Rethinking creativity: creative industries, AI and everyday creativity

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Abstract
This commentary reflects on how creativity is dehumanised (and rehumanised) and how its labour aspects are hindered (and highlighted) in the three recent developments in our understanding of arts, culture and creativity: the creative industries; AI creativity; and creativity in everyday life. The creative industries discourse instrumentalises and dehumanises creativity by hiding labour perspectives and treating creativity as human capital and a generator of IP. Meanwhile, contemplating AI creativity helps us to look beyond the economic paradigm and consider key traits of human creativity and the creation process, some aspects of which are successfully emulated by AI. Yet, we also observe how AI dissociates creativity from human agency and how its cost-cutting effect can challenge human creators in many sectors. Finally, the idea of everyday creativity effectively rehumanises and democratises creativity; however, it not only lacks labour perspectives but also hinders them.

Keywords
AI, AI creativity, creative industries, creative labour, creativity, cultural policy, everyday creativity

During the past 20 years, our understanding of creativity has been heavily affected by the globally powerful discourse of ‘creative industries’. Despite various critiques, the discourse has been unhesitantly underpinned by excessive economic aspirations. Yet, its bright portrayal of the creativity-driven economy is now debunked in the Covid crisis...
with many corners of the cultural sector being hit severely. Even before the pandemic, there was growing discontent about actual conditions of labour in the cultural sector. Witnessing increasing calls for new cultural policy, today is a sober moment where we should rethink creativity beyond the narrow economic framework. I suggest that we do this not only by critically scrutinising what creativity has meant in the creative industries discourse but also by rethinking it in the context of the two other important recent developments in our understanding of culture and the arts, that is, AI (artificial intelligence) creativity and the creativity in everyday cultural life.

In the following sections, I will explain how creativity is constructed in these three areas of discussion and why such constructions matter especially for cultural policymakers who are under increasing pressure to care for artists and cultural practitioners and improve their working conditions and earning. My starting point is the observation that the creative industries discourse has dehumanised creativity by seeing it as a type of capital and thus impedes labour perspectives of creativity. Ironically, thinking about AI creativity is an interesting way to rehumanise creativity. It is because this endeavour necessitates inquiries into the core nature of human creativity and the creation process of human artists whilst AI itself can threat human creators by dissociating creativity from human agency. As such, discussing the creative industries and AI creativity leads to questions around political-economic nature of creativity (labour vs capital) and the entity where creativity is embedded (human/artists vs mechanical process/capital). Finally, focusing on whose creativity (artists’ vs everyone’s) matters, the popular discourse of creativity in everyday cultural life celebrates non-hierarchical and democratic creativity. Yet, a pitfall is that it discourages labour perspectives of creativity and makes it almost impossible to articulate specific characteristics of creativity held by artists and professional cultural practitioners. Calling for rehumanising creativity that has been bluntly instrumentalised by the creative industries discourse, I want to point out that making sense of creativity is a complex task. This task involves an exploring the political economy of cultural production, comprehending the growing impact of technologies on human creativity and reflecting on the rise of cultural democracy and relativism.

The discourse of creative industries: de-humanising creativity

Since Tony Blair’s government in the UK introduced the idea of ‘creative industries’ (those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property), it quickly has become an orthodox template for cultural policy globally. Focusing on the arts, media and cultural industries, it has presented a specific understanding of creativity and determined policymakers’ imagination of a post-industrial economy. It is interesting to note that the creative industries discourse opened up a discursive space in which ‘labour’ that had been delegitimised and marginalised by the neoliberal public policies could have been re-legitimised (Lee, 2017). Its affirmation of the centrality of creativity – which is inseparable from the labour of artists and cultural producers – in the new economy could have served as a powerful advocacy of
labour-value nexus and, moreover, even as a call for more labour share of national income. This is because the discourse had the possibility to persuasively highlight that creativity as a consequence of human labour determines not only aesthetic and symbolic values, but also economic values. Yet, the discourse was preoccupied with the cultural sector’s potentially unlimited economic output and failed to trigger policymakers’ interest in creative labour (the input of the industries) despite the growing scholarship in work and labour in the cultural sector, especially regarding the issues of precarity, low earning and working conditions (e.g. Angela McRobbie’s *Be Creative*).

Broadly speaking, policymakers tend to see creativity along with knowledge, idea and skill as ‘capital’ – human capital or intellectual capital (Petty and Guthrie, 2000; Sweetland, 1996) – that can be accumulated, is put into the production process and is easily transferrable across different sectors (Dean and Kretschmer, 2003; McRobbie, 2016: Chapter 3). They are keen on raising these capitals via education and training, which has been a distinct component of the UK’s creative industry policy during the past 20 years (Lee, 2020). From this perspective, artists and cultural workers who are the owners of creative idea, capacity and skills, are ‘capitalists’ whose livelihood need not concern the government; not surprisingly, UK policymakers lacked interest in addressing the precarity and poor earning in cultural work until the outbreak of Covid-19 pandemic. The underlying assumption before the pandemic was that artists and cultural workers, as capitalists, should help themselves and be responsible for dealing with individualised risks and uncertainties. In this context, the creative industries discourse assisted to produce a self-reliant and entrepreneurial subjectivity among creative workers and, hence, has served as a device of ‘labour reform’ (McRobbie, 2016: 66) that actually impedes labour perspectives.

The perspective that sees creativity as capital and conceptually dissociates it from human labour is further underpinned by the discourse’s emphasis on Intellectual Property (IP) such as copyright. The discourse hides the reality that copyright income for the majority of artists and creative producers is minimal. For example, half of the music performers in the UK receive no royalty income and 35% receive annual royalty income only between 100 and 1000 Euros from music streaming (House of Commons DCMS Committee, 2021: 27). The current discourse of creative industries cannot explain why many professional artists and cultural producers, who are owners of abundant human capital and producers of IP, struggle to earn a decent amount of income. For cultural companies, copyright in popular works serves as if it is capital by generating income for many years and being invested in producing attractive new cultural commodities. That is, copyright can be amassed and transferrable and it can work as a production factor along with traditional factors, such as capital, labour and land. Importantly, copyright subsists in fixed creativity (fixed ‘expression’). The framework of copyright regards creativity as something static that can be stored, accumulated and deployed at will (Dean and Kretschmer, 2003). Thus, to understand creativity via the lens of the copyright hardly recognises the value of unfixed creative ideas and the tacit knowledge of cultural producers, maintenance and development of which takes time and unpaid labour. Equally important is that the copyright framework, which is quality-neutral, lowers our expectation of creativity to ‘non-copying’ and to demonstrating ‘a degree of labour (skills or judgement)’. In short, within the current discourse of creative industries and its emphasis
on IP, creativity is less to do with quality, excellence or critical capacity than with the popularity in the marketplace. Seemingly, such a low threshold of creativity easily applies to artworks generated by AI.

The creative industries discourse assumes unrestricted economic growth that is driven by the abundance of productive human creativity; however, the reality of cultural economy is more complicated. Artistic and cultural production – singing, acting, drawing, writing, etc. – tends to be labour-intensive. Baumol and Bowen’s (1966) cost disease theory captures this tendency well in the context of the live performing arts sector: artists’ labour cannot be replaced by mechanical processes, so the sector suffers from a productivity lag and increasing overhead costs. Of course, their lack of concern with consumption or their measurement of productivity can be questioned (Towse, 2019: 236–242). For example, they understood productivity as the amount of live performance per man-hour. But if productivity is defined as revenue per man-hour, we can say that it can increase when a large audience is found and reached. Still, their findings rightly highlight the irreplaceability of performers’ labour with mechanical processes and its implications for cultural organisations. In the case of dance, theatre and opera companies whose productivity (as revenue per man-hour) is low, the state provides subsidy as it believes that society attaches importance to their products. Meanwhile, cultural industries that are capital-intense tend to enjoy high productivity and can be notably profitable if they can cater to a transnational or global audience.

Nevertheless, the most productive sectors (e.g. music and TV streaming), too, may suffer from the labour intensity of cultural consumption. Consuming cultural and artistic products requires personal and social meaning-making, which takes time and relies on the emotional capacity of consumers. This sets a significant limitation on how much of the potentially abundant productivity in the cultural industries that capitalise on digital reproduction and online streaming can be translated into economic value. Instead of endless growth, these industries are in fierce trans-sectoral and global competition within the zero-sum game of today’s attention economy (Webster, 2014).

To quickly sum up, despite its potential to advocate for the significance of labour in the cultural sector and the broader post-industrial economy, the discourse of creative industries in its single-handed celebration of creativity’s economic power has lacked conceptual frameworks in which labour perspectives of human creativity can be articulated. It has discouraged policymakers from making sense of the problems of creative labour, especially low earning and precarity. Moreover, the discourse has been unable to explain the existence of different ways of dealing with the labour-intensity in cultural production, the low productivity of some parts of the cultural sector, and the constraints posed by the distinct nature of cultural consumption.

**AI: a test for the human nature of creativity**

With the rapid development of advanced technologies such as artificial intelligence and its broad application in the 21st century, there has been increasing attention to the use of AI in cultural production, dissemination and consumption (Anantrasirichai and Bull, 2021; European Parliament Think Tank, 2020; Jin, 2021; Kulesz, 2018). In particular, the use of AI in creating original artistic and cultural content deserves our attention.
Boden (2004, 2016), one of the most influential thinkers on AI and creativity, defines creativity as novelty/surprise and being valuable. Here, the idea of creativity is relatively freed from the economic obsession of the creative industries discourse as it is attached to varying types of values from aesthetic, social, scientific to economic. Unlike the creative industries discourse that sees creativity as input, she seems to regard creativity as both process and output (also see Mazzone and Elgammal, 2019). According to Boden, novelty means being new to the creators themselves (psychological creativity) or being new to society (historical creativity), which is equivalent to Beghetto and Kaufman’s (2007) mini-c creativity or big-c creativity. Such creativity happens when fresh connections are made between familiar ideas (forms, genres, approaches, expressions, etc.) (combinational creativity); when existing ideas are further explored (exploratory creativity); or when the existing ideas are transformed (transformational creativity).

So far, we have seen examples of AI programmes which are apparently creative in the sense of Boden’s psychological and historical creativity, producing new artistic works that did not exist before, for example, in the field of visual art or music composition (Anantrasirichai and Bull, 2021; European Parliament Think Tank, 2020). AI can even be programmed to produce something unexpected and surprising: its programme can have rules to change the rules themselves to possibly generate a transformative effect, though in reality only few have created artworks that have such an effect. Given that not all human artists produce groundbreaking works, the lack of transformative quality in AI creation does not necessarily disqualify its creativity. Moreover, for the layperson, it is not always easy to distinguish human-created paintings and music compositions from those that are AI creations. The quality-neutral and low threshold of copyright easily embraces AI creation, although there are debates on who should be the copyright owner, for example the programmer, the creators of data, the data feeder, the user, or the AI programme itself (European Parliament Think Tank, 2020). AI creativity as a generator of IP and potential economic value comfortably gets on with the discourse of creative industries although it dissociates creativity from human labour.

We can have a look at two core components of the current discussion on AI creativity. The first one is that AI’s creative production process offers insights into the production process by human artists (Boden, 2004; Mazzone and Elgammal, 2019). One example is Portrait of Edmond Belamy, an AI-generated artwork which made a newspaper headline when it sold for US$432,500 at a Christie’s auction in 2018 (BBC, 2018). In this case, a generative adversarial network (GAN) AI programme was fed a data set of 15,000 portraits painted from the 14th century to the 20th century and produced original images that the AI itself thought were human creations. The Portrait of Edmond Belamy was one of those artworks. Another example is AICAN, a creative adversarial network (CAN) designed by Art & AI Lab at Rutgers University: this AI was fed 80,000 images from five centuries of Western art history and was programmed to encourage choices that deviate from copying or repeating what were shown. As a result, it produced surprising new artworks that are wide-ranging in terms of style (Mazzone and Elgammal, 2019). Despite the different scale, AI art creation seems to simulate how human artists learn from previous artworks and create new works and possibly new styles. In this way, looking at AI’s creative process helps us to better understand how the human mind works or how a creative breakthrough happens (Boden, 2004). Similarly, contemplating AI creativity
stimulates us to freshen our takes on aesthetic, personal and social understandings of cultural production, beyond the economy- and IP-centric discourse of creativity.

The second component is about how we can conceptually distinguish human creativity from AI creativity. Commentators ask if AI can demonstrate the traits of human creative labour such as autonomy, motivation, emotion, intention and consciousness. Yet, their observation and assessment are ambivalent. One reason is that they witness examples proving AI’s demonstration of some of these traits. Another reason is that how we define those traits is open to philosophical and scientific debates. For example, Boden (2004: 294–296) argues that some AI programmes can be seen as conscious if we define consciousness in a particular way – as self-reflective evaluation. Meanwhile some scholars regard autonomy as the fundamental feature of human creativity: to programme autonomy would contradict what autonomy means (Du Sautoy, 2019; 283–284). Interestingly, this ongoing debate tends to both dehumanises and rehumanises creativity. That is, the debate opens space in which we not only discuss the increasing possibility of creativity existing without human agency but also explore the essential human conditions of creativity. In this debate, we are supposed to delve into conditions of human artists’ creativity and creative process to seek them in AI or identify limits in AI’s emulation of them. This means that, ironically, the more sophisticated the AIs become, the more attention we will pay to debating the essential nature of ‘human’ creativity.

It is important to notice that for some businesses, using AI presents a fundamental solution to the labour intensity of artists. This has resulted in a situation where capital replaces labour as the main input into the production process of original artwork or cultural content. For instance, a subscription-based AI writing service claims that its customers will ‘have a finished article in under a minute at a fraction of the cost [needed to hire freelance writers]’. Attempts to replace human creative labour with AI are taking place in various sectors, including news reporting, weathercasting, art-making, music composition, writing marketing materials, converting data to narrative, chat-bot conversations, etc. Today, an increasing number of AI art galleries sell ‘original’ AI-generated artworks. These galleries stress that each of their products is one-of-a-kind in the sense that it is not a copy of any existing work(s) though a quick glance at many of these works leaves us unimpressed. The use of AI is also active in music composition (e.g. Sony’s Flow Machines and the AHRC-funded folk:RNN programme). Commercial music AI software programmes such as Amper, Jukedeck and Melodrive are marketed as mechanical producers of ‘royalty-free’ original background music for cultural businesses, advertisers and YouTubers who would otherwise have to use copyrighted music (Peukert, 2019). This may imply that the stronger protection for copyright human authors and cultural companies demand, the more demand for AI creation we will observe.

Currently, the impact of AI is unevenly felt; some ‘authors’ such as artists and composers working at the lower end of cultural production are more likely to face competition from AI. When it comes to ‘performers’, or those whose creativity is produced on and through their ‘body’, it is physically impossible to replace their ‘embodied’ creativity with AI’s creative process. Still, it would be interesting to have a look at the current attempts to create ‘digital’ performers such as actors and singers. As these digital personas are not created by self-learning AIs, they require substantial creative human input, which is costly. To create a reliable virtual actor, the production team depends on input
from real actors behind the scenes, via motion-capturing. According to the Hollywood Reporter (2019), ‘[creating a reliable virtual actor] could cost from $500,000 to $1 million to create. [. . .] producers could expect to pay anywhere from $30,000 to $100,000 per shot, depending on the individual requirements of the performance in the scene’. A slightly different example is the ABBA concerts planned to launch in a purpose-built venue in London in May 2022 (BBC, 2021). In the nightly concerts, digital avatars that will have been created through the motion-capturing of the band’s four members will perform with live musicians. As mentioned above, the huge production costs will be compensated for only when there is a large enough audience.

By contemplating AI’s artistic creation and related businesses, we can explore how creativity is associated and dissociated with/from artists and cultural workers. The dissociation comes with the replacement of labour with capital and is driven by motivations to cut production costs and generate IP. This tendency may further alienate human creators in some sectors. At the same time, thinking about AI creativity ironically offers us an opportunity to reconsider creativity in terms of human labour and human body. As with the creative industries discourse, however, the discussion necessitates a better understanding of cultural consumption. An audience might not be able to clearly distinguish AI works from human creations. While there are willing buyers of AI art, the existing research finds that people attach significant meaning to authorship and undervalue artworks when they are informed that the artworks – including human creations – were made by AI (Fortuna and Modliński, 2021). Investigating the audience response to and engagement with AI creation will not only substantiate our conceptualisation of creativity but will also have significant implications for the future of cultural industries and businesses.

Creativity in everyday cultural life

A surprising consequence of the creative industries discourse is its facilitation of a conceptual development in the realm of the traditional cultural policy. It sparked a ‘creative’ turn in the old idea of ‘cultural democracy’, which refers to people’s engagement and participation in what they consider culture as opposed to the top-down dissemination of elite arts (Evrard, 1997; Hadley, 2021). This means that the inclusive idea of creativity is increasingly dissociated from aesthetic excellence and standards of professional artworks and, instead, is becoming regarded as the conduit for cultural democracy. At least in the UK cultural policy and at the discursive level, creativity has been ‘democratised’. For example, Arts Council England now sees itself as the nation’s developmental agency for culture and creativity. Arts Council England’s latest 10-year strategy, Let’s Create (ACE, 2020: 12) defines creativity as ‘the process through which people apply their knowledge, skill and intuition to imagine, conceive, express or make something that wasn’t there before’ (p. 12). This report argues that the creativity of each of us is equally legitimate and should be valued, celebrated and supported. This is a radical departure not only from the creative industries discourse but also from the Arts Council’s previous belief that professionally-made arts (‘great arts’) should be widely disseminated and accessed by the public. Now, there is no longer clear demarcation between professional, amateur, commercial and everyday creativity in the discourse of.
cultural policy in the UK. The idea of creativity in everyday cultural life aptly rehumanises creativity that has been instrumentalised and dehumanised by the creative industries discourse, seeing it as an essential trait of every human being and being ‘grounded in [our] everyday abilities’ (Boden, 2004: 1; mini-c creativity and little-c creativity in Beghetto and Kaufman, 2007).

Nevertheless, there remain unsolved issues if we take the perspective of professional creative labour. Firstly, when creativity is found everywhere and in every person, the following questions arise unavoidably. Why should the government subsidise professional arts organisations and cultural institutions? Why is the creativity of artists and professional cultural workers special and why should we care about the key characteristics of their labour? Despite its rehumanisation of creativity, the idea of cultural democracy seems to conflate different scales of creativity: for example Boden’s psychological creativity and historical creativity. Indeed, it hardly provides us with a reasoning as for why society should attach importance to the creativity of professional artists and cultural practitioners. Nor does it address issues of their labour such as low productivity, invisible costs incurred to maintain their creativity, and its potential replacement by AI or mechanical processes. Second, such a collapse of cultural and aesthetic hierarchy in cultural policy discussion means that the value of the creativity expressed by or embodied in professional artists is found less in its aesthetic contributions (e.g. their potential historical creativity in Boden’s words) and more in its social and community impacts (e.g. artists working with communities), as noted in the aforementioned Arts Council England’s 10-year strategy. Another point is that the strategy sees not only voluntary arts but commercial cultural sectors playing key roles in shaping everyday creativity, inevitably weakening the ground for public subsidy for non-profit professional cultural organisations and activities.

The impact of AI creativity on everyday culture, too, presents a range of intriguing questions for cultural policy researchers and policymakers. AI’s cultural creation may or may not increase creativity in everyday life. Ordinary people can easily create professional-looking artworks using AI programmes, which results in more diversity in the creative expressions of society. Artworks generated by AI may not be aesthetically impressive, but they could be much more affordable and accessible than works by professional artists. Hence, it is hard to oppose an AI gallery’s statement that they ‘democratise art’. Similarly, the creators of Jukedeck, the music-making AI that is believed to have recently been sold to TikTok, argue that one of their missions is to ‘democratise music’. Yet, there are concerns about the potential lack of cultural diversity in AI-generated cultural expressions as AI’s production may be driven by popular cultural tastes and, furthermore, such tastes are reinforced by AI algorithms utilised by big platform businesses (Jin, 2021; Kulesz, 2018). AI creativity seems to have found its way under the overall conceptual umbrella of cultural democracy; however, this challenges the very idea of cultural democracy by revealing the latter’s lack of capacity to discern the actually-existing everyday cultural and creative environment of contemporary society, in which advanced technologies are utilised to assist and even replace human creative labour, to offer new types of commercial cultural commodities, and to analyse/shape cultural tastes of users.
Concluding remarks

The past 20 years have seen the discourse of creative industries fostering an instrumental perspective of human creativity. This discourse has successfully hidden the labour aspects of creativity and paved the way to treat it as human capital and a generator of IP. The discourse popularised an untested assumption that creativity is overwhelmingly abundant and productive and thus can fuel unlimited economic growth. Such an assumption is contested by observations of the real world of cultural business, especially the low productivity of artists, limited audience and increasing cross-sectoral and global competition for audience attention.

Furthermore, the Covid-19 crisis has effectively debunked the myth of the creative industries and pushed the hardship of artists and cultural producers into the limelight. Even the Department for Digital, Culture, Media and Sport, the UK’s cultural ministry which invented the idea of creative industries, has discarded the economic language: ‘it is culture that has kept us going. Helping us to deal with a weight of solitude. Educating and entertaining. Consoling and comforting. Reminding us of the values that make us human’ (DCMS, 2021: 5). In a way, the cultural sector became unexpectedly freed from policymakers’ headstrong obsession with the economic impacts of creativity. Interestingly, the effect of Covid-19 differs across different sectors in line with the degree of labour intensity and productivity as I discussed above.

Meanwhile, the ongoing development and application of AI in cultural and artistic production both rehumanise and dehumanise our understanding of creativity. Contemplating AI creativity provides us with opportunities to look beyond the economic paradigm and consider key traits of human creativity and the creation process, some aspects of which are successfully emulated by AI. Here, it is necessary to freshly reflect on the importance of embodied creativity and the low productivity in the creative labour of live performing artists, who have been hardest hit by the pandemic. Yet, we are also observing how AI dissociates creativity from human agency and how its cost-cutting effect can challenge human creators in many sectors.

The idea of everyday creativity as a new descriptor of cultural democracy further complicates our discussion of creativity. This is because, whilst tackling the creativity-economy dogma and rehumanising creativity, this idea shifts our concern broadly from professional cultural producers to cultural consumers (as creators of their own). It also radically challenges any efforts to differentiate creativity held, embodied and expressed by artists from creativity in ordinary people. Unavoidably, this will put a lot of pressure on policymakers to come up with a new logic of public support for professional cultural producers and the professional cultural producers and the latter to demonstrate their contributions to enriching everyday creativity, which may incur substantial hidden costs on them (Belfiore, 2021).

I find that the three recent developments in the discussion of creativity hardly give a clear framework with which we can understand creativity from a labour perspective, for example, why creativity – embedded in human labour – is valuable and how such an understanding can help to reshape the labour-capital relationship in the broader economy. The possibility of exploring this is quickly subjugated to the economism in the creative industries discourse. In the discussion on AI’s creativity and its simulation of
human producers, art-making – by either AI or human being – seems to be understood as a process rather than labour. Meanwhile, the current discourse of cultural democracy and everyday creativity not only lacks the labour perspective but also hinders it. Amidst concerns with precarity, low income and harsh working conditions, the cultural sector is in great need for policy and academic discourse explaining why the labour of artists and cultural practitioners is valuable, why society should care for it and what are its distinct characteristics.

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Notes

1. Drawing on the idea of personal creativity, Beghetto and Kaufman’s (2007) define mini-c creativity as the novel and personally meaningful interpretation of experiences, actions and events. Big-c creativity is something similar to historical creativity, which is decided by historical and inter-personal judgement. In between, there is little-c creativity, which is found in creative expressions and endeavours of amateur artists or students’ arts-making.

2. See https://www.articleforge.com/ (accessed 10 September 2021).

3. There are, however, some surprisingly novel AI artworks such as those by Ai-Da (Design Museum, 2021; The Art Newspaper, 2021).

4. Revolution Arts (community-based arts organisation, UK)’s video ‘Creative Bury Park’ aptly summarises the core premise of cultural democracy: along with barbering, making street food and being a beautician, cooking pastries is a creative practice and it is an art-form. https://www.revolutionarts.com/galleries/videos/creative-bury-park (accessed 19 November 2021).

5. https://www.artaigallery.com/pages/about-art-ai (accessed 30 August 2021).

6. https://musically.com/2017/08/09/jukedeck-artificial-intelligence-music/ (accessed 30 August 2021).

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