Production networks in the cultural and creative sector: case studies from fashion design

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Work package	The CICERONE project consists of seven work packages (WPs). This report is part of WP2, which constitutes the empirical backbone of the project. WP2 contains case study research that focuses on networked production in eight cultural and creative industries: 1) architecture, 2) archives (including libraries and cultural heritage), 3) artistic crafts, 4) audio-visual media (film, TV, videogames, multimedia) and radio, 5) design, 6) festivals, as well as performing and visual arts, 7) music and, 8) publishing. The purpose of the case study research is to understand key linkages and mechanisms within real-life production networks in the cultural and creative sector (CCS) and the relationships of these networks to context-dependent variables. Drawing on the case study research, the CICERONE project explores a policy framework that may contribute to enhancing policy support for the cultural and creative sectors. Furthermore, the case study research facilitates the identification of gaps in extant sources of quantitative data, suggesting approaches on how these gaps can be plugged. For this reason, WP2 is not just the empirical backbone of CICERONE, it also provides critical inputs for the work in other WPs (most notably WP4 and WP6). This deliverable (D2.5) reports on the case studies on the design industry. Together with the reports D2.1 to D2.4, D2.6 and D2.7, it provides strategic snapshots of the rich and variegated tapestry of European production networks in the CCS. All the deliverables from the CICERONE project are publicly disclosed on the project's website www.cicerone-project.eu and through its Zenodo community on https://zenodo.org/communities/cicerone-h2020.

Table of contents

List of tables and figures

Executive summary

This report aims to discuss the fashion industry as part of the design industry, with the perspective of the global production network to look beyond a single organisation, offering a complex picture of the whole network where different steps are needed in creating fashion goods. This novel approach considers all the elements implicated in the composite process of fashion, encompassing the realm of identity, behaviour and experiences, involving creativity, industrial processes, marketisation and distribution. The report does not focus on the fashion industry as a whole but on fashion design, the part of the industry where design plays a key role throughout the production network. Fashion design is a sub-field of the design industry where we find large vertically integrated companies and specialised small- and medium-sized organisations. Therefore, the complexity of the high degree of variation in terms of products, high-end or mass production and integrated or outsourced services demands an exploration in the analysis of this sector's production cycle.

The first part of the report provides an overview of the industry and a statistical analysis of employees and companies throughout the different phases. The industry has four main features. First, the industry's primary feature is its product segmentation and variation. Understanding the current dynamics of the fashion design network inevitably involves its connection with the fashion industry in its different segments. This industry includes a wide variety of products, including clothing, accessories, jewellery and leather goods. As differentiation is a key element of fashion design, we find strong segmentation in production, which could be sorted into different categories.

Second, the industry is strongly embedded in certain places while simultaneously producing and distributing globally. Although fashion design has lately grown in presence in many other parts of the world, particularly after World War II, its origins are intrinsically connected with Europe. Fashion design was born in Europe and remains a segment of the fashion industry geographically concentrated in the region, providing specific economic, cultural and social factors and dynamics that still favour the industry concentration in this continent. Embeddedness affects the whole global production network of fashion design in its different phases. Brands are embedded in their locations, nurturing creativity and design activities through a vibrant local ecosystem. Producers are often also embedded in long trajectories of production and know-how in their territories, although we can also find companies intensive in technology that can adapt to demands and are less dependent on territorial traditions in production.

Third, fashion design generates different forms of labour relations based on employee involvement in different phases. There are two distinct types of labour within the fashion global production network: in Hatch's (2014) words, design-led manufacturing is characterised by synthetic (industrial production) and symbolic (design) labour. Within the former, labour relations are more stable and practice-

oriented, while the latter is more shaped by a rapid turnover and mobility of workers between firms and projects. Thus, while synthetic knowledge is context-specific and occurs primarily between spatially collocated partners, the symbolic value (i.e. aesthetic character) is embedded in a work that belongs to the project-based ecology contended of the creative process (Hatch, 2014). Based on this main division is how we understand the different types of labour that comprise the global production chain of the fashion industry.

Finally, regarding policy, the fashion design industry stands out from other creative industries (CIs) analysed in this project for two reasons. First, it immerses itself in a wider chain involving the clothing industry, one with characteristics regarding tariffs and the concentration of players that shape the trade patterns of fashion companies. Thus, the treatment of fashion goods by the World Trade Organisation (WTO; which considers clothing as a position in itself) is different from the United Nations Conference on Trade and Development (UNCTAD), whose Creative Economy Outlook report leaves behind fashion products and only includes fashion design in a wider category that also adds furniture, jewellery and architecture. Secondly, fashion design is a global CI that produces a huge variety of creative goods in a context without strong intellectual property (IP) laws protection, unlike most other CIs.

The second part of the report analyses three case studies to understand fashion design. To analyse the diversity within existing governance models, we selected three collections: a) a collection of haute couture of a high-end brand, b) a collection from a sustainable fashion brand and c) the first collection developed by emergent designers. The analysis of these three cases is useful to show the strong role of embeddedness in creation, dependent on creative ecosystems and the strong links between creation and production. Nevertheless, production is often delocalised and is developed partially in Asia. Large brands can develop more power over the whole production network, but it is limited to medium-sized and emerging companies, which must negotiate with producers and distributors. Thus, its capacity to influence the network is weaker. The three cases also show that digitalisation and sustainability are two key challenges for the industry, as both elements affect production and the whole process (including creation, distribution, exchange and archiving).

Keywords

fashion design, global production network, governance, embeddedness, knowledge

Introduction

This report aims to discuss the fashion industry as part of the design industry, with a global production network (GPN) perspective to look beyond a single organisation, offering a complex picture of the whole network where different steps are needed in creating fashion goods. This novel approach considers all the elements implicated in the composite process of fashion, encompassing the realm of identity, behaviour and experiences, involving creativity, industrial processes, marketisation and distribution. This approach aligns with the notorious description of fashion as the "outcome of a precarious marriage between the process of creative authorship, technological production, and cultural dissemination, […] fashion as idea, object, and image" (Breward, 2003, p. 15).

Applying this approach is a novelty in the fashion studies debate, although the global production network of the apparel industry has been explored (Gereffi, G., Frederick, S. 2010; Fernandez-Stark, K., Frederick, S., & Gereffi, G. 2011; Bair, J., & Gereffi, G. 2004; Castañeda-Navarrete, J., Hauge, J., & López-Gómez, C. 2021).

Concerning the fashion design industry, long-time academics did not know how to treat fashion. Fashion was regarded as too serious to miss but too superficial to discuss (Bruzzi and Gibson Church, 2000). In the contemporary debate, however, designed fashion has become the subject of many studies in different fields (e.g. cultural sociology, consumption, cultural economics and urban studies). The analyses of the relationships between fashion and society are extremely variegated and overcome disciplinary boundaries among cultural, social and economic categories, combining consumption and production, melting material with symbolic forms. The approach we implemented here allows us to offer a novel contribution to the debate, as the focus is on the relationships among all the different actors involved in the fashion industry.

Today, fashion design is an industry of relevant dimensions, where fashion designers are important public figures, heads of large enterprises and influencers of tastes and behaviours. However, these dimensions are a recent phenomenon. In the past, fashion concerned a sort of artistic-artisan sphere, in which only the upper classes, eccentric people and aristocracy were interested, while other people simply got dressed.

In the 1920s and 1930s, when designed clothing was not yet mass-manufactured, the fashion industry was considered a small-scale luxury craft, requiring minimal investment. Tailors (mostly women) produced clothes based on simple, classical and standardised patterns. However, with the advent of industrialisation, mass culture and mass consumption, designed fashion became attractive and affordable for many people, as style was created on the street among young people and adolescents, and fashion became a real industrial business.

The design, production and commercialisation of clothes soon became a large industry, requiring financial resources and industrialisation. Beginning in the mid-1950s, one of the main changes in the fashion industry was the advent and success of the ready-to-wear (*prêt-à-porter*) lines and the consequent massive industrialisation of the fashion system. The goal was to create fashion, or designed clothes, following the idea of the so-called *haute couture* (made to measure for a single client), emphasising the creative process and the symbolic content of clothes made accessible to a wider public, produced within an industrialised system for many customers in different standard sizes. Ready-to-wear mixed factory and fashion, putting novelty, style and aesthetics on the street (Lipovetsky, 1987). Initially, *prêt-à-porter* companies tried to copy or derive inspiration from high fashion. However, afterwards, they became aware of the necessity to employ a stylist, a fashion designer, to offer a more fashionable, designed and original product. With the introduction of the professional position of the fashion designer, the industrial product changed status and became a fashion product. While initially there was a clear border between high fashion and ready-to-wear, the potential of the latter was soon understood by fashion houses.

In 1959, Pierre Cardin was the first fashion designer to propose both *haute couture* and *prêt-à-porter* collections. He was also the first to open a *prêt-à-porter* shop in Paris, and his example was followed by many. With the establishment of the *prêt-à-porter* in the fashion system, fashion companies tended to expand, employing a growing number of employees in highly complex production networks. A new trend in fashion emerging in the last decades of XXth century was the organisation of production around flexibility and cost savings linked to globalisation and delocalisation of production. This strategy was linked to the production of low-cost fashion items and an increasing number of collections produced in short runs, stimulating demand, hence, outsourcing or subcontracting producing, copying and doing inexpensive versions of designs and trends.

The fashion design industry's importance was also signalled by the European Union's (EU) interest, witnessed by several projects funded by its research programmes. A theme of interest in this respect has been the industry's sustainability. Several recent projects, such as FishSkin, have focused on developing and using new raw materials to enhance the industry's circularity. Sustainability has also been considered socially deepened by the project FReSCH, aiming to investigate a just transition to the low-carbon fashion industry. Other projects have investigated the application of new manufacturing technologies to improve the local economic system.

For example, the Refream project investigated creating a digital technology platform for delivering small series innovative functional garment products through an EU-based local textile supply chain. The EU-funded eTryOn project intended to deepen the role of virtual and augmented reality technology with the potential to create new patterns of human involvement with innovation. In this way, the fashion industry has sought to engage potential customers and transform the design process. Other projects have stressed the role of consumers; for example, the objective of SERVIVE was to develop a platform perfectly connecting markets and consumers to fulfil their requirements.

The CICERONE approach to production networks

The point of departure for the analysis of the Cultural and Creative Sectors (CCS) is the Global Production Network (GPN) approach, which was developed by Neil Coe and Henry Yeung on the basis of the Global Value Chain (GVC) approach (Coe & Yeung, 2015; Kloosterman, Pratt, d'Ovidio, Greco & Borén, 2019). The GPN approach is increasingly used to unravel production networks that involve a complex cross-border spatial division of labour. Such production networks have proliferated across many sectors as a consequence of technological advances in communication and transport as well as due to the liberalisation and deregulation of trade (Kano et al. 2020). These processes have also affected (many) CCSs. However, the GPN approach has rarely been applied to them (Coe, 2015 is an exception). By opting for this innovative approach to the CCS, the CICERONE project generated new insights on its functioning.

In a sense, we have used the GPN method to spatialise. Sociological approaches were already proposed by Howard Becker (Becker, 1982), with his concept of the *art world*, and by Pierre Bourdieu (Bourdieu, 1996), who developed the concept of *field*. Both approaches, the differences between them notwithstanding (Buttero & Crossley, 2011), aim at embedding the process of creation into a broader societal setting and at going beyond the identification of individual genius. When we use the GPN approach, we cannot simply position the CCS in that broad context – we must also highlight its spatial footprint. We thus employ the GPN approach as a tool for analysing a wide variety of production networks in the CCS. In other words, the approach is a heuristic tool that explains how the products of the CCS progress from inception to sale and whether and how they may be preserved for future generations.

On the pages that follow, we first briefly summarise the key elements of the GPN approach that guided our fieldwork. Thereafter, we focus on the process by which we selected the units of analysis for our case studies. This section is followed by an explanation of the manner in which our sample of case studies lays the foundation for a concise typology of the CCS which can be used by policymakers to devise more targeted combinations of interventions to foster economic growth and employment as well as social and cultural diversity.

Key elements of the GPN approach

Phases and the spatial footprint

Evidently, the most obvious feature of the GPN approach is the carving up of the value chain into distinct value-adding stages which can unfold in different locations and which may involve different sets of actors (including other firms). We have inserted the archiving phase into the value-adding stages because many (if not all) of those who participate in cultural and creative endeavours draw on the works of their predecessors in one way or another (Pratt, 1997). Therefore, in the CICERONE project, we, in principle, distinguish between the following stages:

1) Creation (the initial conception of an idea or a set of ideas that define aesthetic quality),
2) Production (the realisation of those ideas through an actual good or service),
3) Distribution (the sale of the good or the presentation of the service in front of an audience),
4) Exchange (the wider setting which enables distribution), and
5) Archiving (the formal preservation of the cultural product).

Creation

It is in this part of the cycle that new ideas, processes or approaches are devised. The notion of "creation", in the sense in which the term is used here, is a social one – what is new is also relational, situated and conditional. Therefore, a "creative process", that is, a method, is involved ("design" is an example). Reference is also made to history and to previous instances of creation (the preceding stage). Sometimes, this is referred to as "ideation", that is, having ideas.

Production

An idea or a creative new thing remains provisional, potential and conditional until it can be stabilised or made. The intervening period is often called the prototype stage. Usually, the product is also developed during the multiple (or mass) production phase. Technology and labour costs, production decisions, and technological and regulatory standards affect costs and potential access to the products. Marketing and advertising are also relevant, but we allocate them to the exchange phase here.

Distribution or circulation

Products, even if they are new and unusual, are unformed and inaccessible unless they can be moved or migrated to markets or audiences. Physical distribution is clearly a key issue for access and reach. The same is true of digital approaches, which may overcome some barriers. Generally, distribution systems (or platforms) are expensive to develop and susceptible to monopoly control.

Exchange

Exchange is the stage at which the product of service engages the audience or customers. It is a critical moment of information exchange, and one in which (e)valuation occurs. That (e)valuation may take forms as varied as market transaction, participation or critique. Values are made and stabilised at this stage. Therefore, marketing and expectation setting provide a link to distribution. In the experience economy, and particularly in the cultural one, the negotiation of value is a critical element of the transaction, and institutions have been developed that normalise it and reduce risks. The engagement of the audience or consumer is also shaped directly by advertising and marketing – to refer to the previous stages once more, the exchange process can determine which products are available for production and distribution.

Archiving

Since cultural value is relational, history and cultural diversity always interact with the present. Moreover, the process of reflection and learning (or that of rejection) is part of the critical appreciation of culture. The archiving of culture creates both normative structures that enable cultural production systems and the disruptive elements that facilitate new approaches. This stage also includes education (of audiences or consumers as well as of creative practitioners), institutions such as universities and media systems, and repositories such as libraries, museums and galleries. It is at this point that heritage is identified and later mobilised via the production system. More generally, archiving constitutes the resource from which new ideas are developed, which refers back to creation.

Source: d'Ovidio et al., 2019

We treat this model of the phases as a *point of departure*, not as a given, and we employ the case studies to explore the extent to which these distinctions may explain production in the CCS. As Throsby (Throsby, 2010, p. 25) observed, in some production processes in the CCS, there is no simple and neat sequence, and "[t]he apparent linearity of the value chain may be replaced, for some cultural products, by something more akin to a value network, where multiple inputs, feedback loops, and a pervasive 'value-creating ecology' replaces a simple stage-wise process". Although he was rightly critical of the slavish application of a value chain approach to the CCS, he also observed that "[f]rom a policy point of view, depicting the cultural production process as a value chain allows an analysis of the effects of policy intervention at various points in the chain. For example, in assessing the impacts of existing policy measures, or in determining the optimal point at which to apply prospective measures, the policy analyst can use the value-chain concept to clarify where the effects of intervention have been or will be felt, and who are the affected stakeholders upstream or downstream from the point of intervention".

It therefore stands to reason that one should start with the conceptual framework of these stages and then determine which phases can be identified as distinct, which boundaries are blurred and which phases overlap or are deeply intertwined. Subsequently, we locate phases or combinations of phases – the spatial footprint – and we identify the parties that are involved. In this manner, we extend our focus beyond creation to include other parts of the input-output structure of the CCS.

Governance

The second element that we derive from the GPN approach and which we use to open the black box of the production network is the concept of governance. The complex global value chains and production networks which have been studied (mostly in manufacturing) typically exhibit asymmetrical power structures, with one lead firm engaging in explicit coordination (Gereffi, 2005). This lead firm may be involved in the production phase (producer-driven chain) or in the distribution phase (buyer-driven chain). If power dynamics are asymmetric and a lead firm takes charge of coordinating the network, it may be inferred that it is capable of forcing the other actors to act in a certain way but also that it can capture much of the value that is created in the network. Similarly to

our approach to the stages, we do not take the existence of a lead firm in the CCS for granted. Instead, we attempt to identify a more explicit hierarchical power distribution or a more dispersed horizontal one. Furthermore, we do not assume that the presence of a lead firm or actor necessarily results in an asymmetrical distribution of (economic) value, and we examine this issue as a research question.

Embeddedness

The third element that we use to understand the production networks of the CCS is that of embeddedness. In his seminal work on the transformation of the British economy in the 19th century, Karl Polanyi (Polanyi, 1957) emphasised the importance of the institutional context in which all economic actions are embedded. In this context, differences in embeddedness affect economic actions, the likelihood of their occurrence, the manner in which they unfold and their consequences (Granovetter, 1985). This view became widespread in economic sociology, organisation studies, strategic management (Smelser & Swedberg, 2005) and, somewhat later, in economic geography. The GPN approach explicitly aims to apply embeddedness to make sense of the spatial footprint of the production network: why are such-and-such activities located in such-and-such places? According to Kleiber and Horner (Kleibert & Horner, 2018), the operations of actors within the same universalistic category of a transnational production system is very much contingent on their embeddedness in a particular society, place and social network. Embeddedness thus becomes crucial for understanding the spatial and social division of labour within a production network. The forms of embeddedness are also critical for the design of effective policies for the CCS (Salder, 2022).

We have adopted the multi-layered approach to embeddedness that Coe and Yeung (2015) proposed. We therefore distinguish between three levels of embeddedness.

i. Societal embeddedness: the influence of institutional contexts on the actions taken by actors in production networks (rules, laws and regulations) which are mainly located at the EU level and the national level.
ii. Territorial embeddedness: the local context of the location where a certain activity takes place, which is closely related to local clusters and ecosystems with distinct sets of agglomeration economies that selectively sustain and foster economic activities (Scott, 2000).
iii. Network embeddedness: the linkages between different actors and the functional and social connectivity of those relationships (e.g. social network relationships based on trust).

As with the phases, the boundaries between these forms of embeddedness are not set in stone. Place-based communities are an essential element of agglomeration economies, but they are also closely linked to social networks. We analyse these levels of embeddedness more comprehensively.

Unit of analysis

The CCS are characterised by their emphasis on unique aesthetic qualities and, importantly, on near-infinite horizonal differentiation (Caves, 2000), volatile (cross-sectoral) cooperation, and, crucially, forms of collaboration that are often ad hoc and usually involve several actors with different skills and functions. Those forms of collaboration often permeate the legal boundaries of firms. This particular way of producing involves, as a result, "complex teams – the motley crew property", as well as "close temporal coordination of their activities" (Caves, 2000, p.8). Watson (Watson, 2012, p. 617) added that "[t]he complexity of the [jointly produced product or service] necessitates the coordination of multidisciplinary skills" and that permanent centralisation is not economically efficient (Lorenzen & Frederiksen, 2005). Production must often be completed under severe time constraints (Hobday, 2000; Staber, 2004) Temporary networks, interpersonal collaboration and projects in the CCS are therefore very much intertwined. As de Klerk (de Klerk, 2015, p. 829) observed, "*[t]he dynamic environment in the industry is mostly project-based… thus often obliging these workers to find alternative employment between projects to optimise their limited work opportunities. Bricolage results from working arrangements structured by festivals or special assignments where creative workers move in and out of networks as they are needed*".

The GPN approach has mainly been used to analyse the large-scale production of goods. Some CCSs, such as parts of the fashion industry, seem to fit this format of production well. However, at least some CCS activities are different from the usual subjects of the GPN literature, which tends to focus on production networks in which large firms manufacture large volumes of standardised goods. In other segments, small firms predominate. Instead of churning out many similar (tangible) products, they focus on creating products, such as goods and services, in small numbers (often just one) that require production networks to be more or less ad hoc. The composition of those networks typically fluctuates. A performance, a song or an album, a painting and the design of a theatre are all unique products which are typically created by such ad hoc production networks that vary from product to product (Power & Hallencreutz, 2002; Power & Jansson, 2004; Pratt, 2006).

It must be noted that projects in some CCSs are less volatile (for example, the spring and summer collection and the autumn and winter collection of a large fashion firm, which may involve the same designers, suppliers and sellers). Therefore, they resemble the type of networks which are prominent in the GPN literature. In other CCSs, such as architectural design or festivals, the composition of the networks is much more variable and contextual, and sequences of projects may have different networks and stakeholders.

In order to cover production networks in the CCS that are volatile and project based, we focus in most case studies on projects as a unit of analysis. This approach is very much in line with the literature on the forms of collaboration in the cultural and creative industries. In more recent economic-geographic studies and in sociological research on CCS, project-based work, which involves a multiplicity of

organisational and personal social networks, is a key component of the analysis (see Watson, 2012 for a very thorough overview). Notably, studies on labour conditions in the CCS have benefited from departing from the project-based approach. The important role of project-based work has been corroborated in many CCSs (de Klerk, 2015).

In the CCS, then, the firm should not be granted a privileged ontological status. Instead, networks should be central. One could even go a step further and conceptualise the firm as a more permanent or sustained project or as a collection of long-term projects (although it is evidently subject to recombination and change) that has been solidified into a legal entity. The temporal dimension of the project and therefore of its network then become a crucial variable for the case studies. This shift evidently dovetails into our GPN approach, which emphasises the role of networks. In the CICERONE project, we conceive of these networks not *a priori* in terms of firms but in terms of interpersonal networks that are organised around a specific project. In *Art Worlds*, Howard Becker also highlighted interpersonal relationships (Becker, 1982). Our focus also allows us to emphasise the role of cultural value, which may trump economic value, and the salience of motives other than profit maximisation, especially in the creation phase. These distinguishing features of the CCS have significant consequences for the functioning of its production networks.

A more practical advantage of circling on specific projects is that it enabled us to select respondents more easily – we could simply focus on those individuals who were involved in a given project. It then also became easier to limit the number of respondents (only project-related key or lead actors or firms, strategic partners, strategic suppliers and key customers) that we had to consider.

Selection of cases

The main purpose of the CICERONE project is to provide a new foundation for CCS policies on the basis of a production network approach that generates novel insights on the functioning of the CCS and its cultural and social impact. Our approach situates the CCS in networks of production that extend far beyond the creation phase. We use case studies to map the configuration of production networks and to analyse relationships between actors in creation, production, distribution, exchange and archiving. The case studies are thus intended to uncover linkages and mechanisms within these production networks and to lay the foundation for more informed policies which not only extend beyond the creation phase but also take spatial footprints and governance structures into account.

Business models within the CCS vary widely. That variance obtains not only across industries but also within them. There are differences in staff numbers, turnover, type of products, barriers to entry, the use of technology, capital needs, end markets and strategies, to name but a few. Networks also differ in terms of power relationships, shape and organisation, and the nature, complexity and geography of their linkages. At present, no data sets cover these characteristics comprehensively. Representative

sampling is certainly not feasible within the timeframe of the CICERONE project. The investigation of the variance in question, accordingly, is a voyage into uncharted waters.

We have therefore opted for a purposive selection of cases, whereby researchers select the units to be sampled on the basis of their knowledge, which in our case is the background research that we conducted prior to the cases studies. The aim of this selection was to include cases which may plausibly be assumed to represent a sufficient range of easily assessable variations in key business model characteristics, notably staffing and turnover. This approach yielded cases that typify a significant proportion of the population of the CCS while also exhibiting sufficient differences to represent its variability (Gerring, 2007). In the case study reports that follow, each case study is positioned within the wider sector.

Typology matrix

While the case studies are intended to present a rich picture of the key mechanisms and the main linkages that show how spatial footprints, governance structures and levels of embeddedness are intertwined in real-life situations, a higher level of abstraction that transcends the study of individual production networks must be accessed if general insights are to be derived. We must simplify characteristics and relationships in order to present a clear narrative for policymakers. The key elements of our approach – spatial footprints, governance structures and multi-layered embeddedness – guided us in reducing the complexity of the case studies so as to distil insights from findings.

The first step is to position concrete cases from the CCS in a simple grid which combines the spatial footprint with the governance structure. The two variables are crucial determinants of societal effects. A completely local production network with a horizontal governance structure and a mainly global and hierarchical network that is coordinated by a lead firm or actor differ starkly in their social, economic and cultural impact and in the policy interventions that they require. Furthermore, if creation is local but production and distribution are global, targeting policy only at the creation phase may have unforeseen consequences for the wider network.

In principle, the typology matrix of production networks distinguishes between different phases. Since these phases may overlap, as is the case of many forms of visual art, they may be merged. For each phase or set of phases, it is possible to determine whether a single actor is in charge of all activities. Different phases may then exhibit different governance structures. It may also be the case that one actor is ultimately in charge of the whole network and is clearly present in the coordination of each phase. Alternatively, a small number of actors may control the network. The typology matrix allows more nuanced representations of this kind. Using this typology matrix enables us to draw cross-sectoral comparisons between cases and therefore to depart from the conventional siloed approaches. We expect that certain combinations will transpire to be much more likely to occur than

others: the likelihood of a small local network having a more horizontal governance structure is evidently much higher that of a complex and truly global network adopting such a form of governance, which requires much more extensive coordination.

CCSs are embedded in multi-layered contexts, which range from the EU and the national level to that of the territorial and social network. Our empirical work shows how these contexts affect individual cases. Cross-case analysis shows how the forms of embeddedness are related to the typology matrix more generally. Power relations, for instance, may also depend on institutional conditions. Those conditions may allow an actor to assume leadership or to take advantage of the network.

This typology matrix (see table 1, next page) is a starting point for an exploration of the potential role of hard policy levers (e.g. tax breaks, subsidies and such like) and soft policy levers (e.g. strengthening the institutional framework, establishing platforms for collaboration, improving education and so on) that various policymakers at different spatial levels may in principle manipulate. Policy makers can use this typology matrix as a tool for assessing the key characteristics of the concrete CCS populations, which may be defined narrowly or widely, whose societal impact they wish to improve. Filling this typology matrix clearly also requires new sets of data which allow the larger CCS populations to be profiled.

The typology matrix is crucial to constructing an overarching narrative that transcends the idiosyncrasies of individual cases. Moreover, it supplies a basis for our policy recommendations, which are phase and location specific and must be sensitive to the organisation of network governance. We strove for high uniformity to enable comparisons. We present a guide to achieving that goal below.

It is often difficult to compress information for a whole production network on the spatial footprint dimension from the outset. Instead, we divide the network into phases and then locate the actors in each phase. This process yields a refined stepwise analysis of the production network. The next step is to summarise the findings for the whole network. Production networks may be local from the creation phase to archiving or global from start to finish. It may also be the case that creation and production are entirely local or regional but distribution and exchange are national or even global. Identifying such spatial footprints would convey important information to policy makers.

Similarly, we adopt a stepwise approach to assessing the organisation of network governance. For each phase, we inquire which actor initiates, organises, monitors and controls activities. It may be that one actor is in charge of the whole network. It may also be the case that two actors are in charge of different phases. A more horizontal governance configuration without clear leading actors is also a possibility. How policies impact production networks depends on their governance configurations. Throwing money at a specific cultural and creative industry which is controlled by a transnational corporation that is located outside the EU would be a different proposition from financing a network in which the leading actor is close to the others, in the same country or even in the same city.

We use the typology matrix to systematise the classification of the cases that we studied. This matrix must be completed by using the actor categories in Table 2 (see next page). We use the labels from Table 2 to ensure consistency.

Table 1. The typology matrix

PRODUCTION NETWORK PHASES	Local/regional	National	Intra-EU	Global	GOVERNANCE
Creation					
Production					
Distribution					
Exchange					
Archiving					
Network level					Lead actor/multiple actors/horizontal

Table 2. Key actors in the production networks

Creators	Actors who participate in the initial creation (individuals, such as writers and musicians, or collectives, such as fashion brands and film crews)
Suppliers (specialised)	Suppliers that provide specialised/dedicated services or products and are hard to replace in the short term
Strategic partners (private sector)	Providers of strategic resources (capital, labour, knowledge and certifications) such as banks, educational institutions, professional associations, tastemakers and critics
Strategic partners (civil society)	Actors that operate at neither the state level nor the market level and which provide essential goods, services or resources (funding, labour, information and certifications)
Strategic partners (public sector, multilevel)	Public sector actors at the level of the EU, the national, the regional or the local government that provide strategic resources (e.g. funding and certifications)
Distributors	Actors (individual or collective) in charge of delivering the good or service to the customer or consumer
Consumers	B2C (business to consumer): final market with large number of buyers
Customer	B2B (business to business): final market, typically with a single buyer (e.g. real estate firm commissioning a design for a building)
Lead actor(s)	Actor(s) who initiates, organises, monitors and controls the activities of the network

Phases

We depart from the GPN approach with its five phases. In many cases, however, the phases overlap, and borders are blurred. Such issues can be addressed easily by merging the cells for phases that overlap or by drawing dotted lines if the phases are distinct but their boundaries are blurred.

The spatial scales

We distinguish between four scales: the local or the regional, the national, the intra-EU and the global. These scales, in principle, correspond to different policymakers and, in many cases, also to different policies (from local policies to provide workspaces through national subsidy programmes to EU competition regulations and trade policies). The anchor point for *the local or regional* scale is the point at which initial creation occurs, that is, the point at which the aesthetic component of the good or service is created. This spatial level may coincide with a particular city, a large metropolitan area or a rural region. The origin of the value chain may be located elsewhere, as in the case of architectural design, a domain in which the customer may be located across the globe. However, our focus here is on the first moves of concrete actors from a specific CCS. We then inquire, for each phase, where the other key actors in the production network are located. The location of an activity is where the actors are from: e.g., flying in a choreographer from Norway and a light engineer from Israel to create a modern dance work in The Hague is still a form of global import.

Governance

Governance pertains to the whole network. We distinguish between three options: a) networks with a lead actor, b) networks with multiple lead actors (not more than 2 or 3) and c) bottom-up horizontal arrangements.

PART 1. The European production network of fashion design: An overview

1.1 Overview of the fashion design industry

1.1.1 Profile of the fashion design industry

The complexity involved in analysing the design GPN, as found in pottery, wood furniture and the automobile industry, suggests the choice of fashion design as the main field of our research, given the selection of case studies. Although fashion design has grown in presence in many other parts of the world, particularly after World War II, its origins are intrinsically connected with Europe. Fashion design was born in Europe and remains a segment of the fashion industry geographically concentrated in this region that provides specific economic, cultural and social factors and dynamics that still favour the industry concentration in this continent. The understanding of the current dynamics of the fashion design network inevitably involves its connection with the fashion industry in its different segments, leading to understanding the dynamics of the different ties in Figure 1 without losing attention to our main object of analysis: the fashion design GPN.

Designed products and services vary from final products to consultancy services. Thus, design companies produce their products or sell their design services to other companies. Moreover, large manufacturing companies can become intensive in design, focused on giving value to products and services through design and branding, while less oriented to production. In terms of services, the industry includes the provision of the overall brand and corporate identity, new product development and the design of specific industrial components. These services are offered to companies in other sectors, but in some cases, the design activity is closely integrated within the industry, which is the case in fashion design, as a part of the overall fashion industry that develops and leads design activities inside the industry.

As previously mentioned, many activities are becoming design-intensive (Reimer, 2009). Nevertheless, there is a wide variation in the design location of firms. For instance, pre-production design processes start with an original idea that leads to a technological innovation where the designing activity is central to the improvement of lowering costs or easing the manufacturing process. In contrast, postproduction design processes and successive re-designs lead from product innovation to the reach of a different market segment of consumers (Walsh, 1996).

This report's analysis of the design industry specifically focuses on fashion design, addressing a sub-field of large vertically integrated companies and specialised small- and medium-sized organisations (SMEs). Therefore, the complexity of the high degree of variation in products, high-end or mass production and services, integrated or outsourced, demands an exploration of the analysis of this industry's production cycle.

1.1.2 Goods and services

"Fashion" is a cross-sector concept applicable to the clothing industry extended to leather goods, shoes, accessories and jewellery. Various competencies are required for manufacturing and distributing these products per their intrinsic structures and natures (e.g. a t-shirt and a gold-diamond bracelet use different materials, manufacturing processes, packaging and delivery requirements). These differences are due to the cross-sector nature of fashion and the social and psychological dimensions of certain fashion products adopted across populations and individuals (Christopher et al., 2004). Indeed, clothing to meet a need and functionality does not reveal an absence of "fashion". Fabric quality, clothing design, accessory presence and material richness have always signalled membership in different social classes (Okonkwo, 2009). In contrast, today's clothing and fashion purchase decisions in developed countries are more based on *want* than *need* (Jones and Hayes, 2002). Consumers desire increasing product variety (Christopher et al., 2004; Priest, 2005), so materials, design and functional innovation have emerged as differentiating aspects within a single-product category (Bruce et al., 2004).

Fashion is a broad term that typically encompasses any product with an element of style that is likely to be short-lived. According to Christopher et al. (2004), fashion products are categorised as follows:

- **Short life cycles** – The product is often ephemeral, designed to capture the mood of the moment. Consequently, the period of saleability is likely short and seasonal, measured in months or weeks.
- **High volatility** – The demand for these products is rarely stable or linear and may be influenced by the vagaries of weather, films or even pop and sports stars.
- **Low predictability** – Due to the volatility of demand, it is extremely difficult to accurately forecast total demand within a period, let alone week-by-week or item-by-item.
- **High-impulse purchasing** – Many consumer buying decisions are made at the point of purchase when the shopper is confronted with the product and is stimulated to buy it, hence, the critical need for "availability".

Chairs, houses, lamps, clothes, books, movies and food continue to be produced in new variants, often with little change in their functional properties. In contrast, fashion goods seek constant renovation. The model of product differentiation stresses that consumers have different tastes, so differentiation attempts to satisfy them all. For these goods, the source of novelty and change for consumers does not lie in the improvement of their functionality but in the formal attributes represented by their design features and connections with other goods (Bianchi, 2002).

Okonkwo (2009: 303) understood fashion as "the fundamental need of man to show his distinction, to be admired, recognised, appreciated, and respected through differentiating himself in most cases with his possessions", an indirect human way of satisfaction that meets the desire of ascertaining to a position in the society. In Okonkwo's analysis of luxury goods, these products grant the functionality of social class differentiation, a dynamic rooted in past civilisations and societies when royals, nobles and aristocrats used ostentatious consumption to affirm their superiority and maintain their distance

from the lesser privileged (Veblen, 1992). Despite its ancient roots, this practice remains a part of today's reality because distinction remains prevalent in all cultures, irrespective of the economic situation (Okonkwo, 2009). The role that novelty and product differentiation play in choice have a social dimension for fashion goods that depends on (a) other people performing the same or a similar choice or action and (b) the short life of the novelty that signals erratic preferences (high volatility; Bianchi, 2002).

Indeed, fashion is a repetitious game. Fashion (e.g. the same set of goods, such as seasonal clothing collections, food and cars) may be fragile and vanish. Nonetheless, they continue to reappear with regularity. The idea of fashion results from the ambivalence to conform and differentiate oneself from others, explaining this feature of repetition. Thus, people continue to adopt socially acceptable or envied behaviours because they cannot escape social influences. The indirect allegedly utility of fashion goods explains how they are chosen: not for themselves but the characteristics we think others attach to them (Bianchi, 2002).

Because differentiation is a key element of fashion design, we find strong segmentation in production, sorted by different categories. The most immediate segmentation criteria, creating a distinction between products on the grounds of price, allows representing the fashion industry as a pyramid split into five price tiers: *couture, ready-to-wear, diffusion, bridge* and *mass* (Bandinelli et al., 2013*).* ***Couture*** (at the top of the pyramid) represents global luxury brands that communicate product quality and value. ***Prêt-à-porter*** focuses on seasonal products, creativity and high prices with product innovation, quality and brand image, including luxury brands independent of fashion that offer classic products and carry-over. In contrast, ***diffusion*** includes industrial brands with features similar to the previous segment, while ***bridge*** products span between mass and diffusion products, with linked features to serve the market at the right time since service level is more important than style. ***Mass*** is the least customised market at the bottom of the pyramid: big volumes and distribution capillarity are the most important characteristics.

Although arrangement and price differentiation are the most evident differentiators, we can find two other ways to categorise segmentation: product end-users and groups of clients. **Product end-users'** criteria for differentiating product categories (e.g. beachwear, external wear and underwear) add a particular "use", which provides information about the values a brand wants to deliver as an intangible added value to the product. The second category is **groups of clients** split into two categories: intermediate clients and end customers. This division relates to whether firms reach their final consumer via a vertically-owned retail store or wholesaler intermediation. Each client segment refers to a different type of product, and product customisation is further divided according to additional segmentation criteria: age, gender, geographical location and psychographic behaviour.

This segmentation affects product development and how fashion design companies organise production. Product development (PD) is defined as designing and engineering products that are serviceable, marketable, manufacturable and profitable. For instance, an apparel product line could contain multiple products or styles, with companies developing several product lines per year. The PD process goes from the designer's idea or the initial design concept to make the product ready for final production. According to Senanayake (2015), the general apparel PD process involves five stages: (1)

line planning and research, (2) design concepts: line concept through research, (3) design development: line development, (4) line presentation and marketing and (5) production planning: pre-production and optimisation. PD is later analysed through the lens of the GPN approach. Here, we want to stress the impact of digitalisation in PD, giving place to new products and services.

First, **digital product development** allows for more personalised services. As in other sectors, more functions in fashion design are expected to become digital, with fewer physical entities such as garment patterns and samples, whether in 2D or 3D. This trend applies to apparel PD and includes pre-production, production and post-production functions in the apparel supply chain. Body-scanning technology is ready to be commercially used for apparel PD today. This technology, combined with others, can develop a digital fit model, which can be draped using electronically sewn, digitally decorated garment patterns (from digital libraries) to create digital samples for virtual-fit visualisation and fit decisions. This virtual prototyping capability has been enhanced with technology to create a digital fit model or the fit model avatar to be animated, simulating various realistic activities and poses (e.g., cycling when developing bike shorts or sitting when developing dress pants). Indeed, several apparel companies have reduced the number of physical samples by adopting virtual prototyping.

Second, **digital fabric performance** allows for simulating wearing specific fabrics. Digital fabric libraries with fabric parameters to simulate true-to-life fabric drape still rely on product developers with a good idea of how most common fabrics behave while wearing them. However, if it is a new fabric, many tests are required, with the data incorporated into the libraries before that fabric can realistically be digitally draped for virtual prototyping.

Finally, **digital fabric** printing allows for easing prototyping. Thus, companies could use digitally printed sample yardage to replace the expensive sample yardage development process, which has a long lead time. For example, if a yarn-dyed fabric needs to be developed, rather than going through an expensive physical yarn and fabric development process, one can digitally print multiple yarn-dyed fabric effects on white fabric and use them for the sampling process. Once the exact yarn-dyed fabric effect is approved, the physical sample development process can be started.

In summary, fashion design has a strong differentiation of products, short life cycles and volatility. Digitalisation is generating new forms to approach PD to personalise fashion design products, making production and innovation easier. Moreover, pressures for sustainability are bringing innovation into developing new services and products, including new business models and production parameters. Nevertheless, innovations in PD and services are enmeshed in specific institutional contexts. Considering the GPN approach, we must examine different phases and how they are embedded into certain territories and productive traditions. Furthermore, we must investigate the embeddedness of different actors in their institutional contexts and within the rest of the network.

1.1.3 Labour

Two labour types exist in the fashion GPN. In Hatch's (2014) words, design-led manufacturing is characterised by the *synthetic* (industrial production) and the *symbolic* (design). Within the former,

labour relations are more stable and practice-oriented, while the latter is shaped by a rapid turnover and the mobility of workers between firms and projects. Thus, while synthetic knowledge is context-specific and occurs primarily between spatially collocated partners, the symbolic value (i.e. aesthetic character) is embedded in a work that belongs to the project-based ecology of the creative process (Hatch, 2014). This main division is how we understand the different types of labour that comprise the global production chain of the fashion industry.

The study of labour in the fashion industry becomes a cross-sector concept that encompasses several activities: those related to fashion design (creation), those related to apparel manufacturing (production), those connected to the fashion business (distribution and exhibition) and those connected to the art collection of fashion (archiving).

As globalisation has progressed, world economic geographies have shifted in many low-capital and labour-intensive industries like apparel. Historically, most European clothing production was located in the leading European economies: France, Germany, Italy and the UK. However, during the past four decades, the clothing industries of these countries have experienced massive declines and restructuring, partly due to the rise of the low-cost Asian producers (Dicken, 2011). The textile and clothing industry has certainly been one of the most dynamic and geographically mobile industries, often seen as an archetype of supply chain and production flexibility (Pickles & Smith, 2011). Here, the global dimension of fashion is not something new. Fashion and clothing industries have always been part of global processes characterised by importing raw materials and circling fashions and aesthetic repertoires (Mensitieri, 2018).

Due to the relocation of capital and production beginning in the 1970s, the breaking of hegemonic centres of the planet has ensured the powerful and globally branched industry that fashion is today. Indeed, the delocalisation of production has been a strategy central to labour-intensive industries such as clothing for many years. In the late 1970s, the fashion industry pioneered the so-called “new international division of labour” with widespread international subcontracting of low-skilled, low-wage production in the world periphery while simultaneously intensifying advanced design and production activities in core countries (Scott, 2006). These core competencies (e.g. product design, network coordination, brand ownership, fabric research and development) are assumed to be spatially inflexible and tied to human capital resources and knowledge networks (Rantisi, 2004).

In Europe, the adoption of global sourcing and production strategies by clothing firms has been led by German and British companies. In the 1970s, approximately 70% of the (then West) German clothing firms were involved in offshore production (Dicken, 2011: 318). In contrast, until recently, Italian firms were the major exception to this strong production shift to low-cost foreign locations by European firms. The best-known Italian company to have developed an especially distinctive strategy is Benetton. While most European firms shifted much of their production to Asia, most of Benetton’s garments were still manufactured in Europe until the first decade of the 2000s, in an arrangement that included approximately 5,000 subcontractors mostly located in the Veneto region of Northeastern Italy. Moreover, East-Central European and Mediterranean producers were an important source in the EU apparel market during the 1990s as their closeness allowed an easier control over production, costs and timing. Thus, supplier firms from these regions gained more

competence in manufacturing high-quality garments while showing the necessary flexibility and high speeds that the industry demands (Tokatli, 2007).

Labour, fast fashion and the new retailer

The fast-fashion business model associated with these retailers involves stocking inexpensive fashion items in limited quantities, encouraging customers to increase their frequent store visits and purchases. The increase in the number of seasons and the strategy of spotting trends and copying have allowed retailers to gain cost savings and the necessary flexibility to meet productivity variability. The success of this strategy has been predicated upon a more thorough understanding of consumer mass markets and the ability to offer inexpensive, value-added items (Taplin 2006). Only a few of these retail chains have been garment manufacturers, as the most common practice has been subcontracting and outsourcing arrangements (Dicken, 2011).

Thus, the industry's traditional model had to adjust to faster-changing fashion trends, shorter product life cycles, fierce competition from low labour-cost countries and the stellar growth of emerging markets in a race where the most common response was adopting global production and supply networks (Macchion et al., 2015). In the new system, deliveries of new and replenishment items were quite frequent, based on real-time sales information (Figure 3). In this context, the large retailer firms could exert greater buying power in the global networks (Taplin 2006), which Gereffi (1996) defined as a "buyer-driven chain", where retailers (the buyers) impose their bargaining power in production networks to demand flexibility and low costs from suppliers. This power asymmetry influences the manufacturers' capacity to negotiate, leaving them little leverage over the contract terms and enduring price pressures, directly compromising worker wages.

Thus, although the fashion industry is fragmented, with many small firms operating with subcontractors within different integration scales, there is an undoubted trend towards increasing concentration. Therefore, according to Dicken (2011), the broad categories of clothing companies can be identified as follows:

- **Producers of basic goods** for large markets utilize economies of scale to lower costs and be price-competitive.
- **Operators of small workshops,** often in the form of large-city sweatshops, use immigrant and sometimes undocumented labour as short-term subcontractors producing lower-quality garments.
- **"Factory-less" firms** organise entire systems of garments production, and these international *retail chains* and *buying groups* exert enormous purchasing power and leverage over clothing manufacturers.
- **Large-scale integrated firms**, particularly in East Asia, produce for several leading retailers in the fashion industry.

Each pattern has direct implications for labour terms and conditions. Thus, the next section expands on this topic, stressing the complexity of the different types of labour that conform to the fashion of the GPN.

Creative labour and labour conditions

Creative labour (the CI workforce) has much in common with the demands of modern capitalism: extreme flexibility, autonomy and tolerance to inequality. In the new economy, the mass workers of the Fordist era were replaced by dispersed, fragmented and individualised workers, now part of a decentralised and transnational production regime (Gill and Pratt, 2008). In this context, CI workers emerged as the poster children of these demands, representing current labour transformations more than other groups. The figure of the creative worker, as an example of "model entrepreneurs" by industry and governments, is conjured as representative of the "brave new world of work" willing to solely carry risks and responsibilities, which, for some, has become the new face of neoliberal entrepreneurship (Ross, 2009).

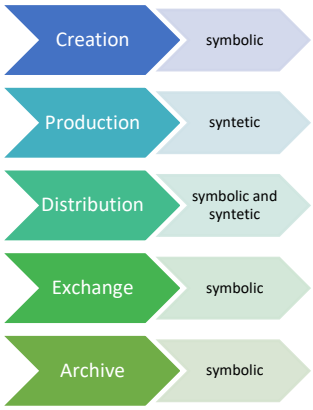
As Mensitieri (2018) argued, the fashion industry is not some outlier of or an exception to the CIs, sitting in the centre of contemporary, neoliberal, globalised capitalism and its labour reforms. According to Mensitieri's (2018) study of the French *haute couture* segment, the industry's normalisation of precarity as the "small price to pay" for getting to do "meaningful, creative work" is a sustainable practice. For its part, Arvidsson et al.'s (2010: 295) exploration of the labour conditions of the Milan fashion labour arrived at similar conclusions, highlighting how "workers in the Milan fashion industry are generally underpaid and overworked".

The vulnerable position where creative workers stand is a consequence of the "huge" reservoir of young who are willing to work for free to succeed in their aspiring creative field – an argument that can singly explain low wages as an oversupply in the market terms (McRobbie, 2016). Interns in the fashion industry are expected to work without compensation for up to one year or more, whereas the promotion to "regular" employees may not see a change in the conditions (Arvidsson et al. 2010).

For Mensitieri (2018), in her luxury sector study, workers are paid in "prestige". Indeed, the more a job is considered a prestigious and rewarding career, the less it is paid (Mensitieri, 2018). According to her study in the French luxury sector, workers are usually paid in "perks" or discounts instead of cash. Wearing luxury brands gives fashion workers credibility in the field, although it does not put food on the table. "Through 'perks' and 'extra-monetary' compensation, employers offer workers 'symbolic capital' instead of 'economic capital'" (Murphy, 2019: 486).

Income within the creative sector is unequally distributed, and there are no standard salaries for different job categories and fashion experience levels. Creative workers' wages tend to skew to small groups at the top of the pyramid who sustain structural inequalities. Although a substantial number of workers in the multi-billion-dollar French fashion industry often make minimum wage, "the money is there, but it is poorly distributed. It's always in the same hands" (Mensitieri in Murphy 2019: 487). Thus, the following scheme identifies the overrepresentation of each in the GPN phases considering the distinction between workers contributing to the production (synthetic) and those contributing to the design (symbolic).

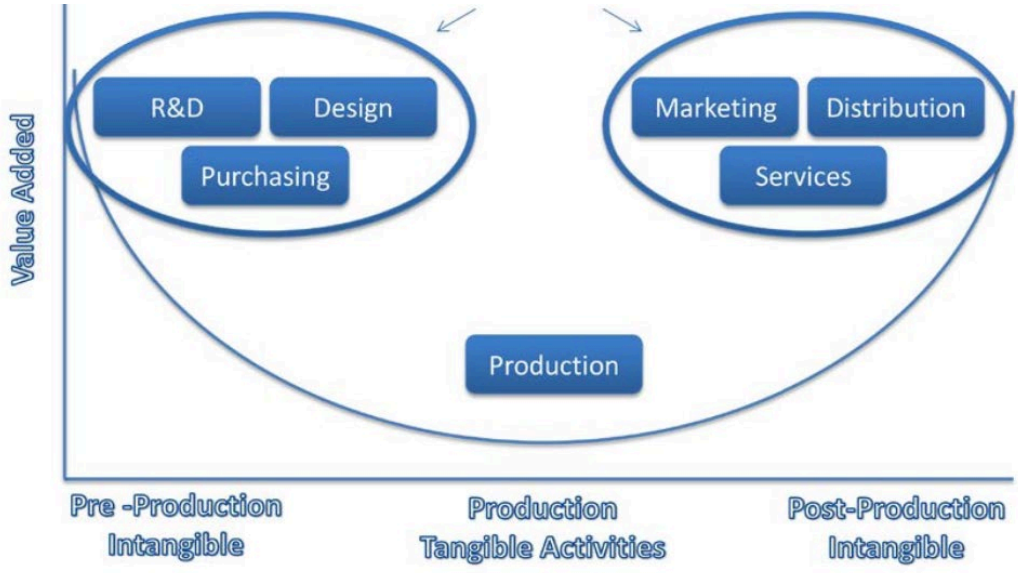
Figure 1. Typology of labour per GPN phase



Source: Own elaboration

Unsurprisingly, this correlates to the "smiley curve" of added value used to describe many (creative) industries, including fashion (see Figure 2 below). What this smiley curve adds to our GPN symbolic-synthetic typology of work in the fashion industry is the idea that symbolic jobs add more value to the final products and, therefore, require higher wages. Moreover, in terms of geographic allocation and according to the report of the ILO (2017), the distribution of added value across the global apparel value chain continues to be skewed towards OECD economies, with pre- and post-manufacturing services capturing more gain than actual manufacturing (Fredericks 2010 in ILO 2017). "Structurally speaking, apparel exporting countries [producers] are 'locked in' at the foot of this curve and locked out of those downstream parts of the industry which generate higher rents". (ILO, 2017). Thus, aligned with the before mentioned new international division of labour, the discussion of added value is connected to the geographic location and the costs of the factors of production.

Figure 2. Curve of added value in the apparel supply chain



Source: ILO 2017

Structural inequalities mark the fashion industry, and its workers are disproportionally impacted. Furthermore, there is precarity all along the fashion GPN that presents in different forms. According to Brydges and Hanlon (2020), these inequalities have been reinforced with the current COVID-19 crisis. Many brands have cancelled orders from their manufacturers, leaving workers who were already in a vulnerable occupational danger unpaid. Brydges and Hanlon (2020) stated that COVID-19 highlighted the fashion labour geographic asymmetries, making it clear who is considered part of the "team", the "visible" workers such as retail employees (and we add all those others in the symbolic phases of the chain) worthy of support or protection, and other workers who are not part of the "team", the "invisible" workers, such as garment factory workers and home workers. However, even understanding the existence of this structural inequality, the precariousness in the GPN of fashion is not limited to these production sectors. As we have seen, many workers in the creative industries also suffer from situations of job insecurity for different reasons, reinforced by the system dynamics. In this context, reflecting on the power imbalances across the fashion GPN is crucial as it is listening to the silent voices of workers acknowledging their complexity all along the global fashion supply chain.

1.1.4 Embeddedness

Embeddedness is a useful concept to analyse economic activities not as isolated from the rest of social life but enmeshed in complex economic and non-economic relations. From the GPN perspective, embeddedness is related to the network's spatial patterns, which are key to understanding why certain parts of the network are located in certain places and how the network is organised, connected to the question of "where" the value (i.e. creation, enhancement and capture) is allocated according to Coe and Yeung (2015). These authors defined three types of embeddedness framing production networks: societal, territorial and network embeddedness. The first refers to historical roots and societal values existing in certain places, generating informal norms, tacit knowledge and work culture around production. The second refers to regulations, formal rules and institutional supports available for different actors. Finally, network embeddedness refers to how actors are connected to other actors in the same place and other places, focusing on the type of relationship and connection.

From a GPN perspective, many fashion brands are strongly embedded in territorial and societal dimensions in specific places. Moreover, they produce and distribute globally. Their **societal and territorial embeddedness** can be understood by looking at cities' and countries' long trajectories and historical development paths. During industrialisation, only some cities have gone from places of material manufacture to sites of immaterial production (d'Ovidio 2016), becoming established centres of fashion, or fashion cities, benefiting from *path dependency* that provides a mixture of social, cultural, institutional and historical dynamics at the beginning of the fashion industry process (Godart, 2014). In this context, fashion brands rely on local networks composed of fashion designers, companies, artists and other creative people, including local shops and small producers in other sectors, contributing to the exchange of knowledge. As in many other creative industries, fashion designers nourish themselves from this fertile soil outside the company and other employees (d'Ovidio, 2016).

The symbolic value that cities like Paris, New York, Milan and London hold in the fashion industry is the product of creative buzz and a matter of socio-institutional aspects underpinning these clusters. Thus, territorial embeddedness plays a key role. As global centres for fashion and design, these cities have retained (or gained) the ability to offer actors an attractive set of institutions and channels for brand negotiation and communication of immaterial value (Jansson and Power, 2010). As the first fashion capital, Paris offered the fashion industry a unique concentration of powers (cultural, economic and political) that combined with the evolution of certain industrial dynamics, such as the location of large luxury fashion groups (e.g. LVMH), and the presence of global events (e.g. fashion shows and the Premiere Vision fair) to build a unique symbolic code for describing this fashion capital societal embeddedness. Since the last half of the 20th century, Paris is no longer the only city associated with the concept of a fashion capital. Although there is no formal definition, scholars and the industry have granted the title to London, Milan, New York and, of course, Paris, defining what Godart (2014) called the "fashion oligarchy". The importance of these places lies in their central role in the global collective representation of the power structure of fashion.

The case of Milan presents a set of factors that led the city to become a fashion capital. Italy had always been a luxury and fashion design reference, with many cities like Rome, Venice and Florence as notable centres of action. The textile industry was an important part of the reconstruction of post-war Italy. Artisans specialising in clothing, leather, shoes and luxury goods demanded by the local elite contributed to the shape of the Italian brands still present today.

This scenario differs significantly from Paris, New York and London, as, unlike them, the Italian case presented an *inter-urban* model illustrated by the dynamics of conflicts and cooperation between the different regions within the same country (Godart, 2014). According to Godart (2014), the industrial infrastructure and the strategy developed by the Milanese industrial actors were key to the city's success in fashion. For Jansson and Power (2010), Milan's positioning as a fashion capital is connected to textile industrial agglomeration in its region, the headquarters of some of the biggest multinationals and the city's reputation and branding.

On the contrary, other examples of failed fashion capitals illustrate how different combinations of socio-cultural-historic and institutional factors have resulted in different dynamics. The Spanish case is a good example, which offers similar points of comparison with the Italian case, with more than one city in the race. After World War II, Spanish *haute couture* collections were as equally trendsetting as the Italians'. At the time, two Spanish cities competed for the leading post: Madrid and Barcelona. Although both cities were recognised as global capitals, neither was a fashion capital. The hypothesis that Godart (2014) presented points to Franco's regime and his insistence on developing a "national" style in fashion, refusing the industry to external influences limiting its global network expansion and mutual exchange.

Moreover, the exile during and after the Spanish Civil War (1936–1939) reinforced the role of Paris as a fashion capital, attracting young Spanish designers such as Balenciaga. As previously mentioned, a relevant factor was the connection between local production and craft tradition on one side and internationalisation on the other. However, Barcelona was the opposite; it was a textile production

capital but never reached internationalisation. The city never developed into a "fashion design" capital as others did, mainly Paris.

Embeddedness plays a key role in design differentiation, providing specific cultural values to products while reinforcing the reputation and recognition of the brand and its location of origin. Knowledge communities' aesthetics and symbolic values are usually space-sensitive and increasingly encapsulated in brands. Hence, fashion knowledge is embedded in place through buzz, tacit knowledge, localised dress practices and material objects, but this knowledge is also somewhat placeless, taken as assets owned by firms. Thus, firms' societal embeddedness can be attributed, per Hess (2004), as the genetic code of the organisation generated by the background (cultural, political, historical and institutional) that shapes the dynamics in the home market. In global firms, this role of embeddedness is combined with efforts to adjust to the culture of host markets to understand the embeddedness features of the new place without losing their brand identities. The interesting aspect of this embeddedness study is its dynamic approach: it remarks on the need for a firm's flexibility, materialised in its awareness of cultural differences, with a firm's capability to transfer the essence of its brand as both ways facilitate societal embeddedness (Frasquet et al., 2018).

From the GPN perspective, **territorial embeddedness** is relevant in the network configuration, as local and national regulations affect different parts of the production network. Brands try to embed certain activities in specific territories, for instance, the creation of store networks for distribution or the allocation of certain production, partly depending on regulations and institutional support affecting costs. Nevertheless, the sustained global growth of the fashion industry often leans towards low sunk costs at the point of entry into international markets. Hence, fashion retailers typically leverage a more standardised and transferable international brand resulting in centralised (rather than localised) sourcing, modest expenses related to distribution and logistical infrastructure, and leased (rather than owned) store networks (Burt, Johansson, and Dawson, 2016). Notably, fashion retailing requires markedly less investment in store networks due to their leasehold nature and reduced focus on local or regional product sourcing due to relying on global supply chains, albeit with moderation in geographic proximity to achieve acceptable delivery times (Tokatli, 2015). Investment in territorial embeddedness (e.g. decentralised physical distribution facilities, the development of subsidiary country office functions and attempts at localised pricing and product ranging) is indicative of a firm's mature internationalisation phase with high levels of commitment in line with the opportunities of latent demand. It requires a high level of adaptability to adjust to the local cultural norms while preserving fashion brand identity (Frasquet et al., 2018).

The fashion retail internationalisation practices evidence a growing concern with territorial embeddedness leading to greater engagement with and response to the heterogeneous requirements of national markets and wider supranational regions (Wood et al., 2019). Increasing localised engagement is identified in the experience's dynamic process, which usually starts with exploring the online potential to partial investment in territorial embeddedness through limited host-market infrastructure. This experience is becoming apparent, particularly in developing distribution centres closer to key markets and understanding the importance of influencing local fashion trends. For the latter, social media channels, even more than marketing departments, are becoming increasingly important for influencing local fashion buzz as today, influencers and consumers are key opinion-

formers in the fashion world. This shift increasingly shows the limitations of administering retail marketing solely from a virtual network located in the home market and hence the difficulty of achieving the necessary local-based buzz and generation of network embeddedness in key host markets (Wood et al., 2019).

Finally, concerning **network embeddedness**, fashion design shows a variety of models according to the intensity of design and the centrality of territorial and spatial embeddedness. Network embeddedness is related to the issues of connectivity, referring to the architecture, durability and stability of the actors' relationships (the "nodes" in our GPN approach), established formally and informally (Hess, 2004; CICERONE D.1.3). These relationships can be approached as a specific actor's network (the relational aspect) or taking the structure and evolution of the network (the structural aspect), referencing actors' relations as inter-firm, intra-firm or extra-firm (e.g. governments, education institutions and NGOs). Network embeddedness is a process of trust-building between network agents.

The CCI fields are mostly dominated by project-based activities, which may lead to a priori thinking in a constant formation of temporary networks with short-term collaborative relationships. The fashion industry offers a good context for analysing these dynamics. The fashion industry network sits in machinery producing retail consumer goods with a well-established global production chain commonly defined as a "supplier-dominated" sector. Nevertheless, recent years have seen a change in the industry with a spread of business models where large segments of the industry have developed the ability to respond rapidly to trends (fast fashion), offering new collections more frequently. Such trends are linked to the growing need to be closer to the final markets and open new stores to expand the network.

The changes over time in the spatial configurations of network relationships are explained throughout the network embeddedness: 1) because the network of sales points in many socio-economic spaces and the requirements to control this spatially disaggregated network occurs due to the actor's inter- and intra-firm connections, 2) because the local nature of consumer-retailer relationships and the globalisation of supply chains and sourcing requires a fashion firm to "be everywhere", with the necessary connections to use widely diffused but centrally controlled branding and 3) because frequent non-tariff barriers and market imperfections and the strong link of retail firms into local, regional and national political economies (previous documents) also demand embedded connections to overcome the distances (i.e. the difficulties of the non-locality; Frasquet et al. 2018).

Historically, textile and fashion activities have tended to agglomerate in industrial districts considered crucial to creating new contacts and remaining on top of the most recent fashion trends. With the evolution of the industry and the internationalisation of its supply chain, the new fast-fashion model seems less dependent on locally-based networks than globally-oriented ones. Therefore, developing interactive relationships between actors located in different places can reduce the perceived distance. These networks of connections are undoubtedly dynamic. The interaction process that a fashion firm can develop over time with its suppliers may generate greater knowledge about the suppliers' market, opening the possibility for the firm to open stores while reducing the distances.

The role of intermediaries is extremely important as the “gatekeeper” nodes that connect different contexts. Indeed, the gatekeeper can reduce the spatial distance while fostering “unlearning” by reducing the acquisition of knowledge about the new context. In general, the role of gatekeeper is a product of interactions over the years, and it is part of firms’ abilities to understand which network actors represent this important node.

The parties that constitute the network of relations are aware of each other and attempt to understand and influence each other. Interaction can be viewed as a “dialectic process”: a two-way path that crosses organisational boundaries and creates new solutions and ties between two parties, where each party is any actor, from an individual to an entire organisation (Håkansson & Ford, 2002). These interactions with other actors lead companies to develop specific resources related to the characteristics of the actor with whom they interact. According to Frasquet et al. (2018), the channel management department has a central role in architectural building relations. Fashion retailers use multiple channels at home and abroad with direct and indirect connections that differ according to the entry mode (wholesale, licensing, franchising or retailing), directly influencing the type of relationship. Hermanson et al. (2018) analysed the evolution of the network embeddedness of two types of fashion entrepreneurs: one experienced and one new to the industry. Although the connections were important for both, how the experienced entrepreneurs benefitted from pre-existing ties and their established brand and reputation was clear. Nevertheless, in conquering a new market, they were also bound to search for new contacts, the difference being that their old contacts could help them make new contacts.

To conclude, embeddedness, with its societal, territorial and network dimensions, affects fashion design’s whole global production network in its different phases. Brands are embedded in their locations, which nurture creativity and design activities through a vibrant local ecosystem. Producers are often also embedded in long trajectories of production and know-how in their territories, although we can also find companies intensive in technology that can adapt to demands and are less dependent on territorial traditions in production.

Different regulations and institutional supports play a role in the production organisation as they set the scene for relationships between suppliers and brands. Exchange activities are often embedded in specific local ecosystems, the most important being fashion capitals such as Paris or Milan. Catwalks are a case in point, but there is also a less territorial dimension of exchange in specialised magazines and social media. Although distribution can be perceived as disembedded, it is strongly affected by different cultural values, consumption patterns and regulations. Finally, archiving is often accomplished by the brand and specialised institutions with a territorial base, for instance, the design hub in Barcelona.

1.1.5 Policy

The fashion design industry stands out from other CI analysed in this project for two reasons. First, it immerses itself in a wider chain involving the clothing industry, one with characteristics regarding

tariffs and the concentration of players that shape the trade patterns of fashion companies. Hence, different is the treatment of fashion goods taken by the World Trade Organisation (WTO; which considers clothing as a position in itself) from the United Nations Conference on Trade and Development (UNCTAD), which in its Creative Economy Outlook report omitted fashion products and only included fashion design in a wider category with furniture, jewellery and architecture. Secondly, fashion design is a global creative industry that produces a huge variety of creative goods in a context without strong intellectual property (IP) laws protection, unlike most other CIs.

Departing from the previously established idea that the creative economy is a unique case of organisational forms, incentives and responses, the regulatory framework of the fashion design industry is a reaffirmation of that statement. Thus, three areas are identified to explore the institutional environment of this industry: international trade regulations and tariffs, IP legislation and institutional policy support from national and regional levels.

Trade dynamics

Fashion design is inherently sensitive to the policies and politics that shape cross-border trade in the clothing industry. While fashion companies are strongly affected by tariffs on international arrangements as one of the highest rates in manufactured goods (Lu, 2019), trade arrangements and tensions between the largest economies and key players (i.e. the US, China and Europe) also shape the dynamics of sourcing and pricing. Moreover, while price competition remains an essential strategy of the apparel business, especially for those targeting the mass market, major attention goes to the production network's costs and geography. Hence, production factors (labour, materials) are determinants, while tariff barriers are key in the conformation of the global chain. Tariff-setting responds to a combination of economic, social and political decisions but functions as a tax that governments apply as a protectionist tool for their domestic markets. Interestingly, while the tariff rates worldwide have declined over the last decades, the clothing industry has remained "protectionist". According to the WTO, in 2018, while the world's average tariff rate for all manufactured goods was approximately 8.8%, apparel products paid a tariff almost twice as high, at a 17% worldwide average rate.

Between the top three world clothing importers (the EU, the US and Japan), the concentration of the global share of imports rose to 61% in 2018. In the same year in the US, the fashion industry accounted for 6% of the imports, but it represented over 40% of the total tariff revenues collected by US Customs, showing the critical position of the industry in this matter (McKinsey, 2019). Unsurprisingly, the world's top apparel importers, the EU and Japan, applied similarly higher tariffs for apparel goods over the average of the other manufactured goods. Remarkably, the bill paid by importing fashion companies is later translated to the price consumers pay, directly affecting companies' marketing strategies. Special attention goes to the US-China tariff war because they represent the first top importer and exporter of world apparel, respectively. The trade war between these two countries, which has escalated since 2016, threatens the world's economy and is the biggest concern of fashion company executives (McKinsey, 2019).

Despite the general trade tensions gravitating mainly around the US, there are also positive dynamics on the global scale with new international agreements and trading routes. Many fashion companies

in the EU and Japan are benefiting from sourcing duty-free from the countries' top clothing producer bases. Thus, the world's top clothing exporters and importers are moving forward in negotiating trade agreements, except for the US. In addition, South-South trade seems to also present rising dynamics, with agreements between Asia and South America and positive future expectations through 2030.

A final note goes to the impact of Brexit on the industry. Due to the high reliance on international talent, raw materials from abroad and exports-oriented players (63% of clothing designers and 55% of UK-based luxury goods makers are export-dependent), the apparel and footwear industry is expected to be strongly affected. The general understanding of the industry agents is that Brexit will be bad for fashion in both the UK and EU on a commercial level and in the labour market (10,000 EU citizens are employed in the UK fashion industry; McKinsey, 2019).

Intellectual property rights

Copyrights, trademarks and patents shape a protected institutional framework for content creation in the cultural sector. Fashion design seems to be the exception, as design copying is ubiquitous in the industry. Copying seems to be an essential element of the fashion industry innovation cycle, what Raustiala and Sprigman (2006) call the "piracy paradox".

While commonly extended today, design copying has long been a widespread practice in the fashion industry. Despite the rapid expansion of IP laws in the last decades, especially concerning cultural goods and services, the fashion industry operates in a "low-IP equilibrium". Hence, fashion activity operates in a low legal protection framework while sustaining political stability. Two characteristics of the fashion industry may explain why this stability persists. The first relates to the association of fashion with "status" goods and their effect on the turnover speed or "induced obsolesce". The second relates to the existence of trends.

The first idea connects with how design is typically allocated in the industry: from a reduced *haute couture*, high-designed, expensive segment to a basic commodity with low-designed, low-price apparel. This association of high design as a status symbol fuels the cycle's dynamics. When an *haute couture* design is copied and mass-produced, its diffusion directly erodes its status position, leading status-seekers to find new designs to distinguish themselves from what the masses wear until these new designs are again copied, and the cycle begins again. Thus, the fashion cycle would be impossible if copying were illegal. The faster fast-fashion companies are to copy, the faster early adopters search for newly designed fashion goods. The rapid obsolescence of fashion designs combined with a low-IP regime grants the rapid, profitable turnover that all the players in the industry seek (Raustiala & Sprigman, 2006).

The different phases across the production network follow trends. Hence, fashion content creation rests on a definable trend that emerges to distinguish a particular season style due to forecasting by designers, fashion magazines, dedicated fashion intermediaries, the online press and social media influencers (Blaszczyk & Wubs, 2018). This dynamic is possible due to a continuous process of copying, referencing and receiving inputs from consultants with widespread international and transnational cultural encounters. Copying helps to create and accelerate trends only possible in a low-IP institutional framework.

The so-called “democratization of fashion” that occurred over the last half of the 20th century could be posited as challenging this top-down design approach. Nowadays, trends rise from the streets, not only from the high-end designers’ houses, and intermediaries and forecasters have acquired a highly relevant role in the distribution segment. Nevertheless, wherever trends come from, the low-IP legal scheme in the industry enables emerging trends to develop and diffuse rapidly, allowing for “creative destruction”. Ultimately, this process reflects the fashion industry at the heart of commercial society, constantly producing new styles and goods that consumers purchase well beyond their necessity.

Institutional policy support

The EU has established a robust line of policy actions as incentives for fashion design firms. The Commission Communication of 2012, “Promoting cultural and creative sectors for growth and jobs in the EU”, recognised that CCSs were a largely untapped resource for jobs and growth in the EU. Two staff working documents were published in parallel to the Communication, paving the way for industry consultations, resulting in an “Action Plan for Fashion and High-end Industries” that outlined progress in key areas and proposed further initiatives to boost growth and create more jobs.[1]

The action plan document acknowledged the importance of the fashion industry as one of the “most vibrant and creative sectors in Europe” and developed initiatives aiming at helping mostly high-end fashion SMEs access finance and innovation. Issues regarding copyrights were also considered but mostly to protect firms from the challenges of fake goods. The plan outlined the following actions:

- Anticipating skills and needs while promoting cooperation between industry and vocational and educational training
- Raising awareness of young people about career opportunities in the fashion and high-end industries
- Supporting information communication technology (ICT) innovative solutions
- Fostering creativity, leading to new products, materials, processes and business models
- Supporting the development of clusters
- Fighting against counterfeiting
- Strengthening SME support for protecting their intellectual property rights (IPR) and internationalisation
- Improving access to finance
- Strengthening regulatory and industrial policy dialogues with key trade partners
- Assessing the feasibility of leather labelling
- Promoting synergies with tourism

Thus, different actors are involved in developing policy programmes to foster the clustering of firms and generate local environments to strengthen fashion design. These policies are often supported through public-private partnerships and the development of strategic plans and initiatives. Other institutional actors’ roles in such policies are key, including design schools, producers’ associations

[1] Available at http://ec.europa.eu/DocsRoom/documents/4154/attachments/1/translations

and design clusters. These policy initiatives include support for emerging companies in consolidation and internationalisation, digitalisation, the organisation of events and promotion. Thus, these policy approaches are relevant in different phases of the production network, including creation (fostering local environments), distribution (fostering internationalisation and creating digital distribution platforms) and exchange (e.g. fostering knowledge transfer between brands and promoting catwalks). Production can also be tackled through efforts on clustering and production modernisation of textile companies.

To conclude, an evolving institutional structure of trade rules and regulations with escalating trade tensions are forcing international brands to rethink their production and distribution strategies. The benefit of countries involved in newly negotiated trade agreements may continue to shape where fashion firms locate their production and how that may differ in the various fashion segments. Fast fashion, which depends on short lead times, will need to find new strategies to maintain delivery speed and production quality, for example, through near-shoring or on-shoring. Moreover, tough commercial decisions will be required in the face of potential rising tariffs in key consumer markets. In contrast, luxury players, especially those that derive most of their income from China or the US, may be required to choose between raising prices or managing squeezed margins. Finally, a further increase in South-South trade, especially between emerging APAC countries, seems quite likely but still leaves an open question of how it may change the strategy of the biggest players.

1.2 Production network configuration of the fashion design industry

1.2.1 Input-output structure

The fashion design production cycle revolves around various phases and involves several actors. This section describes the different phases, summarised in Figure 3 (see page 41).

Creation

Design is creation. Every fashion firm has a design department. However, its relevance varies according to the fashion segment we refer to. In fashion design companies, the first step in design is often the analysis of the targeted consumer. The design process is influenced by the work of other renowned designers who present their collections in cities like Paris, Milan and New York or by trade shows of the previous seasons. Some apparel companies also use fashion-consulting services, which go out into the streets to discover emerging styles (Sen, 2007): "trend-spotters" who are usually part of fast-fashion firms. Design is either completed in-house or commissioned to smaller design companies.

Timing is important in this phase. The design process usually starts while the previous year's garments are still retailed (Sen, 2007). Thus, design department expertise is crucial to accurately predicting demand to deal with uncertainty. Fashion sense and innovative designs are traditional core competencies of brands and are highly idiosyncratic resources. Moreover, responsiveness may be greatly enhanced by reducing the time required for design development. New technologies, such as computer-aided design (CAD) systems, are used for this scope.

Production

This phase is strictly connected with the previous one. Per D 1.3, "Having an idea, or creating a 'new' thing, remains provisional, potential and conditional until it can be 'stabilised' or made/produced".
In the fashion industry, the creation and the production phases are connected by an intermediate phase – the "translation phase" – implying that the design (of clothing) is translated into paper patterns by stylists and then through them into prototypes. The design office examines prototypes and possibly reworks them, while other patterns and prototypes are created until the chief designer is satisfied. The collection is then ready to enter production for the exchange phase (i.e. fashion shows and show rooms, see infra). In the exchange phase, buyers make orders, including pieces, sizes and colours, and the production follows.

Production cycles and product life are short. Low-cost manufacturing in less developed countries initially gave an advantage to the larger fashion apparel firms that moved earlier to engage with subcontractors. However, today, many sophisticated subcontractors in many developing countries

have made low-cost global manufacturing available even to small producers and competitors. Hence, the competition arena has shifted to flexible, fast-cycle manufacturing with rapid learning about demand and customer satisfaction. The benefits of quick response come from reduced inventory costs, fewer markdowns of overproduced items and increased sales (Richardson, 1996).

The flexibility and fast-cycle reaction significantly depend on the firm's integration level. Fast-fashion firms might also integrate the manufacturing process or outsource it. Generally, the more vertically integrated firms are in the fast-fashion industry, the faster they can respond to market demands. Close coordination is how to obtain the most benefit from quick response production cycles. However, vertical integration can limit flexibility and reduce information and innovation as the firm becomes isolated.

In the fashion industry, there are various degrees of integration. As we will see, some firms outsource their entire production, some have a few manufacturing facilities for specific products and outsource other segments, whereas others control the production cycle entirely from the production process to retail. The trade-offs for these decisions are typical of any manufacturing operation. Some are more control over quality and time, fewer communication problems with in-house production, less capital investment and more flexibility with outsourcing.

Distribution and circulation

Products are distributed in physical shops and online platforms. In fashion industries, brands may own their means of distribution via shops or franchises, whereas other firms may locate their products in multi-brand retailers (e.g. shopping malls) and brand-owned shops. However, in more recent years, online commerce has gained ground. From mass online retailers (e.g. Amazon) to brand webpages, fashion e-commerce makes it possible to ship garments worldwide, reducing the need for stores as intermediaries.

Exchange

Exchange is the phase where the meaning of fashion products is negotiated and created as the public is engaged with new designs. In the fashion industry, this exchange happens at international events (e.g. fashion shows and international fairs) and in showrooms where clothes are exhibited to a selected number of buyers. This stage usually occurs before the distribution and circulation phase.

After distribution, the exchange is developed throughout stable channels where reputation plays a key role and through events where companies seek new expertise and talent. An exchange might directly occur with the final customer or different companies. Advertising and marketing strategies are key to informing potential users of the added value that (new or renewed) design incorporates.

The role of intermediary actors is quite relevant: specialised journals, websites and other professionals connect designers with their audiences through their assessments. Multiple brand shop owners are important intermediaries, acting as shop curators. The relevance of customer feedback on trends is an increasing determinant of fashion forecasts. Similarly, digital platforms (e.g. Instagram and specialised blogs) and the use and advertising by popular bloggers or Instagrammers have become essential tools to connect with potential final customers. Thus, this direct relationship between design producers and customers gives the product more value and ensures positive reactions.

Archive

Private archiving by companies is relevant. However, public and private design hubs, museums, design schools and libraries can also play a role in archiving design activities as cultural goods. As design activities are often embedded in specific cities or regions, there are often efforts to archive local design as part of the promotion of the overall sector. Old designs are often used as a material for new creations.

In fashion, archiving is also becoming crucial for reducing design times. Previously mentioned CAD systems can help reduce the time for making the pattern, enabling the electronic storage of the design and making later modifications and transmissions easier.

Figure 3. Summary of the fashion design phases

1.2.2 Governance models

Adopting the GPN perspective for the design industry helps identify various actors and roles with the potential to explore their power relations. The exploration of these relationships implies the appreciation of the design industry's symbolic value and other values connected to the brand and reputation that allow an uneven appropriation of value. Power relationships depend on firms' roles in the network and specific institutional conditions. Asymmetric relationships may also be determined by adopting new technologies or intermediary influencers (e.g. bloggers, critics, social media) who rely on specific professional resources. This section seeks to identify possible governance models in the design industry based on a consolidated understanding of uneven power relationships among the actors involved in the production networks.

The entire fashion industry shows a variety of governance models, depending on the number of actors involved and the role of design in the production network. Hence, we can distinguish between design-driven and retail-driven networks. We can also find varieties within these two broad categories.

Design-driven networks are where design-intensive activities executed with professional and artistic skills constitute the key resources in inter-organisational relationships, such as the high-end fashion segment, where the creation phase is associated with accurate research about new and original styles, tendencies and trends. Moreover, many resources (financial and human) are devoted to the design phase of the production cycle. Creating an exclusive annual collection and the production phases are extremely connected to satisfy the organisational goal to have it duly transferred into production. Because of these relationships, the lead organization, usually large companies and conglomerates, pursues vertical integration. In this fashion segment, there is also a tendency to integrate the distribution phase as certain firms have their shop chains, which is the typical configuration for the high-end and luxury goods industries. Vertical integration implies the internalization of the production function to retain control over quality and production costs, design and distribution. Vertical integration also protects the high asset-specific artisanal skills essential to produce bespoke luxury goods that demand premium prices. High-end fashion houses (i.e. Chanel, Hermès) are examples of these companies.

It is also possible that the design activity is sometimes outsourced. Many large and prestigious fashion houses hire designers as consultants to collaborate with the internal design team (d'Ovidio, 2015; d'Ovidio & Pradel, 2013). These companies are embedded territorially in some specific locations, for instance, Milan, Paris and London, and contribute to organising international events to disseminate their designs reinterpreted by the rest of the industry. Participation of other companies in decision-making power is limited. In this kind of production network, the exchange phase is of particular relevance as it is the phase where the cultural meaning of the product is given, and its novelty and innovation are assessed (Pratt et al. 2012, d'Ovidio 2015, Lavanga). As design novelty and innovation are the production cycle's central elements, cultural intermediation remains crucial.

Design-intensive activities can also be outsourced or separated from production and distribution, performed by independent specialised companies without the resources and skills to become involved in these phases. A variation of this typology implies a more disintegrated production network where the creative phase maintains its centrality, which is the case with networks related to the production of clothes designed by emerging fashion designers. Another trend of transformation concerns the geography of design activities. Despite the key role of certain places for design, several companies from non-central locations are increasingly involved in designing, proposing designs and participating in the value creation process (Tokatli & Kizilgün, 2009). Generally, moving towards a more "design-intensive" segment of the production process is considered a positive goal for various local and national clothing industries (Reimer, 2009). Moreover, fast-fashion companies increasingly enrich their offer with so-called capsule collections, namely a limited number of pieces designed by a renowned fashion designer. Hence, even one company can be inserted into different production network models.

Intensity in design refers to large, high-end luxury brands, SMEs and emergent designers attempting to produce design-intensive clothing and garments for the middle classes while fostering new forms of added value. Sustainability and slow fashion are a case in point. Brands oriented toward slow fashion reduce their production and select their providers regarding costs, know-how and sustainable practices. Sustainable design means research with new materials and forms of production and distribution, generating specific organisational forms of the production network. The roles of certification partners, granting the sustainable origin of raw materials and the good quality of employment, are key in configuring the network and the geographical location of producers and their processes. Thus, for these brands, the role of public institutions in providing regulations and the role of scientific research are critical. The configuration of a production network is not strongly institutionalised, with different forms of organisation and exploration for achieving greater sustainability in the sector. This experimentation can impact the whole fashion industry, as other companies adopt part of these governance models.

The **retail-driven network** is where lead firms exercise their power, using their capacity to organise and control the production and distribution phases. In these industry segments, vertical integration is reduced as firms pursue extensive production decentralisation and outsourcing for standardised production activities. Therefore, control is linked to resources, including the rapidity of production, logistics operations, the brand and publicity. Lead firms often pursue cost-cutting strategies that imply the realisation of simpler products, the use of medium-low quality raw materials, the compression of labour and salaries and the extensive use of subcontracting.

The retail-driven network is found in fast fashion, with Zara as an iconic example. Per Tokatli (2015), Zara is a global retailer with thousands of suppliers worldwide that focuses less on design and more on quickly translating selected high-fashion catwalk designs into mass production (Pratt, Borrione, Lavanga, & d'Ovidio, 2012; Segre Reinach, 2005). The lack of investment in design is possible as copyright rules do not apply to fashion, which allows companies to give up the original design and innovation in favour of a strategy of low prices and rapid production times. This model also applies to other companies, such as Top Shop, H&M and Forever 21 (Hauge, 2007). Unlike Zara, which maintains a limited production capacity, brand marketers (e.g. Hugo Boss, Diesel, Nike) and mass retailers (e.g. M&S, Walmart) own or licence the final product brand but are not involved in manufacturing. Brand marketers deal with department and discount stores that carry private labels and exclusive or licenced brands only available at the retailer in addition to other brands.

To sum up, design-driven companies concentrate on design and high-end markets, choosing whether to integrate the production phase. In contrast, global corporations controlling the production cycle (e.g. Zara) are selectively focused on retailer brands. Manufacturer companies in developing countries often develop the production phase. Thus, global brands (with and without manufacturing competencies) are increasingly subcontracting to small firms in partially industrialised countries, such as China, Turkey, Mexico and India (Tokatli, 2007). As we concentrate on fashion design, we focus on analysing design-driven networks, illuminating the varieties within design-driven networks concerning their embeddedness, verticalisation and relationships between different phases.

PART 2. Statistical mapping of the fashion design industry

2.1 Quantitative analysis of the fashion design industry

This section quantitatively analyses the impact of fashion design on employment, the number of companies and their distribution through European countries. Structural business statistics (SBS), data that covers industry, construction, trade and services, was used to collect the industry's data. Presented according to the NACE activity classification, SBS describe the structure, conduct and performance of businesses across the EU, and data are available for the EU Member States and the United Kingdom (NUTS 0).

Furthermore, activities were selected and linked to different production phases. However, this approach had limitations. In certain phases, such as exchange or archive, NACE activities went beyond fashion design. Thus, although fashion design contributes to generating economic activity for companies in these industries, it cannot be stated that the number of companies or employees directly results from fashion design (e.g. book publishing, advertising and museum activities). Therefore, two versions are provided to cope with this limitation: a minimum (MIN) approach and an extensive (EXT) approach. The first includes industries strictly linked to fashion design, whereas the second provides a broader picture, including activities indirectly tied to fashion design. The real picture of the number of companies and employees in fashion design GPN lies between MIN and EXT. Table 3 summarises the activities included in each phase of the fashion GPN in the MIN and EXT approaches.

Table 3. Activities included in different phases of the fashion design GPN

Case	Phase	NACE	Description	Minimal	Extensive
Fashion	Creation	74.10	Specialised design activities	X	
Fashion	Production	46.1	Wholesaling textiles		X
Fashion	Production	13.14	Preparing and spinning textile fibres		X
Fashion	Production	13.2	Weaving textiles		X
Fashion	Production	13.3	Finishing textiles		X
Fashion	Production	14.1	Manufacturing wearing apparel, except fur	X	
Fashion	Production	14.2	Manufacturing wearing apparel, except fur	X	
Fashion	Production	14.3	Manufacturing knitted and crocheted apparel	X	
Fashion	Production	15.12	Manufacturing luggage, handbags, saddlery and harnesses	X	

Fashion	Production	15.2	Manufacturing footwear	X	
Fashion	Distribution	46.42	Wholesaling clothing and footwear	X	
Fashion	Distribution	47.71	Retail selling of clothing in specialised stores	X	
Fashion	Distribution	47.72	Retail selling of footwear and leather goods in specialised stores	X	
Fashion	Distribution	47.82	Retail selling via stalls and markets of textiles, clothing and footwear	X	
Fashion	Exchange	82.30	Organising conventions and trade shows		X
Fashion	Exchange	73.1	Advertising		X
Fashion	Exchange	58.11	Book publishing		X
Fashion	Exchange	58.14	Publishing of journals and periodicals		X
Fashion	Archive	91.01 (*)	Library and archives activities		X
Fashion	Archive	91.02 (*)	Museums activities		X

Source: Own elaboration

In Table 4, distribution is the activity within the GPN generating the greatest number of companies and employees. Distribution includes 60% of the industry's companies per the minimum definition, while creation includes 23% and production only 17%.

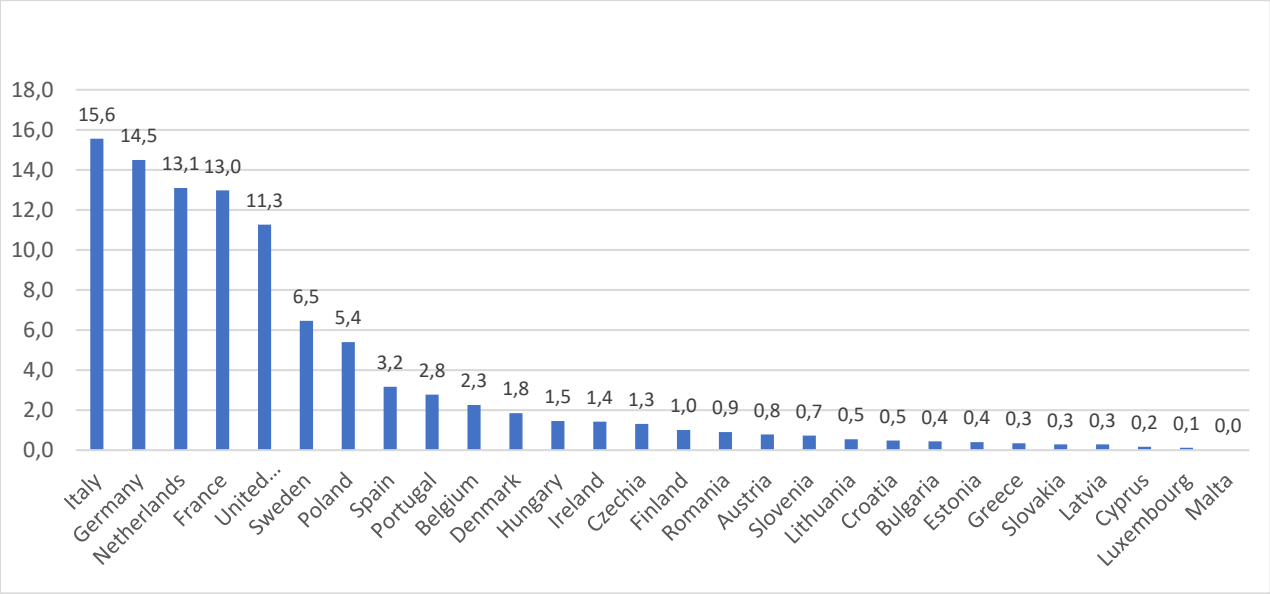
Table 4. Total number of companies and employees (2017)

	Creation	Production	Distribution	Exchange	Archive	Total
Companies MIN	207,494 (23 %)	156,620 (17 %)	534,751 (60%)	-	-	898,865 (100%)
Companies EXT	207,494	195,520	534,751	380,848	430,285	1,748,898
Employees MIN						
Employes EXT						

Source: SBS

Differences between countries show where creation and production concentrate. Distribution is present in all countries, but the presence of companies participating in creation and production is uneven. Creation tends to be concentrated in Italy (16%), Germany (14.5%), the Netherlands, France (13%) and the UK (11 %; see **Graphic 1**, next page).

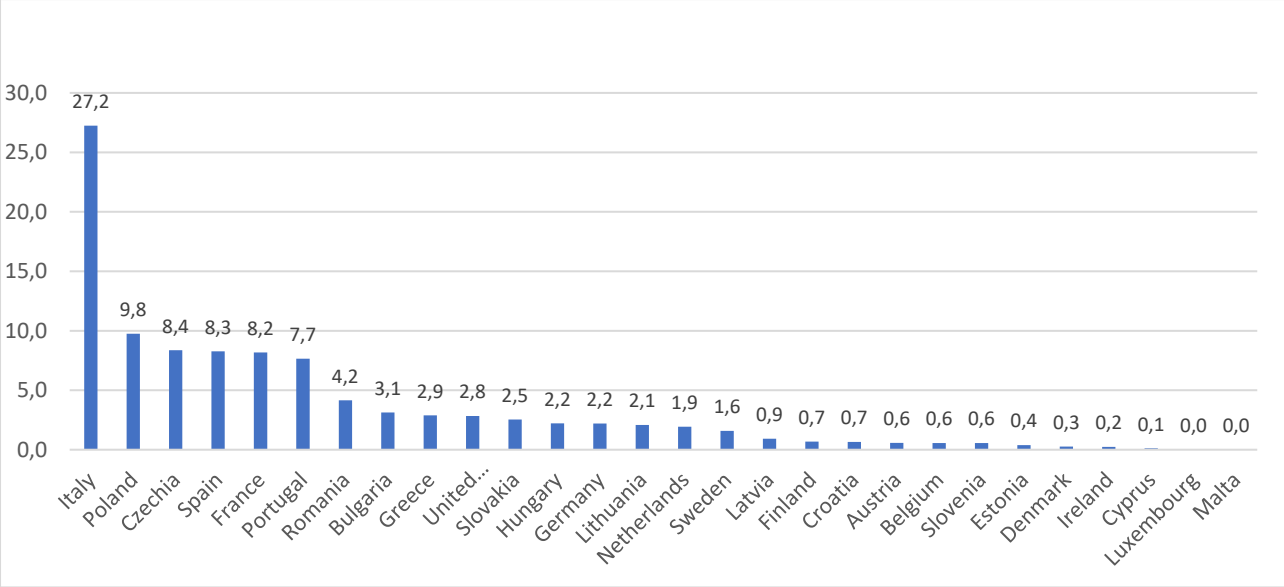
Graph 1. Geographical location of companies involved in the creation phase



Source: Own elaboration from EUROSTAT data

Regarding production (see **Graphic 2**), Italy has more than 25% of EU production, followed by Poland, Czechia, Spain, France and Portugal, each between 8%–10%. The rest of the production companies (30%) are distributed among the remaining countries. If we add secondary production activities (per the extensive definition above), we see that Italy accounts for 22% of the production companies, with Spain at 12 % and the UK at 9.5 %.

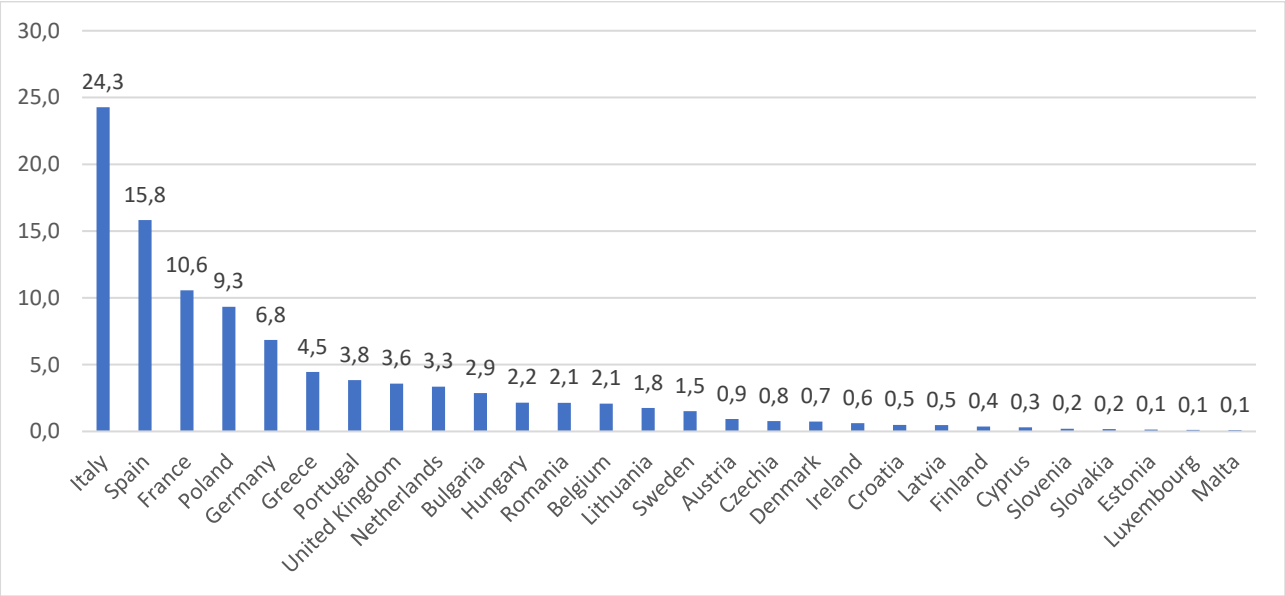
Graph 2. Geographical location of companies involved in the production phase (minimum definition)



Source: Own elaboration from EUROSTAT data

As **Graphic 3** shows, Italy also has the most companies oriented towards distribution (24%), followed by Spain (15.8 %) and France (10.6 %). This data shows the relevance of Italy in the design, production and distribution of fashion design, with creative clusters in different countries and the relevance of Spain in distribution.

Graph 3. Geographical location of companies involved in the distribution phase



Source: Own elaboration from EUROSTAT data

In **Table 5** (see next page), the distribution phase has the most companies in the design industry. Indeed, most countries of the sample are concentrated in this segment of the production cycle. A special focus is on Bulgaria, Greece and Cyprus, where distribution companies represent over 50% of the national design chain. In analysing our EU sample, 31% of the companies in the design industry work in the distribution phase. The next phase is creation. Although less concentrated, most countries still have over 10% of the design cycle dedicated to the creation phase. The Nordics, Denmark and Sweden have the lead, with over 25% of companies dedicated to creation in the national design chain.

Considering the EXT version, the results are less clear. The last three phases of the cycle (distribution, exchange and archive) have an important presence in the territory. Distribution leads the concentration with most countries at over 25%, while Greece, Italy, Cyprus and Poland have over 50%. Moreover, Czechia and Slovakia are interesting, with 61.8% and 72.3% of their companies, respectively, concentrated on the exchange phase. Regarding creation, most countries have a significant presence in the segment, with over 10% of companies dedicated to it. Denmark and Sweden are the leaders of this phase, confirming the pattern (see **Table 6** next page).

Table 5. The number of companies in the fashion design industry in Europe, classified per production cycle (MIN approach)]

Geo/NACE	Creation/Cycle	Production/Cycle	Distribution/Cycle	Exchange/Cycle	Archive/Cycle	Cycle of production
European Union - 28 countries (2013-2020)	16.2	12.1	41.9	29.8	-	100.0
Belgium	13.8	2.6	32.9	24.7	25.9	100.0
Bulgaria	3.4	18.5	57.7	14.9	5.5	100.0
Czechia	5.7	27.5	8.7	45.0	13.1	100.0
Denmark	25.5	2.7	26.0	24.5	21.3	100.0
Germany	17.4	2.0	21.2	25.3	34.2	100.0
Estonia	13.3	9.6	12.0	24.9	40.2	100.0
Ireland	18.7	2.4	21.0	13.5	44.4	100.0
Greece	1.6	10.3	54.2	13.5	20.4	100.0
Spain	3.4	6.6	43.4	24.7	21.9	100.0
France	14.2	6.8	29.9	20.1	29.0	100.0
Croatia	12.6	12.9	33.1	33.7	7.8	100.0
Italy	12.4	16.4	49.7	9.7	11.9	100.0
Cyprus	12.5	6.7	59.1	21.7	-	100.0
Latvia	6.6	15.9	28.1	27.0	22.4	100.0
Lithuania	4.4	12.7	36.6	17.7	28.6	100.0
Luxembourg	14.1	0.8	32.3	31.2	21.7	100.0
Hungary	7.1	8.1	27.1	24.3	33.5	100.0
Malta	-	0.0	30.4	20.1	49.5	100.0
Netherlands	16.2	1.8	10.7	20.7	50.6	100.0
Austria	5.4	3.0	16.3	37.1	38.3	100.0
Poland	10.3	14.0	45.8	29.9	-	100.0
Portugal	8.4	17.4	29.9	9.2	35.1	100.0
Romania	4.9	17.0	30.0	25.0	23.2	100.0
Slovenia	13.2	7.6	9.4	23.9	45.9	100.0
Slovakia	3.5	23.0	5.4	58.2	9.9	100.0
Finland	12.8	6.5	11.9	25.6	43.3	100.0
Sweden	32.4	6.0	19.6	42.0	-	100.0
United Kingdom	21.0	4.0	17.3	25.6	32.1	100.0
Tot.	12.1	9.2	31.3	22.3	25.2	100.0

Table 6. The number of companies in the fashion design industry in Europe, classified per production cycle (EXT approach)

Geo/NACE	Creation/Cycle	Production/Cycle	Distribution/Cycle	Exchange/Cycle	Archive/Cycle	Cycle of production
European Union - 28 countries (2013-2020)	17.8	3.4	46.1	32.7	-	100.0
Belgium	13.7	3.4	32.6	24.5	25.7	100.0
Bulgaria	4.1	2.3	69.2	17.9	6.5	100.0
Czechia	7.9	0.4	11.9	61.8	18.0	100.0
Denmark	25.6	2.3	26.1	24.6	21.4	100.0
Germany	17.5	1.6	21.3	25.4	34.3	100.0
Estonia	14.5	1.5	13.0	27.1	43.9	100.0
Ireland	19.0	0.9	21.3	13.7	45.0	100.0
Greece	1.7	3.8	58.1	14.5	21.9	100.0
Spain	3.5	2.5	45.3	25.8	22.8	100.0
France	15.1	1.4	31.6	21.3	30.6	100.0
Croatia	14.0	3.5	36.7	37.3	8.6	100.0
Italy	14.2	3.8	57.2	11.1	13.7	100.0
Cyprus	13.0	2.8	61.6	22.6	-	100.0
Latvia	7.6	2.9	32.4	31.2	25.9	100.0
Lithuania	5.0	1.6	41.3	20.0	32.2	100.0
Luxembourg	14.1	1.2	32.1	31.0	21.6	100.0
Hungary	7.6	1.9	28.9	25.9	35.7	100.0
Malta	-	0.0	30.4	20.1	49.5	100.0
Netherlands	16.4	0.6	10.8	20.9	51.2	100.0
Austria	5.4	1.4	16.6	37.7	38.9	100.0
Poland	11.5	3.8	51.2	33.4	-	100.0
Portugal	9.8	3.7	34.9	10.7	40.9	100.0
Romania	5.7	3.9	34.7	28.9	26.8	100.0
Slovenia	14.0	1.7	10.0	25.4	48.8	100.0
Slovakia	4.3	4.4	6.7	72.3	12.2	100.0
Finland	13.3	2.4	12.4	26.7	45.2	100.0
Sweden	33.6	2.8	20.2	43.4	-	100.0
United Kingdom	21.2	3.4	17.4	25.8	32.3	100.0
Tot.	13.0	2.4	33.6	23.9	27.0	100.0

Number of employees

The number of employees in the fashion design cycle follows the same distribution as the above-described number of companies. In Table 7 (below), the distribution cycle employs the most people in this industry in the analysed territory, and special concentrations appear in Cyprus, Ireland and Luxemburg. The production cycle has the second-highest concentration of employees, with Bulgaria and Romania leading the segment. Interestingly, the creation phase never shows more than 10% of the employees in the chain for any country.

Table 7. The number of employees in the fashion design industry in Europe, classified per production cycle (MIN approach)

Geo	Creation/Cycle	Production/Cycle	Distribution/Cycle	Exchange/Cycle	Archive/Cycle	Cycle of production
European Union - 28 countries	3.2	23.8	47.9	25.0	0.0	100.0
Belgium	1.5	3.5	55.5	20.0	19.4	100.0
Bulgaria	0.7	73.3	17.1	7.2	1.8	100.0
Czechia	1.3	27.5	29.0	32.4	9.7	100.0
Denmark	6.0	2.2	51.5	24.9	15.3	100.0
Germany	2.5	4.2	46.8	30.0	16.4	100.0
Estonia	4.5	35.1	27.0	17.3	16.1	100.0
Ireland	5.8	1.3	73.9	19.0	0.0	100.0
Greece	0.3	12.4	39.7	15.6	32.0	100.0
Spain	1.2	13.8	42.8	21.6	20.6	100.0
France	2.0	11.2	42.6	27.8	16.4	100.0
Croatia	2.7	49.3	31.5	14.9	1.6	100.0
Italy	2.7	43.6	34.6	11.1	8.0	100.0
Cyprus	3.4	3.1	73.3	20.1	0.0	100.0
Latvia	3.6	29.4	31.9	23.8	11.3	100.0
Lithuania	1.9	39.5	27.7	17.9	13.0	100.0
Luxembourg	3.9	0.0	56.6	31.5	7.9	100.0
Hungary	1.1	29.3	27.1	15.8	26.7	100.0
Malta	-	0.0	49.1	33.9	16.9	100.0
Netherlands	1.8	1.0	39.3	16.0	41.9	100.0
Austria	-	6.0	49.0	26.4	18.6	100.0
Poland	2.2	36.1	39.4	22.2	0.0	100.0
Portugal	1.7	56.9	22.2	7.4	11.8	100.0
Romania	1.0	69.0	14.7	10.6	4.7	100.0
Slovenia	2.7	18.0	28.5	17.7	33.2	100.0
Slovakia	1.2	49.4	18.5	26.0	4.9	100.0
Finland	3.9	9.8	28.9	35.6	21.8	100.0
Sweden	9.7	1.6	55.1	33.5	0.0	100.0
United Kingdom	6.2	2.8	57.3	16.7	17.1	100.0
Tot.	2.8	20.3	41.4	20.3	15.2	100.0

Regarding territorial distribution, Germany (17.9%) employs the most people in the fashion design cycle, also showing a significant presence in the distribution and creation phases with 20.2% and 16.4%, respectively, confirming its importance in the design phase.

Italy follows the total cycle with 11.2%, also showing a significant concentration of the labour force in the production phase (24.2%), the highest phase value. Italy also has 10.8% of the workers in the creation phase, only surpassed by Germany (16%) and the UK, with the most people employed in this first stage (33.9%) in creating designs. The distribution stage is also important in the UK, with 21.1% of the workforce, putting the UK second in the national distribution of the fashion design cycle (see Table 8, see next page).

In the EXT version, the results support the distribution phase concentration but do not yield additional information. The distribution phase employs the most people in the design cycle, 39.5% of the workforce, while the production phase follows with 23.9%, with a higher concentration in certain

countries (Bulgaria, Portugal, Romania and Slovakia). Moreover, the exchange phase is important in the cycle, with over 10% of employees for most countries analysed.

Table 8. The number of employees in the fashion design industry in Europe, classified per national relevance (MIN approach)

Geo	Tot. Creation	Tot. Production	Tot. Distribution	Tot. Exchange	Tot. Archive	Tot. Cycle of production
Belgium/Tot. %	0.8	0.2	1.9	1.4	1.8	1.4
Bulgaria/Tot. %	0.6	8.6	1.0	0.8	0.3	2.4
Czechia/Tot. %	0.6	1.6	0.8	1.8	0.7	1.1
Denmark/Tot. %	2.7	0.1	1.6	1.6	1.3	1.3
Germany/Tot. %	16.0	3.7	20.2	26.4	19.3	17.9
Estonia/Tot. %	0.5	0.5	0.2	0.3	0.3	0.3
Ireland/Tot. %	1.5	0.0	1.3	0.7	0.0	0.7
Greece/Tot. %	0.2	1.1	1.7	1.4	3.7	1.8
Spain/Tot. %	3.7	6.0	9.1	9.3	11.9	8.8
France/Tot. %	7.0	5.4	10.1	13.3	10.5	9.8
Croatia/Tot. %	0.9	2.2	0.7	0.7	0.1	0.9
Italy/Tot. %	10.8	24.2	9.4	6.1	5.9	11.2
Cyprus/Tot. %	0.2	0.0	0.3	0.2	0.0	0.2
Latvia/Tot. %	0.7	0.7	0.4	0.6	0.4	0.5
Lithuania/Tot. %	0.5	1.5	0.5	0.7	0.7	0.8
Luxembourg/Tot. %	0.1	0.0	0.1	0.2	0.1	0.1
Hungary/Tot. %	0.7	2.7	1.2	1.5	3.3	1.9
Malta/Tot. %	-	0.0	0.1	0.2	0.1	0.1
Netherlands/Tot. %	3.3	0.2	4.7	3.9	13.7	5.0
Austria/Tot. %	-	0.5	2.1	2.3	2.2	1.8
Poland/Tot. %	3.6	7.9	4.2	4.9	0.0	4.4
Portugal/Tot. %	2.4	11.4	2.2	1.5	3.2	4.1
Romania/Tot. %	1.8	16.3	1.7	2.5	1.5	4.8
Slovenia/Tot. %	0.3	0.3	0.2	0.3	0.6	0.3
Slovakia/Tot. %	0.4	2.1	0.4	1.1	0.3	0.8
Finland/Tot. %	1.0	0.3	0.5	1.2	1.0	0.7
Sweden/Tot. %	5.8	0.1	2.2	2.7	0.0	1.7
United Kingdom/Tot. %	33.9	2.1	21.1	12.6	17.1	15.3
Tot/Tot. %	100.0	100.0	100.0	100.0	100.0	100.0

Similarly, the territorial distribution in the EXT version yields similar information to the MIN analysis considered above. Germany, Italy and the UK are the “winners” in design cycle employees, with 17.7%, 11.8% and 14.9%, respectively. Germany offers a clear concentration of workers in almost all phases except production, similar to the UK. In contrast, Italy exhibits the highest percentage in the first three phases with a high concentration of workers in production. This finding lays an interesting foundation for building a hypothesis of complementarity between these three countries. In the EXT version, France is also a relevant location, with approximately 10% of the distribution, exchange and archive workforce.

2.2 Open issues

The available data have limitations since they cannot identify the quality of jobs and their added value. Moreover, using NACE codes in analysing GPN phases includes activities related to but not exclusive to fashion design. Thus, EXT phases of the criteria were excluded from the analysis to avoid overestimation but were included in completing the MIN versions that did not affect these phases.

PART 3. The fieldwork: analysis and results

3.1 Case studies in the fashion design industry: Setting the scene

3.1.1 Brief description of the cases

The complexity involved in analysing the design GPN led us to choose fashion design as the primary field of research. Nevertheless, understanding the dynamics of the fashion design network has inevitably involved its connection with the fashion industry in different segments.

Methodologically, the challenge was to select case studies for the empirical research. The fashion design field consists of different realities. Indeed, every fashion firm has a design department. However, its relevance varies per the fashion segment, which can be completed in-house, partially or totally outsourced. Therefore, the architecture and the governance of these industries change. Hence, we reviewed the literature on governance models in the industry to select concrete cases, building on preliminary knowledge in the industry to distinguish several governance structures, leading to identifying specific case studies: the network of firms to explore empirically.

As anticipated in deliverables, the CICERONE project methodology's (Kloosterman et al. 2019) consideration of two variables (degree of vertical integration and resources devoted to design activities) allowed us to identify possible production networks related to designed fashion. In previous sections, we defined the existence of design-driven and retail-driven networks. Thus, the selected case studies aim to better understand design-driven networks by analysing specific projects' development. In the case of fashion design, the project is the development of a collection, a process with different actors and locations. Collections are projects developed over a long period, depending on the design intensity, which is the organisation of the production network and the allocation of value in the different steps of the process.

As previously stated, an analysis of the diversity within the industry shows the relevance of different forms of organisation, especially when products include added value based on design and quality. Hence, high-end companies maintain local production, whereas other companies try to bring added value to their products, looking to reorganise production networks based on quality rather than costs. This approach is due to the close relationship between artistic design and technical production inherent in design activities.

To analyse the diversity within existing governance models, we selected three types of collections: a) the *haute couture* collection of a high-end brand, Yellow Co, b) a sustainable fashion collection from Magenta Co and c) the first collection developed by emergent designers, Cyan Co. This selection allowed us to answer questions about the distribution of power and the role of design in the entire production network in design fashion, showing different governance models and the distribution of

power within design fashion. Thus, we found different degrees of integration of company processes and outsourcing forms.

We also found differences in the role of lead companies in creation, production and distribution, including how these different phases are internalized and controlled by one or multiple single actors. Following this variable, we discovered that large companies lead vertically integrated production networks, devoting resources to the creation phase, developing accurate research about new and original styles, tendencies and trends while internalizing production to retain control over quality and production costs. In contrast, we found production networks based on smaller actors organised in less hierarchical networks where design actors remain central. In this case, small brands and individual designers design their products, looking for partners to produce and distribute them. The creation and production process is often the result of a joint effort between designers and producers, bringing technical knowledge and channels of distribution that rely on finding partners (e.g. multi-brand shops, online platforms).

Fashion design is strongly embedded in certain locations, so this element was also considered when selecting specific case studies. Some regions with consolidated fashion design clusters have retained the capacity for local production and know-how in this process, but for many others, local know-how has been lost in favour of delocalisation. As seen in the statistical mapping, Italy retained a strong capacity in creation, production and distribution in fashion design, having relevant clusters, the most important in Milan. Hence, we selected a case of **a collection of garments produced by a high-end brand in Italy**, where apart from the design, the production is local, similar to industrial districts. Thus, small companies working with leather and other materials have the know-how, interrelating with the brand in production. The analysis of the production of a high-end collection sheds light on the power distribution within the network and how the location of different activities in different locations occurs.

The other two cases were in Spain: Barcelona and Bilbao. As shown in Section 2.1, Spain retained certain capacities of creation and production in fashion design and is salient in distribution. This context of still having some relevance in creation and production allows for understanding how other forms of design-driven networks are taking shape in a context where fashion design is less consolidated as a leading activity. Furthermore, the second case study analysed **a collection produced by a medium-sized Spanish brand** focused on **slow, sustainable fashion**. As previously stated, configuring production networks in sustainable fashion is an ongoing process with several practices occurring simultaneously. The analysis of this case study was useful to understand to what extent sustainable fashion is particularly organising its networks and the role of embeddedness in the creation and production phases. The collection selected belongs to a company which began to focus on sustainable design in the mid-2000s, coming from a retail-driven orientation, seeking to add value to the brand through a design transformation, production and distribution. The case study could be useful also in understanding possible pathways toward greater sustainability.

The third case study consisted **of collections produced by emerging designers in Bilbao and Barcelona**. We analysed the two emerging designers, gathering common elements to construct a typical case of the emerging designer. The emergent designer in Barcelona launched her company

after finishing her studies in a design school and has launched two collections on local and international catwalks since then. The emergent designers of Bilbao launched a brand while maintaining other jobs, with institutional support from the local cluster Bilbao International Art & Fashion, which supports them in distribution, communication and exchange. Thus, this case featured the need for strong support from local institutions like associations and design schools and the creation of online and physical distribution platforms and exchange mechanisms. For emerging designers in Spain, exchange and creation are closely linked, which is relevant for acquiring reputation and making the brand recognisable beyond the local market.

3.1.2 Case study methodology

As previously mentioned, the fieldwork and data collected were directed at understanding the production network of fashion design through three case studies: a) a collection of high-end complements, b) a collection of a sustainable fashion brand and c) the first collection of emergent designers. Nevertheless, the fieldwork also included interviews and secondary data by experts and actors to better understand the industry.

The data gathered to analyse the three collections were based mainly on in-depth interviews of actors involved in the production process. The development of the fieldwork was difficult due to the companies' reluctance to be interviewed. Hence, once the model of case studies was established, we conducted exploratory fieldwork to detect potential case studies and different possibilities given the typology of actors detected in the theoretical analysis.

In the case studies of the high-end fashion brand, we approached a strategic supplier in the Puglia region to enter the fieldwork for our network study. The company produces national and international brands that concentrate the creative process in their headquarters and outsource the production. However, we faced a major difficulty, as interviewees were not inclined to reveal the names of their customers or suppliers, with few exceptions. Moreover, in many fashion design companies (the brand), employees are not allowed to interview.

Thus, it was challenging to acquire the names of the actual actors since interviewees were inclined to give limited information about several features of the suppliers and customers of their network, such as the position (the kind of production or service as a direct or indirect contractor), the geographical location (region or district) and the firm's size (number of employees, revenue). These interviews were conducted with firms' representatives or economic activities sharing the requested features. Therefore, although the *actual* network was not researched, a network with the same characteristics was studied.

In the case of a sustainable brand collection, the company facilitated contacts so that we could schedule four interviews with relevant actors in the production network. In the case of emerging designers, we took a different approach focusing on the designers themselves and the local institutions supporting them. Furthermore, the case study of the collection of an emerging designer

was not empirically grounded on a specific collection by a specific designer but on emerging designers in Barcelona and Bilbao. The joint analysis of these two experiences allowed for a more comprehensive picture of the process of developing the first collections and establishing a brand. Moreover, the analysis included complementary interviews with fast-fashion designers and producers, allowing us to better understand the fashion design ecosystem.

Table 9 summarises the interviews developed for each of the case studies. All interviews were conducted via virtual meetings. In addition, secondary sources and data were sometimes used to complete the information.

Table 9. Interviews developed for the case studies

Case study	Interview	Date
Sustainable Fashion Collection (Magenta Co.)	Founder	12/01/2021
	Artistic Director	20/04/2021
	Logistics and Sustainability	25/02/2021
	Specialised Provider	18/03/2021
Emerging Design Collection (Cyan Co)	Manager of Design School	21/09/2021
	Two Managers of BIAAF, a Young Fashion Designer's Promotion Platform (Bilbao)	13/04/2021
	Two Emerging Designers, Founders of a Brand (Bilbao)	04/05/2021
	Responsible for Fashion Cluster Catalonia (MODAC)	28/01/2022
	Responsible for Design Cluster Barcelona (FAD)	18/01/2021
	Emerging Designer (Barcelona)	04/11/2021
	Marketing Partner Emerging Designer (Barcelona)	06/11/2021
	Fast-Fashion Studio Designer and Producer	
	Fast-Fashion Fabric Supplier	22/11/2021
	Press Agency	15/12/2021
	Fashion Circular Consultant	22/10/2021
	Responsible for Design Cluster Spain (ACME)	01/06/2021
	Consolidated Designer	10/06/2021
High-End Fashion Collection (Yellow Co)	Textile Production – CEO and Creative Director	05/10/2020
	Garment Production – Entrepreneur	20/10/2020
	Second-Tier Garment Production Company – Entrepreneur	23/10/2020
	Textile Finishing – Entrepreneur	13/11/2020
	Fashion Brand – Designer	17/12/2020

	Garment Production – Entrepreneur	19/11/2020
	Fashion Brand – Marketing office director	29/12/2020
	Industrial Collective Actor – Representative	27/01/2021
	Fashion Magazine – Senior editor	08/03/2021
	Fashion Expert	26/03/2021
	Knitwear Factory – Worker	27/03/2021
	First-Tier Garment Production Company – Entrepreneur	09/04/2021
	Association of Fashion Distribution Companies – Representative	14/04/2021
	Researcher and Cultural Manager	14/05/2021
	Holding Company for Luxury Brands – CEO	27/05/2021
	Consultant Company for Critical and Sustainable Fashion – Representative	24/06/2021
	E-Commerce Company – Entrepreneur	24/06/2021
	Association of Small Boutiques – Representative	05/07/2021
	Fashion Fair – Communication Manager	02/08/2021
	Fashion Expert – Journalist	25/09/2021
	Fashion Distribution Company – Owner	26/09/2021
	Consultant Company – Partner	27/10/2021
	Fashion Brand – Designer	01/02/2021

3.2 Case 1: Yellow Co, a high-end fashion brand

3.2.1 Phases, actors and locations

The investigated project is a collection of a high-end fashion brand (Yellow Co) to be presented at the next Milan Fashion Week. The brand is located in Milan, while its production chain reaches other locations, mainly in Italy, although the raw material is sourced in China and Romania. The brand is distributed globally; its reputation is international. In the production chain, the brand plays a central role; however, the articulation of the production network shows the importance of other elements, such as artisanal competencies and skills, territorial embeddedness and social media. (Phases in the high-end fashion industry are organised circularly instead of linearly, and some overlap.)

3.2.1.2 Identification of the structure of the network

In the analysed fashion collection, different garments are produced with different fabrics originating from various yarns. In the case of silk, yarns come from China, imported and twisted by a company in the Veneto region that sells them to a silk-weaving mill in Como (Lombardy). This mill collaborates with other local producers in several phases, such as dyeing, printing and finishing. The fabric reaches the brand's creative team that works to design the collection: at this stage, the creative and archive phases are intertwined, feeding each other. Indeed, the design activity starts just after valuing suppliers' samples:

> *Textile suppliers send us the samples that we have chosen, and we start immediately to focus on the research [needed to start designing the collection]. (Fashion Brand – Designer 1)*

To carry out the collection, the creative team works with various sources, from cinema to magazines, internet images, street styles and vintage shops. However, the creative process finds inspiration in various archived materials: past collections, vintage dresses and previous raw fabrics. All of it continues to feed their archives:

> *So, let's say that the supply chain is very long. [...] And really, it's not just what happens in a style office. The style office is the last step, as, for instance, when you serve a dish: you first have someone who cultivated, someone who made [...] from the grandmother's recipe to the vegetable garden behind the house, you are a piece in a very long chain (Fashion Brand – Designer 1)*

After the research and design step, several drawings are selected and sent to the internal production office for prototypes. Their finalization occurs after several fixes; some are displayed on the brand catwalk. Often, catwalk planning and garment production are frenetic since time is limited, and creatives change their plans based on what is shown elsewhere (e.g. other catwalks, the fashion and

star system, magazines, the news). Therefore, these two steps (the collection production and the catwalk) frequently overlap, with pieces of the collection produced behind the catwalk scenes:

> *[During the catwalk,] we set a workstation for the hat-maker behind the scenes. She prepared the hats just during the show. […] All the buyers think that everything is ready and planned for months, while it is all decided at the last minute. (Fashion Brand – Marketing Office Director)*

During the catwalk and in the following days, buyers are invited by the brand to examine the whole collection as only the most iconic clothes are shown during the catwalk, and buyers place their orders based on the budget available. Catwalks represent the most important moment of exchange for Yellow Co: the collection is displayed to customers, the press and social media, which intermediate the cultural and symbolic meaning to the wider audience. In the last ten years, cultural intermediation has changed significantly because of the role of influencers and fashion bloggers who directly reach specific segments of the public.

Showrooms are places where the distribution process starts to occur widely as the brand invites Yellow Co buyers from single-brand stores and buyers from multi-brand and chain stores. Nonetheless, in the brand showrooms, relevant attention is paid to the experience of buying and selling garments to build the brand identity. As indicated by the responsibility of a showroom association, while it is important to have websites and online platforms, the physical place is crucial for a buyer:

> *[...] to understand if it can be interesting – if the product [is good] from a qualitative perspective – if it fits its expectations. (Association of Fashion Distribution Companies – Representative)*

The production process starts at this stage in various Italian regions (e.g., Lombardy, Toscana, Puglia) and assumes different configurations depending on conditions, such as the quality and quantity of products, the local production systems and social networks. Firstly, Yellow Co has direct relationships with some producers. Secondly, the relationship between the producer and the brand may be mediated by a commercial intermediary: a professional or a company that knows the market and distributes the work to single small producers or artisans. Thirdly, the producer works as a subcontractor for a more consolidated company that receives a direct order from the brand. Thus, the producer works for several brands:

> *Since we offer high-quality production, we produce for several brands. (Knitwear Factory – Worker)*

> *The big brand orders 10,000s of items [trousers for instance] from the main producer, who asks his own many suppliers to produce them for him. (Garment Production – Entrepreneur)*

The brand reaches consumers through its distribution channels with numerous single-brand, multi-brand and department stores. Here, the distribution phase overlaps with the exchange phase as shops are usually furnished to reinforce the brand's identity and image. Through the architecture of shops and their internal design, combined with sensorial artefacts (i.e. music, lights), an effort is made to

deeply involve consumers in an experience that goes beyond the mere purchase. Hence, sellers are carefully selected and trained.

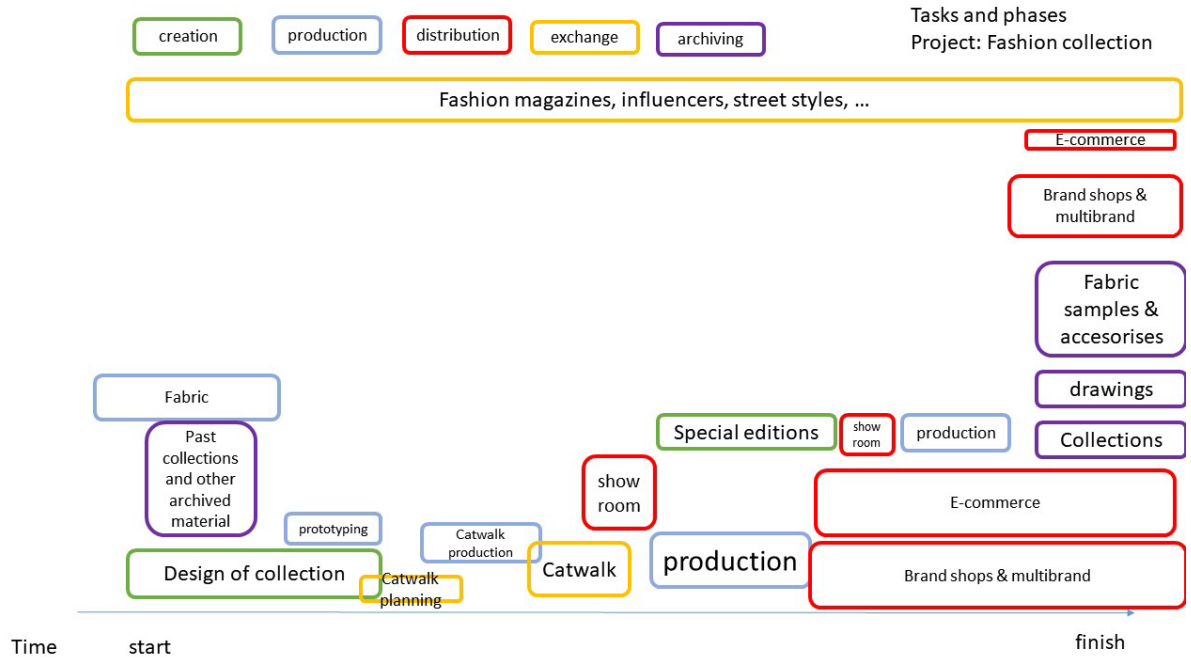
The digital distribution channel has increased over the last years and boomed during the COVID-19 pandemic. However, while recognising the opportunities provided by digitalisation, big brands like Yellow Co do not consider it a privileged channel to reach consumers. As clearly explained by the responsible representative of an e-commerce business,

> *Our work is to help small brands to reach their own visibility, […] to transmit the product and therefore to the point of view of the market to possibly increase the capacity of selling products. The presence of big brands on specific e-platforms is an advantage as it brings a lot of traffic to the platform, which may eventually benefit other products. (E-Commerce Company – Entrepreneur)*

The archiving phase lies in the brand headquarters: the archive contains all the collections, special editions, drawings and textile and accessories samples from suppliers. For instance, a designer talking about samples stated,

> *We never throw away anything. Everything is kept in our archive because it may become useful in the future. (Fashion Brand – Designer)*

Figure 4. Network structure of Yellow Co



3.2.1.3 Territorial embeddedness

The geography of Yellow Co is extremely concentrated for certain phases of the production network yet extremely dispersed for others. Raw materials are taken from distant locations; distributions are international, and some aspects of the exchange phase – social events, catwalks and fairs – are located in specific cities and fashion magazines' editorial offices:

> *With concern to production, one can detect the geographical concentration of the production network of the textile segment. Yellow Co uses silk that is produced in the Como area, which is renowned for the location of SMEs working on all the phases of fabric production (weaving, dyeing, printing, finishing). The CEO and Creative Director of a textile production uses the metaphor of the reef to express the complexity as well as the perfect integration of the industrial district: [in the surrounding areas of Como] It is like a forest or a reef: there are many living in the reef. (Textile Production – CEO and Creative Director)*

Notably, the integration is the consequence of the co-location of many different activities in the district, emphasised by a representative of an association of manufacturers:

> *Textile and clothing production is rooted and born in districts. […] The know-how is handed down there, and I must say that the dissemination of technological innovations is easier in the districts. (Industrial Collective Actor – Representative)*

The production of the finished items mainly occurs in Italy, geographically spread into different regions. Yellow Co values district dynamics such as traditional, high-level production competencies, institutional support (e.g. research centres for innovation, business associations and infrastructures), training and education (e.g. technical schools, training programmes) and cultural dispositions.
The proximity to producers is valued as a major asset by brands that can check the production at any moment, as explained by the director of the marketing office with years of experience in the sector:

> *We need production that is close to us because our technicians need to go and see. (Fashion Brand – Marketing Office Director)*

The creation phase is geographically concentrated in fashion capitals, although fashion designers are extremely mobile in terms of employment; in addition, they come from a restricted number of highly specialised schools such as the Central Saint Martins in London.

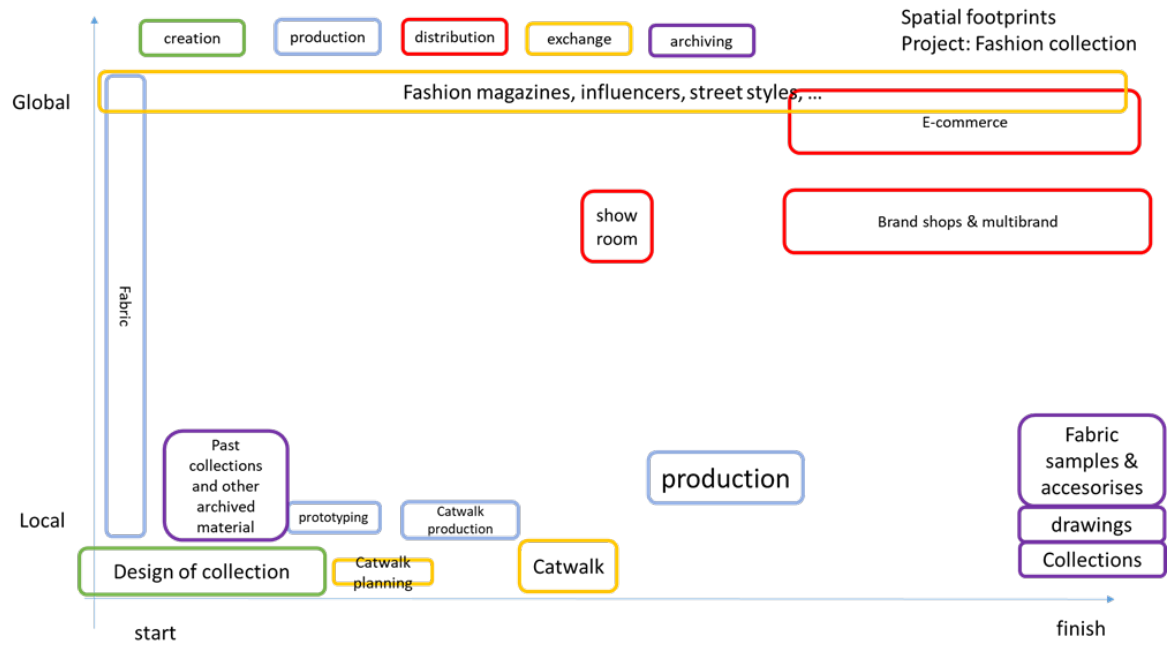
3.2.1.4 Dynamics: Changes over time

Regarding Yellow Co, the effects of COVID-19 along the production chain have been temporary, and they have not radically transformed how the production network is organised. Surely, our results were influenced due to interviewing what remained after the pandemic, so we cannot evaluate the many companies forced to close because of the crisis. However, there has been a delay in some productions

because of the illness of craftspersons. Moreover, in the Spring-Summer 2021 collection, the scarcity of textiles and accessories required the design office to make crucial decisions.

3.2.2 Relationship between actors

Figure 5. Spatial footprint of Yellow Co



3.2.2.1 Governance

The high-end fashion design production network analysed in this study displays the leadership of the fashion brand, whose power is exercised over all the phases of the production cycle. The fashion brand is the lead actor in the network with the power to organise the production cycle according to its market visions and strategies. Power derives from various sources, such as reputational and symbolic capital, the capacity to create original and innovative products and the establishment of aesthetic canons to become market-setters. This capacity is coupled with the material capacity to ensure high-quality production, with organisational resources and competencies that allow responding to a particularly volatile market like the fashion market. In addition, the brand holds enormous economic power. As identified by a second-tier producer,

> *Their [brands] strength lies in the fact that they give you large quantities, they assure you that you can work for five months without no worries at all. (Second-Tier Garment Production – Entrepreneur)*

Hence, the high-fashion brand can organise and control the production network by affecting its spatial configuration. The requirement of tight control over the production implies that the latter is closer to the design phase, as suggested by the marketing officer of Yellow Co:

> *The more the project is successful, the more the process shortens: the manufacturer is close by [...] because the technician has to go and check that they sew well, and today our technicians go to Tuscany and Rome, but not in the South of Italy.*

The brand establishes which actors enter their production cycle and the shares of value they will obtain, primarily with the actors of production. Their first-tier suppliers are selected by the quality of production standards, the capacity to deliver on time, flexibility and overall reliability and trust. As explained by a first-tier supplier of Gold Co:

> *Our workers made it perfectly. The manufacturing of the sample was perfect. Therefore, the order became ours. (Knitwear Factory – Worker)*

> *When they (the brands) realise that you're honest, you work well, you're reliable, it's difficult that they let you down […] If you answer with quality and delivery, you have no problems. (First-Tier Garment Production Company – Entrepreneur)*

The interview with the marketing officer of Yellow Co confirmed the search for extremely high production standards:

> *In Trezzano sul Naviglio [near Milan], there is a firm making bridal gowns, and it is the only one able to work on tulle so well. (Fashion Brand – Marketing Office Director)*

Being chosen as a first-tier supplier is not simple as there are requirements to be fulfilled and does not ensure a particularly privileged position. As explained by one of the interviews with a first-tier supplier,

> *[To work with the brand implies] to find a bigger space, organise your production lines properly […] more technological machines […] more luminosity at the work desks. (First-Tier Garment Production Company – Entrepreneur)*

Yellow Co controls the producers' technical system, who are requested to buy new machines if they want to keep working for the brand. As a second-tier producer clarified,

> *The brand said, "There is this work for you. Do you have the machines that are necessary [to make it]? Yes or no? If yes, ok, tomorrow we will send you the fabric already cut. If not, what do you want to do? Do you want to adapt, or you are not interested in working? Therefore,*

either you buy that machine, or you cannot work" (Second-Tier Garment Production Company – Entrepreneur).

Strict control is also exercised over the fabric quantity and quality, the time and the delivery of products. As revealed by a first-tier supplier,

> *They come to control the state of advancement of production; before producing the whole batch, we make a single model. […] They come to see if it fits the standard. […] You have to respect delivery deadlines. You can have a delay of a couple of days but not more than that. […] Controls aren't anticipated. (First-Tier Garment Production Company – Entrepreneur).*

However, such producers can count on the precision of payments, not their stability. As a producer explained,

> *Their [brands'] strength is that they assure you the quantities, they give you stable work for months, and you don't have to worry anymore. (Second-Tier Garment Production Company – Entrepreneur)*

Yellow Co works with several first-tier suppliers depending on the type of product. In general, it does not have privileged relationships with single producers. At the same time, producers work for different clients. These producers, in turn, may outsource part of their production to second-tier suppliers. Outsourcing usually occurs when the order volume exceeds the firm's production capacity, as explained by a second-tier supplier. "Yellow Co chooses producers that can produce many articles (10,000 units) and share a larger order with its producers" (Second-Tier Garment Production Company – Entrepreneur).

By analysing producers' perspectives, the asymmetric nature of the relationships with brands emerges. According to a second-tier supplier,

> *Without us [the producers], the product would never exist, but we are crushed; on the other hand, the brand pays a lot to those who work in marketing: they are useless, but they work to build the experience linked to the product. (Second-Tier Garment Production Company – Entrepreneur)*

Such tight relationships urge the search from suppliers for margins of manoeuvre to avoid problematic situations when possible. A first-tier producer discloses its strategy:

> *How many shirts can I make in a month? 8,000? I take work commitments for 7,500, not for 8,000. (First-Tier Garment Production Company – Entrepreneur)*

The brand also exercises its power in the distribution and exchange phases.

As anticipated, the distribution of products occurs through the brand's shops and multi-brand stores. In this case, as indicated by the member of the board of a showroom association working with various brands,

> *Then I can tell you that it is the brand that has the contractual strength because, in fact, retailers sign contracts for adhesion [retailers can accept them or not] where commissions [intermediation fees are already set]. (Association of Fashion Distribution Companies – Representative)*

Concerning the exchange, the brand has relationships with traditional and new modalities of exchange, and its influencing power is relevant in both cases. Yellow Co heavily influences fashion magazines, as analysed by an editor of a fashion magazine:

> *There is for sure the strength of the brand, who says to you, "If you put [on the magazine] this and that, I will not give you the promised 800,000 € every year through my advertisements". In fact, they pay the magazines at the end of the year. (Fashion Magazine – Senior Editor)*

New modalities of exchange have emerged with social media. In this case, the focus is on influencers. At the beginning of the phenomenon, the promotion of a brand by influencers, fashion bloggers and, in general, social media occurred spontaneously. These relationships have become increasingly risky with time compared to a typical advertising campaign. As explained by the lawyer of a well-known company providing professional services to companies,

> *Their autonomous management of the advertising could bring with it, besides benefits, also reputational problems when transparency is not ensured. (Consultant Company – Partner)*

Therefore, brands continue to search for different tools to control the public discourse on their products on the internet: among them, the legal means to impose contractual arrangements to influencers that lead to a greater share of responsibility for them, while informal instruments persist, as noted by the editor of a fashion magazine:

> *Influencers are "paid" [by brands] through fashion products. (Fashion Magazine – Senior Editor)*

With a concern for value, its creation, enhancement and capture are the three dimensions to be considered, as highlighted by the literature. In contrast to common knowledge, value creation in the fashion industry occurs during the design phase and along the network: the production contributes to the quality of the raw material and final products. The distribution reaches various markets, while the exchange phase contributes to the diffusion and reputation of products symbolically. The archive phase creates value as a source of renewed creativity.

Value enhancement in the production network of the high-end brand takes place, especially in the creative, exchange and archiving phases where the value of fashion products is symbolically amplified. As explained by the lawyer of a well-known company providing professional services to companies,

> *We often say, how is it possible that the intrinsic value of a bag is X, and if we add the brand, its value is then Y? Well, it's possible because the product incorporates all the immaterial value of the brand. Therefore, there's value in the immaterial (element/dimension) in the creativity. (Consultant Company – Partner)*

As also observed by the editor of a fashion magazine,

> *Now, brands have a number of sophisticated communication structures where they insert political, social and emotional values (Fashion Magazine – Senior Editor).*

Catwalks, fairs and showrooms are important moments for two reasons. First, they enhance the symbolic value of the fashion products by creating the conditions for their social appreciation and diffusion in a context where perceived exclusivity is an essential component. Secondly, they represent the moment when buyers define their orders. Hence, they define the quantity of products sold and produced. The production of a high-end fashion collection occurs based on orders; no product is produced without being sold to buyers. The value enhancement connected to the production lies in acknowledging the high-production competencies and quality of the artisanal companies and producers who contribute to high-end products.

In the high-end fashion design production network, the brand captures the greatest share of the value created along the network, which seems to occur at each stage of the production network.

Although acknowledging the role of producers – always indicated as artisans – with their specific competencies and skills, the brand maintains asymmetric relationships with them. The control is tight and continuous. The monetary value of products paid to producers is limited, often a third or less of the price the brand sells to consumers. As explained by a second-tier supplier,

> *You [the consumer] pay 250 euro for a pair of trousers from [brand name] because of the fabric, the marketing etc. For the production, though, there is a range depending on a series of variables. […] It depends. A third of the final price or even less. (Second-Tier Garment Production Company – Entrepreneur)*

Despite a rhetorical and symbolic emphasis, widely connected to the image of "Made in Italy", the value rewarded to the material dimensions of production is concretely and significantly limited and mainly used for marketing purposes. This idea emerges clearly in the words of a senior editor of a fashion magazine:

The rich Chinese customers [in the late '90s] who wanted to dress Prada did not want to dress Prada with products made in China. They wanted them made in Italy. In fact, then Prada, like Dolce and Gabbana, moved the factories either here or in Eastern Europe. In China, there are hardly anymore, but there because it came from consumers, from the famous big spenders. (Fashion Magazine – Senior Editor)

As anticipated, Yellow Co distributes a part of its production in multi-brand shops. Even in this segment of the network, the brand captures value. As explained by the member of the board of a showroom association working with various brands,

Let's say that there is an average commission of 12%. It is clear that if I get a brand that brings me 2 million turnover and offers me 10%, I'm fine with it. (Association of Fashion Distribution Companies – Representative)

A brand's value is greatly measured based on the archive it holds. As previously indicated, the archive contains drawings and goods that are part of the brand's physical and symbolic capital. A clear indication of this importance is given when a brand is sold. As explained by the lawyer of a well-known company providing professional services to companies,

The value of the archive is certainly one of the most important items that are quantified in view of a market acquisition. (Consultant Company – Partner)

3.2.2.2 Socio-cultural embeddedness

Yellow Co is based in Milan, one of the four international fashion capitals, and its production is mainly based in Italy (either in the Centre or the South). Indeed, if the status of Milan as a fashion capital is rather new and dates post-1970s, the Italian reputation for producing high-quality goods has a long-lasting history. A highly skilled craft community of tailors, seamstresses, leather workers and accessory makers support the enduring international reputation of the Italians as producers of high-quality fashion goods (Breward 2003). Indeed, the rise of Milan as a capital of designed fashion depends historically on the concentration of small, medium and even large factories dealing with textile and clothing production located in the North of Italy, surrounding Milan in particular. Indeed, after World War II, a third of the Italian national wealth was destroyed, but the clothing and textiles factories, located mainly in the North, were remarkably fortunate, with only 0.5% damage. Soon factories produced again, thanks to fuel and raw materials provided by the US.

Moreover, Italian textile factories enjoyed advanced technical and managerial innovation thanks to their frequent contact with the US. For fashion shows and consumption, by the end of the 1940s and the beginning of the 1950s, sporadic fashion shows were held in Zurich and Milan by individual companies, also in Venice during the International Film Festival, and Florence, where all significant collections by Italian designers were displayed to the international fashion press (Breward 2003).

Italian tailors and craftsmen soon gained considerable success, particularly with the American public, who were increasingly coming to Italy as tourists.

The US had more influence in the fashion industry, symbolically, stylistically and economically, and the mass production of women's ready-to-wear clothes formed a key model for the development of the Italian fashion industry. Indeed, ready-to-wear production had begun much earlier in the US than in Italy or Europe. Once World War II was over, the US was ready to sell women's dresses worldwide and teach other nations how to do it. In February 1951, the first international Italian collective fashion show was held in Florence, organised by one of the most important buyers of Italian products for the Americans. Eight individual American buyers were invited to attend the show, held the week before Paris so that Americans could fly directly from Florence to Paris. The show hosted ten Italian designers and was an absolute success, with many orders and favourable press comments. The primary reasons for the success were low prices, French-led style and high production quality. Linkages between textiles and the fashion industry strengthened on that occasion, as many leading Italian textile brands were involved in the fashion shows as event sponsors.

In the late 1950s to early 1960s, Italy, particularly Milan, experienced an incredible economic expansion that revolutionised Milanese society. An unprecedented economic concentration of economic activities (particularly in the CCS) and a boom in the consumption patterns of the city made Milan the economic and cultural capital of Italy. Fashion magazines, photo shootings and the advertisement industry on the one side and the textile and garment producers on the other created the conditions for the success of fashion shows in the city, which stole Florence's primacy a couple of years later.

From that decade until today, Milan has remained the Italian fashion hub (d'Ovidio and Pacetti 2020), concentrating and organising a complex set of activities related to the whole production chain of the fashion system.

Today, the fashion system is undergoing deep transformations, due particularly to the changed economic global order. Nevertheless, the distinction of Milan within the international fashion system still plays a role in the Italian economy, as the city concentrates the vast majority of the main Italian fashion brands and the related specialised services. The production of textiles, leather, garments and accessories is still paramount in the Italian economy, concentrated in industrial districts in particular Italian regions (Campania and Apulia in Southern Italy, Tuscany and Marche in Central Italy and Veneto, Lombardy and Piedmont in Northern Italy).

Historically, companies in Puglia have specialised as cheap, reliable and quality suppliers of full-package or cut-make-trim production phases for Northern Italian and foreign brands in the 1970s and 1980s (Viesti, 2000). In the 1990s, the liberalisation of outward processing trade and the rise of suppliers in emerging economies with lower production costs pressurised Southern Italian subcontractors (Dunford et al., 2016; Dunford and Greco, 2006; Pickles and Smith, 2011). Delocalisation became a priority for many brands that aimed to cut production costs (Greco, 2002; Prota and Viesti 2010). Moreover, local firms started to outsource the most labour-intensive

production phases to Albania and other Eastern European countries thanks to the geographical and cultural proximity maintaining a short lead time with a high level of control over foreign suppliers.

The network observed here is characterised by strong embeddedness in two contexts: the creative activities are inserted into a localised socio-cultural environment in Milan, while the production phase is localised in local systems presenting the characteristics of industrial districts.

3.2.3 Positioning the case within the typology

The table shows the governance and the spatial footprint of the production network of Yellow Co.

Table 10. Governance and spatial footprint of the Yellow Co production network

PRODUCTION PHASES	Local/regional	National	Intra-EU	Global	GOVERNANCE
Creation	Creators				
Production	Specialised suppliers	Specialised suppliers			
Distribution		Customer (showrooms)		Distributors, Consumers	
Exchange	Creators			Strategic partners - private	
Archiving	Creators				
Network level					Lead actor

As widely discussed in the previous pages, the production network of Yellow Co is structured around the leadership of the fashion brand, whose power is exercised over all the phases of the production cycle. Yellow Co has in fact the capacity to organise all the activities of the network according to its need and strategies.

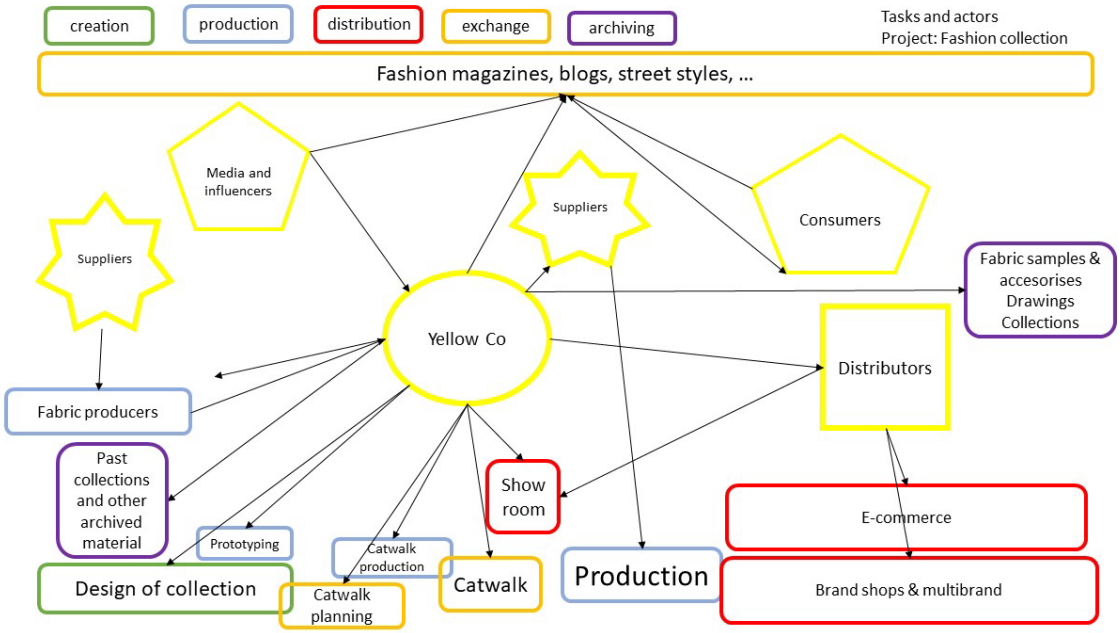
If creativity is internalised within the company, production is mostly outsourced, and highly controlled and managed by Yellow Co.

The brand also exercises its power in the distribution and exchange phases: Yellow Co owns brand shops and in the case of distribution through multi-brand shops, the brand activates a very strict control towards multi-brand shops owners, thanks to contracts and other legal tools.

In the exchange phase, the influence of the brand is also strong. Yellow Co controls directly the whole catwalk organisation, and uses different tools (both financial and symbolic) to affect the action of fashion journalists and fashion bloggers.

Therefore, we can describe the production network of Yellow Co as led by a single actor (the brand). Regarding the spatial footprint of the network, it is both very localised (territorially embedded), and much globalised. In fact, the creativity and the production phase are deeply rooted, respectively, in Milan and in some Italian regions; the brand however, reaches all over the world with its products, its name, its importance.

Figure 6 Governance of Yellow Co.



3.2.3 Societal impacts of the production networks of the high-end fashion collection

3.2.3.1 Economic impact

It is important to distinguish the different phases composing the production cycle, which have particular geography and varied outcomes, to discuss the economic impact of the high-end fashion industry. Notably, the creative phase of the fashion segment is well-concentrated in certain cities (Casadei, Gilbert, e Lazzeretti 2021), contributing to the local economy through the GDP and employment while adding urban symbolic value.

The creative phase of the production network related to Yellow Co is in Milan, which is remarkably one of the four major global fashion capitals. Here, the fashion industry is an important asset to the local economy. A recent report on the Milan fashion industry calculated that fashion represents a turnover of 19 billion euros, while exports of Milanese fashion are 6 billion euros. In Milan, 13,000 companies employ 90,000 people. Milan represents 5% of all companies in Italy, 10% of jobs and a fifth of the volume of national sales (http://www.adlmag.it/2018/11/15/milano-capitale-della-moda-made-in-italy/).

Yellow Co is certainly not an exception to this picture, as one of the larger fashion companies in Milan, belonging to the group of few Milanese fashion firms employing between 1,000 and 4,000 employees, with revenue of over 1 billion euros. Moreover, the exchange phase is mainly located in major cities, particularly Milan. The city also benefits indirectly from business and shopping tourism with fashion weeks and fairs. Milan Fashion Week represents a 19 million euros business.

The economic impact of the Milan Fashion Week reaches 160 million euros, including all related sectors, from transport to museums, shops and restaurants, with 137,000 employees and 18,000 companies involved. Milan has strengthened its presence on the international scene and on social networks. Thus, Milan is becoming increasingly connected and "social", especially on Instagram. According to a survey by Blogmeter for Camera Moda, the FW 2019 fashion week in Milan generated 46.2 million social interactions, +15.3% compared to the previous edition. The total number of messages related to the fashion week increased by 46.6%.

Concerning the production phase, Yellow Co and most Italian high-end fashion companies mostly produce in Italy, with few production lines partly manufactured in Asia.[2] This concentration represents an important asset for the national economy, as shown in the statistical mapping.

As presented in the previous chapters, Yellow Co produces internally (e.g. a few pieces and prototypes) and externally with a system of direct contractors and subcontractors located in clusters in the Lombardy region, Tuscany and Apulia.

According to Confindustria Moda (the fashion branch of the main Italian association representing manufacturing and service companies), by the end of 2018, the Italian fashion design industry generated revenues of 95.7 billion euros. As reported by a 2019 Confartigianato (the main association representing SMEs in Italy) study, the 79,000 micro-enterprises and SMEs operating in the industry – including textile, clothing, leather, eyewear and jewellery – contributed revenues equal to 43.5 billion euros (approximately 45% of the entire industry) and employed 372,000 workers (approximately 67% of the total). The three most representative sub-industries of the TCL sector – textile, clothing and leather – counted 55,491 SMEs (98.1% of the total), of which 27,882 (50.2%) operated in clothing, 14,518 (26.2%) in leather and 13,091 (23.6%) in textiles (number of employees: 311,697 = 67.5% of the entire TCL sector). Among them, 35,914 were artisanal enterprises and employed 158,267 workers, including employees and independent contractors.

[2] As the editor of a fashion magazine explained, at the turn of the century, there was an important reshoring of the production of Gold Co and many other brands, particularly due to the Asian market preference for "Made-in-Italy".

While the most important fashion brands are localised in Northern and Central Italy, Southern Italy (especially Campania and Puglia) accounts for a significant bulk of production and employment. Campania's production structure prominently specialises in leather goods, while Puglia has various textile clothing (and footwear) districts. Some figures help define the nature of its production structure. In 2018, Puglia had slightly more than 3,400 companies operating in the TCL industry (ARTI, 2021), with approximately 2,300 companies operating in the clothing segment employing over 14,000 workers, over 60% of TCL sector employees. Women accounted for most workers; this sector was also highly informal.

Of the seven industrial districts in Puglia, five relate to the industry, with different production specialisations and performances, emphasising the predominance of industry in the region. They include Barletta's textile and clothing district, which specialises in nightwear and underwear, Martina Franca's district specialising in outwear, Minervino Murge specialising in clothing, the textile and clothing district of Putignano specialising in wedding dresses and children's wear and Casarano specialising in leather and footwear.

Between 2009 and 2020, the number of textile, clothing and footwear companies decreased by approximately one-third, compared to a decrease in the South and Italy of 19% and 17%, respectively. This decline was due to various factors, from the financial-economic crises of the late 2010s to the most recent COVID-19 pandemic. Competition from low-labour-cost countries, such as East Asia, has impacted the past decades with the changes in demand and consumption. However, the specific configuration of production and production networks has also contributed to this dynamic. The data show a) a low value of turnover per employee and b) a low propensity to export,[3] explainable by regional production being addressed to the internal market and local companies in production networks acting as suppliers (subcontractors) to companies located in Northern Italy due to significant production capacities, artisanal skills and lower labour costs. Nowadays, production in the North and South has different profiles: the export centres of the national industry are mainly located in the North, while the Southern districts continue to work as suppliers for Northern lead firms (Giunta et al., 2012).

Therefore, local companies are fully integrated into national and transnational production networks. A few reach foreign markets with their brands, while the rest are integrated as subcontractors in production networks of brand marketers, retailers and brand manufacturers with a global reach. Specifically, a limited number of brand manufacturers reach national and foreign markets and, according to the quality of their product lines, either retain an important part of their production in-house or outsource locally and to nearby countries. Other firms work as full-package suppliers for brands and retailers, managing design and sample-making and outsourcing production to different CMT suppliers.

Finally, the largest group of firms works for local or external buyers providing a specific phase of production, such as fabric or clothing embroidery and embellishment, cutting, ironing, labelling and

[3] Data show that, compared to similar companies in Italy, companies in Puglia have a much lower propensity in exports (23% compared to 69%) (ARTI, 2021).

packaging. Assembly workshops also persist. These firms are greatly dependent on a small number of fixed clients who are usually first-tier suppliers and not the final lead firm of the chain. All these firms face growing pressures in costs, quality and delivery times, with increasingly leaner and uncertain orders. According to Arti (2021), the future development of the industry in Puglia must invest in the creative segments of the production network (i.e. style, brand promotion) and the distribution phase (i.e. internationalisation and distribution). Moreover, the industry depends largely on external financial sources and needs to address workers' skills and qualifications.

Considering the Milanese fashion system (a complexity of activities in the creation and production of designed clothes and accessories), it appears that the city acts as a hub, organising the relationship between the creation and production phases while developing multiple networks at various scales during the exchange phase. It is a complex ecosystem based on the assemblage of multi-scalar connections coordinated mainly in Milan (d'Ovidio e Pacetti 2020). The feature of the city as an important connector among different actors, phases and activities is recognised particularly by actors working in the system.

The fashion system is remarkably concentrated. According to research on the Milanese fashion system in 2013, the revenue analysis was noteworthy: 80% of the entire wealth produced by the industry was due to five main actors (d'Ovidio 2014).

3.2.3.2 Social impact

If the fashion system creates many jobs and contributes to employment in Italy, the quality of work is questionable. Indeed, working conditions are not always sufficient in the production and creative phases.

It is rather common to have temporary contracts in the creative phase instead of full-time, permanent contracts, as many designers are freelance or consultancy workers. Hence, a fashion designer works on a fee basis for a larger fashion *maison*. McRobbie (1998, p. 98) suggested a kind of "predatory relationship" on the part of the big companies that tend not to take risks, externalising them to workers and creatives. Many workers are employed in the Milanese fashion industry, many as freelancers.

Moreover, it is common to have a large army of internships, often unpaid, rewarded with learning competencies and reputation. Yellow Co is not an exception in this environment, confirmed by research on the creative segment of Milan's fashion system that examined the quality of the work in the fashion industry, questioning the Floridian ideology of creativity as a value. For example, Marchetti and Gramigna (2007) and Arvidsson et al. (2010) explored the working conditions of employees in major companies in the Milanese fashion industry, including Yellow Co, demonstrating that workers were generally underpaid and exploited, with a highly polarised labour market. Other studies have confirmed this finding: "The work process [in fashion] tends to look more like the non-creative sectors, such as advanced business services, call centres [...] rather than the kind of basically fulfilling, interesting and 'cool' work which describes Florida" (Arvidsson et al. op.cit.: 297).

Considering the production phase, Yellow Co produces internally but especially externalises production to a complex and variegated combination of SMEs, crafts workshops and laboratories, some of which can be extremely small. As the marketing office director of Yellow Co admitted, the entire production of children's shoes had to stop when the workers contracted COVID-19.

Therefore, the GPN of the designed fashion industry could mobilise a variegated set of production activities involving many employees at different levels, supporting SMEs at the core of the Italian economic system. However, several criticalities were observed. Concerning suppliers, in the previous chapter, we observed the strong power Gold Co has along the whole production chain. Indeed, producers claim that relationships with clients (brand or other producers) are not always formalised through official contracts that fix prices and production time: all is decided informally via word of mouth. What may appear as a sign of freedom is, in fact, another way for the brand to exercise control over its producers.

This concern makes relations ambiguous and often conflictual, depending on company or sector culture. For example, the owner of a first-tier production company remembered that it was difficult for him to develop good relationship with the brands, and he recalled that the first time he met them, he rented a big, expensive car and dressed up well:

> *They [brand's representatives] want to see you, and when you meet them, you should pretend being someone important because, otherwise, they treat you badly. (First-Tier Garment Production Company – Entrepreneur)*

Moreover, the global organisation of the fashion system (e.g. four main collections annually plus the capsule collections, fashion shows, fairs and exhibitions) imposes working times on suppliers that are either hyper-frantic or calm, with almost no operation, depending on the season. For instance, during the fashion shows, producers work on a compressed schedule because sometimes brands ask for modifications or products to be delivered in a few days. A worker employed in a first-tier knitwear production described working hours as non-standard and demanding:

> *We should work until 3 pm, but we always stay until 6 pm. (Knitwear Factory – Worker)*

Working conditions can also be remarkably poor. For instance, making textiles requires much physical effort as looms are noisy, workers remain standing and few pauses are allowed to avoid stopping and going for the machines. Moreover, the following ethnographic notes from the interviews support this picture:

> *It was the first days of October 2020, and production had just restarted after the hard months of the lockdown. After answering my questions in a large and bright office and showing me some of the fabric samples, the interviewee introduced me to the production department. It consisted of a large and bright site with a dozen looms, some other machines and yarns. A group of three workers were discussing something in the corner of the mill. Only a couple of looms were in operation, both operated by one single female worker. They were a bit hypnotic, with the spool going back and forth, but there was especially a deafening noise impeding us*

from talking. Workers did not wear ear protection, and they shouted to communicate. The interviewee and I did not talk because of the noise. (Ethnographic Notes – October 2020)

Furthermore, brands' requests do not tolerate small changes in their features like colours or textures. We had an informal talk with a representative of a craft association about this issue, and we were told about a leather dyer who spent the whole night working to obtain the exact yellow requested by the brand.

Finally, the education field deserves a few words, as it is connected to local development. Two main and contrasting dynamics appear in comparing the creative and the production phases. Considering the regional geography where Yellow Co is located, a pattern emerged: the designers' schools are concentrated in Milan, while the professional schools are outside the city boundaries in the core of the local industrial district. This distinction is linked to the labour market characterising the two areas. However, these schools tend to have few students, not enough for the market's requests, since young students choose not to follow this professional path at the beginning of their educational curriculum. Moreover, the producers claim a lack of labour for manual workers and craftspeople who engage in traditional jobs within the fashion system.

In contrast, design schools are prized by the younger generations, who aspire to become fashion designers. However, despite these interactions with companies, the variety of schools in the territory and the virtuous dynamics existing in the industrial districts, our key informants argued that there is a big gap between the needs expressed by companies and workforce availability, both quantitatively and qualitatively: firms report a lack of technicians and young people interested in manufacturing employment opportunities for occupations as textile workers. The problem is shared by the different regional players, explained by the general loss of attractiveness of manual professions and the widespread belief that the Italian manufacturing industry is destined to experience an inexorable decline (d'Ovidio & Pacetti 2018).

3.2.3.3 Cultural impact

Notably, the concentration of fashion design studios with the periodic fashion show clearly characterises the global fashion capitals while distinguishing one from the other. Unsurprisingly, Milan's identity and culture are displayed by the presence of the fashion system. The rise of Milan as a capital city for fashion in the late 1970s (next to Paris, London and New York) transformed the image of the city, especially abroad (Foot, 2001). Urban tourism, especially fashion tourism, rapidly changed Milan from a grey industrial centre to an exclusive, stylish, fashionable city.

The myth of the fashion industry in Milan is perceived as if it soaks everywhere in the city. By the 1980s, a central area, known as the *Quadrilatero della moda,* characterised by an enormous concentration of boutiques, fashion shops, showrooms and designer studios, became "the place of the image above substance, the showcase of the post-industrial city, the heart of a capital fashion" (Foot, 2001: 128). Since the 1980s, Milan fashion has experienced a close relationship with the urban

territory since the city, symbolically and economically, is strongly defined by the fashion industry. Moreover, fashion designers in Milan have become public figures, demonstrating their importance by physically and symbolically occupying the urban space. Increasingly, their investments are directed to real estate by renovating their offices and headquarters, often entire palaces in the city centre. Moreover, fashion brands promote culture in the city with artistic and cultural foundations, representing a critical financial asset with an important footprint on the city and its culture. In Milan, brands sponsor events to engage with the city, for instance, the campaign by the well-known fashion brand Dolce & Gabbana on traditional venues in Milan:

> *Dolce & Gabbana pays homage to the city of Milan with a special tribute to its historic stores. Authentic places, imbued with unconditional love for their work, that represent an invaluable social heritage that deserves to be preserved and protected.*
> *(*https://world.dolcegabbana.com)[4]

This discussion brings us directly to the links that the fashion industry keeps with the local culture in the productive districts, where brands much appreciate local traditions, know-how and working practices and are used to creating or increasing the value of the designed products. The director of the marketing office of Yellow Co used terms like "perfect", "perfectly made", "important work" and "extraordinary job" in the interview when debating artisanal work. For instance,

> […] *but with the shape just perfectly made in this farmhouse. […] There are these craftspersons who are very good at making things. […] They did an extraordinary job. […] A dress came off that was made perfectly. (Fashion Brand – Marketing Office Director)*

Another important element concerns innovation and technology. In the production chain, notably, there are two kinds of innovation: one rising from the need to create new projects (product innovation) and the second related to the production process (process innovation). In the CCS, this dynamic is greater as novelties must be put on the market continuously, and so it is in the fashion industry, where the market is organised on seasonality: two seasons for large new collections and, increasingly often, smaller, less structure set of pieces, called *capsule collections*. In this industry, product innovation is extremely frequent, as, by definition, every fashion product must differ from the previous ones (with few exceptions). Therefore, process innovation is needed because new products need new productive systems, which are often paid for by producers showed by the fact that brand imposes producers to update their own machineries.

Moreover, the opposite dynamic happens when innovation on the production line influences the design of new products:

[4] https://world.dolcegabbana.com/it/discover/autentica/ - last visited 30 June 2022

This technological innovation, which is made by someone who deals with production, is then received by many stylists, and it has the potentiality of becoming the trend because it is then taken by brand A, by brand B and so on, each in his own way. (Fashion Brand – Marketing Office Director)

Clearly, innovation is moving on the production network in two main directions: either producer towards brand or brand towards producer.

Therefore, the fashion industry permeates the local society to a high degree, however, with qualitative and quantitative differences. In the urban environment of Milan, the fashion system contributes strongly to creating an urban identity and deeply influencing the city branding. However, in Milan, the fashion system creates its image of exclusiveness rather than inclusiveness, stressing the idea of the fashion system as a world apart, characterised by luxury and sophisticated elements. In the local productive system, the strong identity connected to the fashion industry permeates the daily life of the people of the district.

3.2.4 Policy implications

Some areas of policy interventions have emerged from the analysis of the case of high-end fashion design. Firstly, there is an issue of competitiveness of the industry where the actors of the sector expressed their overall concern about the competitiveness of the Italian fashion design system, which is an integral part of the internationally well-reputed "Made-in-Italy" brand. This issue is complex. The first aspect concerns the cost of labour that producing companies consider too high to compete internationally. Some interviewees suggested the necessity of easing the fiscal load on the indirect labour costs they are requested to pay. According to a first-tier supplier,

One of the disadvantages that we have here in Italy is certainly, but this does not concern only the fashion industry, the cost of labour that is burdened by a tax wedge that is too important. I would like to be able to put 100, 200, 300 euros more in the pay envelope of the seamstress, but on the other hand, I have already a very high level of labour costs that are almost double the net amount that goes into her pay envelope. (First-Tier Garment Production Company – Entrepreneur).

Others stressed the unfair domestic competition when fiscal policies support Southerner producers to ease their infrastructural peripherality and geographical distance from the creative and distribution centres. Therefore, according to the chief executive officer of a well-known company working with luxury brands,

The cost [of labour] for a minute here [Tuscany] is higher; in my opinion, you shouldn't worry so much about lowering the cost of labour for the Apulian companies. You should worry about making sure that a company in Nardò (Apulia) is not disadvantaged from a competitive point of view compared to XX in Busto Arsizio or XX in Montevarchi. This is not the correct intervention; it is instead doping, a steroid injection that generates only disequilibrium in the whole system. (Holding Company for Luxury Brands – CEO)

Foreign investments and takeovers signal the weakness of the Italian fashion industry. The same interviewee observed,

We had some beautiful companies that, however, in the national context, are hardly able to compete; therefore, they have become attractive for brands that, vice versa, with further investments help them to compete (Holding Company for Luxury Brands – CEO).

Thus, interventions should concern not only brands but also the manufacturing activities related to them to ensure competitiveness, allowing them to maintain the high-quality standards of the industry and its reputation. The same chief executive suggested,

The real fashion industry, from my point of view, is the creation, design and production industry. I say creation and design as well as production because, in reality, this part of the supply chain is not only made up of blind and brutal executors of other people's designs and projects. […] In most cases, we receive inspiration, we receive sketches, we receive vintage garments, we receive an idea that we then transform both from a creative viewpoint and from a production perspective – we complete it and give it a three-dimensional and industrialised execution – so we make it substantially feasible on a large scale with a process that is partly creative and partly industrial. (Holding Company for Luxury Brands – CEO)

An important reason for the weakness of the Italian fashion industry lies in the industry being mainly comprised of SMEs. As indicated by a representative of an association of fashion distribution companies,

We need to safeguard the Made in Italy, the SMEs and, above all, the artisanal companies because this is another Italian jewel that we really risk losing. [...] If it is not supported, it will die. (Fashion Distribution Company – Owner).

Nevertheless, as deplored by the representative of the small companies' retail association,

When large companies close and shed employment, it makes noise; when it deals with the closure of many small units that lose one or two employees, this is instead a white noise. […] It is only us in the sector that hear, perceive and yell without having the possibility of being

heard by media. […] One thinks that it will be easy to find a new job. (Association of Small Boutiques – Representative).

Some suggestions of intervention to support the industry were expressed by a representative of an association of fashion distribution companies:

> *Investing in business culture, supporting professional growth and market capacity are priority objectives for relaunching the country's production and employment, especially after the serious crisis caused by the pandemic. In this process, it is of key importance to dialogue with all the productive categories of the system, to listen to requests and collect ideas and at the same time develop a recovery plan, enhancing skills and professionality. (Fashion Distribution Company – Owner)*

Another issue for the industry concerns the labour market in general and, more specifically, professional dynamics and recognition. A relevant issue for the fashion design industry is the low level of attraction toward artisanal professional paths. This question takes on different aspects. The first one concerns firms' capacity to hire craft workers. Explanations for such difficulty range from insufficient remuneration levels to insufficient personnel training to negative perceptions of certain occupations. As indicated by a representative of an association of fashion distribution companies,

> *Nobody wants to do this type of work, nobody wants to do it anymore because obviously it is not profitable enough or maybe schools prepare them [workers] insufficiently, but we are losing them, and we are risking to really lose what was the excellence of our industrial and production fabric, the craftsmanship. [...] So, something really needs to be done. (Fashion Distribution Company – Owner).*

However, the chief executive officer of a well-known holding company working with luxury brands well explained,

> *If I do not find specialised labour, I have to go and get it as soon as possible. Even when the young man of the area and his family have to make [an educational and training] choice, I have to let him know that there are professions that are very stimulating. This is in contrast to what is the perception of working in manufacturing which is always perceived as alienating and repetitive work, etc. etc., that is not in line with what young generation like, [...] this is a type of job for which I like the title of "intelligent hands"; it is a job that requires manual skill and manual savoir-faire, but it also requires great intelligence in its execution. It's not like the work of the Charlie Chaplin's Modern Times on the assembly line; each garment is a different garment; we are in companies and in beautiful workplaces*. (Holding Company for Luxury Brands – CEO)

Another aspect is generational change. The same interviewee observed,

In these companies, the main asset is not the building, not the machinery, not the technology [...] but it is the people and their savoir-faire. So, we have to motivate people in some way. We have to keep them [in the industry]; we have to look for them because we have to manage the fundamental issue of this industry which is the generational turnover of skilled labour. (Holding Company for Luxury Brands – CEO)

In addition, a representative of an association of fashion distribution companies illustrated,

Yesterday, I was in Carpi [a town in the Emilia Romagna region] for work; this small company that lives on Made in Italy, makes a very beautiful product; among other things, they told me that they have a problem with seamstresses. Their seamstresses are seventy-year-olds. They don't have a new generation because no one wants to be a seamstress anymore. They aren't trained. We are forced to go to the Chinese because they no longer find Italians. This is a very serious issue. (Association of Fashion Distribution Companies – Representative)

The labour issue also affects the creative segments of the industry with their professional profiles and jobs. According to the same interviewee,

If we don't do something, we risk that this world of fashion and young designers will disappear in the next ten years. This would be an immense damage because we have talented designers, I mean, there are really good resources coming out of schools, but these guys alone can't make it. We are no longer able to support them, so we need institutional intervention; we need that the government intervenes. (Association of Fashion Distribution Companies – Representative)

Some initiatives are designed to ease the existing mismatch with some companies trying to set up their own training schools, as indicated by a fashion journalist:

Companies are creating their own internal schools for that very reason. Because there aren't any [enough workforce]. But that's a big problem […] as we all want to be graduated. (Fashion Expert Journalist)

Other initiatives hinge upon the enhancement of cooperation between the world of labour and highly renowned schools that prepare young professionals. As indicated by a representative of an association of fashion distribution companies,

They [young guys] spend a lot of money, then they have no job opportunities, or go to work abroad…. We also talked with Marangoni [a prestigious school for creatives], and we also proposed, among other things they are part of a very important circuit called "Galileo" where there is Saint Martin etc., and we said: "Let's make a plan together, where we offer concrete possibilities to these people that you prepare to approach the working world. We give awards;

we try to select the most talented. (Association of Fashion Distribution Companies – Representative)

Support of the industry might also imply the formal recognition of professional profiles as in the field of intermediation. The same interviewee explained,

> *The role of quality intermediation is fundamental to facilitate the success of a strategic supply chain such as Italian fashion, which represents an excellence of Made in Italy in the world. I am working in Parliament to ensure that the category is recognised an adequate specificity*. (Association of Fashion Distribution Companies – Representative)

Thirdly, the industry faces the issue of environmental sustainability. Many interviewees stressed the increasing challenge brought about by the search and request for sustainable industry practices concerning production and consumption. Thus, as explained by the chief executive officer of a well-known holding company working with luxury brands, sustainability implies taking care of the territory through welfare plans and contributions to the community or corporate social responsibility. It is also clear that to render the system sustainable, producers must incur additional costs. Some are related to the system of certifications which are expensive economically and procedurally. As explained by the interviewee,

> *From the first of June, fabric scraps will be entrusted to the Green Line. […] It recovers the paper and sends it to the recycling of paper, the plastic in the plastic and the fabric is reused to make secondary products such as sound-absorbing panels, protective fabrics, etc. etc. All very nice, we like to do it, fantastic, but the disposal costs 19 cents a kilo, that is 50% more. So how can I sustain higher costs if I don't have economies of scale or larger aggregation of more structured groups that can cope with this kind of effort*? (Holding Company for Luxury Brands – CEO)

One of the problems arising from the pressure to become more sustainable is that the additional costs are paid by all the actors of the *filière* but not by the brand that usually requires it but is certainly the one that takes the surplus. Indeed, as indicated by the member of an organisation working for the sustainable fashion industry,

> *The costs of sustainability are not borne by [the name of a brand...] but are borne by all suppliers that are along its supply chain. However, it does not pay a surplus for suppliers to become more sustainable and to pay for the certification or for the costs of improving their company. So, sustainability at this time is still a cost for the supply chain. (Consultant Company for Critical and Sustainable Fashion – Representative)*

This way of dealing with the issue of sustainability may imply that some activities go out of business as they cannot keep up with the costs involved. The more general risk is that the distortions created

by uneven cost distribution along the production network may lead some entrepreneurs to take shortcuts and find easy answers to solve the problem rapidly, namely not respecting the obligations or even undertaking illegal behaviours. Sustainability concerns also the capacity to communicate and promote it. For instance, as indicated by a responsible of an association of small boutiques,

> *If I buy a product that is made on the other side of the world and then I deliver it house by house, I have an environmental cost that is much higher than any other type of cost of production of the fashion product in terms of waste of water and cotton, […] cotton is a natural fibre that has certain characteristics that are good for perspiration and people […] in reality one does not think that if I get a fabric in polyester, I have used petroleum [...] to spend a few euros I had to get it from the Far East. (Association of Small Boutiques – Representative)*

Ultimately, the industry faces the great challenge of modifying the prevailing business model. As a researcher and cultural manager explained,

> *Today, consumption is no longer sustainable; there is a big problem of the sustainability of fashion, and, therefore, the idea remains that fashion must change because at least every six months, new collections and new colours are produced and presented. […] But, the brands are always the same*. (Researcher and Cultural Manager)

Another issue emerging from the interviews is digitalisation. The widespread and increasing use of digital technologies raises contrasting positions and calls for policy regulation. Some interviewees highlighted the potential benefit of such technologies for the industry's future development. According to a member of an organisation working for the sustainable fashion industry,

> *It would be much more effective if artificial intelligence is implemented in the shop or on websites because, in the shop, you can show the story of the garment and then interact to ensure that the final consumer, the buyer, understands. [...] Thanks to these tools, you really immerse yourself in history and really create empathy. So, like smart shops and things like that with integrated artificial intelligence are, in my opinion, an effective tool because it increases the emotional bond with the dress and the story of the garment. (Consultant Company for Critical and Sustainable Fashion – Representative)*

It is also true that generally, in the policy realm, digitalisation and artificial intelligence require huge investments, have an environmental impact (that is contested and debated), and need adequate skills presently lacking. Indeed, the combination of digitalisation and e-commerce creates friction between the production network's different actors, especially in the distribution phase, where fashion chains and brands can circulate their products with no or completely different rules compared to physical shops by subtracting them great shares of the market. Retail associations require greater policy intervention to restore a level playing field that risks producing the default of many physical shops

and seems concerned with the extent of retail distribution and its rules. As exemplified by a responsible of an association of small boutiques,

> *[The chains] can circulate products within their stores on platforms that reaches global consumers. To give you an example, if a chain has a product that it didn't sell in the winter in the Northern hemisphere, it can sell it in the other hemisphere, so in Argentina now, it is still able to sell it. (Association of Small Boutique – Representative)*

Furthermore,

> *Is it possible that we pay the taxes on advertising and shop signs, which among other things, give light to the city, and security to the city, while on the internet, all is for free? I mean, no one has to spend for anything? How many billions and billions of online advertisements do we get in a week? (Association of Small Boutiques – Representative)*

Another interesting policy issue pertains to the protection of IPR also connected to the phenomenon of counterfeiting; the two phenomena might be read circularly. First, it appears increasingly difficult to detect products that are not original and that increase the illegal market. Consumers are called to pay more attention to the issue in this respect. According to the lawyer of a well-known company providing professional services to companies,

> *Let's start by saying that all the products that come from the world of counterfeiting are illegal products that the consumer should never approach, even if we know well how low the sensitivity is to this [issue]. And also, from the point of view of quality, it is true that it can be very difficult to recognise the differences between the two products, but if one examines the final product, the quality of the material eventually comes out. (Consultant Company – Partner).*

As the counterfeiting concerns the brand, only the owner of the brand can act legally, which is connected to the protection of IPR. As explained by the interviewee,

> *The first thing a lawyer must say to a small brand. [...] From the first moment the brand starts to enter the market is: protect your intellectual property. First of all, protect your brand. The brand is the main asset of the company. It is what allows you to recognise the assets of a company.* (*Consultant Company – Partner)*

This protection concerns the creativity of the brand, its aesthetic and its name:

> *There are jurisdictions – I think [...] in Italy or France – which are very "pro" protection of intellectual property; others are much less so. [...] To give you an example, the current EU regulation provides for the protection of trademarks of all kinds: they are the so-called "non-*

traditional trademarks". According to these rules, everything or almost everything can be traced back to trademark law: colour, shapes, smells etc. (*Consultant Company – Partner)*

It is also interesting that protection can cover the production when the brand's quality is especially connected to the production quality.

3.2.4 Final remarks about the high-end fashion collection

Geography

Activities are very well-embedded territorially, socially and culturally yet presenting geography very differentiated according to the phases of the production network. Creativity is strongly embedded in large cities; particularly, Yellow Co is deeply embedded in Milan, strongly connected with the culture of the Milanese fashion styles and the economic environment (e.g. other brands, the concentration of magazine and media activities, proximity with some productive district). The production (of textiles and garments) is extremely territorialised in several Italian regions and follows the "classical" industrial district dynamics.

Power asymmetries

Yellow Co maintains a dominant position in the network, controlling the whole production chain. However, several actors constantly put this role in question: fashion magazines and their editors (with the capacity to influence the symbolic, cultural values of the brand), craftspersons holding productive skills and the market on some occasions (requesting a more sustainable and Made-in-Italy fashion).

Critical issues

Several issues can be identified, opening new research and insights venues. First, the quality of labour is critical in all phases of the production network but mainly in the productive phase, where workers are required to have specialised skills that are not always rewarded. When the value of the workers' skills is recognised, brands often capture it through appropriation and co-optation in the exchange phase. Moreover, training and education are polarised between the creative and the productive phases. Thirdly, the industry must face the issue of sustainability, developing efficient industrial policies to embrace the whole network. All these elements are clearly linked to the issue of the competitiveness of the industry, jeopardised by new market requests, new global actors and technological developments.

3.3 Case 2: A collection of a sustainable fashion company: Magenta Co

3.3.1 Phases, actors and locations

The second case study is a collection of Magenta Co, a brand oriented towards sustainability and slow fashion in Bilbao, Basque Country, that sells globally. The company was founded in 1999 and was reorganized in the mid-2000s, acquiring production standards to increase sustainability. Labelling itself as slow fashion, the brand produces two collections per year, trying to promote an atemporal, sustainable and urban-chic style. Giving centrality to slow and sustainable fashion impacts the organisation of the global production network while influencing the actors involved, the role of localisation of proximity and how design is approached. The production network includes several actors, including the providers of raw materials, the producers of clothing, certification platforms, multi-brand shops and online platforms.

The **design** of the collection is developed by an in-house team of five members and the lead designer in the central offices in Bilbao. Sometimes, an external designer is hired to collaborate with the team. The team is formed by two fashion designers, two graphic designers and a pattern designer. The art director chooses a topic, an idea guiding the collection, and the designers start to work on it with different ideas. Each designer develops a mood board. Then, the team chooses models for development. This work takes place in close contact with manufacturers, coping with possible technical difficulties in producing the pieces. This collaboration with manufacturers takes place in parallel with follow-up and control over the collection already being produced at that moment:

> *[Designers] have to be constantly talking to the factory. […] It is something that is super important for me. At the end, a design, for me, it is not worth anything. The idea is not worth anything if it is not worked on in the factory directly with the professional people in it. (Art Director, Magenta Co).*

In parallel, graphic designers develop printing models, and the whole team selects the colours for the collection, assigning different prints to different pieces, a process that takes one month. Then, technical details and specification sheets are sent to the manufacturers involved, and they produce a perfect sample of each piece, allowing for a second try and selection of final pieces included in the collection. Next, a new set of samples are produced and sent to merchandisers to sell them, and the pattern designer works at this stage verifying sizes and testing them on real people. The design process takes several months, including the phases of creation, testing and selection in different meetings. The art director stresses the relevance of keeping the process of creation instead of having other business models in which designs are provided by the same producers or are copied from elsewhere:

I don't know. There is something that I find difficult in this model is that the creation is not connected to a story and a theme that takes time for the creation itself. It seems to me that it's more about dealing product by product, and in the end, that's what I try not to do just to give meaning to what we do and to sell this as well. […] We [the fashion industry] are too far away from craftsmanship because we are taken as a product, and in the end, I really want to keep or save this process of creation. It seems to me to be part of the soul. (Art Director – Magenta Co)

As we shall see later, the creation process is strongly embedded in Bilbao, as designers are settled there, taking inspiration from the city. The issue of sustainability also influences creation as it fosters experimenting with new materials and making designs more durable through time with quality and trendiness. The relation between design and raw materials influences the organisation of the network as designers need to have control over the raw materials and what can or cannot be done with them:

We have to produce the fabrics ourselves from scratch in our factories, even if it is not the garment factory and is a subcontract of it because it is another factory that produces the fabric. In the end, we give the specifications to produce the fabric, and we make according to what they can produce. Then, you get to a point where you know what they can do, what they can't do, what you can ask for: "Replace me this yarn with such and such yarn" or "make me such and such, this construction". (Head of Logistics – Magenta Co)

Thus, design is also related to the existing network of producers and their abilities to produce raw materials and specific designs.

The **production** phase of a collection is strongly controlled by designers and always occurs in parallel to the design of the next collection. Designers are involved in monitoring the production of raw materials and final clothing. Sustainable and social dimensions are key elements for the selection of providers. The company has generated some conditions for providers to become part of the production network:

First of all, I would say that it is the certification they have. I don't know if I can go into detail now, but well, we have a series of environmental and social criteria. Second would be the location of the supplier with respect to the raw material. This is a logic that, in the end, the textile industry is totally global, and there are many initiatives to produce locally, et cetera, which are very good, and we always look for where the raw material comes from because, in the end, you reduce its impact when you produce in a reduced perimeter around your raw material. At least, that's what we believe. So we have developed supply chains by region according to the raw materials that are found in each region. This would also be a criterion. And then, obviously, the personal reaction and the commitment we feel from the suppliers that we are in line with what we believe in. (Head of Logistics – Magenta Co)

This criteria for selection mean that the network limits its production to China, India and Portugal, together with some production in Spain. The selection of providers does not come out of the blue but departs from the company's involvement in a platform for certification, connecting designers and

producers seeking sustainable and social values. The platform, called "Textile Exchange", was one of the first certifications that allowed knowing new experiences and trends in sustainability. Thus, nowadays, all the cotton pieces of the collection are developed by a cooperative in India and China, ensuring organic cotton production that gives fair working conditions to workers, mainly women. Hence, manufacturers are settled on India (cotton), China (linen) and Portugal and Spain (knits, recycled cotton, other recycled fabrics).

Moreover, the network of providers and producers is strongly embedded, with long-term relationships established through the years. The owner of the company has had a strong role in the configuration of this network through informal meetings at catwalks and events, promoting trust and collaboration:

> *We meet most of the costumers at the International Exhibition and International shows, textile shows. […] Some introduce by themselves, you know such Magenta Co, 23 years ago. I didn't know the owner. […] And now, so, we will be doing business as friends for 18 years.* (Producer from China)

Thus, developing sustainable fashion occurs within an existing network of providers and producers, including the main company and its providers and producers who have included sustainability criteria in their production. In this process, manufacturers need certificates assessing their environmental and social sustainability, which has resulted in many providers and producers acquiring certifications and collaborating with the main company. Indeed, the company has worked with some of its providers to certify them and change their production patterns, which has meant shifting providers in some cases and reducing the number of countries where producers are settled:

> *One of our objectives is precisely to measure the permanence we have with suppliers and not to have too much rotation because we see that we are a family business, so we have historical suppliers who have become friends. […] Now, a lot of suppliers are certified. They have been improving a lot. Ten years ago, this was not the case. We had to work with our historical suppliers, make them understand the importance of some things for us and make them certify by assuming the cost, and so on*. (Head of Logistics, Magenta Co)

The production organisation, through certification and raw materials, has allowed for a concentration of logistics in Bilbao, and the production is no longer concentrated in China. When Magenta Co was producing 90% in China, it had an office there. Now, quality control is outsourced to large consultancy companies and controlled from Bilbao. Trust is also a key element for production and logistics and for maintaining a relationship between designers and producers.

Exchange occurs through different formal and informal mechanisms, strongly linked to its transformation towards sustainability. The company's owner plays a role as a public figure in promoting the brand and its transformation through interviews and participation in public events. As previously mentioned, this role is important for developing and strengthening the network at different levels. Apart from traditional exchange mechanisms in the fashion industry (e.g. catwalks, specialised magazines), certification agencies play a role in the exchange phase of sustainable fashion, allowing

for new experiences and forms of production and the development of new materials and forms of production organisation:

> *At the end of the day, sustainability is a world where you always have to question yourself and always have to relearn. So, they train us, and every year, we attend seminars, etc., where they open our eyes to new initiatives.* (Head of Logistics, Magenta Co)

The company also promotes the clustering of sustainable clothing companies in the Basque Country to promote the brand and establish new production forms, allowing the company to gain credibility as a relevant actor in sustainable clothing:

> *I think being too technical in communication, not being sexy enough, not being spotted in the theme somehow, and on the other way, not posting things until we were satisfied because we realised textile was changed, but you need to prove it. […] This has given us a lot of credit in the market because we have not been posting without any proof. And because I mean, also textile has changed. We've been nominated two years in a row in the top ten companies in the world for transformation because we started manufacturing conventional, and we are going towards a more sustainable. (Founder – Magenta Co)*

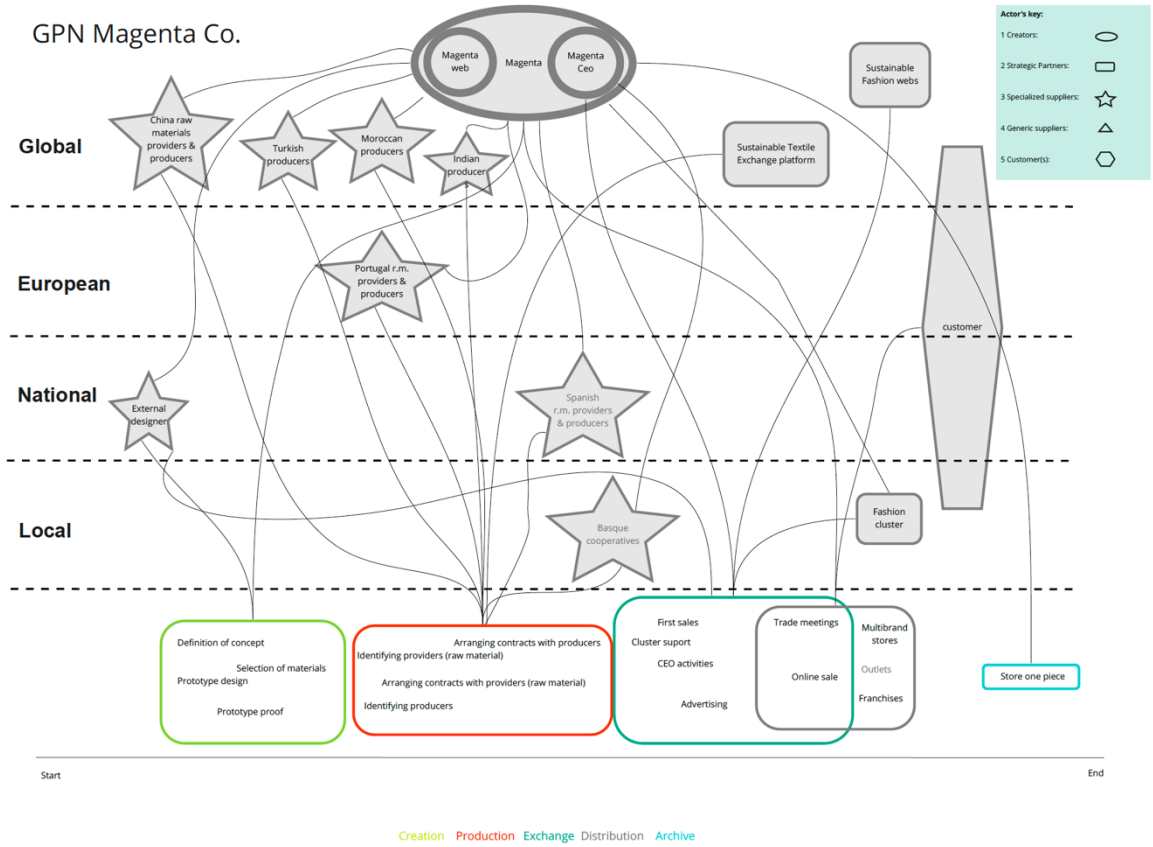
Distribution is based on three mechanisms: Magenta Co shops, multi-brand shops and online, with 50% of the sales via wholesale, 25% via retail and another 25% online, which has grown due to the pandemic. The multi-brand shops were strongly affected by the pandemic, so the brand was already retiring some of them, whereas many Magenta Co shops were closed after confinements. Currently, the brand has nine shops in Spain, three in France and two in Chile, but it had 25 shops before the pandemic in Sweden, Germany, Ireland, the Netherlands and the US.

However, the main part of the distribution is via wholesale and shops selling the collection. The mechanism for wholesale is based on pre-orders, so production starts once the collection is sold to customers. Magenta Co's main market is Europe (80% of the total sales volume), especially in countries with high environmental consciousness. Germany has become a key market in this regard, and the growing environmental awareness plays a role in the sales in countries like Spain. The art director collaborates with marketing agents to ensure the collection is presented properly, reinforcing the general branding of Magenta Co.

In line with its philosophy, the company has launched innovations in distribution, such as hiring clothing instead of selling or selling second-hand clothes and garments. In this regard, hiring allows for the production of more durable clothing.

Archive: Apart from institutions providing archiving through the cataloguing of collections, the company stores each piece produced in its own archive.

Figure 7. Global production network of Magenta Co



3.3.2 Relationships between actors

Governance of the network

As mentioned, the relationships between actors are characterised by trust-building processes, a determinant factor in their connection with suppliers, producers and consumers, aiding resilience before a crisis. Nevertheless, the brand retains power in selecting providers and other actors involved. Coming from a traditional fashion design company, the brand has pushed for the certification of some providers in sustainability and fair trade, which did not always achieve the expected results. Some providers were dismissed when they did not want or achieve these certifications. This outcome can be read as a double process. On the one hand, the brand has power over the rest of the actors, pushing them to become more sustainable and change their forms of production to continue producing with them, a necessary process when only a few providers and producers were available. On the other hand, the failure in transforming the network and moving towards new providers and restructuring was a limitation of the power of the company, as its owner stated:

> *How can you be releasing all these dirty waters into nature like this? I mean, don't you have a fine? No, we don't have any problem with the government. […] But, 200 metres away, there was a rice field! And I said, no, this cannot be done. It cannot be done in and world. And then I decided, you know, we need to change this now. We need to change it. So, I was putting*

pressure on them for many years. I still have a personal relationship with them, but then eventually, they didn't want to make the investments that we needed. […] So then, I realised, fuck, somehow it's also our responsibility. I mean, I'm the customer. So, it that depends how big a customer you are for a factory that, you know, you have certain power, or you don't. And apparently, we didn't have enough power. (Founder – Magenta Co)

In contrast to large companies such as Yellow Co in the high-end sector, Magenta Co has a limited capacity to push providers and producers since its production volume is limited. Often producers also work for other customers, giving Magenta Co less relevance. For instance, the Chinese producer interviewed for this case study worked for several customers in sustainable fashion, and Magenta Co was not the most relevant. Moreover, the inclusion of environmental, fair trade and good quality jobs criteria generates limitations in terms of quality demands and costs. The firm is currently committed (and certified) to ensuring fair trade from their suppliers and only establishing relationships with those guaranteeing fair labour conditions. They use certifications all along the chain (i.e. GOTS, GRS, ETI, FLA). These efforts provide value to the brand through sustainability, fair production and discursive practices.

Design is also relevant in orienting the whole company strategy and the relationships between actors. As previously stated, designers in the company have a strong role in setting the language and discourse of subsequent phases such as distribution and exchange. In this regard, marketing is linked to the head of designers' images for the collection and the brand. At the same time, designers must negotiate with producers on possibilities and development.

3.3.3 Socio-cultural embeddedness

As previously mentioned, the company produces globally in China, India, Portugal and Spain. However, it is strongly embedded in the Basque Country and Biscay, related to the transformation of the whole area with the Guggenheim effect and the role the brand itself played in this transformation:

Then, I think that the image of Bilbao, and I don't know if you know Bilbao, but how this city has been turned around, inspires a lot of people. So this, this breath of creativity and innovation, really exists here, and it is said and lived. And so, there is a lot, a lot of creation around it, so the dynamic is good. (Head of Logistics, Magenta Co)

The transformation of Bilbao into a hub for the CCSs has been widely studied and partially explains the emergence of new fashion brands in the Basque Country. As stated in the first part of this report, Spain has not become central in the fashion circuits, partly because of the country's isolation after the Spanish Civil War (1936–1939). Nevertheless, before the Civil War, the Basque city of San Sebastián was a relevant fashion design centre, concentrating a relevant part of the Spanish bourgeoisie generating demand for fashion design, whereas Bilbao remained an industrialised city linked to heavy industry. With the city's transformation during the 1990s, including the urban renewal of its industrial area and the construction of the Guggenheim Museum, new institutional actors and private

companies emerged linked to the creative and cultural sector, including the fashion design industry. Public institutions have also fostered the fashion design industry, and in recent years, sustainable fashion more specifically, but there is increasing competitiveness between Basque cities to foster the sector:

> *It is true that the public administration has been pushing the issue of sustainable fashion a lot over the last three years, and each time within the Basque Autonomous Region, there are three regional councils, and each one was vying a little in terms of who is going to have the most innovative initiative, etc*. (Head of Logistics, Magenta Co)

Nevertheless, in contrast to other areas such as Barcelona (see Case 3), there is no local production left:

> *I am going to be honest with you. There is almost nothing left of the textile industry in the Basque Country. Production, production, I'm talking about. Let's see, as creative industries, yes, there are. As for production, it is not like some regions of Spain or Portugal. (Founder, Magenta Co)*

Nevertheless, embeddedness is not only linked to the existence of a creative hub in Bilbao but many elements in the local culture. The specific fiscal regime of the Basque Country is also a relevant element, as the company perceives that its taxes have an impact on its immediate territory. The owner of the company summarised it as follows:

> *It's a fantastic country to live. And, of course, there is no network. There is no industry here. It is difficult to get the good profiles, but we are a Basque brand. I mean, where I was supposed to go? And I live here. This is I live in a fantastic place near the coast. And I love my country, and I want to create wealth in here. […] In the Basque Country, like in Navarra, we pay the taxes here locally. We don't pay the taxes to the central government. So we see the impact. We are paying literally millions of euros in taxes, but we know that you are impacting your local economy and your fellow citizens. It is not that we are paying to a distant government in Madrid and then they decide, you know, where they spend the money and all that. And which is, you know, one of the problems that Catalonia has now, a big one in the origin of all this drama. So for me, this is a plus. And to be able to talk to the tax office top guys, which in Spain is impossible, I mean, a small company like us will not, you know, all these kinds of things apart from the fact that we are from here. I would not compromise my personal life in order to grow enough*. *(Founder, Magenta Co)*

The company actively collaborates with other actors, including the administration, to foster a local cluster in fashion design and a sustainable fashion cluster in particular. It promotes emerging brands and a specific style linked to the territory through associations and local actions.

This socio-cultural embeddedness can also be found in some of the company's providers. The relevance of certification, environmental practices and fair work conditions mean that some suppliers are also strongly embedded in their territories, which is the case of the Indian cooperative that

produces cotton and cotton clothes for the company. This cooperative has a social impact on the labour insertion of women, providing them quality jobs and an environmental impact through organic cotton production.

Figure 8. Summary of Magenta Co

3.3.3 Positioning of the case within the typology

This typology matrix of a Magenta Co.'s typical collection case breaks down its global production network's governance and spatial footprint by phases. The network shows multiple lead actors, with several actor's holding power in different phases of the project. The fashion brand manages and begins the collection production project but must negotiate and balance its development with other actors like suppliers and intermediaries.

Table 11. Governance and spatial footprint of the Magenta Co production network

PRODUCTION NETWORK PHASES	Local/regional	National	Intra-EU	Global	GOVERNANCE
Creation	Creator				
Production				Suppliers (specialised)	
Distribution				Distributors	
Exchange		Strategic partners (private sector and civil society)		Customers and consumers	
Archiving	Creator				
Network-level	Creator	Strategic partners (private sector and civil society)			Multiple lead actors

The creation phase is locally embedded in Biscay. The team of designers is based at the company headquarters and even if an external designer occasionally collaborates with the collection, the process is managed and fulfilled locally. As explained above, the creation and production phases develop in a parallel progression. However, the production carried out by specialized suppliers is scattered globally through China, India, Portugal and Spain. These factories and textile suppliers share power with the fashion firm in the production phase, so the certifications and specifications required to produce a sustainable collection are met through a negotiation where both parts modulate their conditions. Producers do not bend to the will of the fashion firm because it is a medium size company, and its commissions cannot compete with larger organizations'.

The distribution and exchange phases are intertwined, as the two former phases, and both have a global spatial footprint. The distributors, external to the company, are wholesalers that place orders before the actual production of the collection so they have the power in this phase. Intermediaries, like specialized magazines or catwalks, that curate the trends for the fashion cycle are critical in the exchange phase, and together with the certification agencies and other exchange agents are the most powerful actors in this phase. The CEO of Magenta Co also engages in promotion activities that contribute to the value appreciation of the collection, but its power is not above the other actors, rather it's a mutually dependent relationship.

Finally, the archival phase is carried out by the creator, that is Magenta Co. The company stores each piece produced in its own archive located at its headquarters in Biscay.

3.3.4 Dynamics: Changes over time

The brand has been forced to adapt to the COVID-19 pandemic, reinforcing its online channels while closing physical shops in many cities. It has transformed its internal structure as well:

> *I know people are fast, very fast, moving towards digitalisation. We have advanced in six months, where he would have taken normally five to 10 years. We are probably going to be triple by next year the online business. But of course, this is not feeding my whole structure. Just before the crisis, we were about 100 people in the company. So we have been forced to close some shops to get out of El Corte Inglés and also to do some changes. To decrease is far more difficult than to grow. And, you know, certain people, top level of the company, have left or we have been pushing them out, and we are turning into more horizontal and more flexible way of working. (Founder, Magenta Co)*

Changes linked to COVID-19 have brought a growing interest in sustainable fashion and other forms of consumption, an opportunity to reinforce the brand and promote new business models:

> *Anyway, it doesn't exist sustainable fashion. OK, a more sustainable fashion from a holistic point of view not only see the most obvious things but taking the side effects of, you know,*

packaging, transport, even communication electric consumption later on CO2. [...] And now, different business models like second-hand or renting. (Founder, Magenta Co)

In this regard, the brand was a pioneer in Spain in clothing rental, an activity which continues to grow. The brand also foresees launching capsule collections and producing them on-demand while selling them online. For all these transformations, digitalisation is key.

3.3.5 Impact

The brand has a relevant impact in terms of its GDP and employment. The company has approximately 20 million euros of billing, dropping with the pandemic but recovering since late 2020. The company had 150 employees in 2018, with 35 workers at the headquarters and the rest in the retail shops. Its more relevant impact is abroad, as it has implemented certification for fair trade and good employment conditions, contributing to consolidating the social and solidarity economy in its production countries. Certification in environmental production also translates into an impact in terms of sustainability, although measuring this impact can be difficult. In terms of employment, the company has a limited local impact: only a small group of designers is involved, although it impacts employment and economic growth in associated sectors such as IT (for the vending platforms) and marketing. In this regard, the company impacts its home region and city (Bilbao), which, as we have seen, is a relevant place to find these services as a source of creativity.

In terms of cultural impact, the company is part of a trend started at the end of the 1990s known as the new Basque fashion, contributing to transforming the image of the Basque Country and also linked to the physical transformation of its main cities: Bilbao and San Sebastián. The company is strongly rooted in the Basque culture, and it wants to have an impact in its home country:

What should I go? It's a Basque brand, and we use and get inspired language for the name; we use a tiny language for communication, and we bring talent here. (Founder, Magenta Co)

3.3.6 Policy implications

An analysis of Magenta Co has policy implications at different levels. First, the case shows a lack of regulation on sustainable fashion. Certification agencies have become key actors in this industry, granting access to resources and actors as key gatekeepers. They play a role in connecting creation, production and exchange and, to some extent, archiving. Regulation on transparency and information regarding the origins and process of production of raw materials and clothing is key, and a system of indicators is needed regarding the impacts of fashion on the environment. Moreover, the case study shows that policies to foster sustainability in fashion must focus on production and new forms of distribution and consumption. Furthermore, the design can tackle sustainability issues in materials, durability and less variation.

In this regard, the case study also shows the dynamic change in business models in sustainable fashion design, with new approaches in production and distribution linked to innovation in new materials, the efficiency in the use of materials and the management of waste. There are also new business models fostering renting and production on demand. The value of the product is not only linked to its quality but also to its sustainability and branding. The role of digitalisation in this regard is key as it allows for such new distribution models.

At the local and regional levels, the case of Magenta Co shows that bringing value to a fashion design company through sustainability can impact the reindustrialisation and relocalisation of production, and new dynamics linking innovation in fabrics and raw materials, innovation in production processes and design in itself. Sustainability affects the geographical location of the production network in different ways. Network embeddedness is relevant as there are other factors than costs in maintaining the relationships between providers and producers, such as the quality of jobs and environmental principles. Know-how and the capacity to develop designs are also relevant to the network's participation, bringing certain relocalisation to Europe with fewer environmental costs. Nevertheless, it is limited to places with know-how and local production to adapt to new demands regarding sustainability.

3.3.7 Final remarks

The case study shows a medium-sized company's limited power capacity in the GPN. While the brand can transform the actors involved, these actors do not work exclusively for the brand, retaining negotiation power. The brand, settled in Bilbao, has to look for know-how in different fabrics to develop innovative and sustainable designs, configuring the network in terms of costs, knowledge and sustainability. In this scenario, certification agencies play a key role, as they act as gatekeepers for connecting. They also transfer knowledge on technological and managerial innovations in sustainable fashion. Relocalisation emerges as a strategy to find both elements. Hence, the case shows how the brand can rely on existing production systems in Spain but not its region. It can rely to a larger extent on production activity in Portugal, finding know-how and innovation in sustainable fabrics and reducing emissions linked to transport. Nevertheless, there is no strong network governance between local producers and the brand, so it remains to see how it can be consolidated.

The case shows the relevance of embeddedness for the creation and the need for a strong local ecosystem fostering creativity, including institutions able to promote the CCS. The brand plays a role in developing such an environment, participating in local events such as catwalks. The local ecosystem is also relevant in terms of exchange, together with traditional fashion circuits and sustainable fashion events. Nevertheless, the production remains mainly localised in Asia. The inclusion of sustainability and quality jobs in the selection of providers and producers means that the brand combines different forms of producers, collaborating with some companies spatially embedded in their territories while having a social impact by itself. In terms of distribution, the case draws a transformation of distribution channels, with the growth of digital distribution and the closing of some physical shops, with new business models offering new possibilities for consumption.

3.4 Case 3: Emergent designer-first collection – Cyan Co

3.4.1 Phases, actors and locations

This third case explains the production network of a first collection put forward by an emergent designer. As an archetypical representation, it allows the analysis of the particularities of developing the first collection while setting up a designer's brand. With fieldwork including an emerging designer from Barcelona and a team of emerging designers from Bilbao, Cyan Co is the fictional brand name chosen to identify the archetypical emerging designer putting forward the collection of this case.

Cyan Co's quest to produce the first collection is characterised by being of an uncertain outcome. Since there is no former collection to rely on, the successful development of the collection as a project is the result of overcoming multiple challenges along the production network. The project development's unknown outcome, which could either fail before its completion or be distributed and marketed with different degrees of success, allows for tracing how the new networks are formed, their embeddedness and actors' diversity. The case aims to contribute to finding policies targeted at emerging creators whose network is forming and would contribute to cultural and social diversity and economic progress.

The **design** of the collection is developed by the designer, often with the informal help of other colleagues. The first collection emerges either from the end-of-degree thesis or as an evolution of their final works as students. Like subsequent collections, it relies on colleagues' assistance or has some forms of institutional support from the school or other institutions. Since the production network is still under construction, there is no previous collection experience to rely on. Therefore, this creation phase is not directed mainly to market production but minimal output for exhibition on catwalks to achieve notoriety while introducing the designer as a brand. Local catwalks are key, allowing young designers to access this resource. Thus, catwalks are useful to exhibit the collection and as exchange platforms even before production can be aimed at the final consumer – an example of the nonlinearity of the GPN model.

Next, there is a possibility to re-work the collection to produce and sell clothes, but this process is parallel to developing the organisational infrastructure and becoming a company. The company configuration process is strongly supported by an informal collaboration of colleagues and formal support of institutions assessing the whole process.

The **production** phase is based on finding producers and providers. Due to the design's intensity and the critical importance of quality control in the first collection, emerging designers look for local producers with whom they can establish a close relationship and collaboration. In both cases previously analysed, the role of local organisations was key to finding producers. In Barcelona, there

are still producers coming from the long textile historical production, especially from Sabadell, where a textile cluster still exists that emerging designers can take advantage of:

> *We have discovered a lot of textile companies, especially in Sabadell, because there is a lot of tradition there that offer very good products and very good prices. (Emerging Designer – Barcelona)*

In Bilbao, emergent designers can find local providers and producers through the fashion design cluster that connects different actors in the fashion industry to fulfil its goal of promoting new designers. Nevertheless, looking for providers is a relevant part of the production phase. Thus, the production phase starts with selecting the provider, arranging artistic views and production and the production itself. Collections are small in the variety and quantity of pieces produced. Emerging designers interviewed rely on local production, attempting to give added value to their products with good environmental and working conditions, but their capacity to include environmental issues in the production is limited due to financial limitations. However, they can easily work with local providers and producers.

The **distribution** of the product is mainly accomplished via online channels, creating their own online shops by investing in web services or joining existing e-commerce platforms. Online vending allows targeting to international audiences where the products can be more easily sold to a niche segment (e.g. Northern Europe or Japan) while pursuing recognition and presence in specialised circuits. Thus, having only a virtual presence, young designers need visibility in the media and on catwalks to make their work known. Emergent designers can do this by themselves but often rely on institutional support from private or public actors involved in the process:

> *So, I also think that the theme of the catwalks, without a doubt for me, has been a boost of publicity. In the end, being on a catwalk, perhaps one of the most important, one of the two most important national ones, is the way in which many people and acquaintances in the area get to know you.* (Emergent Designer – Barcelona)

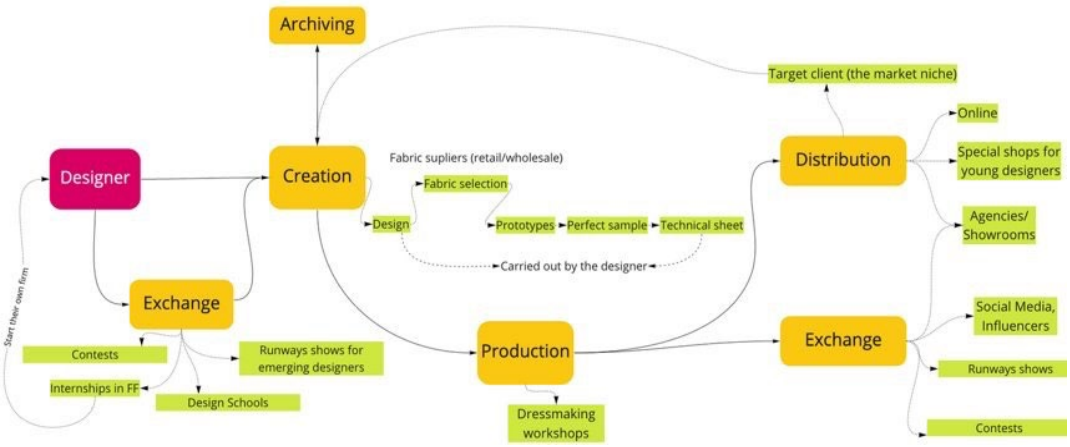
Thus, in the **exchange** phase, we find the role of consultancy companies helping emerging designers to be present in specialised media and events such as catwalks, with the involvement of public institutions and local associations. In one of the emergent designers analysed, a company was interested in her final thesis designs and promoted her in magazines. The fashion school's role and prestige were key in the involvement of the consultancy company. In the case of Bilbao, the fashion design cluster did a mentorship process, overseeing the distribution and communication of the brand:

> *I was signed by an agency in Barcelona, which is dedicated to representing young designers. Then, from that moment on, the garments from that first final collection started to appear in magazines, in fashion, to people in the fashion industry in Barcelona, stylists, photographers, to get to know the brand a little more, and from there I saw that maybe there was an opportunity to create a brand as such, not only to use that final collection name but to really create a brand.* (Emerging Designer – Barcelona)

Finally, the **archive** phase of the collection is carried out informally, with the designer keeping a personal registry of the designs, patterns and, sometimes, pieces and samples of the collection. There is an interesting connection between the archive and the creation phases. Museums and institutions play a role in stimulation and design development for emergent designers. Therefore, their role transcends the archiving function and spills over the creation phase, linking the GPN model circular cycle and starting a new turn. In a fashion design training programme, the first collection of the students drew inspiration from the resources of a well-known, established museum honouring one of the main fashion designers of Spain:

> *The last stage of their training is done in collaboration with the Balenciaga Museum. They study the archives of the museum, the pieces, how they are constructed and then they have to make a, let's say, a redesign or a more contemporary conceptualisation of what that piece would look like. (BIAAF, Fashion Designers' Promotion Platform – Bilbao)*

Figure 9. Phases and actors in the emerging designer's collection



3.4.2 Relationships between actors

Emerging designers are weak actors in the production networks as newcomers, and their capacity to exert power on the activities of other value-chain agents is limited. They greatly depend on other actors, including design schools, local associations and private companies, to promote them. Informal networks and mutual help are also relevant in developing the first collections for resources, funding and developing ideas. For the first collection to succeed, it needs to accumulate sufficient capital, which can be either economic capital (from family, friends, investors and side jobs) or social and cultural capital with the involvement of friends or colleagues whose skills are valuable (e.g. craftmanship in patterns and financial and marketing specialisations). Indeed, the emerging designer's

successful development is often associated with a partnership of personal and professional relationships. Hence, the designer has a close business manager who complements its creative drive, which was the case of Christian Dior, Marc Jacobs and the Barcelona emerging designer.

Moreover, even if the relationship is only professional, the Bilbao emerging designers also closely partner with fashion design cluster managers who act as strategic partners in the production, distribution and exchange phases. Therefore, Cyan Co successfully developed its first collection partly due to securing this partnership with management and business skills, generating a positive waterfall effect in winning the complicity of other relevant actors:

> *I think it is quite important as a young designer to be in a showroom, which is the agency, because that is where everyone goes to look for clothes for the editorials, where if you are within that range of possibilities to appear in the magazine, you will be seen much more than if you try individually unless you are very lucky or you do an incredible marketing job. But, in general, all young designers need that agency that pushes us a little bit into the working life and advertising.* (Emerging Designer – Barcelona)

As a fashion design school graduate, the emergent designer leading Cyan Co has chosen to develop its brand and bring it to the market. An alternative professional path choice would be to secure an entry-level position at a fast-fashion multinational brand to develop experience and, after some years, become independent and release its designs. The social network developed during the fashion design studies constitutes the main asset and point of access to the production network of the collection. As an exploratory endeavour, the collection is characterised by trial and error in the relationships with other actors like suppliers and a constant openness to assimilate advice or recommendations from other designers or actors in the fashion field.

However, in terms of value, the emerging designer benefits from capturing most of the symbolic value produced by the first collection. Brand notoriety and positioning are linked to the designer's name. Therefore, Cyan Co is the actor benefiting the most from the collection's success, shaped by contest participation, awards received, evaluations at runways shows, dissemination via social networks and any other activities that increase the recognition and appreciation in the fashion design field, including activities in the exchange phase.

The emerging designer's relationship with the producers and workshops does not benefit from trust built through experience since it is the first time it has engaged in a collection. Even considering the designer is a local producer and communication and control processes can be fluid, the collection output is not always satisfactory. This outcome places the emerging designer as a weak actor in contrast with more established fashion designers:

> *What we have taken care of over time has been to always work with the best. [...] The company that manufactures all our tailoring has been with us for 12 years, and I don't even think about changing. In other words, deadlines? Okay. Costs? Okay. Spectacular quality. Why should I change? (Consolidated Designer)*

Cyan Co faces the challenge of finding every supplier for the collection while taking risks by working with them. Given the reduced quantity of the materials and work commissioned, the emerging designer is not a priority for suppliers like wholesalers and workshops. However, some tools can help alleviate the burden of starting from zero and guide toward specialised suppliers that match the requirements of the first collection production. Still, the outcome is uncertain, as one interviewee stated:

> *There's a web called Cooperatextil. […] You can put there for every need that you have to look for: a fabric supplier, I'm looking for a supplier of I don't know what kind of fabrics, buttons, zippers..., I'm looking for workshops, you put it all there, and you get a list. [...] And, this time, we have taken it to a clothing workshop in Sabadell. We opt for the Made in Spain, that is, we want to bet on the national business, as it is being lost so much in our country. And, we wanted to look for garment workshops here. In any case, we have not been happy with the workshop we used, so we are now looking for another one. In the next one, it will be someone else, but for the moment, we did it there in Sabadell. (Emerging Designer – Barcelona)*

Hence, the lack of know-how and time has required decisions aided by the involvement of other actors, like the example of Cooperatextil, a public initiative to set up and maintain a database of the regional textile cluster or the more direct intervention of partners. In the case of BIAAF, which manages the production processes of the emerging designers in Bilbao, Cyan Co selected providers and workshops to put together the first collection. Even if the production phase can be assisted in different ways by other actors, what is a constant is the weak position of Cyan Co in the production network and its need to strengthen its capacity, either by internal or external help, to improve the chances of success.

Concerning the development of her first collection, the designer from Barcelona stated that she did it with a colleague without many resources, but they found support from the Barcelona catwalk, which exhibited their work. It is important to repeat, as explained in Section 1.1, that at this point, the aim is to produce a minimum viable collection to exhibit to professional customers and media as a step towards producing larger quantities to reach the end buyer:

> *We actually made it at home, between her house and my house. It was crazy, but in the end, 080 did support us. They took us in. (Emerging Designer – Barcelona)*

For the collection to have a quality standard and be competitive, designers value control in the production process. The translation of the design into the pattern and the final garment has several steps that require clear understanding, coordination and supervision. The local embeddedness of the production phase is seen as the designers select local producers to implement their collection:

> *There are often things that are a risk factor, in the sense that there are designs that you don't know if they are going to work or not or if they are going to be understood in the workshop. You can have a design that is the best of the best, but maybe in the workshop, they don't know how to interpret it. So, the fact that they are close to you, that you can transmit how to make*

them, how you like the finishes because each brand has its own style and all those things. The fact that they are close to you is important. (Emerging Designer – Bilbao)

Cluster associations and other corporate organisations in Barcelona do not specifically include emerging designers as relevant stakeholders. Modacc, the fashion cluster of Catalonia, is mainly comprised of medium-sized companies with revenue between 6 and 14 million euros. Therefore, the emergent designer strategic partners for promotion, business development and internationalisation are other organisations, mainly PR agencies, showrooms, foundations, public administrations and private investors. Moda FAD (The Association for Fostering Arts and Design – Fashion), based in Barcelona, is a professional association, a sort of a fashion design cluster, that nurtures a fashion community with activities aimed at fashion designers and companies at different stages of maturity, including independent emerging designers:

I really like the emergency, and in Moda FAD, what we are doing is to support the designer who does not want to go to work in a fast fashion simply but who wants to set up their company and be an entrepreneur. So, we are going to try to give them the resources. (Moda FAD Director)

The showrooms and public relations agencies are other key actors, given their position of power in the emerging designer production network. They are critical in the exchange phase as their skills and, more importantly, social capital can boost the impact and success of the collection. In this sense, showrooms and PR agencies are gatekeepers, constituting a node in a two-sided business. On the one side, the designer or brand is a customer interested in promoting the collection. On the other, photographers, stylists, influencers and media outlets are the secondary clients. The broker between the two is the showroom, which could also be a PR agency:

For example, in Spain, when Vogue wants to do something, they talk directly with us. They say, "Hey, pass me this garment", because they have their own professionals who will generate the content. But, then there are many magazines that buy already created content. Then, it's the photographer who approach them and say, "I have this editorial". They send it, and if it is very good, it gets published. (Showroom and PR Agency Director)

Catwalks and fashion shows are critical to the success of the emerging designer collection as they are a validation mechanism for the recognition of the value and a gatekeeper for the career development of the emerging designers. The Barcelona emerging designer team successfully aimed at their participation in the 080 Fashion Show:

We saw that one of the most relevant factors at the beginning to be able to do something like this was the issue that the market itself values you and recognises you. That is to say, if you have been invited to an 080, you have done well. (Barcelona Emerging Designer, Marketing Partner)

As mentioned above, catwalks are a fundamental space for the exchange phase. The emerging designer from Barcelona had a breakthrough by being selected to participate in the New York Fashion

Week. Such an endeavour also presented challenges, mainly the collection production and all the logistics. In this case, the city council's involvement was key to gathering the resources to create, promote and distribute their collection. Not only was a space provided free of charge, but also a sponsorship agreement was reached to fund the collection while at the same time gaining exposure for the city of Salou:

> *Entering one of the catwalks of New York is an investment, is time and resources. There are agents such as the City of Salou with whom we signed an aid agreement with counterparts, with services from Paola. For example, they express their will to provide a financial amount to support a particular event, and, in return, we agree to include their logo on our visual communications and to give small talks in local schools. And, a few more little things to really enhance the image of Salou itself. (Emerging Designer, Marketing Lead)*

Emerging designers are strongly embedded in their socio-cultural context despite looking for international markets and specific niches. In the case of designers of Bilbao, this has a direct impact on their brand and the company itself**:**

> *What united us was Bilbao. It was the traditions of our land that inspired us, the legacy of Balenciaga. So, we created a collection that was linked a little bit to our roots, to what inspired us and what we wanted to be. We wanted to have, and we still want to have a contemporary vision of Basque traditions and that a woman can wear it, that she can wear it at any time of the day.*

In contrast, the designer of Barcelona was not as clearly influenced by the Catalan or Barcelonese culture but by the cosmopolitan environment that she found in this city and any other global city. Nevertheless, she is embedded in the local fashion design environment, including her design school, the 080 fashion week promoted by the city council and the existence of networks of local producers, enabling her to find providers for the production phase, as explained above with the Cooperatextil online database.

3.4.3 Positioning of the case within the typology

This typology matrix of a Cyan Co.'s very first collection case illustrates how power, phases and spatial footprint combine for the archetypical representation of a viable production network. Since failure is a possibility along the production network, given the weakness of the creator, the initiator of the collection, and their need to accumulate cultural, social, and economic capital for its development, power at the network level can be depicted as horizontal.

The design of the collection comprises the creation phase and is developed by the designer locally, usually with the aid of other emerging designers. Apart of the creativity required to design the collection, the economic and labour investment from the emerging designer vest them the power at this phase. The production phase is also local, with providers and producers located nearby to

facilitate direct communication and quality control by the emerging designers. However, due to the limited scale of the first collection, Cyan Co is a weak actor that is not a priority for suppliers like wholesalers and workshops. Therefore, producers are the powerful actor at this phase.

Table 12. Governance and spatial footprint of the Cyan Co production network

PRODUCTION NETWORK PHASES	Local/regional	National	Intra-EU	Global	GOVERNANCE
Creation	Creators				
Production	Suppliers specialised	Strategic partners (private & public sector, civil society)			
Distribution					-
Exchange				Consumer	
Archiving					
Network-level		Strategic partners, private sector	Strategic partners, public sector multilevel	Consumer	Horizontal

While the distribution is online and therefore global, intermediaries could be located at national level as well. These are agents and gatekeepers of specialized circuits that bring recognition to the emerging designer first collection. As it has been expressed elsewhere, the exchange is intertwined with the distribution, with sites of exchange like catwalks, showrooms, magazines or awards as most powerful actors.

To conclude, the archive phase has a local spatial footprint and is carried out by the emerging designer in a personal registry of patterns, designs and samples. This archive could be the basis for the next creation phase, in which a reinterpretation of the designs starts the next production cycle.

Even if in terms of value the emerging designer benefits from capturing most of the symbolic value produced by the first collection, agencies, intermediaries and producers share the power of the production network, thus the horizontal characterization of power.

3.4.5 Impact

The economic impact of the emerging designer collection is limited. The production network includes actors with a wide range of revenue levels: from precarious emerging designers who may even have to work other jobs to sustain themselves while working on the collection to established workshops, suppliers and historical training centres. The cultural and social impact is more relevant since the

emerging designer participates in local networks contributing to the diversity and renovation of the cultural milieu. Potentially, the collection can impact cities' branding, especially when they are not capitals but more regional cities. The collection's exchange phase incorporates the creation phase's local embeddedness as a territorial label that can raise the notoriety of the place with consequences in terms of tourism and talent attraction in the creative field.

In all, the economic impact on producers and providers is minimal. The designer could buy some limited quantities at retail prices for the first collection due to the lack of a production network and the exploration for providers, while thanks to social capital, time invested and strategic partner interventions, Cyan Co could find wholesale providers, maximising the limited resources to source fabrics and other raw materials.

3.4.6 Policy implications

Since it is the first collection of Cyan Co, the emergence and consolidation of the network show aspects relevant to policy intervention. Here, the Cyan Co case's policy implications have two phases of the first collection's global production network: the creation and production phases and the distribution and exchange phases.

This case highlights the importance of the archive in the GPN and how it is linked, both informally and formally, in the creation phase. Programmes such as the one run by BIAF in collaboration with the Balenciaga Museum, where fashion design students must reinterpret the museum's collections, facilitate the inspiration of contemporary and current creations based on references linked to the identity and history of the territory.

Following the creation phase, the role of supporting actors is relevant. Fashion design schools and foundations for emerging designers' development are platforms where first-time designers can access networks. Such hubs are spaces for interaction that facilitate the growth of social capital and access to trends and critical information for the development of the first collection. Therefore, support for these institutions and their activities is critical to sustaining a fertile local ecosystem that enables the collection's production.

Fashion design schools, clusters, foundations and public initiatives also have critical roles in identifying talent that is underground or still non-professional. Awards and catwalks are tools for the negotiation (e)valuation and recognition of value – the exchange phase of the global production network linked to the distribution phase.

However, even if the emergent designer achieves certain recognition on these platforms or events, there is still the need for policy intervention at the exchange and distribution phases to increase the chances of a successful first collection. Hence, access is needed to management skills and partners who take care of the production, administration and marketing to complement the creative skills of the fashion designer. Including entrepreneurship courses at design schools aimed at new designers is

helping in this regard. However, the case shows that when a business partner complements the designer, the capacity increases substantially, and the results are more likely to be positive.

3.4.5 Final remarks about Cyan Co

This case offers a global production network perspective on how emerging designers' first collection is put forward. Above all, the remarkable case is how it shows networks being formed. It presents a snapshot of the network-building processes to develop a collection that involves new connections, relationships and combinations among various actors.

Since it is the first collection, the production network is emerging and has not previously existed. Therefore, far from high-reaching conclusions, the case displays the relevance of institutional support in the success of the emerging designer's effort to bring the collection to the market. It also shows how labour conditions, fashion design schools and early internationalisation influence the first collection's production.

Even if the economic impact is low, the first collection's most relevant repercussion is the fashion designer's career. The first collection brings visibility, reputation, network creation and consolidation. The network strengthens due to a negative or positive experience, and the partnerships develop, eventually developing an economic impact. As a project, the first collection economic value multiplier effect is limited but still impacts the providers, workshops and other actors involved in the production network. Furthermore, the collection can potentially upgrade the quality of local producers that may not enjoy a high-value reputation, like the Sabadell cluster near Barcelona.

To sum up the Cyan Co case, it could be argued that emerging fashion designers are the future of fashion. Like a start-up company, it can consolidate its career, growing to become tomorrow's consolidated fashion designer. As a potentially influential case, its addition to the fashion design GPN research helps provide a wider and more inclusive perspective in consolidation.

PART 4. Conclusions

4.1 Conclusions

This section refers to the entire industry as an explorative exercise conducive to new avenues of research. The analysis of fashion design through the lens of the GPN and using different case studies allow us to better understand a complex industry that enmeshes creation and design with industrial production and global distribution, bringing relevant insights to tackle challenges for the industry such as its adaptation towards greater sustainability and digitalisation. The research objective was not only to know more about how the design industry is organised but also to assess to what extent the GPN approach can shed new light on existing knowledge. As a first step, as design is a broad industry including different activities, the departing point was to focus specifically on fashion design, setting apart other subsectors such as industrial design or graphic design. The variety of design activities, with different markets and patterns, makes comparing case studies of different design subsectors difficult. The selection of fashion design also includes a wide variation in production organisation, as reflected in the case studies.

Fashion design is categorised as part of the CCS and shows different features in common with the rest of the creative and cultural activities. Nevertheless, it is part of the wider fashion industry, having specific elements linked to more traditional industrial sectors. Thus, fashion design includes industrial actors and a strong role of the market in the whole value chain, including the relevance of customers and variations in demand through adopting new styles and designs. In terms of design, it differs from other cultural and creative industries by the lack of strong protection of IP rights, allowing for copying and reproducing designs, and the emergence of business models in which design is not the main activity. An example is an emergence of “fast fashion” that relies on diminishing production costs through delocalisation and developing cheap versions of designs and products developed by other brands. Being an industry high in production, it is also strongly globalised, but geography still matters: there are still a few fashion capitals and some subcentres in which design takes place, whereas parts of the production are dependent on tacit knowledge embedded in certain geographical areas. Europe plays a key role, concentrating most of the fashion capitals and long traditions of design and production.

The industry also faces major challenges. As in many other sectors, there is a process of financialization, with an ongoing concentration of power in big financial actors. Second, the growing awareness of the ecological crisis is bringing a change of paradigm towards sustainability, affecting how products are designed, produced, sold and distributed, generating new processes and actors, new needs and demands. Hence, the GPN approach provides a good analytical model to better understand the industry and how these challenges can be tackled. Analysis has shown that the theoretical approach of GPN is useful for understanding the role of design in the fashion industry and how and to what extent design plays a role in different production phases. Therefore, the approach sheds light on how value is added to the product and the role of design in this process.

As has been seen through the case studies, designers must dialogue with producers, bringing their tacit knowledge while playing a key role in the final design and how the relationship is organised. At the same time, the exchange of knowledge is key to the creation process, and designers need this exchange to make them known and to grasp new ideas related to uneven power relations between actors within the network, as detected through the GPN lens. Hence, this analysis is useful to dive deeper into the relationship between the cultural and economic value generated in the production process. In this regard, our analysis has shown that the tensions between cultural and economic values run throughout the network, with various forms of network organisations to cope with these tensions.

Focusing on different actors and phases is also useful for understanding the role of different geographical locations and their institutional contexts. The analysis has shown that the process of creation and part of the exchange are strongly embedded. The relevance of embeddedness is part of the production activities, especially when tacit knowledge plays a role in the production, and the role of different consumption patterns in different locations influences the actors involved in distribution. The approach is also useful for understanding how territorial and social embeddedness is combined with the institutionalisation of the network and the generation of network embeddedness based on mutual trust and long trajectories of collaboration, which are also relevant to understanding power relations and how production is organised. Finally, with the added value of this approach, it is possible to bring better information about the industry and provide more targeted policy recommendations, which is especially relevant for the challenges the EU faces and the role of creative and cultural sector.

Through the analysis of the three case studies, it has been possible to depict the variety of production networks in the industry, organising power differently. The selection of a collection produced by a large high-end brand, a collection of a sustainable fashion medium-sized brand and the first collection of emerging designers allow for an understanding of the dynamics between actors in different forms and organisations. In the three cases, design plays a central role in the whole chain. However, we find different forms of organisation, from a classical vertical organisation in the high-end company to a relatively more horizontal organisation in the case of Magenta Co, as the company has less power to negotiate with producers and providers due to its volume.

Furthermore, the need for certifications to ensure sustainability limits the capacity to negotiate with other actors and gives more power to certification agencies. Emerging designers are strongly dependent on local institutions as they need support to establish their networks. Moreover, they are in a weak position to impose their criteria for production, and they seek local producers able to adapt to their demands in terms of design. Local institutions can play a role in the case of emerging designers. Nevertheless, they also use informal support, networks and personal resources to launch their first collections.

Despite organisational differences, a common element is the generation of value throughout the different phases, not only during creation. Production plays a role by adding quality in the provision of raw materials and finished products, and the exchange, distribution and archiving also amplify value. Further analysis of how exchange and distribution phases iterate on consecutive collections and

their impact on the brand and fashion designer's career is certainly worth placing on the research agenda.

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Appendix A. Methodology

A1. Research methodology

Introduction

The general aim of the CICERONE research, and in particular of WP2, is to understand the role of Cultural and Creative Sector (CCS) in the local development of EU countries starting from the configuration and dynamics of their global production networks (GPNs). This work package is based on a case study approach combining quantitative with qualitative research. The former is aimed at positioning the sector along a number of dimensions, while the latter will uncover the more in-depth aspects of the GPNs of the selected industries. While the project adopts a prevailing qualitative approach, it also envisages secondary data analysis. The case study approach is coherent with the research aim because of its ability to cover both the phenomenon and its context.

This appendix presents the main methodological issues of the WP2, some of which have been pointed to at the beginning of the reports.

Methodology stands for the systematic examinations of procedures and modalities of explanation that are used for the analysis of empirical data[5].

In social sciences, empirical research may adopt a descriptive or an explorative logic; however, all research is always informed by a theoretical apparatus, even though the connection between theory and empirical research takes different connotations in the different disciplines/fields.[6] Notably, epistemology draws a distinction between explanation and comprehension. Explanation implies the search for a stable nexus of causality between two (or more) variables, independently from the social and historical context. The underlying assumption is that we should be able to identify universal laws explaining the nature of observations (like in the so-called hard sciences). Comprehension refers to the traditional Weberian conception of understanding the meaning of the action for social actors. Such a meaning is influenced by institutional, normative and cultural dimensions that are spatially and historically specific. Reality is not simply described, but it is read, analyzed and interpreted.

In a situation where universal laws are inapplicable, the logic is to search for empirical generalizations. In order to move towards empirical generalization, social sciences make use of models or typologies

[5] Selvin, H. C. (1958). Durkheim's suicide and problems of empirical research. *American journal of sociology*, *63*(6), 607-619.

[6] Rueschemeyer D. (2009) Usable Theory: Analytic Tools for Social and Political Research.

starting from Weberian insights. Weber describes ideal types as 'mental constructs, formed by the analytical and one-sided 'accentuation of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and occasionally absent concrete individual phenomena, which are arranged according to those one-sidedly emphasized viewpoints into a unified analytical construct'.[7] Through ideal types, reality is recomposed and synthesized starting from classificatory categories, so to help researchers to identify dynamics and mechanisms that underlie social processes.

Traditionally, empirical research is based on either qualitative or quantitative methods (or both). The distinction between the two has a technical nature: the choice depends on many elements, such as the research questions, data availability or the approach that drives it.

The choice of the method: the case study

Among many qualitative methodologies, case study research investigates in-depth into a real-life phenomenon by considering its situatedness and contextual embeddedness. [8] Such a case can be an individual, a group, an organization, an event, a problem, or an anomaly.[9] Contrary to the quantitative logic, the case is chosen because it is of interest[10] or for theoretical reasons.[11] Unlike experiments, the contextual conditions are not delineated and/or controlled but are part of the investigation.

In the case study methodology, the selection of cases is a crucial phase, and generalization of results is mostly based on that. There are two modalities to select case studies: [12] random and information-oriented selection. Random selection is usually chosen to avoid systematic biases in the sample; in such circumstances, the sample size is decisive for generalization.

In social science research, cases are generally not randomly selected because it is difficult to in depth explore a huge sample. Moreover, random selection not necessarily provides informative cases, while in a research based on information-oriented selection of cases, the generalizability of results can be increased by the strategic selection of cases. As Flyvbjerg claims:

> "*When the objective is to achieve the greatest possible amount of information on a given problem or phenomenon, a representative case or a random sample may not be the most appropriate strategy. This is because the typical or average case is often not the richest in*

[7] Weber, [1904] in Rossi P. (1974)(ed.) *Lo storicismo contemporaneo*. Loescher, Torino: 124-125.

[8] Ridder, H.G. (2017). The theory contribution of case study research designs. *Business Research*, 10(2), 281-305.

[9] Burawoy, M. (2009). *The extended case method: Four countries, four decades, four great transformations, and one theoretical tradition*. Univ of California Press; Stake, R.E. (1995). *The art of case study research.* Sage, London; Yin, R. K. (2014). *Case Study Research Design and Methods* (5th ed.). Thousand Oaks, CA

[10] Stake, R.E. (1995). *The art of case study research.* Sage, London

[11] Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of management journal*, 50(1), 25-32.

[12] Flyvbjerg, B. (2006) Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, 12(2).

information. Atypical or extreme cases often reveal more information because they activate more actors and more basic mechanisms in the situation studied." [13]

Information-oriented selection of cases implies that case studies are selected based on the expectations about their insights into processes, agency, strategies (information content). The experiment in hard sciences can also be seen as an extreme example of information-oriented selected case studies.

"*Carefully chosen experiments, cases, and experience were also critical to the development of the physics of Newton, Einstein, and Bohr, just as the case study occupied a central place in the works of Darwin, Marx, and Freud. In social science, too, the strategic choice of case may greatly add to the generalizability of a case study*". [14]

Cases bring new knowledge either because they have a strategic importance in relation to the general problem or because they help to test the validity of the theory. Moreover, case studies allow cross-country comparison: the different contexts shed light on different dynamics related to economic circumstances, national and local regulatory framework, labour market, local culture and know-how, and so on. According to Robinson[15] the choice of the territory assumed as the basis of the comparison (being it a nation, region or city) should be carefully chosen in relation to the single case study rather than assumed a priori.

Research design and research steps

As said, WP2 is based on a mixed methods approach of investigation. This means using both quantitative and qualitative tools; primary and secondary data allow a complex research design composed by several interconnected research dimensions: a sector description, an analysis for the identification of the case studies and the case studies themselves.

Industry description

Quantitative data was used to have a factual overview of European GPNs in CCS together with literature and desk analysis.

Literature analysis and quantitative (secondary) data were used to explore and describe the features of each sector, its quantitative consistence and its European production network, its role in the European economy, the territorial distribution of its companies and the typical business models.

[13] *Ibid. p.229*

[14] *Ibid. p226*

[15] Robinson, J. (2011). Cities in a world of cities: The comparative gesture. *International journal of urban and regional research*, *35*(1), 1-23.

1. Literature review – for each industry
    a. Configuration of the Production Network (input-output structure) in the selected industry
    b. Prevailing governance typology in each industry (e.g. power relationships, barriers to entry, value adding mechanisms, labour processes/skills …) + possible governance typologies considering single interfirm relationships
    c. Key socio-institutional dimensions affecting network configuration/dynamics (e.g. fiscal incentives, property rights, labour legislation, path dependent cultural aspects) at various levels (European, national, regional)
    d. (possible) Changes over time (e.g. digitalisation, technologies, …) + possible firms upgrading processes (value capture strategies)
    e. (possible) National variations and specificities (e.g. national funds that support the film industry)

Statistical mapping of production network of CCS in Europe

Statistical data at the EU level (by Nuts 1, 2, 3 if possible) on number of firms, employment, VA, ... relative to the *different network phases* (e.g. creation, production, distribution, etc.) composing the Production Networks of the 8 selected CCIs.

Case studies in WP2

One of the strengths of the research lies in the fact that the great variety of case studies share a common unit of analysis. This is the production network of actors, firms, organisations involved in projects, which is very much in line with a whole body of literature on forms of collaboration in the cultural and creative industries. According to Watson (2012, p. 168), the benefits of a such project-based approach are:

> *"… first it moves beyond [solely] structural analyses to allow for an understanding of the importance of agency in project work; second it allows us to move on from firm-level analyses to develop an understanding of the complex social networks involved in [production networks]; and finally it moves on from research at the meso-level on inter- and intra-firm networks to provide micro-level analyses of project work."* [16]

Such an approach enabled the whole research to take into account agency *and* structure as well as their interaction, thereby heeding the view of Powell and Smith Doerr[17] who conceptualise networks both as relational forms and structural ones.

[16] Watson, A. (2012). Sociological Perspectives on the Economic Geography of Projects: The Case of Project-Based Working in the Creative Industries. *Geography Compass*, *6*(10), 617-631, p. 618.

[17] Smith-Doerr L, Powell W (2005) Networks and Economic Life. In Neil Smelser and Richard Swedberg, eds. *The Handbook of Economic Sociology*, Russell Sage Foundation and Princeton University Press.

As anticipated in *The Cicerone approach to production networks* section of this report, cases were selected on the basis of their informative power and of the theoretical expectations about their insights. Particularly, case studies represent a sufficient range of variation in terms of key business model characteristics, geographical span within the EU limits and cross the borders of European countries, finally and obviously they are accessible to researchers.

Such choices aim at bringing new knowledge on the contribution of the European CCS to local development, sustainability, social cohesion and (local) identity. Furthermore, as already discussed, an information-oriented selection of case studies increases the generalizability of results.

In details, theoretically based case study selection was grounded on the review of the existing literature on CCS and their organizational forms[18] assuming a novel viewpoint. Three common aspects underlie this choice.

A) GPNs in the CCS, as in any other industries, are characterized by differential power relations. Powerful actors (the lead firm) are those who drive networks and make things happen: as explained, their ability derives from their control of key resources, namely physical, economic, technological but also social, political and immaterial ones. The control of resources however does not automatically imply that the actor is powerful until power is exercised. Rather than being matter of actors' position in the network (more or less marginal actors), power should be conceived as the capacity to concretely exercise control within it. Governance identifies the authority and power relationships that affect how resources – material, financial, human, etc. – are distributed and flow along the chain. Following Gereffi it is possible to distinguish between two typologies of networks: the producers- and the buyer- driven chains. Governance as driveness embraces a broad idea whereby governance refers to the whole chain dynamics: this concept is meant to capture the power that lead firms exert over other participants and to highlight its ability to govern the chain by making decisions about where, how and by whom goods/services are produced. In the identification of concrete governance typologies characterising a specific sector, the concept of governance as driveness is one important aspect[19].

B) Relationships between lead firms and the other actors in the network differ across industries due to the particular features of the products/services produced, to the production process and the organization of that specific industry. The configuration and coordination of global production networks are also shaped by the expansion of demand and markets. Goods and services' demand needs to be created and sustained by final consumers and end users (i.e. think about the increased role of merchandising). It is therefore important to satisfy customer pressures, (i.e. price, quality), the so-called time

[18] Different disciplinary insights have been gathered from literature in business, economics, sociology, economic geography.
19 Greco, L. (2016) Capitalismo e sviluppo nelle reti globali del valore. Carocci, Roma.

to market (i.e. time imperative) as well as the basic access to the market and to new markets (i.e. in emerging economies). Finally, the choices and strategies of production networks are also influenced by financial considerations, which relate both to firms' activities and to their shift to non- manufacturing ones. Such aspects refer more to technical, organizational dimensions and demand that are shaped primarily by the industries' internal logic.

C) As underlined, the innovativeness of the CICERONE project lies in the application of the GPNs perspective to the CCSs. Whilst a vast array of studies has concerned the manufacturing industry, considerably less attention has been devoted to the cultural and creative sector. The empirical work required by the project intended primarily to make a contribution to the understanding of the CCS considered by the project at European level. Nonetheless, the empirical research aimed also to account for the broad institutional context in which production networks operate. Institutions do not only influence chains' dynamics but should be considered constitutive of these networks in ways that are critical for understanding their social and economic consequences: institutions were therefore not be considered external to the networks even though they are not strictly connected to inter-firms' relationships.

For each industry, case studies numbers range between two to four, according to the identified typologies, complexity of the case studies, availability of interviewees and so on.

Case study analysis

The empirical research based on case studies (namely the production network of projects) was carried on through the exploration of the single network-nodes and their relationships. Qualitative data was used to produce novel knowledge in the field and constitute the base for further research.

The explicative power of the selected case studies lies in the fact that the analysis is able to produce a 'substantive' representativeness of the EU CCS rather than their statistical one; in other words, case studies analysis allows understanding dynamics, mechanisms, relationships, etc. useful for explaining the functioning of such sector.

After selecting case studies, the empirical investigation was carried out using interviews, observations, ethnographies, digital ethnographies. The key dimensions of the analysis are: the network configuration and its geographical footprint; the governance dimension (power relations; value creation); the variety of embeddedness forms; the impact on socio-economic development.

As already indicated, production networks are socially and territorially embedded, beyond their organizational embeddedness. Societal embeddedness places economic actions within a multilevel institutional and cultural framework. Territorial embeddedness appreciates the differing ways in

which firms are anchored to different places and to its specific resources and features, for instance the local culture, labour forces, policies, raw materials and so on. Ultimately CCS industrial dynamics in Europe was analysed both in their ideal-typical sense (by accounting for the specific sector-level characteristics affecting inter-firm linkages) and with concern to the differentially embedded nature of their economic activities. Attention was paid also to the ways in which actors mobilize and deploy resource, forge alliance, shape regulatory structures through discursive constructions and mechanisms that legitimate the GPN configuration, i.e. eco labels, fair trade, ethical labour, environmentally friendly productions, etc. Consideration was also devoted to any relevant policy (or the lack of it) at the different stages in chain, which may affect the way in which the whole chain is configured. Policy analysis has looked at different kind of policies, i.e. cultural but also industrial as well as regulatory and trade policies. Additionally, policy and policy environment were addressed in their multiscalar nature.

A unifying matrix focusing on the two key dimensions of governance (power) and spatial footprint allowed synthesizing the case study results by conducting a series of comparisons in different contexts. In addition, the systematization in the matrix is designed as a tool for policymakers in support of better CCS-relevant policies.

Research strategy

Preparing the interview

For each node of the production network, interviews were made to all the informed people that were considered suitable to understand the mechanisms at play in the node. The number of interviews was decided by each team according to the availability of interviewees and the information to be gathered. Three or four pilot interviews were recommended in order to recalibrate / reorganise the interview script; in some cases, interviewees were not available for the interview, but they were asked a number of key questions via mail: this solution was adopted if no alternative was possible. Empirically, the field was accessed through a company, which represents a node/phase in the network; starting from that, the whole network (both relations among phases and phases themselves) has been explored.
At the beginning of each interview, the interviewer presented him/herself and presented the research. The interviewee was given a leaflet containing information on the research as well as on the specific role that the EU can play in this field. After the signature of a consent form on the part of the interviewee, the interviewer started recording the interview. Interviews were done in person or in videoconference when the situation required it.

Each case study gathered qualitative data on a number of topics, which are detailed in the next section containing the interview outline, namely

- The interviewee profile
- The organization profile

- The network configuration
- The governance structure and strategies
- The embeddedness
- Policy
- Contribution to development

Qualitative data gathering

All interviewers allowed recording the interview with digital recorder. Interviews were then transcribed *verbatim*, pointing out emotional status only if particularly relevant.

Each interview was labelled and stored using all the following variables:

- Industry
- # case study
- Phase of the production cycle
- # interview (within the phase)
- Geography (Nuts3)
- # interview (within the industry)
- Date (DD/MM/YY)

Interviews coding

A two-step codification was used:

1) Codification of the interview according to the homogeneous excerpts on the basis of thematic areas identified for the research:
   - Network configuration → CODE: NET-CON
   - Spatial organization of the networks → CODE: GEO
   - The governance of the network → CODE: GOVERN
   - Embeddedness → CODE: EMBEDD
   - Institutional conditions → CODE: INSTIT
   - Policy → CODE: POLICY
   - Contribution of the production network to the development of European regions → CODE: EU_DEVELOP
   - Any other relevant issue that we might "discover" → CODE: OTHER

2) Codification of all the excerpts in each of the previously identified thematic areas (input-output structure, its spatial organisation, governance, institutional conditions, role in the EU development, other) based on relevant analytical categories.
   - Ex. Mechanisms of value appropriation; modalities of cooperation among organisations; upgrading mechanisms, working conditions, social/cultural embeddedness; any other new element

A2. Interview outline

Profiling the case study

A first step in the interview outline was to profile the interviewee and her or his organization, company, or agency.

Interviewee's profile

Themes to analyse:

- Position within the organization/agency/company/etc.
- Years spent in the position
- Main responsibilities
- Years spent in the organization/agency/company/etc.
- Years spent in the industry
- Years spent in the field
- Competences required for the job
- Any other relevant theme

- What is your job position within the organisation/agency/company/etc.?
- How many years have you been working in this position?
- What are your main responsibilities?
- How many years have you been working in this organisation/agency?/company/etc.?
- How many years have you been working in this industry?
- What are the main skills/competences required for your job?

Organisation profile

Themes to analyse:

- Brief history of the organisation
- Core business
- Legal nature of company
- Employees
- Any other relevant theme

- What does your organization/agency/company/etc. do/develop?
- What is the main activity performed by your company/organization/agency/etc.?
- What is your core business?
- Is your organization/agency/company/etc. independent or is it a part of a bigger company? (if yes) how responsibilities with the headquarter are distributed?
- How many employees does your organisation/agency/company have?
- Can you briefly tell me about your or organisation/agency/company? (*gather some information on its history, key moments, etc.*)

Network configuration

The second step of the interview outline aimed at shedding light on the whole cycle of cultural production from creation to final users (actors involved, roles, geography). In what ways is the industry X articulated/organised? How does the division of labour occur in the industry? Who are the main actors? Their roles? The geography?

The sketch of a diagram together with the interviewee can be a very useful tool at this stage: we suggest to use a large sheet of paper and start with the interviewee in the middle; then add the other organisations/agencies/actors/… involved in the different phases (locate the phases at the corners of the paper). Use this diagram as a map throughout the whole interview.

- Among the projects (services/activities/goods/event) that you briefly presented us, let us consider now the chosen one (possibly it should be one that involves an extended/extra-local/European/international network). Please, help us to identify the whole cycle of cultural production and your role in it.
- Who are the actors that are involved, together with you, in the carrying out of your project (i.e., customers, intermediaries, consumers/audiences, etc.)?

Actors involved

Possible actors involved:

- Artists, composers, designers, creatives
- Producers
- Suppliers, impresarios
- Audience, customers
- Intermediaries, dealers, experts, critics
- Media, influencers
- Archivists
- Any other relevant actor

Themes to analyse for each actor:

- Description of the actors
  (Who they are? Big or small organizations/groups, independent, subsidiaries…)
- Role played by the actor in the network
- Type of resources mobilized (financial, economic, reputational, technological resources…)
- Any other relevant theme

- Who do you work with?
- Who are the people that are involved in the realization of the project?
- Who are the suppliers that are involved in the realization of the project?
- Can you tell us more about them?
- (i.e. SME / large organizations, public/private, local/global, independent/subsidiaries, etc.)
- What kind of resources do they mobilize in the project?
- (i.e. a service, an idea, technical or professional knowledge, raw materials, a semi-product, a final product, financial assets, etc.)

- Who are your customers? or your audience?
- Do you sell directly to the final consumer?
- Are there any actors in your business that you would define as intermediaries? Why? For instance, because they help your product/you to be visible, or they "translate" your work for the audience, or they appreciate particularly your work.
- Is there anybody that helps you in promoting your products/projects? (e.g. art curators, advisors, critics, etc.)
- Do they have an impact on your business? How?
- What do they do precisely?
- What does their intermediation consist of?
- Could you give me an example of a situation in which intermediaries were useful to your business?
- How did you come in contact with this intermediary?
- How did they find you?
- Has your relationship with intermediaries changed over time? Why?
- Do media and influencers play a role in your business?
- How do they impact on your activities?
- How do they get to know you?
- Let us consider the social media. Are there any influencers on Instagram/Facebook/etc. that have an impact on your strategies/activities?
- Have your own accounts an impact?
- Do you use them to promote your project?
- Have you or has your organisation got an archive of your projects (creations/services/activities/products)?
- Have you or has your organisation been part of a show/exhibition/etc.?
- Does collecting exist as a practice in your business?
- (If yes), Who are the collectors? Does a collecting market exist?
- Who decides on what will be archived and in which form?
- Have your projects ever been part of a collection?
- Are there any museums/institutions particularly important in your sector that collect major/innovative works?

Spatial organisation

Themes to analyse:

- The geography of the network
- The issue of physical distance
- The management of distance (if relevant)
- The management of communication (if relevant)
- Any other relevant theme

- Where are the actors/organisations of the network located? (Use the diagram to identify actors)
- (consider all the phases of the PN)
- Have you ever experienced any problem due to the distance? (for instance, dealing with something implying face-to-face communication; the need to check a process personally; …)
- How do you communicate with the different actors in the network?
- Do you need to travel a lot?
- How is the geographical distance managed?

Governance

What kind of relationships govern and regulate the network organization in the Industry X? What are the economic, socio-institutional, political aspects affecting inter-firms' dynamics?

Relations among network organisations

Themes to analyse:

- Type of relationships between actors (formal/informal)
- Decision-making process concerning the project. (who decides, autonomy / cooperation / subordination, participation)
- Existence of standards / conventions to follow
- Resources: type of resources that the interviewee can mobilise, whether they are specific or generic, easy to find or difficult, locally based, … type of resources that the interviewee needs, whether they are specific or generic, easy to find or difficult, locally based, …

- What's your role in the network?
- What [actor/organisation x's] role in the network? (Use the diagram to identify actors)
- How do your customers/suppliers/partners/… choose you?
- How did your customers/suppliers/partners/… get to know you?
- What are your relationships with customers/suppliers/partners/… based on?
- (i.e. trust, competences, flexibility, quality, price, uniqueness, etc.)
- Has your relationship with customers/suppliers/partners/… changed over time? Why?
- Has your relationship with your customer(s)/audience impacted on your business in terms of production/profit growth, number of people working in the company/organization/agency/etc., visibility, etc. Could you quantify it?
- Do your suppliers/partners provide you with standard projects?
- Have you ever asked them to customise their products for you?
- Do your suppliers/partners provide special goods/services that are difficult to find?
- Do your suppliers/partners provide special goods/services that only them are able to provide you?
- Have you ever developed a project together with suppliers/partners?
- How do you select your suppliers/partners?
- How did your suppliers/partners get to know you?
- Have you ever had any problems with suppliers/partners? how did you solve them?
- Has your relationship with suppliers changed over time? Why?
- Do you have direct relationships with the consumers/audience of your project?
- (if yes) How do you manage it?
- Does audience/final consumer participate in your creation/production/distribution/exchange/archiving processes? How?
- How important are audience/consumers' preferences/judgments for your projects/business/activity?
- Does their judgment affect your creation/production/distribution/exchange/archiving processes?
- How are your relations with your customers/suppliers/partners/…regulated/governed?
- (i.e. formal agreements, informal accords, individual contracts, codes of conducts, etc.)
- Have you got any exclusive agreement with your customers/suppliers/partners/…?
- Does it include non-disclosure clauses?

- Does it include the use/concession of technologies/knowledge that are protected by (any kind of) agreement that you cannot use/replicate for other processes?
- (If yes) what kind of agreement?
- Who decides how to create/produce/develop/make/provide/etc. the project that you carry out?
- Does your customers/suppliers/partners/…participate in such a process?
- Do you have a say in such a process?
- Has your customers/suppliers/partners/… their own margins of autonomy in such a process?
- Do you have your own margins of autonomy in such a process?
- Can you/your customers/suppliers/partners/… negotiate terms and conditions of the creation/production/distribution/exchange/archiving/etc. process?
- Is there any quality standard to be respected in such a process?
- What are the consequences in case of non-compliance with the contract/standard?
- Do you envisage any kind of reward for your best suppliers? What does it consist of?
- Do you have any knowledge of the destination of the project (service/activity/good) that you produce/ create/develop/make/provide/etc.?
- In your opinion, how easy would it be for you to replace your other customers/suppliers/partners/…with others?
- In your opinion, how easy would it be for your customers/partners/… to replace you with other suppliers/partners?
- What do you/ does your company/organization/agency do better than others in your industry?
- What is your specific asset/advantage with respect to others?
- How important is reputation in your business? What elements are crucial for it?
- How do you build your reputation?
- How do you make yourself/your organization/agency/company known?
- Have there been any crucial moments in your organization' history/your career that have changed your reputation?
- Have there been any people that have been particularly important for your career/your organization' growth?

Price and value

Themes to analyse:

- Mechanisms at play in the price and value formation
  (decisions, relevant aspects such as brand, status, reputation, production…)
- Actors involved (or excluded) in value/price formation
- Any other relevant theme

- Who decides the price of the project that you exchange with your customers/suppliers/partners/…?
- On the basis of what dimensions?
- (i.e. market position, competencies, reliability, reputation, brand, design, technology, etc.)
- Can you/your supplier(s)/customer(s) negotiate the price? On what basis?
- With respect to such a price do you think that your contribution is adequately rewarded?
- Could you tell us how much it costs the realization of the project that you exchange with your customers/suppliers/partners/…?
- How often do you receive a non-monetary reward for your work? What do you receive instead?

- Does the price of the service/activity/good that you exchange with your customer(s)/supplier(s) allow you to run your activity/business according to legal and social standards? Why/Why not?
- Do you know the final price at which the project (service/activity/good) is sold?
- In your opinion what are the elements that contribute to determine the final price of the project?
- (it might be the price of the final good, the price of the ticket of a concert/show/exhibition but also the price of the whole exhibition/festival)
- Do you think that the final price of the project is appropriate? Why?
- Do intermediaries impact on decisions about the price of your project? How?
- In your opinion does the final price of the good/service reflect its value?
- In which stage of the production cycle (refer to the diagram) is the value of the project mostly created?
- Who are the actors/organisations in the PN that gain the most from the realisation of the project? Why?

Working conditions, labour and collective actors

Themes to analyse (when applicable):

- Profile of the workforce/associates/collaborators/partners
- Recruitment process and wage definition
- Organisation of work
- Presence and role of trade unions in the organisation/agency/company/etc.
- Presence and role of trade unions and/or business/trade associations in the industry
- Any other relevant theme

- Do you have employees/collaborators/associates, etc.?
- How is your workforce composed?
- (i.e.: percentage of professionals/consultants/technicians/workers, etc. out of the total, but also percentage of women/men, percentage by ethnicity, etc.)
- How is work organized in your organization/agency/company, etc.?
- (i.e.: on projects, regular working time, piece rates, etc.)
- What types of contracts does your organization/agency/company mainly apply to them?
- (i.e.: fixed-term contracts, permanent contracts, agency staff, freelancers, consultants and contractors, etc.)
- Do they work mainly full time/part time?
- Where do they mainly work?
- (i.e. offices, ateliers, workplaces, at home, in co-working spaces, etc.)
- What aspects do you mainly consider when selecting the workforce?
- (i.e. skills, formal training and education, experience, reputation, flexibility, technical knowledge, etc.)
- Do you employ foreign professionals/workers? Why?
- Do you have internships? Do you have any specific agreement with schools/universities in this respect?
- How do you set salaries and working conditions for your workforce?
- (i.e.: collective agreements, plant level agreements, informal agreements, individual negotiation, etc.)

- Does your organization/agency/company set any productivity incentives/bonus for your workforce?
- Do workers have a say in the activity carried out by the organization/agency/company?
- Do your workers must respect any codes of conduct?
- Do your workers must respect any non-disclosure agreements/clauses?
- Are trade unions present in your organization/agency/company/etc.?
- What are their main claims?
- Have they ever helped you? When?
- Do they influence your business? How?
- (i.e. through the bargaining process, strikes, demonstrations, disputes, etc.)
- Have you had any conflicts with unions recently?
- (If yes), Could you tell me what was the issue?
- How did you negotiate your positions?
- What is the role of business associations/trade associations/etc. in your industry? (at different levels: local/regional/national/international)
- Do you participate in some of them?
- (If yes), How is this beneficial?

Skills and knowledge

Themes to analyse:

- Main skills/competencies/resources required in the industry
- Skills/competencies/resources that make the interviewee / organization crucial / important for the network.

- What kind of skills/knowledge/competencies/technologies/etc. are involved in/needed by your production/creative/distribution/etc. process?
- Do you have any specific expertise that makes you irreplaceable to your partners?
- Do you find skill/knowledge/competencies/technologies in the local labour market or do you need to acquire/buy them from abroad/very far from you/in a difficult way?
- Do you provide any training programme to your workforce? Who decides for them?
- Does/do your customer(s) play a role in such a process?
- (i.e.: sending consultants/technicians/skilled workers, organizing training programmes, etc.)

Innovation

Themes to analyse:

- Main innovations for the industry and the specific economic activity
- Impact of innovations on the cycle of production
- Impact of innovations on relationships with partners
- Impact of digitisation
- Any other relevant theme

- How do you keep yourself informed on the latest technologies/innovations/trends/etc. that are relevant for your business?
- (i.e.: fairs, contests, consultants, journals, magazines and sector publishing, etc.)

- What is the most important/recent innovation that has been introduced in your creative/production/ distribution/exchange/archive process?
- (focus on different types of innovation: product, technological, stylistic, in the distribution, …)
- Who/what urged this innovation?
- How did this innovation impact on your business?
- (Please, explore the different implications of this innovation)
- Did it allow you to develop new organizational capabilities?
- To hire new/qualified workforce?
- To reach other customers or/and enter new/different markets/businesses/activities?
- To acquire new/better capabilities?
- How did innovation impact with your work?
- Have you been asked to acquire new skills?
- How did this innovation modify your relationships with the other actors/organisations of the network?
- Have you ever needed/solicit collaboration with schools/universities/ laboratories/education centres/etc. for developing/learn any innovation?
- (i.e. for finding skilled professionals/workforces and/or for developing new skills/competencies/knowledge)
- Is there any research centre with which you cooperate to research and develop new services/products/ideas? Are they private, public or are they the result of public-private partnership?
- Has digitalisation had an impact on your activity? How?

Embeddedness

Relations between the production network and the region

Themes to analyse:

- Resources that the territory/context offers and relevance for the activity carried out
- Advantages/disadvantages connected to the area
- Role of Institutions
- Policies
- Any other relevant theme

- What kind of resources can this territory offer to your organization/agency/company, etc.?
- (Here's a list of possible items that you may explore: know-how, traditions; logistics; skilled labour; research structures, academies and schools, innovation hubs, incubators; geography and natural resources);
- For instance, with reference to social resources:
- What kind of social resources can the community of this area offer to your company/organization/agency/etc.? (i.e. local work ethos/culture, informal relations, attitudes towards the economy, openness to innovation, diversity, social values, cultural activities, etc.)
- In what ways are they relevant for your activity?
- Do you think that the local community supports your economic activity? (If yes) In what ways?
- Would you say that it is strategic to be here? Why?

- What factors keep you here?
- Has this territory a special reputation in your industry's tradition? How do you benefit from it?
- (i.e. territorial brand that may help your activity?)
- What are the problems of the territory that impact on your organization/agency/company, etc.?
- Do institutions (regional, local authorities, ---) in this territory encourage economic initiatives in your industry? In what ways?
- Do institutions (i.e. region, local authorities, ---) encourage cultural initiatives in this area? In what ways?
- Does the economic and institutional context in which you work help/hinder your activity? How?
- (focus on fiscal requirements, industrial policies, labour regulation, environmental standards, trade policies, etc.)
- Do you think that the existing policies at regional level are adequate to the needs of your organization/agency/company?
- (focus i.e., on innovation policies, labour and tax regulation, incentives, industrial policies, etc.)
- Do you think that the existing policies at national / international level are adequate to the needs of your organization/agency/company?
- (focus on innovation policies, labour and tax regulation, incentives, industrial policies, trade policies, intellectual property right agreements, etc.)
- Has your organization/agency/company, etc. tried to influence policy making?
- Has your organization/agency/company, etc. benefited from policy initiatives developed in industries connected to yours?
- Do you participate in some regional-funded project/initiative?
- In your opinion what should be done at a policy level to promote/help your industry/activity?

Contribution to socio-economic development

Themes to analyse:

- Socio-economic impact of the PN on the region
- Birth/decline of new/traditional job/economic activities connected to the PN
- Birth of new professional/technical schools/courses connected to the economic activity
- Collaboration with institutions/universities/schools
- Participation of the interviewee/organisation in local cultural/social initiatives
- Economic/social/environmental sustainability
- Any other relevant theme

- Does your involvement in a network of (global) activities impact on the economy of the region you work in? In what ways? (i.e.: incomes, employment and wages, local taxation, touristic trends, etc.)
- Has your participation in the network favoured the birth/diffusion/expansion/decline of new/traditional jobs/professionals and/or economic activities connected to it?
- Has your participation in the network favoured any collaboration with universities or local schools?

- Has your participation in the network favoured the birth of new professional/technical schools/courses/etc. connected to your activity?
- Has your participation in the network favoured the development of local cultural and social initiatives?
- (i.e.: festival, fairs, competition and contests, community revitalization programs, urban regeneration, etc.)
- Has your participation in the network favoured the involvement of your organization/agency/company, etc. in the social life of your locality/region? (i.e.: charity initiatives, with prisons, etc.)
- Do you support/promote any local association/organization/initiative/festival/fair/sport club/etc.?
- Are you involved in any local association/club/organisation for the promotion of the local society?
- (i.e. local festival, local fairs, etc.)
- Has your participation in the network contributed to improve the well-being of your workforce's conditions in this region? (i.e.: labour standards, diversity promotion, health and safety, etc.)
- Has your participation in the network contributed to improve the environmental sustainability of your economic activity? (i.e.: introducing cleaner technologies, environmental sound processes, materials, etc.)
- Do you think that your business has contributed to change/improve your region's image/reputation? In what ways? (i.e.: local specializations, brand rent effect, testimonials, etc.)

Concluding session

- In your opinion, how important is your contribution to the production network you participate in?
- How do you think you are contributing to the development of local society?
- What are the main values that inspire your activity/organization?
- How do you imagine this industry in ten years' time?
- (focus on e.g. cultural hybridization, technological innovation, new markets, etc.)
- How do you imagine you/your activity in this industry in ten years' time?