchers agreed on 101 out of 111 cases of eligible studies for systematic revision. This corresponds to an agreement rate (AR= number of observations agreed upon/ total number of observations) of approximately 0.91, respectable interrater reliability.

Agreement rates assigned to each cell, and observed and expected proportion disagreement when compared with the number of observations (such as Cohen's Kappa and Weighted Kappa index ((DeVellis, 2005)) could not be determined as the researchers compiled both observations altogether.

4. Results (Statistical Analysis)

In total 27 studies (21 journal articles and 6 conference proceedings) fulfilled the criteria outlined. They were structured and summarized in appendix 1. This section of the study will proceed to summarize their results. It leans over the five research questions to consider the distribution and content of publications on cultural mapping Cultural and Creative Industries across international journals and conferences.

Following the reference strategy used by Betsy Uchendu, Jason R. C. Nurse, Maria Bada, and Steven Furnell (2021), the full set of research articles is presented in Table 2. Paper identification numbers (IDs) (e.g., P1, P2) are assigned to each paper, allowing easier reference of review articles throughout the analysis.

Paper IDs	Study
P1	Evans, G. (2016)
P2	Porrello, A., Talone, A., & Collovini, D. A. (2010)
P3	Dubois, V., & Méon, J.-M. (2013)
P4	Horlings, L. G. (2015)
P5	Murray, S. (2017)
P6	Evans, G., & Foord, J. (2008)
P7	Freitas, R. (2016)
P8	Fitri, I, Ratna, R Sitorus, & M. A. (2017)
P9	Sharma, T., & Singh, N. (2018)
P10	Duxbury, N. (2019)
P11	Yunus N.M.M., Endut E., & S. S. Y. (2021)
P12	Ribeiro, V., Pereira, M., Matos, O., Alves, J., Remoaldo, P., Gôja, R., & Freitas, I. (2020)
P13	Gibson, C., Brennan-Horley, C., & Warren, A. (2010)
P14	Ponzini, D., Gugu, S., & Oppio, A. (2014)
P15	Lee, D., & Gilmore, A. (2012)
P16	Gerundo, C., & Adad, G. N. (2019)
P17	Panagiotopoulou, M., Somarakis, G., & Stratigea, A. (2020)
P18	Jeannotte, M. S. (2016)
P19	Currie, M., & Correa, M. M. (2021)
P20	Hultman, J. (2007)
P21	Nugroho, C., Nurhayati, I. K., Nasionalita, K., & Malau, R. M. U. (2021)
P22	Basov, N., & Kholodova, D. (2021)
P23	Taylor, K. (2013)
P24	Othman, R. N. R., & Hamzah, A. (2013)
P25	Cabeça, S. M., Gonçalves, A. R., Marques, J. F., & Tavares, M. (2019)

- P26** Assumma, V., & Ventura, C. (2014)
P27 Linde, J. V. D., Snowball, J., & Jooste, T. (2020)

Table 2. Full list of studies reviewed and respective paper IDs.

RQ1: What is the type of issued studies focusing on cultural mapping and their distribution and impact across time, geography (of authors), source, publisher, and funding entity?

Publication type and years of publication. The 27 eligible articles were published in the 2007-2021 period, which is over the last 15 years. This represents quite a recent sample so it is possible to conclude cultural mapping CCIs is a current topic.

In Figure 3 it is possible to observe the type of included studies, journal articles (P1, P3, P4, P5, P6, P7, P10, P11, P12, P13, P14, P15, P17, P18, P19, P20, P21, P22, P23, P25, P27) or conference proceedings (P2, P8, P9, P16, P24, P26) over the years.

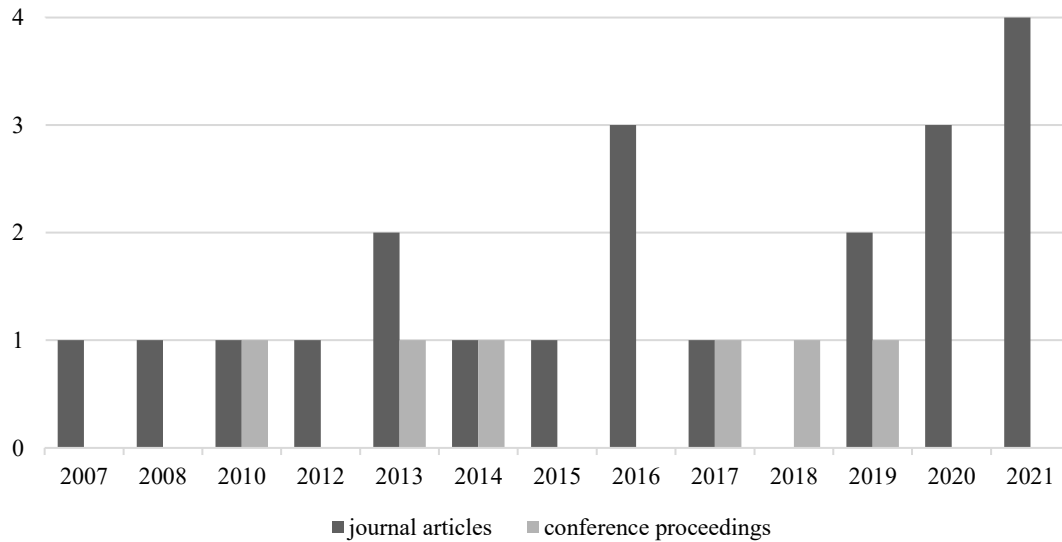


Figure 3. Number of journal articles and conference proceedings per year in the final analysis, from 2007 to 2021.

The first indexed document is from 2007, written by Johan Hultman, and entitled “Through the protocol: Culture, magic and GIS in the creation of regional attractiveness” (P20). Furthermore, at the time of this research, 2021 is the most productive year with 4 out of the 27 articles (15%).

No exponential growth seems to have been experienced.

Year	Nr	Paper IDs
2007	1	P20
2008	1	P6
2009	0	
2010	2	P2, P13
2011	0	

Year	Nr	Paper IDs
2012	1	P15
2013	3	P3, P23, P24
2014	2	P14, P26
2015	1	P4
2016	3	P1, P7, P18
2017	2	P5, P8
2018	1	P9
2019	3	P10, P16, P25
2020	3	P12, P17, P27
2021	4	P11, P19, P21, P22

Table 3. Number of publications focused on cultural mapping CCIs per year in the final analysis, from 2007 to 2021.

Author geographic distribution. With the exception of Graeme Evans, author of P1 and P6, every other study corresponds to different authors. It is observed that 30% of the studies have been produced by a single author and 70% by two or more authors from the same country/ institution.

Publications are scattered across 14 countries and 5 continents. More than half (62%) of the body of research is published by authors in Europe, followed by Asia (19%), Australia/ Oceania and North America (7%), and Africa (4%). Figure 4 shows that studies led by authors in the UK are the most frequent (5 journal articles), followed by Italy (1 journal article and 3 conference proceedings) and Portugal (3 journal articles). (Fig. 4)

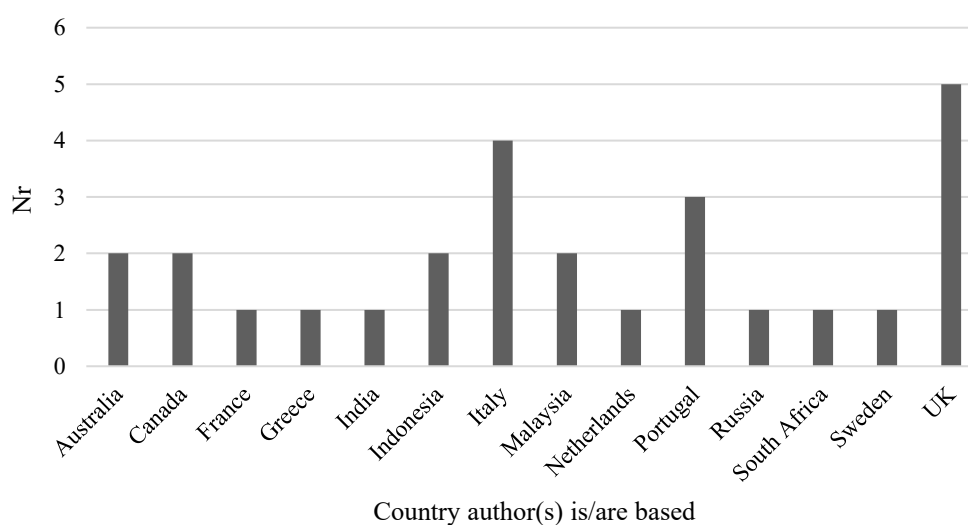


Figure 4. Authors' geographic distribution.

Publication source. Literature on cultural mapping CCIs is published in a remarkably diverse range of sources: 20 different publication sources are represented across the 27 publications. More than half of the total production (67%) is included in sources that only have one article on the subject.

The two most frequently appearing journals are “Cultural Trends” and “City, Culture and Society” (see Table 4), with 5 and 4 publications, respectively. This corresponds to 33% of all the references highlighting an apparent concentration around this topic. Indeed, both journals focus on culture from slightly different perspectives. “Cultural Trends” articles focus on the relation between cultural geography and cultural policy, and especially in measuring cultural provision and participation. “City, Culture and Society” is aimed at urban governance under the banner of cultural creativity and social inclusion.

“Cultural Trends” published 5 articles spread over the majority of the analyzed period (2008, 2010, 2012, 2016, and 2021), 2 of them in special issues (P1 and P13). In P1, Graeme Evans discusses the dissociation between the analysis of production, places or programming (cultural provision) and the analysis of participation in cultural activities. The article is part of a special issue that explores the spatial distribution of cultural investment in its societal impact. Integrated into the Australasian special edition surrounding cultural policy and statistics, P13 discusses the potential applications of Geographic Information Technologies (GIT) in making cultural research more easily accessible and challenging policymakers and researchers’ prevailing notions. P6 reviews the evolution of cultural and artistic planning in the UK. In P15, David Lee and Abigail Gilmore are devoted to cultural mapping as a methodology for policymaking at a regional and local level. P19 reflects on cultural mapping approaches as a tool for capturing cultural spaces and local communities and as catalysts for building a more inclusive city.

All 4 articles from “City, Culture and Society” journal are part of special issues published in 2014, 2016, and 2017. Both P7 and P18 are part of the same issue - “Mapping Culture: Making the Intangible Visible” - that emphasizes the value of mapping intangible dimensions of culture. P7 explores different approaches to cultural mapping aiming to comprehend their complementary nature. P18 reflects on citizen engagement in mapping intangible cultural assets. Initiated by a university, P5 exemplifies how cultural mapping might represent a platform for community engagement and understanding of specific urban dynamics and movement. It is part of a special selection of papers from a conference “on cultural mapping and its relation with culture-led development” (Sacco, P. L., & Vella, G., 2017). Part of a special issue focused on the understanding of CCIs across Europe, P14 highlights the complex and nested nature of local creative and cultural industry policies.

Source	Nr	Paper IDs
Cultural Trends*	5	P1, P6, P13, P15, P19
City, Culture and Society*	4	P5, P7, P14, P18
IMSCI 2010 - 4th International Multi-Conference on Society, Cybernetics and Informatics	1	P2
Cultural Sociology	1	P3
Regional Studies, Regional Science	1	P4
IOP Conference Series: Materials Science and Engineering	1	P8
CEUR Workshop Proceedings	1	P9
Mouseion	1	P10
Planning Malaysia: Journal of the Malaysian Institute of Planners	1	P11
Journal of Information Science Theory and Practice	1	P12

Source	Nr	Paper IDs
Smart Innovation, Systems and Technologies	1	P16
Journal of Urban Technology	1	P17
Tourism Geographies	1	P20
Journal of Asian and African Studies	1	P21
Social Networks*	1	P22
Historic Environment-policy & Practice	1	P23
Procedia - Social and Behavioral Sciences*	1	P24
Tourism & Management Studies*	1	P25
Advanced Engineering Forum	1	P26
African Review of Economics and Finance	1	P27

Table 4. The publication sources ranked by number of publications on cultural mapping CCIs.

* Asterisks indicate those sources that published included papers in Special Issues.

The varied range of publications per journal and conference is also reflected in the number of publishers. (Table 5) But, as with sources, there is also a greater concentration around two publishers. Routledge published the articles from “Cultural Trends” journal and Elsevier the ones from “City, Culture and Society”. Besides these articles, Routledge also published P4, P17, P20, from journals that focus more on regional and urban studies and Elsevier also published P22 and P24, with a greater focus on social sciences.

Publisher	Nr	Paper IDs
Routledge (Tylor & Francis Group)	8	P1, P4, P6, P13, P15, P17, P19, P20
Elsevier	6	P5, P7, P14, P18 P22, P24
SAGE Publications	2	P3, P21
CEUR-WS	1	P9
Institute of Physics Publishing (IOP Publishing)	1	P8
International Institute of Informatics and Systemics (IIIS)	1	P2
Korea Institute of Science and Technology Information	1	P12
Malaysian Institute Of Planners	1	P11
Maney Publishing	1	P23

Publisher	Nr	Paper IDs
Porthologos Press	1	P27
Springer Science and Business Media Deutschland GmbH	1	P16
Trans Tech Publications Ltd.	1	P26
Universidade do Algarve	1	P25
University of Toronto Press	1	P10

Table 5. Number of publications by publisher.

Open access. Almost half ($n = 13$) of the reviewed papers are available via an open-access format (Green, Bronze, Gold or Hybrid routes). (Table 6) This proportion of open access publications highlights the increasing move towards open science/research, a pre-condition for the results of the academic research to become effectively audited (Fonseca, 2017). Publishing via open access routes advocates the transparency of the publication processes and costs, favoring a more balanced relationship scientific system and the market and enabling author communities and the wider public to access research at the forefront of the discipline.

Open access	Nr	Paper IDs
green	7	P1, P3, P5, P11, P14, P20, P25
bronze	1	P10
gold	5	P4, P8, P23, P24, P25
hybrid	2	P11, P26

Table 6. Open access status per number of publications.

Funding. With regard to funding sponsors, publications are divided roughly in half among those in which funding is unidentified (13 did not provide empirical evidence about funding), and those that identified it (14). Of the identified, 12 studies (P1, P3, P5, P7, P8, P12, P13, P15, P19, P22, P24, P25) received public funding, 1 public and private funding (P20), and 1 did not have financial support (P21). (Fig. 5)

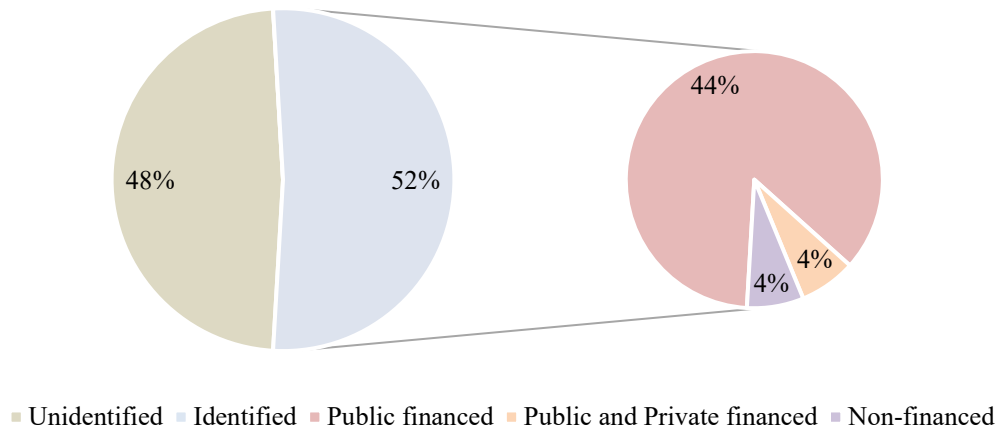


Figure 5. Percentage of types of financing across the number of publications.

Impact. Of all 27 papers, 20 (74%) have one or more citations, ranked in Table 7. The documents identified have a total of 223 citations (22 articles) in Scopus, with approximately 10 citations/article, whereas WoS registers 82 citations (14 articles), and around 6 citations/article.

Two articles in particular stand out with regard to the number of citations: “Cultural mapping and sustainable communities: Planning for the arts revisited” by Graeme Evans and Jo Foord, with 61 citations (P6) and only indexed in Scopus; and “Values in place; A value-oriented approach toward sustainable place-shaping” by L. G. Horlings (P4) with 42 citations, the second-highest in Scopus and the higher in WoS. Altogether the two articles represent 46% of the total of citations of the reviewed papers.

R	Paper IDs	Scopus	WoS
1	P6	61	-
2	P4	42	42
3	P7	19	-
4	P13	18	-
5	P18	18	-
6	P20	13	-
7	P15	11	-
8	P3	10	6
9	P14	10	-
10	P1	7	10
11	P17	6	6
12	P5	4	-
13	P24	-	4
14	P25	-	4

R	Paper IDs	Scopus	WoS
15	P26	-	4
16	P23	-	3
17	P12	2	-
18	P8	1	1
19	P16	1	1
20	P21	-	1

Table 7. Ranking of the studies with one or more citations.

R = ranking; Scopus = number of citations in Scopus; WoS = number of citations in Web of Science.

With the exception of 2018, there is at least one registered citation per publication year. The year with the highest number of citations in Scopus is 2008, with 61 citations that correspond to the most cited paper, P6. It is followed by 2016 with 44 (P1, P7, P18 in Scopus) or 47 (P7 and P18 in Scopus and P1 WoS) citations. P1 is a common article in Scopus and WoS. The difference in the number of citations between databases justifies the quantitative discrepancy. The third-year is 2015 with 42 citations, deriving directly from the second most cited paper, P4. (Fig. 6)

This type of analysis shows that, in the last five years, papers regarding cultural mapping CCIs have experienced a decline in the number of citations. (Fig. 6)

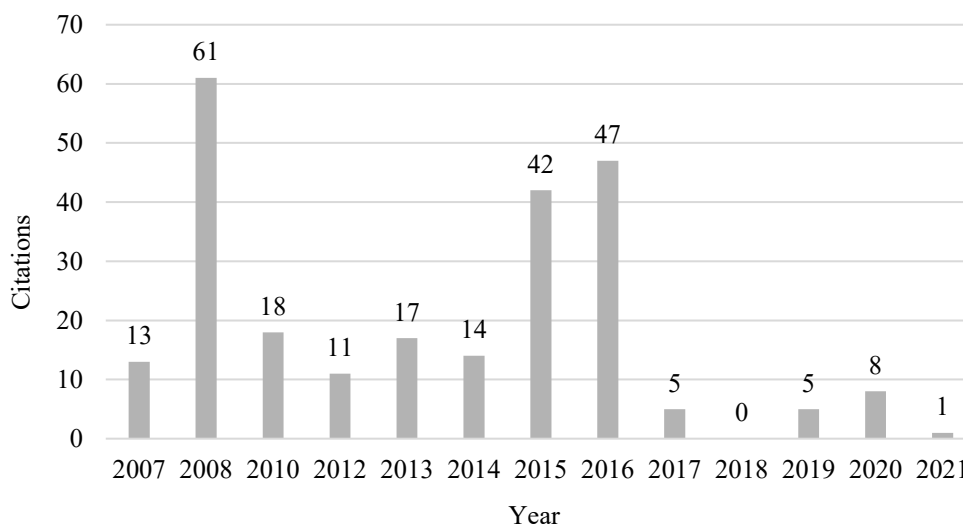


Figure 6. Number of citations per year in the final analysis focused on cultural mapping CCIs from 2007 to 2021.

(In case the same article is indexed in Scopus and WoS, the maximum value of citations reached was considered, regardless of the database in which it is registered.)

Considering the total of 242 citations (in accordance with the maximum value of citations registered in each study, irrespective of the database) for the reviewed articles, 96% of the citations are attributed to journal articles and 4% to conference proceedings. Around one-third of the citations come from 4 journal articles from the UK (P1, P5, P6, P15), 17% from one article (P4) from the Netherlands, and 10% from 3 Portuguese articles (P7, P12, and P25). Taking into account the number of citations, European publications have an impact of around 79%. (Fig. 7)

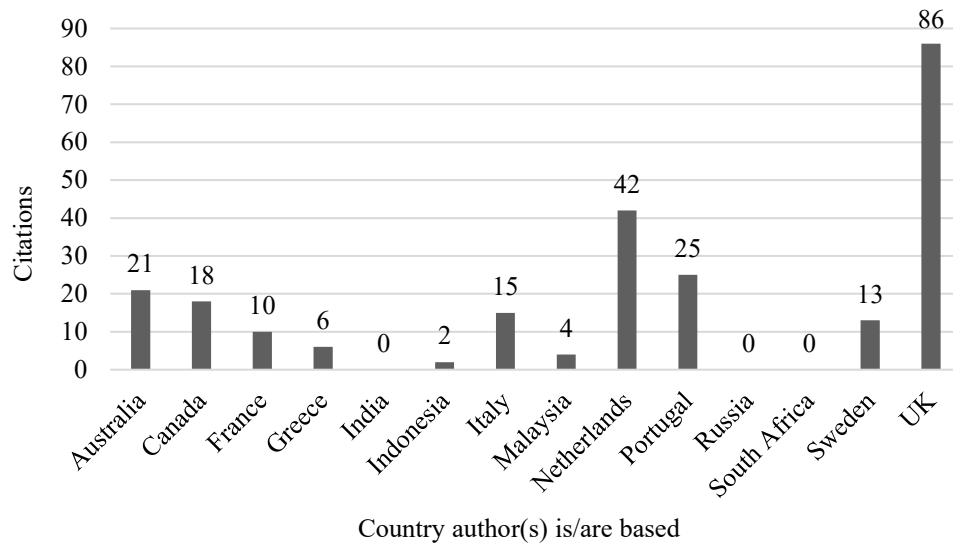


Figure 7. Number of citations per country in the final analysis focused on cultural mapping CCIs from 2007 to 2021.

(In case the same article is indexed in Scopus and WoS, the maximum value of citations reached was considered, regardless of the database in which it is registered.)

As regards the source of publication, the two most frequent journals, “Cultural Trends” and “City, Culture and Society”, account for 62% of all citations (41% “Cultural Trends” and 21% “City, Culture and Society”). This is also reflected in the publishers with more citations per article. Routledge collects 67% of the citations (161 out of 242 citations) and Elsevier 22% (55 out of 242). Together these publishers have a citation impact of 89%.

The funded publications accumulate 40% of citations (83 public funding and 13 public and private funding) and the undefined the remaining part.

An interesting perspective over the impact of open access is registered if one looks at the total of citations of these publications per database: 39% of Scopus (88 out of the 223 citations) and 90% of WoS (74 out of 82) citations correspond to open access papers. Considering the total of citations by intersecting the databases, 105 out of 242 citations from the eligible studies correspond to open access publications. This means that 43% of citations belong to open access publications.

RQ2: What is the subject area of each research?

Subject area. The conceptual overlaps and distinctions of cultural mapping and CCIs discussed in section three might be explained taking into account the wide distribution by study areas. The publications extend across 17 subject areas:

	Subject areas	Nr	IDs
1	Arts and Humanities	7	P1, P6, P10, P13, P15, P19, P23
2	Social Sciences	18	P1, P3, P4, P5, P6, P7, P10, P11, P12, P13, P14, P15, P17, P18, P19, P20, P22, P24
3	Computer Science	4	P2, P9, P12, P16
4	Engineering	2	P8, P21
5	Material Science	2	P8, P21

	Subject areas	Nr	IDs
6	Decision Sciences	2	P12, P16
7	Psychology	1	P22
8	Business Management and Accounting	1	P20
9	Economics, Econometrics and Finance	5	P4, P5, P7, P14, P27
10	Multidisciplinary	1	P23
11	Interdisciplinary	1	P24
12	Environmental Studies	1	P24
13	Hospitality	1	P25
14	Leisure	1	P25
15	Sport & Tourism	1	P25
16	Regional Urban Planning	1	P26
17	Urban Studies	1	P26

Table 8. Distribution of eligible publications focused on cultural mapping CCIs across subject areas.

Even though the interest in studying this topic is quite heterogeneous, four areas present a higher concentration of papers: more than one-third (36%) are related to Social Sciences; 14% Arts and Humanities; 10% Economics, Econometrics and Finance; and 8% Computer Science. (Fig. 8)

All of this indicates that the field of study might need a multidisciplinary approach to effectively address the geographic, social and economic dynamics of culture and creativity. However, this can result in a difficulty in comprehending CCIs and cultural mapping as an object of study, as it might need an assemblage of theories from different fields.

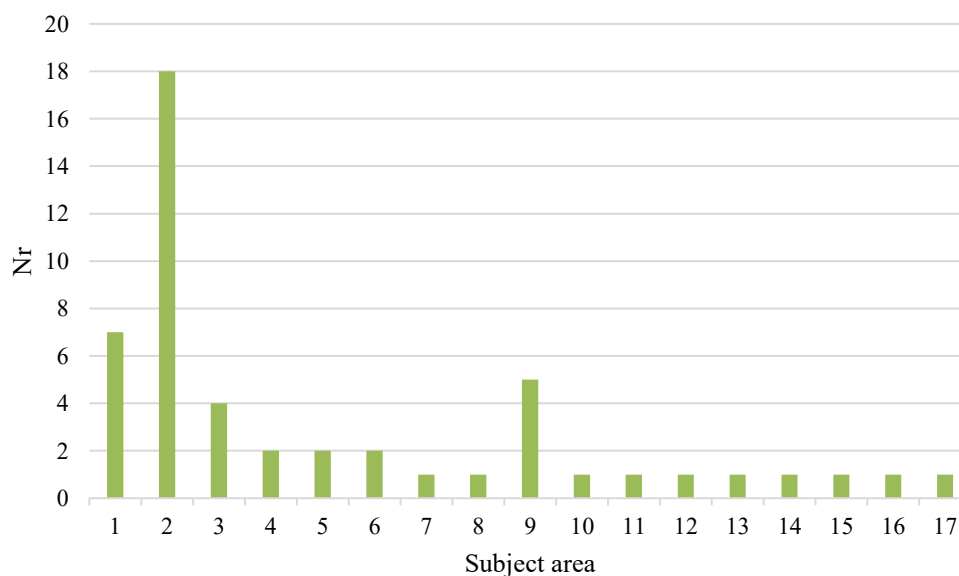


Figure 8. Number of publications on cultural mapping CCIs per subject area.

Both “Cultural Trends” and “City, Culture and Society” have an h-index (metric for quantifying the cumulative impact of the journal, counting and comparing publications to citations) of 27. It is interesting to glance at the performance by area of the main journals (encompassing 33% of the eligible studies and responsible for 62% of all citations) publishing on the subject. The SCImago Journal Rank (SJR) indicates the scientific influence of a journal, providing an alternative to measuring the impact factor or average citations per document. It attributes different values to citations depending on the importance/ prestige of the journals that receive them. Both journals are ranked according to their SJR and divided into four quartiles per year of papers included:

Cultural Trends

Quartiles/ Year	2008	2010	2012	2016	2021
Communication		Q4	Q3	Q2	
Cultural Studies		Q3	Q2	Q1	
Visual Arts and Performing Arts		Q2	Q1	Q1	

Table 9. Cultural Trends: Quartiles ranking according to SCImago Journal Rank (SJR).

Q1 (green) comprises the quarter of the journals with the highest values, Q2 (yellow) the second highest values, Q3 (orange) the third highest values and Q4 (red) the lowest values.

There is no information available for the year 2008 and also not yet for 2021.

City, Culture and Society

Quartiles/ Year	2014	2016	2017
Economics, Econometrics and Finance (miscellaneous)	Q2	Q2	Q1
Social Sciences (miscellaneous)	Q2	Q2	Q1
Urban Studies	Q2	Q2	Q2

Table 10. City, Culture and Society: Quartiles ranking according to SCImago Journal Rank (SJR).

Keywords. Keywords are the main instrument of search, summing up the scope of a subject and its concepts. Together with title and abstract, the choice of terms seeks to represent the theme of the work, and above all, the particularity of its contribution. Thereby, keywords reflect the whole publication.

With regard to the frequency of the number of keywords, most studies have 5 author keywords (40%). No article has less than 2 or more than 8 keywords.

A network of co-occurrence was constructed in VOSviewer to visualize the co-occurrences of author keywords. With the exception of the following keywords, all the others only have one occurrence among the identified documents: cultural mapping 17 occurrences, cultural planning 5, culture 3, GIS 3, creative tourism 2, and crowdsourcing 2. One document, P8, did not have metadata regarding the author’s keywords registered. Furthermore, 122 keywords are identified in the entire sample, with cultural mapping being the central descriptor. (Fig. 9)

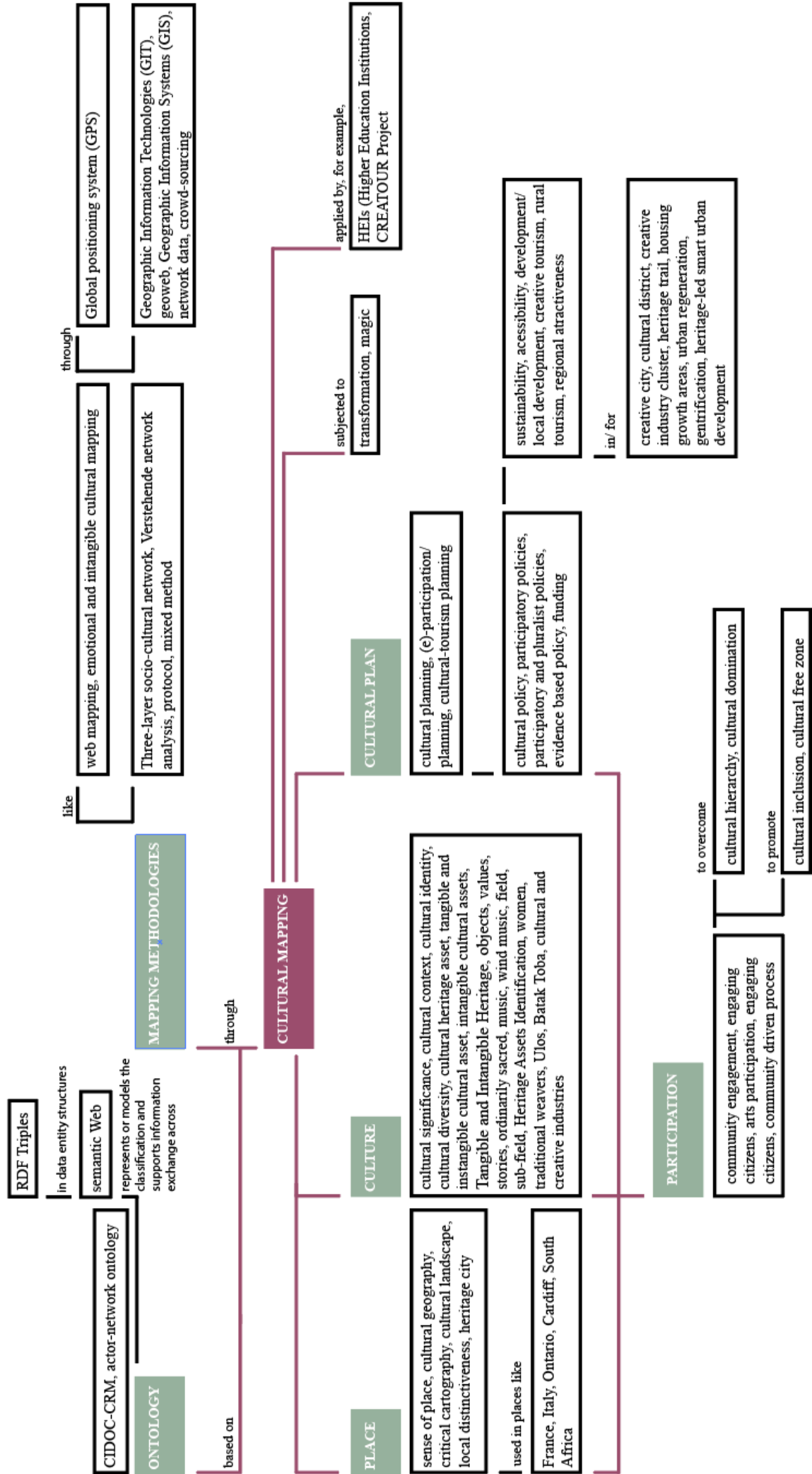
Despite 7 keywords coexisting in more than one document, 74% of author keywords vary.

In the absence of a widely accepted cultural mapping categorization procedure, different researchers have created schemes to serve specific purposes. In order to systematize, in some way, the world family of cultural mapping and associated concepts, researcher Luana Santos proposes a broader grouping that relies on each of the included 122 author keywords. (Fig. 10) The aim is to propose a structured and extensible guide for categorizing keywords based on the eligible articles from the systematic review.

Taking the author keywords, the proposal sets participation as the basis that allows leverage and nourishing of other levels. Community is vital for populating and shaping places and culture, and therefore, planning. Places are linked and defined by infrastructures, activities and conviviality. Culture depends and is a driver of a rich understanding of people and places. The ultimate goal of cultural planning is to incorporate culture, place and community into an inclusive, sustainable and strategic development environment. These complete the four dimensions that cultural mapping seeks to articulate and recognize. With/ through mapping methodologies or ontologies at its disposal, cultural mapping displays, indicates and provides relevant information about the geography, culture and community under consideration.

The adoption of one or more of the seven broad suggested categories as keywords would increase the efficiency and effectiveness of organizing and understanding incurred cultural mapping investigation thematic variances. Perhaps these groups can provide a first contact more directed to the content of the investigation.





RQ3: How the methodology is defined.

Different operational and systematic procedures are applied according to the objective and approach that the researcher wants to use as a scientific method of his study. From the outset, the inability to analyze the results through broad criteria such as nature, approach and objectives were notorious. These forms failed to specify crucial details to undertake a comprehensive and rigorous analysis and, mainly, one that is expected to allow comparison between publications.

In the midst of such a diverse topic, it seemed challenging to create a structured model for collecting information on the methodology of each publication. The range of results captured with the “cultural mapping” expression is enormous, even when directed towards Cultural and Creative Industries. As Lee, D., & Gilmore, A. (2012, p. 9) reflect, “there is no standardized methodology used across projects for compiling data, classifying and presenting it”. Although all the reviewed journal articles and conference proceedings focus on mapping culture, they differ in the approaches, highlighting the complexity of the practice. They illustrate a range of approaches that differ in purpose, definition, scale and methods.

In spite of methodological and theoretical suggestions about ways to grasp or analyze data, researchers Luana Santos and Ana Sousa have not found a complete and somehow holistic analysis guide for cultural mapping methodologies. To address this absence and for the purpose of the investigation, reviewed methodologies are decomposed and evaluated in different stages: delimitation of the analysis (object/subject of analysis and data dimension), data collection, data analysis and form of presenting results/ findings.

Embedded in so many possible directions, the mapping exercise, the methodology or the associated technology narrow the field of analysis according to its ultimate goal. It is not possible that a map contains all the cultural activity of a certain place. The chosen approach must communicate clearly a limited number of assets. (Porrello et al., 2010)

3.1. object/ subject of analysis

The division of studies into those that would be practical or theoretical did not satisfy researchers, as most of these studies were mixed although with very different frameworks. As laid down in the PRISMA methodology section, eligible outcomes are grouped under six typologies in accordance with their operational concept. Each will be referred and explored in the next research questions using the said designation:

1. elaborate or implement a cultural mapping of cultural places, activities, and/or actors that belong to the Cultural and Creative Industries;
2. review or analyze one or more case-studies of cultural mapping of cultural places, activities and/or actors that belong to the Cultural and Creative Industries. This typology is verified when the authors dissect information and retrieve specific data from the presented cases of cultural mapping carried out or framed in previous investigations and/or carried out by other authors. The study represents a departure from previous exercises and does not (or not only) attempt to discuss associated methodologies, but to reveal, discuss or evaluate data obtained by those case-studies.
3. review or analyze existing cultural mapping methodologies or ontologies;
4. suggest new or improved cultural mapping methodologies or ontologies;
5. review or analyze existing cultural mapping technologies;
6. suggest new or improved cultural mapping technologies.

These typologies are not exclusive, which means that in a given publication more than one of the typologies can coexist. Actually, this happens in 16 of the studies, representing 59%. 13 publications are associated with two types simultaneously (P2, P7, P11, P14, P15, P16, P17, P19, P20, P21, P22, P24, and P26), 2 to three typologies (P12 and P13), and P6 to four. In total there are 47 results for the different types of publications, 34% of which correspond to the third type (16 out of 47), making the revision or analysis of cultural mapping methodologies or ontologies the most common approach among the sample. 21% belong to the first type (10), 19% to the fourth (9), 15% to the second (7), 9% to the fifth (4), and 2% to the sixth (1). (Fig. 11)

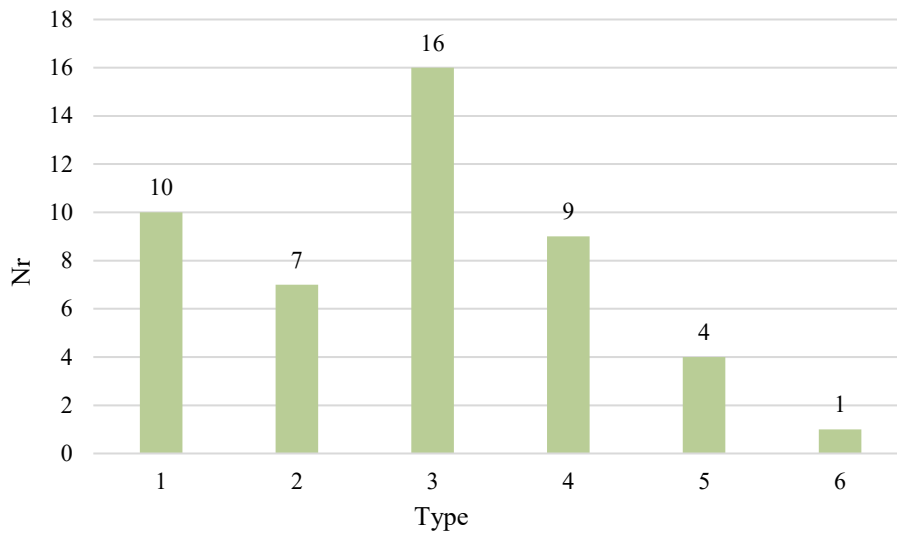


Figure 11. Number of publications on cultural mapping CCIs per type.

As it is possible to witness through the data collected, 13 of the 27 studies (48%) use a specific classification model, meaning that the assessment is supported by an author’s created, adapted or modified model to reach the analysis purpose. The agreed model can be defined by the publication authors or can be participative (including stakeholders, community or organizations). There is an exception to this in P25, where authors report the Project CREATOUR, in which there is no unique model followed. Despite having common guidelines, each pilot (organization, entity, or professional project) proposes its own selection of creative activities and cultural assets to further develop.

41% of the authors do not refer to or apply any model (11). 2 studies report the use of Cultural Resource Framework (CRF) and the Department for Digital, Culture, Media & Sport (DCMS) creative economy grouping is used also in 2 studies. UNESCO Cultural Heritage and the Mzansi Golden Economy (MGE) funding program are integrated and support 1 study each.

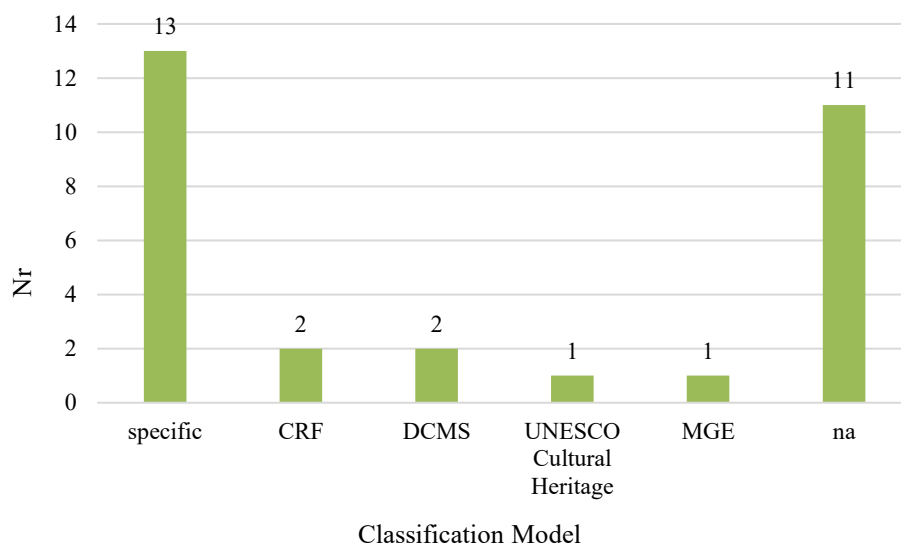


Figure 12. Cultural and Creative industries classification model used by each publication.

Na= not applied

The definition of what is considered part or falls outside of Cultural and Creative Industries varies across publications, affecting the decision about what to map and the kind of data needed. This implies that different

industry classification models and codes are hardly comparable, and therefore that it is complicated to get a clear picture of the data collected.

17 articles analyse key cultural dimensions by aggregated indicators:

- **P1** evaluates cultural engagement through the frequency of audience attendance, geographic availability (accessibility) and proximity and diversity, in order to understand the place-based cultural provision and operation.
- **P3** is interested in analyzing cultural domination in relation to the position of wind music in the musical field and as a sub-field (organizational and symbolic autonomy and recruitment).
- **P4** surveys theoretical components related to the sense of place, which can also be seen as indicators: “place attachment, place identity, place commitment and dependency, place satisfaction, belongingness or rootedness or community connectedness and community cohesion” (Jorgensen & Stedman, 2006; Soini, Hanne, & Poutaa, 2012; Vanclay, 2008, pp. 7–9, as cited in Horlings, 2015, p.267).
- **P5** explores Cardiff creative economy and creative network by looking at the creative industry workers within each DCMS sector (frequency per sector and business characteristics).
- **P6** refers to assessments on cultural consumption and participation represented by data indicators like cultural capital (education/ prior experience, and income), frequency, proximity, accessibility, cost and other community and amenity profiling (including population density and growth (demographic, household/housing type); sport and community facilities and open spaces; creative industries and economy (firms, employment, sector; clusters, VAT start-ups/closures); age groups, health and disability, ethnic groups, income groups, etc.; employment, skills; unemployment/worklessness, benefit claimants etc.; MOSAIC and ACORN household and consumer/lifestyle groups).
- **P7** reflects on the cultural “instrumental view” indicators that vary in terms of the views of culture (top-down or bottom-up approaches) development models (concept of development associated with growth or economic performance/human development, involvement of the stakeholders in the exercise; basis for selection of activities for mapping, approach to sustainability); levels of analysis (utilitarian and materialist approaches opposed to intrinsic and essentialist approaches, degree of concern with quantitative/qualitative data, broad - “ways of life, value systems, traditions, modes of consumption” (Freitas, 2016, p. 13)- or narrow understanding of culture).
- **P8** six categories of Cultural Resource Framework (CRF) are used in the study for delimitation of the research field: community cultural organizations, spaces and facilities, cultural heritage, natural heritage, festival and events, and creative cultural industries.
- **P13** presents three creative city assessments on “geographies of creativity” (creative spaces, workers and networks), affective/ emotional links to city environments (attitudes, feelings, preferences...) and cultural vitality.
- **P14** references one “research mainly focused on the cultural vocation of each district”(Ponzini et al., 2014, p. 79) (meaning data concerning tangible and intangible cultural infrastructure, demographic trends, educational institutions, transport links and local stakeholders) and another that draws upon an outlined cultural district definition (regarding cultural assets, territorial boundaries, shared cultural identity, educational institutions, innovation and networking capacity, cultural offering and the presence of economic organizations that are complementary to heritage appreciation process or benefiting from its positive externalities).
- **P15** refers to indexes that have been “developed in attempts to assess the creativity and comparative competitiveness of cities in relation to image and culture”(Lee & Gilmore, 2012, p. 6). These include: creativity index developed by Richard Florida and Sharpie creativity index. It also leans over three case-studies that considered the significance of cultural assets (according to capacity/scale, usage/attendance profile, quality/distinctiveness/uniqueness).
- **P16** proposes a hybrid methodology based on conventional data and “Big Data” (geotagged social media data (GSMD)) that can be used to determine the “flux and the frequency of the tourism in the region” (Gerundo & Adad, 2019a, p. 185) or “read the actual perception of the space” (Gerundo & Adad, 2019, p. 186).

- **P18** examines methodologies for mapping intangible cultural assets in different communities. The town of Georgia mapped community's identity (sites and stories identified by the community members), as well as the County of Essex and the City of Windsor, which also grouped stories under three categories – honoring the past, celebrating the present and envisioning the future -.

- **P19** follows a process led by participants to identify valuable places and create a rank of the most valuable hubs, generating discussions around inclusivity and access. Drawing on the report “Making Cultural Infrastructure”, authors “included three primary categories of space to organise the Edinburgh map from the start: performance, making, and virtual spaces. Performance includes cultural acts that put the body in the centre of creation, including music, dance, theatre and performative art. The Making category focuses on the creation of objects, including painting, sculptors, craft, jewellery, printmaking and wood. The Virtual category describes the creation of objects that do not have a fixed time or place, such as literature, journalism, illustration and filming.”(Currie & Correa, 2021, p. 9)

- **P20** establishes that attractiveness is defined and fixed by the use of the cultural domains: Visual Arts, Performing Arts, Events, Cultural Heritage, Media, Architecture & City Development, Life-long learning, Cultural Tourism, Sport or Not Included.

- **P21** analyzes cultural identity, including: Toba Batak language, Parmaliem beliefs, and Ulos weaving.

- **P22** proposes a three-layer socio-cultural framework with six types of socio-cultural relations (“individual-to-individual (1), individual-to-sign (affiliations with symbolic culture) (2), sign-to-sign (symbolic culture) (3), sign-to-object (symbolic representation of material culture) (4), object-to-object (material culture) (5), and individual-to-object (affiliations with material culture) (6)”(Basov & Kholodova, 2021)), revealing social ties.

- **P24** shows the interdependency of cultural resources in the old quarter of Melaka City between tangible cultural heritage assets (such as living history sites, historic corridors, heritage districts, buildings, cemeteries), natural heritage (like the river), and community's identity and sense of place (by mapping intangible cultural heritage assets such as traditional values and stories).

- **P26** maps the most attractive creative districts, in terms of: “economic apartments, access to work, opportunities as freelancer, access to the resources as galleries, performance spaces, associations, social networks and others.”(Assumma & Ventura, 2014, p. 498)

- **P27** uses data from the Mzansi Golden Economy (MGE) funding programme as an indicator of cultural activity or cultural vibrancy (“number of beneficiaries by MGE funding category and all funding categories together” (Linde et al., 2020, p. 118)). The spatial distribution of the amount of funding can give an idea of the available cultural resources. The spatial distribution of funded activities can be useful to identify cultural clusters.

Each of the studies has specific criteria for delimiting the sample for analysis:

1. geographic;
2. social;
3. economic;
4. political;
5. methodological/state of the art;

Again, these are not mutually exclusive and 17 studies (63%) have 2 (P3, P5, P9, P14, P15, P17, P20, P22, P24, P26, and P27) or 3 (P6, P16, P19, P21, P23, and P25) specific selection criteria. Geography is the preponderant factor concerning the decision (34%), followed by the need for a methodological or state of the art framework (26%), building on societal factors (22%) or economic (14%) factors, or, finally, political orientations/ decisions (4%). (Fig. 13)

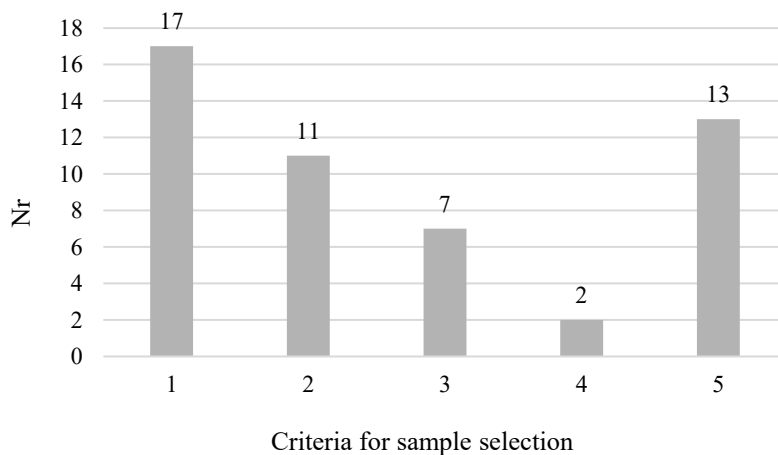


Figure 13. Number of publications across criteria for sample selection.

Naturally, the quality of the subject/ object of analysis differs across studies. The assets reported are intangible, tangible or, and in most instances, both (corresponding to 59%). The emphasis on representing both intangible and tangible dimensions of culture articulates “invisible” or not easily quantified elements with other physical or more easily marked on a map elements, respectively. Together both dimensions of culture contribute to the definition of communities and places.

P7 combines two cases with both and only intangible dimensions. (Fig. 14)

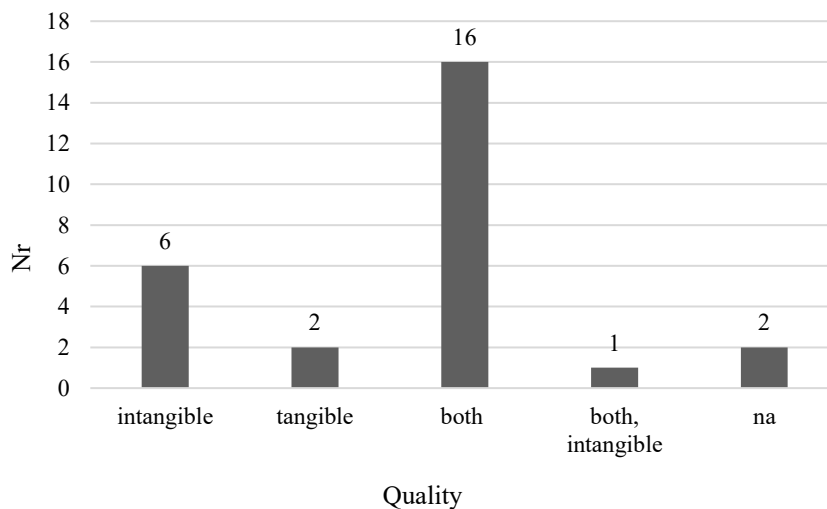


Figure 14. Number of publications per assets quality type.

The two principal paradigms to read and map cultural places are bottom-up and top-down. Bottom-up or “humanistic integrated approaches” include and privilege community perspectives. Top-down or “more utilitarian, materialist approaches” are expert-led. (Freitas, 2016)

More than half of the publications (52%, 14 publications) are built upon bottom-up methodologies. 2 present top-down methods and 2 mixed methods (a combination of bottom-up and top-down on the same project). 3 have bottom-up and top-down methods simultaneously but that are not mixed in the same mapping exercise. It is also this justification that can be applied to the “top-down, mixed” publication (includes one top-down and one mixed approach cases). (Fig. 15)

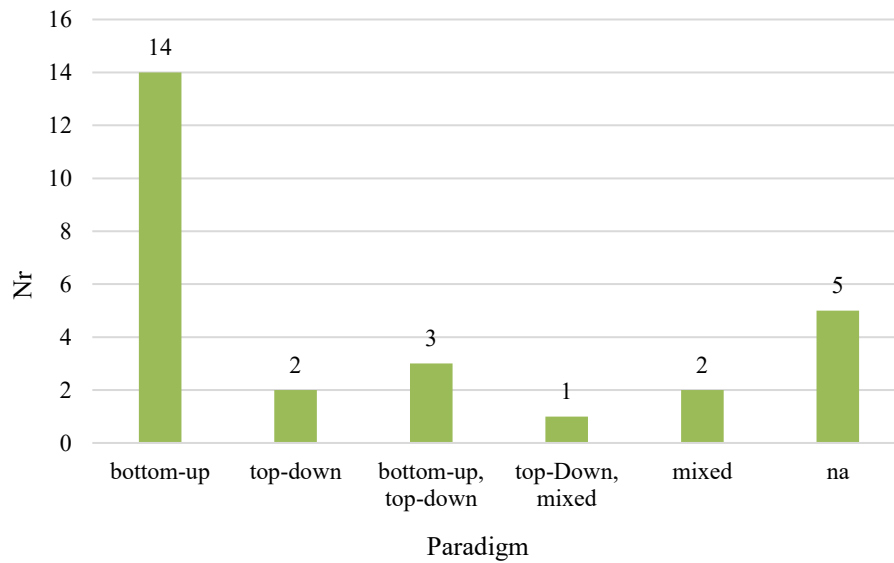


Figure 15. Number of publications across the type of paradigm employed.

The disparity in captured spatial information about Cultural and Creative Industries is characterized by fragmentation of datasets and sources, and lack of consistency and compatibility between levels of data.

As table 11 indicates, it is difficult to draw relationships between the methodological choices for delimiting the object of study of each publication. The same types of articles end up using different criteria for sector classification, sample selection, quality and paradigm of assets to be mapped. Bottom-up and top-down projects/exercises capture tangible and intangible data, which justifies the lack of “a hard dualism at work here”. (Currie, Correa, 2021)

IDs	Type	Classification Model	Criteria for sample selection	Quality	Paradigm
1	2	Na	2	Na	Na
2	3, 4	Na	5	Na	Na
3	1	Na	1, 2	intangible	Na
4	3	Na	2	Intangible	Na
5	1	DCMS	1, 3	Tangible	Bottom-up
6	2, 3, 4, 5	Na	2, 3, 5	Both	Bottom-up
7	2, 3	Na	5	Both, intangible	Bottom-up, Top-down
8	1	CRF	1	Both	Bottom-up
9	4	Na	1, 5	Both	Na
10	3	Na	5	Intangible	Bottom-up
11	1, 3	Na	1	Both	Mixed
12	1, 3, 5	Na	5	Both	Bottom-up

IDs	Type	Classification Model	Criteria for sample selection	Quality	Paradigm
13	2, 3, 5	specific	5	Both	Bottom-up
14	2, 3	Specific	1, 5	Both	Top-down, mixed
15	2, 3	Specific, DCMS	1, 5	Both	Bottom-up, Top-down
16	1, 4	Specific	1, 3, 4	Tangible	Mixed
17	4, 6	Na	1, 3	Both	Bottom-up
18	3	UNESCO Cultural Heritage	2	Intangible	Bottom-up
19	2, 3	Specific	1, 2, 5	Both	Bottom-up
20	3, 5	Specific	1, 3	Both	Top-down
21	1, 4	Specific	1, 2, 3	Intangible	Bottom-up
22	1, 4	Specific	2, 5	Intangible	Bottom-up
23	3	Specific	1, 2, 5	Both	Bottom-up
24	1, 4	Specific, CRF	1, 2	Both	Bottom-up
25	3	Specific	1, 2, 3	Both	Bottom-up
26	3, 4	Specific	1, 5	Both	Bottom-up, Top-down
27	1	Specific, MGE	1, 4	Both	Top-down

Table 11. Resume: Delimitation of the analysis stage and IDs association.

3.2. Dimension of the included data

Comparisons between cultural mapping investigations are often difficult even at the level of the data dimension included (region of focus, scale of analysis, and product chain stage). As a result, this valuable source of information remains largely untapped.

Geographic scale. Cultural production and consumption have a spatial organization. But understanding culture and cultural activities as a geographic phenomenon, with spatial location and a certain orientation is not always simple. Infrastructure, for example, is easily geolocated, however marking stories or memories on the map is a separate task. Different places, scales and objects of study guide the conceptual construction and correlations establishment between different phenomena. Space can be interpreted in different dimensions as a product of diverse and complex relationships in constant mutation. Hence, cultural mapping identifies and elaborates a systematized representation of the location and orientation of cultural phenomena, allowing for the interpretation and correlation between the collected information.

Concerning the analyzed approaches, geographic information was grouped in local, national or international terms as a starting point for the organization and articulation of data. (Fig. 16)

When different geographic scales coexist in the same article, the individual scale of each case is identified. For example, in P7, Freitas presents two case-studies - a report called “The Cultural and Creative Sector in Portugal” that draws on a national level (concerned with the cultural and creative sector in Portugal) and the project “Our Art: the Colours and Crafts in the Future” on a local level (traditional crafts in the Municipality of Castelo de Vide). So, this article is associated both with national and local levels. Also, if, in the same article, cases from different countries are identified, it was considered as a national (and not the international) analysis.

Eight publications combine two kinds of geographic analysis (local + national - P1, P7, P20, P23, P27 - and local + international - P11, P12, P22). The national and international scales were only implemented or analyzed together with the local scale.

The majority of investigations map or are based on a local level. Among these, the most common are the city scale (P1 London in England, P5 creative Cardiff and Penarth (town outside Cardiff but important to the city's creative economy) in Wales, P13 Darwin, Wollongong and Sydney in Australia, P17 Athens in Greece, P18 Windsor in England, P19 Edinburgh in Scotland, P22 is dedicated to five European art collectives based in Barcelona, Hamburg, London, Madrid, and St. Petersburg, P25 Project CREATOUR: Creative Tourism Destination Development aimed at small cities and rural areas in Portugal), other scales included more micro levels such as neighbourhood (P6 in South Cambridgeshire non-metropolitan district and Milton Keynes South midlands region, England), municipality (P7 Castelo de Vide in Portugal, P12 Amares in Portugal, P16 Pozzuoli in Italy, and P18 Wawa in Canada), heritage district (P8 seven heritage districts inside the city of Medan in Indonesia), old quarter (P24 Melaka city in Malaysia), cultural district (P14 in Veneto Region, Italy), village (P9 Preet Nagar, India), area (P21 Toba area in Indonesia, P26 Grecanic Area is situated in the Province of Reggio Calabria in Italy), archeological site (P23 Angkor in Cambodia), beyuls (“isolated, tranquil Himalayan valleys suitable for spiritual retreat” in Nepal), downtown (P26 CCPF (Creative City Planning Framework) is developed in five Canadian downtowns: Toronto, Vancouver, Calgary, Ottawa, Ville de Montreal) or more macro levels such as island (Surin Islands, Thailand), town (P11 Kuala Kangsar in Malaysia, P18 Georgina in Canada), sub-regional (P15 Fylde Coast and Lancashire in England), or regional (P3 Alsace, P4 does not specify regions but highlights the importance of regional sustainable development, P15 West Midlands and North West in England, P20 Øresund in Sweden and Denmark). P27 combines “data from multiple sources with a view to making policy suggestions related to equitable geographic spread in terms of provinces, rural and urban areas, and metropolitan areas.” These more concentrated levels of analysis allow “for a more fine-grained approach to gathering data” (Lee & Gilmore, 2012).

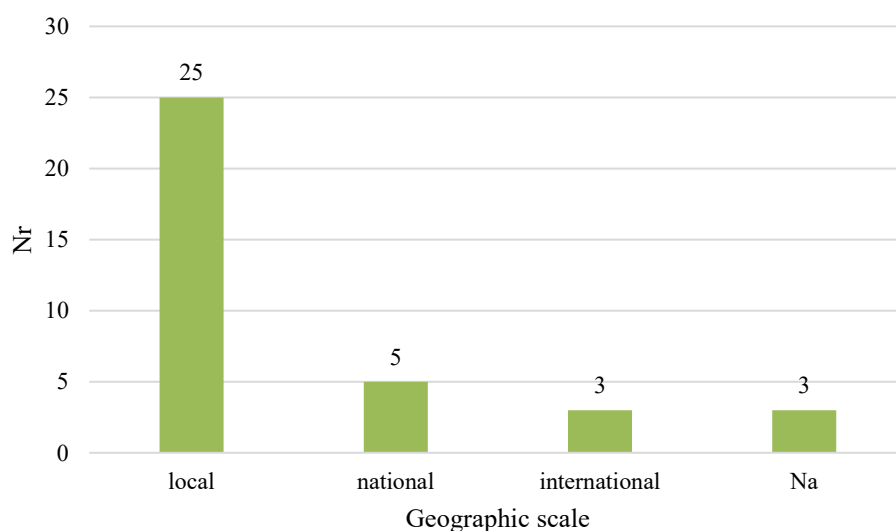


Figure 16. Number of publications per geographic scale of data included.

The scale of analysis. With regard to the “scale of analysis” (Fig. 17), the data collection procedure intended to capture the dimension of the industry activities and practices. The joint association of activities that operate in Cultural and Creative Industries business sphere is considered to map the “industry” as a whole. Despite the classification model used, if the publications do not intend to capture a specific area of activity, then the authors assume or are presumed to map CCIs. The industry is further broken down into specialized divisions like “field” and “sub-field”. The field includes specific and generally included areas of CCIs, as is the case of music (P3, P26), Cultural Heritage (P8, P11, P18, P20, P23, P24, P26), Tourism (P12, P17, P25), Design (P13), and Arts (P26). Sub-field has an even more specialized nature such as wind-music (P3) or traditional crafts (P7, P21).

Four publications map or include cultural mapping cases with distinct CCIs scales of analysis (P3, P7 and P26 include two and P13 three).

38% of cultural mapping studies address the analysis of a field or multiple fields, followed closely by 34% regarding the industry.

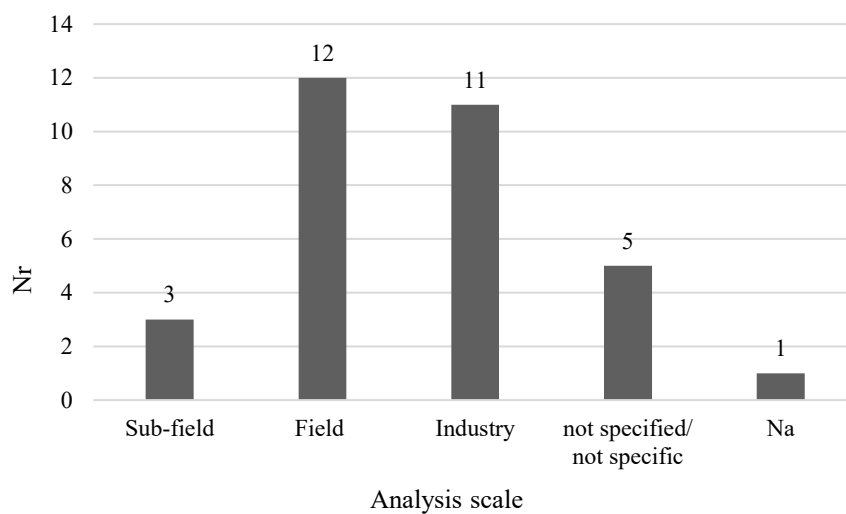


Figure 17. Number of publications per CCIs scale of analysis.

Production chain stage. Cultural activities were only included in the present systematic review if they were part of a socio-economic context. The reviewed authors build the analysis through multiple and scattered stages in the production chain of the industries considered. These range from production/ supply (1, 2, 3, 4, 5) to consumption/ demand (6) (Fig.18) cycles.

As it can be observed in Figure 18, both production and consumption patterns support the analysis of cultural mapping publications.

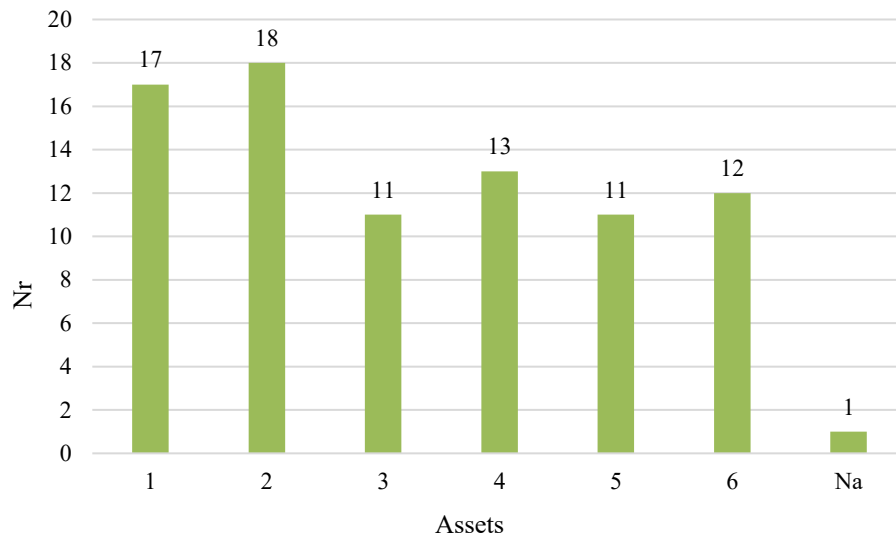


Figure 18. Number of publications per mapped stages (production/ supply and consumption/demand) and assets of the production chain.

1 = Practices and activities; 2 = infrastructure, resources, places, firms, facilities; 3 = professionals; 4 = public/audience/community/ non-professional; 5 = networks; 6 = public/audience/community; Na = not applied.

8 publications comprise just one asset (P1, P2, P8, P9, P11, P12, P16, P19), 6 are applied the whole production chain, including all the six kinds of assets (P6, P7, P13, P20, P25, P26); 4 are applied to three assets (P5, P14, P15, P23) and 4 to two (P4, P18, P21, P24); 2 are applied to four (P3, P27) and five (P17, P22) assets. One paper is not applied (P10).

The heterogenous nature of production and consumption and their spatial relationships requires an integration of diverse geographic scales, sectors, activities and people.

IDs	Geographic scale	Analysis scale	Assets
1	Local, national	Industry	6
2	Na	Not specified/ specific	5
3	Local	Sub-field, field	1, 3, 4, 5
4	Local	Na	4, 6
5	Local	Industry	1, 2, 3
6	Local	Industry	1, 2, 3, 4, 5, 6
7	Local, national	Sub-field, industry	1, 2, 3, 4, 5, 6
8	Local	Field	2
9	Na	Not specified/ specific	5
10	Na	Not specified/ specific	Na
11	Local, international	Field	2

IDs	Geographic scale	Analysis scale	Assets
12	Local, international	Field	6
13	Local	Field, industry, not specified/ specific	1, 2, 3, 4, 5, 6
14	Local	Industry	1, 2, 6
15	Local	Industry	1, 2, 6
16	Local	Industry	2
17	Local	Field	1, 2, 3, 4, 5
18	Local	Field	1, 4
19	Local	Industry	2
20	Local, national	Field	1, 2, 3, 4, 5, 6
21	Local	Sub-field	1, 4
22	Local, international	Not specified/ specific	1, 2, 3, 4, 5
23	Local, national	Field	1, 2, 4
24	Local	Field	1, 2
25	Local	Field	1, 2, 3, 4, 5, 6
26	Local	Field, industry	1, 2, 3, 4, 5, 6
27	Local, national	Industry	1, 2, 3, 6

Table 12. Resume: Dimension of the included data and IDs association.

3.3 Research methods (Data collection and analysis strategy)

In this review, there is the presence of three research approaches – mixed methods, qualitative and quantitative. Mixed methods research involves both qualitative and quantitative approaches. The distinction between qualitative research and quantitative research can be framed in terms of “differences between (...) the basic philosophical assumptions researchers bring to the study, the types of research strategies used in the research (e.g., quantitative experiments or qualitative case-studies), and the specific methods employed in conducting these strategies (e.g., collecting data quantitatively on instruments versus collecting qualitative data through observing a setting).” (Creswell, 2014).

Regarding the procedures of inquiry (or research designs) the systematic review focused on observing the specific research methods of data collection and data analysis.

Data collection. As shown in Fig. 19, the reviewed papers consider a varied range of possible methods of data collection. A combination of different methods of data collection is used in the majority in order to get a valid and reliable understanding of CCIs complex ecosystem.

The most used method among publications is case-study, included in 62% of them. When articles presented case-studies as examples to prove a given idea/context/methodology of the application of cultural mapping, they were considered to be using case-studies as a method for collecting information. Therefore, the papers that include case-studies are categorized as part of typology 2. This does not mean that case-studies cannot also be used to collect

data in other article typologies (1, 3, 4, 5, 6). It is important to consider that case-studies included in the articles did not focus exclusively on the analysis of specific results (otherwise they would only be considered as part of typology 2), but also aimed to understand or reflect upon their production context or results.

Surveys (through online and offline platforms, applied to pre-defined target groups or volunteers. For the purpose of this investigation, this category includes questionnaires and crowdsourcing) and official documents (including report, plan, legislation, strategy, policy, or audit) are also applied in more than a half (54%) of the 26 publications. Interviews and databases are used in 46% of cases. Other methods include audiovisual and multimedia documents and social media (31%), direct observation (27%), mind-mapping (drawing or filling in a physical or online map by the community, 23%), event (including workshop, meeting, or debate, 19%), Geotagged Social Media Data (15%), snow-ball (11%), Global Positioning System (11%), maps (8%), and objects (4%).

In addition to the above mentioned, every paper departs from or draws upon theoretical research (bibliography).

P2 does not carry out any method of data collection.

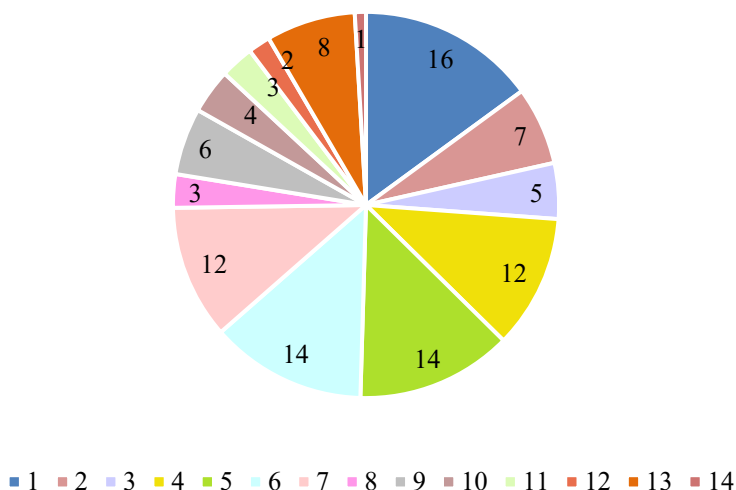


Figure 19. Frequency of the methods for data collection included in each publication.

1 = Case-study; 2 Direct observation; 3 = Event; 4 = Interview; 5 = Survey; 6 = Report/plan/legislation/strategy/consult/provision/policy/audit; 7 = Database; 8 = Snow-ball; 9 = Mind-mapping; 10 = Geotagged Social Media Data (GSMD); 11 = Global Positioning System (GPS); 12 = maps; 13 = Audiovisual and multimedia documents and social media; 14 = Objects.

Data analysis. The type of data collected will directly influence the rising claims and knowledge, and the further course of the examination process. Quantitative analysis refers to the set of quantitative methods used in the analysis and interpretation of a given phenomenon. Researchers analyze and interpret statistical results or emergent data patterns between and among variables. Usually, quantitative indicators allow simpler, repeatable and more objective interpretation.

Only P1 employs an exclusive quantitative analysis to discuss the need to unify and link cultural supply and demand through the connection between “national data sets, commissioned, surveys and local knowledge (residents, arts organizations)”. (Evans, 2016, p. 17)

Qualitative analysis tends to use more diverse and less standardized techniques. It involves interpreting and blending empirical evidence and abstract concepts to build theories. Data in qualitative analysis is more diffuse than concrete mathematical expressions. (Neuman, 2014) P4 and P18 present a qualitative analysis to capture an intangible cultural dimension. P25 is also qualitative but includes tangible and intangible culture. Both quantitative and qualitative procedures can be used to analyze tangible and intangible cultural mapping data.

It can be verified (Fig. 20) that the publications included in the sample mainly use a mixed methods approach. Mixed methods involve a balance of qualitative and quantitative data sets analysis.

Despite referring to data collection, P9, P10, P16, P20, and P23 do not examine the data. P2 does not collect or analyze data because is only interested in studying methodological mapping approaches.

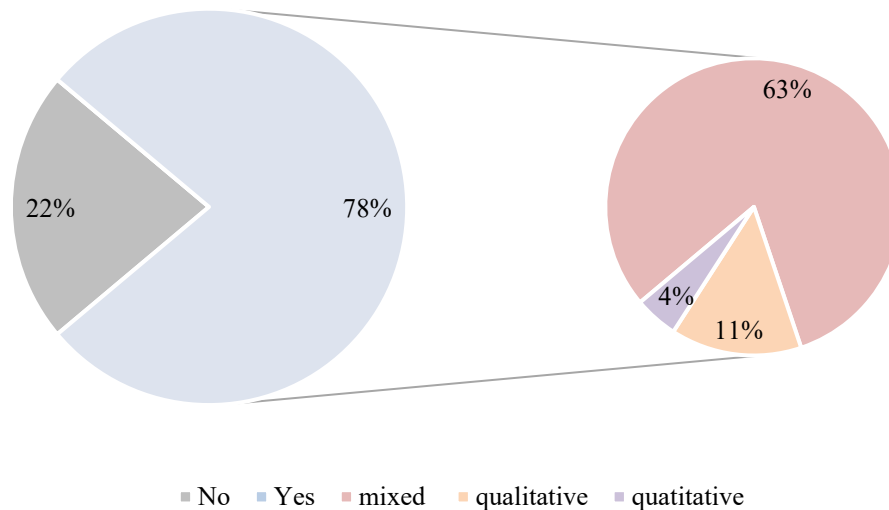


Figure 20. Percentage of the methods for research analysis by publication.

3.4. Data presentation

Data presentation still corresponds to the research development phase, prior to the dissemination of results. In this step, the authors proceed with the selection and organization of the analyzed data. The resulting material is the basis to draw up conclusions and will later be included in different dissemination mediums.

Method for data presentation. As shown in Figure 21, nine different ways were identified among the articles to present the analyzed data. P2 and P23 do not include a presentation of results in the article.

Maps and tables are used by more than a half of the publications. Maps are used in 72% of the articles (18 out of 25) for displaying the retrieved data. Tables are the second most used method, presented in 60% of the articles (15 out of 25).

In addition to other more usual formats such as graphs or diagrams, data is also presented through:

- theoretical confrontation: critical perspective on/between practical cases and/or theoretical assumptions.
- narrative stories: to capture intangible culture, P18 reviews three case-studies of communities that gather and incorporate local stories in social media posts or websites. Although several investigations collect stories, memories or experiences from the community, only this article presents them as a textual final “product”.
- audiovisual and multimedia (AM) documents: ranging from audio and video recordings with locals or about local stories (P7, P18, P21), videos with photos of cultural assets accompanied with a musical background, a silent video documenting the construction of the Ambassador Bridge or a video walking tour of a Windsor neighbourhood (P18), or photographs (P7, P11, P12, P18, P22, P24, P25).
- Maps: made by the authors based or not in community consultation or in community map drawings. They can be based on technology (like geotagged social media data or network structures) and presented through photography/ aerial photography, GIS, GPS, or drawn in other kinds of software.

- workshops/ discussions: P14 - discussion between regional and local institutions and actors and the research group, P25- discussions among various entities about pilot initiatives and workshops thought as “laboratories of ideas”, P26- dialogue between community, stakeholders and public administrations.
- objects: revealers of meaningful links between territory and local identity in P25. Pilot projects were invited to present to listeners different objects that characterized and expressed their place.

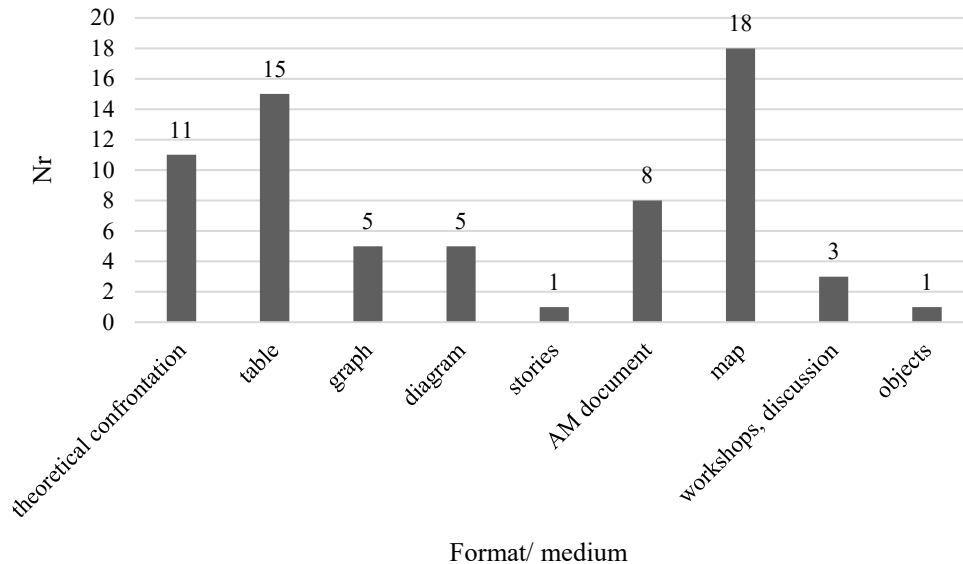


Figure 21. Number of publications per format/ medium used for data presentation.

Tools applied. Some methodological approaches are combined with modern cartography technologies or techniques like:

- multiple correspondence analysis: data analysis technique to visualize the association between two or more categorical variables. In P3, Vicente Dubois and Jean-Matthieu Méon (2013) use this technique to distinguish orchestras exposure to cultural domination. By combining two axes (sociability and institutionalization of the orchestras) the authors are able to create a socio-cultural map of the orchestras and their musicians.
- Resource description framework (RDF) is used in P9 as the model to structure ethnographic information into resource nodes. By decomposing the history of Indian villages (as a prototype), the article intends to stress the advantages of this structure to improve datasets compatibility and effectivity.
- QGIS is an open-source GIS software used in P8, P17, P19, P27 to process data and design maps (<https://www.qgis.org/en/site/>).
- ArcGIS is also a GIS software but it is a product of Esri company. In P12 a web map is created with ArcGIS and combined with the Public Information web application that “tracks social media activity in real time” (Ribeiro et al., 2020, p. 62). In P16 GSMD is added to ArcGIS and resorts to ESRI Story Map tool and in P19 website hosts an ESRI ArcGIS map.
- PostgreSQL (P17): open-source object-relational database system (<https://www.postgresql.org/>).
- PostGIS (P17): spatial database extender for PostgreSQL object-relational database (<http://postgis.net/>).
- Geoserver (P17): open-source server for sharing geospatial data (<http://geoserver.org/>).
- Leaflet (P8, P17): open source, front-end JavaScript library for creating interactive maps (<https://leafletjs.com/>).
- Open Street Map (P17): online collaborative mapping project that allows to create and provide free geographic data worldwide (<https://www.openstreetmap.org/>).
- Apache Tomcat in P17 as a Web server (<http://tomcat.apache.org/>).
- Microsoft MapPoint is used in P26 to elaborate the map of Canadian downtowns.
- Microsoft Excel, used in P26 to elaborate histograms and percentages.

- Google Earth used in P27 “to identify the coordinates of each funding recipient” (Linde et al., 2020, p. 116).

GIS are also used in P13, P14, P15, P18, P20, P24, P26 but these papers do not indicate what was the specific GIS software employed or the authors develop a proprietary GIS.

This survey does not include tools for presenting results whose specific name is not mentioned by the authors or that are proprietary.

RQ4: What is the aim of the research?

The identification and interpretation of the scope of the articles selected for review according to five trajectories, suggested by Duxbury, Garrett-Petts, & Maclennan (2015) was the first attempt to group the articles’ ultimate goals. These authors suggest five main trajectories of cultural mapping practice: community empowerment and counter-mapping, cultural policy, municipal governance, mapping as in artistic practice and academic inquiry. However, these could not encompass the richness and diversity of the results. (Duxbury, 2019)

In P2, Antonio Porrello, Antonio Talone, Diego A. Collovini, and Enrico Tommarchi (2010) identify that cultural mapping might have distinct functionalities: documentation about cultural resources, community empowerment, effective management of cultural resources, economic development of the community, transmission of local knowledge systems, and promotion of intercultural dialogue.

Taking these two publications as a starting point and in response to the reviewed papers, the trajectories were adapted into nine aims (Fig. 22):

1. Documentation about cultural resources (research, leveraging and documentation of tangible and/ or intangible resources);
2. Community development/ empowerment (contribute to the development, strengthening and valorization of a community. The community is a centerpiece for a better insight into the cultural conceptions and procedures and a pivotal aspect of strategy);
3. Effective management of cultural resources (development of processes, strategies and policies to contribute to the achievement of the desired goals. Authors seek to integrate cultural resources concerns into planning and management processes);
4. Sustainable development (development requires a differentiated and specific approach to places, resources and local capacities in order to support the sustainable development of economic, social, cultural and political activity. It was applied when authors clearly state the aim to contribute the sustainable development of communities and regions, whether to generate profit or inclusion);
5. Network establishment or development (proposal of creation of new networks or development/ reinforcement of already existing ones);
6. Economic development and tourism;
7. Transmission of local knowledge systems (from generation to generation or from one community/ group to others);
8. Promotion of cultural/ intercultural dialogue;
9. Theoretical debate (rising of general issues for the field).

Figure 22 shows that the majority of cultural mapping papers (74%) aim at documenting cultural resources (aim 1). This means that the projects develop some kind of inventory for accounting cultural assets, providing the base information to foster knowledge and new perspectives over the object of analysis.

Cultural mapping is undertaken in 59% of papers to inform and sustain both effective management (aim 3) and 56% of papers for economic development (aim 6) and also to rise some theoretical issue (aim 9).

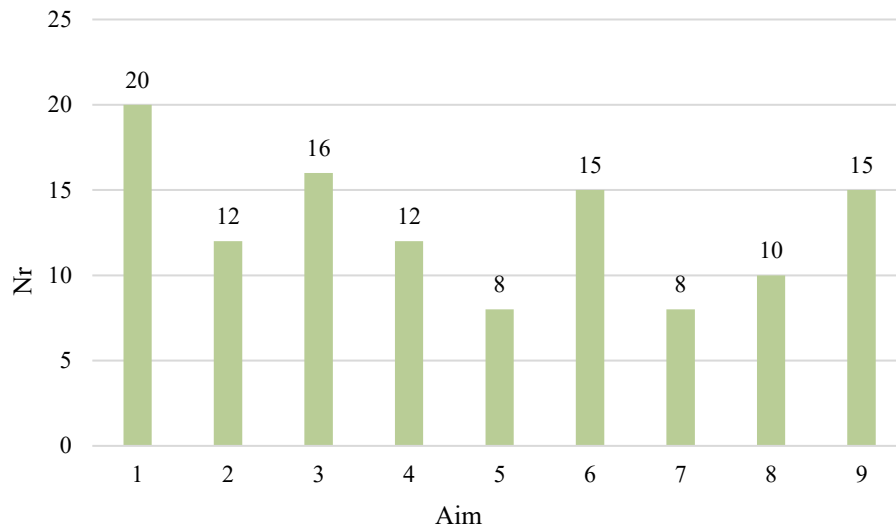


Figure 22. Number of publications according to the aim.

The reasons for associating each paper with the respective aim(s) will be explored below. Only the first objective was not mentioned because it is an objective criterion: either the articles include or they do not include the mapped assets.

12 publications include the aim 2 (community development/ empowerment):

- P3: investigates the effects of social changes, social recruitment, cultural strategies and policies on the traditional link between wind bands and their local community. Wind music in France is “situated at the lowest level in the cultural hierarchy” (p.127) and a framework is provided to “propose a balanced view of a cultural form often seen in a stereotypical manner”. (p.142) (Dubois & Méon, 2013)

- P11: one of the six stages proposed for the preparation of the cultural mapping exercise was the involvement of the community, stimulating its participation to "create a sense of belonging and ownership amongst the local residents and to reduce the burden on the government side"; as well as "the protection of human rights and respecting the traditional knowledge". (Yunus et al., 2021, p.29)

- P13: by using Geographic Information Technologies for the study of the creative city and policymaking in Australia, the authors were able to involve the community and empower it: in the Darwin project, after the conclusion of the empirical stages the “dialogues with government and various community sectors have continued to unfurl” (p.337); The Cultural Asset Mapping for Regional Australia (CAMRA) project sought “community-generated knowledge on what constituted cultural assets in regional, rural and remote parts of Australia.” (p.338); Communities defined creativity, cultural aspects, features, attitudes, feelings, preferences, etc. (Gibson et al., 2010, p.339)

- P17: calls the attention to the power of ICT to put local community’s perspectives forward, motivating the transition to a more collaborative planning process. The ExpATHENS project promotes “active and constructive engagement of local actors, as well as the creation of a shared responsibility towards qualitative cultural product development at the business level.” (Gibson et al., 2010, p.20)

- P18: describes the efforts of communities in Ontario “in order to uncover the intangible cultural dimensions of the community” (p.35) and tell their unique stories. Communities’ “voice” was disseminated through websites, social media, a book, among others.(Jeannotte, 2016)

- P19: based on a participatory mapping, which helped “examine the relationships between Edinburgh’s cultural spaces and local communities”. People identified cultural categories to include in the map and shared their perspectives on cultural spaces outside Edinburgh’s tourist-ridden core.(Currie & Correa, 2021, p.1)

- P21: acknowledges that “the existence of the women weavers has not been optimally empowered as a cultural heritage with high economic and artistic value”. So, the study “aims to uncover the social and cultural mapping of the current condition of Ulos Toba weavers by identifying female weavers in the Lake Toba region related to the inheritance of traditional weaving as the cultural identity of the Batak Toba.”(Nugroho et al., 2021, p.1)
- P22: “the approach is focused on understanding of social (inter)action in local lifeworlds” (p.16), to “answer how symbolic and material culture is molded by social network ties and how cultural context, in turn, constitutes social ties.” (p.2) “(...) Mapping of social ties side to side with their cultural context principally changes our understanding of individuals’ positions” (p.15) and enables “(...) capturing mutual effects of cultural contexts and social ties, would these effects be noticed by individuals or go unrecognized.” (p.16) (Basov & Kholodova, 2021)
- P23: analyzes “how mapping can be a tool to help local communities have their voice heard through their involvement in the mapping process.” (Taylor, 2013, p.1)
- P25: the CREATOUR project pointed out “to contribute to local development processes, focusing on local cultural resources and community involvement.” (p.43) Approaching cultural mapping through objects as a tool, regional actors discovered what was “‘so special’ about their places, a way to link tourism offers with the community where they take place.” (p.42) The authors also reinforce how creative tourism can be a tool for local empowerment.(Cabeça et al., 2019)
- P26: M.U.S.I.C. project platform extracted models of perception of urban and contemporary spaces so that they would “be more inclusive with stakeholders as well as with the cultural demand of citizens and consumers”. In the case-study of the Grecanic Area, it is explored the idea of an EcoMuseum that would enable the community to take care and explore its own territory. (Assumma & Ventura, 2014, p.498)
- P27: objectives of Mzansi’s Golden Economy (MGE) programme include: “audience development and consumption”, “human capital development” and “developing cultural entrepreneurs”.(Linde et al., 2020)

16 publications include the aim 3 (effective management of cultural resources):

- P6: reviews the evolution of artistic and cultural planning in the UK, highlighting the (often absent) importance of adjusting to the regional (and national) profile of the community. “The multi-purpose “Arts Centre” is still the default – in the absence of either an alternative planning model or “cultural map.” (p. 69) Local authority and regional cultural bodies need to understand the cultural activity of their areas of interest.(Evans & Foord, 2008)
- P8: stresses the necessity for a plan to safeguard heritage districts in the city of Medan, Indonesia. The cultural mapping of seven of these heritage districts positions itself as an important step for conservation policies and strategies, interconnecting heritage preservation and urban development planning.
- P11: in the undertaken cultural mapping exercise, heritage assets were identified and added to an inventory, becoming a “database and reference for any parties in relation to their conservation” and promotion. A Heritage Trail is suggested “to ensure that heritage assets will be manageable and connected properly”. (Yunus et al., 2021, p.29)
- P13: Geographic Information Technologies (GIT) “can be integrated into research agendas (...) and engage with policy debates already populated by people, politics and perspectives.” In the context of creative city research and policy making, the authors describe three research projects that used GIT in cultural mapping.(Gibson et al., 2010)
- P14: cultural mapping has been undertaken by governments in order to identify, analyze and promote specific policies targeting the social organization of cultural and creative activities, such as clusters, quarters or districts. Policymakers have demonstrated interest in approaching Cultural Districts (CDs) however policies for creative industries face deficiencies. Two case-studies of policies undertaken in northern Italian regions aimed at heritage preservation and creative production are described.
- P15: explores cultural mapping through the lens of cultural policy at a regional and local level. The projects identified are “helping partnerships between cultural agencies and local authorities to identify shared priorities and discuss joint investment decisions”. (p.25) Cultural mapping is approached as a tool of contemporary governance, important to support decision making and investment.(Lee & Gilmore, 2012)

- P16: points out the necessity for a cultural strategy to valorize and understand the cultural resources and dynamics of Pozzuoli. “The aim of the project is to make freely available supporting material designed for public authority, to be used by the municipality to promote Pozzuoli’s cultural, economic and touristic potential.”(Gerundo & Adad, 2019, p.182)
- P17: the development of Information and Communication Technologies (ICT) and Geographic Information Science (GIScience) facilitates participation and access, rendering “the bi-directional e-interaction among planners and decision-makers on the one hand and local communities on the other”. (Creighton, 2005, p.4) The ExpATHENS participatory cultural planning exercise includes objectives include: “revitalizing and upgrading the cultural and tourism complex in the area under study”, “promoting an inclusive urban environment”, “spreading the benefits reaped by cultural tourism to the stagnating local business community, still suffering from a long-lasting economic recession” and “promoting a heritage-led urban development perspective”. (p.12) (Panagiotopoulou et al., 2020)
- P19: the Culture and Communities Mapping Project can be used as a tool “to better understand Edinburgh’s cultural geography and guide further research on arts equity and access.”(Currie & Correa, 2021, p.1)
- P20: “shows how culture is used and transformed as it becomes mobilized as a strategic resource in a regional development project within a neoliberal economic discourse.” (p.318) “The overall goal of this three-year project of mapping and planning culture is to ‘develop old and establish new city centres and peripheral areas, develop the profile and marketing of cities...[and] the development of creative environments’”. (p.319) “An important aim of the project is to strengthen the economic and cultural position of municipalities outside the Copenhagen/Malmo metropolitan area.” (p.319) (Hultman, 2007)
- P21: “this research is expected to be the basis for designing strategies to utilize Ulos woven artefacts as one of the cultural heritages and identities in the Lake Toba region (...).” (p.1) (Nugroho et al., 2021)
- P23: Lhakpa suggests a series of measures for conservation of intangible cultural sites and values, that are being addressed by the project “Building Livelihoods along Beyul Trails”. (Taylor, 2013)
- P24: declares its relevance “for application in the study area and also in other complex urban historic sites for purposes of safeguarding cultural heritage assets.” (p.577) The study employed aimed to "verify the interdependency of cultural heritage assets in urban heritage in order to show that these assets cannot be developed distinctly”. (p.578) The information produced on cultural resources will support decision-making purposes and can be integrated into municipal plans. (Othman & Hamzah, 2013)
- P25: the creation of creative tourism initiatives will “safeguard and promote cultural identities” and “generate affection between visitors and communities.” (Cabeça et al., 2019, p.46)
- P26: cultural mapping in the Grecanic Area “represents a possible instrument for local development, contributing to arise awareness of the local cultural heritage, discarded too many times just for an ephemeral seaside tourism.” (p.495) A workshop on CMPP’s approach and Cultural policy (“set of guide lines and directives for the regulation, management and localization of territorial resources”) was led. (p.497) The main aim of the research in the Grecanic Area “is to investigate the opportunity to create an Ecomuseum to enhance the cultural heritage.” (p. 499) (Assumma & Ventura, 2014)
- P27: the report had in view “making policy suggestions related to equitable geographic spread (of public funding for the arts) in terms of provinces, rural and urban areas, and metropolitan areas”.(p. 111) (Linde et al., 2020)

12 publications include the aim 4 (sustainable development):

- P4: the paper elaborates on how the cultural dimension and different notions of values can be relevant for sustainable development. The “aim is to understand how processes of sustainable place-shaping are influenced by human values, rooted in culture.” (Horlings, 2015)
- P6: reflects that the development and planning process “requires a more comprehensive and systematic analysis of cultural resources and activities and of the people and places” (P.90) that will form the sustainable communities. The authors, by reflecting on the concept of cultural planning, disclose the evolution of urban planning strategies, identifying that, from 2001 onwards, the paradigm is sustainable communities. (Evans & Foord, 2008)

- P14: The project “Cultural Districts – Drivers for Local Economic Development” had, among others, the goal to plan the sustainability of cultural interventions.
- P15: in the third case-study (Pennine Lancashire Living Places Priority Place Partnership), a commissioned study, the goal was to develop a “method for understanding the relative importance and contribution of different cultural assets to the range of stakeholder priorities – economic development, community cohesion, sense of place, health communities and children and young people – associated with Housing Market Growth and Renewal”. (Lee & Gilmore, 2012, p.17)
- P16: attempts to stimulate the production of sustainable development policies.
- P17: “ExpATHENS” pilot application is presented “as an example of a sustainable and resilient cultural tourism route, steering economic revitalization of a specific area in the historical center of Athens.” (Panagiotopoulou et al., 2020, p.5)
- P18: sustainable development comprehends not only tangible culture, but also intangible cultural assets. All the communities analyzed attempted to capture and express the value of their intangible cultural narratives tied to characteristics of places.
- P21: “This research is expected to (...) to provide sustainable benefits for the weavers, so that they can provide solutions to the problem of extinction threats to this Batak cultural inheritance.” (Nugroho et al., 2021) The sustainability of the practice is at stake due to the lack of awareness of the local community for this weaving activity, poor interest of younger generations to learn it, lack of economic and social recognition of the profession and lack of incentive.
- P23: The author considers that the essence of cultural sustainability lies in the intangible knowledge, made visible through cultural mapping exercises, providing "(...) providing real insights into cultural diversity, history, identity, and knowledge. (UNESCO Bangkok)". This type of exercise can, applying to Angkok, promote the "economic benefit and enhancement of a sense of pride in traditional knowledge systems." (Taylor, 2013, p.7)
- P24: cultural mapping data produced can be used “as an indicator in measuring the sustainability of the historic city.” (Othman & Hamzah, 2013, p.585)
- P25: CREATOUR aimed to “guarantee the initiatives’ sustainability” and “evidenced the importance of cultural mapping to a more sustainable offer”. (Cabeça et al., 2019, p.45)
- P26: framed within the Cultural Mapping, Planning and Policy Process (CMPP), authors refer that “Culture is the starting-point for sustainable development as well as the cure for several forms of decay.” (p.497) “The creation of a Grecanic Ecomuseum can surely provide a series of sustainable paths to link the coast and the mountains in accordance with the sustainable rural tourism principles.” (p.499) (Assumma & Ventura, 2014)

8 publications include the aim 5 (network establishment or development):

- P5: the Cardiff Creative Economy team launched the university's city-wide creative economy network connecting the university to the local creative community through events, resources and a website with membership subscription.
- P14: in the context of “Distretti Culturali Evoluti”, cultural and creative clustering in the Veneto Region was encouraged through different strategies.
- P17: a cultural route is suggested to gather and engage local entrepreneurial and commercial activity.
- P19: one of the outcomes identified by the participants of the Culture and Communities Mapping Project was that cultural mapping could be used as a tool for networking (connect geographic communities) “and for finding contacts, offices and rehearsal space.” (Currie & Correa, 2021, p.14)
- P22: departs from the Verstehende network analysis approach to identify social network ties in symbolic and material cultural contexts.
- P24: the Cultural Mapping Approach (CMA) undertaken can “create new opportunities for peer-to-peer business relationships and showcase the local quality of life to potential new residents”. (Othman & Hamzah, 2013, p.585)

- P25: the CREATOUR Project selected and joined creative tourism pilot initiatives to a network hoping to “diversify tourist offerings, attract new tourists, break seasonality in tourism and bring tourists to small towns and rural areas where tourism has not yet been developed”. (Cabeça et al., 2019, p.45)

- P27: identifies the tendency of cultural events and activities to cluster around metropolitan areas and larger cities, and makes policy suggestions, say, for example, the encouragement of applicants for MGE funding to link themselves to a cultural cluster or quarter.

15 publications include the aim 6 (economic development and tourism):

- P5: Cardiff Creative Economy team mapped the creative economy in Cardiff “to start to build a picture of the creative economy” and “to establish a database to inform the establishment of a creative economy network”. (p.4) The objective was to strengthen the city’s creative economy. (Murray, 2017)

- P6: research into cultural planning is motivated by current and expected population growth, leading to the development of new cultural amenities.

- P11: the promotion of heritage sites in Kuala Kangsar is highlighted as a potential benefit for increasing tourism.

- P12: exploratory research on crowdsourcing tools applied to creative tourism is developed. The use of geotechnologies such as crowdsourced web mapping represents an interesting attempt to strengthen destinations’ attractiveness.

- P14: cultural cluster, quarter or district are cultural planning concepts for “detecting and analyzing the spatial organization of cultural production and consumption, as well as for designing policy measures for supporting them, enhancing their spillover effects, and even for creating new organizations and agglomerations.” (p.76) The Italian cultural heritage is considered as an example of “high economic and symbolic relevance and strong relationships to creative production”. (p. 77) In the case-studies strategies such as the encouragement of cultural and creative clustering or the stimulation of local economies “by co-funding and institutionalizing CDs” were outlined. (Ponzini et al., 2014, p.79)

- P15: the projects identified arise in regards to spatial planning and growth policies. The motivations behind them include: “levering capital funding for facilities development in relation to spatial strategies within housing growth and renewal priority areas”. (Lee & Gilmore, 2012, p.9)

- P17: revolves around the impact of ICT in the tourism market and smart tourism. The ExpATHENS case study aims “to create a cultural route that capitalizes on information provision to visitors regarding existing cultural assets of the study area as well as amenities and services that are gathered by effectively engaging the local business community through crowdsourcing.” (p.11) The project seeks to “render cultural assets a vehicle for boosting the local economy”, encouraging the “creation of value chains both horizontally (within the tourism or cultural sector) and vertically (among local providers and stakeholders of various sectors, e.g., accommodations, museums, shopping centers, catering, coffee shops, and bars), offering new potential for deliberate and planned sharing of emerging opportunities in the study area.” (Panagiopoulou et al., 2020, p.20)

- P18: the cultural mapping project described regarding the municipality of Wawa intended to “promote growth in the face of decline in its traditional industries”. (p.37) In the City of Windsor, the objective was to support local economic development through culture. (Jeannotte, 2016)

- P20: the aim of the cultural mapping exercise is to “incorporate local culture and cultural heritage in the regional tourist economy” of four smaller municipalities in the transnational Swedish/Danish Øresund. (Hultman, 2007, p.318)

- P21: Ulos weavers might have an important role in increasing regional tourism and boost the economy. There is “no concept of a tourism village in the area” yet but, if well managed, “the natural and cultural potentials of Toba Lake can be a source of community income in the region.” (Nugroho et al., 2021, p.11)

- P23: Angkor is a touristic place, attracting both Cambodian domestic tourists and the rest of the global community. In Nepal, the Ford Foundation developed “tourism home-stay programmes and cultural tourism activities”, a “multi-purpose mountain centre”, and provided “sub-grants to monasteries”. (Taylor, 2013, p.9)

- P24: The Cultural Mapping Approach “can create new opportunities for peer-to-peer business relationships and showcase the local quality of life to potential new residents.” (Othman & Hamzah, 2013, p.585)

- P25: evidenced the importance of cultural mapping to develop creative tourism initiatives (“create value from the territories and people’s identity resources, generate territorial attractiveness” (p.46)) and contribute to the “overall marketing of destinations.” (p.42) (Cabeça et al., 2019)

- P26: Creative City Planning Framework (CCPF) shows “that Arts, Culture and Heritage are the essential features for the future economy as heritage as well as quality of life.” (p. 498) The proposed rural Ecomuseum “has demonstrative effect on the tourist development of the ethnic cultural landscape.” (Assumma & Ventura, 2014, p.501)

- P27: MGE funded cultural events and activities are “linked to the goal of economic growth and job creation”. The paper concludes that “while funding to culturally vibrant areas in metropolitan areas with high population density makes sense from an economic point of view, cultural funding to more rural, poorer areas is important from an equity and development perspective.” (Linde et al., 2020, p.130)

8 publications include the aim 7 (transmission of local knowledge systems):

- P17: the idealized “Road of Museums” is a cultural route that connects history, narratives or stories to the historical center of Athens.

- P18: amongst the presented study-cases, there were some evidence examples of this aim: in the Town of Georgina, a group of citizens were concerned about the impact of “uncontrolled development on their historic landscapes” (p.37), and therefore decided to produce “an intangible cultural narrative, *The Georgina Book: What Citizens Value the Most*”. (p.38) “The Chippewas of Georgina Island First Nation undertook a separate intangible cultural mapping project that resulted in a community website devoted to digital storytelling” (p.37), and wished to create a “living museum” with community stories, a legacy that would not be forgotten by youth. The city of Windsor “incorporated local stories honouring the past, celebrating the present and envisioning the future” in its website. (Jeannotte, 2016, p.37)

- P19: the Culture and Communities Mapping Project “reveals the benefits of using cultural maps to facilitate interactions with local communities and to serve as catalysts for telling stories and facilitating research about people and places, in constant motion and change.” (Currie & Correa, 2021, p. 16)

- P21: “(...) provides an overview of the social and economic conditions of women weavers in inheriting and maintaining Ulos weaving as a cultural identity of the Batak Toba.” (p.1) Ulos weavers “participate in the preservation of the cultural heritage of Batak ancestors.” (p.1) But the lack of interest of the younger generations might “jeopardize the continuation and the sustainability of Toba traditional weaving.” (Nugroho et al., 2021, p. 10)

- P23: “while many local traditions and historic places are disappearing or crumbling at unprecedented rates, a remarkable opportunity exists at Angkor to involve locals in mapping resources that are meaningful to them.”(p.57) The project “Building Livelihoods along Beyul Trails” included: “developing a documentary film to educate outsiders and improve the self-esteem of local people in relation to their important cultural values and belief systems”, “organizing regular cultural awareness programmes for visitors and local communities” and “conserving the endangered Sherpa language by compiling dictionaries and illustrated publications as learning materials as well as training indigenous instructors to teach scripts and language in schools.” (p.9) The “Tale Diary 2008: Morgan Folk Tale” is a book made by Moken children (Thailand) that tells the legend of the traditional relationship with the sea. The “Surin Islands Project” “Moken primers” (educational material) intended “to enable Moken children and adults to learn through their own language written in Thai script with Thai translation and through their own cultural context.” (Taylor, 2013, p.10)

- P24: “this study has identified a list of four main historical corridors with the stories. Their unique stories greatly contribute to understanding the characteristics of the place.” (Othman & Hamzah, 2013, p.581)

- P25: “pilot initiatives such as this aim to revitalise traditional arts and crafts; promote spaces and places; evoke memories; foster creativity and the arts; develop technologies; and present the natural, historical, cultural heritage

of regions.” (Cabeça et al., 2019, p.45) Visitors could participate in different classes, workshops, co-creation processes and community-art, interact and work with the local community, follow thematic routes and use technologies.

- P26: amongst the examples provided in the paper, it is identified the intention of preserving local knowledge, as well as dissemination initiatives: Queenie McKenzie, leader of the Warmun community, “fought to save tangible and intangible heritage, assuring the correct transmission of cultural practices, values and ancient knowledge through songs, tales and ceremonies.” (p. 497) The women of the community then “wrote a book about her life and Aboriginal heritage: *Written in the Land*.” (p. 497) The Grecanic Ecomuseum would make known “naturalistic and cultural resources for present and future generation”, by reflecting the “innate vocation of the area”. (Assumma & Ventura, 2014, p. 499)

10 publications include the aim 8 (promotion of cultural/ intercultural dialogue):

- P14: two of the goals of “Cultural Districts – Drivers for Local Economic Development” initiative were: to “promote better communication among the actors in the cultural sector” and “support the dialog among the cultural, administrative and productive systems”. (Ponzini et al., 2014, p.79)

- P17: the proposed “Road of Museums” aims to promote the city's culture to all who visit it. Throughout all the project creation process, great importance was given to stakeholders’ opinions and suggestions. Stakeholders were invited to respond to different forms in the project website and post comments in the site’s forum on cultural route-based information, stimulating business networking and dialogue. They also evaluated the ExpATHENS platform and route and provided content with regards to their activities, services and products.

- P18: intangible culture/ community stories were disseminated through a book in the case of Georgina, and also through a website in Georgina and Windsor, hoping that it reached a wider public. The Wawa cultural mapping project invited the public to tell stories via email, website, Facebook page, workshops and in various conversations with the project coordinator.

- P19: the cultural map of Edinburgh promotes conversation, artistic projects and further research.

- P20: “project participants from two municipalities were discussing all the exciting manifestations of culture that they would like to have present in their respective municipalities.” (Hultman, 2007)

- P21: “This assistance can be in the form of the construction of traditional weaving organizations that can accommodate future generations to learn traditional weaving. Lastly, it can be suggested that the government provide workshops and training on weaving marketing online and provide Internet technology facilities to increase the selling value of the traditional weaving.” (Nugroho et al., 2021, p. 12)

- P22: Elicitation is a means of data collection utilized in this approach, that uses “visual materials as prompts for conversation, instead of questions.” Photoelicitations made in group’s physical residences were shown “to research participants in order to facilitate comments on their physical contexts and interactions.” (Basov & Kholodova, 2021, p.2)

- P23: in the case study of beyuls in Nepal, “the need for intercultural dialogue and initiation of a cultural mapping exercise with indigenous participation” is highlighted (p.8). The project “Building Livelihoods along Beyul Trails” carried out activities like “cultural awareness programmes for visitors and local communities”. (p.9) In Thailand, a book wishes to make Moken children stories travel far and the Surin Islands Project “Moken primers” was thought to pass the knowledge on intangible culture to children. (Taylor, 2013)

- P25: Visitors were able to participate in several activities and had opportunities to “make, learn and emerge” (Cabeça et al., 2019, p.45) in a group environment, a new network. The project also facilitated the development of partnerships as well as the exchange of information, knowledge, ideas and action plans between pilots.

- P26: regarding the case study of Aborigine culture in Australia, students are still involved in “aborigine culture through some oral tale told by elders of Texas Downs.” (p.497) In Italy, the M.U.S.I.C. project (Mediterranean Urban Sounds Interactive Culture) desires to promote the growth of Mediterranean community and favor “the dialogue between community, stakeholders, public government and the culture as source of development of the entire Mediterranean”. (Assumma & Ventura, 2014, p.498)

15 publications include the aim 9 (theoretical debate (issue rising)):

- P1: expresses the necessity for more carefully weighed investment and provision of cultural facilities and programmes.
- P2: reviews and stresses the possibilities of cultural mapping and associated concepts and approaches, in the context of cultural planning.
- P3: exposes the usually stereotyped wind music (“cultural domination”) “and the possibilities of escaping it”. (Dubois & Méon, 2013, p.127)
- P4: argues that “there is a need for more empirical ‘value-oriented’ research in the context of community and regional development, offering insight in people’s motivations and driving forces in place-shaping processes, and offering ‘valuable’ information for place-based governance strategies.” (Horlings, 2015, p.269)
- P6: suggests the adoption of techniques and mapping approaches for assessing and planning culture in an everchanging environment, and the inadequacy of traditional “methods of planning arts and culture on an incremental and sectoral basis”. (Evans & Foord, 2008, p.90)
- P7: the article focuses on the distinction between cultural industry intelligence, and humanistic integrated approaches (differing in regards to development models, levels of analysis and views of culture), and proposes a possible integrative framework to combine the positive aspects of each approach. (Freitas, 2016)
- P10: “This article provides an overview of the field, identifies some of the objectives and issues with which researchers are currently engaging, and offers questions and suggestions to guide efforts to build closer connections with the realms of cultural policy and planning.” (Duxbury, 2019, p.18)
- P12: the aim is to fill the gap in the study of crowdsourcing tools’ contribution for enhancing participation in the creative tourism market.
- P13: present an overview on Geographic Information Technologies and discuss potential applications of these in cultural research.
- P14: provides an overview of CDs in Italy by “explaining the contextual characteristics and constraints”.(p.75) It aims to clarify the often-fuzzy directions of CDs concepts and practices in policymaking context (“namely the difference between analytical and policy-oriented approaches”). (Ponzini et al., 2014, p.78)
- P15: reflects upon the opportunities, necessities, and main challenges that cultural mapping projects face.
- P17: in the context of “increasing smart tourism interest and applications that flourish in a smart city”, the paper attempts to show the value of ICT to the cultural tourism sector. (Panagiotopoulou et al., 2020, p.3)
- P18: recognizes the limitations of intangible culture mapping led by the communities, but acknowledges the potential interest in community engagement “for building cultural maps that tell the story of a place.” (Jeannotte, 2016, p.41)
- P19: denies the existence of “a rigid dualism between the intangible and the quantitative” (p.14), as in the project “the digital GIS map very easily represents the tangible, quantitative data”. (p.15) (Currie & Correa, 2021)
- P27: show the potential of GIS to analyse spatial data, using data from the Mzansi Golden Economy (MGE) funding programme as an example.

The reviewed investigations are published in the printed format of conference proceedings or journal articles. Besides that, 12 investigations, or parts of them, are disseminated through the internet or in a website, 5 are debated in a discussion session or public launch, 3 in video/ photo, 2 in newspapers and 1 in report form.

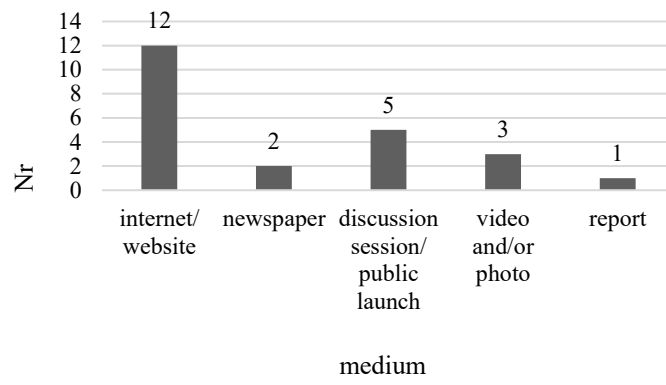


Figure 23. Number of publications according the investigation output/ dissemination medium