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AI's influence on the Creative and Cultural Industries

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Abstract

AI has significantly advanced, impacting various fields, particularly the Creative and Cultural Industries (CCI), prompting a reevaluation of traditional approaches and professional roles. This paper critically examines the evolving role of AI in the cultural and creative industries (CCI) by analyzing its impact on both professionals and society, using architecture and music as exemplary cases. The study challenges the traditional "myth" of creativity, historically viewed as an exclusively human ability, now being reshaped by AI technologies. By adopting a transdisciplinary approach, the paper highlights the need for a broader understanding of how AI influences the cultural sector, emphasizing the importance of considering both the economic and socio-technical imaginaries in this transformation.

Keywords

Artificial Intelligence | Social Imaginary | CCI | Architecture | Music





Artificial Intelligence (AI) has made substantial advances in several fields, including the CCI (Creative and Cultural Industries) disrupting old approaches and employment responsibilities. In the creative economy, technology, particularly digital technology, has always had a significant role. Already the United Nations' Creative Economy Report of 2010 underscores technology as a major driver of the creative economy (United Nations, 2010). The concept of cultural and creative industries is contextual and varies geographically, influenced by local heritage and circumstances. It encompasses a fusion of "creative arts" and "cultural industries," evolving with advancements in technology and the emergence of new media technologies. This evolution has expanded the scope of creative industries to include a range of knowledge-based economic activities, necessitating innovative, multidisciplinary interactions (Hartley, 2005). Since the 1980s, the creative industries have emerged as an important dynamic sector within the global economy (Hartley, 2005; Collins, 2017). This trend is evident not only in Western Europe and the US, but also in Asia, particularly in China and South Korea (Collins, 2017). It seems, as culture and creativity have become key drivers of economic growth, as the European Agenda for Culture and the "Creative Europe" program recognize the importance of culturally driven development for sustainable and inclusive growth.

So far, creativity has increasingly been recognized as a crucial component of economic development, as well as a fundamental skill. This notion gained significant traction, especially following Richard Florida's book "The Rise of the Creative Class," (2002) which popularized the idea of a strong link between creativity and economic growth within the framework of capitalist logic. Consequently, the imaginary surrounding the cultural and creative sectors has become closely intertwined with the concepts of economic productivity and creativity. The evolution of imaginaries within cultural and creative industries has been a subject of extensive scholar inquiry, highlighting shifts in economic paradigms, technological advancements, and societal values. Campbell (2014) explores the emergence and dominance of the economic imaginary surrounding creativity, tracing its trajectory from a discourse centered on cultural industries to one emphasizing the creative economy.

This transition reflects broader policy shifts aiming to integrate culture into economic agendas, blurring the boundaries between cultural and creative domains.

The discourse surrounding creative industries is supported by statistical evidence, contributing to the stability of the economic imaginary. As the creative industries agenda evolved, it increasingly prioritized business development over cultural and social inclusion goals, aligning with neoliberal economic strategies, raising concerns about the commodification of culture (O'Connor, 2015).

This commodification brings to what already has been observed by Adorno (1964) and the Frankfurt School: the critique of the cultural industry (*Kulturindustrie*) underscores its capacity to produce a normative and heteronomous mass consciousness and perpetuate ideological conformity. By prioritizing commercial interests over intrinsic content, the industry homogenizes cultural products, stifling diversity and creativity. The cultural industry, through marketing strategies and

standardized distribution channels, reinforces social norms and restricts critical engagement, ultimately shaping individuals' attitudes, behaviors and imaginaries to align with preconceived ideologies. In this context, algorithmic technologies have gained new significance, not only in shaping individual subjectivities and their imaginaries through the hyperindividualization of algorithms (Roberge & Seyferth, 2016), but also in influencing the work of professionals within the creative sector.

Looking ahead, the integration of AI into cultural and creative industries is poised to further reshape social imaginaries. AI algorithms have the potential to optimize content creation, distribution, and consumption processes, leading to new modes of cultural production and consumption. However, concerns about algorithmic bias, filter bubbles, and the commodification of culture underscore the need for critical examination of AI's influence on social imaginaries. Social imaginaries are socially transmitted representational assemblages that interact with individuals' imaginaries and serve as mechanisms for meaning-making and world-shaping. The concept of the imaginary encompasses both the process of generating meanings and the resulting outcomes but also forging normative constitutions (Castoriadis, 1987).

Drawing on Manfred Steger's (2008) conceptualization, the social imaginary encompasses various layers of meaning, including ideas (expressed beliefs of individuals), ideologies (comprehensive belief systems representing patterned truths), and imaginaries (collective constructs framing diverse ideological manifestations). As such, the social imaginary is shaped not only by conceptual ideas but also by practices that reflect the meanings and traditions of the past (James, 2019). Thus, the social imaginary of the creative and cultural industries can be defined as the collective perceptions and conceptions that people hold regarding the sector, encompassing both conceptual ideas and practical engagements, both for professionals as also for individuals.

The investigation into the intricate relationship between AI integration and cultural production within the creative and cultural industries is essential for understanding their evolving impact on societal values and the formation of social imaginaries. As previously discussed, much of the existing literature on CCI focuses on the economic imaginary related to the cultural and creative sector. However, it often lacks a critical analysis of the developments over the past years and does not adequately consider how rapidly AI is transforming the sector. This transformation challenges the dominant imaginary surrounding the so-called 'myth' of creativity and the assumptions traditionally associated with the cultural and creative industries (Manovich 2022; Mazzone & Elgammal, 2019; Natale & Ballatore, 2020). Therefore, to effectively address imaginaries within the cultural and creative industries (CCI), it is essential to adopt a transdisciplinary perspective that goes beyond merely the economic or socio-technical imaginaries. In this paper we want to take two examples of the creative sector, taking them as "exemplary cases" (Kracauer, 1971) of how AI is impacting the creative sector, looking at two different perspectives: at one hand on the work of professionals and at the other the impact on individuals and society.





By delving into specific examples within these fields, we aim to elucidate how AI-driven technologies are transforming cultural production, consumption patterns, and the construction of meaning across diverse cultural landscapes in a transdisciplinary perspective. The paper is the result of the discussion between professionals working in music, architecture, design, research and social sciences permits therefore a unique and transdisciplinary understanding of the different impacts that AI has on CCI. The main contribution of this paper is lies therefore in its critical examination of the evolving role of AI within the cultural and creative industries (CCI) at the example of architecture and music challenging established (economic) imaginaries and assumptions surrounding creativity and aesthetics. By highlighting the rapid advancements in AI, the paper questions the traditional "myth" of creativity (Manovich, 2022) that has long been associated as a human ability, but is now changing. Moreover, using these two examples we show how technologies in the sector are nothing new, but what is new is its impact and possible future developments. This is important, because it emphasizes the need for a transdisciplinary approach to understanding these shifts, including both the effects at the side of the professionals, but also what happens to the individuals and the society. This perspective encourages a more comprehensive analysis of how AI is reshaping the cultural and creative sectors, offering new insights that could influence future research, policy, and practice within these industries. The social imaginaries surrounding AI have the potential to instill fear across society, including among creative professionals, while simultaneously encouraging a passive, standardized form of cultural consumption. It can be viewed as a modern iteration of Schumpeter's concept of creative destruction, underscoring the increasing subordination of cultural industries to data industries.

First, we will introduce the example of architecture: starting from the history of technology in architecture and how it has evolved over time, what are the main concerns and then showing that the difficulty is not how AI can become a "partner" in doing the creative work, but how professionals will use technology. This part of the paper examines the enduring role of architects in the age of AI, emphasizing that while AI advancements have transformed many aspects of design, the core elements requiring an architect's specialized understanding of aesthetics, space and societal needs remain crucial. Second, with the example of music we show how AI produce a hegemony of the sector and how algorithms are shaping and directly influencing taste, consumption and production of music.

1. Technologies in Architecture

The history of architecture is intricately linked to technological advancements, ranging from the creation of the compass and T-square to the evolution of CAD software and, more recently, the emergence of AI applications. Architects have consistently encountered the need to adapt and acquire fresh proficiencies with the

advent of each novel technology. Moreover, they have frequently confronted opposition and doubt from their peers within the architectural community.

The introduction of CAD tools in the 1980s brought about a significant transformation in the area of architecture (Gero, 1983). Architects transitioned from utilizing manual drawings and tangible models to employing digital design methodologies (Coyne, 1996). There was opposition to the implementation of CAD tools because people were worried about losing their jobs and the possibility of human creativity and talent becoming less valuable (Cooley, 1997). Research has demonstrated that utilising CAD tools can greatly enhance productivity and job satisfaction (Barfield, Shieldest, & Cooper, 1993). Computer-aided design (CAD) tool's influence on the process of creative problem solving in architectural design has been determined to have both advantageous and disadvantageous effects. On one hand, CAD tools can improve visualisation and speed up the process of drafting, while on the other, they carry the risk of limiting thinking and causing premature fixation on a particular design (Robertson and Radcliffe, 2009).

The advent of Computer-Aided Design (CAD) technologies into architectural domain brought about a substantial departure from traditional methodologies. This innovation greatly expanded the possibilities for architects to present innovative design concepts and enhance their efficiency. Nevertheless, this alteration also led to intricacies, particularly in the understanding and administration of spatial components. The conventional method of drafting, which depended on predetermined scales, provided a concrete understanding of size and measurements. However, the conceptualization of this element grew significantly with the development of CAD tools and their digital interface. The shift towards a more flexible and dynamic conception of space signifies a notable change in the thinking and methodology of architects in relation to the design process (Robertson and Radcliffe, 2009). The historical use of CAD required a reassessment of the comprehension of space, shifting from the limitations of tangible mediums to the boundless opportunities provided by digital realms. This move not only signified a substantial shift but also sparked an ongoing progression in architectural design, wherein the comprehension and depiction of space are constantly improving, inspired by continuous improvements in digital technology (Bhavnani, 1996).

The essential issue is not whether this represents a change or a continuance, but rather how architects can navigate and utilise these emerging models to leverage innovation while also maintaining a comprehensive grasp of spatial dynamics. The insights acquired from this period of technological implementation can provide valuable comprehension for the current integration of AI into the field of architecture.

As AI is advancing and becoming more widely used in the construction and design sector, there is also a growing concern in the industry about the future responsibilities of architects, or at least as architects know it. The core concern of this topic revolves around the potential for AI to supplant human architects or lessen the importance of their specific skill. The talents stated above include not only technical abilities such as modelling, drafting, and computational design, but also aesthetic



sensitivities such as the capacity to conceive and create visually pleasing and spatially balanced designs. The primary responsibility of an architect is to develop designs that make a deep connection with persons and effortlessly integrate form, function, and the surrounding environment. This requires a strong foundation in aesthetic skills. The concern is legitimate, as AI applications in architecture, such as generative design algorithms, have shown the potential to generate design solutions based on certain criteria and objectives. Although AI can enhance designs to make them more efficient, sustainable, or affordable, the intricate comprehension of creative worth, cultural importance, and emotional influence remains exclusively within the realm of human expertise (Zhou & Lee, 2024) (Mazzone & Elgammal, 2019).

Hence, the difficulty does not lay in substituting architects with AI, but rather in how architects may utilise AI as a tool to enhance their abilities, including aesthetic discernment. This is a mutually beneficial partnership in which AI manages the more numerical and data-oriented components of design, enabling architects to concentrate on the qualitative and imaginative aspects (Leach, 2022).

One fundamental understanding of this inquiry revolves around the notion of representation, an area where currently AI is its main play field in this domain (fig. 1).

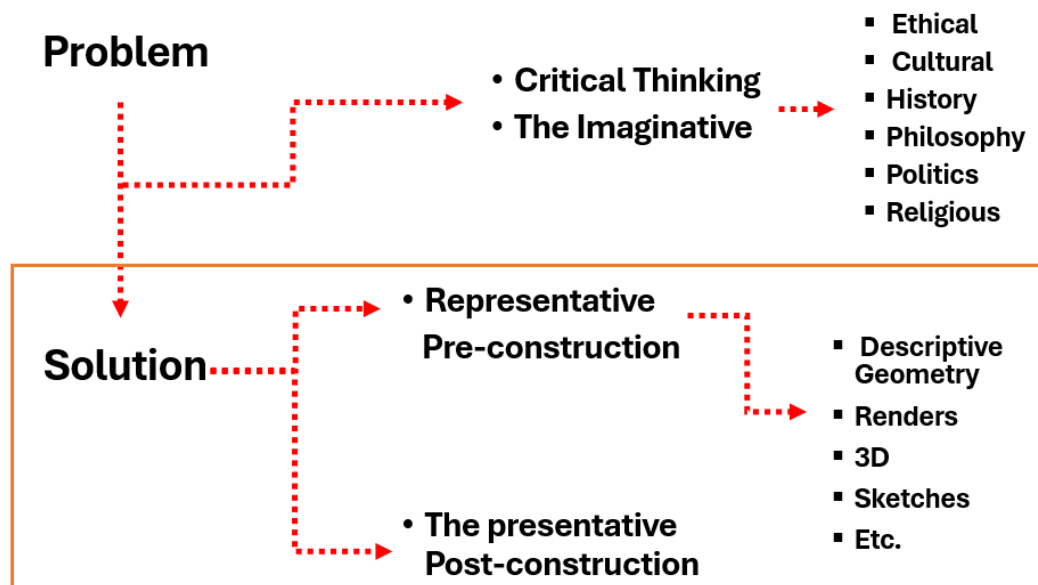


FIG. 1 – Simple problem-solving phases. Source: El Moussaoui (2024)

Architecture, at its core, is the pursuit of creative solutions to complex problems. At each stage of the design process, the architect must traverse diverse fields of knowledge to arrive at an outcome. This outcome, however, must be made manifest—it must be represented to exist beyond mere thought. Historically, representation has evolved through various mediums: from carvings on tablets and rocks, to sketches on paper, and later to digital models using CAD tools. These were

not the ideas themselves but vehicles to convey thought, whether fully formed or still emerging.

Representation methods and tools have always evolved with the development of civilizations, reflecting the advancements in communication. One of the key milestones in this evolution was the creation of descriptive geometry in the late 18th century by Gaspard Monge (Monge, 1795). His system allowed engineers and architects to project three-dimensional objects onto two-dimensional planes using mathematical precision, offering a shared "language" for representing complex structures (Barbin, 2019).

The next significant leap in representation came with the development of computer-aided design (CAD) tools in the latter half of the 20th century, as mentioned earlier. AutoCAD, introduced by Autodesk in 1982, became the predominant tool in architectural and engineering practices. It transformed the representation of designs from hand-drawn blueprints into digital models, significantly improving the accuracy, scalability, and flexibility of the design process.

AutoCAD introduced a new "language" of design, where architects could manipulate objects in a virtual space and immediately see the consequences of design decisions, thus streamlining the workflow and enhancing collaboration across disciplines. Studies have shown that AutoCAD increased productivity by up to 60% in certain industries by reducing manual errors and shortening design cycles

Today, we stand in the middle of major keystone at this point history, AI is playing a central role in the representational phase. The transformative impact of AI in architecture, particularly in representation, stems from the development of technologies such as Generative Adversarial Networks (GANs) in 2014 and the subsequent rise of Diffusion Models by 2022 (Kumar et al., 2024). These innovations have revolutionized how we visualize and externalize architectural thought, reshaping the very tools we use to express creative solutions.

Nevertheless, the advancement of representational techniques has greatly enhanced architecture and several associated fields. The incorporation of spatial changes into architectural techniques emphasises the continuous influence of computer technology in contemporary society. This highlights the crucial importance of projection in the discipline, a sentiment that is held by both theorists and practitioners.

The significance of this is further emphasised by the swift progress in projective geometric approaches propelled by AI. Projects such as NeRF showcase this progress by showcasing the capability to generate complete 3D models from a limited number of 2D images, hence uncovering previously undiscovered geometries. This transition from incomplete to comprehensive depictions represents a significant advancement in the objectives of descriptive geometry. Various AI models utilising distinct spatial representations are consistently advancing, leading to significant advancements in projective approaches that are applicable to architecture practice (Stanislas, 2023).



1.1 Magnitude of Change

DamiLee, a social media blogger, undertook a straightforward experiment to demonstrate the alterations occurring in the field of architecture. Three human architects were compared to AI technologies in a competition to design a 280-square-meter home on a difficult sloped terrain. As the ideas were shown, each representing different viewpoints and nuances, the Archibeans Discord community was invited to evaluate them without knowing who created each design. The AI tool's concepts emerged as the winners in the voting process, surpassing the speed at which human equivalents could develop designs (DamiLee, 2023).

The AI's proficiency extended beyond just design, excelling in rendering and textual articulation tasks, underscoring its growing significance in architectural practices. However, it is clear that the spatial characteristics of human architects' designs are notably inferior to those produced by AI. This difference was especially evident when comparing the plans generated by AI with the spatial quality and intellectual depth found in architect-crafted designs.

Nevertheless, while examining the historical development of text-to-image models, the accuracy of these algorithms that rely on visual data has seen substantial improvement, enabling them to capture increasingly intricate and organised concepts. Advanced models, such as diffusers and LLMs, encode complex conceptualizations that go beyond the fundamental components observed in parametric modelling. State-of-the-art text-to-image models demonstrate this progress by transforming complex language prompts into top-notch images through the utilisation of references to styles, historical periods, and artistic movements. Furthermore, the pace of progress in these areas of research is amazing. When we enter identical instructions into these models, it becomes clear how rapidly these technologies have begun to imitate and improve upon key notions in our profession. A comparison between the GLIDE model (December 2021) and Midjourney V5 (March 2023) and Midjourney V6 (February 2024) demonstrates a notable improvement in the accuracy of outputs, such as floor layouts, in just eighteen months (Stanislas, 2023).





FIG. 2 - *The magnitude of GANs capabilities in creating architectural plan, in a chronological order* Source: Stanislas (2023) and El Moussaoui (2024)

In the field of architecture, aesthetics and the primacy of the visual sense have been essential. The dominance of visual perception can be attributed to the Renaissance (Bowering, 2007). Globalisation has influenced architecture to prioritise vision above other senses, reflecting an ocularcentric approach. According to Pallasma (2005), architecture is increasingly moving towards being a visual art, focused on creating an impressive display rather than providing a physical and immersive encounter. Structures are frequently created with a primary focus on their visual aesthetics, while neglecting the importance of engaging all the senses and considering the overall experience. The inclination towards retinal architecture has wider societal implications, as the emphasis on form outweighs function significantly (El Moussaoui, 2020).

Given the discussions presented earlier, it is crucial to recognise the significant influence of AI applications, especially in the representational phases of architectural design. It is important to note that we are still in the early stages of comprehending the full potential of these tools. AI tools now handle these typically time-consuming processes. These tools have shown impressive ability to speed up the process of creating visual pieces, surpassing human efficiency even when assisted by non-AI technologies like Adobe Photoshop and rendering software. This move represents a crucial change in the workflow of architectural design, as jobs that are considered ordinary and onerous are assigned to AI, which will free up some time for architects, for an initial thought, this freed up time should be extra time to be spent on the critical thinking phase, the phase were designers/architects use their background knowledge to find a solution to the problem they are handling, as by now, the representational field of architecture can be done by AI much faster and easier.



With these progressions, the fundamental elements of architectural design that require an architect's distinct understanding have mostly remained unaffected by AI (up until this point), by fundamental elements of architectural design, i mean those phases in architectural design process that allows us to jump from the problem to the solution.

These components encompass the comprehension of space and the incorporation of varied scientific information to address societal demands. The renewed focus on the architect's function highlights the inherent significance of their contribution to the discipline. Architects are not only responsible for creating visual objects, but also for designing experiences that are closely connected to the philosophical, social, and political aspects of their work. Their specialised knowledge and skills are essential in effectively utilising AI systems, not just for automation, but as tools to solve problems, create meaningful solutions, and improve sustainable results. This viewpoint emphasises the significance of emphasising the experience elements of living, surpassing the constraints of a aesthetic approach to building.



2. AI in Music : the (re)emergence of *Kulturindustrie*

Music is a social and professional practice that requires no special academic or scientific knowledge but only specific skills (Becker & Faulkner, 2009). First and foremost, music and the music professions (musicians, sound engineers, tour managers, artistic directors, etc.) place originality, subjective and artistic expression above mere technicality (Perrenoud, 2007). Nevertheless, music, in all its aspects of production, dissemination and reception, has always been one of the liberal arts most affected by and sensitive to technological developments (Wikström, 2020).

Indeed, while music has always integrated the most recent technologies before the other arts, at the same time, these same technologies have often destabilized this ecosystem, which is particularly integrated into the market economy (Wikström, 2020). In this respect, a certain historicity exists in the music world regarding these "micro-revolutions". In this section, we'll show how the social imaginaries associated with AI can frighten the whole of society (including music professionals) and, at the same time, correspond to a form of passive, standardized consumption of cultural production. In this respect, AI - especially generative AI - can appear as a new iteration of the Schumpeterian concept of creative destruction and, in the case of AI, of a subservience of the cultural industries to the data industries.

2.1 From "elevator music" to "fake Drake": acceptance and resistance in music production

Western music is the result of the circulation of rationalities in the Middle Ages, which led to the codification of a social and scientific rationalization of both musical production and the instruments required for its production and dissemination (Weber, 1998, 1958). Thus, at least since Mozart and culminating with Wagner, the

European musical system has been entirely codified in both form and content (Elias, 1991). Aesthetic revolutions in music since the 18th century have been more the result of scientific treatises on music (Adorno, 1994; Weber, 1998, 1958), the social expression of invisibilized music (such as blues or folk music), or technological developments (electrification, digitization of musical instruments and recording media). However, the stability - and hegemony - of the European musical system has led to an industrialization of musical production, notably through what has come to be known as Muzak music, a first contemporary iteration of the notion of cultural industry developed by Adorno and Horkheimer (1947).

Since the 1920s, Muzak music has been based on the industrialization of music, both in terms of production and aesthetics. Described as "elevator music", Muzak music had a single function from the outset: to accommodate consumers with a repertoire based on the same aesthetic organizing principle i.e. rhythmic, harmonic and melodic simplification. As the means of mass broadcasting (radio, telephone cable) began to develop, the music industry took advantage of technological advances. While the musical structures and chord progressions needed to create "hits" were already known since Bach and Mozart, Muzak Inc increased the rationalization of the process: recording the same patterns on an (industrial) assembly line, with minimal variations, to produce a sound environment conducive to consumption, concentration or withdrawal (particularly in elevators) (Lanza, 2004).

Although fiercely criticized by critics and the music world alike, this operationalization of ancestral musical knowledge has nonetheless enabled careers to blossom.

Musicians playing for radio stations or recordings labels earned their living playing music for the first time, by ceding their performance rights. Playing this uninteresting and tasteless music allowed "non-classical" musicians to earn a living and free up their time to create and compose original works.

One of the first paradoxes of the cultural industries appeared in our view: the production of music with no artistic vocation potentially enabled the performers of this music to create radically new aesthetic and artistic content. Jazz, for example, could be considered as such: the "hits" mass-produced in New York - in particular by European Jews who had fled the pogroms and were paid by written title in a fordist perspective - could be appropriated and poached by African Americans in the southern United States - mainly in New Orleans. In this way, many musicians were able to "make a living" from their music, year in, year out: by ceding their (performance) rights, musicians gained aesthetic freedom.

Generative AI brings exactly the opposite to music production: if music's rules are well known since decades, the originality of composed works can be now calculated, replicated or modified. The result is a calculated (re)compositions with the same iteration with minimal variation. based on the idea that Western music is a closed system (limited number of notes, rhythms and melodies), generative AI could produce more (variations) of the same (Snickars, 2017). In this way, many composers demand a royalty when their compositions are included in databases used by Ais



(Robins-Early, 2024), in line with the lawsuit brought by the New York Times against OpenAI (chatgpt) for the use of their article (Le Monde, 27/12/2023).

In order to protect their works or artistic identities, many musicians and copyright holders struggle to protect - or sell - their catalogs (Jamet et Blum, 2022). We've seen (2023) Drake's representatives put streaming platforms on notice for allowing the broadcast of AI-generated music featuring the artist's voice, flow, intonations, lyrics, etc. (Daniel Tencer, *MBW*, 18/4/2023) while renowned artists such as Bruce Springsteen and Neil Young have sold their catalogs for hundreds of millions dollars to art/data-brokers such as Hypgnosis, who market these catalogs on the stock market (Jamet et Blum, 2022).

From a critical and adornian perspective, these elements are the both face of the same thing: an illustration of algorithmic capitalism (Durand-Folco et Martineau, 2023), these artists (especially the more established ones) derive maximum profit based on venture capital investment (data-broken) not necessarily linked to actual consumption, and on the other hand, demand a high level of rent for streaming consumption of their works (copyright, neighbors rights). So, for all their criticisms, they are the objective allies of the most avant-garde algorithmic capitalism. Which tends to disconnect consumption and production (of their products) to focus on stock market valuation through high-frequency trading (Pasquale, 2016) of their catalogs (which will be more or less relevant depending on the request of database needed by a music-generating AI). This positioning prevents emerging artists from gaining access to the market and listeners, because the "market" (i.e. streaming platforms) claims to have absorbed and to be the only representative of all "calculated" individual subjectivities and tastes (Introna, 2016). The impact of recommendation algorithms on the social imaginary of cultural and creative industries is examined by Airoidi (2015). These algorithms, operating on platforms like Netflix, Last.fm, and YouTube, exert considerable influence over users' browsing and consumption choices, shaping contemporary cultural consumption patterns.

The automated associations generated by recommendation algorithms contribute to the formation of shared semantic connections, but also lead to homophily, conservatism, and a reduced propensity for serendipity in cultural consumption.

2.2 AI, Music and broadcasting : the fusion of content and subjectivity

Algorithmic prescriptions and AI-generative's contents precisely fulfill the platforms' aim to tune in (Schütz, 2007) and harmonize with these social activities.

The promise of music streaming platforms lies in the marketing argument that each user, in his or her singularity and habits, will have an interface and musical environment "tailor-made" for them. However, this environment is never truly "tailor-made". Indeed, given the sheer volume of content and users, platforms and their analytics departments (The Echo Nest at Spotify (Lunden, 2014), for example ultimately proceed on the basis of a set of "profile-types" by aggregating "comparable" user profiles (Roberge, Jamet, Rousseau, 2019). Ultimately, then, streaming platforms rely on categories of social tastes and uses of music that pre-



exist the platforms which are aggregated in music's database. Platforms have thus engaged in fierce competition to offer algorithmic devices that can recommend, anticipate and predict what listeners might like to hear, when and how, without the need for any interaction with the platform (Jamet, 2019). It is in this sense that we can speak of "algorithmic culture, : "Algorithms have developed and implanted their logic into the very fabric of all social processes, interactions and experiences that increasingly rely on computation to unfold: they now populate our daily lives, from sorting information (...) to predicting personal preferences and desires (...) to the point where no aspect of human experience escapes them" (Roberge and Seyfert, 2016: 1)

This is, in turn, directly correlated with musical experiences aimed at ensuring a certain emotional regulation of individuals. De Nora (2000) thus sees the desire of individuals to "sanctuarize" their intimacy and thereby create a musical halo protecting them "from the outside world" and its multiple solicitations. From a radically different perspective, Beer & Burrow (2013) emphasize the interactions between listening type and geospatial context, showing that the musical choices made by individuals are closely related to the listening environment and context.

In this way, music, via algorithmic recommendations, AI content and playlists (Hagen 2015; Hagen & Lüders, 2016), is used, among other things, to make emotional adjustments and achieve a socialized individuation of music. The aim is, on the one hand, to make available the same "singularized-normalized" prescriptive techniques and to classify users into socio-cultural profiles and types of use; and on the other, to provide an individualizing experience of music. This twofold objective aims to evade, from the user's ears and consciousness, the social roots of this type of recommendation, such as the definition of listening contexts, recommendations based on listener profile homology or socio-cultural profiling. Streaming and the technological devices that accompany it (from servers to headphones, playlists, etc.) are primarily designed to continuously broadcast musical "atmospheres" that can be interwoven with other places and activities. In the end, what is proposed is a new experience of the identical (Adorno, idem): without even prejudging the intrinsic quality of the musical content, the aim remains to offer a musical experience that doesn't stand out from the situation but sticks to its "design".

Deezer, for example, has for some years been developing an artificial intelligence (Flow) to detect the moods of its user-listeners based on their interactions on social networks, their geolocation data, the movements of their cell phones or even their listening times. The purpose of this artificial intelligence would be to predict what user-listeners would be looking for to accompany their personal moods.

Playlists for mood and emotional accompaniment fit in perfectly with the desire of the various generations of the music industry, from their very beginnings, to deliver musical content to every corner of our daily lives (elevators, supermarkets, waiting rooms, etc.). Streaming platforms are part and parcel of this history, but the technological devices they use are now primarily designed to address each individual in isolation, to "embuller" (Pariser, 2011) users not in their listening experience, but in their experiential flows (Schütz, 2007). Playlists typically aimed at public places



(bars, supermarkets, administrations, etc.) or activities (transport, sport, etc.), the target of streaming platforms becoming the permanent emotional accompaniment of their users, so to speak, "streaming their moods" (Jamet, 2019). Ultimately, however, the aim of these platforms remains to develop their business models by collecting, analyzing and reselling their users' data (Roberge and Seyfert, 2016; Introna, 2016).

All these elements thus directly affect the very experience of music as a social, subjective and aesthetic experience. Musical experiences are socially and subjectively grounded (Adorno, 1994; Bourdieu 1979), the result of social, political and cultural constructions of the "earing" (Pecqueux and Roueff, 2009) and differentiated ways of experiencing music (Hennion, 1981). Moreover, as already emphasized, these musical experiences only acquire individual and societal significance in a particular environment (Dewey, 2005) and according to particular listening contexts (De Nora, 2000, Beer & Burrow, 2013). What, then, do streaming and related technological devices imply for music consumption?

First of all, we can argue that the musical experience is significantly altered by the material conditions of its realization, such as cloud storage, connectivity and ubiquity, as it is above all individual portable devices, notably smartphones and other devices with screens and individualized interfaces, that are most used to listen to streaming music (IFPI, 2024). This material reality contributes to an apparently more individualized listening experience. But critical analysis forces us to see this promise differently: the promise of hyperindividualization is above all a social imaginary driven by platforms and the capitalism that underpins them. The cultural industry appears here as an attempt to merge content and container, to merge AI-generated music content, recommendations based on socio-emotional profiles and experiential flow.

3. Discussion: CCI as second nature: congruence and insubordination through creative experience

The deployment of algorithmic technologies - of which machine learning and artificial intelligence are corollaries - is thus not only intended to offer a better "user experience", but also to become part of the experiential and - musical - intimacy of their user. Streaming platforms in a way aim to standardize musical tastes, although they may participate in doing so. On the contrary, they are the entrepreneurs, willingly or not, of a mass individualization and singularization of culture.

Notwithstanding the platforms' desire to approach their users' tastes and intimacy asymptotically via the analyses of their traces, we can observe a certain insubordination on the part of users to this technological pervasion of their intimacy. For many people, music remains a particularly personal element, and the very idea that algorithms could "calculate" the depths of their subjectivity remains a non-negligible obstacle. Thus, in the face of the experiential marketing of streaming platforms, we need to intensify future research into the avoidance tactics of user-



listeners (De Certeau, 1990) in the face of these commercial and pervasive strategies, with the aim of reappropriating their own subjectivities and ontological security (Giddens, 1984).

The deployment of algorithmic technologies, including machine learning and artificial intelligence, extends beyond enhancing user experience; it intrudes into the experiential and intimate realms of users, particularly in music. Streaming platforms aim to tailor musical tastes, but in doing so, they also contribute to the individualization and singularization of culture. However, despite these platforms' efforts to align with users' preferences through data analysis, there remains a resistance among users to this technological intrusion into their personal musical spaces. For many, music is deeply personal, and the notion of algorithms "calculating" the depths of their subjectivity is met with unease. Future research must explore how users resist and reappropriate their subjectivities against the pervasive strategies of experiential marketing (De Certeau, 1990), thereby securing their ontological security (Giddens, 1984).



4. Discussion

The research question central to this paper examines AI's transformative impact on social imaginaries within creative and cultural industries (CCI), particularly in music and architecture. AI's increasing integration into these sectors reshapes creative, distributive, and consumptive processes, presenting professionals with both opportunities and significant challenges. However, the understanding of these changes requires more than just a focus on the technological aspects. AI profoundly impacts CCI by transforming both the visible and invisible aspects of society (Marzo & Mori, 2019).

It reshapes the social imaginary by altering how we interact with and understand the world through new narratives and meanings, driven by AI's integration into daily life.

AI influences tangible structures like smart cities and digital platforms, while also affecting the deeper, often invisible aspects of societal values and beliefs. This transformation underscores the need for a holistic understanding of AI's role in shaping cultural production and creative practices reflecting the interplay between visible changes and underlying social meanings. In the context of technological advancements, these imaginaries influence the design and acceptance of technological artifacts. They drive choices toward specific forms over others and shape processes of meaning attribution and recognition, but also of future projections as for socio-technical imaginaries (Napolitano, 2023). This dual relationship between technology and the imaginary is crucial: while the imaginary influences the form and meaning attributed to technology, technology itself participates in shaping the imaginary (Musso, 2019).

Understanding this relationship is essential in addressing how AI and other technologies are integrated into the CCI.

The myth surrounding AI's creative potential often overlooks the nuanced understanding that AI does not create in the same way humans do. Instead, AI reconfigures existing elements, perpetuating a cycle of standardized production rather than true innovation. This myth is sustained by recurring analogies and discursive shifts, which borrow concepts from other fields to describe AI technologies. Moreover, there is a rhetorical use of the future, suggesting that current limitations will soon be overcome. Controversies surrounding AI's capabilities are integral to the discourse of the AI myth and must be critically examined.

Technological artifacts are not neutral; they are social constructions imbued with specific values and worldviews. One of the critical tasks of research is to deconstruct what appears to be self-evident, revealing the underlying social, cultural, and political dimensions. In this sense, socio-technical imaginaries, which are the inextricable relations between technoscientific assemblages and sociopolitical order, are crucial. These imaginaries shape and are shaped by our capacity to imagine futures, which is a fundamental element of socio-political life.

In architecture, AI influences social imaginaries by redefining the practice and perception of the field. Architecture inherently involves problem-solving, where the architect uses critical thinking to address issues and represent solutions, thereby shaping social imaginaries. However, this process is more complex than just the reconciliation of technological advancement with enhanced "humanities" skills. The creation and perpetuation of social imaginaries in architecture require a more profound understanding of how these imaginaries are formed and how they interact with technological advancements. Similarly, in the music industry, AI reshapes social imaginaries around creation, dissemination, and reception, challenging traditional notions of authorship, authenticity, and cultural diversity. Musicians and industry professionals must navigate an environment where AI-driven algorithms significantly influence consumer preferences, shaping musical innovation and cultural expression.

To effectively counter AI's tendency toward standardization, professionals must reclaim their role in shaping these imaginaries by leveraging AI as a tool for creative augmentation, not replacement.

In conclusion, the integration of AI into CCI signifies a profound shift in societal perceptions and conceptions. The theory of social imaginaries provides a critical framework for understanding these changes. Professionals in CCI must critically assess AI's impact on social imaginaries, balancing technological opportunities with the preservation of human creativity's essence. This paper calls for a broader, theoretically grounded and transdisciplinary discussion on the intersection of AI and creativity, urging stakeholders to engage in dialogue that will harness AI's transformative potential while safeguarding the integrity of human expression. AI is not inherently problematic; it is a tool capable of performing tasks and calculations beyond human capacity.

However, its fetishization, driven by the social imaginaries associated with it, constructs its perceived power. By fostering critical reflection and dialogue,



stakeholders can harness AI's potential to catalyze genuine artistic revolution and preserve the essence of human expression in architecture and music.



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Ingrid Kofler, Mustapha El Moussaoui, Romuald Jamet
AI's influence on the Creative and Cultural Industries

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