# (Under Review, Please Do Not Share) The Value of Art in the Age of Generative Al: Artists' Perceptions and Negotiations of Text and Image Generation Models

JORDAN TAYLOR, Carnegie Mellon University, USA

JOEL MIRE, Carnegie Mellon University, USA

ALICIA DEVRIO, Carnegie Mellon University, USA

MAARTEN SAP, Carnegie Mellon University, USA

HAIYI ZHU, Carnegie Mellon University, USA

SARAH FOX, Carnegie Mellon University, USA

The relationship between art and generative AI is a source of significant controversy. While proponents tout the potential for generative AI to democratize the production of art, critics raise numerous ethical and labor concerns. This paper draws on semi-structured interviews with 15 artists to examine how they are making sense of and responding to the emergence and proliferation of text and image generation models. We identify five key points of tension: issues of ownership, authenticity, meaning, process, and labor. We detail how our participants and the artistic communities to which they belong are negotiating these tensions, such as limiting the visibility of their work online and folk theorizing to detect AI use. We discuss the aesthetic, social, and economic value of art, from the perspective of interviewees, and provide implications for how HCI researchers can better support artists' agency in relation to generative AI.

CCS Concepts: • Human-centered computing → Empirical studies in HCI.

Additional Key Words and Phrases: Art, Critical HCI, AI, Generative AI

## **ACM Reference Format:**

 

# 1 INTRODUCTION

Generative AI (GenAI) is highly controversial among artists. Part of this concern stems from major tech companies training GenAI models using massive amounts of text, images, or videos scraped from the internet without creators' consent [27, 84–86] — a practice that has led to numerous copyright infringement lawsuits brought by artists [81, 87]. Artists have also raised concerns about the labor implications of GenAI, worrying that managers will use these models to replace artists' jobs [18, 71, 80]. For this reason, GenAI has featured prominently in numerous creative industry

Authors' addresses: Jordan Taylor, Carnegie Mellon University, Pittsburgh, PA, USA; Joel Mire, Carnegie Mellon University, Pittsburgh, PA, USA; Alicia DeVrio, Carnegie Mellon University, Pittsburgh, PA, USA; Maarten Sap, Carnegie Mellon University, Pittsburgh, PA, USA; Haiyi Zhu, Carnegie Mellon University, Pittsburgh, PA, USA; Sarah Fox, Carnegie Mellon University, Pittsburgh, PA, USA.

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from permissions@acm.org.

© 2024 Association for Computing Machinery.

Manuscript submitted to ACM

strikes in the past two years [18, 80]. At the same time, high-profile writers [16] and musicians [94] have questioned whether GenAI models can or should be used to make art.

Companies developing GenAI models have done little to assuage artists' concerns. In a 2024 interview, OpenAI CTO Mira Murati said, "Some creative jobs maybe will go away [due to GenAI], but maybe they shouldn't have been there in the first place" [67]. In a separate 2024 interview, Murati dodged questions over whether OpenAI's text-to-video model Sora was trained using YouTube videos: "I'm just not gonna go into the details of the data that was used, but it was publicly available or licensed data" [43]. These comments are indicative of an industry-wide lack of transparency about the data used to train GenAI models and disdain toward artists' worries [25, 91].

HCI research on art and GenAI has typically focused on how artists currently or might wish to use AI. HCI researchers have studied the practices within GenAI art communities [13, 93] and how to design GenAI models that better align with artists' values [5, 40, 58]. However, the line of HCI research on artists already using or seeking to improve the design of GenAI models may not account for artists who do not use or hold negative views toward GenAI. Meanwhile, more critical scholarship on GenAI and art has designed tools to help artists protect their work from being used to train GenAI models without their consent [95] and taken up the related philosophical question of whether AI-art "is" theft [42]. Others have drawn on news reports and social media data to examine the impacts of GenAI on artists [55, 57]. However, less work has spoken directly to artists with negative attitudes toward GenAI.

In this work, we conducted semi-structured interviews with 15 artists, most of whom did not use or expressed negative opinions toward GenAI. We find our participants' attitudes towards GenAI more nuanced than a simple good/bad binary; rather, their views depended on whether models were being used or developed in ways that align with their individual and community values. We identify five shared points of tension our participants saw between art and GenAI: issues of ownership, authenticity, meaning, process, and labor. Across these categories, we highlight points of agreement, disagreement, tension, and negotiation between our participants, their artistic communities, and the companies and individuals they envision building and using GenAI models.

We discuss two major implications of our work. First, we describe the aesthetic, social, and economic value misalignment our participants saw between themselves and those misusing GenAI. Our participants viewed art as a deeply relational and human process while imagining that the companies and individuals building and misusing GenAI models see art as an alienated commodity to be extracted, refined, and sold. We provide implications for how HCI researchers can examine and challenge the values embedded in the design and discourses surrounding GenAI and art. Our findings also point to a general lack of agency our participants felt at all stages of GenAI development and use. In response, we discuss how HCI researchers can better support artists' agency concerning GenAI, such as by building tools to resist online art scraping [95] and informing the design of policy or bargaining materials for labor advocacy organizations representing artists.

# 2 BACKGROUND ON VALUE TENSIONS IN ART

The question of what constitutes "art" as well as "good art" has long been a topic of study within the humanities and social sciences [8]. Sociologist Howard Becker emphasizes that the process of art making is a sociotechnical, collective activity involving a dense network of people (e.g., photographers, curators, & audiences) and technologies (e.g., cameras, photographic film, & photo paper) [3] — networks he calls "art worlds" [3]. In this work, we examine the perceptions of GenAI among our participants in relation to their various art worlds.

Different art worlds may disagree over the importance of effort, form, feeling, concept, and meaning when interpreting art [3]. Non-figurative art like Pollock's drip technique is often maligned for being easier to make than figurative art Manuscript submitted to ACM

like the Mona Lisa, as indicated by the cliché: "My kid could have made that" [1, 117]. Another point of tension is the importance of form — be it figurative or abstract — versus the intended meaning of a piece of work. Artist Sol LeWitt distinguishes between "perceptual" art "meant for the sensation of the eye" and "conceptual" art for which "the idea or concept is the most important aspect of the work" [63]. A canonical example of conceptual art is Marcel Duchamp's Fountain — a signed urinal submitted to an art exhibition in 1917 that sought to challenge the meaning of art [10]. At the same time, some have critiqued the privileging of content or meaning over form for undervaluing the embodied experience of art appreciation [104].

While the category of who gets to be called an "artist" is slippery, not all artists make a living through their art, and even fewer become wealthy [2, 26]. This can be due to a variety of factors. Some art is easier to commodify than others: consider the difference between a unique painting versus an infinitely reproducible mp3 file [107]. Some artistic communities have norms against maximizing profits, such as the stigma against "selling out" [73]. Drawing on theories of commodity exchange [66] and anthropological research on gifts [68], Lewis Hyde examines tensions around the commodification of art in "The Gift" [53]. Hyde associates commodities with individualism, alienation, and profit maximization versus associating gifts with relations of care and community. Hyde argues "the primary commerce of art is a gift exchange, that unless the work is the realization of the artist's gift and unless we, the audience, can feel the gift it carries, there is no art." In turn, "the artist in the modern world must suffer a constant tension between the gift sphere to which his work pertains and the market society which is his context" [53].

Closely tied to forms of exchange, new tools to mechanically reproduce art are often met with controversy and perceived to diminish the quality or aura of an artwork. Walter Benjamin famously suggested that photography diminishes the value of the art being reproduced, be it a painting or a recording of a play [4]. Controversies surrounding what counts as "art" also often accompany technological developments. While one may now take for granted that photography and filmmaking "count" as art, this was hotly contested in the early 20th century [4, 103]. Likewise, making art using a computer — in any sense — was once highly stigmatized [7]. Here, we can see that the social construction of art is entangled with the social construction of technology [82].

As was evident from how often our participants referenced art history, one cannot understand contemporary perceptions of GenAI among artists without also understanding these historical aesthetic, social, and economic tensions between art and technology.

# 3 RELATED WORK

# 3.1 Ownership, Care, & Agency in HCI Research on Art

Prior work on art in HCI often focuses on issues of ownership. Remixing is a common practice in online creative communities, such as maker [74, 78] and fan [33] communities. However, controversy can arise when individuals are not appropriately attributed for their artistic work. For example, white TikTok creators have been criticized for profiting from dances created within the Black community without recognizing or compensating the original Black inventors [22]. Likewise, online creative communities often enforce intra-community norms against plagiarism through public shaming [36]. Remixing is impacted by community norms, copyright laws, and the design of technology in service of these laws. This is why issues of copyright and ownership are common concerns within online creative communities [36]. YouTubers worry about having their videos removed for copyright infringement by incontestable content moderation systems [36, 65]. Online fan communities have norms against profiting from fan work due to legal and ethical concerns [33]. Companies use Digital Rights Management (DRM) encryption technology to control media

distribution to protect their profits [32], such as preventing someone from sharing a copy of a song they bought with a friend. In the United States of America, it is, in fact, illegal to circumvent these "digital locks" [26]. Here, we can see that technologies related to artistic ownership (e.g., DRM) are typically designed to support powerful institutional actors (e.g., record labels) while limiting the agency of smaller individual artists (e.g., YouTubers or remix artists) [62]. Technology is often designed in ways that privilege the economic exchange of art over its social exchange.

The importance of gifting in maintaining social relationships is a common theme in HCI research on craft. The form of these gifts can range from hybrid crafts — such as knitting a hat for a loved one with a lullaby sung into it [88] — to AR experiences shared with partners [119]. The aura of a gift depends on the effort that went into its making [119]. This focus on intimacy and effort can be seen in Cheatle & Jackson's suggestion that craft simultaneously engages "the head, heart, and hand" [14]. Care can also be in conflict with commerciality. As mentioned earlier, online fan communities have norms against profiting from fan works, instead having a strong "gift" culture [34]. These gifts can include sharing fan works for free as well as the less visible volunteer labor that goes into online fan communities, such as maintaining community classification systems [9]. Although the social aspects of art making can be in tension with making money, these two forces are not necessarily incompatible. The social media-mediated relationship between musical artists and their fans [2] or content creators and their audiences [100] are simultaneously commercial and care-full.

Technology can trouble the social and economic facets of art making in ways that reduce artists' agency. Online fan communities made on sites not built by and for them can be harmed by wanton policy changes intended to increase profits [35], leading fan communities to develop their own alternatives [30]. These fan-led online communities are often run as non-profits and built using participatory processes, thus valuing artists' agency [30, 37]. Similar values can be seen in research on online creative labor, or "the work of professionalizing and monetizing a creative product shared on social media" [100]. This line of research often highlights how algorithmic processes, such as opaque content moderation systems, can lead to precarity for social media content creators [29]. In turn, Simpson & Semaan suggest that the design of platforms can alienate creatives from their audiences, their art, and themselves [100]. At the same time, artistic communities are not passively impacted by technology but rather take direct actions to reclaim their agency, as in the case of fans building their own online communities [30] and TikTok creators deploying folk theories to negotiate algorithmic systems [24]. As we will describe in the next section, the recent proliferation of GenAI technologies has led to similar tensions over artists' agency.

# 3.2 Generative Al & Art

The labor impacts of GenAI on art have recently garnered substantial scholarly and journalistic attention. In fact, at the time of our writing in August 2024, video game voice and movement actors are on strike over AI [80] and recent layoffs in the video game industry have been attributed to mangers using GenAI to cut jobs [71]. Computing researchers have also raised concerns over the negative economic impacts of GenAI on artists, such as forced GenAI use and job reductions [55]. Similar observations were made by Kawakami & Venkatagiri in their analysis of social media and news discourse related to GenAI and Art [57]. Another concern is that GenAI will lead to de-skilling [55]. As an example, the video game studio Electronic Arts (EA) recently admitted to using GenAI to create digital models of American football player heads for an upcoming video game, hiring artists to merely retouch the AI-generated 3D-models [69]. The use of GenAI to task-ify creative work in this way raises similar ethical concerns to the growth in gig work over the past decade, such as increased time pressure [114] and the alienation of atomized work [44, 118].

Another major concern among artists is how GenAI models are trained: using massive amounts of text, images, or videos scraped from the internet without creators' consent [27, 86]. Investigative journalists found that major tech Manuscript submitted to ACM

companies — such as Anthropic, Nvidia, and Apple — used YouTube subtitles scraped without consent to train GenAI models [86]. Others discovered that a common dataset used to train large language models included pirated books from living authors [84]. These training data practices have led to legal action, such as visual artists filing copyright infringement lawsuits against Google [54] and Midjourney [87] over their generative image models. Beyond seeking legal recourse, some artists have fought back against unauthorized scraping through data poisoning [112], such as the online fan fiction community organizing a sexually explicit write-a-thon [98].

Questions of artistic ownership also feature prominently in computing scholarship on GenAI [42, 55, 95]. In their recent FAccT research, Goetze draws on theories of property [64], distributive justice [83], contextual integrity [76], and data colonialism [121] to argue that GenAI relies on "art theft" [42]. Researchers are also developing tools to help artists protect their work from being used to train GenAI models, such as tools that makes barely noticeable changes to digital images to impede mimicry from [95] or poison [96] text-to-image models. HCI researchers have also found that GenAI troubles notions of creative authorship and ownership [11, 28]. Draxler et al. liken generative text models to ghostwriters because users may identify themselves as *authors* while simultaneous not perceiving themselves to be *owners* of AI-generated text [28]. On the other hand, artists using AI in their artistic process run the risk of audiences perceiving their art as being made "by" rather than "with" AI [11, 21].

HCI researchers are exploring how artists are using or might use AI — generative or otherwise. Much of this work has looked at individuals who are already using GenAI in their practice [13, 93]. For instance, Chang et al. studied the art world of "prolific users" of text-to-image models, finding these "prompt artists" view both their text prompts as well as resulting images as forms of art [13]. Other artists use AI to shine a light or critique these technologies themselves via art [11, 51, 113]. The ability to use GenAI in art is also impacted by biases embedded in the design of these systems [55, 72]. Mim et al. describe points of friction between image-makers in Bangladesh and text-to-image models, such as reproducing stereotypes and requiring English proficiency [72]. Meanwhile, other artists are interested in working with AI due, in part, to their limitations [11, 101], leading to glitches [13], uncertainty [101], and surprise [11]. Another line of inquiry in HCI scholarship on artists and AI has looked at tool development or improvement, such as helping individuals refine AI art prompts [116] or helping creators make video podcast teasers [115]. In addition to research on those *already using* GenAI, some have sought to understand how artists *might wish to use* AI in their practice [5, 40, 58], often emphasizing the need for AI tools to align with individual artistic values.

HCI research on AI and art often focuses on understanding the practices of those already using AI or understanding how to improve the design of future AI tools. In order to participate in such a study, one likely already has to accept that GenAI should or could have a role in art. However, this may overlook artists who hold quite negative attitudes toward GenAI. On the other hand, existing computing scholarship focusing on critiquing the relationship between GenAI and art (e.g., [42, 55, 57]) has tended to focus on extant news reports and social media discourse rather than speaking with artists directly. More work is needed to understand the experiences and beliefs of artists who do not use and/or hold negative attitudes toward GenAI. In this work, we aim to understand the contours of our participants' perceptions of GenAI by highlighting points of agreement, disagreement, tension, and negotiation.

#### 4 METHODS

In this work, we conducted semi-structured interviews with 15 artists we recruited through a web form shared on Reddit and Twitter. Our inclusion criteria were that participants must (1) be at least 18 years old, (2) live in the United States of America, and (3) identify as a "queer artist." We were initially motivated to study the experiences of "queer artists" rather than "artists" due to prior work on the fraught relationship between LGBTQ+ communities and AI (e.g.,

PID	Artistic Practices	How Often They Use GenAI (1 = Never, 5 = All the Time)	Feelings Toward GenAI (1 = Strongly Dislike, 5 = Strongly Like)
1	Video Games, Game Design	1	1
2	Crafts, Physical 3D Things	1	3
3	Fan Fiction, Embroidery, Cosplay, Painting	2	1
4	Musical Theatre	3	4
5	Drawing, Sequential Art	2	4
6	Visual Art, Fan Fiction, Music.	2	3
7	Fan Art, Fan Fiction, Original Character Design	1	1
8	Drone/Noise/Glitch Music, 3D Modeling.	2	3
9	Digital Fan Art, Amateur Sculpting	1	1
10	Illustration	1	2
11	Science-Fiction Writing, Digital Illustration	2	2
12	Crochet, Origami, Lego Building	1	1
13	Textiles/Garments, Ceramics, Printmaking	1	1
14	Cartoons, Non-Representational Drawing	1	2
15	Social Practice, Sculpture, VR	2	3
The Property of the Property o			

Table 1. Participant demographics detailing their individual artistic practices, how often they use GenAl (1 = Never, 5 = All the Time) and how they feel toward GenAl (1 = Strongly Dislike, 5 = Strongly Like)

stereotypical representations [92] and over-moderation [97, 106]) as well as members of our research team's prior experience researching LGBTQ+ communities. Our research team also includes those who appreciate and make musical, written, visual, and textile art.

Through our interviews, we learned that our participants' identities as artists were far more relevant to their attitudes toward GenAI than their queer identities. Recognizing that queer people's attitudes toward technology need not always be tied to their queer identities [110] and following our participants' lead in foregrounding their artistic identities as the key mediator of their attitudes toward GenAI, we scope our findings to "artists" rather than "queer artists."

In our recruitment form, we required participants to describe their artistic practice. Our participants engaged in a variety of art forms, such as writing, visual art, textile art, sculpture, music, and video game design. About half of our participants mentioned engaging in fan communities (P3, P6, P7, P9, P11, P14) through either fan fiction or fan art. Through our interviews, we found that only one of our participants primarily made a living through their art (P1). Meanwhile, other participants sold their art in more one-off ways (P3, P6, P7, P14, P15), such as selling fan art at conventions (P7). We required participants to rate the following on a five-point scale: how often they use GenAI (1 = Never, 5 = All the Time) and how they feel toward GenAI (1 = Strongly Dislike, 5 = Strongly Like). We then asked participants to explain each rating in corresponding open-text fields. These questions were not used as survey instruments but rather to guide our interview preparation. Our participants identified as infrequent GenAI users (mean = 1.53, median = 1) and tended to hold negative attitudes toward GenAI (mean = 2.13, median = 2, std = 1.13). That being said, there was greater variation in how our participants felt toward GenAI (std = 1.13) than in how often they use GenAI (std = 0.64). More information can be found in Table 1.

Participants were also given the option of sharing additional demographic information. Of those who provided their age, our participants ranged from 20 to 33 years old, with a median age of 26. A majority of our participants Manuscript submitted to ACM

identified as white, five as Asian, and two as Hispanic/Latina. Due to our inclusion criteria, all participants identified as queer artists. Nearly all participants identified as transgender, non-binary, gender questioning, gender queer, or gender non-conforming. Four participants identified as disabled.

Each semi-structured interview lasted approximately one hour, and each participant was compensated with a \$25 Amazon Gift Card. The first author led each interview, which took place between March and May of 2024. Our questions focused on understanding each participant's artistic practices, their past experiences with and feelings toward GenAI, and how GenAI has been impacting their artistic communities. However, our questions narrowed slightly over time. Based on nascent themes from our earlier interviews, we modified our questions over time to theoretically sample for a greater understanding of values associated with art and GenAI [17].

After transcribing each interview, the first and second authors engaged in open coding [17]. This open coding process lasted approximately one month. While coding, the first and second authors wrote memos and discussed initial patterns in weekly meetings. Then, we imported each of our open codes onto a digital whiteboarding tool to perform axial coding, which involved clustering similar codes into categories and mapping relationships between categories. At this stage, we identified numerous dialectical tensions between our participants' perceptions of Art and GenAI, such as "art making as a process" versus "generative AI as a shortcut." This led us to locate the source of our participants' antagonism toward GenAI as resulting from value tensions in the production of art.

#### 5 FINDINGS

Among our participants, the use of GenAI to make art was highly stigmatized, with individuals characterizing GenAI models as "vomiting" (P9) or "spitting out" (P2, P3, P13) text and images. AI-generated text and images were referred to as "stupid" (P12), "meaningless" (P15), and "soulless" (P1, P3). Participants often framed artists as in dialectical opposition to those developing and using GenAI, as apparent in the numerous controversies over GenAI alluded to by our participants. P10 described an incident where someone used GenAI to undermine the intended meaning of a work: filling in "an abstract piece made by [Keith Haring] who was dying from AIDS that he deliberately left unfinished." <sup>1</sup> P1 told the story of a "debacle" and subsequent backlash when "the owners of Dungeons & Dragons tried to like change their open gaming license and a lot of people saw that like AI was being kind of integrated into it." Even those who were less critical of GenAI (P6) believed he was in the minority within his artistic communities.

We found these negative attitudes to be rooted in five, at times overlapping, points of tension related to art and GenAI: issues of ownership, authenticity, meaning, process, and labor. Our participants' attitudes toward GenAI hinged on the particular ways in which models are developed and used as well as their existing attitudes toward art. Therefore, we take care to highlight points of disagreement and factors impacting ethical negotiations. Along the way, we also detail how our participants and members of their artistic communities are subverting and appropriating GenAI.

## 5.1 Ownership Tensions: Consent, Data Theft, & Resistance

Our participants expressed frustration that GenAI models were built from the works of artists without their consent, describing the development of GenAI models as "stealing" (P1), "theft" (P6), "scummy" (P7), "nasty" (P9), and an "invasion of privacy" (P13). As P11 explains, "Artists are not super happy about the generative AI process because they were not being properly taken care of or consulted and no one asked their permission." P13 similarly worried about the lack of transparency and agency for artists:

<sup>&</sup>lt;sup>1</sup>https://www.smithsonianmag.com/smart-news/keith-haring-painting-artificial-intelligence-180983563/

"I wanna be able to be certain that Microsoft isn't pulling from a Tumblr blog I've forgotten about from 2013 with pictures of my art on it or something. I just don't want my work being fed into the AI blender ... You cannot be certain that if you opt out that your choice is actually being respected." (P13)

Our participants did not necessarily reject all GenAI. Rather, their ethical attitudes and responses were shaped by the particular ways GenAI models do or do not align with community values. For example, participants mentioned they would have fewer ethical concerns if GenAI models were built from more ethically sourced data (i.e., built with artist consent). P13 explained, "My dislike of AI is not my dislike of digital tools. I think digital tools are great. I just think that with AI the consent issue of it is what gets me." P11 felt that "a nice, formal, transparent consent process" would "help a lot to reconcile" her ethical concerns. P9 compared the morality of using GenAI to intra-community fan artist norms around how to ethically use other artists' work:

"Having a generative AI that is trained on a consensual data set is more ethical to me than one that is trained on stolen data, just like 'tracing' versus taking a publicly available base and using it. Because the base creator wanted people to use their stuff while the tracer or the person you traced probably did not." (P9)

P7 distinguished between the use of existing media by fan artists and GenAI developers: "Fan art is usually well, I hope, usually created through the own means of the artist ... They aren't just like tracing a photo or whatever, and slapping it on the Internet and saying, 'Hey, I drew this.' They're usually like creating something." In other words, P7 argued that building on existing art is more ethical when one mixes their individual creative labor with another piece. We explore this conversation around effort in greater detail in Section 5.4.

Thinking through potential remedies for these issues of consent, P6 worried about artists invoking the language of copyright protection: "Copyright is horsesh\*t anyway. It shouldn't exist. It's just a tool for corporate... It's just a tool to give The Mouse [Disney] more billions." However, P6 — an artist who works in IT — believed "there is an argument to be made" that GenAI relies on "data theft," with GenAI being just one example of an unethical data practice "that happens to everyone on such a broad scale."

Improved data consent was not necessarily perceived as a panacea for the ethical concerns regarding GenAI. P7 felt that seeking data consent would make GenAI feel "a lot more ethical." However, she still worried resulting models might be used in ways that artists might not desire, such as "not safe for work art" or art that is "derogatory to other people." Similarly, P3 explained she would feel "a little better" if everyone had consented to their work being used to train a GenAI model but still worried "there's so much potential for the models to be used in negative ways."

In light of these concerns, participants described numerous ways they and members of their artistic communities are resisting those building AI models without artists' consent. P13 decided to opt out by limiting the visibility of their art: "I don't put my art online anymore. I don't want [fast fashion brand] stealing it. I don't want AI combing through it to take chunks of it and cut it apart and use it for other things I don't want. I don't want any of that. So I purely share my art person to person." In an attempt to regain agency, P3 saw fan fiction writers place 'do not scrape' requests at the top of stories: "They'll put something up top that says like 'Please don't use this for AI training' ... not that I think that [the requests] would actually stop anybody." P6 was excited about the use of data poisoning tools: "It's a sort of watermarking software that you can use to put like a glaze over your art when you upload it online. That apparently makes it harder for your art to be used in data sets for training AI." P6 notes that "most people" are using data poisoning tools to "mess with the data sets so [developers] can't use [these models] anymore." In addition, P6 thinks "it's cool that Manuscript submitted to ACM

the data sets are getting messed with because now we are going to get something different out of those generative AI. We're going to get something that we wouldn't expect, which is so exciting to me."

# 5.2 Authenticity Tensions: Deception, Disclosure, & Detection

The undisclosed use of GenAI to make art was seen as a form of deception by our participants. P1 explained: "My feelings towards [GenAI] are pretty negative right now. They mainly seem to be used to — I mean to be blunt — scam people. To create soulless art or to haphazardly take away any kind of the critical thought that goes into art." Similarly, P7 worried: "Just the fact that I would be able to find out that something's AI. It gets upsetting because it's becoming more and more like deception." P10 also recalled: "I have had a moment of being like 'oh, this is a really cool visual,' and then I find out it was AI-generated and then it kind of it feels a bit like a letdown." This same phrase, a "letdown," was used by P9 to describe the feeling of finding out a piece of work was made using GenAI. The mere possibility that one could find out art was made using AI has led our participants to approach art they encounter with greater suspicion.

Participants wanted to know if or how GenAI was used to make art. P4 said one should "give credit where it's due," meaning "if you didn't do all the work, you should probably mention that you used AI to assist you." Similar concerns featured prominently in conversations about the relationship between technology and art, emphasizing that technological mediation in-and-of-itself does not diminish art but rather the lack of disclosure of this process. P3 considered both hand embroidery and machine embroidery to be "just two different ways of approaching a piece of art." P3 contrasted that, unlike with GenAI, "I feel like people who do machine embroidery aren't trying to pass it off as like 'I hand embroidered this.'" P2 likened the recent "outrage" toward GenAI among artists to "the stir in the art world [in the early 20th century] where people were starting to use photographs of people in place of live models for their art" which people believed "takes something out of [the art]." As a remedy, P2 encouraged artists to "just be open about what you're doing with [GenAI]," going on to reiterate that "transparency is the key with something like art." Attitudes toward GenAI in art depend not only on the use of AI but also how a piece of art is presented.

Owing to the desire for greater transparency into the use of AI to make art, participants wished various technologies were designed to better support the disclosure and detection of AI usage. Some participants (P9, P10, P11) wished AI-generated art was labeled when shared on social media. P11 was glad to see that visual and written art contest submission forms increasingly "will ask you to click the box if this is AI-generated or not." P11 went on to say that without these "labels" you "cannot track it down" if "original artists claim that they have had their copyright violated." P11 also thought that better detection tools might help address the negative consequences of AI-generated spam. As a science-fiction writer, P11 was disappointed to see "a couple sci-fi magazines ... literally paused their open call and stuff like that because they were spammed by AI-generated stories."

Due to the lack of transparency over GenAI use, participants developed and deployed their own strategies to try to detect AI-generated images, such as examining "hands" in visual art (P3, P7, P9). In turn, these folk theories can be leveraged to accuse others of using GenAI. P3 recalled: "I see AI-generated fan art come across my timeline way more often but usually it's coming across because somebody is quote retweeting the fan art and saying like 'this is AI-generated and you can tell because of like this, this and this.'" At the same time, P9 doubted the efficacy of these strategies: "I really wish it could always be true that we can tell when there's a human behind stuff but I think the reality of the situation is that we can't." As these folk theories are imperfect, artists now run the risk of being falsely accused of using AI:

"I have seen artists who have genuinely created this work get replies saying, 'this is AI,' even when it's not so, it adds, I think, a level of frustration. That not only has have people had their work ripped off but now their work is being accused of not being theirs in the first place." (P10)

Along with this new risk of accusation comes a new need for artists to be prepared to prove the authenticity of their work. P3 recalled: "I have heard of my friends who are fan artists, saying that now they try and draw in a very much more distinctive art style or when they draw they'll do time lapses of like them drawing the actual picture so they don't get accused of it being AI."

# 5.3 Meaning Tensions: Intentions, Concepts, & (In)Humanity

Participants' attitudes toward using GenAI to make art depended, in part, on the importance they place on the meaning or concept behind art. Some of our participants did not think one can imbue meaning in a piece of work through prompting GenAI. In explaining why P7 believes conceptual art is art, she said, "As long as there's like some degree of sincerity, or, like personal belief put into it, regardless of what it is, I think that makes it art." However, P7 does not consider GenAI to be art because "it's the thought behind it, like it is the intention you put behind something and GenAI models don't have intention." Similar sentiments were echoed by P13 who believes art made using GenAI "feels emptier" because "there's no intention there" and "there's no person behind it."

Like other participants' emphasis on the meaning behind art, P11 said that "what makes art art is that there's something inherent in art that's communicative and expressive." However, unlike other participants, P11 thought GenAI can be used to make art because they think prompting can encode meaning: "it's still human having the urge for expression but might not have the skill set or time or energy to manifest it in an artistic way." Similar to the use of "meaning" and "intent" to evaluate art, participants often used the metaphor of having, lacking, or being filled with a "soul" (P1, P2, P3, P6, P7, P10) to explain their feelings toward GenAI. However, participants disagreed over the extent to which art made using GenAI can have meaning or a soul.

While acknowledging that GenAI is often used to make meaningless art, some participants believe this is not a property of GenAI itself but rather the way it is used. When asked why they have not used GenAI in their artistic practice, P15 answered "because [GenAI is] inauthentic." They went on to explain that "the process of an artist is to generate good ideas," but most AI-generated images feel "sort of like noise" because they are "so meaningless." At the same time, P15 caveated: "if you have a great idea, though, and you are able to use GenAI to make it faster or more efficient or maybe it's research of some form where you have to aggregate all this data and then generate an image from that, I think, 'Okay, sure cool that could— That's a good way of using generative AI.' P6 and P8 similarly prioritized the idea behind art versus the effort that went into making a piece of work, both drawing on the history of conceptual art. P6 critiqued those making "strict judgments about what can and can't count as art," going on to say: "I fail to see the difference between [Duchamp's Fountain] and using like generative AI. I don't think it's worthwhile as a discussion to consider whether or not art has a soul or whether enough effort went into making it because at the end of the day what matters is the end product. What matters is the idea that's being expressed by the art." Similar sentiments were expressed by P8:

"In art history there's sort of a process of placing the art part of art in the realm of ideas and not so much in the physical, technical skill aspect. You know Ai Weiwei has that one work 'Sunflower Seeds' where it's thousands of porcelain replica sunflower seeds. He didn't make all the sunflower seeds himself. He had a team of people who did it for him. But we understand it as his artwork because he had the idea

and he had the concept behind it. Yes, other people brought it into the world, but I don't think that diminishes his role as the artist. ... With AI art it's similar to 'Sunflower Seeds' in that the human artist didn't draw it. They didn't have much direct influence on the work in terms of the image file that the computer produces. But if they hadn't told the computer what to do, it wouldn't have done anything. If you want to know, 'Oh why did the artist make this art?' You wouldn't ask the computer. You'd ask the person who told the computer what to make in the same way that you wouldn't ask a paintbrush why it painted something. That's kind of how I see AI art in the context of art history and conceptual art, that history of abstraction and questioning what exactly makes an artist." (P8)

Participants often found GenAI most artistically interesting when artists lean into the inhumanity or meaninglessness of the technology, rather than trying to replace human creativity. P8 was most interested in how GenAI can create a "picture of something that doesn't exist and like can't possibly exist in the real world," which "harkens back to [surrealist] art." Similarly, P6 was excited about the potential applications of GenAI in "data bending" glitch art, which he described as "some of the most surreal — inhuman in a good way — feeling art." P9 enjoyed the "early days of AI-generated images" because they were "pretty freaky." P9 elaborated:

"[Early AI art was] way more art than what the AI image generators are spitting out now because you could see a machine struggling to comprehend stuff or at least algorithms struggling to comprehend stuff. And I that that was pretty cool. I guess it was also cool because it wasn't really comparable to what I think that artists could make. So it was like its own niche. But instead of, I guess becoming its own niche, it's now intruding in artist territory, and I think that's bad." (P9)

What P14 found most interesting about GenAI in the context of art "is that [GenAI] is so non-human." He went on to explain: "I could probably find hypothetical ways that I would use AI in a project and make it not corny, but I think it's very hard to do that right now because our imagination around AI is collectively limited because of the way it's hyped. It's hyped as this product that can substitute for human creativity, which is obviously disrespectful to human creativity and also to the particular creativity that AI offers." Likewise, P12 mentioned he would be upset with museum exhibitions that frame AI-generated art as a replacement for human creativity. However, he was interested in critical AI art, such as a museum displaying AI-generated images to "dunk on it the entire time."

# 5.4 Process Tensions: Tools, Shortcuts, & Effort

Our participants described art-making as a deeply human process. P13 explained: "I like being able to give my friend, a cool mug or a cool plate that I made, and then, whenever they use it, they're like, 'Oh, yeah, [P13] loves me.' I like that about art." P2 said she creates "items of religious significance" for use within her religious community, such as clothing and "rattling type instruments." Participants also enjoyed communing with other artists in online communities, such as Twitter (P3, P6, P7), Reddit (P1, P8, P12), and Discord (P6, P9). P3 explained: "I don't think fanfic writing would be as enjoyable if there wasn't that aspect of sharing it with other people and being engaged with other people." Our participants also described art-making as a deeply personal avenue for self-care and identity exploration. For instance, P14 is an artist whose work is "heavily influenced by the furry fandom." He described using art to realize: "desires that don't exist in my life, that don't exist in the world, or might be impossible to exist in the world."

Some of our participants felt that using GenAI to make art would diminish this joyful, human aspect of art making. P3 said: "I really don't get the point of AI-generated [fan art or fan fiction] because, for me, the point of making creations like that is to share joy with others and to share my vision with others, and to connect with others. It feels like a very

human activity in that way — a very social activity — and to have a machine created... I suppose I just don't understand where the joy is in [GenAI] and if there's no joy then what is the purpose for me?" Likewise, P5 felt that the social value of art would be diminished by using GenAI: "I still get the social value from making art personally and having the experience of sharing my own art with my friends because it's like I put effort into it, and I value my own art, and it's a fun experience. It just wouldn't be the same if I told Microsoft Image Creator to make this personal art and I shared it with my friends." P2 summed up how the humanity of art is in conflict with the inhumanity of GenAI: "I feel like AI really takes the human spark out of things." Others emphasized a pedagogical aspect of the art-making process and worried that increased AI use would prevent people from learning how to make art. P15 — an art school student — TA'd a design course and was dismayed that: "nobody sketches anymore like nobody actually makes anything by themselves, and I think that it's frustrating or it could be like a little sad." P15 went on to explain: "it's like a different way of experiencing the world to sketch it and I think that is lost [by using GenAI]."

Our participants were typically more comfortable with those using GenAI as a tool or a small component of a broader artistic process — as opposed to treating the direct output of a GenAI model as art. To make sense of this line between acceptable and unacceptable amounts of AI use, numerous participants (P3, P9, P10) alluded to a controversy in which animators of a recent Spiderman film were accused of using AI. P3 found it acceptable for animators to use AI to help with "grunt work," such as "very basic line work." Similarly, P10 explained, "From what I've heard the animation process of making that movie was very grueling. So I think if it's something like that that can make a job just a bit easier, then I think that's that's a good application [of GenAI]." This sentiment toward GenAI as a tool versus the end product was summed up by P1: "I think there can be some benefits. Ultimately, the problem I have with [GenAI] is that it's a really interesting tool that people are using and treating as the producer of an end product."

Participants were also often more comfortable with those using GenAI to help them learn or practice rather than replace skills. P9 believed one "shouldn't shovel over [tasks] to AI," such as using "AI to finish my [one's] colors." However, P9 caveated that: "If you just want to practice coloring and there was like a generative AI that could spit out forms for you to color. I might be less disapproving of that, especially if it was never a sold product." At the same time, the line between aid and replacement is ambiguous; P2 described this tension well: "I think it's hard to put an exact line on it ... it's not categorical. It's it's kind of one fluid line of of how much can [GenAI models] do?" While P2's instinct is to "nix" capabilities from the system that go beyond aid and encroach on replacement, they acknowledged that there are many context-specific use cases, counter-examples, and counter-arguments. Ultimately, they concluded: "I'm not so sure. You know. I feel like it's very case by case."

This distinction between AI as a tool versus end product can be seen in how P11, a science fiction writer, has used GenAI. P11 emphasized that art making is "a pretty extensive long process" that is often obfuscated: "It's not just like you pick up the pen and do the strokes. There's a lot of preparing processes and there's like test trials, testing material, testing colors." P11 has never used GenAI to write her stories because LLMs have their "own taste and choice of style" and "sometimes you don't feel like that should be in your own writing because it doesn't sound like you." However, P11 has used GenAI to help with "preparation" and "post-production." As an example of how P11 has used GenAI to help with writing preparation, she considered the hypothetical of looking up background information about "a specific aquarium in a random city in China." As an example of post-production work, P11 tried to use GenAI to help them write "a pitch letter" and "a summary paragraph." P11 likened this post-production work to having an "AI editor:" "I write a synopsis draft and I give it to the generative AI saying that I'm writing a synopsis for a writing competition."

Some participants emphasized the importance of the effort or process behind a piece of work when evaluating the art of others, leading to a stigma toward those using GenAI. P1, a game developer, critiqued those who use GenAI to Manuscript submitted to ACM

excess: "There's always going to be people who take stuff that's meant to be like tools or minor shortcuts, but then they use all the shortcuts." P1 likened GenAI to "asset flipping" in the game development community, which they defined as when "game developers buy a bunch of pre-made assets, put them into a really quick game that they can make and then sell it for profit." P1 goes on to explain that these games are "really negatively viewed" and "seen as kind of cheap." P14 raised similar concerns regarding those using GenAI to make low quality, low effort art: "I can tell like, 'oh, they didn't budget for hiring an illustrator to make a bespoke image for this because they had a Midjourney subscription so they could just use that.' In those sorts of cases, I think that's just laziness. That's not necessarily an AI problem. That's a laziness problem. That is a lack of imagination problem." P13 compared the relationship between the person prompting a GenAI model and model outputs as "less like artist and art and more like the person who commissions the art and the art." For P13, what "means the most to me is the process of making [art]. There's no, there's no process there [when using GenAI]. It's just you're telling it phrases, and it's giving you pictures." P3 compared the ease of making AI-generated art to "downloading an image off of Google," while she "would much rather see someone's like chicken scratch like crappy drawing and cheer them on." For P2, the beauty of art was also tied to the effort that went into its production. This is why P2 felt that using GenAI diminishes the aesthetic value of art:

"[Art made using GenAI] doesn't move me in the way that something that someone poured their heart and soul into and for me does. That's really the beauty of of art is like when you have some piece of media that somebody like really poured themselves into and, even if it doesn't take a lot of time, it took a lot of spirit and emotion. And you know, that's the stuff that really moves me. And I don't think AI can create that because it doesn't have that component. It doesn't have passion." (P2)

Our participants emphasized that the value of art is inseparable from the history of its making. P12 told the story of a textile artist on Instagram who made a blanket for their baby, saying he enjoys "the humanity part" of art: "I know people say you can separate the art from the artist, but I disagree ... [with GenAI] there's no artists attached to it so there's no humanity." P9 also critiqued those seeking to divorce art from the context of its production: "There is an argument for why [using GenAI] shouldn't be disappointing being that 'Oh, look at the product and stuff.' But that sort of approach to making stuff leads to a less empathetic more miserable world, one more susceptible to consumerism and working for our Lord and saviors Amazon and being exploited until the end of time. We need to value people around us more than we value products." Here, we can see that the value of art is brought into tension because GenAI can reduce the effort to make art and, in turn, distance art from artists.

# 5.5 Labor Tensions: Cost Cutting, Profits, & Personal Use

We found the economic and moral value of art were often in tension with one another. For some, the lack of artists' consent in the process of making AI models was exacerbated by the use of these models to make money. P7 rebuked: "You're taking these artists' work, usually without their consent, and trying to make something usually that you can earn a profit or clout from. I just think that's scummy." Our participants' concerns regarding GenAI lie both in how the models are developed as well as toward what ends they are used.

Although most of our participants did not make money from their art, they often worried about the labor impacts of GenAI on other artists. P10's "main concern" regarding GenAI was that "people are using [GenAI] at the expense of working artists, writers, actors, etc." Likewise, P7 worried about "people who put time and effort and a lot of monetary resources into honing their craft and then they're just getting pushed by the wayside." Our participants' did not necessarily believe that GenAI could *truly* replace artists' jobs. Rather, they feared that employers seeking to "cut costs"

(P9) believe AI can replace artists' jobs. P14 characterized GenAI as "a violence against those artists who now are finding themselves out of work because the people who would hire them falsely believe that AI is capable of replacing that type of work." P6 worried about managers using GenAI to put additional pressure on artists: "The expectation is no longer going to be 'You have a week to do this' Now it's 'Okay you have 2 days to do this because we've given you this new tool, which means that you should be able to do it faster.'" P8 was less concerned with GenAI itself than "what will businesses do with AI art," going on to say "I will never trust any kind of business to make decisions that are good for art." This concern over GenAI models replacing artists' jobs has contributed to a stigma toward using GenAI. For P3, using ChatGPT once felt "like almost a betrayal, in a sense, to my values and how much I value the work of writers and also artists because I know AI-generated art has taken away a lot of jobs." Similar sentiments were echoed by P1:

"There's this inherent joy in art of facing a problem and coming up with a solution on your own. That's why I think for a lot of game developers AI doesn't seem that enticing as opposed to CEOs and more business oriented people who want to cut as many game developers out of the development process. Which probably contributes to the stigma. It's literally the machines taking dream jobs away." (P1)

The perceived labor impacts of GenAI on specific artistic communities depended on existing economic practices. P3 mentioned "it's part of the culture of fan fiction where people generally want it to be free and have it be a free exchange of ideas and fiction. I feel like that's a big cultural value." As a result, P3 felt "the fact that [fan fiction is] not profitable will discourage AI use." However, P3 worries "there's more reason for people to want to make AI-generated fan art" because "people do often make a profit off of fan art, either through selling prints or commissions. or being in the artist alley at conventions." This is perhaps why P7, a fan artist, recalled recently selling her art at a fan convention that "explicitly [banned AI art] on the page to register for the artist ally." P12 discussed a controversy where a prominent yarn company shared an AI-generated image of crochet art that is impossible to make on social media. He worried that these images may harm artists who publish instructional books by "distorting people's perception about crochet."

Participants distinguished between those using GenAI to make money versus those using it for personal use, perceiving the latter to be more ethical. As P3 explained: "I feel like using it for your own purposes is fine, perhaps, but if it's taking away people's jobs, or if you're making a profit off of it that I feel way less comfortable with." P11's attitudes toward GenAI in the context of art depended on whether the art was "personal versus public" as well as whether a piece of art is made public "for profit." P11 had few qualms with private usage or public usage for non-profit purposes, even saying in relation to non-profit usage "I think that's where it can do a lot of good benefits to certain communities when they don't have money to hire a professional illustrator for them to make a poster for an event." However, she went on to say "I think for generative AI and for profit, I think it will need more regulation and transparency."

Some participants located their concerns with GenAI not entirely within the technology itself but rather the capitalist system. P6 worried about artists getting "into a decades long pissing contest of whether or not [GenAI] should be used at all instead of seeking to regulate the ways that we use it or regulate the treatment of workers using it." P6 feared GenAI will be "used as a scapegoat to sort of dodge the actual question of workers rights in creative industries." Similarly, P8 wonders about the relationship between critiques of GenAI versus critiques of capitalism:

"Maybe it's foolish to try and extract the idea of AI art from the context of the real world which it unavoidably exists in. I just feel like if people didn't have to rely on their art to make money and support themselves and live, I feel like that would be a better world and I feel like we wouldn't be having these conversations about like the fear of being replaced. It's only because there's this need to extract profit from art. I think that's what makes this anxiety occur." (P8)

As P15 summarized: "Being a creative person under capitalism is hard. Period."

733 734

735

736

750

760

DISCUSSION

We then discuss how researchers and designers can better support artists' agency.

# 6.1 On the Value of Art

As described earlier, aesthetic debates over what art is and should be long predate the development of GenAI [3]. Even our handful of participants disagreed over what counts as art and whether or not GenAI can or should be used to make art, hearkening to longstanding debates over the importance of effort (Section 5.3) in valuing art. Adjudicating whether GenAI can be used to make art is also a topic of substantial debate at the time of our writing among prominent artists [16] and computing scholars [55]. However, due to the different aesthetic values of our participants, we discourage HCI researchers from imposing particular definitions of art and art-making onto others. Rather than focusing on "if" GenAI can make art, future HCI research should explore "when" and "by whom" artifacts made using GenAI are considered art or not-art, such as recent empirical work on the art world of "prompt artists" [13]. We call for empiricism that centers the aesthetic values of particular actors and groups in relation to art and GenAI.

In this section, we reflect on value tensions between our participants and those seeking to profit from GenAI in the arts.

Our participants often found GenAI to be most artistically interesting when used to make surreal or inhuman art, praising earlier GenAI models for their strangeness. In contrast, they found newer — ostensibly more "advanced" models to be "corny" simulacra of human creativity (Section 5.3). Our findings reinforce the value of glitches and surprise pointed out in prior work on AI and art [11, 13, 101]. It follows that future HCI research should question for whom and according to whom a creative technology can be said to get "better." Moreover, researchers should examine these aesthetic value misalignments between artists and makers of GenAI models in greater detail, such as studying explicit values through public corporate communications [49] and implicit values embed in the design of GenAI models by auditing outputs, datasets and objective functions [6, 12, 27]. In sum, we call on HCI researchers to examine the politics of beauty in both the material design and imaginaries of those developing GenAI models.

Despite their individual aesthetic disagreements, our participants shared a view of art as a deeply human and relational process. Whether one prioritizes the intended meaning or effort behind art making, both preferences demonstrate a value for the social history behind a work. Perceptions of authenticity were also tied to the morality of artistic honesty (Section 5.2). To value consent and cast out copiers, one must care about the impact of their art on other artists. Our participants enjoyed making art and sharing their work with others (Section 5.4). In sum, our participants derived immense social value from their artistic practices and those of other artists. Our findings reaffirm prior computing research on the importance of care within artistic communities [2, 89, 99].

Meanwhile, our participants' negative attitudes toward GenAI were largely rooted in critiques of how individuals and corporations are developing and seeking to use GenAI to profit from art. Our participants worried about corporate visions of art as an anti-relational and alienated object, in direct contradiction to their aforementioned social values. To build AI models from artists' work without their consent or giving them a way to opt-out requires explicitly not caring about the artists behind the art. Instead, developers convert art into data: an undifferentiated commodity to be mined, refined into GenAI models, and sold [121]. Unsurprisingly, our participants likened GenAI developers to thieves (Section 5.1). Since journalists have been able to identify exactly which authors and YouTube creators are in prominent datasets used to train GenAI models [84-86], it is certainly within the abilities of major corporations to do so. For managers to cut production costs using GenAI they must value the profits from art more than the process or people

behind the art (Section 5.5). Our findings demonstrate that the tensions between artists and GenAI are not simply the most recent version of longstanding aesthetic debates [3] or the result of technological *naïvetés*. Instead, these are tensions between competing visions of what art is and should be, between the social and economic value of art [53].

To examine these tensions between the social and economic values of art, HCI researchers must contend with relations of power in art. While it is important for HCI researchers to continue studying artists, we also encourage scholars to "study up" [75] those building and using GenAI to profit from art at the expense of artists. To do so, researchers will need to examine the relations within and between technology companies and art businesses at various scales. Much like prior research in other "future of work" domains, one could understand corporate visions of art by analyzing public trace data — such as marketing materials, patent applications, job postings, and CEO interviews [15, 38, 49]. At the same time, we encourage researchers to study how artists are contesting these capitalist visions of GenAI — such as by examining social media discourse related to the various controversies our participants alluded to over GenAI and art. At the same time, HCI researchers will need to use other methods to understand the real and imagined corporate value of GenAI in the micro contexts of development, deployment, and use. As computing researchers often have close ties to industry, we could leverage these connections to interview GenAI developers. Researchers could also seek to interview artists within corporations who can draw on their dual experience as artist/corporate insiders.

Finally, we encourage HCI researchers to think beyond small technical fixes [19]. Our participants' aesthetic and social values toward art are deeply incongruous with the values of those seeking to use GenAI to profit from art (Section 5.5). From the perspective of artists, these major corporate models may be beyond repair. Instead, we call on HCI researchers to explore ways to unmake and contest these hegemonic GenAI models [90]. At the same time, we encourage HCI researchers to imagine GenAI models otherwise. HCI researchers could work with artists to co-design GenAI models that center relationality, consent, and care at all levels of development and deployment. However, doing so will likely require rejecting capitalist values of scale [41]. The non-profit, community-driven fan sites we described earlier may serve as models worth emulating to rethink the design of GenAI from the ground up [37].

# 6.2 Supporting Artistic Agency

We encourage HCI researchers to support artistic agency through research, design, and policy targeted at all levels of GenAI development and use.

6.2.1 Consent in GenAl Development. One could support artists' agency by helping individuals learn if, how, and by whom their art has already been used to train GenAl models. For instance, researchers should audit and make visible the content in prominent open-source datasets, such as prior investigations of the Colossal Clean Crawled Corpus [27] and Book3 [84] datasets. Designers can help communicate the results of these investigations by building tools to help artists check if their work is in popular datasets, such as a tool created by journalists to search for authors in Book3 [85]. However, this work may be insufficient to address transparency concerns because companies rarely disclose their GenAl training data. Therefore, HCI researchers should also advocate for policy changes to increase training data transparency [47]. Merely knowing if one's work was used to train GenAl models is still insufficient to address our participants' concerns, such as the inability to opt their work out of being used to train GenAl models (Section 5.1) and fear of these models being used to replace one's work (Section 5.5). Lacking other ways to opt out, some of our participants have resorted to limiting the visibility of their art online (Section 5.1). It follows that future work should investigate how GenAl has impacted online art communities, such as recent work on DeviantArt [45].

Researchers and designers should help artists opt in or out of having their online work used to train GenAI models across all levels of the technology stack. At an infrastructural level, technologists could update internet standards — such as robots.txt — to differentiate between scraping permissions for search engine indexing versus GenAI training [56]. However, such changes may prove ineffective because internet standards are usually enforced by norms rather than laws [61]. Applications developers could imperceptibly perturb images and videos that users upload [95] to protect these works from being used to build GenAI models, similar to social media sites removing location metadata when users upload images [39, 52]. At the user-interface level, designers of online platforms should provide artists with clear consent settings, with opting out being the default option. Unfortunately, it is unlikely that for-profit companies will make decisions that are best for users at the expense of their bottom-lines, as indicated by Reddit and Tumblr deciding to sell user data to GenAI developers [79]. Therefore, we encourage HCI researchers to advocate for user data protection policies, such as extending right to be forgotten laws to training datasets [77].

As indicated by the numerous lawsuits facing tech companies at the time of our writing over the development of GenAI models [54, 87], tech companies have a long history of skirting regulation by "asking for forgiveness rather than permission" [111]. Regardless of any policies, standards, or interface-level changes intended to give artists greater agency, there will certainly be tech companies and individuals that continue to ignore artists' wishes. As we described earlier, technologists have spent decades developing DRM software to prevent everyday users from scraping artwork owned by major corporations [26], with much less attention paid to designing technology to protect everyday artists from major corporations [62]. To reverse this course, we encourage oppositional privacy research and design to help artists protect their work from being used to train GenAI models without their consent, such as tools like Glaze [95] and Nightshade [96].

6.2.2 Transparency into GenAI Use. Our participants also expressed a desire for greater transparency into how or if GenAI is used in the art-making process. Hence, multiple participants wished that art made using GenAI was labeled when shared on social media (Section 5.2). However, implementing such digital labeling poses numerous research and design challenges. Our participants' perceptions of art depended greatly on exactly where in the artistic process one uses GenAI (Section 5.4). It follows that a single "AI-generated" label may fail to account for the myriad ways GenAI may be used in the process of art making. Future work should explore how to design art labeling schemes beyond the binary of GenAI use/non-use [31] as well as how the design of different interfaces for displaying these labels impact audience perceptions, similar to usable privacy research on the design of opt-out buttons [46]. Researchers should also continue exploring how to watermark or detect AI-generated media [59, 120], while also balancing the relative harms of false-negatives versus false-positives in different application domains [20].

Our participants and members of their artistic communities have resorted to using folk theories to try to detect AI-generated images (Section 5.2). However, this heightened suspicion harms artists and artistic audiences by adding additional labor to prove use/non-use when sharing or enjoying a work of art. Future research should investigate the strategies, harms, and benefits associated with these grassroots "everyday audits" of art [97], paying particular attention to false-positives, false-negatives, and the space between GenAI use/non-use. Much like recent work designing platforms to support crowd audits of biases in algorithmic systems [23, 60], designers may also wish to design tools to support crowd labeling of AI-generated art. At the same time, such systems would need to provide avenues for accused artists to contest or refute claims as the consequences of a false-positive could be detrimental to artists' reputations (Section 5.2). Regardless of whether one builds dedicated tools, these crowd audits into AI-generated art will likely continue. Researchers should also study the experiences of those who have — rightly or wrongly — been accused

of using GenAI to make art. In turn, researchers and designers may wish to consider how to help artists prove the "authenticity" of their art-making process.

6.2.3 Agency over Labor. In light of the numerous strikes involving GenAI in the past two years [18, 80], HCI researchers can also support artists' agency in the workplace by working with with creative unions to craft labor contract language. Researchers could help design policies on how or if GenAI models can be trained on past or future creative work, remedying the uncertainty our participants experienced (Section 5.1). One could also co-develop contracts with union members around how or if workers can use particular GenAI models, such as preventing forced use from management (Section 5.5). At the same time, individual artists may still want the option to use GenAI models on their own terms, such as P11 who only used GenAI to help with pre- and post-production work like writing formulaic pitch letters (Section 5.4). Researchers should consider how to design technologies to help workers enact hard-fought AI policies [105]. Future work could also study how artists are discussing GenAI during labor disputes as well as how current GenAI labor policies are designed, such as a close reading of the Hollywood writers' strike rhetoric and their resulting contract [18]. At the same time, research should also examine how more atomized freelance artists are making sense of and responding to GenAI by, perhaps, analyzing social media discourse [118].

Our findings also demonstrate the need to consider those who do not make art for a living (Section 5.5). Not only are GenAI models built using freely shared art (Section 5.1), some of this art is produced within art worlds with strong communal, anti-capitalist values (Section 5.5). It is unjust for GenAI developers to commodify art held in common and freely exchanged within an art world against these artists' wishes. Much like Goetze argues [42], GenAI models are developed in ways that echo the colonial dispossession of communal property [48, 50]. The free and open-source software community has similarly responded to companies seeking to commodity technology built on work made and shared for free [62]. So-called "copyleft" licenses use copyright law to force those building on free and open software to release derivative works for free [102]. Future HCI research should collaborate with legal scholars to design similar licenses to resist the enclosure and commodification of free online art [108].

#### 6.3 Limitations

Our work should not be interpreted as speaking for or seeking to represent all "artists." Although all of our participants self-identified as "artists," they often belonged to different art worlds — ranging from textile art to game design to fan fiction. In doing so, we were able to study a breadth of attitudes toward GenAI and get partial views into various artistic communities. At the same time, each art world has its own particular histories, norms, and mediums. One salient aspect of different art worlds is how or if people make money from their art, such as the norm against profiting from fan fiction (Section 5.5). In this study, most participants did not make a living primarily through their art. The attitudes of, for instance, full-time screenwriters toward GenAI would likely differ from those of our participants. Another limitation of our work is that all our participants lived in the United States of America, and our interviews were conducted in English. However, perceptions and experiences of art and GenAI may differ outside our particular context of study, as evident from prior work on image-making in Bangladesh that found substantial linguistic and cultural biases in GenAI models [72]. HCI researchers should examine GenAI within various cultural, linguistic, and artistic contexts in greater depth.

We also wish to end on a note of caution that the HCI research we make is situated within larger technological discourses [109]. By choosing to study self-identified artists, we implicitly chose *not to* center the various groups of artists organizing to resist GenAI, such as Hollywood writers [18] or video game actors [80]. Corporations, artists, or researchers may attempt to recuperate our findings or discussion of art history to dismiss the demands of organized Manuscript submitted to ACM

937

941

942 943 944

948 949

945

950 951 952

953 954

955

956

958

961

962

963

964

965

966

967

968

969

970

971 972

973

974

975

976

977

978

979

980

981

982

983

984

985

#### **REFERENCES** 957

CONCLUSION

[1] Tsion Avital. 1997. Figurative art versus abstract art: Levels of connectivity. Emotion, Creativity, and Art. Perm, Russia: Perm Cultural Institute (1997).

artistic labor, casting concerned artists as merely disgruntled Luddites [70]. When, in fact, the Luddite movement's fight

for worker rights demonstrates the need to challenge modernist fables of technological developments as never-ending

In this work, we examined how artists from a variety of art worlds are making sense of and negotiating the recent,

proliferation of GenAI. We identified five points of tension between art and GenAI related to artistic ownership, authenticity, meaning, process, and labor. Our participants, at times, held subtly different beliefs about GenAI and art. Therefore, we call for more research on GenAI within particular art worlds, with an eye toward similarities and

differences between artistic communities. At the same time, our participants were largely unified in their condemnation

of the major corporations developing and seeking to use GenAI models to profit from art. We call on HCI researchers to

contest these power relations through an oppositional program of design, research, and policy. Finally, we encourage

HCI researchers to imagine alternative ways of making and unmaking GenAI in ways that center relationality, consent,

marches toward "progress" [90]. We strongly condemn any use of our work to undermine organized artistic labor.

- [2] Nancy K Baym. 2018. Playing to the crowd: Musicians, audiences, and the intimate work of connection. New York University Press.
- [3] Howard S Becker. 2023. Art worlds: updated and expanded. Univ of California Press.

and care at all levels of development and deployment.

- [4] Walter Benjamin. 1986. The work of art in the age of mechanical reproduction. In Illuminations. Random House Digital, Inc., 217-252.
- [5] Oloff C Biermann, Ning F Ma, and Dongwook Yoon. 2022. From tool to companion: Storywriters want AI writers to respect their personal values and writing strategies. In  $\underline{\text{Proceedings of the 2022 ACM Designing Interactive Systems Conference.}}\ 1209-1227.$
- [6] Su Lin Blodgett, Gilsinia Lopez, Alexandra Olteanu, Robert Sim, and Hanna Wallach. 2021. Stereotyping Norwegian salmon: An inventory of pitfalls in fairness benchmark datasets. In Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (Volume 1: Long Papers). 1004-1015.
- [7] Margaret A Boden and Ernest A Edmonds. 2009. What is generative art? Digital Creativity 20, 1-2 (2009), 21-46.
- [8] Pierre Bourdieu. 1984. Distinction: A Social Critique of the Judgement of Taste. Harvard University Press.
- [9] Julia Bullard. 2016. Motivating invisible contributions: framing volunteer classification design in a fanfiction repository. In Proceedings of the 2016 ACM International Conference on Supporting Group Work. 181–193.
- [10] William A Camfield. 1990. Marcel Duchamp's fountain: Its history and aesthetics in the context of 1917. Marcel Duchamp: Artist of the century
- [11] Baptiste Caramiaux and Sarah Fdili Alaoui. 2022. " Explorers of Unknown Planets" Practices and Politics of Artificial Intelligence in Visual Arts. Proceedings of the ACM on Human-Computer Interaction 6, CSCW2 (2022), 1-24.
- [12] Stephen Casper, Carson Ezell, Charlotte Siegmann, Noam Kolt, Taylor Lynn Curtis, Benjamin Bucknall, Andreas Haupt, Kevin Wei, Jérémy Scheurer, Marius Hobbhahn, et al. 2024. Black-box access is insufficient for rigorous ai audits. In The 2024 ACM Conference on Fairness, Accountability, and Transparency. 2254-2272.
- [13] Minsuk Chang, Stefania Druga, Alexander J Fiannaca, Pedro Vergani, Chinmay Kulkarni, Carrie J Cai, and Michael Terry. 2023. The prompt artists. In Proceedings of the 15th Conference on Creativity and Cognition. 75-87.
- [14] Amy Cheatle and Steven Jackson. 2023. (Re) collecting Craft: Reviving Materials, Techniques, and Pedagogies of Craft for Computational Makers. Proceedings of the ACM on Human-Computer Interaction 7, CSCW2 (2023), 1-23.
- [15] EunJeong Cheon. 2023. Powerful Futures: How a Big Tech Company Envisions Humans and Technologies in the Workplace of the Future. Proceedings of the ACM on Human-Computer Interaction 7, CSCW2 (2023), 1–35.
- [16] Ted Chiang. 2024. Why A.I. isn't going to make art. https://www.newyorker.com/culture/the-weekend-essay/why-ai-isnt-going-to-make-art
- [17] Juliet Corbin and Anselm Strauss. 2014. Basics of qualitative research: Techniques and procedures for developing grounded theory. Sage publications.
- Jake Coyle. 2023. In Hollywood writers' battle against AI, humans win (for now). AP News. Accessed January (2023).
- Jay Cunningham, Gabrielle Benabdallah, Daniela Rosner, and Alex Taylor. 2023. On the grounds of solutionism: Ontologies of blackness and HCI. ACM Transactions on Computer-Human Interaction 30, 2 (2023), 1-17.

994

995

1001

1002

1003

1004

1009

1023

1024

1027

1028

1031

1032

1033

035

1039

- [20] Doraid Dalalah and Osama MA Dalalah. 2023. The false positives and false negatives of generative AI detection tools in education and academic
   research: The case of ChatGPT. The International Journal of Management Education 21, 2 (2023), 100822.
  - [21] Antonio Daniele and Yi-Zhe Song. 2019. AI+ art= human. In Proceedings of the 2019 AAAI/ACM Conference on AI, Ethics, and Society. 155–161.
- [22] Cienna Davis. 2022. Digital blackface and the troubling intimacies of TikTok dance challenges. In <u>TikTok cultures in the United States.</u> Routledge,
  - [23] Wesley Hanwen Deng, Michelle S Lam, Ángel Alexander Cabrera, Danaë Metaxa, Motahhare Eslami, and Kenneth Holstein. 2023. Supporting User Engagement in Testing, Auditing, and Contesting AI. In Companion Publication of the 2023 Conference on Computer Supported Cooperative Work and Social Computing. 556–559.
  - [24] Michael Ann DeVito. 2022. How Transfeminine TikTok Creators Navigate the Algorithmic Trap of Visibility Via Folk Theorization. Proc. ACM Hum.-Comput. Interact. 6, CSCW2, Article 380 (nov 2022), 31 pages. https://doi.org/10.1145/3555105
  - [25] Pranav Dixit. 2024. Artists criticize Apple's lack of transparency around Apple Intelligence Data. https://www.engadget.com/artists-criticize-apples-lack-of-transparency-around-apple-intelligence-data-131250021.html
- 1000 [26] Cory Doctorow. 2014. <u>Information doesn't want to be free: laws for the</u> internet age. McSweeney's.
  - [27] Jesse Dodge, Maarten Sap, Ana Marasović, William Agnew, Gabriel Ilharco, Dirk Groeneveld, Margaret Mitchell, and Matt Gardner. 2021 Documenting large webtext corpora: A case study on the colossal clean crawled corpus. arXiv preprint arXiv:2104.08758 (2021).
  - [28] Fiona Draxler, Anna Werner, Florian Lehmann, Matthias Hoppe, Albrecht Schmidt, Daniel Buschek, and Robin Welsch. 2024. The AI ghostwriter effect: When users do not perceive ownership of AI-generated text but self-declare as authors. <u>ACM Transactions on Computer-Human Interaction</u> 31, 2 (2024), 1–40.
- 1005 S1, 2 (2024), 1 40.

  [29] Brooke Erin Duffy, Annika Pinch, Shruti Sannon, and Megan Sawey. 2021. The nested precarities of creative labor on social media. Social media+ society 7, 2 (2021), 20563051211021368.
- 1007 [30] Brianna Dym, Namita Pasupuleti, and Casey Fiesler. 2022. Building a pillowfort: Political tensions in platform design and policy. Proceedings of the ACM on Human-Computer Interaction 6, GROUP (2022), 1–23.
  - [31] Ziv Epstein, Antonio Alonso Arechar, and David Rand. 2023. What label should be applied to content produced by generative AI? (2023).
- [32] Casey Fiesler. 2020. Lawful users: Copyright circumvention and legal constraints on technology use. In Proceedings of the 2020 CHI Conference
   on Human Factors in Computing Systems. 1–11.
- 1012 [33] Casey Fiesler and Amy S Bruckman. 2014. Remixers' understandings of fair use online. In Proceedings of the 17th ACM conference on Computer
  1013 supported cooperative work & social computing. 1023–1032.
- [34] Casey Fiesler and Amy S Bruckman. 2019. Creativity, copyright, and close-knit communities: a case study of social norm formation and enforcement.

  Proceedings of the ACM on Human-Computer Interaction 3, GROUP (2019), 1–24.
- [35] Casey Fiesler and Brianna Dym. 2020. Moving across lands: Online platform migration in fandom communities. Proceedings of the ACM on Human-Computer Interaction 4, CSCW1 (2020), 1–25.
- [36] Casey Fiesler, Jessica L Feuston, and Amy S Bruckman. 2015. Understanding copyright law in online creative communities. In Proceedings of the 18th ACM conference on computer supported cooperative work & social computing. 116–129.
- 1019 [37] Casey Fiesler, Shannon Morrison, and Amy S Bruckman. 2016. An archive of their own: a case study of feminist HCI and values in design. In 1020 Proceedings of the 2016 CHI conference on human factors in computing systems. 2574–2585.
- 1021 [38] Sarah E Fox, Kiley Sobel, and Daniela K Rosner. 2019. Managerial Visions: stories of upgrading and maintaining the public restroom with IoT. In
  1022 Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems. 1–15.
  - [39] Christine Geeng, Jevan Hutson, and Franziska Roesner. 2020. Usable sexurity: Studying {People's} concerns and strategies when sexting. In Sixteenth Symposium on Usable Privacy and Security (SOUPS 2020). 127–144.
    - [40] Katy Ilonka Gero, Tao Long, and Lydia B Chilton. 2023. Social dynamics of AI support in creative writing. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems. 1–15.
  - [41] Tarleton Gillespie. 2020. Content moderation, AI, and the question of scale. Big Data & Society 7, 2 (2020), 2053951720943234.
  - [42] Trystan S Goetze. 2024. AI Art is Theft: Labour, Extraction, and Exploitation: Or, On the Dangers of Stochastic Pollocks. In <u>The 2024 ACM</u> Conference on Fairness, Accountability, and Transparency. 186–196.
- 1029 [43] Sharon Goldman. 2024. OpenAI's sora: The devil is in the "details of the data" | venturebeat. https://venturebeat.com/ai/openais-sora-the-devil-1030 is-in-the-details-of-the-data/
  - [44] Mary L Gray and Siddharth Suri. 2019. Ghost work: How to stop Silicon Valley from building a new global underclass. Eamon Dolan Books.
  - [45] Qingyu Guo, Kangyu Yuan, Changyang He, Zhenhui Peng, and Xiaojuan Ma. 2024. Exploring the Evolvement of Artwork Descriptions in Online Creative Community under the Surge of Generative AI: A Case Study of DeviantArt. In <a href="Extended Abstracts of the CHI Conference on Human Factors in Computing Systems">Extended Abstracts of the CHI Conference on Human Factors in Computing Systems</a>. 1–7.
  - [46] Hana Habib, Sarah Pearman, Jiamin Wang, Yixin Zou, Alessandro Acquisti, Lorrie Faith Cranor, Norman Sadeh, and Florian Schaub. 2020. "It's a scavenger hunt": Usability of Websites' Opt-Out and Data Deletion Choices. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems. 1–12.
  - [47] Jack Hardinges, Elena Simperl, and Nigel Shadbolt. 2023. We must fix the lack of transparency around the data used to train foundation models. Harvard Data Science Review (2023).

1048

1052

1053

1056

1057

1058

1059

1060

1061

1062

1066

1067

1068

1069

1070

1071

1072

1073

1074

1075

1078

1079 1080

1081

1082

1086

1087

1088

1091

- [48] Dean Hardy, Maurice Bailey, and Nik Heynen. 2022. "We're still here": An abolition ecology blockade of double dispossession of Gullah/Geechee
   land. Annals of the American Association of Geographers 112, 3 (2022), 867–876.
- [49] Jean Hardy and Silvia Lindtner. 2017. Constructing a desiring user: Discourse, rurality, and design in location-based social networks. In <u>Proceedings</u>
   of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing. 13–25.
- 1045 [50] Cole Harris. 2004. How did colonialism dispossess? Comments from an edge of empire. Annals of the Association of American Geographers 94, 1
  1046 (2004), 165–182.
  - [51] Drew Hemment, Morgan Currie, Sarah Joy Bennett, Jake Elwes, Anna Ridler, Caroline Sinders, Matjaz Vidmar, Robin Hill, and Holly Warner. 2023.
    AI in the public eye: Investigating public AI literacy through AI art. In <u>Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency</u>. 931–942.
  - [52] Benjamin Henne, Christian Szongott, and Matthew Smith. 2013. SnapMe if you can: Privacy threats of other peoples' geo-tagged media and what we can do about it. In Proceedings of the sixth ACM conference on Security and privacy in wireless and mobile networks. 95–106.
  - [53] Lewis Hyde. 2019. The gift: How the creative spirit transforms the world. Vintage.
  - [54] Kyle Jahner. 2024. Google hit with copyright class action over Imagen AI model. https://news.bloomberglaw.com/ip-law/google-hit-with-copyright-class-action-over-imagen-ai-model
- [55] Harry H Jiang, Lauren Brown, Jessica Cheng, Mehtab Khan, Abhishek Gupta, Deja Workman, Alex Hanna, Johnathan Flowers, and Timnit Gebru.
   2023. AI Art and its Impact on Artists. In <u>Proceedings of the 2023 AAAI/ACM Conference on AI, Ethics, and Society</u>. 363–374.
  - [56] Jaime Jiménez and Jari Arkko. 2024. AI, Robots. txt. (2024).
  - [57] Reishiro Kawakami and Sukrit Venkatagiri. 2024. The Impact of Generative AI on Artists. In Proceedings of the 16th Conference on Creativity & Cognition. 79–82.
  - [58] Taewook Kim, Hyomin Han, Eytan Adar, Matthew Kay, and John Joon Young Chung. 2024. Authors' Values and Attitudes Towards AI-bridged Scalable Personalization of Creative Language Arts. In Proceedings of the CHI Conference on Human Factors in Computing Systems. 1–16.

  - [60] Michelle S Lam, Mitchell L Gordon, Danaë Metaxa, Jeffrey T Hancock, James A Landay, and Michael S Bernstein. 2022. End-user audits: A system empowering communities to lead large-scale investigations of harmful algorithmic behavior. proceedings of the ACM on Human-Computer Interaction 6, CSCW2 (2022), 1–34.
  - [61] Lawrence Lessig. 1999. Code and Other Laws of Cyberspace. Basic Books, Inc., USA.
    - [62] Lawrence Lessig. 2008. Remix: Making art and commerce thrive in the hybrid economy. Bloomsbury Academic.
    - [63] Sol LeWitt. 1967. Paragraphs on conceptual art. Artforum 5, 10 (1967), 79-83.
    - [64] John Locke. 2015. The second treatise of civil government. Broadview Press.
  - [65] Renkai Ma and Yubo Kou. 2022. "I'm not sure what difference is between their content and mine, other than the person itself" A Study of Fairness Perception of Content Moderation on YouTube. Proceedings of the ACM on Human-Computer Interaction 6, CSCW2 (2022), 1–28.
    - [66] Karl Marx. 2016. Capital. In Social Theory Re-Wired. Routledge, 145–151.
    - [67] Paris Marx. 2024. Roundup: Openai says some artistic jobs shouldn't exist. https://disconnect.blog/roundup-openai-says-some-artistic-jobs-shouldnt-exist/?ref=weekly-roundups-newsletter
    - [68] Marcel Mauss. 2000. The gift: The form and reason for exchange in archaic societies. WW Norton & Company.
    - [69] Michael McWhertor. 2024. College football 25 wouldn't have been possible without AI, EA Boss says. https://www.polygon.com/24210468/college-football-25-ai-machine-learning-ea-sports
    - [70] Brian Merchant. 2023. Column: What Stephen King and nearly everyone else gets wrong about ai and the Luddites. https://www.latimes.com/business/technology/story/2023-08-31/column-stephen-king-i-love-you-but-youre-wrong-about-the-luddites-and-technological-progress
    - [71] Brian Merchant. 2024. Ai is already taking jobs in the video game industry. https://www.wired.com/story/ai-is-already-taking-jobs-in-the-video-game-industry/
    - [72] Nusrat Jahan Mim, Dipannita Nandi, Sadaf Sumyia Khan, Arundhuti Dey, and Syed Ishtiaque Ahmed. 2024. In-Between Visuals and Visible: The Impacts of Text-to-Image Generative AI Tools on Digital Image-making Practices in the Global South. In Proceedings of the CHI Conference on Human Factors in Computing Systems. 1–18.
- [73] Ryan Moore. 2007. Friends don't let friends listen to corporate rock: Punk as a field of cultural production. <u>Journal of contemporary ethnography</u> 36, 4 (2007), 438–474.
- 1085 [74] Catarina Mota. 2011. The rise of personal fabrication. In Proceedings of the 8th ACM conference on Creativity and cognition. 279–288.
  - [75] Laura Nader. 1972. Up the anthropologist: Perspectives gained from studying up. (1972).
  - [76] Helen Nissenbaum. 2009. Privacy in context. Stanford University Press.
  - [77] Claudio Novelli, Federico Casolari, Philipp Hacker, Giorgio Spedicato, and Luciano Floridi. 2024. Generative AI in EU law: liability, privacy, intellectual property, and cybersecurity. arXiv preprint arXiv:2401.07348 (2024).
  - [78] Lora Oehlberg, Wesley Willett, and Wendy E Mackay. 2015. Patterns of physical design remixing in online maker communities. In <u>Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems</u>. 639–648.

1110

1111

1113

1114

1115

1127

1128

1129

1135

1136

1137

1140

1141

- [79] A.W. Ohlheiser. 2024. A poster's guide to WHO's selling your data to train AI. https://www.vox.com/technology/24086039/reddit-tumblr wordpress-whos-selling-your-data-to-train-ai
- 1095 [80] Ash Parrish. 2024. Video game actors are officially on strike over AI. https://www.theverge.com/2024/8/5/24213808/video-game-voice-actor-1096 strike-sag-aftra
- [81] Katie Paul. 2023. Meta used copyrighted books for AI training despite its own lawyers' warnings, authors allege. https://www.reuters.com/technology/meta-used-copyrighted-books-ai-training-despite-its-own-lawyers-warnings-authors-2023-12-12/
- [82] Trevor J Pinch and Wiebe E Bijker. 1984. The social construction of facts and artefacts: Or how the sociology of science and the sociology of technology might benefit each other. Social studies of science 14, 3 (1984), 399–441.
- [83] John Rawls. 1971. A theory of justice. Belknap Press/Harvard University Press.
  - [84] Alex Reisner. 2023. Revealed: The authors whose pirated books are powering generative AI. The Atlantic 19 (2023).
- [85] Alex Reisner. 2023. These 183,000 books are fueling the biggest fight in publishing and tech. Atlantic (2023).
- [86] Alex Reisner and Annie Gilbertson. 2024. Apple, Nvidia, anthropic used thousands of swiped YouTube videos to train AI. https://www.wired.
   com/story/youtube-training-data-apple-nvidia-anthropic/
- 1105 [87] Adi Robertson. 2024. Artists' lawsuit against stability AI and Midjourney gets more punch. https://www.theverge.com/2024/8/13/24219520/stability-1106 midjourney-artist-lawsuit-copyright-trademark-claims-approved
- 1107 [88] Daniela K Rosner and Kimiko Ryokai. 2009. Reflections on craft: probing the creative process of everyday knitters. In <u>Proceedings of the seventh</u>
  1108 <u>ACM conference on Creativity and cognition</u>, 195–204.
  - [89] Daniela K Rosner, Samantha Shorey, Brock R Craft, and Helen Remick. 2018. Making core memory: Design inquiry into gendered legacies of engineering and craftwork. In Proceedings of the 2018 CHI conference on human factors in computing systems. 1–13.
    - [90] Samar Sabie, Robert Soden, Steven Jackson, and Tapan Parikh. 2023. Unmaking as Emancipation: Lessons and Reflections from Luddism. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems. 1-15.
  - [91] Rob Salkowitz. 2023. Midjourney founder David Holz on the impact of AI on art, Imagination and the creative economy. https://www.forbes.com/sites/robsalkowitz/2022/09/16/midjourney-founder-david-holz-on-the-impact-of-ai-on-art-imagination-and-the-creative-economy/?sh=ec3bbb72d2b8
  - [92] Princess Sampson, Ro Encarnacion, and Danaë Metaxa. 2023. Representation, Self-Determination, and Refusal: Queer People's Experiences with Targeted Advertising. In Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency. 1711–1722.
- 1117 [93] Téo Sanchez. 2023. Examining the Text-to-Image Community of Practice: Why and How do People Prompt Generative AIs?. In <u>Proceedings of the</u>
  1118 15th Conference on Creativity and Cognition. 43–61.
  - [94] Mark Savage. 2023. Nick Cave says Chatgpt's ai attempt to write Nick Cave Lyrics "sucks". https://www.bbc.com/news/entertainment-arts-64302944
- [95] Shawn Shan, Jenna Cryan, Emily Wenger, Haitao Zheng, Rana Hanocka, and Ben Y Zhao. 2023. Glaze: Protecting artists from style mimicry by {Text-to-Image} models. In 32nd USENIX Security Symposium (USENIX Security 23). 2187–2204.
- [96] Shawn Shan, Wenxin Ding, Josephine Passananti, Stanley Wu, Haitao Zheng, and Ben Y Zhao. 2024. Nightshade: Prompt-Specific Poisoning Attacks on Text-to-Image Generative Models. In 2024 IEEE Symposium on Security and Privacy (SP). IEEE Computer Society, 212–212.
- [97] Hong Shen, Alicia DeVos, Motahhare Eslami, and Kenneth Holstein. 2021. Everyday algorithm auditing: Understanding the power of everyday users in surfacing harmful algorithmic behaviors. Proceedings of the ACM on Human-Computer Interaction 5, CSCW2 (2021), 1–29.
- 1125 [98] Amanda Silberling. 2023. Fan fiction writers are trolling AIS with Omegaverse stories. https://techcrunch.com/2023/06/13/fan-fiction-writers-are-trolling-ais-with-omegaverse-stories/
  - [99] Ellen Simpson, Samantha Dalal, and Bryan Semaan. 2023. " Hey, Can You Add Captions?": The Critical Infrastructuring Practices of Neurodiverse People on TikTok. Proceedings of the ACM on Human-Computer Interaction 7, CSCW1 (2023), 1–27.
  - [100] Ellen Simpson and Bryan Semaan. 2023. Rethinking creative labor: A sociotechnical examination of creativity & creative work on TikTok. In Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems. 1–16.
- [101] Christian Sivertsen, Guido Salimbeni, Anders Sundnes Løvlie, Steven David Benford, and Jichen Zhu. 2024. Machine Learning Processes as Sources of Ambiguity: Insights from AI Art. In Proceedings of the CHI Conference on Human Factors in Computing Systems. 1–14.
  - [102] Johan Söderberg. 2002. Copyleft vs. copyright: A Marxist critique. First Monday (2002).
- 1133 [103] Susan Sontag. 1977. On Photography. Picador.
- 1134 [104] Susan Sontag. 2001. Against interpretation: And other essays. Macmillan.
  - [105] Franchesca Spektor, Sarah E Fox, Ezra Awumey, Christine A Riordan, Hye Jin Rho, Chinmay Kulkarni, Marlen Martinez-Lopez, Betsy Stringam, Ben Begleiter, and Jodi Forlizzi. 2023. Designing for Wellbeing: Worker-Generated Ideas on Adapting Algorithmic Management in the Hospitality Industry. In Proceedings of the 2023 ACM Designing Interactive Systems Conference. 623–637.
  - [106] Logan Stapleton, Jordan Taylor, Sarah Fox, Tongshuang Wu, and Haiyi Zhu. 2023. Seeing seeds beyond weeds: Green teaming generative ai for beneficial uses. arXiv preprint arXiv:2306.03097 (2023).
  - [107] Jonathan Sterne. 2020. MP3: The meaning of a format. Duke University Press.
  - [108] Kacper Szkalej and Martin Senftleben. 2024. Generative AI and Creative Commons Licences: The Application of Share Alike Obligations to Trained Models, Curated Datasets and AI Output. (2024).
- [109] Jordan Taylor, Wesley Hanwen Deng, Kenneth Holstein, Sarah Fox, and Haiyi Zhu. 2024. Carefully Unmaking the "Marginalized User:" A Diffractive
   Analysis of a Gay Online Community. <u>ACM Transactions on Computer-Human Interaction</u> (2024).
- 1144 Manuscript submitted to ACM

- [110] Jordan Taylor, Ellen Simpson, Anh-Ton Tran, Jed R Brubaker, Sarah E Fox, and Haiyi Zhu. 2024. Cruising Queer HCI on the DL: A Literature
   Review of LGBTQ+ People in HCI. In Proceedings of the CHI Conference on Human Factors in Computing Systems. 1–21.
  - [111] P Vaughan. 2024. The New York Times' AI copyright lawsuit shows that forgiveness might not be better than permission. The Conversation (2024).
  - [112] Nicholas Vincent, Hanlin Li, Nicole Tilly, Stevie Chancellor, and Brent Hecht. 2021. Data leverage: A framework for empowering the public in its relationship with technology companies. In Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency. 215–227.
  - [113] Johanna Walker, Gefion Thuermer, Julian Vicens, and Elena Simperl. 2023. AI art and misinformation: approaches and strategies for media literacy and fact checking. In Proceedings of the 2023 AAAI/ACM Conference on AI, Ethics, and Society. 26–37.
  - [114] Ding Wang, Shantanu Prabhat, and Nithya Sambasivan. 2022. Whose AI Dream? In search of the aspiration in data annotation.. In <u>Proceedings of</u> the 2022 CHI Conference on Human Factors in Computing Systems. 1–16.
  - [115] Sitong Wang, Zheng Ning, Anh Truong, Mira Dontcheva, Dingzeyu Li, and Lydia B Chilton. 2024. PodReels: Human-AI Co-Creation of Video Podcast Teasers. In Proceedings of the 2024 ACM Designing Interactive Systems Conference. 958–974.
  - [116] Yunlong Wang, Shuyuan Shen, and Brian Y Lim. 2023. Reprompt: Automatic prompt editing to refine ai-generative art towards precise expressions. In Proceedings of the 2023 CHI conference on human factors in computing systems. 1–29.
  - [117] Ellen Winner. 2019. How art works: A psychological exploration. Oxford University Press, USA.
  - [118] Zheng Yao, Silas Weden, Lea Emerlyn, Haiyi Zhu, and Robert E Kraut. 2021. Together But Alone: Atomization and Peer Support among Gig Workers. Proceedings of the ACM on Human-Computer Interaction 5, CSCW2 (2021), 1–29.
  - [119] Lei Zhang, Tianying Chen, Olivia Seow, Tim Chong, Sven Kratz, Yu Jiang Tham, Andrés Monroy-Hernández, Rajan Vaish, and Fannie Liu.
    2022. Auggie: Encouraging Effortful Communication through Handcrafted Digital Experiences. <a href="Proceedings of the ACM on Human-Computer Interaction">Proceedings of the ACM on Human-Computer Interaction</a> 6, CSCW2 (2022), 1–25.
  - [120] Haonan Zhong, Jiamin Chang, Ziyue Yang, Tingmin Wu, Pathum Chamikara Mahawaga Arachchige, Chehara Pathmabandu, and Minhui Xue.
    2023. Copyright protection and accountability of generative ai: Attack, watermarking and attribution. In Companion Proceedings of the ACM
    Web Conference 2023. 94–98.
  - [121] Shoshana Zuboff. 2018. The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power (1st ed.).

## **ACKNOWLEDGMENTS**

Names removed for review