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OPEN FORUM

Re-evaluating creative labor in the age of artificial intelligence: a qualitative case study of creative workers' perspectives on technological transformation in creative industries

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Abstract
This article explores how the emergence of creative AI technologies transforms creative workers' self-apprehension in the context of critical theory and labor studies. The distinguishing contribution of this study resides in its focus on how CI laborers' creativity perception and reception are affected by AI technologies' intrusion into the creative domain. Creative AI technologies are expected to present new expressive capacities to creative workers and cost-cutting advantages for CIs' production that put a lot of creative jobs at risk. Findings show that creatives perceive the adaptation of AI technologies as both an opportunity for their creative process and a requirement of their active presence in the market survival as a matter of technocratic rule. We critically analyze creative labor's novel mods engaged with updated technology and present reflections on the favorable co-creation conditions to flourish an understanding of socially intelligible technology and thereby a creative livelihood against technocracy.

Keywords Artificial intelligence · Creativity · Creative labor · Creative and cultural industries (CCIs) · Generative AI · Visual design

1 Introduction

The worldwide interest in generative artificial intelligence (AI) has increased due to recent developments in machine learning (ML) as well as the successful implementation of these technologies into models such as ChatGPT and Midjourney that are easy to use and easy to access. In this environment, AI creativity has grown into a vigorous global debate (Manovich and Arielli 2024; Boden 2014; Mazzone and Elgammal 2019), especially for those who aim to capture the next steps of the creative sector. Instead of operating as a single 'creative' imagination, AI functions based on training datasets. These datasets implicitly show a division of human labor and everyday human creativity (Pasquinelli and Joler 2020). Extracting this division of labor, AI now can create a great number of artistically plausible texts (visuals, sounds, scripts, etc.) within seconds. Capitalist entrepreneurship, once dependent on the figure of individual author/genius to transform the collective expressive capacity of society into surplus value (Brouillette 2009), seems to possess alternatives to human creatives in cultural production. Thus, generative AI invalidates the predictions that creative/artistic labor is not likely to be automized (Frey and Osborne 2017) and challenges established concepts, such as creativity (Boden 2014), authorship, and (creative) labor (Dyer-Witheford et al. 2019).

The critical theory framework affirms that technological rationality has also become political rationality, because it defines and regulates technical progress within the framework of domination (Feenberg 1988). This critique opposes a technocratic rationale equating progress with accumulation by undermining technology's social–political contexts and assuming technology is value-free. Thus, technology's central efficiency goal is linked to human autonomy versus automation (Chiodo 2022). According to its rationale, new technologies are primarily validated for their capacity to reduce the time necessary for any task to proceed. For sure, creativity merging with datafication (Saifer and Dacin

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2022) resonates with a higher interest promise. Eventually, the grand question mark consists of the prospective role of the creative workers in this new chain of AI-assisted creative production, seemingly more efficient and time-saving. According to the broadly accepted definition, creative industries (CIs) originate in individual skills, talent, and expertise (DCMS 1998). AI intervention seemingly questions the requirement for individual skill, talent, and expertise in CIs. But more importantly, it embodies the problematic conception of technological innovation separated from its social ground and situated context.

In Turkey, CI jobs are considered as potential 'good jobs' (Florida 2014; Hesmondhalgh and Baker 2013) since these jobs assumingly present less alienated working experiences and more room for human expression and opportunity for self-realization. Throughout this study, we aim to provide a grassroots insight into the critical conceptualization of creative AI technologies and their impact on labor and creativity. We principally focus on creative workers' perspectives, investigating the following questions: How do creative workers originating in Istanbul adopt the ongoing changes in the cultural sectors? Do they think the possibilities of artistic expression in CIs diminish due to 'AI creativity' intrusion? How can we think of an updated vision of creative labor in harmonious lines of collaboration with AI technologies? To answer these questions, we conducted a qualitative case study of Istanbul-originated creative workers who received professional instruction in Turkey. We combined a qualitative adoption of Interpretative Phenomenological Analysis (IPA) with Critical Discourse Analysis (CDA) to generate a critical theory-based conceptualization of creative worker experience of AI. The article concludes by identifying grassroots terms of genuine co-creative engagements conditioning socially intelligible creative AI technologies.

2 Working within creative industries

The 'creative industries' discourse considered creative workers in the wider CIs as a multinational workforce of skilled workers, who harness their skill, talent, and creativity to produce creative goods and services to meet the increasing customer demand (Garnham 2011). In this regard, creativity, as human capital, consisted of creative class' ability to drive the knowledge economy by using the economic value of creativity (Florida 2014). Critical studies argued that this discourse was shaped by policy-makers whose aim is to turn cultural policy into an industrial policy to enhance employment and GDP in the new information economy (Garnham 2005). Scholars also debated the creative industries discourse's depoliticizing effect (Hesmondhalgh 2013) on cultural production due to its supposed "tendency to remove concerns of politics, power, and structural issues" (Lee 2014 p.1).

Most creative work in creative and cultural industries (CCIs) in both Global North and Global South is based on short-term contracts and freelance work is widespread (UNESCO and The World Bank 2021). This offers flexibility and variety for creative workers (Hesmonndhalgh and Baker 2013; McRobbie 2018), however, also leads to precarity, with growing issues, such as inconsistent income, lack of job security, and limited access to benefits (Lee 2012; De Peuter 2011; Gill and Pratt 2008). Alongside the challenges of being a 'creative' in CIs, such as the uncertainty of freelance gigs (Morgan and Nelligan 2018), unstable incomes, and the need for nonstop skill development; scholarly interest also focuses on the joys of creative practices and the struggle to balance professional expression (Hesmondhalgh and Baker 2013) with market demands. This coincides with passion toward their creative occupations, usually stemming from their childhood and their search of self-actualization, esteem, and self-esteem through their work (Hesmondhalgh and Baker 2013). Data also show that immaterial values of work such as 'autonomy' and 'self expression' are highly valued among creatives, even more than material rewards such as pays and benefits (Marčeta et al. 2023). However, they must constantly find their ways in the market conditions to achieve these goals.

Our subject of study is the impact of creative AI technologies on the conditions of creative design workflow. Such induction of technological revision on creative workflow precisely holds the potential of reconfiguring relations and self-perceptions in CIs. Digital technologies are known to offer new tools for production and platforms for showcasing work but also raising questions about copyrights, compensations, and the blurring of work-life boundaries. On that issue, Pasquinelli (2023) inserted that the social history of AI shows a technopolitical ground for the current abstraction of the division of labor. Critical social theory already identified the reification of time consciousness (Lukács 1972) under the high-technological capitalist production. This includes the domination of social time incompatible with the ever-increasing efficiency rule, thereby fragmentation of subject under the limitation of self-knowledge and elucidation of the social situation's necessity (Shippen 2014). Creative AI promises fast creative production while supposedly accelerating the realization of value through reducing circulation and time (Dyer-Witheford et al. 2019: 79 -80). Indeed, AI-powered systemic creative production corresponds with demand for produ(s)er immediate satisfaction search for consumption, and the consequent need for immense production.

High expectation of agency in creative action discursively designates both individual and/or collective capability to act and make a difference in a given context throughout aesthetic creations. Creative agency in a critical theory sense allows reflexivity regarding the sociopolitical world. This can be presumingly endangered by AI supposedly automating the

creative production and aesthetic choices (Manovich 2018) for produ(s)ers. A critical assumption of creative AI derives from its part in datafication process that explicitly involves a pattern-seeking mode of being (Berry and Dieter 2015) which provides reduced activation of reflection and critique as a cost-saving necessity of acceleration and automation. The generic conceptualization of human will accords with consciousness for taking responsibility involved with the action (Chiodo 2022). Indeed, creative creation is always used to connote the embodiment of both contingency and necessity aka purposeless purpose (Feng 2021). As such, a more positive account of generative AI cultural production suggests that creative autonomy embodied by the human–machine complex has just been reformulated to be tied to handing over creative decisions to the programs, arriving at outcomes while sustaining interactions among systems and consumers (Serrano 2019). Such deliberation also involves the construction of a posthuman creative agency that undertakes technological mediation central to situated subjectivity and social actors.

AI intrusion updating the creative realm offers possibilities and constraints for creative agency and its supposed role in understanding, contesting, and/or re-generating the subjectivity and social situation. The creative agency navigates various technocultural causalities, social experiences, and power dynamics. In this article, we are specifically interested in the grassroots first-hand perceptions of the new technology of creative AI. Our research questions focus on how individual creative workers relate to technology, use technology, or how technology, on a large scale, affects cultural work and careers (Morgan and Nelligan 2018; Williams et al. 2021). We explore creatives' experiences with generative AI technologies with the potential to disrupt and reshape creative careers drastically (Ponce Del Castillo 2023; Anantrasirichai and Bull 2022; Lee 2022; Caramiaux 2020). By investigating how creative workers encounter AI, we aim to shed light on the collective impact of technology on creative work through the critical analysis of individual creative workers' perspectives and attitudes on this technology to reveal the dynamics of oppression and resistance.

3 Methodology

Power relations are an object of phenomenological investigation. The actual high-technological communication-enabled society is understood as mediated by the actions of 'individual persons' and vice versa. Therefore, we aim to discover the phenomenological connections throughout individual perceptions of AI experience to understand the socio-historical meaning of technological innovation. To reveal the lived experiences of creative laborers on AI creativity throughout our case study, we employ Interpretative Phenomenological Analysis in combination with Critical Discourse Analysis to analyze the qualitative data obtained from in-depth interviews (Eatough and Smith 2017) with CIs professionals. Using the transcribed interviews, we have developed emerging themes, searched for connections among the themes, and looked for patterns across cases.

3.1 Participants

We have formed a table summarizing the AI tools used by participants to provide a clear understanding. The table includes details such as the number of participants using each tool, the tools' perceived role in creative workflows, the perceived benefits they offer, the perceived challenges they pose, and their position in creative processes. Only tools mentioned by two or more participants have been included to ensure the observations reflect wider patterns and are not based on anecdotal experiences. (Tables 1, 2).

3.2 Data collection

Topics covered during the interviews consist of a comprehensive definition of creativity, their professional experiences, their daily routines, and understandings of emerging technologies, and how they made sense of it. Interviews were conducted by the first author. Data collection lasted 2 months between September 2023 and November 2023 and resulted in 15–16 h of data.

Through the snowballing technique for purposeful sampling, we recruited 14 interviewees, who used generative AI technologies in their professional workflows. Driving from the IPA research paradigm, we aimed to find a fairly homogenous sample for whom the research question will be meaningful (Smith et al. 2009), because they 'represent' a perspective rather than a population.

A semi-structured format was used for the interviews. The participants were mainly from a visual arts background. However, since CIs present highly flexible working environments (Banks 2007), most participants were simultaneously performing duties outside of their primary professions, such as social media management, academy, music production, and company management. Interviews lasted an average of 47 min. Eleven participants were male, and three participants were female. The median age of the participants was 29.4. Three interviews were conducted face-to-face, and eleven interviews were conducted using an online video communications platform. The interviews were held in Turkish, and the authors translated the excerpts from the transcription into English for the article. All the interviews were audio-recorded and transcribed. Due to ethical data considerations and the job safety of the participants, we anonymized participants' names by assigning simulated names.

Table 1 The participants

Name	Job title	Expertise	Age	Base	Details	AI tools used
Kerem	Freelance visual communication designer/Freelance photographer/University lecturer	6 years	29	Istanbul	Nowadays concentrating mostly on his own artisan brand with his partner/spouse. Does professional photography and visual communication design	ChatGPT, Adobe Photoshop integrated AI tools
Koray	Freelance multi-disciplinary designer/Academic	20 years	38	Istanbul	A highly above-the-line multi-media designer working for big clients. He holds a PhD in graphic design	ChatGPT, Midjourney, Stable Diffusion
Eren	Freelance motion graphic designer	10 years	30	Istanbul	Recently quit his job as a university lecturer in visual arts. After leaving his lecturer position, he was employed in a design agency and quit it after. Now, he continues his freelancing in motion design. He also does VJing performances	ChatGPT, Midjourney, Adobe Photoshop integrated AI tools
Melis	Freelance visual communication designer/Illustrator/Photographer	13 years	34	Paris	Freelancing as a visual communication designer for more than ten years. Interested in photography. She is also doing her PhD in social sciences	ChatGPT, Midjourney, Deep AI, DreamStudio
Rüzgar	Full-time motion graphic designer	2 years	26	Istanbul	Freshly graduated and works as a motion designer for an Istanbul-based animation studio that heavily produces animation ads for national and international companies	Adobe Photoshop integrated AI tools, Upscayl
Bora	Visual communication designer	6 years	30	Istanbul	Owns a company, does the company's visual communication materials by himself using AI tools. Graduated from the visual communication design department. Also interested in creative coding	ChatGPT, Midjourney
Berfin	Visual communication designer	2 years	23	Istanbul	Freshly graduated, works for two places at the same time. One is for a seasonal festival as a visual communication designer, and one is for a company active in creative industries-related fields as a visual communication designer. Both of them are part-time jobs	ChatGPT, Midjourney, Stable Diffusion
Volkan	Full-time midweight designer	2 years	28	Istanbul	Works in an international streaming company's design department. Also interested in photography	Adobe Photoshop integrated AI tools, Midjourney
Güneş	Freelance multi-media designer	6 years	30	Istanbul	Started his career as an industrial designer but was not happy. Self-taught himself in areas such as live visualization and animation. Creates in a wide range of areas such as animation, graphic design, AR, VR, apps, and game motors	ChatGPT, Midjourney, Stable Diffusion
Seda	Full-time graphic designer/social media manager	4 years	25	Istanbul	Works in a public institution's graphic design/social media management department. Also takes freelance graphic design jobs. Doing street photography as her hobby	ChatGPT, Midjourney, Adobe Photoshop integrated AI tools

Table 1 (continued)

Name	Job title	Expertise	Age	Base	Details	AI tools used
Aras	Multi-media artist/Art director	6 years	29	Berlin	Also interested in music production. Has live DJing experience and does electronic music	ChatGPT, Midjourney, Stable Diffusion
Adem	Artist	20 + years	45	Istanbul	Uses AI mostly for artistic production of his own projects that he markets from his social media accounts. Interested in philosophy and mathematics. Writes his own micro stories	ChatGPT, Midjourney, Wombo
Tuna	Visual communication designer	3 years	22	Istanbul	Works in an AI application developer firm's marketing art department. Highly engaged with AI models	ChatGPT, Midjourney, Adobe Photoshop integrated AI tools, Eleven Labs, Heygen, Runway, Deforum
Gökhan	Freelance graphic designer	2 years	23	Istanbul	Works heavily relationally for close circle. No social insurance. Engaging his own professional project	ChatGPT, Midjourney

3.3 Data analysis

We prioritize community-based particularities inducted from individual emergent themes to extract individualized yet related stances against the power imbalance on the issue of decisions on a technological update in creativity. Therefore, we made an adaptation of the IPA's defined steps (Finlay 2011). That is why, our sample size is large in the context of IPA, which is mostly used for a small sample of 3–4 people. We contend that the IPA method precisely aligns with CDA, focusing on the context and the issues of power, inequality, and domination (Dijk 2008, p. 85) to emphasize contextual codes that run in the background and permit communication to formulate meaning. As such, we combined CDA with the IPA's staged process of data analysis schema. To deduct systematic hierarchies and constructions of inner and outer groups such as worker-employer-societal drive of technology, definition of market value, human–machine, and dichotomies, we focused on the recurrent themes across the cases rather than individual emergent themes for each interviewee. To maximize the validity and reliability of our qualitative case study, we first separately studied the audio-recorded interviews and transcribed texts. Each researcher identified the recurrent emergent themes and their related sub-themes after working on the sum of the data collection. Following this, we separately focused on the individual cases to distinguish between different parts of experiences and make decisions about connecting experiential parts as sub-themes to more comprehensive recurrent themes. Then, we compared our initial findings of the first level before continuing to the next step of interpreting meanings to constitute common meaning across the connected recurrent themes, thereby generating a critical theory-based conceptualization on the case study of AI experience for creatives across discursive engagement with the findings.

This analysis contributes to the critical studies of technologies literature from a qualitative case study of creative workers who received professional instruction in Turkey and providing a conceptualization of creativity from a specific socio-cultural and economic context, although, the participants are either hired abroad in the Global North or frequently freelancing for an international corpus of CIs tasks. Following IPA's aim of "capturing particular experiences as experienced for particular people" (Smith et al. 2009:16), this CDA sheds light on experiences in conjunction with socio-historical situated context for creative workers receiving professional education in Turkey.

4 Findings

Interview data provided insight into participants' perspectives and experiences regarding the use of generative AI gathered under three central themes and fourteen sub-themes (Table 3):

Table 2 Perceptions and uses of specific AI tools by participants

AI tool used by participants	Number of participants using it	Perceived role in creative workflows	Perceived benefits	Perceived challenges	Creative role of the AI tool
ChatGPT	12	Brainstroming, Refining textual content, Scripting, Creating and improving texts to integrate in design	Saves time, Supports ideation by providing new perspectives	Limited creativity, Generic responses	Assistant Editor
Midjourney	12	Generates visuals to use for production of visuals, moodboards, concepts and brainstorming, Supports creative exploration	Delivers high-quality, visually appealing outputs	Can lack originality, Outputs heavily influenced by training data, Hard to achieve desired results	Visual collaborator
Adobe Photoshop integrated AI tools	6	Enhances tasks by advanced editing and generative fills	Increases efficiency, Leaves more time for creative thinking	Inconsistent results in complex content	Creative augmentation
Stable Diffusion	4	Generates artworks and concept visuals, Supports creative iterations	High customizability through advanced settings	Can lack originality, Output quality can vary	Visual collaborator

4.1 Perceiving of creativity on the axis of AI update on authorship

Creativity is envisioned as something to be secured. Therefore, creating and maintaining 'good works' (Hesmondhalgh and Baker 2013) in CIs necessitate designing technologies with an understanding of actual users' own perception of creative agency in incorporating these technologies into their processes. Participants value the creativity aspect of their work and assert that having the chance to use their creative potential is one of the main reasons why they work in their occupations. They have passion and love for their profession, usually stemming from their childhood. Eren said, "*I always wanted to work in sectors where I could use my creativity (…) It's been like this since middle school, I was drawing cartoons, doing graffiti*". Güneş mentions, "*I only do this work for creative satisfaction, nothing more*".

Many of our participants share the same idea that creativity is a dynamic and evolving process influenced by continuous learning, environmental factors, and personal experiences, combining both innate abilities and learned skills. For Koray, creativity "*grows and develops with exercise just like a muscle…Learning continuously and exposing myself to creative stuff have broadened my vision*". The influence of the environment and personal experiences are crucial in the formation of this evolving process. These participants continuously emphasized the significance of diverse experiences in shaping their creativity. Rüzgar says "*My relationships*

Table 3 Themes and subthemes

Themes	Sub-themes
Perceiving of creativity on the axis of AI update on authorship	Creativity as a dynamic process Creativity as seeing differently Balance of innate and learned skills Caring creativity The views on ownership of AI-generated content Responsible and ethical use of AI
Perceived impact of AI on creativity	AI as an enhancer AI's potential risks and limitations for creativity
Perception of AI's historical role in shaping creative timespan	Adaptation and skill development Mandatory engagement with AI Agency through creative intention Human-AI collaboration The lonely creator Losing the bargaining power

with people, or even the relationship between two different people, their communication and interaction… looking at that… even these kinds of things feed my creativity". Aras says, "*The more I learn, the more I know, the more I am interested in different areas my creativity escalates*". Hence, creativity is something that needs to be fed, something that grows and changes in time, while they interact with other people, other people's works, or with nature. Creative action engages with overall social livelihood. This socially driven and personally incorporated creativity serves as a means of communication in return. Tuna says *"we use creativity to convey messages. It is about empathy and understanding the other*". As such, the relational aspect of creativity and creative work constitutes an access point mentioned for engagement.

The role of unique perspectives and the recombination of existing elements to produce original artifacts, which participants considered themselves as good at doing, are important to achieve creativity and, thereby authorship. Participants both support traditional notions of ownership related to authorship as well as new models that account for the collaborative nature of AI technologies. There were several alternative perspectives on ownership, including 'collective ownership', 'ownership belonging to AI developers', and 'conditional ownership', which requires at least a minor contribution from the human user to the end product, as well as some indecisions and ambiguities among participants. There is no consensus among the participants on the issue of copyrights and ownership of AI-produced images. Most participants assert that the person who creates and enters the prompts to the AI models should be considered the sole owner of the AI-generated artifact. Their views show their belief in the active role of the user in guiding the AI model's output and can be seen as aligning with traditional perspectives on authorship where the individual 'author' or groups of 'authors' hold the rights of the content. Hence, creativity and the intentional capacity of the human will to curate sensorial terms are aligned to claim authorship and thereby ownership.

Participants are also conscious that AI copies and mixes others' work. Yet, only a minority express concerns about creating copyright infringement and ownership dilemmas regarding their use of AI applications. This finding demonstrates that although the social aspect of creativity has been validated for creative potential, the creative agency is understood as subscribed to the individuated agent that collects and curates elements and artifacts to form an aesthetic outcome rather than create from scratch. Thus, AI creativity masking such collective social labor inherent in its production process borrowed from the envisioned hierarchical division of labor between manual and intellectual labor. Yet, it fortifies this notion by automatically reducing the intellectual labor of each element to its instrumentality in the form of anonymity for the end product to be intentionally curated by the creative end user.

4.2 Perceived impact of AI on creativity

Almost all participants embrace technology in their creative practice, are committed to digital software, and find it very helpful in expanding their expressive capacities. Participants think software is necessary to create what is on their minds, even opening new possibilities that they are not aware of by playing with the software. AI technology is no exception in this regard:

> *Technological tools and software can enable you to be more creative. For example, when you take a photograph and edit it on software, the software's tools can take you in a new creative direction. AI is the same: it can take you to different places regarding creativity.* (Kerem)

Using AI in design action directly or indirectly affects the quality and creativity of the end product. Most participants asserted that using AI in automating labor-intensive works, such as cutting images, rigging, and enhancing image quality, has significantly reduced their total workloads. This relief on the part of manual labor has consequently afforded them to conduct more time on creative thinking. They believe that this kind of integration of AI tools into their creative workflows gives them more time to think creatively, thus resulting in more creative products. Eren says this kind of use of AI tools: "*fastens the process, makes it easier, adds quality to work*".

For some participants, AI is the only way to materialize the concept in their minds. This shows the democratizing effect of AI models in the sense that AI facilitates the burgeoning of creative action. Adem says that he did draw when he was younger but did not take his skills further after some point in life. With the help of AI, he says, he could create the desired images in his head. He commented, "*It's definitely not restrictive for me. It moves me forward*". Even an experienced designer Eren believes: "*After all, everyone has access to AI now. Therefore, everyone is in an equal position* [to engage in creative action]". This massification of ability negates the CIs' discursive emphasis on individual skill and talent (DCMS 1998); as with AI, anyone can create aesthetically pleasing artifacts, arguably without skill and talent.

On the other hand, we observed that integrating generative AI into creative practices may raise concerns among participants about the potential erosion of satisfaction and fulfillment derived from creative work. Some participants felt alienated when using these technologies, attributing AI's tendency to shortcut the creative process. Rüzgar remarked on writing prompts and choosing the best images among the ones AI presented, stating, "*on my part, I don't find that*

process very creative, and I think it limits the fun the creativity brings". Adem says, "*Many times I want to do the work alone; I don't want AI to do it for me*", because he is enjoying while doing his creative practice.

Yet, it must be noted that some participants also affirmed that they consider creating artifacts with generative AI as an exceptionally creative and satisfactory way of cultural production. However, there is also a consistent concern of misconduct about leaving complete responsibility to AI for creative action in the sense of acting on their subjective creative agency's behalf. While embracing AI within the cultural sector, AI-produced image aesthetics sometimes cause negative feelings and dilemmas for participants. They mention that AI models can exhibit a lack of originality, and not authentically creative due to the repetitive output patterns they display. This dilemma requires them to constantly make changes to AI-produced outputs to distinguish their works from other AI-produced images. When a project explicitly looks so much AI-produced, it does not address the participants' taste; therefore, they prefer not to use it.

In that matter, participants precisely indicate the compatibility of AI with the market demand of immense production before their own will for creative action. Indeed, CIs are already suspected of prioritizing quantity rather than quality to extract more surplus value. Some participants think this lack of originality in AI-produced creations will decrease the overall quality of Turkish CIs. Thus, AI-led, rather than AI-assisted, creative work, although candidate to be recognized as valid in CIs, can differ from what the participants envision as human creativity depending on originality.

4.3 Perception of AI's historical role in shaping creative timespan

Participants recognized the potential transformative effect of creative AI technologies within Turkish CCIs. Kerem commented that "*this AI thing and AI tools are something else. It is a big leap and changes everything*". Some people considered it an epoch-breaking development: "*This is like the new industrial revolution, bigger than the invention of the Internet*" (Eren). These participants see AI as a pivotal development in cultural production, unparalleled by any other development in decades. The successful implementation of generative AI tools into everyday lives with easy-to-use and easy-to-access user interfaces becoming mainstream may have a positive effect on their creative work practices. Some of the highlighted opportunities were AI's advantage of speed through new featured tools to use in the creative production process. Even Koray, who usually showed a negative stance on the use of AI in Turkish CCIs said: "*It* [the use of AI] *satisfies me in terms of the time it takes to create the work due to its speed and the appreciation and customer satisfaction you receive in return*". Aras commented that "*AI is an opportunity, it presents surprising tools. For example, recently I saw a model that produces 3D models from text, it's pretty exciting"*. Tuna commented, "*as AI models progress, the limits of what we can implement to our products expand*".

Participants also experience a mandatory engagement with technology, and they fear missing good job opportunities and desirable career roads if they do not use technology efficiently enough. Recently, this also includes AI technologies:

> *But of course, there is this problem, people who do not know AI, especially in our occupations, or do not know how to use it, will probably not be able to participate in this sector in the future.*
> (Seda)

Just like Seda, all participants believe that they have to keep their skills and knowledge about technology up to date. This shows that while participants embrace technology in their creative practices, one reason they use it is the fear of losing good job opportunities and leaving vulnerable in the precarious Turkish cultural job market (Öztaş, 2023). Cultural workers are regarded as poster children of the rising class of the precariat (Gill and Pratt 2008; Standing 2014), and they eventually evaluate their engagement with any technology and any cultural work according to real market conditions. As Standing (2014) suggests, the precariat must constantly be ready for new job opportunities, demanding a constant self-driven effort to stay up-to-date with emerging technologies and techniques. Many participants highlighted that, given AI's current hailing in contemporary discourse, some clients request works produced using AI. Not using the updated technology may again mean losing 'good' job opportunities.

Despite the common belief among participants that generative AI will dramatically transform the creative sector, all of them also believe that although there might be job displacement of creatives or transformation of creative occupations, the intrinsic value of their role as artists/creatives is going to remain indisputable. The common view among participants is that CIs will always need creatives to assess, appropriate, and utilize human creativity. This perception shows enduring self-reliance in the fundamental role of 'human' creativity within the changing landscape of digital cultural production, possibly suggesting that such capabilities are secured against obsolescence:

> *Our job will never become outmoded; after all, not everyone has time to design, or design is irrelevant to them. What a customer has is an aim, and if the customer needs a design to meet that aim, he will again come to designers. I don't think designers will*

lose jobs. (…) actually, writing the right prompt is also a skill, it's an output of a certain experience.
(Bora)
I am on the side of crafting. If you still can maintain the human emotions, you can continue to create. People like the human touch, even the mistakes. The demand for human creativity will not fall but will incline. Everyone [designers] *turns to AI to save themselves from outmoding, however, what they have to do is the opposite.*
(Koray)

Koray's comment here addresses the centrality and irreplaceability of intentionality in cultural/artistic production. Similar to Koray, most participants emphasized the importance of intentionality behind their creative practice. This perception of intentionality, as central to creative agency, is foundational to our participants' confidence that automation cannot displace human input in cultural production. Thus, AI has yet to reproduce rather than initiate creative action. Accordingly, AI technology's achievement in fast delivery of aesthetically pleasing artifacts gives the impression that the communication design profession is transforming toward a curatorial act, from the direct production of cultural artifacts to the selection and integration of AI-produced texts and images to form creative end products. This 'curatorialization' might represent a clear discursive and concrete shift in cultural production from a working model that encompasses both conception and execution led by human creatives to a predominantly conception-focused, AI-executed task:

The designer role will evolve radically. I think this role will turn into a curator role... Therefore, I think that to survive in professional life, people who achieve the desired results by using artificial intelligence tools will come to the fore.
(Tuna)

This priority of the intentional aspect of creative action and related 'curatorialization' of creative tasks accord with participants' enhanced capability to undertake projects independently thanks to AI assistance. The necessity for cooperation with other creative workers decreased. Users are said that they easily adopt roles such as creative directors or team leaders, in which generative AI models undertake the actual design action under their command. This kind of experience suggests a trend toward more individualized creative practice, where the dynamic relationships between creative workers diminish, and AI becomes the ultimate partner in creative practice.

With AI, I may not need to talk too much with anyone else after I satisfy my need for dialogue [to process my creative work]. *Well, there is already AI. You can eliminate that need for dialogue* [as a step of brainstorming] *and isolate yourself completely.*
(Eren)

Aras, experienced with co-creative teams, mentions that when he is working with AI, his job is similar to a creative art director while AI constitutes his whole creative team:

Let's think of the art director as the person visualizing the (key)words [given by the customers], *I can say that it* [art directorship] *is a process driven by a concept, consisting of analyzing the creative ideas. This corresponds to how the AI handles the prompt and obtains results accordingly.*
(Aras)

Thus, AI's sufficiency for completing a creative team or becoming a leading member reduces the necessity for interactions and communications with colleagues, contributing to less social environments for working types. Therefore, the Turkish cultural workforce's process of individualization (Öztaş, 2023) in terms of the sociality of the work intensifies in AI-applied creative engagements.

Additionally, some participants have remarked on the influence of AI on their negotiation leverage with clients and customers. Traditionally, creatives/artists are portrayed as a distinct group of laborers (Ryan 1992), who wield considerable bargaining power against capital, because cultural production is usually linked to a signature specific to the author as well as commonsensical legitimacy of the still prevalent modernist genius discourse today (Wolff 1993). However, with the massification of creative abilities empowered by AI technologies that participants asserted, such narratives of 'creative' and 'creative person' distinction that participants articulate may likely begin to erode:

"*Designers are often asked these kinds of questions in the industry: 'Why does it take so long? Is it really that difficult?' And we could say, 'go and do it yourself then'. Now we won't be able to give that answer anymore. The rug has been pulled out from under us because these tools are very easy to learn. People who do not know design can create design products.*
(Koray).

5 Analysis and discussion

The findings demonstrate that participants are keen to adapt to the changes in the creative sector and incorporate generative AI technologies into their creative practice. Most participants agree that AI enhances their creativity and could quickly produce more aesthetically pleasing artifacts that

can satisfy client expectations; however, they also experience a progressively alienating working experience due to the extension of AI's use in the creative process while bypassing social prospects as well as erosion of creative process granted by the assumed agency of the talent-raised individual. On the other hand, since AI shortcuts the production process and making tasks effectively easier, it can be seen as a mechanism for lightening work (Spencer 2024) in cultural sector. Yet, it is not clear that those short-cuttings are promoting more leisure for creative workers; it might simply mean that now they are expected to complete more tasks or undertake more work in less time. Additionally, as noted above, many creative workers do not want to lighten their work, since the process itself is where they find fulfillment and joy.

The findings reveal creatives' high validation of 'intentionality' (Tigre Moura 2023), which is still considered exclusively human in creative production. This statement also points out the creative workers' perspective of prospective human advantage regarding their endurance in the CI's chain of labor division. However, as mentioned in the introduction, the interplay between human and technological intentionality challenges established boundaries. Redaelli's (2024) concept of 'preter-intentionality' is successful on illustrating how generative AI not only executes human intentions but goes beyond them and creates results that might reflect an unintended surplus of creativity.

Indeed, the widespread argument on the democratization of creative production as well as the demystification of creative agency by AI's process shortcut effect is evident throughout the statements. The presumed massification of the ability to deliver creative tasks through AI applications provokes the reconsideration of the once-mighty, granted creative act achievable by rigorous work, training, and practice for talent-raised individuals. While the search for an authentic creative 'agency' still prevails, such democratization of creative ability devalues the status of creative workers according to participants' perception of their place in the market and, thereby the societal order. More people can access the human creator's raised talent and professionalism. Thus, although the means-and-ends schema for CIs used to firmly stood out even before AI intervention, human-based creative agency's mystic power and related requirement of professionalism risk being explicitly transferred to the technology in the service of the market demands, meaning higher control on the work process and conditions. Yet, the dominant statement asserts that the extensive manual part of the creative work can belong to AI technologies; the human creator's intentional will constitutes the labor's essential part, which is non-transferable. The highlighted statement is that creative capital in the form of raised talent and professionalism would positively affect the quality of creation. Thus, the discourse that creative work outstands the market logic depends on this assumed individually 'capitalized' creative agency still surviving in capitalistic relations of accumulation.

However, the preeminent argument of adjustment in the creative class' societal and economic status in the production chain depends on their efficiency of adaptation rather than creative professionals' active participation in the decision-making on their profession's technological updates. Parallelly, although revolutionary, the democratization of creative production can reduce the bargaining power of the creatives under the precarity of flexible work hours. This derives from the fact that the market rule and technological drive are regarded as separate from the society members' self-perception of their agency. Certainly, the obligation felt by the creatives to adapt fast to new technologies, as in the case of creative AI applications, resonates with such a hegemonic narrative on the technology's value-free drive as well as the lack of envision for alternative ways that can outdate capitalistic terms of indispensability. In our case study of Istanbul-originated creatives, this felt requirement of overlapping with technology and 'value' attached to excelling in technological updates can be connected to the situated conditions of the Global South vis-a-vis Global North. In Turkey, the discourse of technological advancement has always connoted the disadvantages of developing countries, the detriment of underdeveloped infrastructure to catch up with the global superstructure advancing to secure market survival. Further studies on different creative settings of culturally and socio-economically diverse locations can provide opportunities for comparative analysis.

The increasing emphasis on 'curatorialization' of the creative work displaces creativity from ideation and formation to overall curatorial make-up of recycled dead (creative) labor that is to be reinvested. This readymade feature of shortcutting the work process limits the first-hand acknowledgment and experience of the creative techne and displaces creativity from the intellectual organization in the CIs. Such time and energy shortcuts are indeed for the delivery of creative output, as such, the creative actors' formation necessarily lessens the emphasis on living labor and hence the felt performativity of social capital required for this articulated 'curatorialization' inherent in the AI-infused creative workflow.

Creative media production is a highly social form of work since it requires different agents to come together and enter a division of labor. When producing a movie, an animation, or a user interface, a person works with a variety of people to complete the creative product. What Marxist labor theory asserts "human beings become capable of executing more and more complicated operations" (Engels 1886; p.288) that produce society. Such creative cooperation consists of the socialized productive force of different individuals engaged in the process. In the case of generative AI applications,

creative professionals can create cultural artifacts by engaging with updated technology perceived as exclusive to social cooperation. The human individual's active living labor engages with the dead labor already reinvested in the creative artifacts through the generative AI model, conceived as separate from the social engagement. Thereby, human creatives are not perceived to cooperate among themselves. Such disconnection conceals the potentialities of co-creative livelihood. Thus, cultural production cooperation shifts from human-to-human cooperation to human–machine collaboration, creating a less human-based social working environment.

The lonely creator, the posthuman, isolated from the social sense of creative engagement yet joining a seemingly more democratic creative sphere, definitely both escape the burden of the settled communal network and their code of law and yet dissociate from the exercise of social collaboration and colleague cooperation. The social could have been considered a burden rather than a shortcut for market operations. Removing the social is both time- and energy-saving for the almost maximum optimization of the work process where the creatives are fleeing the market obligations due to the 'nature' of their creative task. The democratization of creative production indeed includes almost equal chances for isolated individuals to activate their creative ideas without the necessary social capital criteria. Still, the communication, which is automatized rather than autonomously exercised for what is envisioned for the creation, substantially nullifies the discourse of creative labor's mismatch with the market logic. This dilemma demonstrates that democratization through facilitating technology does not necessarily follow alternative coordination of agents in societal togetherness. Indeed, only technology that empowers social agency can be creative in the sense of disrupting collective sense-making potentialities (Arda, 2023). This requires the implementation of priority on enhancing human agency for technological progress.

6 Conclusion

Throughout the article, we traced harmonious collaboration (Vinchon et al. 2023) traits of AI technologies with human creativity based on the first-hand perspectives of creative workers. Our case study's results inform that 'creative intentionality' is an essential aspect of production; however, the commercial demands of ease of use, including practicability, advantages of cutting costs, and time pressure, inhabit conflicting interests according to creative workers for a future of AI-enabled CIs. We argue that this demonstrates not only a paradigm shift in the co-creative relationship between AI and humans (Tigre Moura 2023) for measurement and assessment of creative domains but also acknowledges the compulsory involvement of creative workers' expertise in identifying the practicability of AI technologies for a reformed assessment of a creative, collaborative posthuman output.

In formulating a bottom–up approach for human creativity and autonomous creative technologies in cultural production, AI turn must first be understood not only as a technological update but societal reformulation of values as well as an opportunity for the activation of social agency. The potential for socially intelligible technological co-creation is already inherent in creative AI applications. Time and energy saving in the service of co-creative livelihood rather than the market requirements promise better working conditions for creative professionals. A shortcut to an idealized technology-enabled creative agency signals not automatic but autonomous engagement.

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Conflict of interest The authors have no conflicts of interest to declare.

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