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Master Thesis

Can cultural and creative industries drive innovation?

Cultural practice and innovation labs in Barcelona

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Student: Alina Maria Dumitru

Student number: 578892

Email: alinam.dumitru@gmail.com

Supervisor: Dr. Jeroen Euwe (Erasmus University Rotterdam)

Second reader: PhD, MBA Manel Gonzalez (University of Barcelona)

Third reader: Prof. Jeffrey Fear (University of Glasgow)



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CHAPTER 1: INTRODUCTION

The concept of cultural and creative industries has been sharply analysed and discussed over the last two decades.¹ Recent literature discussions and policy research about cultural and creative industries place an emphasis on their capacity to foster economic development through their capacity of driving innovation, with effects over the whole economy as a spillover effect.² Cities across Europe have been using with preponderance over the past decade the discourse of creative cities to stimulate economic development, social inclusion, and well-being within an innovative environment. It is within this context that the local authorities of cities across Europe like Barcelona seem to follow the same trend, focusing on the spillovers over the wider economy generated at the intersection of creative industries and new technologies.³

At the same time, the European Commission plays an active role in acknowledging and supporting cities aligned with its agenda. One can recall designations such as the European Capital of Culture, the European Green Capital Award, or the European Youth Capital. As it is being presented on the official website and pamphlets of the European Commission, The European Capital of Innovation Award (iCapital) is an award aimed at showcasing and supporting innovation in cities since 2014.⁴ The contest was designed within the Horizon 2020 programme, under the regulation of the Research and Innovation Directorate-General, programme that continues to be in place under the

¹ Nicholas Garnham, "From Cultural to Creative Industries," *International Journal of Cultural Policy* 11, no. 1 (2005): 15–29, <https://doi-org.ezproxy.lib.gla.ac.uk/10.1080/10286630500067606>; Mark Banks and Justin O'Connor, "Inside the Whale (and How to Get out of There): Moving on from Two Decades of Creative Industries Research," *European Journal of Cultural Studies* 20, no. 6 (December 1, 2017): 637–54, <https://doi.org/10.1177/1367549417733002>; Stuart Cunningham, "Creative Industries after the First Decade of Debate," *The Information Society* 26, no. 2 (February 18, 2010): 113–23, <https://doi-org.ezproxy.lib.gla.ac.uk/10.1080/01972240903562753>.

² Tom Fleming Creative Consultancy, "Cultural and Creative Spillovers in Europe: Report on a Preliminary Evidence Review" (Arts Council England, October 2015), https://www.artscouncil.org.uk/sites/default/files/Cultural_creative_spillovers_in_Europe_full_report.pdf.

³ Barcelona City Council, "Government Measure for Boosting Creative Industries," 2019, https://ajuntament.barcelona.cat/economiatreball/sites/default/files/documents/WEB-MG-Industries-creatives-EN_def.pdf. Senate Department for Culture and Europe, "Third Creative Industries Report" (Berlin, 2015), <https://www.berlin.de/sen/kultur/en/cultural-policy/creative-economy/>.

⁴ Among the iCapital nominees of the subsequent editions – both forerunners and winners - numbered Glasgow, Bristol, Rotterdam, Amsterdam, Groningen, Antwerp, Leuven, Nantes, Paris, Toulouse, Espoo, Tallinn, Athens, Torino, Aarhus, Hamburg, Umeå, Tel Aviv. European Commission, "European Capital of Innovation. A Place to Bring Ideas to Life: Will Your City Be the next European Capital of Innovation?" (European Commission, July 30, 2018), <https://op.europa.eu/en/publication-detail/-/publication/2a95a163-946f-11e8-8bc1-01aa75ed71a1/language-en/format-PDF/source-search>.

Horizon Europe scheme.⁵ Its mission is to annually support and stimulate the innovation efforts of European cities.⁶

Cities like Barcelona, Nantes, and Amsterdam have been designated iCapitals throughout the years, being recognised for their efforts to innovate. Barcelona city brand successfully conquered the acknowledged perspective of Barcelona as a creative city, where culture and creativity are at the forefront of development and innovation.⁷ Moreover, its officially acknowledged innovative ecosystem cannot be overlooked. The cultural and innovation policies seem to employ common interrelated envisioned strategies creating a favourable innovative mechanism. By unravelling the dominant policy discourse and the city image that was projected before and after this milestone in Barcelona's development, it can be argued that there exists a continuity of how culture and creativity have been related to innovation.

1.1 Innovative aspects of the thesis

The research done in the field of cultural and creative industries on one hand, and on innovation, on the other hand is tremendous. The existing literature has tackled innovation through the prism of concepts such as knowledge flows within clusters and firms and innovation processes in traditional sectors. The literature regarding cultural and creative industries can be traced back to the '90s.⁸ However, addressing their contribution to innovation to a lesser extent is the identified literature gap this work aims to tackle.⁹ At the same time, there exists no dedicated literature on iCapital, although it is a contest running for more than 5 years. Whilst the vision that innovation can be driven by CCI goes a long way back, a clear explanation of how it is supposed to function is lacking. Although choosing a city awarded the European Capital of Innovation title as a criterion

⁵ European Commission, "Horizon 2020," accessed January 28, 2021, <https://ec.europa.eu/programmes/horizon2020/en>.

⁶ European Commission, "The European Capital of Innovation (iCapital) Award," accessed January 28, 2021, https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/prizes/icapital_en.

⁷ Montserrat Pareja-Eastaway and Marc Pradel i Miquel, "New Economy, New Governance Approaches? Fostering Creativity and Knowledge in the Barcelona Metropolitan Region," *Creative Industries Journal* 3, no. 1 (January 3, 2014): 29–46, https://doi.org/10.1386/cij.3.1.29_1.

⁸ Stuart Cunningham, *Framing Culture: Criticism and Policy in Australia (Australian Cultural Studies)* (Allen & Unwin, 1992).

⁹ Jason Potts, "Introduction. Creative Industries & Innovation Policy," *Organization & Management* 11, no. 2 (2009): 138–47, <https://doi.org/10.5172/impp.11.2.138>; Luciana Lazzeretti, ed., *Creative Industries and Innovation in Europe. Concepts, Measures and Comparative Case Studies* (Routledge, 2013).

for analysing the role of cultural and creative industries might seem counterintuitive, doing so can explain their contribution to innovation. This aspect reflects the scientific relevance of this thesis.

1.1.1 Development of cultural policies in Barcelona

While the city has a long cultural policy tradition, the strategies came to know a development from the creative city to the city of knowledge and more recently, to the smart city.¹⁰ The 1990s represent a milestone in Barcelona's urban development history. It was the time when the local administration strategy embraced the "creative city" rhetoric to boost the city's economic profile during the transition from an industrial city to a service and knowledge-based one.¹¹ The 22@Barcelona project launched in 2000 by the City Council reflects the urban regeneration strategies aimed at integrating former industrial districts within the post-industrial service-based economy.¹² The development of the policy strategies reflects, concomitantly, one centred around citizen, meaning that the local administration's efforts go towards supporting a participative culture and a focus on citizens participation.¹³

Strategic documents from the 1990s show a predilection to support enhancing the quality of life, while also supporting a cultural infrastructure to create more social opportunities.¹⁴ Strong internationalisation and the quality-of-life improvement, together with the progress of people enabled by cultural infrastructures and social opportunities have been the focus of the document.¹⁵ What can be observed is a development of the policy strategy where elements such as knowledge and culture have gone through an instrumentalist adaptation in different stages of development. What is unique about the case of Barcelona is the emphasis on the human factor throughout the various stages of development that can be observed from the 1990s to the latest strategic

¹⁰ Raphaël Besson, "Les 'Ateneus de Fabricació' Barcelonais et Les 'Laboratorios Ciudadanos' Madrilenos. Une Nouvelle Approche de l'innovation Urbaine?," *Géographie, Économie, Société* 20, no. 1 (n.d.): 113–41, <https://doi.org/10.3166/ges.20.2017.0031>.

¹¹ *Ibidem*.

¹² Fábio Duarte and Joaquín Sabaté, "22@Barcelona: Creative Economy and Industrial Heritage - a Critical Perspective," *Theoretical and Empirical Researches in Urban Management* 8, no. 2 (2013): 5–12, <https://www.jstor.org/stable/24873346>; Elisabet Viladecans-Marsal and Josep-Maria Arauzo-Carod, "Can a Knowledge-Based Cluster Be Created? The Case of the Barcelona 22@ District," *Papers in Regional Science* 91, no. 2 (2011): 377–400, <https://doi.org/10.1111/j.1435-5957.2011.00383.x>.

¹³ "Strategic Planning," The Barcelona Model. Management Booklets. (Aula Barcelona), accessed June 2, 2021, <https://geographyfieldwork.com/BarcelonaStrategicPlanning.pdf>.

¹⁴ *Ibidem*.

¹⁵ *Ibidem*.

documents. Understanding the embedded character of CCI within the development of local policies offers, therefore, the possibility of a more nuanced perspective on how the concept of CCI emerged in a policymaking context and how it was adopted within the local context. This might reveal useful insights that could be applicable, as well, in other contexts.

1.1.2 Justification for the case study

Barcelona is being widely recognised as both, a creative and innovative city. One can wonder if and how the characteristics that make Barcelona a creative and innovative city have been dialectically interrelated. Framing the case study within a broader European framework can shed light on how a European innovative city is envisioned to look like. One can regard the criteria of awarding Barcelona this title as the result of supported and consistent action of decision makers over time. However, the validity of this statement is going to be proved or dismantled by the main findings of this thesis. At the same time, the existing literature is solid enough to provide support in doing so. The literature and the empirical evidence employed in conducting previous research on creative cities on the one hand, and on urban innovation on the other hand, together with the case study focused on Barcelona point to the fact that it can only reveal valuable aspects on what share CCI could have in fostering an innovative environment. Therefore, exploring how CCI contribute to fostering an innovative environment in Barcelona can innovatively contribute to understanding if and how culture is envisioned in a European understanding to drive innovation.

Up until now, literature did not offer a straightforward explanation of how innovation driven by CCI is supposed to work. Framing how culture and arts are seen to drive innovation within an urban context might facilitate the understanding of the mechanism through which CCI are seen to drive innovation. Literature operated so far with concepts such as diversity, externalities, knowledge flows, infrastructure, human capital, competition, and networks.¹⁶ These elements have gone through a moulding process over time in several urban innovation types of rhetoric where certain aspects are central to each of them: attractiveness, in the case of creative city, and

¹⁶ Besson, “Les ‘Ateneus de Fabricació’ Barcelonais.” Richard Florida, Adler Patrick, and Charlotta Mellander, “The City as Innovation Machine,” *Regional Studies* 51, no. 1 (2017): 86–96, <https://doi.org/10.1080/00343404.2016.1255324>. Murciano Martínez and Carlos González Saavedra, “The Cultural and Creative Industries in the Spanish Regions: The Case of Catalonia,” *Revista Latina de Comunicación Social* 73 (2018): 146–67, <https://doi.org/DOI:10.4185/RLCS-2018-1250en>.

technology, in the case of smart cities.¹⁷ For this thesis, the adopted explanation of how innovation in cities happens is based on the idea that local policies and dynamics between actors play an important role in orchestrating the cultural and artistic activity within the innovation mechanism.¹⁸ For doing so, examining the literature written on the concepts of spillovers and CCI is necessary. First, understanding the concept of spillovers sheds light on how innovation mechanism is supposed to work. Then, adding to this understanding how the cultural and creative industries have emerged in the context of policymaking will clarify more in detail their role in the innovation mechanism.

1.1.3 Theoretical framework

1.1.3.1 The emergence of the CCI as a concept in policymaking

The definition of creative and cultural industries (CCI) has been discussed and redefined since the emergence of the concept and it has been the subject of much controversy.¹⁹ Scholarly literature dealt with the influence of CCI on decision-making, on social aspects, and on other sectors.²⁰ Most of the literature on the nexus of CCI and innovation deals with knowledge flows in creative clusters

¹⁷ *Ibidem*.

¹⁸ Besson, “Les ‘Ateneus de Fabricació’ Barcelonais.” Florida, Patrick, and Mellander, “The City as Innovation Machine.” Martínez and Saavedra, “The Cultural and Creative Industries in the Spanish Regions: The Case of Catalonia.”

¹⁹ United Nations Development Programme, “Creative Economy Report 2013: Widening Local Development Pathways” (New York, 2013), <http://www.unesco.org/culture/pdf/creative-economy-report-2013.pdf>.

²⁰ Eleonora Belfiore, “Art as a Means of Alleviating Social Exclusion: Does It Really Work? A Critique of Instrumental Cultural Policies and Social Impact Studies in the UK,” *International Journal of Cultural Policy* 8, no. 1 (September 17, 2002): 91–106, <https://doi.org/10.1080/102866302900324658>; Eleonora Belfiore, “On Bullshit in Cultural Policy Practice and Research: Notes from the British Case,” *International Journal of Cultural Policy* 15, no. 3 (September 14, 2009): 343–59, <https://doi.org/10.1080/10286630902806080>; Marisol García, Santiago Eizaguirre, and Marc Pradel, “Social Innovation and Creativity in Cities: A Socially Inclusive Governance Approach in Two Peripheral Spaces of Barcelona,” *City, Culture and Society* 6 (2015): 93–100.; Munir Abbasi, Panayiota Vassilopoulou, and Lampros Stergioulas, “Technology Roadmap for the Creative Industries,” *Creative Industries Journal* 10, no. 1 (January 17, 2017): 40–58, <https://doi.org/10.1080/17510694.2016.1247627>; Per Mangset, “The End of Cultural Policy?,” *International Journal of Cultural Policy* 26, no. 3 (July 30, 2018): 398–411, <https://doi.org/10.1080/10286632.2018.1500560>; Hasan Bakhshi, “The Creative Industries and Industrial Policy: The UK Case,” ed. Stuart Cunningham and Terry Flew, *A Research Agenda for Creative Industries*, September 27, 2019, 27–38, <https://doi-org.ezproxy.lib.gla.ac.uk/10.4337/9781788118583.00009..>

and cities in the pursuit of discovering and understanding if and how clustering facilitates the presumed spillover effects in cities.²¹

While some authors regard the UK of the late 1990s as the period and space of its emergence within the policy discourse, a more thorough quest to clarify the concept does not overlook its spring within the critical theory of Frankfurt School in the mid of the previous century.²² It has been highlighted that the growing attention the concept of “culture industry” received at the beginning of the second half of the XXth century was paralleled by the foundation of institutionalized narrative of cultural policy.²³ In “Culture Industry Reconsidered”, published in 1975, Adorno recalls himself using for the first time the concept of culture industry in the seminal book “Dialectic of Enlightenment”.²⁴ This concept emerged as a way to clarify the distinction between what Adorno and Horkheimer have called “mass culture”, the “contemporary form of popular art” and the culture consumed by the masses.²⁵ One implication of culture industry is the eroded distinction between low and high art and its loss of autonomy with its entrance into the culture industry.²⁶ This is their explanation of how art and culture became a commodity regulated by the market.²⁷ However, looking at the CCI through the prism of critical theory reveals one characteristic of the creative and cultural industries one should consider, namely the influence of technological innovation and the modes of production of a capitalist society on the artistic practice.²⁸

The 1990s saw an increase of the conviction that creativity is an advantage in the economic policies.²⁹ The origin of this concept in policy discourse was traced back to 1994 when the

²¹ Luciana Lazzeretti, Rafael Boix Domenech, and Francesco Capone, “Do Creative Industries Cluster? Mapping Creative Local Production Systems in Italy and Spain,” *Industry and Innovation* 15, no. 5 (February 2008): 549–67, <https://doi.org/10.1080/13662710802374161>; Pareja-Eastaway and Miquel, “New Economy, New Governance Approaches? Fostering Creativity and Knowledge in the Barcelona Metropolitan Region.”

²² Cunningham, “Creative Industries after the First Decade of Debate.”

²³ Justin O’Connor, *The Cultural and Creative Industries: A Review of the Literature*, 2nd ed. (Arts Council England, 2007), https://www.researchgate.net/publication/251804201_The_Cultural_and_Creative_Industries_A_Review_of_the_Literature.

²⁴ Theodor Adorno and Anson Rabinbach, “Culture Industry Reconsidered,” *New German Critique*, 1975, 12–19, <https://doi.org/10.2307/487650>.

²⁵ *Ibidem*.

²⁶ *Ibidem*.

²⁷ *Ibidem*.

²⁸ Ieva Moore, “Cultural and Creative Industries Concept – a Historical Perspective,” *Procedia - Social and Behavioral Sciences*, 2014, 738–46, <https://doi.org/10.1016/j.sbspro.2013.12.918>.

²⁹ *Ibidem*.

government of Australia introduced it in order to make use of the opportunities advanced by ICT (Information and Communication Technologies) development.³⁰ The notion was introduced in the policy discourse in the UK in 1997 when the ICT and the creative economy were evolving in parallel.³¹ Multiple classifications and definitions of cultural and creative industries, such as the DCMS Model, the Symbolic Texts Model, or the WIPO (World Intellectual Property Organization) Copyright Model have been formulated since then.³² Throsby highlighted in 2008 that a shift of this concept towards a more encompassing understanding was taking place at that time.³³ His model stands at the foundation of the cultural and creative industries classification in Europe and the UK.³⁴ He built the concentric circles model on the premise that cultural goods and services produce two types of value: the economic and the cultural one.³⁵ The stronger the cultural value, the more likely to be classified within the core of artistic production.³⁶ The less the mark of the cultural value a cultural good or service has relatively to its commercial content, the further from the core is going to be found.³⁷ The relevancy of his work is based on reconsidering the justifications when undertaking policy research and when arguing for the support of a certain policy strategy.³⁸ This scholarly research trend has been paralleled by scholars and researchers discussing and asking for a reconsideration of how the value and impact of culture are being framed, especially in the context of discussing the social impact of cultural policies.³⁹

Academic literature and research seem to link the concept with cultural and creative industries rather sporadically and indirectly, either when talking about creative entrepreneurship, either using distinct terms such as knowledge transfer, open innovation, or crossovers, all of them being

³⁰ *Ibidem.*

³¹ *Ibidem.*

³² United Nations Development Programme, “Creative Economy Report 2013: Widening Local Development Pathways.”

³³ David Throsby, “The Concentric Circles Model of the Cultural Industries,” *Cultural Trends* 17, no. 3 (September 26, 2008): 147–64, <https://doi.org/10.1080/09548960802361951>.

³⁴ *Ibidem.*

³⁵ *Ibidem.*

³⁶ *Ibidem.*

³⁷ *Ibidem.*

³⁸ Lyudmila Petrova, “David Throsby: The Economics of Cultural Policy,” *Journal of Cultural Economics Volume*, no. 35 (2011): 237–40, <https://doi.org/10.1007/s10824-011-9138-2>.

³⁹ Belfiore, “Art as a Means of Alleviating Social Exclusion: Does It Really Work? A Critique of Instrumental Cultural Policies and Social Impact Studies in the UK.” Roberta Comunian, “The Weakest Link: Creative Industries, Flagship Cultural Projects and Regeneration,” *City, Culture and Society* 5, no. 2 (2014): 65–74, <https://doi.org/10.1016/j.ccs.2014.05.004>.

facilitators of innovation.⁴⁰ In fact, it was argued that CCI, thanks to the network nodes and agglomerations they create, turn cities into powerful “innovative machines” with high capacity to generate competitiveness and development.⁴¹ The issue of externalities stemming from CCI over the wider economy was framed, as well, within a discussion about commons, open innovation, and co-creation.⁴² Understanding the embedded character of CCI within a market logic offers, therefore, the possibility of a more nuanced perspective on how the concept of CCI emerged in a policymaking context and how it has been adopted differently by local administration of cities such as Barcelona.

1.1.3.2 Spillovers

The concept of spillovers in the traditional economic literature can be traced back to Marshall, British economist, and to his theory about external economy that he coined in 1890.⁴³ The main idea of Marshallian spillovers is that the way knowledge moves between firms is determined by the density concentration of firms of the same industry.⁴⁴ It creates an environment where there is a flow of ideas through people circulating from firm to firm in geographical proximity.⁴⁵ In his *Principles of Economics* (1890) Marshall develops two concepts: internal economies and external economies.⁴⁶ For this thesis, the concept of external economies is of main importance. The concept was explained as sources external to firms that could be useful for the production processes.⁴⁷ The aspects of his theory that are relevant for this thesis are that the external economies contribute to

⁴⁰ Pareja-Eastaway and Miquel, “New Economy, New Governance Approaches? Fostering Creativity and Knowledge in the Barcelona Metropolitan Region.” Gerald Carlino, “Knowledge Spillovers: Cities’ Role in the New Economy,” *Business Review (Federal Reserve Bank of Philadelphia)*, no. Q4 (2001): 17–26, <https://EconPapers.repec.org/RePEc:fip:fedpbr:y:2001:i:q4:p:17-26>.

⁴¹ Martínez and Saavedra, “The Cultural and Creative Industries in the Spanish Regions: The Case of Catalonia.”

⁴² João Romão, “Are Creative Cities Good Places for Creative People? Notes on the Social Conditions for Cultural Production in Contemporary Economy,” *Quality Innovation Prosperity* 21, no. 1 (2017): 49–60.

⁴³ Katia Caldari and Fabio Masini, “Pigouvian versus Marshallian Tax: Market Failure, Public Intervention and the Problem of Externalities,” *The European Journal of the History of Economic Thought* 18, no. 5 (December 2, 2011): 715–32, <https://doi.org/10.1080/09672567.2011.629300>.

⁴⁴ Pareja-Eastaway and Miquel, “New Economy, New Governance Approaches? Fostering Creativity and Knowledge in the Barcelona Metropolitan Region.”

⁴⁵ *Ibidem*; Elisa Giuliani, “Towards an Understanding of Knowledge Spillovers in Industrial Clusters,” *Applied Economics Letters*, February 20, 2007, 87–90, <https://doi.org/10.1080/13504850500425907>.

⁴⁶ Sinclair Davidson and Heath Spong, “Positive Externalities and R&D: Two Conflicting Traditions in Economic Theory,” *Review of Political Economy* 22, no. 3 (July 23, 2010): 355–72, <https://doi.org/10.1080/09538259.2010.491284>.

⁴⁷ *Ibidem*.

economic growth and foster the flow of ideas between the firms of an industry.⁴⁸ At the same time, these have a positive effect on production processes and does not ask for government's correction.⁴⁹ Framing the Marshallian externalities within the discussion about innovation, it has been argued that these bear more relevance on the aspect of innovation and less on the one of production, contributing to the process of clustering of firms.⁵⁰

The discussion continues with Pigou and his reinterpretation with the externalities concept.⁵¹ Pigou's interpretation of externalities has been developed in his *Wealth and Welfare* (1912) and *The Economics of Welfare* (1920). His understanding of externalities was explained as non-contractual effects a decision has over other actors.⁵² Unlike the Marshallian understanding of externalities, Pigou sees them as market failure that requires government regulation through taxes and subsidies to correct the market.⁵³ The market failure occurs when beneficial transactions between multiple parties fail to be monetised.⁵⁴ Then, Coase's contribution to the literature referred to the role of the government in correcting the market failure caused by externalities with significant impact over the market.⁵⁵ Coase's theoretical grasp of externalities has been explained as an effect occurring when an actor is being affected by the flow of resources.⁵⁶ In the Coase Theorem, government intervention is, however, unnecessary in correcting the market since the process of doing so might involve more costs, being less beneficial than the outcomes of government intervention.⁵⁷

Theories about agglomerations explain the reasons why clustering occurs, having as a rationale the interlinkages between the firms facilitated by the flow of knowledge.⁵⁸ The Marshall-Arrow-

⁴⁸ *Ibidem*.

⁴⁹ *Ibidem*.

⁵⁰ Morgan Kelly and Anya Hageman, "Marshallian Externalities in Innovation," *Journal of Economic Growth* 4, no. 1 (March 1999): 39–54, <https://doi.org/10.1023/A:1009874508579>.

⁵¹ Herbert Hovenkamp, "The Coase Theorem and Arthur Cecil Pigou," *Arizona Law Review* 51 (2008): 634–49.

⁵² Caldari and Masini, "Pigouvian versus Marshallian Tax."

⁵³ *Ibidem*.

⁵⁴ Richard O. Zerby Jr and Howard E. McCurdy, "The Failure of Market Failure," *Journal of Policy Analysis and Management* 18, no. 4 (1999): 558–78, [https://doi.org/10.1002/\(SICI\)1520-6688\(199923\)18:4<558::AID-PAM2>3.0.CO;2-U](https://doi.org/10.1002/(SICI)1520-6688(199923)18:4<558::AID-PAM2>3.0.CO;2-U).

⁵⁵ Nahid Aslanbeigui and Steven G. Medema, "Beyond the Dark Clouds: Pigou and Coase on Social Cost," *History of Political Economy* 30, no. 4 (1998): 601–25, <https://doi.org/10.1215/00182702-30-4-601>.

⁵⁶ Hovenkamp, "The Coase Theorem and Arthur Cecil Pigou."

⁵⁷ Aslanbeigui and Medema, "Beyond the Dark Clouds: Pigou and Coase on Social Cost."

⁵⁸ David Newlands, "Competition and Cooperation in Industrial Clusters: The Implications for Public Policy," *European Planning Studies* 11, no. 5 (2003): 521–32, <https://doi.org/10.1080/09654310303649>.

Romer externality model suggests that spillovers between firms are impacted by geographical concentrations of firms within an industry.⁵⁹ In fact, it was argued that the geographical proximity facilitates clustering of CCI.⁶⁰ Jacobs, in 1969, theorised the role of diversity in innovation.⁶¹ Whereas Marshallian externalities focus on the localised concentration of firms within an industry as a determinant of innovation, Jacobs (1969) argues that the localised variety of industries and the diverse background of citizens are determinant factors of the innovative character of the urban environment.⁶² Cities – with Jacobs’ theory – have been proven to “spur innovation and entrepreneurship”.⁶³ In her argument, the complementarity of industries rather than their similarity is effective in knowledge spilling over through the circulation of agents between firms, thus leading to innovation.⁶⁴ Theoretical literature on the topic of agglomeration explains the reasons why clustering occurs, having as a rationale the interlinkages between the firms facilitated by the flow of knowledge.⁶⁵ Aspects such as location and industry as influencing factors in innovation patterns and the knowledge transfer between companies in proximities have been emphasized as complementing innovation efforts.⁶⁶

Based on this theoretical foundation, Porter, contemporary economist dealing with economic development, competition, and business strategy to name a few areas of focus, is being brought up with reference to the cluster theory.⁶⁷ The discussion Porter proposes revolves around the concept of clusters defined as “critical masses—in one place—of unusual competitive success in particular fields.”⁶⁸ It is within this conceptual framework of spillovers that the potential of CCI to drive

⁵⁹ Maryann P. Feldman and David B. Audretsch, “Innovation in Cities: Science-Based Diversity, Specialization and Localized Competition,” *European Economic Review* 43, no. 2 (1999): 409–29, [https://doi.org/10.1016/S0014-2921\(98\)00047-6](https://doi.org/10.1016/S0014-2921(98)00047-6).

⁶⁰ Sang Hoo Bae, “Economic Modeling of Innovation in the Creative Industries and Its Implications,” *Technological Forecasting and Social Change* 96 (2015): 101–10, <https://doi.org/10.1016/j.techfore.2015.02.010>.

⁶¹ Gerben van der Panne, “Agglomeration Externalities: Marshall versus Jacobs,” *Journal of Evolutionary Economics*, no. 14 (2004): 596–604, <https://doi.org/10.1007/s00191-004-0232-x>.

⁶² Carlino, “Knowledge Spillovers: Cities’ Role in the New Economy.”

⁶³ Besson, “Les ‘Ateneus de Fabricació’ Barcelonais.”

⁶⁴ van der Panne, “Agglomeration Externalities: Marshall versus Jacobs.”

⁶⁵ Newlands, “Competition and Cooperation in Industrial Clusters: The Implications for Public Policy.”

⁶⁶ Tommi Inkinen, “Reflections on the Innovative City: Examining Three Innovative Locations in a Knowledge Bases Framework,” *Journal of Open Innovation: Technology, Market, and Complexity* 1, no. 8 (2015), <https://doi.org/10.1186/s40852-015-0009-5>; Aimilia Protogerou, “Innovation in the European Creative Industries: A Firm-Level Empirical Approach,” *Industry and Innovation* 24, no. 6 (2017): 587–612, <https://doi.org/10.1080/13662716.2016.1263551>.

⁶⁷ Michael E. Porter, “Clusters and the New Economics of Competition,” *Harvard Business Review*, n.d., <https://hbr.org/1998/11/clusters-and-the-new-economics-of-competition>.

⁶⁸ *Ibidem*.

innovation has been theorised. He defines clusters as “geographic concentrations of interconnected companies and institutions in a particular field”.⁶⁹ And the keyword here is interconnectedness. A cluster includes those firms of multiple linked industries.⁷⁰ Therefore, not only that within a cluster the capacity to innovate is being stimulated, but the resilience and flexibility of those firms are being increased.⁷¹

Theories about entrepreneurship have been often engaged in discussions about flows of creativity and innovation in cities. For Florida, entrepreneurship in an urban context is another instrumentalist end of human creativity spurred by dynamic flows between groups of people.⁷² Concomitantly, it was demonstrated that spillovers from CCI stem from a complex network where social ties, “creative inputs”, and human capital are indispensable.⁷³ In this network, the “middleground” represents the space where groups of people interact and mingle with other actors, generating a “structured and non-structured” learning and innovation process.⁷⁴ Florida adds to Jacobs’ theory that innovation processes – driven by innovation, entrepreneurship, and creativity – are important pillars for innovation.⁷⁵ Innovation stemming from CCI was explained based on quantitative research methods used to measure the relatedness between sectors.⁷⁶ Lazzaretti concluded that CCI need clustering and the presence of other sectors in order to generate innovation. Other scholars argue that culture-related innovation is not about producing innovative spillovers over the wider economy but is about achieving an artistic or social goal within the local context.⁷⁷ In fact, exploring to what extent and in what ways CCI are seen to have an impact over social aspects will contribute to the societal relevance of this work.

⁶⁹ *Ibidem*

⁷⁰ *Ibidem*

⁷¹ *Ibidem*

⁷² Florida, Patrick, and Mellander, “The City as Innovation Machine.”

⁷³ Montserrat Pareja-Eastaway and Marc Pradel i Miquel, “Towards the Creative and Knowledge Economies: Analysing Diverse Pathways in Spanish Cities,” *European Planning Studies* 23, no. 12 (2015): 2404–22, <https://doi.org/10.1080/09654313.2014.988018>; Hoo Bae, “Economic Modeling of Innovation in the Creative Industries and Its Implications.”

⁷⁴ Patrick Cohendet, David Grandadam, and Laurent Simon, “The Anatomy of the Creative City,” *Industry and Innovation* 17 (2010): 91–111, <https://doi.org/10.1080/13662710903573869>.

⁷⁵ Florida, Patrick, and Mellander, “The City as Innovation Machine.”

⁷⁶ Niccolò Innocenti and Luciana Lazzaretti, “Do the Creative Industries Support Growth and Innovation in the Wider Economy? Industry Relatedness and Employment Growth in Italy,” *Industry and Innovation*, 2019, 1152–73, <https://doi.org/10.1080/13662716.2018.1561360>.

⁷⁷ Yosha Wijngaarden, Erik Hitters, and Pawan V. Bhansing, “‘Innovation Is a Dirty Word’: Contesting Innovation in the Creative Industries,” *International Journal of Cultural Policy* 25, no. 3 (2016): 392–405, <https://doi.org/10.1080/10286632.2016.1268134>.

1.2 Research question and sub-questions

The objective of this thesis is, first, to understand what must be considered when clarifying what is the role of CCI in the innovative ecosystem of European cities. Considering the broadness of this aspect in terms of time and space, an exploratory case study will narrow the focus of this thesis on how the idea of CCI as drivers of innovation are translated into local policy, how is this put into practice, and what its outcomes are. Additionally, the analysis can reveal concrete strategies of how European cities translate this into local policies, while explaining the translation from broader European level policy into local policy. The main research question that arises is the following:

How have cultural and creative industries been translated into local policies in Barcelona over the past 15 years?

This question cannot be tackled in depth, however, if further emergent questions are not being addressed. To understand the envisioned mechanism through which culture can innovate, this work will explore what proper conditions have been theorised for innovation to emerge in an urban context. Then, for understanding the policy framework in which iCapital contest takes places, conceptual tools and knowledge needed to explain how the European Commission envisions culture-driven innovation in European cities will be clarified. In order to do that, it is necessary to explore how cultural and innovation policies have been strategically envisioned in Barcelona in the past 15 years and how the cultural projects and initiatives over the past 10 years have been inscribed within a strategic framework. Therefore, as shown in *Table 1*, the main sub-questions that this thesis will cover are:

Sub-question	Source
What have been theorised as proper conditions for innovation to emerge in an urban context?	Literature review

What is the envisioned role of CCI from a European perspective and what is the policy framework in which iCapital contest takes places?	Reports, communication materials, pamphlets and leaflets, policy documents
How have cultural and innovation policies been strategically envisioned in Barcelona in the past 15 years?	Reports, communication materials, pamphlets and leaflets, policy documents
How have the local policies been translated into cultural projects and initiatives during the recent urban developments in Barcelona?	Interviews, communication materials, reports

Table 1. Sub-questions that will be covered in the thesis.

1.3 Methodology and structure of the thesis

The chosen research method to provide answers for the research question and to attain the objectives is the exploratory case study. The literature review explores the development and the current scholarly debates that have marked the literature on the nexus of innovation and CCI. The next step will be undertaking a thematic analysis based on primary sources such as official reports, policy documents, and in-depth interviews as shown in *Table 2*:⁷⁸

Documents selected	Data analysed	Limitations
Policy documents and texts (European and local)	Mission, goals, and measures of the local authorities to foster the CCI and innovation. Goals, measures, and underlying agenda of European and local policies	They offer only one side of the story; the connection to emergent bottom-up initiatives independent on them might not be captured properly.

⁷⁸ Appendix 1.

Reports	Additional background and context that could offer valuable insights.	The sources might be biased in favour of financier.
Interviews	Additional data that could cover the gaps and limitations of the other sources in use.	Limited time to undertake the field work; limited number of interviewees, therefore limited range of perspectives.
Other additional sources (websites, other official documents, media)	Additional background and context that could offer valuable insights (such as online official statements of the European Commission, webpages, reports, press releases, results, or the online identity of implemented projects).	One-sidedness.

Table 2. Overview of documents and data analysed.

1.3.1 Methodology and sources

Multiple primary sources (policy documents, reports, and interviews) are being used to triangulate the data analysis and to provide a robust understanding of the results of this research. Having a corpus of sources comprised of policy documents serves in understanding the official agenda of authorities regarding CCI and innovation. This, at the same time can be a limitation; paid consultancy reports and other official reports will be used to extract empirical data that might prove to be useful for this research. While paid consultancy reports might offer valuable quantitative data, he identified limitations might be their one-sidedness. However, their affiliations might reveal predilections for certain rhetoric. The documents analysis will be accompanied by a process of generating themes using Atlas.ti with the aim of probing if there are underlying continuous patterns over time in the policy discourse, and to what extent cultural and artistic projects and initiatives can be inscribed within the themes. These will act as a guide in identifying the cultural practices and the focus of the research so that a clarifying answer to the research question is being

provided. While the advantage of using urban policy documents as a source is reflected in observing trends in its development, the connection to emergent bottom-up initiatives independent on them might not be captured properly.

Interviews will be carried out in order to understand in practical terms what characterizes the CCI arena of Barcelona and how are they contributing to an innovative environment. Moreover, interviews have the advantage of the possibility of informing the researcher about the most recent developments of the city after awarding the iCapital award, contributing to the understanding of the city's continuous development into a certain direction. The semi-structured interviews will take the form of discussions with multiple stakeholders with various roles in the Barcelona ecosystem. The profiles of the interviewees have in common the active involvement in the cultural and creative scene and an in-depth understanding of the Barcelonan ecosystem. Each of this profile can help us gain different insights and vantage points of looking at how CCI contribute to innovation. At the same time, choosing the interviewees active in the cultural field was based on their involvement in initiatives and projects openly embracing innovation. However, the limited time of field work and restrictions imposed by distance and free movement due to COVID-19 regulations might pose a challenge in reaching out to the profile of interviewee this thesis is aiming at.

The secondary sources consist of literature that focuses on the discussions where the main concepts of this work arise. The aim is to explore, define and delineate the conceptual tools employed in the empirical exploration within the study case. The objective of operating with these sources is to create the conceptual frame that will serve later in understanding Barcelona as a space where creative industries can generate an innovative environment, therefore providing support for the research question and sub-questions. At the same time, it will provide the necessary analytical depth for conducting the research. One aspect to be considered when contemplating the limitations of the collected sources is that several authors have dealt with both academic literature and paid consultancy reports. Therefore, a need to contribute to academic literature and research from an objective and analytical point of view is being outlined.

1.3.2 Structure of the thesis

The structure of the thesis is comprised of four sections. Chapter 1 introduces the topic and its relevance, it clarifies the relevant concepts and their development over time, and it formulates the research question and sub-questions. It seeks to articulate the relevancy of framing the city as a setting that could facilitate answering the main research question. The concept of cluster within CCI will be tackled to discover and understand if and how agglomerations facilitate the presumed spillover effects. Chapter 2 seeks to integrate into this thesis the European understanding of an innovative city and what role CCI play in the innovation mechanism. Furthermore, this chapter will introduce the iCapital award to understand the European perspective of what makes a city innovative. By doing this, how the identified elements outlined by the theory fit the criteria of awarding this title and the profile of winning cities taking part in the contest will be examined. Being a recurrent event since 2014 it can give us a grasp on how the understanding and priorities on a European level have been developing in the recent past. Therefore, the iCapital award acts as a guide for choosing the city for the study case and for making an informed choice of how to approach both the theoretical and empirical dimensions of this thesis. Hopefully, this chapter will equip the researcher with the necessary conceptual tools and understanding of the policy framework on the quest of identifying the aspects of an innovative environment in a creative city such as Barcelona.

Chapter 3 therefore, is an empirical exercise of converging the main theoretical findings in the previous chapters into one concrete study case. Choosing Barcelona as the main city to focus on has two rationales behind. First, being the winner of the iCapital pilot edition (2014) leaves space for observing a pre-existing set of conditions that have shaped the innovation and cultural policies at the city level highly valued by the contest's jury, setting the stage for subsequent editions. Second, this study represents an opportunity for developing an understanding of how CCI can foster an innovative environment from a European standpoint. The first step in writing this chapter will be to offer a historical perspective of the policy rhetoric development in Barcelona over the past 15 years. The reason for doing so is to probe the continuity of a supported action in line with a specific cultural and innovation agenda that the iCapital episode highlights. City Council documents and communications material, together with official reports will be examined to understand how local authorities and official observations are framing the development of

Barcelona as a creative and innovative hub.⁷⁹ The information from theoretical literature and policy documents will be completed with observations from interviews to probe to what extent different stakeholders line up in objectives and actions. Chapter 4 concludes the main takeaways from previous chapters, while inviting to reflection for further research.

⁷⁹ Appendix 2.

CHAPTER 2: CCI IN THE URBAN INNOVATION MECHANISM

This chapter frames CCI within urban innovation theories as a priority in development strategies while introducing European innovation policies – including a presentation of the European Capital of Innovation Awards (iCapital) – over the past 10 years.⁸⁰ For discussing about innovation and creativity in cities, scholarly literature operated with concepts such as agglomerations, spillovers, entrepreneurship, or information and knowledge flows. The assemblage of these theories shows an innovation system that entails the city as a place where groups of people and organisations redirect and capture spillovers stemming from CCI through social and open innovation processes.

2.1 Culture-driven innovation from a European perspective

European policies seem to offer a model of an innovation mechanism driven by CCI in which the elements at play are mutually interconnected. Although the scholarly literature produced insightful results so far, there is a lack of consensus with regards to ways CCI could contribute to innovation. There is no systematic approach that provides a straightforward explanation of how this could happen. However, the reviewed literature, reports, and policy documents show several common conditions that enable CCI to drive innovation: “agglomerations”, groups of people and networks, cross-sectoral collaboration, diversity, and openness to the environment.

Several reports published by agencies such as NESTA (National Endowment for Science, Technology and the Arts) or KEA have discussed about hidden innovation and creative spillovers; however, without a strong theoretical foundation, without a clear explanation of how the innovation is supposed to work, and without a clear and effective assessing and measuring method. In 2010, a NESTA report introduces the concepts of “hidden innovation” driven by CCI thanks to their linkages with other sectors.⁸¹ Innovation in tech industries is presented as the most common one thanks to the creative content of CCI and to the adaptation of recent technologies as means of

⁸⁰ Luciana Lazzeretti, Francesco Capone, and Niccolò Innocenti, “The Rise of Cultural and Creative Industries in Creative Economy Research: A Bibliometric Analysis,” in *Creative Industries and Entrepreneurship. Paradigms in Transition from a Global Perspective*, ed. Marilena Vecco and Luciana Lazzeretti, 2018, 13–34, 10.4337/9781786435927.00007.

⁸¹ Ian Miles and Lawrence Green, “Hidden Innovation in the Creative Industries,” Project Report (NESTA, 2008), <http://e-space.mmu.ac.uk/624532/>.

artistic and cultural expression.⁸² The concept of spillovers stemming from CCI has been referred to within a European context. The “Cultural and Creative Spillovers in Europe: Report on a Preliminary Evidence Review” classifies and defines spillovers in knowledge spillovers, industry spillovers, and network spillovers.⁸³ The report examines how this concept is being referred to within European Commission funding programmes, schemes, and projects. However, the report shows that the concept of “spillover” by itself is not being widely accepted as a concept to refer to culture-led innovation.⁸⁴ At the same time, many studies have been focusing on the social aspect of innovative spillovers stemming from CCI.⁸⁵ De Propriis and Cooke have offered a more nuanced perspective on the types of innovation CCI might generate.⁸⁶ CCI with more affinities towards new technologies – media, software, tech, advertising – are seen to generate spillovers on technological innovation, while CCI closer to the core of artistic and cultural practices – events, museums, archives – could foster tolerance and diversity.⁸⁷

Prior to 2014, the innovation mechanism envisioned by the EU was already relying explicitly on the role of arts and culture. In 2010, KEA provided a brief report on how CCI are being articulated in a European framework in the Green Paper document from 2010 aimed at highlighting the missed opportunities of the document.⁸⁸ This testifies a point in the development trajectory of European cultural policies.⁸⁹ In fact, it has been argued that the Green Paper from 2010 is the first document that the European Commission has published up until that point about CCI.⁹⁰ The document presents CCI and arts as the foundation for a knowledge-based society.⁹¹ CCI are seen to stimulate

⁸² *Ibidem* Miles and Green.; Phil Cooke and Lisa De Propriis, “A Policy Agenda for EU Smart Growth: The Role of Creative and Cultural Industries,” *Policy Studies* 32, no. 4 (2011): 365–75, <https://doi.org/10.1080/01442872.2011.571852>.

⁸³ “We therefore define cultural and creative spillovers as the process by which activity in the arts, culture and creative industries has a subsequent broader impact on places, society or the economy through the overflow of concepts, ideas, skills, knowledge and different types of capital.” Tom Fleming Creative Consultancy, “Cultural and Creative Spillovers in Europe: Report on a Preliminary Evidence Review.”

⁸⁴ Tom Fleming Creative Consultancy.

⁸⁵ Ethan Seltzer and Dillon Mahmoudi, “Citizen Participation, Open Innovation, and Crowdsourcing: Challenges and Opportunities for Planning,” *Journal of Planning Literature* 28, no. 1 (2013): 3–18, <https://doi.org/10.1177/0885412212469112>.

⁸⁶ Cooke and De Propriis, “A Policy Agenda for EU Smart Growth.”

⁸⁷ *Ibidem*.

⁸⁸ KEA, “The EC Green Paper on Cultural and Creative Industry – A Contribution,” 2010, <https://keanet.eu/opinions/ec-green-paper-on-cultural-and-creative-industry/>.

⁸⁹ *Ibidem*.

⁹⁰ *Ibidem*.

⁹¹ European Commission, “Green Paper - Unlocking the Potential of Cultural and Creative Industries,” 2010, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A52010DC0183>.

growth and competitiveness while contributing to a more cohesive and greener future society.⁹² The document identifies several types of creative spillovers in relation to new technologies, cities, the entrepreneurial ecosystem, sustainable development and citizens: CCI contribute to the technological development through the content that they provide for the digital devices; CCI bestow cultural capital to individuals; at the same time, they increase the attractiveness of cities for local residents, international, and investors while having, as well, a strong social impact.⁹³ In fact, scholarly literature argues that the innovation mechanism envisioned in the Green Paper is dependent on soft skills.⁹⁴ At the same time, KEA pointed out that the main focus on education and social aspects at the expense of the “powerful” trade, competition, and tech innovation is a flaw of the Green Paper.⁹⁵ On the other hand, measures to stimulate creativity and imaginative thinking are missing.⁹⁶ However, it does so consider ways in which creativity and imagination could boost competitiveness in the entrepreneurial ecosystem.⁹⁷ Based on this identified flaw, their recommendation is to strengthen the cross-sectoral and multidisciplinary collaboration where arts and culture intersect with the wider economy.⁹⁸ However, an explanation of how the “powerful” trade, competition, and cross-sectoral collaboration will contribute to stimulating creativity and imagination is missing.

Later, Horizon 2020 (2014 - 2020) has been designed as a financial instrument aimed at enabling the implementation of Innovation Union and Europe 2020 to stimulate global competitiveness, drive economic growth, and create jobs.⁹⁹ In 2013 the preparatory work for adopting the program began. In the same year the first open call and work programmes for proposal were adopted.¹⁰⁰ At its core stood smart and sustainable urban transformation enabled by tech innovation.¹⁰¹ At the

⁹² European Commission.

⁹³ *Ibidem*.

⁹⁴ Phil Cooke and Lisa De Propriis, “For a Resilient, Sustainable and Creative European Economy, in What Ways Is the EU Important?,” in *Innovation, Global Change and Territorial Resilience*, ed. Philip Cooke, Mario Davide Parrilli, and José Luis Curbelo, 2012, https://ideas-repec-org.eur.idm.oclc.org/h/elg/eechap/14530_18.html.

⁹⁵ KEA, “The EC Green Paper on Cultural and Creative Industry – A Contribution.”

⁹⁶ *Ibidem*.

⁹⁷ *Ibidem*.

⁹⁸ *Ibidem*.

⁹⁹ European Commission, “What Is Horizon 2020?,” accessed May 30, 2021, <https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>.

¹⁰⁰ *Ibidem*.

¹⁰¹ “Turning Europe into a True Innovation Union,” 2010, https://ec.europa.eu/commission/presscorner/detail/en/MEMO_10_473.

same time, its ambitions were highly related to societal impact and inclusiveness.¹⁰² In fact, scholarly literature has argued that Horizon 2020 made social innovation into a priority.¹⁰³ The issue of societal challenges and the aspect of “science with and for society” are two dedicated sections in the programme text of the Horizon 2020.¹⁰⁴ What social innovation means in this context is the type of innovation where the individual citizen is being actively engaged in sustainable and social cohesion practices, where inclusion, co-production, and bottom-up grassroots initiatives are their enablers.¹⁰⁵ Within this innovation mechanism, arts and culture are envisioned to play a key role thanks to their capacity to enable economic, sustainable, social, and smart transformation. In fact, “The Smart Guide to Creative Spill-Overs” report presents the Horizon 2020 framework as one EU funding scheme that leverages arts and culture as vital elements of innovation, therefore prioritized by policies.¹⁰⁶ The Horizon 2020 Work Programmes, the programmatic documents of Horizon 2020 are envisioning arts to stimulate a feeling of identity, belonging, and understanding, as well as civic engagement.¹⁰⁷ Ultimately, in a European framework, arts can inform policymaking and scientific advancement.¹⁰⁸

The impact of CCI in contributing to a vibrant economy and as a revitalisation factor are being acknowledged by the European Commission.¹⁰⁹ The overlapping of CCI with innovative technologies are often seen to promote the European cultural heritage. The requirements regarding the project proposals under the Horizon 2020 scheme are addressing the need for both quantitative and qualitative indicators for assessing the role of “skills and traditional crafts, training, design, and creativity”.¹¹⁰ Within this rhetoric, a successful CCI sector implies and should be measured by

¹⁰² European Commission, “What Is Horizon 2020?”

¹⁰³ Robert Grimm et al., “Social Innovation, an Answer to Contemporary Societal Challenges? Locating the Concept in Theory and Practice,” *Innovation: The European Journal of Social Science Research* 26, no. 4 (2013): 436–55, <https://doi.org/10.1080/13511610.2013.848163>; European Commission, “History of Horizon 2020,” Horizon 2020, accessed May 30, 2021, <https://ec.europa.eu/programmes/horizon2020/en/history-horizon-2020>.

¹⁰⁴ European Commission, “Horizon 2020 - Work Programme 2018-2020 Europe in a Changing World – Inclusive, Innovative and Reflective Societies,” accessed May 30, 2021, https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-societies_en.pdf.

¹⁰⁵ Grimm et al., “Social Innovation, an Answer to Contemporary Societal Challenges? Locating the Concept in Theory and Practice.”

¹⁰⁶ “The Smart Guide to Creative Spill-Overs to Assist Cities Implementing Creative Spill-Overs” (KEA, 2015), <https://keanet.eu/wp-content/uploads/2019/09/SMARTGUIDE-FINAL-PDF.pdf>.

¹⁰⁷ European Commission, “Horizon 2020 - Work Programme 2018-2020 Europe in a Changing World – Inclusive, Innovative and Reflective Societies.”

¹⁰⁸ *Ibidem*.

¹⁰⁹ *Ibidem*.

¹¹⁰ *Ibidem*.

the innovativeness and resilience of initiatives and businesses within the sector contribute to higher employment rates and sustainable development.¹¹¹ Concomitantly, smart specialisation strategies are also being mentioned. A second requirement is that the projects must assess how CCI represent cultural diversity and how the access of all citizens to it is facilitated. The implemented projects are envisioned to raise awareness of economic and societal issues, among others.¹¹²

2.2 The European Capital of Innovation Awards (iCapital)

The European Capital of Innovation Awards is a Horizon 2020 initiative taking place annually since 2014.¹¹³ Up to this point, literature has tackled the iCapital award within the context of smart cities and urban management.¹¹⁴ The case of Barcelona with its 22@ Barcelona cluster has been discussed in literature as an example where smart city transformation emerged within what has been widely acknowledged as a major Spanish creative cluster. The 22@ Barcelona district has been widely discussed within the literature on CCI, creative cities, innovation, and clusters attracting criticism on its capacity to drive innovation.¹¹⁵ The iCapital award has been discussed, as well, within the topic of global and European tourism, where tourism ought to drive urban and rural development, economic growth, and social inclusiveness.¹¹⁶ However, as literature points out, the explanation of how this mechanism is supposed to work not only that is missing from policy documents, but urban planning is explicitly not comprised within the core focus of European policies.¹¹⁷

¹¹¹ *Ibidem*.

¹¹² *Ibidem*.

¹¹³ European Commission, “European Capitals of Innovation 2016-2019. Places That Bring Ideas to Life” (European Commission, April 27, 2020), <https://op.europa.eu/en/publication-detail/-/publication/3f93ff13-88f5-11ea-812f-01aa75ed71a1/language-en/format-PDF/source-131040115>.

¹¹⁴ Nazly Atta, “Built Environment: Smart Buildings and Smart Cities,” in *Nternet of Things for Facility Management. SpringerBriefs in Applied Sciences and Technology*, 2021, 10.1007/978-3-030-62594-8_2.

¹¹⁵ García, Eizaguirre, and Pradel, “Social Innovation and Creativity in Cities: A Socially Inclusive Governance Approach in Two Peripheral Spaces of Barcelona.” Patrick Cohendet and Laurent Simon, “Rethinking Urban Creativity: Lessons from Barcelona and Montreal,” *City, Culture and Society* 2, no. 3 (September 2011): 151–58, <https://doi.org/10.1016/j.ccs.2011.06.001>.

¹¹⁶ Cecilia Pasquinelli and Nicola Bellini, “Global Context, Policies and Practices in Urban Tourism: An Introduction,” in *Tourism in the City*, 2017, 1–25, 10.1007/978-3-319-26877-4_1.

¹¹⁷ *Ibidem*.

The award aims at rewarding cities that use innovation in bettering the lives of the citizens within a context of sustainability and societal challenges that cities are facing.¹¹⁸ The envisioned innovative solutions fostered in cities are expected to improve the wellbeing of citizens, while tackling issues such as inequality, climate change, mobility, and digitalisation.¹¹⁹ Within this framework, innovation is seen to happen in communities, where citizens get directly involved in finding solutions for local challenges that directly affect them through bottom-up initiatives.¹²⁰ Key-phrases such as “co-creation”, “living labs”, “city lab”, “hubs”, “creative factories” seem to appear recurrently when referring to successful implementation of citizen-driven initiatives.¹²¹ In this mechanism, the exploration of new technologies is one enabler of innovation. It is not in “any” city where social innovation is being fostered, but it is in city-as-labs.¹²²

The city lab concept refers to cities where experimentation is being promoted in the city governance with the aim to find solutions for local challenges through encouraging citizen participation.¹²³ In fact, the iCapital award criteria depict city-as-a-lab characteristics, where citizen-driven social innovation and wellbeing are highly valued aspects.¹²⁴ In the framework of innovation capitals, diversity and tolerance are seen as the fuel of creativity by bringing people and ideas together at grassroots.¹²⁵ Based on the European Commission’s communication materials of the iCapital award, the awarded prizes are meant to incentivise and scale-up these initiatives as means to tackle local challenges.¹²⁶ However, an explanation of how the innovation mechanism and citizen involvement in governance are not straightforwardly explained within the iCapital

¹¹⁸ Economic Development Forum, “Economic Development Forum Policy Update,” November 2018, https://nws.eurocities.eu/MediaShell/media/EDF_Policy_update_May.pdf.

¹¹⁹ European Commission, “European Capitals of Innovation 2016-2019. Places That Bring Ideas to Life.” *passim*.

¹²⁰ “EC Awards Paris as Most Innovative European City in 2017,” *MRS Bulletin*, 2017; European Commission, “The European Capital of Innovation Awards,” accessed May 30, 2021, https://eic.ec.europa.eu/eic-funding-opportunities/eic-prizes/european-capital-innovation-awards_en#ecl-inpage-245; Rao, “EC Awards Paris as Most Innovative European City in 2017.”

¹²¹ European Commission, “European Capitals of Innovation 2016-2018. Places That Bring Ideas to Life” (European Commission, April 27, 2019), <https://op.europa.eu/en/publication-detail/-/publication/37d2bde0-8d87-11e9-9369-01aa75ed71a1/language-en/format-PDF/source-search>.

¹²² *Ibidem*.

¹²³ Christian Scholl and René Kemp, “City Labs as Vehicles for Innovation in Urban Planning Processes,” *Urban Planning* 1, no. 4 (2016): 89–102, <https://doi.org/10.17645/up.v1i4.749>.

¹²⁴ European Commission, “European Capitals of Innovation 2016-2018. Places That Bring Ideas to Life.”

¹²⁵ *Ibidem*.

¹²⁶ Economic Development Forum, “Economic Development Forum Policy Update.” Jaziar Radianti, “Towards European Dimensions of City Resilience,” in *Information Technology in Disaster Risk Reduction. ITDRR 2016. IFIP Advances in Information and Communication Technology*, vol. 501, 2017, 104–18, 10.1007/978-3-319-68486-4_9.

context. At the same time, the role of CCI in fostering innovation is missing completely from the criteria, although it has a well-articulated expected role within a broader framework. Examining the award criteria and initiatives in cities from previously awarded cities might clarify these aspects.

2.2.1 An overview of the award criteria

The pilot edition criteria of iCapital – innovative, inspiring, integrated, interactive – has set the scene for a certain innovative ecosystem and mechanism in European cities that continued to be promoted with slight changes over the following years.¹²⁷ The envisioned innovation mechanism at the city level consists of multistakeholder collaboration between the public and private sector while engaging its citizens.¹²⁸ This mechanism consists of four big system-strands: the economic system, the governance system, the social system, and the urban system. In it, the role of the private sector is seen to be responsible for the functioning of the entrepreneurial ecosystem, where networks, clusters of start-ups and labs play a crucial role. Concomitantly, the public sector is responsible for creating participatory services and the conditions for knowledge flows to happen. However, how this mechanism is supposed to work has never been explained in a straightforward manner. The iCapital pilot call proposes an innovation mechanism where science, business and culture are envisioned as its facilitators.¹²⁹

As in the bigger European framework of the Horizon 2020, culture seems to have a role in establishing a well-functioning of the social system that constitutes the innovation ecosystem of the city.¹³⁰ Taking a closer look at the artistic and cultural practices identified in the iCapital-related brochures, CCI seem to be profiled as a lever that follows the same logic of the envisioned innovation mechanism through creating collaborations between cultural districts and innovation labs, collaborations between artists, social entrepreneurs, and citizen groups to generate innovative

¹²⁷ European Commission, “European Capital of Innovation Award. Pilot Call for Proposals 2013,” 2013, https://ec.europa.eu/info/index_en. This document is no longer available at this address and can be found in “The International Activities of the City of Espoo 2013” (Mayor’s Office, City of Espoo, 2014), https://www.espoo.fi/download/Report_on_the_international_activities_of_the_City_of_Espoo_2013_Report_on_the_international_activities_of_the_City_of_Espoo_2013/74283619-fae4-406f-82a1-028f3c4b9294/48327. p.28

¹²⁸ European Commission, “European Commission Seeks ‘Capital of Innovation,’” September 3, 2013, https://ec.europa.eu/commission/presscorner/detail/en/IP_13_808.

¹²⁹ European Commission, “European Capital of Innovation Award. Pilot Call for Proposals 2013.”

¹³⁰ *Ibidem*.

education and cultural activities, promoting contemporary art projects aimed at raising awareness of topics such as smart cities, the use of 3D technologies by architects and designers to tackle social aspects (e.g. housing problems), creative factories that engage citizens in decision-making, or through engaging art projects and artists in renovation, repurposing and redevelopment initiatives.¹³¹ Cooperation with citizens and civil society, grassroots initiatives and collaboration between artistic communities in the neighbourhoods is one highlight of the iCapital communication materials.¹³²

In this mechanism, the urban system is the space where innovation and governance intersect in making the city attractive for talent and investment, while inspiring citizens to get involved in urban governance matters.¹³³ The criteria of the following editions include social inclusion programmes, networking platforms within the cities between different actors involved in decision-making, digital participation, and sustainable practices.¹³⁴ If the 2014 pilot programme was based on a 4-criteria award system comprising innovation, inspiration, integration and interactivity, the following editions, with slight changes, kept the same experimental approach towards innovation centred around citizens and bottom-up initiatives.

2.2.2 An overview of the previous editions

In 2014 Barcelona was chosen as the iCapital based on the implemented innovations in smart lighting, mobility, residual energy, and on its efforts to boost citizen participation in urban governance.¹³⁵ The 2016 award went to Amsterdam where multistakeholder collaboration between multiple levels of society, bottom-up approaches and bottom-up driven creativity, together with social innovation based on digitalisation and smart growth initiatives were appreciated.¹³⁶ The

¹³¹ European Commission, “European Capitals of Innovation 2016-2018. Places That Bring Ideas to Life.” *passim*.

¹³² *Ibidem*.

¹³³ European Commission, “European Capital of Innovation Award. Pilot Call for Proposals 2013.”

¹³⁴ European Commission, “European Capital of Innovation. A Place to Bring Ideas to Life: Will Your City Be the next European Capital of Innovation?”

¹³⁵ A 2015 edition of the iCapital awards did not take place; Rao, “EC Awards Paris as Most Innovative European City in 2017.”

¹³⁶ *Ibidem*; European Commission, “European Capital of Innovation (iCapital) 2016,” 2016, https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/prizes/icapital/icapital2016_en; Jin Hyo Joseph Yun and Zheng Liu, “Micro- and Macro-Dynamics of Open Innovation with a Quadruple-Helix Model” 11, no. 12 (2019): 3301, <https://doi.org/10.3390/su11123301>.

2017 edition placed Paris as a “Fab City” under the spotlight by being awarded the iCapital title.¹³⁷ The Fab City project is a global initiative that promotes an urban model based on an open, self-sufficient, and resilient way of processing sources, materials, and data inside the city by its citizens.¹³⁸ Culture and science are mentioned with reference to activities aimed at social inclusion and cohesion, environmental sustainability, cross-cultural collaboration, co-creation, technology, and health.¹³⁹ For example, PLACE start-up is a project that encourages the integration of migrants into the Parisian society by stimulating their involvement in creating projects and collaborative practices with outcomes ranging from tech to arts and the environment.¹⁴⁰ Embellir Paris is another highly-valued project that invites cultural and creative workers to initiate repurposing projects of abandoned urban sites.¹⁴¹

In 2018 Athens received the title based on its effort to innovate in order to overcome the economic and social crisis it went through.¹⁴² The POLIS project, aimed at repurposing abandoned buildings through supported efforts of collaborative practices between residents, small enterprises, creative communities, and civil society, was highly valued. The project has multiple areas of action, such as greening urban sites, interventions in the neighbourhoods and streets, and public and digital art open calls.¹⁴³ Artistic practice is seen as contributing to the creation of “an open, innovative, and creative identity”. Serafio – an open call for an artistic installation using tech applications and open data – is an example of an initiative where art is enabled by modern technologies in order to highlight their key role in urban development and governance.¹⁴⁴

¹³⁷ Rao, “EC Awards Paris as Most Innovative European City in 2017.”

¹³⁸ Fab City Global Initiative, “The Fab City Dashboard,” The Fab City Dashboard, accessed June 26, 2021, <http://dashboard.fab.city/>.

¹³⁹ European Commission, “European Capitals of Innovation 2016-2018. Places That Bring Ideas to Life.”

¹⁴⁰ PLACE, “PLACE,” accessed June 26, 2021, <https://place.network/>.

¹⁴¹ Embellir Paris, “Embellir Paris,” Embellir Paris, accessed June 26, 2021, <https://www.embellir.paris/>.

¹⁴² European Commission, “European Capital of Innovation (iCapital) 2018,” 2018, https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/prizes/icapital/icapital2018_en.

¹⁴³ This is Athens - POLIS, “Interventions in the City,” accessed June 2, 2021, <http://www.polis2.thisisathens.org/en/paremvaseis/>.

¹⁴⁴ This is Athens - POLIS, “Serafio - Public Building & Digital Art,” accessed June 2, 2021, <http://www.polis2.thisisathens.org/en/aksones/serafio-dimosio-ktirio-psifiaki-techni/>; Renata Paola Dameri, “Searching for Smart City Definition: A Comprehensive Proposal,” *International Journal of Computers & Technology* 11, no. 5 (2013): 2544–51, <https://doi.org/10.24297/ijct.v11i5.1142>.

In 2019, Nantes was the winner, with Glasgow, Rotterdam, Espoo, Bristol, and Antwerp as runners-up.¹⁴⁵ Nantes is given as an example of leveraging democratic participation and open governance in tackling digitalisation and social innovation. The “creative factories” and labs as spaces of open innovation, together with initiatives of repurposing of spaces for sustainable and inclusive practices were prized.¹⁴⁶ The 2020 edition – with Leuven as a winner – continued to appreciate open governance models, together with the city’s efforts to become a lab where solutions for societal challenges are being tackled.¹⁴⁷ Concomitantly, its creative character was much appreciated. The MindGate project invited artists to get involved in urban regeneration initiatives. The project depicts a mechanism facilitated by a network of creatives, entrepreneurs, orchestrated by local authorities.¹⁴⁸ Within the envisioned innovation ecosystem, the concept of “lab” (encompassing variations of the term, such as innovation lab, city lab, living lab) is presented as an important pillar in bringing innovation processes closer to grassroots through democratisation of artistic and cultural practices.

2.2.2.1 “Smart” urban regeneration strategies underlying the innovation mechanism

The underlying innovation mechanism that the prized artistic and cultural initiatives of the previous editions seem to embrace is based in fact, on urban regeneration strategies.¹⁴⁹ In terms of urban governance, authors have concluded that a mix between top-down intervention and bottom-up initiative is desirable in effectively repurposing urban sites.¹⁵⁰ However, the “Barcelona model” of urban regeneration is one example where culture has been instrumentalised and marketed to build social cohesion leading, in fact, to unequal access to decision making and other exclusive outcomes such as gentrification.¹⁵¹ Moreover, CCI have been presented as capable of bringing regeneration,

¹⁴⁵ European Commission, “European Capital of Innovation (ICapital) 2019,” accessed June 2, 2021, https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/prizes/icapital/icapital-2019_en.

¹⁴⁶ *Ibidem*.

¹⁴⁷ European Commission, “European Capital of Innovation (ICapital) 2020,” accessed June 2, 2021, https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/prizes/icapital/icapital-2020_en.

¹⁴⁸ European Commission, “European Capitals of Innovation 2016-2018. Places That Bring Ideas to Life.”

¹⁴⁹ Christina Lidegaard, Massimiliano Nuccio, and Trine Bille, “Fostering and Planning Urban Regeneration: The Governance of Cultural Districts in Copenhagen” 26, no. 1 (2017): 1–19, <https://doi.org/10.1080/09654313.2017.1364352>.

¹⁵⁰ *Ibidem*.

¹⁵¹ Marisol García and Mónica Degen, “The Transformation of the ‘Barcelona Model’: An Analysis of Culture, Urban Regeneration and Governance,” *International Journal of Urban and Regional Research* 36, no. 5 (2012): 1022–38, <https://doi.org/10.1111/j.1468-2427.2012.01152.x>.

especially in relation to design and digital tech.¹⁵² In this innovative ecosystem that iCapital is envisioning, innovation takes place at grassroots level, where the public sector creates the engaging environment for citizens through socially innovative practices, while the private sector facilitates the knowledge flows between multiple actors through open innovation practices.¹⁵³ In fact, this innovation mechanism resembles the “smart” urban regeneration.¹⁵⁴ As argued by scholars, in the innovation mechanism of these regeneration strategies, local heritage, history, identity, and landscapes must be considered.¹⁵⁵ The outcome of this mechanism is a community that is more connected and resilient.¹⁵⁶ However, with no clear formulated explanation of how the European Commission envisions this innovation mechanism to function, the risk is that the smart urban regeneration of cities will replicate the same inequalities as culture-led regeneration. In fact, this is the exact same criticism scholars formulated about smart cities. Without a reconsideration of urban management strategies, the outcomes of smart city strategies will only replicate the weaknesses of the creative city strategies.¹⁵⁷ However, some scholars have argued that CCI can innovate, and that they do so through open and social innovation.

2.3 CCI as drivers of social and open innovation

Thanks to their linkages to other sectors, CCI could potentially generate open innovation through offering innovative solutions to processes, urban regeneration practices, and valorisation of local identity.¹⁵⁸ The linkages between CCI and tech industries is seen as essential in generating cross-sectoral collaboration that leads to the creation of “digital cultural resources”.¹⁵⁹ In this innovation

¹⁵² Cooke and De Propriis, “A Policy Agenda for EU Smart Growth.”

¹⁵³ European Commission, “Commission Awards Paris as Most Innovative European City in 2017,” European Commission, 2017, https://ec.europa.eu/commission/presscorner/detail/en/IP_17_4363.

¹⁵⁴ Boyd Cohen, Esteve Almirall, and Henry Chesbrough, “The City as a Lab: Open Innovation Meets the Collaborative Economy” 59, no. 1 (2017): 5–13, <https://doi.org/10.1177/0008125616683951>.

¹⁵⁵ *Ibidem*.

¹⁵⁶ Simon Huston, Ali Parsa, and Reyhaneh Rahimzad, “‘Smart’ Sustainable Urban Regeneration: Institutions, Quality and Financial Innovation,” *Cities* 48 (2015): 66–75, <https://doi.org/10.1016/j.cities.2015.05.005>.

¹⁵⁷ Tali Hatuka et al., “The Political Premises of Contemporary Urban Concepts: The Global City, the Sustainable City, the Resilient City, the Creative City, and the Smart City,” *Planning Theory & Practice* 19, no. 2 (2018): 160–79, <https://doi.org/10.1080/14649357.2018.1455216>; Robert G. Hollands, “Will the Real Smart City Please Stand Up?,” *Analysis of Urban Change, Theory, Action* 12, no. 3 (2008): 303–20, <https://doi.org/10.1080/13604810802479126>.

¹⁵⁸ Cooke and De Propriis, “A Policy Agenda for EU Smart Growth.”

¹⁵⁹ European Commission, “Horizon 2020 - Work Programme 2018-2020 Europe in a Changing World – Inclusive, Innovative and Reflective Societies.”

mechanism, these resources are seen to be the ones that could promote creativity, generate innovation, and generate value for institutions, service sector, heritage, and for CCI themselves.¹⁶⁰

At the same time, agencies such as KEA framed the discussion about the linkages of CCI to other sectors within the concept of fragmentation of sectors. This fragmentation is seen to create the right context for interactions between CCI and scientific, technical, or commercial innovation processes, therefore shattering the sectoral silos.¹⁶¹ The EU Work Programme for Horizon 2020 states that there exists a high degree of fragmentation in artistic production, therefore multidisciplinary collaboration is seen as a priority that should be addressed.¹⁶² In fact, one interview respondent argued that there exist higher levels of open innovation where businesses and initiatives active in the field of CCI are involved.¹⁶³

Concomitantly, the cross-sectoral collaboration with CCI could generate new business models that include users in the innovation process.¹⁶⁴ Although the innovation mechanism envisioned within the iCapital framework does not clearly articulate the role of CCI, these seem to be placed in a beneficial position from where they could generate open innovation. Case studies have offered insights into synergies that could be created between different stakeholders.¹⁶⁵ Following a qualitative research based on interviews, a study concluded that especially incremental innovation has been connected to CCI thanks to their openness to the environment and diversity.¹⁶⁶ In fact, the nature of the creative process in CCI requires openness to the environment and, in turn, collaboration between different sectors.¹⁶⁷ What has been observed is that the widely acknowledged idea according to which CCI contribute to innovation through spillovers does not suffice in explaining the innovation mechanism enabled by CCI.¹⁶⁸

¹⁶⁰ European Commission, “Horizon 2020 - Work Programme 2014-2015. Europe in a Changing World: Inclusive, Innovative and Reflective Societies,” April 17, 2015, https://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-societies_en.pdf.

¹⁶¹ “The Smart Guide to Creative Spill-Overs.”

¹⁶² European Commission, “Horizon 2020 - Work Programme 2018-2020 Europe in a Changing World – Inclusive, Innovative and Reflective Societies.”

¹⁶³ Marc Aguilar Santiago, (Cultural Researcher and Project Manager at Bit Lab), interview by Alina Maria Dumitru, April 6, 2021.

¹⁶⁴ “The Smart Guide to Creative Spill-Overs.”

¹⁶⁵ Inkinen, “Reflections on the Innovative City.”

¹⁶⁶ Wijngaarden, Hitters, and V. Bhansing, “Innovation Is a Dirty Word.”

¹⁶⁷ *Ibidem*.

¹⁶⁸ *Ibidem*.

The positive externalities fostered by cultural policies have been usually associated in scholarly literature and policy texts with social cohesion, inclusion, sustainable and economic growth.¹⁶⁹ One role arts have, as presented by the European Commission, is to address inequality, migration, climate change, and social aspects.¹⁷⁰ In fact, when the arts and culture are defined separately from the commercial side of CCI, it is assumed that CCI contribute to social cohesion.¹⁷¹ Within this rhetoric, the valorisation of cultural heritage, together with “memories, identities, and tolerance” have been on the agenda as aspects that have to be addressed by projects implemented within Horizon 2020. Digital cultural resources have been presented by the European Commission as bridging differences instead of “inspiring misplaced nostalgia”.¹⁷² However, no clear explanation on how this is supposed to happen has been given. The three strategies within a European framework that are seen to foster social innovation, where cultural and artistic practices play a main role, are community building at a local level, democratic participation, and bottom-link approach to innovation.¹⁷³ How this mechanism is supposed to work is through bottom-up initiatives where citizens are included in innovative co-production processes.¹⁷⁴ While it has been argued that social innovation has a significant and promising role in the European agenda, more research regarding its interdisciplinarity and the role of multistakeholder collaboration has been deemed as necessary.¹⁷⁵

The academic literature and research address the nexus of CCI and innovation sporadically and indirectly.¹⁷⁶ However, the character of the initiatives that had a say in attracting the iCapital prize, together with the criteria show, in fact, a focus on the role of citizen participation. Citizen

¹⁶⁹ Comunian, “The Weakest Link: Creative Industries, Flagship Cultural Projects and Regeneration.” European Commission, “Horizon 2020 - Work Programme 2018-2020 Europe in a Changing World – Inclusive, Innovative and Reflective Societies.”

¹⁷⁰ European Commission, “Horizon 2020 - Work Programme 2018-2020 Europe in a Changing World – Inclusive, Innovative and Reflective Societies.”

¹⁷¹ Comunian, “The Weakest Link: Creative Industries, Flagship Cultural Projects and Regeneration.”

¹⁷² European Commission, “Horizon 2020 - Work Programme 2014-2015. Europe in a Changing World: Inclusive, Innovative and Reflective Societies.”

¹⁷³ Santiago Eizaguirre and Marc Parés, “Communities Making Social Change from below. Social Innovation and Democratic Leadership in Two Disenfranchised Neighbourhoods in Barcelona,” *Urban Research & Practice*, 2019, 173–91, <https://doi.org/10.1080/17535069.2018.1426782>.

¹⁷⁴ Grimm et al., “Social Innovation, an Answer to Contemporary Societal Challenges? Locating the Concept in Theory and Practice.”

¹⁷⁵ *Ibidem*.

¹⁷⁶ Pareja-Eastaway and Miquel, “New Economy, New Governance Approaches? Fostering Creativity and Knowledge in the Barcelona Metropolitan Region.” Carlino, “Knowledge Spillovers: Cities’ Role in the New Economy.”

participation is a characteristic of what has been theorised as open and social innovation. And this is, in fact, a strong characteristic of how the EU envisions innovation driven by CCI: through citizen engagement that leads to cultural and creative co-creation practices that might lead, in turn, to open innovation.¹⁷⁷ However, the rationales behind criticizing the adoption of CCI as a flagship in driving innovation are multiple.

2.4 A critical reflection on the role of CCI in the innovation mechanism

2.4.1 Organisational inconsistencies

Horizon 2020 is part of an innovation strategy aimed at instrumentalising the development of new technologies in urban regeneration.¹⁷⁸ Addressing aspects related to R&D, digital tech, and human capital have been formulated with a concomitant focus on the role of CCI as one of the main pillars in articulating this regeneration.¹⁷⁹ However, a clear commitment and approach to this aspect and a broader innovation strategy where CCI are an integral part of it have been pointed out as lacking, together with a clear vision regarding which European Commission department should be held accountable.¹⁸⁰ The European Commission argues that CCI represent a key pillar; however, there is a lack of a clear strategic approach on an institutional level. Cooke and De Propris argued that most of the times, CCI are placed in relation to soft and hard skills.¹⁸¹ At the same time, CCI are characterised by activities and outcomes within arts and culture. Therefore, delineating the boundaries of what CCI represent and what value they pose furthers the question whether CCI should be administered by the institutional body responsible for education and culture or the one responsible for innovation. Their recommendation is that CCI should be tackled within a broader innovation agenda.¹⁸² As it could be seen, a clear articulation of how CCI are supposed to drive innovation is missing, although the iCapital framework, policy texts, paid reports, and scholarly literature argue that CCI are responsible for innovation over the wider economy and society.

¹⁷⁷ European Commission, “European Capitals of Innovation 2016-2019. Places That Bring Ideas to Life.”

¹⁷⁸ Cooke and De Propris, “For a Resilient, Sustainable and Creative European Economy,”

¹⁷⁹ *Ibidem.*

¹⁸⁰ *Ibidem.*

¹⁸¹ *Ibidem.*

¹⁸² *Ibidem.*

2.4.2 Terminology inconsistencies

Some scholars argued that literature has focused more on the formal cultural projects while overlooking everyday practices and contributions of artists and entrepreneurs.¹⁸³ This is a result of the limiting definitions of aspects that theory and policy design have operated with. This, in turn, made it difficult to measure the real impact of cultural policies and to advance conclusions related to the role of CCI in innovation. The fact that institutionalised cultural forms are accounted more often when defining concepts such as cultural participation, CCI, and cultural value could lead to a limited access to cultural participation and to a missed opportunity to assess the real impact of underground and grassroots cultural projects.¹⁸⁴ This could lead in turn to disregarding local communities in decision-making processes.¹⁸⁵

2.4.3 Impact and value of culture

De Propriis and Cooke suggested that the European Commission does not display a credible commitment to supporting CCI as a driver of competitiveness and growth since it is missing from its external action strategies.¹⁸⁶ Regarding the rhetoric of growth, the identified problem is, on the one hand, that advocating for this argument is hard in times of austerity.¹⁸⁷ The conducted interviews confirmed that it is indeed difficult to maintain people's mood and positive perspective on cultural practice as a priority in public investment.¹⁸⁸ On the other hand, scholarly literature argued that the economic growth rhetoric of CCI is not inherently right or wrong; however, what is problematic is, in fact, the existence of a single rhetoric that most of the times can be resumed

¹⁸³ Andrew Miles and Lisanne Gibson, "Everyday Participation and Cultural Value," *Cultural Trends* 25, no. 3 (2016): 151–57, <https://doi.org/10.1080/09548963.2016.1204043>; Comunian, "The Weakest Link: Creative Industries, Flagship Cultural Projects and Regeneration."

¹⁸⁴ *Ibidem*.

¹⁸⁵ *Ibidem*.

¹⁸⁶ Cooke and De Propriis, "For a Resilient, Sustainable and Creative European Economy,."

¹⁸⁷ Eleonora Belfiore, "'Impact', 'Value' and 'Bad Economics': Making Sense of the Problem of Value in the Arts and Humanities" 14, no. 1 (2015): 95–110, <https://doi.org/10.1177/1474022214531503>.

¹⁸⁸ Oriol Estela Barnet, (Coordinador General de l'Associació Pla Estratègic Metropolità de Barcelona), interview by Alina Maria Dumitru, April 21, 2021.; Cohendet and Simon, 'Rethinking Urban Creativity: Lessons from Barcelona and Montreal'.

to a “neoliberal monoculture”.¹⁸⁹ In this light, some scholars argued that the discussions on the impact and value of culture should focus, as well, on why it might fail to contribute to these.¹⁹⁰

One aspect that was criticised is how the impact and its value are measured, as expressed by Belfiore. She argues that the concept of “impact” is problematic due to its linkage to only one single proxy for value that contributes to commodification of knowledge creation and of academic expertise.¹⁹¹ In her work she pleads for a shift of focus from the impact alone to a broader concern with public value.¹⁹² Scholarly literature argued that the discourse focused on regeneration is limiting due to an over-simplification of framing the impact and value of cultural policies.¹⁹³ Not much research has been done on how public investment in culture had, in fact, an influence over the development of local industries; moreover, scholars have argued that it is more like an assumption that public investment will encourage regeneration driven by CCI.¹⁹⁴ Concomitantly, measuring the social value of cultural policies has been revealed as problematic especially as they are embracing a rhetoric of impact as a defensive nature of instrumentalism.¹⁹⁵ The impact of cultural policies, often defined in terms of contribution to social aspects, is used to refer to their ultimate expected outcome.¹⁹⁶ Social innovation, as a much-praised outcome of cultural policies, together with social cohesion and social value are concepts that have been questioned.¹⁹⁷ Diversity – a much-praised pillar of culture-led regeneration and development – has been emphasized by some authors as a factor that erodes, in fact, social cohesion due to individual differences that

¹⁸⁹ Vasilis Avdikos, “Processes of Creation and Commodification of Local Collective Symbolic Capital; a Tale of Gentrification from Athens,” *City, Culture and Society* 6, no. 4 (2015): 117–23, <https://doi.org/10.1016/j.ccs.2015.07.003>.

¹⁹⁰ *Ibidem*.

¹⁹¹ Belfiore, “‘Impact’, ‘Value’ and ‘Bad Economics’: Making Sense of the Problem of Value in the Arts and Humanities.”

¹⁹² *Ibidem*.

¹⁹³ Comunian, “The Weakest Link: Creative Industries, Flagship Cultural Projects and Regeneration.”

¹⁹⁴ *Ibidem*.

¹⁹⁵ Comunian; Belfiore, “‘Impact’, ‘Value’ and ‘Bad Economics’: Making Sense of the Problem of Value in the Arts and Humanities.”

¹⁹⁶ Steven Hadley and Clive Gray, “Hyperinstrumentalism and Cultural Policy: Means to an End or an End to Meaning?” *Cultural Trends* 26, no. 2 (2017): 95–106, <https://doi.org/10.1080/09548963.2017.1323836>.

¹⁹⁷ Noorseha Ayob, Simon Teasdale, and Kylie Fagan, “How Social Innovation ‘Came to Be’: Tracing the Evolution of a Contested Concept,” *Journal of Social Policy* 45, no. 4 (2016): 635–53, <https://doi.org/10.1017/S004727941600009X>; David Schiefer and Jolanda van der Noll, “The Essentials of Social Cohesion: A Literature Review,” *Social Indicators Research* 132 (2017): 579–603, <https://doi.org/10.1007/s11205-016-1314-5>.

might break the social unity and common wellbeing.¹⁹⁸ In fact, it was argued that multistakeholder collaboration could potentially stimulate social innovation.¹⁹⁹ However, the loose definition of social innovation, the fact that its processes are not target-oriented, and the specifics of the local context, all play a significant role in shaping the outcome of social innovation practices.²⁰⁰

2.4.4 Commodification of arts and culture

Then, the strategic adoption of CCI in driving innovation commodifies arts and culture.²⁰¹ Cultural policy has been often formulated considering rationales that are not linked to the cultural content the policies might incentivise.²⁰² The market-driven discourse behind the culture-driven urban regeneration was focused mainly on the return of investment while disregarding non-cultural outcomes.²⁰³ This led to outcomes such as inequality and gentrification, often associated with urban regeneration strategies where CCI are instrumentalised.²⁰⁴ Often investment in culture and regeneration aimed at marketing the attractiveness of cities.²⁰⁵ This, together with the business-centric formulation of cultural policies have been proven to overlook the importance of social aspects in the city in facilitating the flow of cultural processes.²⁰⁶ Moreover, the rhetoric of vibrancy and attractiveness lying behind cultural policies promote a highly instrumentalised “politics of experience” that ultimately commodifies culture and creativity.²⁰⁷

Talking about the role of CCI in driving innovation implies the consideration of several specific conditions that enable the innovation mechanism. It is simplistic to say that CCI drive innovation. Innovation in cities is driven by a mechanism in which the strategies of the local government to

¹⁹⁸ François Levrau and Patrick Loobuyck, “Is Multiculturalism Bad for Social Cohesion and Redistribution?,” *The Political Quarterly* 84, no. 1 (2013): 101–9, <https://doi.org/10.1111/j.1467-923X.2013.02433.x>.

¹⁹⁹ Grimm et al., “Social Innovation, an Answer to Contemporary Societal Challenges? Locating the Concept in Theory and Practice.”

²⁰⁰ Grimm et al.

²⁰¹ Sánchez Belando.

²⁰² Hadley and Gray, “Hyperinstrumentalism and Cultural Policy.”

²⁰³ *Ibidem*.

²⁰⁴ *Ibidem*.

²⁰⁵ Comunian, “The Weakest Link: Creative Industries, Flagship Cultural Projects and Regeneration.”

²⁰⁶ In fact, in the conducted interviews, the artistic empowerment of locally rooted communities and underground settings have been presented as more innovative than contexts where top-down interventions took place. Matías I. Zarlenga, Joaquim Rius Ulldemolins, and Arturo Rodríguez Morató, “Cultural Clusters and Social Interaction Dynamics: The Case of Barcelona” 23, no. 3 (2016): 422–40, <https://doi.org/10.1177/0969776413514592>.

²⁰⁷ Mari Paz Balibrea, *The Global Cultural Capital. Addressing the Citizen and Producing the City in Barcelona*, 1st ed., The Contemporary City (Palgrave Macmillan UK, 2017), 10.1057/978-1-137-53596-2.

foster multistakeholder and cross-sector collaboration result in specific beneficial conditions for innovation to happen. In this mechanism, culture-driven innovation is inscribed within two big understandings of innovation: open innovation, and social innovation. The European rhetoric links CCI to social cohesion and to the engagement with innovative technologies within an open innovation system.

CHAPTER 3: CASE STUDY

Having tackled in the previous section how CCI are envisioned to innovate in a broader framework, directing the focus on the Barcelona case is the aim of this chapter. This chapter will tackle the recent urban developments from a historical perspective in order to understand the role of CCI within the innovative ecosystem of Barcelona. It will do so by looking, first, at how CCI are framed within a broader policy strategy in the recent urban historical development. Then, looking at projects and initiatives within the cultural landscape in Barcelona, the focus will be redirected to concrete initiatives in order to examine role of CCI in driving innovation.

3.1 Overview of developments in urban regeneration strategies of Barcelona

3.1.1 Barcelona as a creative city

Towards the end of the XXth century, the transition from an industrial to a service-based society had a great impact on cities of developed countries.²⁰⁸ Local administration of cities like Barcelona, as part of a very industrialised Spanish region, was faced with the need to plan and adopt urban repurposing and regeneration strategies to keep up with the socio-economic changes at that time.²⁰⁹ It is during these changes that development projects such as clusters (22@ Barcelona) or big events (Sònar), and city branding strategies were implemented by local administration to capture and redirect knowledge, creativity, and to ultimately attract funds for economic growth. Opening the city internationally to attract highly skilled workers and investment was part of the development strategy. Since then, it became a priority and continues to be nowadays a focus of local administration strategies. In fact, its openness is being depicted as one of the elements that profoundly pushed the transition from an industrial to a knowledge-based economy, with a significant role played by CCI and innovation in supporting the transition.²¹⁰ Creativity, knowledge, highly skilled workers, an attractive atmosphere of the city, supported by an urban

²⁰⁸ Duarte and Sabaté, “22@Barcelona: Creative Economy and Industrial Heritage - a Critical Perspective.”

²⁰⁹ *Ibidem*.

²¹⁰ Barcelona City Council, “BCN Metròpoli Creativa. Informe i Mapes Urbans de Coneixement i Innovació de Barcelona” (Ajuntament de Barcelona, 2013), https://www.researchgate.net/publication/272392332_Barcelona_Metropoli_Creativa_Informe_i_mapes_urbans_de_coneixement_i_innovacio_de_Barcelona_2011.

infrastructure adapted to realities of a service economy have been identified as the constituting elements of what academic literature theorised to be the “creative city”.²¹¹

After the Olympics (1992), the creativity factor underwent a refinement in policy discourse and strategy, being depicted as an “engine” that fuels knowledge, information, and industry.²¹² It can be observed that the rhetoric of culture has been linked with regeneration, internationalisation, and investment, leading to economic growth.²¹³ *Foment de les Arts i el Disseny* (Promotion of the Arts and Design) was founded as a non-profit in 1903.²¹⁴ In its latest developments as an association, its activity partially focused on lobbying for internationalisation and for promotion of transversality in artistic practices.²¹⁵ The 1980s and 1990s represented a period when the socio-economic and political dynamics left a mark on the cultural policy in Barcelona placing the city on the urban regeneration track.²¹⁶ The global market dynamics subsequently impacted organisations active at grassroots level and social movements.²¹⁷ In fact, due to these dynamics, three phenomena were identified.²¹⁸ First, access to governance on aspects related to culture was restricted.²¹⁹ Then, due to the market logic of a neoliberal agenda, a reductionist approach to cultural policies was adopted.²²⁰ This had in turn to a commodification of culture and arts.²²¹

²¹¹ Joaquim Rius-Ulldemolins, Gil-Manuel Hernández I Martí, and Francisco Torres, “Urban Development and Cultural Policy ‘White Elephants’: Barcelona and Valencia,” *European Planning Studies* 24, no. 1 (2016): 61–75, <https://doi.org/10.1080/09654313.2015.1075965>.

²¹² Pla Estratègic Metropolità de Barcelona, “The Barcelona Metropolitan Strategic Plan – Vision 2020” (Pla Estratègic Metropolità de Barcelona), accessed June 2, 2021, https://pemb.cat/en/publications/barcelona_vision_2020/25/.

²¹³ Barcelona City Council, “Informe Barcelona Metròpoli Creativa 2013. Economia Del Coneixement i Economia Creativa a Barcelona. Document de Síntesi,” 2014, <https://barcelonadadescultura.bcn.cat/informe-barcelona-metropoli-creativa-2013/>.

²¹⁴ Montserrat Pareja-Eastaway et al., “Promoting Creativity and Knowledge in the Barcelona Metropolitan Region. How to Enhance the City’s Competitiveness” (ACRE report 10.2, 2010), <http://acre.socsci.uva.nl/results/documents/wp10.2barcelona-FINAL.pdf>.

²¹⁵ *Ibidem*.

²¹⁶ Maria Victoria Sánchez Belando, “Building Alternatives to the Creative Turn in Barcelona: The Case of the Socio-Cultural Centre Can Batlló,” *City, Culture and Society* 8 (2017): 35–42, <https://doi.org/10.1016/j.ccs.2016.11.001>.

²¹⁷ *Ibidem*.

²¹⁸ *Ibidem*.

²¹⁹ *Ibidem*.

²²⁰ *Ibidem*.

²²¹ *Ibidem*.

3.1.2 Outcomes of culture-led urban regeneration

During the 1990s and 2000s the city's local administration efforts were concentrated on increasing the city's visibility as one of the most creative and innovative cities.²²² In fact, between 2000 and 2011 the number of international students doubled.²²³ In 2008 Catalonia was ranked within the top 10 regions in Europe with the highest number of professionals within CCI, with a total of 3,491,404.²²⁴ In 2010, 10% of workers registered in Barcelona was represented by professionals working in creative fields, with the highest number of occupancies in software development, advertising, architecture, and engineering.²²⁵ In 2012, 77% of Catalan exports were recorded in Barcelona, out of which 58% was represented by knowledge-intensive manufacturing and services.²²⁶

Barcelona Metròpoli Creativa: Informe i mapes urbans de coneixement i innovació de Barcelona 2011 (Barcelona Creative Metropolis: Report and urban maps of knowledge and innovation of Barcelona 2011) and *Informe Barcelona metròpoli creativa 2013. Economia del coneixement i economia creativa a Barcelona* (Barcelona Creative Metropolis Report 2013. Knowledge economy and creative economy in Barcelona) are two documents offering an overview of socio-economic changes Barcelona went through between 2000 and 2010.²²⁷ The *Informe Barcelona metròpoli creativa 2013* document draws upon recent developments in order to focus the effort on articulating the image of Barcelona as a city of culture, knowledge, creativity, and science as favourable factors for increasing the city competitiveness on an international scale.²²⁸ These facets of the city were positioned as constituting elements for attracting talent and investment.²²⁹ Moreover, the document invites supportive action for promoting more intensively the creative industries by adopting a broader definition of innovation that encompasses the knowledge

²²² Charalampos Tsavdaroglou, "Urban Commons and the Right to Ambiance: Gentrification Policies and Urban Social Movements in Barcelona, Athens and Istanbul," in *Ambiances, Tomorrow. Proceedings of 3rd International Congress on Ambiances* (Greece: HAL, 2016), 707–12, <https://hal.archives-ouvertes.fr/hal-01414154/document>.

²²³ Barcelona City Council, "Informe Barcelona Metròpoli Creativa 2013."

²²⁴ *Ibidem*.

²²⁵ *Ibidem*.

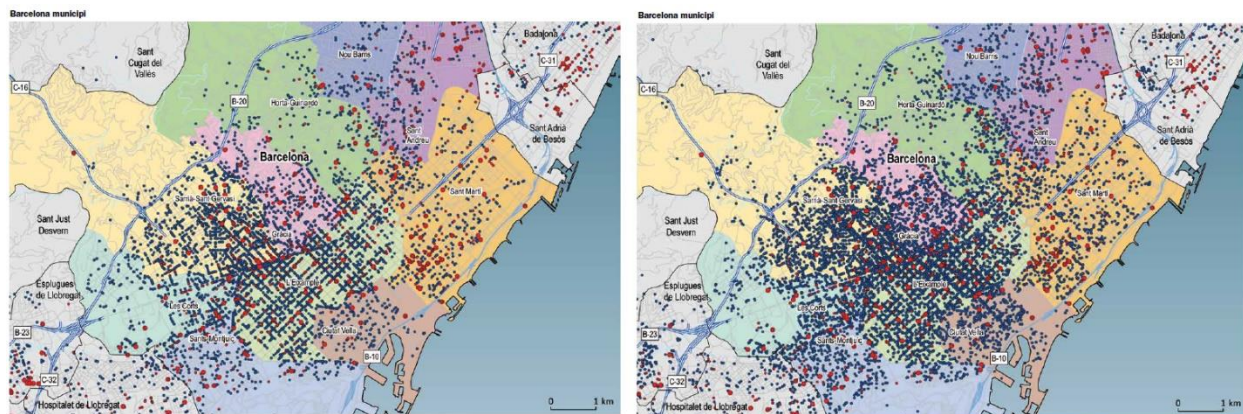
²²⁶ *Ibidem*.

²²⁷ Barcelona City Council, "BCN Metròpoli Creativa"; Barcelona City Council, "Informe Barcelona Metròpoli Creativa 2013."

²²⁸ Barcelona City Council, "Informe Barcelona Metròpoli Creativa 2013."

²²⁹ *Ibidem*.

intensive businesses, technological developments, as well as the symbolic charge generated by cultural and creative industries.²³⁰ *Figure 1* depicts an evolution of technology and knowledge intensive companies between 2001 and 2010. According to *Informe Barcelona metròpoli creativa*, the number of knowledge-intensive enterprises in the municipality of Barcelona grew between 2001 and 2010 from 15,727 to 19,336, with the creation of 9,427 of knowledge-intensive businesses.²³¹



*Figure 1. Map documenting the evolution of CCI companies between 2001 and 2010 in the municipality of Barcelona. BCN Metròpoli Creativa.*²³²

At the same time, in 2010, 6,495 CCI enterprises were mapped, marking an increase between 2001 and 2010 (*Figure 2*). The document *Barcelona Metròpoli Creativa* characterizes technology and knowledge intensive activities as having a high R&D expenditure and highly qualified human capital, considering both manufacturing and services.²³³ Regarding the adopted definition of CCI, the same document includes manufacturing and service activities (e.g., printing, publishing, fashion, design, jewellery, instruments, toys, video games, software, advertising, audio-visual, architecture, heritage, crafts).²³⁴ In the *Government measure for boosting creative industries* document published in 2019, the adopted definition was:

*Audio-visuals, fashion, design, architecture, restoration, IT applications applied to the world of communications, and visual arts as a compendium of the application of new technologies to create new aesthetic scenarios.*²³⁵

²³⁰ *Ibidem.*

²³¹ *Ibidem.*

²³² Barcelona City Council, “BCN Metròpoli Creativa.”

²³³ *Ibidem.*

²³⁴ *Ibidem.*

²³⁵ Barcelona City Council, “Government Measure for Boosting Creative Industries.”

However, this broad definition of CCI makes it difficult to analyse the impact of CCI and to capture unbiased data.²³⁶

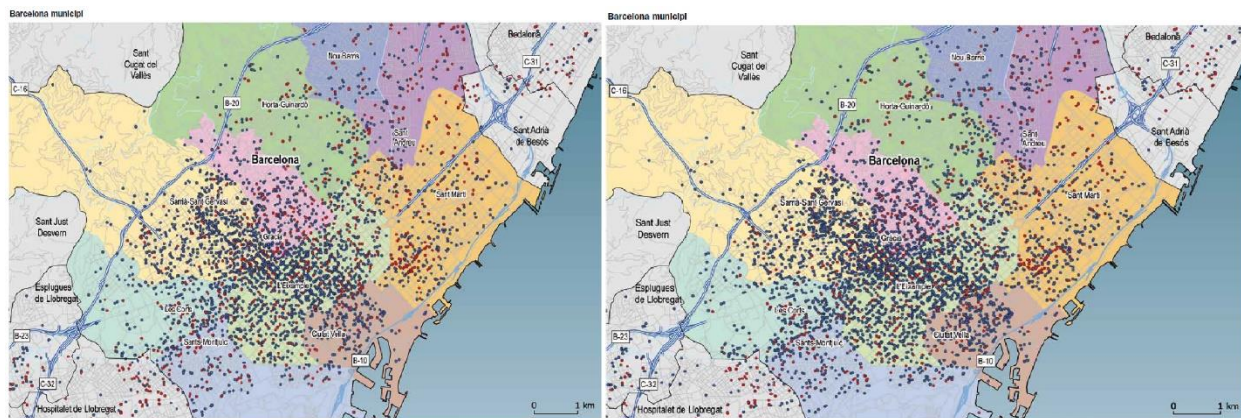


Figure 2. Map documenting the evolution of CCI companies between 2001 and 2010 in the municipality of Barcelona. BCN Metròpoli Creativa.²³⁷

3.1.3 The Barcelona city brand

Between 2000 and 2010 the city's efforts were concentrated in increasing its visibility. A growth in talent, technology, and tolerance were recorded.²³⁸ The 3Ts – talent, technology, and tolerance – that Florida proposed in 2002 as values for the levels of creativity in a city were assessed within the Barcelonan context.²³⁹ For measuring technology, the intensity of high-tech manufacturing and patents per million of inhabitants were used. Talent was measured by the number of professionals employed within the cultural and creative sector, together with the percentage of higher education degree holders out of the total number of employment index. For measuring tolerance, diversity, the percentage of people born abroad, the gay index, and the bohemian index were as variables. The document observations show that the 280-300 range of patents per million of inhabitants, the 12.6% percentage of creative workers from the whole Spain, and the index of 21.7 for diversity

²³⁶ Rusne Kregzdaite et al., "Problems of Evaluation Impact of CCI: Constructing Indexes," *19th International Conference on Cultural Economics*, 2016, https://www.researchgate.net/profile/Zilvinas-Jancoras/publication/308887229_Problems_of_Evaluation_Impact_of_CCI_Constructing_Indexes/links/57f4b54608ae886b897e6a61/Problems-of-Evaluation-Impact-of-CCI-Constructing-Indexes.pdf.

²³⁷ Barcelona City Council, "BCN Metròpoli Creativa."

²³⁸ Tsavdaroglou, "Urban Commons and the Right to Ambiance: Gentrification Policies and Urban Social Movements in Barcelona, Athens and Istanbul."

²³⁹ Richard Florida and Gary Gates, "Technology and Tolerance: Diversity and High-Tech Growth," *The Brookings Review*, 2002, <https://www.researchgate.net/publication/259797930>; Barcelona City Council, "BCN Metròpoli Creativa."

(the highest from Spain) made Barcelona a highly ranked creative city. In fact, the innovation per capita index suggests a number almost double than Madrid for the Barcelona Metropolitan Region in 2013.²⁴⁰

In the *Barcelona vision 2020*, the cultural industries were already seen as one of the most strategic focus at that point, although the strategy was not implemented due to the 2008 financial crisis.²⁴¹ The document portrays the nowadays city as a city of culture.²⁴² In 2010, when the document was published, culture was already seen as an engine for the economy and the city was acknowledged as having a particular appeal for the creative workers.²⁴³ The document is depicting the Barcelona brand as a creative city with the aim to improve the international visibility of city's cultural scene through big events such as Sònar and to promote multistakeholder collaboration with local and international actors for attracting private investment.²⁴⁴ In fact, the document recognises that the transversality of the cultural and creative sector makes it an essential element for cross-sectoral synergies.²⁴⁵ However, an explanation that supported how is this supposed to happen is missing. At the same time, the document adopted a mechanism that had a strong top-down character, where subsidies were granted based on criteria of economic, social, and educational return.²⁴⁶

3.1.4 “Barcelona as a people city”

In 2011 the government strategy was already articulating a smart city rhetoric, where smart infrastructure, services and citizens participation were becoming a priority.²⁴⁷ The image of the city as leading the smart city movement was confirmed by several international rankings placing Barcelona on their top list.²⁴⁸ The objective of the City Council was to create a “self-sufficient”

²⁴⁰ Barcelona City Council, “BCN Metròpoli Creativa.”

²⁴¹ Barnet, (Coordinador General de l'Associació Pla Estratègic Metropolità de Barcelona).

²⁴² Pla Estratègic Metropolità de Barcelona, “The Barcelona Metropolitan Strategic Plan – Vision 2020.”

²⁴³ *Ibidem*.

²⁴⁴ *Ibidem*.

²⁴⁵ *Ibidem*.

²⁴⁶ *Ibidem*.

²⁴⁷ Barcelona City Council, “Informe Barcelona Metròpoli Creativa 2013.”

²⁴⁸ Xosé María Mahou-Lago and Enrique José Varela-Álvarez, ‘Innovation and Opportunities for Citizen Participation in Spanish Smart Cities’, ed. J. Ramon Gil-Garcia, Theresa A. Pardo, and Taewoo Nam, *Smarter as the New Urban Agenda. A Comprehensive View of the 21st Century City*, Public Administration and Information Technology, 11 (2016), <https://doi.org/10.1007/978-3-319-17620-8>.

mechanism where citizens themselves come up with solution to local challenges.²⁴⁹ In the same year, the “Barcelona as a people city” project was launched.²⁵⁰ The initiative could be seen as a continuation of the already established creative knowledge city strategy that can be traced back to the redevelopment strategy implemented after the Olympics.²⁵¹ In 2012, the projects adopted in 2011 that were appreciated by the iCapital jury were criticised for missing the sustainable and bottom-up approach focus, aspects seen as essential in ensuring social inclusion.²⁵²

It is within a certain innovation mechanism that the idea of “Barcelona as a people city” was articulated. The innovation model adopted at the city level was the triple helix that later became the quadruple helix.²⁵³ Leydesdorff theorised three constituting actors enabling this mechanism: academia, industries, and public administration.²⁵⁴ The first agent (universities and research institutions) attracts talent and advances knowledge that could benefit businesses.²⁵⁵ The second agent – the business landscape – represents the agent through which knowledge becomes the input for articulating innovation; this innovation is seen, further, as wealth-creating.²⁵⁶ The third agent – public administration –orchestrates how and where innovation happens.²⁵⁷ Leydesdorff theorises that hybrid structures could be created among these actors for promoting an innovative ecology in the city.²⁵⁸ The quadruple model implies a fourth agent: the citizens. This “polyhedric” innovative ecosystem increased the city’s visibility as a digital, touristic, and as an innovative hub, placing

²⁴⁹ François Mancebo, “Smart City Strategies: Time to Involve People. Comparing Amsterdam, Barcelona and Paris,” *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 13, no. 2 (2019): 133–52, <https://doi.org/10.1080/17549175.2019.1649711>.

²⁵⁰ Ignasi Capdevila and Zarlenga, “Smart City or Smart Citizens? The Barcelona Case,” *Journal of Strategy and Management* 8, no. 3 (2015): 266–82, <https://doi.org/10.1108/JSMA-03-2015-0030>.

²⁵¹ Marco Bontje and Sako Musterd, “Creative Industries, Creative Class and Competitiveness: Expert Opinions Critically Appraised,” *Geoforum* 40 (2009): 843–52, <https://doi.org/10.1016/j.geoforum.2009.07.001>; Mancebo, “Smart City Strategies: Time to Involve People. Comparing Amsterdam, Barcelona and Paris.”

²⁵² Mila Gascó, Benedetta Trivellato, and Dario Cavenago, “How Do Southern European Cities Foster Innovation? Lessons from the Experience of the Smart City Approaches of Barcelona and Milan,” ed. J. Ramon Gil-Garcia, Theresa A. Pardo, and Taewoo Nam, *Smarter as the New Urban Agenda. A Comprehensive View of the 21st Century City*, Public Administration and Information Technology, 11 (2016), <https://doi.org/10.1007/978-3-319-17620-8>.

²⁵³ Montserrat Pareja-Eastaway and Josep Miquel Piqué, “Spain: Creating Ecologies of Innovation in Cities – the Case of 22@Barcelona,” in *Global Clusters of Innovation*, ed. Jerome S. Engel, 141–59, accessed June 2, 2021, https://ideas-repec-org.eur.idm.oclc.org/h/elg/eechap/15588_5.html.

²⁵⁴ Loet Leydesdorff, “The Triple Helix: An Evolutionary Model of Innovations” 29, no. 2 (2000): 243–55, [https://doi.org/10.1016/S0048-7333\(99\)00063-3](https://doi.org/10.1016/S0048-7333(99)00063-3).

²⁵⁵ Pareja-Eastaway and Piqué, “Spain: Creating Ecologies of Innovation in Cities – the Case of 22@Barcelona.”

²⁵⁶ *Ibidem*.

²⁵⁷ *Ibidem*.

²⁵⁸ *Ibidem*.

Barcelona on the fifth most attractive city internationally for starting a business in rankings.²⁵⁹ It was argued that the trajectory of Barcelona towards becoming a smart city is coupled to a notion of citizens as decision-makers through several strategies, such as supporting living labs and creating open data platforms.²⁶⁰ However, scholarly literature argued that a participatory approach to governance was implemented only in 2017 when the city explicitly adopted a smart city strategy with the creation of platforms such as Decidim, an open-source platform that promotes citizen participation.²⁶¹ Until then, concrete ways to include citizens in decision-making were not formulated in its strategic agenda.²⁶² Scholarly literature observed that this resulted in greater “creative capacities” of people enabled by diversity, where the city brand reinforced local identities.²⁶³ In other words, the innovation mechanism seems to replicate the underlying mechanism of culture-led urban regeneration where agglomerations facilitate spillovers.

In 2014, after two decades since adopting a culture-led urban regeneration, Barcelona was acknowledged as the fourth most creative city in the world, depicted as climbing higher in city rankings with reference to business, cultural and creative sector.²⁶⁴ However, the concept of creative city and its policy adaptation attracted a trenchant criticism since its emergence. Despite its appealing rhetoric in strategies aimed at overcoming social challenges that the European cities were facing at that time, the “creative city” concept has been dismantled as a mere buzzword that has a negative impact over the society.²⁶⁵ The main criticism that was formulated is that it overshadows systematic flaws such as inequality, unemployment, lack of democratic participation to the detriment of a glamorous façade of neoliberalism.²⁶⁶ In the case of many creative cities such as Barcelona, gentrification and social displacement were revealed as a flip side of urban

²⁵⁹ Capdevila and Zarlenga, “Smart City or Smart Citizens? The Barcelona Case.”

²⁶⁰ Igor Calzada, “(Smart) Citizens from Data Providers to Decision-Makers? The Case Study of Barcelona,” *Sustainability*, 2018, <https://doi.org/10.3390/su10093252>.

²⁶¹ Mancebo, “Smart City Strategies: Time to Involve People. Comparing Amsterdam, Barcelona and Paris.” Decidim, “Decidim,” Free open-source participatory democracy for cities and organizations, accessed June 29, 2021, <https://decidim.org/>.

²⁶² *Ibidem*.

²⁶³ García, Eizaguirre, and Pradel, “Social Innovation and Creativity in Cities: A Socially Inclusive Governance Approach in Two Peripheral Spaces of Barcelona.”

²⁶⁴ Barcelona City Council, “Barcelona, the Fourth Most Creative City in the World,” 2014, https://www.barcelona.cat/infobarcelona/en/my-new-post-392_17895.html.

²⁶⁵ Paul Chatterton, “Will the Real Creative City Please Stand Up?,” *City Analysis of Urban Trends, Culture, Theory, Policy, Action* 4, no. 3 (2000): 390–97, <https://doi.org/10.1080/713657028>.

²⁶⁶ *Ibidem*.

regeneration strategies implemented under the flagship of the “creative city” label.²⁶⁷ What is valuable to mention is that indices of innovation were used to depict Barcelona as a creative city. Examining the development of local translation of cultural and innovation policies might reveal insightful interlinkages between CCI and innovation in Barcelona.

3.2 Main findings

3.2.1 Recurrent themes in the policy agenda

Several overlapping recurrent themes were identified in the policy in Barcelona following the analysis of the documents listed in *Appendix 3*: emergent technologies as tools in cultural production, networking and cross-sectoral collaboration, internationalisation and talent attraction, and citizen participation. The data gathering processes following an analysis of policy documents (*Appendix 3*) and interviews (*Appendix 1*) seem to show that the examined cultural projects (*Appendix 4*) can be inscribed within each theme, as illustrated in *Figure 3*.

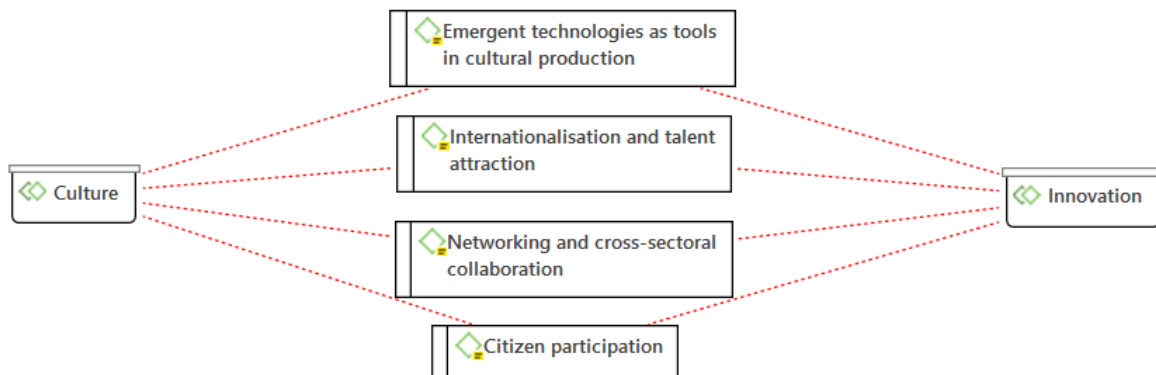


Figure 3. Network generated using *Atlas.ti* showing the linkages of the innovation and cultural agendas with the identified themes. Elaborated by the author.

²⁶⁷ García and Degen, “The Transformation of the ‘Barcelona Model’: An Analysis of Culture, Urban Regeneration and Governance.”

3.2.1.1 Emergent technologies as tools in cultural production

New technologies have been regarded as a mean to increase the participation of citizens at the decision-level since the 1999 strategic plan.²⁶⁸ From a public policy perspective, embracing the digital transformation has been a priority in improving the quality of life of citizens and for fostering innovation.²⁶⁹ Digital literacy as a way to open citizens to the world was in the agenda already in 1999.²⁷⁰ In fact, it has been a strategic pillar since the city transitioned to the so-called city of knowledge, aimed at empowering citizens through digitalisation.²⁷¹ *Barcelona Vision 2020* recognized, in fact, that making use of new technologies is a growing trend among companies active in CCI.²⁷² It was argued that CCI have a high potential to successfully accompany the urban regeneration strategies through platformisation, where the creative content as a product of CCI is to be found at “the top end of the market”.²⁷³ The United Nations Conference on Trade and Development argued that thanks to their high creative content, CCI “gives visual life to the digital world”.²⁷⁴ This idea was taken over by paid consultancy reports.²⁷⁵

As it has been observed, this idea is embedded in the local policy discourse for two decades and it continues to be articulated in the latest City Council documents related to CCI and innovation.²⁷⁶ One project implemented locally is Cibernàrium, a programme aimed at equipping citizens with knowledge and practical skills in cross-cutting technological innovations with application in multiple areas, such as health, mobility, tourism, design, education, and legislation, among others.²⁷⁷ The project aimed at increasing employment rates in STEAM industries.²⁷⁸ At the same

²⁶⁸ Pla Estratègic Metropolità de Barcelona, “3rd Strategic Economic and Social Plan of Barcelona,” 1999, https://pemb.cat/en/publications/3rd_strategic_economic_and_social_plan_of_barcelona/37/.

²⁶⁹ Barcelona Activa - Barcelona City Council, “Cibernàrium, 20 Years of Technological Skills Acquisition and Outreach. Development and Future Challenges,” February 2020.

²⁷⁰ Pla Estratègic Metropolità de Barcelona, “3rd Strategic Economic and Social Plan of Barcelona.”

²⁷¹ Barcelona Activa - Barcelona City Council, “Cibernàrium, 20 Years of Technological Skills Acquisition and Outreach. Development and Future Challenges.”

²⁷² Pla Estratègic Metropolità de Barcelona, “The Barcelona Metropolitan Strategic Plan – Vision 2020.”

²⁷³ Cooke and De Propriis, “A Policy Agenda for EU Smart Growth.”

²⁷⁴ United Nations, “Creative Economy Outlook. Trends in International Trade and Creative Industries 2002-2015,” 2018, 2002–15, https://unctad.org/system/files/official-document/ditcted2018d3_en.pdf.

²⁷⁵ EY, “Cultural Times. The First Global Map of Cultural and Creative Industries,” 2015, https://en.unesco.org/creativity/sites/creativity/files/cultural_times._the_first_global_map_of_cultural_and_creative_industries.pdf.

²⁷⁶ Barcelona City Council, “Government Measure for Boosting Creative Industries.”

²⁷⁷ Barcelona Activa - Barcelona City Council, “Cibernàrium, 20 Years of Technological Skills Acquisition and Outreach. Development and Future Challenges.”

²⁷⁸ Barcelona Activa - Barcelona City Council.

time, it was argued that due to local embeddedness of CCI, the use of new technologies can boost rural development and cultural tourism.²⁷⁹ With regards to tourism, it was argued that the Internet and the new digital technologies are opening up locally rooted cultural aspects to a larger public.²⁸⁰ Several projects aiming at promoting cultural heritage, tourism, and history were identified through data collection (OPEN4CITIZENS, RICHES, I AM).²⁸¹ Noteworthy is that these projects benefitted mainly from European funds. What must be noted is that all the projects display a strong international character through the creation of networks and collaborative initiatives with institutions from abroad, while placing a strong emphasis on engaging citizens in impactful projects through new technologies.

3.2.1.2 *Networking and cross-sectoral collaboration*

Scholarly literature has argued that the smart urban regeneration strategies are built-up on the backbone of a network between multiple institutions embracing the open innovation processes, where citizens are the central actors in innovation.²⁸² This was envisioned as a vital aspect in fostering an innovative and creative environment in the city. The City Council observes that in the recent urban developments, cultural and artistic practices have fostered innovative processes and governance models.²⁸³ At the level of strategic planning, cross-sectoral synergies are seen to have a relevant impact on creativity and externalities that could emerge within CCI.²⁸⁴ The City Council encouraged cultural projects based on collaboration between different stakeholders is a priority.²⁸⁵ It can be observed in the 1999 strategic planning document that these synergies were part of the strategic planning agenda.²⁸⁶ The 2005 document has on its agenda diffusion of knowledge through

²⁷⁹ Cooke and De Propriis, “A Policy Agenda for EU Smart Growth.”

²⁸⁰ Besson, “Les ‘Ateneus de Fabricació’ Barcelonais.”

²⁸¹ “The Project,” OPEN4CITIZENS, accessed June 2, 2021, <http://open4citizens.eu/>; keep.eu, “International Augmented MED,” Project - International Augmented MED, accessed June 2, 2021, <https://keep.eu/projects/16302/International-Augmented-MED-EN/>.

²⁸² Martijn de Waal and Marloes Dignum, “The Citizen in the Smart City. How the Smart City Could Transform Citizenship. It - Information Technology,” *It – Information Technology* 59, no. 6 (2017): 263–73, <https://doi.org/10.1515/itit-2017-0012>.

²⁸³ Barcelona City Council, “Barcelona, Laboratori d’innovació. Relat d’Innovació Municipal. Mandat 2015-2019 Ajuntament de Barcelona” (Barcelona City Council, 2019), <https://ajuntament.barcelona.cat/digital/ca/blog/barcelona-laboratori-dinnovacio>.

²⁸⁴ Pla Estratègic Metropolità de Barcelona, “The Barcelona Metropolitan Strategic Plan – Vision 2020.”

²⁸⁵ Barcelona City Council, “Barcelona, Laboratori d’innovació.”

²⁸⁶ Pla Estratègic Metropolità de Barcelona, “3rd Strategic Economic and Social Plan of Barcelona.”

clustering and competitiveness.²⁸⁷ In 2013 strengthening networks, cross-sectoral collaboration, and multistakeholder collaboration was recognised as a priority.²⁸⁸ In fact, these have been observed as contributing to the city's dynamic, creative, and innovative character.²⁸⁹ Based on the discussion with the General Coordinator of the Barcelona Metropolitan Strategic Plan (Pla Estratègic Metropolità de Barcelona - PEMB), CCI are seen to create positive externalities, especially through multistakeholder partnership and collaboration.

*To me, there is one sector that provides positive externalities, is culture, is creativity. And this sector because they "pollute" all the other sectors.*²⁹⁰

Cultura Viva is one example of an initiative active in the field of culture and innovation displaying a strong emphasis on collaborative practices based on urban processes related to democracy, diversity, citizen innovation, community management and cultural economies.²⁹¹ The connection with local actors is, in fact, another way in which competitiveness and the entrepreneurial landscape have been fostered in the city.²⁹² Projects such as SMATH, ACTION, and BCNLab were implemented in the fields of culture, education, and society through Bit Lab innovation lab with the support of local administration. Although these projects are envisioned to have an impact locally, the international ties within an internationally connected collaborative network are noteworthy.²⁹³ At the same time, projects that were supported by the City Council and other local non-state actors (such as the i2CAT foundation) have done so with the support of European funds. Bit Lab is being acknowledged as a space for co-creation of projects displaying a strong social return with the potential to encourage citizen participation.²⁹⁴ The implemented projects often involved partnership between several institutional bodies locally and internationally (*Appendix 4*).

²⁸⁷ Barcelona City Council, "Barcelona Ciutat Del Coneixement: Economia Del Coneixement, Tecnologies de La Informació i La Comunicació i Noves Estratègies Urbanes," 2005, <http://www.bcn.cat/publicacions/pdf/bcncone.pdf>.

²⁸⁸ Barcelona City Council, "Informe Barcelona Metròpoli Creativa 2013."

²⁸⁹ Barcelona City Council, "Barcelona, the Fourth Most Creative City in the World." Barcelona City Council, "Barcelona, Laboratori d'innovació."

²⁹⁰ Barnet, (Coordinador General de l'Associació Pla Estratègic Metropolità de Barcelona).

²⁹¹ Barcelona City Council, "Barcelona, Laboratori d'innovació."

²⁹² Barcelona City Council, "Barcelona, the Fourth Most Creative City in the World."

²⁹³ "SMATH - Smart Atmospheres of Social and Financial Innovation for Innovative Clustering of Creative Industries in MED Area," accessed June 2, 2021, <https://smath.interreg-med.eu/>; ACTION, "The ACTION (Participatory Science Toolkit against Pollution) Project," ACTION, accessed June 2, 2021, <https://actionproject.eu/about/>.

²⁹⁴ BitLab, "BCNLab," BitLab, accessed March 2, 2021, <http://www.bitlab.cat/en/projectes/bcnlab/>. Refer to Appendix 4 for a projects overview.

3.2.1.3 Internationalisation and talent attraction

It has been argued in the scholarly literature that innovation is strongly influenced by the way the local environment is globally connected to international opportunities.²⁹⁵ One positive externality driven by culture identified in the scholarly literature is related to the increased levels of attractiveness associated with a city.²⁹⁶ This generates, in turn, a competitive advantage granted by a favourable location that businesses could benefit of.²⁹⁷ The governing strategy of Barcelona has internationalisation and talent attraction as embedded goals for several decades already. Increasing the international competitiveness of the city can be identified as a priority since the second strategic plan was published.²⁹⁸ The document aimed at pinning down Barcelona on the global market map, looking for ways to stimulate its international development.²⁹⁹ The role of culture and creativity was instrumentalised with the aim to stimulate the creation of an attractive image that could act as a magnet for a highly skilled class.³⁰⁰ In the *Economia del coneixement i economia creativa a Barcelona* and in *Informe Barcelona Metròpoli Creativa 2013* this aspect is formulated as a priority.³⁰¹

Big events such as Sónar and Primavera Sound have been strategically used to market the city as highly attractive internationally in order to attract investment and businesses.³⁰² Sónar brings under the flagship of the same event “music, creativity, and technology.”³⁰³ The festival was the outcome of the urban regeneration efforts trying to fill in a vacuum left after the Olympics in ’92.³⁰⁴ Over time, the event became part of a broader network of European festivals opening up the local scene

²⁹⁵ Alba Colombo and Greg Richards, “Eventful Cities as Global Innovation Catalysts: The Sonar Festival Network,” *Event Management* 21, no. 5 (2017): 621–34, <https://doi.org/10.3727/152599517X15053272359077>.

²⁹⁶ Comunian, “The Weakest Link: Creative Industries, Flagship Cultural Projects and Regeneration.”

²⁹⁷ *Ibidem*.

²⁹⁸ Pla Estratègic Metropolità de Barcelona, “Strategic Plans,” accessed June 2, 2021, https://pemb.cat/en/30-years-pemb/strategic_plans/5/.

²⁹⁹ *Ibidem*.

³⁰⁰ Barcelona City Council, “BCN Metròpoli Creativa.”

³⁰¹ Barcelona City Council, “Informe Barcelona Metròpoli Creativa 2013.”

³⁰² Barcelona Activa - Barcelona City Council, “Strategic Sectors in Barcelona,” 2018, <https://ajuntament.barcelona.cat/economiatreball/sites/default/files/documents/WEB-Sectors-Estrategics-2018-EN.PDF>.

³⁰³ “Sónar Festival,” accessed June 3, 2021, <https://sonar.es/>.

³⁰⁴ Greg Richards and Alba Colombo, “Creating Network Value: The Barcelona Sónar Festival as a Global Events Hub,” in *The Value of Events*, ed. John Armbricht et al., 1st ed. (London: Routledge, 2017), 73–86, https://www.academia.edu/32909455/Creating_network_value_The_Barcelona_S%C3%B3nar_Festival_as_a_global_events_hub.

to a global one.³⁰⁵ Moreover, some scholars argued that cities bearing the mark of international events such as Sónar become catalysts for innovation globally thanks to flows of preferences, skills, and knowledge.³⁰⁶ The Universal Forums of Cultures was another urban regeneration project that the local administration implemented. It required planning and continuous investment throughout the five years between 1999 since its implementation and 2004 when it took place. Regardless the necessary investments to better the infrastructure and to alleviate the environmental effects of a former industrial area, its social, environmental, and financial outcomes were less impactful and less well-received than expected.³⁰⁷ The nature of the event and the investment of 220.8 million euros, together with the government's political affinity at that time caused clashes with the creative communities and social movements in the city.³⁰⁸ Subsequently, the facilities were repurposed for hosting the Primavera Sound, the Blue Museum of Natural Sciences, amusement parks, and other leisure areas.³⁰⁹ Sónar's example shows how internationalisation initiatives, big events, and projects are being promoted since over two decades.³¹⁰ While the international character is indubitably present in projects such as Sónar or the Universal Forum of Cultures, the strong international character has been observed in the case of more recent neighbourhood-rooted projects as benefitting from European funds. However, the literature and policy texts document most of the times the success of big events where the top-down intervention is high intensity. The gathered data about artistic and cultural projects implemented in Barcelona in the last decade reflect the importance of international ties, regardless of the presence of public support (e.g., Dorkbot, SMATH, Action project). Yet, the data shows that it is only lately that the involvement of local administrative bodies has been displaying a more intensive activity regarding neighbourhood-rooted projects.

³⁰⁵ "Sónar Festival." Antonia Folguera and Alina Maria Dumitru, (Curator and Communicator at Sónar+D), May 3, 2021.; Richards and Colombo, "Creating Network Value: The Barcelona Sónar Festival as a Global Events Hub."

³⁰⁶ Richards and Colombo, "Creating Network Value: The Barcelona Sónar Festival as a Global Events Hub."

³⁰⁷ Rius-Ulldemolins, Martí, and Torres, "Urban Development and Cultural Policy 'White Elephants': Barcelona and Valencia."

³⁰⁸ *Ibidem.*

³⁰⁹ *Ibidem.*

³¹⁰ Jasper Chalcraft et al., "Music Festivals as Cosmopolitan Spaces," in *European Art Festivals: Strengthening Cultural Diversity* (European Commission, European Union, 2011), Giorgi, Liana and Sassatelli, Monica and Santoro, Marco and Delanty, Gerard and Chalcraft, Jasper and Solaroli, Marco, *European Art Festivals: Strengthening Cultural Diversity* (March 29, 2011). Research - Socio-Economic Sciences and Humanities, European Commission, European Union, 2011, Available at SSRN: <https://ssrn.com/abstract=1805104>.

3.2.1.4 Citizen participation

Since the 1999 strategic planning, the idea of a participative city is being strongly lobbied for.³¹¹ Social cohesion and citizen participation were expressed as priorities in the 3rd strategic planning document.³¹² In this strategic vision, new technologies were already seen as a vehicle that facilitates citizen participation.³¹³ Citizen participation was already recognised at that time as one of the most “significant values of the city” and as its competitive advantage.³¹⁴ In fact, the citizen support and culture were recognized as pillars in maintaining the social cohesion in the city starting with the end of the 1990s.³¹⁵ Together with culture, it continues to be a key-element in maintaining the cohesiveness of the city, as it was pointed out during the interview with the General Coordinator of PEMB:

*We started to make the new strategic plan and next week we will enter in the policy participatory process, and one of the areas that we have for discussion is the combination of culture, research and innovation, science, and technology, and this is for us one of the key pillars for developing a more cohesive city, a more prosperous city and a more resilient city.*³¹⁶

Regarding the newest smart city transformation agenda, citizens represent the key element in implementing the smart city program.³¹⁷ In fact, social innovation projects implemented by local innovation labs seem to bring the city closer to the idea of a smart creative city where citizens are its focus.³¹⁸ Bit Lab is one of the few innovation labs documented by scholars that has implemented projects with a high cultural profile.³¹⁹ *Barcelona, laboratori d'innovació: Relat d'Innovació Municipal Mandat 2015-2019* (Barcelona, innovation laboratory: Municipal Innovation Report Mandate 2015-2019) report recognizes the importance of diversity and inclusion in innovation.³²⁰ The document seems to favour bottom-up initiatives thanks to their high capacity to drive social

³¹¹ Pla Estratègic Metropolità de Barcelona, “3rd Strategic Economic and Social Plan of Barcelona.”

³¹² *Ibidem.*

³¹³ *Ibidem.*

³¹⁴ *Ibidem.*

³¹⁵ García, Eizaguirre, and Pradel, “Social Innovation and Creativity in Cities: A Socially Inclusive Governance Approach in Two Peripheral Spaces of Barcelona.”

³¹⁶ Barnet, (Coordinador General de l'Associació Pla Estratègic Metropolità de Barcelona).

³¹⁷ Calzada, ‘(Smart) Citizens from Data Providers to Decision-Makers? The Case Study of Barcelona’.

³¹⁸ Teemu Santonen, “Comparing Living Lab(s) and Its’ Competing Terms Popularity,” ed. Iain Bitran et al., *The Proceedings of ISPIM Innovation Conference, Innovation, the Name of the Game*, 20.6 2018, <https://www.theseus.fi/bitstream/handle/10024/152443/Santonen.pdf?sequence=1&isAllowed=y>.

³¹⁹ *Ibidem.*

³²⁰ Barcelona City Council, “Barcelona, Laboratori d'innovació.”

and open innovation. The document maps innovation laboratories and spaces between 2015 and 2019, as it can be seen in *Figure 4*.³²¹ This shows, in fact, the recognition of their importance in the city strategy.

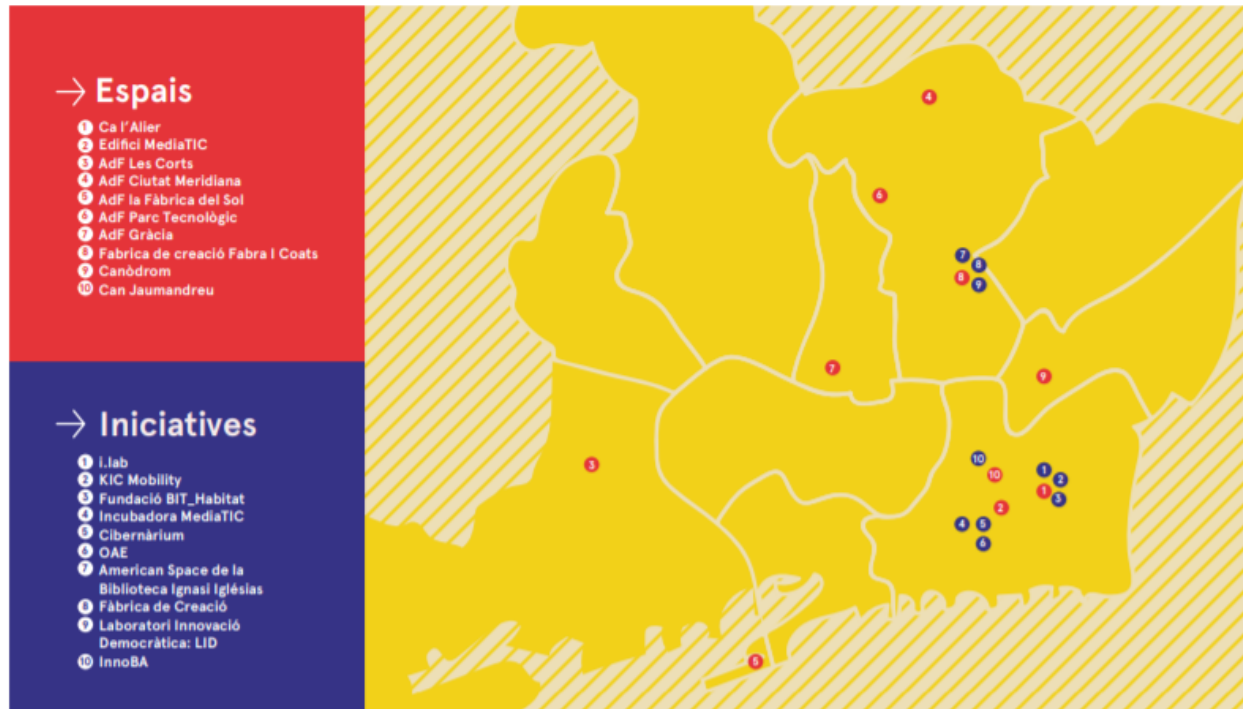


Figure 4. Map documenting innovation spaces and initiatives between 2015 and 2019 in the municipality of Barcelona. Barcelona, laboratori d'innovació: Relat d'Innovació Municipal Mandat 2015-2019.³²²

3.3 Innovation labs in Barcelona

As it has been observed based on the policy rhetoric development, the cultural policy was intertwined with the innovation rhetoric throughout the years, where common themes reoccur. However, even though the role of culture and innovation were identified as leading the transition to new production models, making the metropolitan area of Barcelona the top second Spanish city with the highest creative class, the criteria for receiving the iCapital award does not mention the contribution of CCI in this innovative environment.³²³ At the same time, innovation was used as

³²¹ *Ibidem*.

³²² *Ibidem*.

³²³ Barcelona City Council, "Informe Barcelona Metròpoli Creativa 2013." Barcelona City Council, "BCN Metròpoli Creativa."

an index to measure the creativity levels in the city. Yet, a well-defined support mechanism for cultural sectors seems to be lacking.

Some of the literature has shown that cultural practices, especially the ones employed within the socio-cultural field, can “create narratives and practices of culture and creativity that question the market-centred vision”.³²⁴ The image of Barcelona as an innovative and as a creative city seems to be closely linked to the possibility of creating new social narratives and to attract talent, while being a reference point in Europe for business and innovation.³²⁵ The intensive advocacy for a participative culture where citizens are a pillar in the innovation mechanism made scholars such as Sánchez Belando to describe Barcelona as a place where “counter actions of contesting creative policies through grassroots socially innovative initiatives” have taken place.³²⁶ “Counter actions” that challenge the market-driven cultural discourse at the city level have been observed especially in social innovation practices.³²⁷ Thanks to the capacity of the core CCI to contribute to social cohesion, discussions about the smart urban regeneration expressed the necessity to leverage stronger ties with this category of CCI.³²⁸ One existing type of cluster in the Barcelona ecosystem with the highest potential impact is represented by locally rooted artistic communities such as Raval or Fabra i Coats thanks to the highly innovative subcultures and creative spillovers they generate.³²⁹

In the light of the current policy developments, not only that creativity and culture are considered to bear the potential to contribute to the wellbeing of the citizens, but they have an important role in making cities attractive through innovative open processes and social inclusion practices, especially within the more recently adopted smart city rhetoric.³³⁰ Recent policy developments and recent involvement of local administration in promoting a human-centred policy can be observed in its action to stimulate and to promote neighbourhood-rooted projects and bottom-up

³²⁴ Sánchez Belando, “Building Alternatives to the Creative Turn in Barcelona: The Case of the Socio-Cultural Centre Can Batlló.”

³²⁵ Barcelona City Council, “Barcelona, Laboratori d’innovació.”

³²⁶ Sánchez Belando, “Building Alternatives to the Creative Turn in Barcelona: The Case of the Socio-Cultural Centre Can Batlló.”

³²⁷ *Ibidem*.

³²⁸ Hollands, “Will the Real Smart City Please Stand Up?”

³²⁹ Zarlenga, Ulldemolins, and Morató, “Cultural Clusters and Social Interaction Dynamics: The Case of Barcelona.”

³³⁰ Martínez and Saavedra, “The Cultural and Creative Industries in the Spanish Regions: The Case of Catalonia.”

initiatives.³³¹ Recent policy developments and action are showing, therefore, a support of CCI as a pillar in contributing to innovation, especially with regards to social innovation and open innovation. As it could be seen, there exists a space that embraces this cultural and artistic articulation of innovation: the innovation lab. Based on the overlapping themes in cultural and innovation policies, together with the nature and scope of innovation labs and the projects implemented through these labs, it can be argued that these places can facilitate the emergence of spillovers. Simultaneously, their activity is to be found in-between the top-down intervention and bottom-up approach. However, considering the different attitudes towards the government intervention in regulating spillovers and the challenges related to measuring the impact of cultural and artistic projects makes the discussion more nuanced.

3.3.1 Innovation labs

3.3.1.1 Overview of innovation labs research

The scholarly research on innovation labs has begun quite recently. In 2015 an analysis of multiple definitions of “living” labs led to the theorisation of some common characteristics: 1. They operate in real-life or environments that enact real-life conditions; 2. Their activity engages various stakeholders; 3. Different implementations of projects based on tools, methods, and concepts that most of the time rely on co-creation.³³² Innovation labs have been defined as “think tanks, digital R&D labs, social enterprises, and charitable organisations”.³³³ Through innovation labs, the local authorities seem to leverage the collaboration between multiple actors active in the city landscape, including creative workers, educational institution and research centres, civic organisations, and local communities.³³⁴ In fact, lab clusters are presented as a part of the iCapital innovation

³³¹ Maurizio Carta, “Creative City 3.0: Smart Cities for the Urban Age,” *Smart Planning for Europe’s Gateway Cities. Connecting Peoples, Economies and Places, Proceedings of IX Biennial of European Towns and Town Planners*, 2012, <https://pure.unipa.it/en/publications/creative-city-30-smart-cities-for-the-urban-age-2>.; Hatuka et al., “The Political Premises of Contemporary Urban Concepts: The Global City, the Sustainable City, the Resilient City, the Creative City, and the Smart City.”

³³² *Ibidem*.

³³³ Piret Tõnurist, Rainer Kattel, and Veiko Lember, “Innovation Labs in the Public Sector: What They Are and What They Do?,” *Public Management Review* 19, no. 10 (2017): 1455–79, <https://doi.org/10.1080/14719037.2017.1287939>.

³³⁴ Barcelona City Council, “Barcelona, Laboratori d’innovació.”

ecosystem contributing to creating “opportunities for digital society” in the 2013 call for proposals.³³⁵

Scholars argued that the innovation discourse focuses on the economic value it can bring, while producing a mechanism that benefits social innovation is a challenge.³³⁶ Living labs have been discussed so far in terms of their capacity to generate social and open innovation.³³⁷ In extension, cities as labs have been tackled by scholarly literature, especially in the context of discussions about boosting the circular economy and sustainable development. Barcelona was mapped in 2017 as the most active city in terms of living labs with emphasis on circular economy – with 16 references in the Metropolitan area - followed by Amsterdam, Berlin, and Helsinki, to name a few.³³⁸ Some activities of living labs across Europe are to certain degrees linked to local administration and, most of the times, referenced in close connection to European projects aimed at stimulating circular economy where culture and heritage play a role in tourism sustainability.³³⁹ Culture, together with citizen participation, have been seen as facilitators of innovation in the context of labs.³⁴⁰ However, not much explanation has been given about their innovation mechanism.³⁴¹ It is in general within discussions about emergent business models and alternative funding that the concept of innovation lab is being tackled.³⁴²

3.3.1.2 Barcelonan innovation labs

Innovation labs have become increasingly visible in the last decade in the cultural landscape and innovation ecosystem of the city as spaces where the exploration new technologies and synergies take place.³⁴³ While it was argued that these labs indeed have the means to foster the innovation capacity in the city, CCI – considering the policy discourse where creativity is seen as a fuel for innovation – did not receive sufficient attention in this context. Examining more closely the

³³⁵ European Commission, “European Capital of Innovation Award. Pilot Call for Proposals 2013.”

³³⁶ Pla Estratègic Metropolità de Barcelona, “The Barcelona Metropolitan Strategic Plan – Vision 2020.”

³³⁷ *Ibidem.*

³³⁸ Santonen, “Comparing Living Lab(s) and Its’ Competing Terms Popularity.”

³³⁹ *Ibidem.*

³⁴⁰ *Ibidem.*

³⁴¹ *Ibidem.*

³⁴² *Ibidem.*

³⁴³ Noteworthy to mention is how the emergence of smart city initiatives is articulated as if it happened within an element previously identified as characteristic to the creative city label, namely creative clusters. Atta, “Built Environment: Smart Buildings and Smart Cities.”

activity of such innovation labs can probe the effectiveness of the underlying urban policies that have been unfolding for at least already a decade.

The innovation lab as a space where innovation is expected to happen can be identified in the city ecosystem, with a strong emphasis on their social and open innovation potential. The existing labs in the Barcelona ecosystem over the last decade have been focusing on aspects such as circular economy, new technologies (e.g., I2CAT Living Lab), and social innovation.³⁴⁴ It was argued by the City Council that culture and artistic means – through practices and technology used – have the potential to empower citizens.³⁴⁵ This opens up the prospect of arguing that innovation labs display the potential of fostering social and open innovation, where cultural and artistic practices are being used as tools and methods| to generate socially innovative practices and processes. It is within these innovation labs that CCI could potentially generate innovation with focus on social innovation through cultural projects that make use of emergent technologies enabled by collaborative practices while having, as well, a strong international character, where citizens are its focus and main enablers, as illustrated in *Figure 5*.

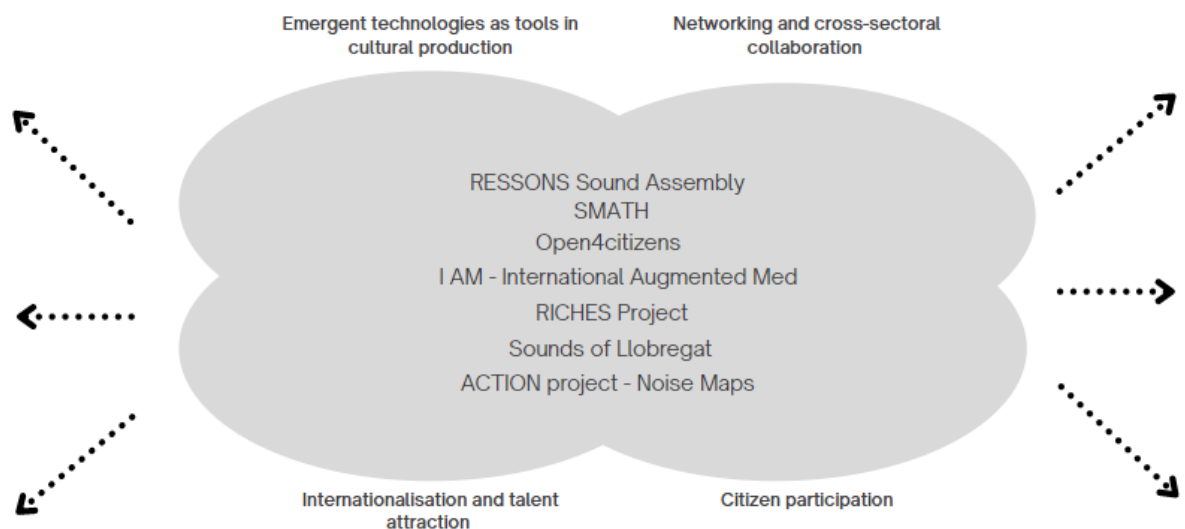


Figure 5. Cultural projects implemented by innovation labs.

³⁴⁴ Santonen, “Comparing Living Lab(s) and Its’ Competing Terms Popularity.”

³⁴⁵ Barcelona City Council, “Barcelona, Laboratori d’innovació.”

3.3.1.3 *Bit Lab and Lichen*

The data collected through interviewing key people directly related to two innovation labs (Bit Lab and Lichen) together with the existing additional documents related to the implemented projects through these innovation labs show the overlapping recurrent themes - emergent technologies as tools of cultural practice, internationalisation and talent attraction, networking and cross-sectoral collaboration, citizen participation - that have been observed at the level of policy discourse and strategic planning over the last two decades. Based on the conducted interviews and on the data collected regarding cultural projects in Barcelona, innovation labs are an example that articulates the idea of heritage valorisation, democratisation of cultural and artistic practice, while leveraging on citizen participation for social and open innovation. This aspect potentially opens the suggestion that the nature of innovation labs, considering the broader setting, as well as the local conditions, is auspicious for CCI-driven innovation.

Bit Lab innovation lab is a non-profit organisation – “a Barcelona-based non-profit organisation which works to democratise access to culture and innovation through community projects” - active since 2017 and it is constituted of specialists from cultural and innovation sphere, together with professionals from CCI such as cinema, music industry, design, and communication.³⁴⁶ The role of the lab most often consists of workshops design and production, coordinating and implementing projects together with other institutions or local administration actors, such as Barcelona Activa or Institut de Cultura de Barcelona.³⁴⁷ At the same time, the projects have a strong community-rooted character; the innovation labs, thanks to the nature of the projects they implement, are to be found at the intersection of bottom-up initiatives and top-down intervention.

The Sounds of Llobregat project had as one objective raising awareness of social issues through artistic valorisation of sound heritage in rural areas.³⁴⁸ The project was initiated in collaboration with local administrative bodies and non-profit associations. According to the Project Manager of Bit Lab, the project was implemented in 2020 and it aimed at raising awareness of the

³⁴⁶ BitLab, “What We Do,” accessed June 3, 2021, <http://www.bitlab.cat/en/what-we-do/>; “How to Make an URBAN NOISE MAP. Detection and Collaborative Analysis of Urban Sounds” (BitLab, ACTION Project), accessed June 3, 2021, https://drive.google.com/file/d/191pf79OXUbjw2N9hLTH_q1aaM2Uq8dzI/view.

³⁴⁷ Bitlab, “SMATH, Support Programme for Cultural and Creative Entrepreneurship,” accessed June 3, 2021, <http://www.bitlab.cat/en/projectes/smath-support-programme-for-cultural-and-creative-entrepreneurship/>.

³⁴⁸ Bitlab, “Sounds of the Llobregat River,” Bitlab, accessed June 3, 2021, <http://www.bitlab.cat/en/projectes/sounds-of-the-llobregat-river/>.

environmental impact in rural areas and at equipping citizens with skills for manufacturing the necessary tools for recording and for analysing data:

*We were approached by the Citizen Science Office in Barcelona. They wanted to commission some work from us to do some sound documentation, the idea is that you get some good quality sensors but that are still quite affordable and easy to use for non-professionals and you get the community organised so they can map out the soundscapes of their community.*³⁴⁹

Noise Maps, displayed, as well, by Ars Electronica, is one project implemented by Bit Lab at the initiative of a local community. The project aimed at tackling the problem of noise pollution in the area, according to the Bit Lab Project Manager:

*A neighbourhood association in El Raval, in the centre of Barcelona, they approached us because they said “Hey, we’ve seen that you’ve done this in San Andreu, could we find a way to do that also in our neighbourhood? Because it’s impossible to sleep in El Raval, there’s always parties going on, there’s always lots of noise and we would want to prove that to the City Council.” And this is where the Noise Map started.*³⁵⁰

The project started in 2020 after an open call for projects tackling pollution and documenting sound heritage was launched.³⁵¹ The project ran for 6 months, and it invited citizens to fabricate the necessary tools for tracking the levels of noise in El Raval and Sagrada Familia and it equipped the participants with the necessary knowledge and skills to document and analyse the data. The project aimed at informing decision-makers about the challenges the local community is facing.³⁵² Both projects made use of tools developed within the city’s fab labs network, shaping Bit Lab as an innovation lab that acts as a democratisation factor of artistic processes and innovative practices with expected high social return.

One third project implemented in the field of CCI by Bit Lab is SMATH project. It was implemented as part of the Interreg MED programme (European programme for supporting development of Mediterranean countries) that demonstrates strong local and international ties.³⁵³ The SMATH project stands for “Smart atmospheres of social and financial innovation for innovative clustering of creative industries in MED area” and it aimed at fostering cross-sectoral

³⁴⁹ Santiago, (Cultural Researcher and Project Manager at Bit Lab).

³⁵⁰ *Ibidem*.

³⁵¹ ACTION, “The ACTION (Participatory Science Toolkit against Pollution) Project.”

³⁵² Santiago, (Cultural Researcher and Project Manager at Bit Lab).

³⁵³ Appendix 4.

collaboration between artists and entrepreneurs.³⁵⁴ As outcomes, collaboration was fostered, together with equipping participants with entrepreneurial and artistic skills necessary to initiate projects that continued to exist after the project came to an end, according to the Project Manager of Bit Lab:

*There were a few important outcomes, interesting outcomes. One was that, with this project, we were able to break down the department-based logic of how projects are deployed in the city, so we were able to bring a project that really united very different areas of the City Council working towards the same goal. So, more concretely, culture and entrepreneurship; [...] with this project we really put them on an equal standing and working together was really useful. And then another different outcome I think was that we were able to prove very different ways of working together.*³⁵⁵

The director of Lichen - social innovation lab in Barcelona active as well in Latin America - observed, in fact, that cultural and artistic practices empower citizens to find innovative solutions to the problems they are the most aware of. In fact, according to their manifesto, collaboration, people centeredness, sustainability and collective knowledge are at the core of their activity.³⁵⁶ However, lack of funding was emphasized as a problem they are confronting with.³⁵⁷ Ressons is one community art project that the lab implemented using a methodology that comes from creativity and technology.³⁵⁸ When asked where creativity comes from, the Director of Lichen suggested that citizen engagement and democratisation of cultural practices seem to be at play.³⁵⁹

We try to encourage creativity in all our processes. We have run a citizen laboratory in Bolivia. [...] with just a few resources to recover the historical Centre of Santa Cruz Bolivia. We use mainly culture and a creativity approach. So, from one side, you have a random group of people and the only thing that they have in common is that they are just citizens. You have different profiles and different backgrounds and everything, and this is a nice way to trigger creativity, because they can add different inputs into projects. so, for example, you can see in the processes that we run, we start their mapping with who and what they can add to a project, and you can spark creativity on everyone. [...] Something that you use every day for everything triggers creativity. In

³⁵⁴ Institut de Cultura de Barcelona, “SMATH Programme,” n.d., [https://www.barcelona.cat/barcelonaciencia/en/smath-programme.](https://www.barcelona.cat/barcelonaciencia/en/smath-programme;); “SMATH.”

³⁵⁵ Santiago, (Cultural Researcher and Project Manager at Bit Lab).

³⁵⁶ Lichen, “Manifiesto,” accessed June 3, 2021, <https://lichenis.com/manifiesto/>.

³⁵⁷ Matías Verderau, (Director en Lichen Innovación Social), interview by Alina Maria Dumitru, April 22, 2021. Barnet, (Coordinador General de l’Associació Pla Estratègic Metropolità de Barcelona).

³⁵⁸ “This community-based project about sound art that was quite interesting. You can see how we apply this process of making this social link into an art exhibition and how we can develop this kind of a projects in this framework..” Verderau, (Director en Lichen Innovación Social).

³⁵⁹ *Ibidem*.

prototyping processes, with just a few resources you can use, you achieve your goals when this is all a creativity process.”

Previous top-down practices were criticised for their decoupling from the grassroots level and for perpetuating a restrictive access to spaces and processes where innovation could happen.³⁶⁰ However, these innovation labs have an affinity to employ artistic practices and new technologies for empowering citizens and for creating a sense of community. The geographical spread of labs can be observed to exist in the metropolitan region, as well.³⁶¹ And this is one aspect local decision-makers are aware of.³⁶² At the same time, the labs’ potential to democratise innovation processes was recognised and articulated by the City Council.³⁶³

3.3.1.4 Main characteristics of innovation labs in Barcelona

There are multiple projects and initiatives implemented by innovation labs in Barcelona. These labs embrace a bottom-up approach and a focus on the human factor, an approach that is being encouraged for more than one decade, as the policy rhetoric development suggests; and the iCapital award is an episode that highlights this trajectory the city has embarked on and that can be reflected as well in subsequent developments. The innovation labs show a flexibility in terms of engaging and collaborating with various stakeholders – from international networks, the local City Council, public and private cultural actors, to citizens – to stimulate a potentially fruitful dialogue and action. These innovation labs have the capacity to capture the attention of both local authorities and citizen communities and run projects aimed at social innovation; cultural and artistic practices are often employed; ultimately, they can be a mechanism to capture spillovers and multiply them thanks to their positioning in a space between local administration, international networks, while being deeply locally rooted; they have the expertise and institutional support to run projects and access funds and strong roots in the community. The involvement intensity of various stakeholders, however, varies.³⁶⁴ While it was highlighted that the creative city policies follow a market

³⁶⁰ Zarlenga, Uldemolins, and Morató, “Cultural Clusters and Social Interaction Dynamics: The Case of Barcelona.”

³⁶¹ Barnet, (Coordinador General de l’Associació Pla Estratègic Metropolità de Barcelona).; Santiago, (Cultural Researcher and Project Manager at Bit Lab).

³⁶² *Ibidem.*

³⁶³ Barcelona City Council, “Barcelona, Laboratori d’innovació.”

³⁶⁴ Teemu Santonen et al., “Cities as Living Labs – Increasing the Impact of Investment in the Circular Economy for Sustainable Cities” (European Commission, 2017), https://ec.europa.eu/research/openvision/pdf/rise/cities_as_living_labs.pdf#view=fit&pagemode=none.

rationale, these locally rooted initiatives seem to intensively promote citizen participation and to question initiatives of the market-centred narrative of the cultural policy rhetoric.³⁶⁵

3.3.2 The city as a lab

The most striving and dynamic cities of the future are depicted as the ones that will have “wide innovative and heritage-based cultural resources and that are able to use them as the basis for creating new visions”.³⁶⁶ The idea of the city as a laboratory of ideas was already existing when the 1st Barcelona Metropolitan Strategic Plan (2003) was formulated.³⁶⁷ The characteristics of the city-as-a-lab that the City Council enumerates are “diversity, democracy, citizen innovation, community management, cultural economies”.³⁶⁸ Discussions about innovation labs have been often framed within the idea of the city-as-a-lab. In fact, many scholars argued that cities are laboratories, with attractive cultural capital, networks, and knowledge flows.³⁶⁹ The idea of the city-as-a-lab relies on bottom-up approaches to foster innovation due to their capacity to create new social narratives that empower citizens; in fact, it was formulated that people are to be found at the centre of innovation processes that fuels the smart transformation of cities.³⁷⁰ Thanks to citizen involvement, the General Coordinator of PEMB believes that innovation labs could potentially foster smart transition in cities:

*For me, one key moment is when the city decided to decouple the idea of a smart city from big companies and adopt this more citizen-based approach or community-based approach. [...] We have all these innovation labs at the neighborhood level in some cities and in the metropolitan area, involving people and locally rooted organisations in this idea of a smart city. I think this works better.*³⁷¹

“Barcelona as a people city” - the project for which Barcelona was chosen as the iCapital of Europe in 2014 - shows, in fact, the embeddedness of citizens-as-a-focus in the local discourse. Although

³⁶⁵ Sánchez Belando, “Building Alternatives to the Creative Turn in Barcelona: The Case of the Socio-Cultural Centre Can Batlló.” Pla Estratègic Metropolità de Barcelona, “The Barcelona Metropolitan Strategic Plan – Vision 2020.”

³⁶⁶ Carta, ‘Creative City 3.0: Smart Cities for the Urban Age’.

³⁶⁷ Pla Estratègic Metropolità de Barcelona, “The First Barcelona Metropolitan Strategic Plan,” 2003, https://pemb.cat/en/publications/the_first_barcelona_metropolitan_strategic_plan/38/.

³⁶⁸ Barcelona City Council, “Barcelona, Laboratori d’innovació.”

³⁶⁹ “The Smart Guide to Creative Spill-Overs.”

³⁷⁰ Barcelona City Council, “Barcelona, Laboratori d’innovació.”

³⁷¹ Barnet, (Coordinador General de l’Associació Pla Estratègic Metropolità de Barcelona).

the project was criticised in its earlier days for “a lack of environmental sustainability” and for a lack of bottom-up approaches, the adopted public policies and the human-centeredness placed Barcelona area in a leading position in terms of smart transformation that includes citizens at the level of decision-making.³⁷² Even more intensively nowadays, the city strategy keeps the focus on the citizens in policy making, according to the General Coordinator of PEMB:

*We have the creative city, the smart city, we have a “whatever city” and it's like adopting different models [...] Connecting all of them wisely, from the perspective of the public policies is what we need to create new public policies that take into account these vectors of technology, creativity and culture, and changing the way of doing things and helping people change the way they do things and the way they live, all these contribute in building the city.*³⁷³

Following the strategic planning idea of a cohesive city and policy level decisions, this is where CCI are envisioned to fill in the gaps and bring social impact through social innovation initiatives that deploy cultural and artistic practices open to citizens. Although written in 2000, Chatterton, in the much-cited *Will the real Creative City please stand up?* poses the question “whether we are serious about opening up the creative process to the most marginalized groups in society.”³⁷⁴ There exists a trend in literature to emphasize the importance of citizens in the smart city rhetoric.³⁷⁵ And the case of Barcelona is one example that adopts this rhetoric. At the same time, the scholarly literature highlighted a type of smart city where a tension between a class-oriented perspective and “an all-residents city” perspective is being created.³⁷⁶ This tension within the context of the possibilities innovative technologies have brought up and, on the other hand, within the context of the existing inequalities in the urban social and economic landscape.³⁷⁷ The technological development provides, on the one hand, the incentives for strengthening a more democratic engagement of citizens in governance related aspects in the city through open innovation.³⁷⁸ On

³⁷² Mahou-Lago and Varela-Álvarez, “Innovation and Opportunities for Citizen Participation in Spanish Smart Cities.”

³⁷³ Barnet, (Coordinador General de l'Associació Pla Estratègic Metropolità de Barcelona).

³⁷⁴ Chatterton, “Will the Real Creative City Please Stand Up?”

³⁷⁵ Capdevila and Zarlenga, “Smart City or Smart Citizens? The Barcelona Case.”

³⁷⁶ Hatuka et al., “The Political Premises of Contemporary Urban Concepts: The Global City, the Sustainable City, the Resilient City, the Creative City, and the Smart City.”

³⁷⁷ *Ibidem*.

³⁷⁸ *Ibidem*.

the other hand, the market driven rationale that marked the culture-led urban regeneration strategies might replicate under the newly adopted smart urban development agenda.³⁷⁹

Based on the data gathered and discussions carried out with the Project Manager of Bit Lab and with the Director of Lichen, it can be claimed that the common points of their projects are: the engagement to the mission of empowering communities and citizens, encouragement of cross-sectoral collaboration, making use of collective documentation and open data, using innovative artistic processes and valorisation in co-creation processes, and engaging multiple actors at the city level.³⁸⁰

The current approach of strategic planning seems to reflect the striving for a balance between the top-down and bottom-up initiatives.³⁸¹ One noteworthy aspect is that the top-down approach employed in innovation after the Olympics – the 22@ creative cluster as an example of an institutional cluster that was criticised in the literature for not creating a genuinely innovative and creative environment – was contested.³⁸² The subsequent strategy and the current priority is finding an equilibrium between top-down and bottom-up approaches, as expressed by the General Coordinator of PEMB:

*What is really important is the connection with people. So, we see a lot of cities, and Barcelona is probably not an exception, that have thrilled in the past years in some cultural sectors and in combining technology and culture, but people in the cities are actually disconnected from this and they do not take advantage of this strategy. So, for me, the real innovative city is the one that combines the bottom-up approaches to innovation, with the top-down, because both are useful and necessary for the city. But there must be an equilibrium between them, otherwise, you can only take part of this as a spectator or you can really get involved in it, and I think that it's the mixture of both that it's important.*³⁸³

³⁷⁹ *Ibidem*.

³⁸⁰ Universitat Pompeu Fabra – Music Technology Group, Ateneu de Fabricació Ciutat Meridiana, Raval Neighbourhood Association Network

³⁸¹ Barnet, (Coordinador General de l'Associació Pla Estratègic Metropolità de Barcelona).

³⁸² Cohendet and Simon, "Rethinking Urban Creativity: Lessons from Barcelona and Montreal." Zarlenga, Ulldemolins, and Morató, "Cultural Clusters and Social Interaction Dynamics: The Case of Barcelona."

³⁸³ Barnet, (Coordinador General de l'Associació Pla Estratègic Metropolità de Barcelona).

3.3.3 Challenges and opportunities in the cultural and creative sector in Barcelona

The role of CCI has been deemed as highly valuable. At the same time, innovation labs have been profiled as places where innovative spillovers can take place. However, a tension between attitudes and priorities of different actors can be identified.

3.3.3.1 Different attitudes towards the intervention of local administration

The interview respondents expressed the belief that if there is a sector that could create innovative externalities over the wider economy, it is the cultural and creative sector. When asked about the current role of CCI in creating positive externalities over the wider economy, the General Coordinator of PEMB answered:

*The cultural sector probably has played this role and probably still does that in some specific moments or portion of the economy, but I do not feel that it is something general right now.*³⁸⁴

When directly asking if the aspect of externalities stemming from CCI at the policy level are considered potentially relevant and if their regulation is being considered in the benefit of knowledge advancement, social innovation, and economic development, it was difficult to get a direct answer. However, the discussion with the General Coordinator of PEMB suggests it is more a serendipity that might be at play:

*Well, I think that this is a broader discussion because this idea “can you regulate arts and culture and innovation and creativity, [...] or there's a serendipity happening?” I think that the one and only idea of saying that your city is creative and projecting this idea helps things to happen and if people believe in these, I think that the environment is prompted to generate initiatives. Of course, you need money, you need programs, and you need public policies behind. [...] This idea of externalities was very rooted in the idea of clusters; for me, this vision of industry on different economic clusters should be again the original one, and then we will realise the importance of the creativity and cultural sectors.*³⁸⁵

Some scholars have argued that it is not all the time the case that positive externalities will benefit a variety of sectors. First, there exists an unequal access to cultural opportunities due to

³⁸⁴ *Ibidem.*

³⁸⁵ *Ibidem.*

concentrations of investment in specific sectors.³⁸⁶ While it has been widely accepted in the literature and research that creative clusters such as 22@ Barcelona supported the transition from an industrial economy to a service one with various benefits to the economic ecosystem of the city, the various negative aspects, such as gentrification and displacement of residents were revealed as factors reinforcing a market-rationale.³⁸⁷ Concomitantly, it was argued that this kind of initiative of the cultural sphere can counterbalance the downsides of cultural city policies, such as gentrification and inequalities.³⁸⁸ Culture-led regeneration did not necessarily imply bottom-up innovation and citizen engagement since its implementation relied often on top-down intervention.³⁸⁹ In fact, the broad definition of CCI and the label of creative city have been heavily criticised for overlooking the local urban dynamics and challenges due to the lack of social inclusion in decision-making.³⁹⁰ This only reinforced, in turn, the high levels of inequality in cities.³⁹¹

Regarding the way people active in the cultural field feel about the intervention of the government, it was observed that there is no institution specialised in facilitating this aspect.³⁹² Despite the fact that some scholars argued that due to the terminology limitations only strongly institutionalised cultural projects are taken into account for subsidies and incentives, a predilection and even a preference for an organic progress inside the community and at grassroots level was observed.³⁹³ Moreover, while incentives and subsidies are considered as extremely beneficial, a non-interventionist attitude of the local administration was deemed as more beneficial for bottom-up innovation, as it was pointed out by the Curator and Communicator at Sónar+D and Co-organiser of Dorkbot, Barcelona:

³⁸⁶ Comunian, “The Weakest Link: Creative Industries, Flagship Cultural Projects and Regeneration.”

³⁸⁷ Cohendet and Simon, “Rethinking Urban Creativity: Lessons from Barcelona and Montreal.”

³⁸⁸ Sánchez Belando, “Building Alternatives to the Creative Turn in Barcelona: The Case of the Socio-Cultural Centre Can Batlló.”

³⁸⁹ García, Eizaguirre, and Pradel, “Social Innovation and Creativity in Cities: A Socially Inclusive Governance Approach in Two Peripheral Spaces of Barcelona.”

³⁹⁰ Chatterton, “Will the Real Creative City Please Stand Up?”

³⁹¹ *Ibidem*.

³⁹² “Today I don't think that there are any institutions that specialize in supporting innovation in art science and technology, I think that many of them claim to do so [...] but there is no institution that's meant to support on these practices, I don't think I maybe I'm wrong, but I don't think it's it.” Folguera and Dumitru, (Curator and Communicator at Sónar+D).

³⁹³ Andrew Miles and Lisanne Gibson, “Everyday Participation and Cultural Value,” *Cultural Trends* 25, no. 3 (2016): 151–57, <https://doi.org/10.1080/09548963.2016.1204043>; Comunian, “The Weakest Link: Creative Industries, Flagship Cultural Projects and Regeneration.”

*People, at the end, organise themselves and they make things happen in their own means; they look for the funding and they do it for themselves, they are not waiting fortunately for someone to come and support them; [...] Top-down might be a good model for certain areas [...] Otherwise you wouldn't have not even in a million years all the resources available to make this project grow at the pace that it does. And I think about [...] digital art like Arduino or open frameworks, pure data and other types of tools that artists use that are open source, these are developed by the community and community means individuals, means artists, means developers, engineers, but also companies, and also organisations that, at certain times, they inject money in developing certain parts of the project, but leaving the project open for the community to use, for the community to develop, and this cannot be in any other way that it's not grassroots.*³⁹⁴

3.3.3.2 Measuring the impact of cultural and artistic projects

The discussion carried out with the Project Manager of Bit Lab revealed that measuring the innovation capacity of firms and of grassroots projects within CCI is often challenging.³⁹⁵

*It is difficult to capture it because indicators for return to investment and innovation activities are purely based on financial mechanisms, are based on financial indicators. And if you want to capture something broader, you really have a problem because there aren't well-established methodologies for that; we experimented with social return on investment and it's good mostly as a community building strategy [...] but it's still not robust and reliable enough to compare with financial data.*³⁹⁶

At the same time, the 2010 strategic planning openly prioritizes subsidies for the cultural and creative sectors based on “economic, social and educational return”.³⁹⁷ What can be questioned is how, then, subsidies based on economic, social, and education return ought to be granted as expressed in *Barcelona Vision 2020* if, first, there is an ambiguous way of defining CCI; then, as the interviewed experts highlighted, it is difficult to capture the impact of cultural practices with traditional measurements and variables; concomitantly, there seems to be a serendipity at play that might lead, in turn, to missed opportunities.³⁹⁸ Last but not least, measuring the impact and value

³⁹⁴ Folguera and Dumitru, (Curator and Communicator at Sónar+D).

³⁹⁵ *Ibidem*; Hoo Bae, “Economic Modeling of Innovation in the Creative Industries and Its Implications.”

³⁹⁶ “You have a hard time sometimes proving that were you doing is valuable because the return it's more diffused and it's not something that you can put a hard number on it very, very often, because it comes, for example in terms of learnings, in terms of increased network connections, it comes in terms of educational value, delivered to schools, it comes in terms of inclusiveness, in cultural innovation activities for people who were previously excluded”

Santiago, (Cultural Researcher and Project Manager at Bit Lab).

³⁹⁷ Pla Estratègic Metropolità de Barcelona, “The Barcelona Metropolitan Strategic Plan – Vision 2020.”

³⁹⁸ *Ibidem*.

of CCI overlooks institutional dynamics and aspects outside the market-driven rationale rhetoric embraced by latest developments of cultural policies and academic research.³⁹⁹

At the same time, it was argued that CCI represent a “high-risk area” in which the less structured organisation mechanisms make it an inadequate sector for top-down intervention, asking for more flexibility and a more support for bottom-up approaches.⁴⁰⁰ As it was already highlighted, some professionals in the CCI field see a non-interventionist approach more fruitful for innovation.⁴⁰¹ The role of cultural brokers was recognised as highly valuable since they act as mediators between local decision-makers and grassroots actors in the industry.⁴⁰² However, following the discussions carried out during interviews, capturing spillovers and mediating between administrative institutional bodies and actors within CCI was revealed as challenging at times.⁴⁰³ This was due partially to an insufficient multistakeholder collaboration in the Barcelonan ecosystem. Moreover, this aspect was recognised by the General Coordinator of PEMB as a potential challenge for CCI due to the competition for accessing European funds that broke the bridges between sectors:

*When we relied, as we have done, on external money, let's say European funds, it has been a competition between sectors, and this breaks the bridges between different sectors.*⁴⁰⁴

However, fostering the cross-sectoral collaboration of CCI was expressed as a priority of the newest strategic plan:

*Of course, if you consider that cultural and creativity sectors play this role of triggering the positive externalities for all the sectors, you should put these sectors or these activities in the core of your strategy. And well, that is the reason that we have them in the newest strategic plan.*⁴⁰⁵

At the same time, the need for a space designed particularly for facilitating innovation at grassroots was recognised by the Project Manager of Bit Lab:

³⁹⁹ Belfiore, “‘Impact’, ‘Value’ and ‘Bad Economics’: Making Sense of the Problem of Value in the Arts and Humanities.”

⁴⁰⁰ Pareja-Eastaway et al., “Promoting Creativity and Knowledge in the Barcelona Metropolitan Region. How to Enhance the City’s Competitiveness.”

⁴⁰¹ Folguera and Dumitru, (Curator and Communicator at Sónar+D).

⁴⁰² Pareja-Eastaway et al., “Promoting Creativity and Knowledge in the Barcelona Metropolitan Region. How to Enhance the City’s Competitiveness.”

⁴⁰³ Barnet, (Coordinador General de l’Associació Pla Estratègic Metropolità de Barcelona).

⁴⁰⁴ *Ibidem.*

⁴⁰⁵ *Ibidem.*

If you really want innovation to reflect the needs and the rules of society, not just of customers who can pay for it, but of the whole of society, if you want to bring innovation closer to what would this idea of social innovation mean, it would be the result of having innovation that serves the needs of the whole of society; then, you need to create a place, a methodology, a mechanism by which citizens can have a say in this whole innovation process. And that was the whole idea behind BCNLab.⁴⁰⁶

As it could be seen, one professional active within the CCI argued that the non-interventionist approach from the city administration is more beneficial. In fact, a more equilibrated approach between top-down and bottom-up was expressed as a priority by the General Coordinator of PEMB. This approach can be framed within a more general theoretical trend arguing that CCI require more flexibility in terms of governance. At the same time, cultural and artistic projects are many times in need of proper funding. However, without an understanding of how CCI can impact and without a proper explanation of how impact and value can be understood, opportunities that could benefit the involved stakeholders in the city ecosystem can be overlooked.

⁴⁰⁶ Santiago, (Cultural Researcher and Project Manager at Bit Lab).

CHAPTER 4: CONCLUSION

4.1 Summary of main findings

4.1.1 European framework

The literature on innovation and cultural and creative industries has been up until this point complex and varied. However, the impact of CCI on innovation has been addressed to a lesser extent and in a less systematic manner. This study aimed at exploring how cultural and creative industries are envisioned to drive innovation. To do so, framing the discussion within an urban context facilitated understanding how the underlying innovation mechanism is supposed to work. This work dealt, firstly, with how the European framework envisions CCI to drive innovation. As it was shown, certain conditions enable this to happen. The European rhetoric often correlates CCI to social cohesion and to the engagement with recent technologies within an open innovation system.

Academic literature often framed the city as the place where innovation happens. For this thesis, the European Capital of Innovation Awards constituted a guide in framing how the European city is being envisioned and what is the dynamic between CCI and innovation in European cities. It is within international and local networks that multistakeholder and cross-sector collaboration facilitate the spillover effect, where the local administration orchestrates the dynamics responsible for triggering the innovation mechanism. In it, the cultural and creative industries are envisioned as a lever for social and open innovation. CCI are profiled as dependent on the dynamics between the public and the private sector in the city.

4.1.2 Local framework

The main research question addressed how cultural and creative industries have been translated into local policies in Barcelona over the past 15 years. The research undertook in order to answer the research questions reflects a concrete case of how culture is envisioned to drive innovation. Examining the cultural policy discourse in historical perspective revealed several recurrent underlying and interrelated themes where CCI play a significant role in innovation: emergent

technologies as enablers of cultural and artistic production, networking, and cross-sectoral collaboration, internationalisation and talent attraction, and citizen participation. The next step was to explore how CCI and innovation interrelate in existing projects in order to gain a more extensive understanding of the connection between these recurrent themes.

Receiving the iCapital award was the result of a consistent action in policymaking throughout the years. After 1992, culture-led development became central in the city's agenda in order to increase its visibility in the international agenda and to attract talent. This did not happen, however, without consequences. While the city was pinned down on the map as one of the most creative and innovative cities in Europe with very well branded and networked creative clusters, the levels of inequality in the city increased. At the same time, the city development agenda pushed the idea of a participative city since the 1990s, in which citizens are being encouraged to get involved in city governance through new technologies and collaborative practices. However, it is over the last decade that the local administration has taken supported action, adopting smart city development strategies.

This study showed that the innovation lab is an example of a space where the urban innovation mechanism is being articulated often in a cultural and artistic form. The examined innovation labs use recent technologies as enablers of cultural production and manifestation, as well as enablers of citizen participation by making use of open innovation practices. From an organisational perspective, the innovation lab is a space where cross-sectoral collaboration and networking with local and international actors keep projects running. The aim of projects implemented within the activity of innovation labs under analysis seemed to aim for social and open innovation. Thanks to the organisational nature of innovation labs, these spaces act as platforms for both top-down intervention and bottom-up initiatives.

However, the way impact and value are being measured and formulated as a sole unit of making sense of how CCI impact is not enough to understand how CCI in fact, contribute to innovation. This becomes even more difficult considering the broad definition of CCI that is being often adopted by policy makers. Then, adding to the idea that the concept of social cohesion stands on shaky grounds, the contestation of the way impact and value of CCI are being formulated in policy making reveals the difficulty of measuring the role of CCI in driving innovation. Simultaneously,

the discussion about innovation implies multiple ways of framing the concept. This thesis proved that researching innovation labs provide a fruitful starting point for understanding in what ways the local administration creates the space and incentives for adopting the participatory agenda in cities. The iCapital framework profiled the innovation lab as a tool in including citizens in governance related matters. Nevertheless, local governments could make more effort to understand what the result of the intensity of their involvement is and at what costs. As this thesis revealed, an acknowledged belief that CCI drive innovation through spillovers is at play. Yet, how is this supposed to happen and to benefit all the city actors still needs further clarification.

4.2 Opportunities for further research

The reviewed theoretical implications of defining and operating with the concepts of CCI and innovation automatically bring difficulties for conducting both quantitative and qualitative research. Based on this aspect, it could be said that this impacted the discussions carried out during the interviews. The interview discussions, backed up by a policy analysis and literature review, showed a predilection for a general belief that CCI are drivers of social innovation and open innovation. The qualitative nature of this study makes it difficult, however, to draw generalising conclusions. While the interviewers confirmed the acknowledged idea that CCI drive innovation, a bigger sample and more extensive research would cover the gaps of this work. Further research might consider a more extensive selection of key respondents and more data in order to probe to what extent CCI contribute to social and open innovation. At the same time, alternative conceptual frameworks for framing the concepts of CCI and innovation could be considered. This way, a more clarifying perspective of what cultural and creative industries are correlated with innovation can be formulated. At the same time, further research could consider different ways of defining innovation and the ways CCI can be correlated with it. Considering the dependency of CCI on the institutional dynamics, this would further inform policy design and decision makers in tailoring suitable measures for local contexts. While there seems to be a consistent effort to support innovation in relation to CCI, at the same time, the predilection for a non-interventionist approach could act as a doubled edged sword. While the interview discussions showed that this approach could foster innovation, not acknowledging further a more nuanced way of framing innovation and the ways CCI contribute to it might lead to missed opportunities for all the involved actors shaping the urban ecosystem. Researching further the interplay between the actors of the urban

ecosystem might provide a good start for understanding how the institutional dynamics influence the levels of citizen involvement in decision making and how it shapes diverse cultural and artistic articulations of innovation in cities.

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APPENDICES

Appendix 1: Interviews.

Name	Institution	Date
Marc Aguilar Santiago	Cultural Researcher and Project Manager at Bit Lab	06/04/2021
Pau Adelantado Pérez	UX Research and social innovation at Universitat Oberta de Catalunya	19/04/2021
Oriol Estela Barnet	General Coordinator of the Barcelona Metropolitan Strategic Plan (Pla Estratègic Metropolità de Barcelona - PEMB)	21/04/2021
Matías Verderau	Director en Lichen Innovación Social	22/04/2021
Antonia Folguera	Curator and Communicator at Sónar+D	03/05/2021

Appendix 2: Official documents and communications materials. European Commission.

Title	Year	Publishing body
Green Paper - Unlocking the potential of cultural and creative industries	2010	European Commission
Barcelona is "iCapital" of Europe	2014	European Commission
Horizon 2020. Work Programme 2014 - 2015. Europe in a changing world – Inclusive, innovative and reflective societies	2015	Directorate-General for Research and Innovation (European Commission)
European Capital of Innovation (iCapital) 2016 - Amsterdam	2016	Directorate-General for Research and Innovation (European Commission)

European Capital of Innovation (iCapital) 2017 - Paris	2017	Directorate-General for Research and Innovation (European Commission)
Horizon 2020. Work Programme 2016 - 2017. Europe in a changing world – Inclusive, innovative, and reflective societies	2017	Directorate-General for Research and Innovation (European Commission)
A place to bring ideas to life: will your city be the next European capital of innovation?	2018	Directorate-General for Research and Innovation (European Commission)
European Capital of Innovation 2018 – Athens	2018	Directorate-General for Research and Innovation (European Commission)
European capitals of innovation 2016-2018. Places that bring ideas to life	2019	Directorate-General for Research and Innovation (European Commission)
European capital of innovation awards 2019	2019	Directorate-General for Research and Innovation (European Commission)
European Capital of Innovation 2019 - Nantes	2019	Directorate-General for Research and Innovation (European Commission)
European capitals of innovation 2016-2019. Places that bring ideas to life	2020	Directorate-General for Research and Innovation (European Commission)
European Capital of Innovation Awards 2020	2020	Directorate-General for Research and Innovation (European Commission)
European Capital of Innovation 2020 – Leuven	2020	Directorate-General for Research and Innovation (European Commission)
Horizon 2020. Work Programme 2018 - 2020. Europe in a changing world – Inclusive, innovative and reflective societies	2020	Directorate-General for Research and Innovation (European Commission)

Appendix 3: Official documents and communications materials. Barcelona.

Title	Year	Publishing body
Barcelona Strategic Economic and Social Plan 2000 (1990-1994)	1990	Barcelona City Council (Ajuntament de Barcelona)
3rd Strategic Economic and Social Plan of Barcelona (under the 1999-2005 perspective)	1999	The Barcelona Metropolitan Strategic Plan (Pla Estratègic Metropolità de Barcelona - PEMB)
The First Barcelona Metropolitan Strategic Plan (1r Pla estratègic metropolita de Barcelona)	2003	The Barcelona Metropolitan Strategic Plan (Pla Estratègic Metropolità de Barcelona - PEMB)
Barcelona Ciutat del Coneixement: Economia del Coneixement, Tecnologies de la Informació i la Comunicació i Noves Estratègies Urbanes	2005	Barcelona City Council (Ajuntament de Barcelona)
Barcelona Vision 2020	2010	Pla Estratègic Metropolità de Barcelona
Barcelona Metròpoli Creativa	2013	Barcelona City Council (Ajuntament de Barcelona)
Estat de la Ciutat: La Ciutat de les Persones	2013	Barcelona City Council (Ajuntament de Barcelona)
BCNLab: A platform to connect innovation and creativity	2014	Barcelona City Council (Ajuntament de Barcelona)
Economia del coneixement i economia creativa a Barcelona	2014	Barcelona City Council (Ajuntament de Barcelona)
Rethinking the future with creativity	2014	Barcelona City Council (Ajuntament de Barcelona)
Barcelona, laboratori d'innovació: Relat d'Innovació Municipal Mandat 2015-2019	2019	Barcelona City Council (Ajuntament de Barcelona)

Government measure for boosting creative industries	2019	Barcelona City Council (Ajuntament de Barcelona)
Barcelona Metropolitan Strategic Plan: 30 years designing the Barcelona of the future	2020	The Barcelona Metropolitan Strategic Plan (Pla Estratègic Metropolità de Barcelona - PEMB)
2016-2019 Strategic Framework	n.d.	Barcelona City Council (Ajuntament de Barcelona), Barcelona Activa
Barcelona Digital City Plan (2015-2019): Putting technology at the service of people	n.d.	Barcelona City Council (Ajuntament de Barcelona)
Barcelona is a creative capital	n.d.	Barcelona City Council (Ajuntament de Barcelona)
Creative Industries and Artificial Intelligence	n.d.	Barcelona City Council (Ajuntament de Barcelona)
Strategic sectors in Barcelona	n.d.	Barcelona City Council (Ajuntament de Barcelona), Barcelona Activa

Appendix 4: Cultural projects and initiatives

Project title	Institutional partners	Timeframe	Framework	Link
I AM - International Augmented Med	Ministry of Culture (Government of Catalonia) i2CAT Foundation Kòniclab Association ONTT - Regional Commisariat for Tourism of Nabeul-Hammamet Library of Alexandria Department of Antiquities of Jordan Jordan University of Science	2012 - 2015	Interreg MED	https://keep.eu/projects/16302/International-Augmented-MED-EN/

	and Technology RIWAQ Municipality of Jebeil Municipality of Al Taybeh University of Genoa			
RICHERS Project. Renewal, Innovation and Change: Heritage and European Society	University of Coventry (UK) - COORDINATOR City of Rostock (Germany) RMV LEIDEN (The Netherlands) Waag Society (The Netherlands) Exeter University - College of Social Sciences and International Studies (UK) Promoter Srl (Italy) i2CAT (Spain) University of Southern Denmark (Denmark) Prussian Cultural Heritage Foundation- Stiftung Preußischer Kulturbesitz SPK (Germany) Ministry of Culture and Tourism KYGM (Turkey)	2013 - 2016	European Union's Seventh Framework Programme for research, technological development, and demonstration	https://www.riches-project.eu/project.html
Open4citizens	Aalborg University i2Cat Politecnico de Milano Telecom Italia Experio Lab - The County Council of Värmland (Sweden) Antropologerne Dataproces Delft University of Technology	2016 - 2018	Horizon 2020	http://open4citizens.eu/
SMATH	Regione del Veneto - Direction du patrimoine des activités culturelles et du sport Ca' Foscari University of	2018 - 2020	Interreg MED	https://keep.eu/projects/21350/Smart-atmospheres-of-social-EN/

	<p>Venezia, Venezia</p> <p>Maribor Territorial Marketing Agency, Maribor</p> <p>Zagreb Development Agency, Zagreb</p> <p>Friuli Venezia Giulia region, Venezia</p> <p>TVT Innovation, Toló</p> <p>Pôle Industries Culturelles & Patrimoines, Arles</p> <p>Technopolis, city of Athens, Athens</p> <p>Barcelona Institute of Culture, Barcelona</p> <p>Barcelona Activa, Barcelona</p>			
Sónar	Advanced Music S. L.	1994 - present	Private held	https://sonar.es/
Dorkbot	Grassroots; supported by Hangar Art Production Center and Minipimer video and internet experimental lab	2000s	Community-based	https://www.dorkbotbarcelona.org/en/
ACTION project - Noise Maps	Implemented by BitLab; supported by Universitat Pompeu Fabra – Music Technology Group, Ateneu de Fabricació Ciutat Meridiana, Raval Neighbourhood Association Network	2020	Horizon 2020	http://www.bitlab.cat/en/projectes/noise-maps/
Sounds of Llobregat	Coordinated and implemented by BitLab Barcelona Provincial Government – Bibliolabs Junta de la Sèquia Foundation – Aigües de Manresa	2020	NGOs and City Council	http://www.bitlab.cat/en/projectes/sounds-of-the-llobregat-river/
RESSONS Sound Assembly	Nau Ivanow Center Civic Navas Plataforma Educació Social (PES) Navas and the Navas Community Plan	2019	NGOs and City Council	https://lichenis.com/ressons/

Appendix 5: Consent form template

CONSENT FORM

The purpose of this form is to explain how the research interview which you agree to undertake with us is archived at the History Department of the Erasmus University Rotterdam. When you sign this form, you are agreeing to take part in the interview and allowing us to store and make use of your personal data now and in the future in order to administer and archive your interview (transcribed version) for educational purposes.

The course work which you are contributing to

You have been invited to take part in the student's Alina Maria Dumitru thesis research interview, supervised by Dr. Jeroen Euwe, PhD, MBA Manel Gonzalez, and Prof. Jeffrey Fear. This thesis is part of the Erasmus+ GLOCAL master program (<https://www.eur.nl/master/global-markets-local-creativities-glocal>) which results in a multiple degree award granted by the University of Glasgow, University of Barcelona, and Erasmus University Rotterdam.

Project Title: "Barcelona as the European Capital of Innovation. Can Cultural and Creative Industries Drive Innovation?". The goal of this research is to explore the role cultural and creative industries have in creating an innovative environment in Barcelona.

Your personal data

We will process your interview according to the new data protection legislation (the General Data Protection Regulation [GDPR] which came into effect on 25 May 2018).

What we will do with your personal data

The data contained within this form will be held securely and not shared with anyone unless the Erasmus University is obligated to do so for legal purposes. The information contained within the interview itself will be made available (subject to your agreement) to the teaching and trained research staff for academic purposes. We will keep the data in perpetuity to preserve the oral history and inform the research of future generations. You may ask to remove the interview from our archives and/or request a copy of the personal data we hold about you at any time. Additionally, the research findings and transcribed segments from the recordings might be shared more broadly through conferences and/or in published forms (e.g., journal articles and book chapters). Subject to request, no personally identifiable information will be reported.

Procedures

You will participate in an interview lasting approximately between 30 minutes and one hour. You will be asked questions about your experience in your field and relevant projects you have worked on.

Confidentiality

Your privacy will be protected to the maximum extent allowable by law. No personally identifiable information will be reported in any research product. Moreover, only trained research staff will have access

to your responses. Within these restrictions, results of this study will be made available to you upon request. As indicated above, this research project involves making audio recordings of interviews with you. Transcribed segments from the audio recordings may be used in published forms (e.g., journal articles and book chapters). In the case of publication, pseudonyms will be used. The audio recordings, forms, and other documents created or collected as part of this study will be stored in a secure location in the researchers' offices or on the researcher's password-protected computers.

Your agreement to take part

This agreement is made between the interviewer and you ("the interviewee", "I"):

Name and address of the responsible teacher: Dr. J.J. Euwe, Erasmus University Rotterdam, P.O. 1738, History Department, 3000 DR Rotterdam

Name of Interviewer: Alina Maria Dumitru, Erasmus University Rotterdam

Your signature indicates that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction; and you voluntarily agree to participate in this research study.

Declaration

I hereby agree to take part in an interview for the master thesis of Alina Maria Dumitru and am fully aware that the content of this interview will be available for the teaching staff of this course, subject to any closure or other restrictions that I might request when the interview has been completed.

By or on behalf of the Interviewee:

Signed:

Name in block capitals:Date: