It Takes (at least) Two: The Work to Make Romance Work

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ABSTRACT

Digitalization has motivated romance novelists to move from traditional to self-publishing online. However, engagement with flexible and responsive, yet precarious and biased algorithmic systems online pose challenges for novelists. Through surveying and interviewing the novelists, and using the lens of feminist political economy, we investigate how digitalization has impacted the novelists' work practices. Our findings detail the increased agency afforded by self-publishing online, which comes at the expense of performing new forms of work individually, collectively, and with assistance, otherwise performed by publishing houses. We focus on the immaterial, invisible, and unpaid work that the novelists and the ecology of workers surrounding them conducted. We make recommendations for designing digital labor platforms that support the work practices of self-employed digital workers toward a more sustainable, collective, and inclusive future(s) of work.

KEYWORDS

Political Economy; Feminist Theory; Labor; Immaterial Labor; Unpaid Labor; Work; Future of Work; Romance; Publishing; HCI; CSCW; Algorithms; Intermediation; Marginalization; Post-Capitalist

1 INTRODUCTION

Human-Computer Interaction (HCI) and Computer Supported Collaborative Work (CSCW) researchers have had a long-standing interest in understanding the opportunities and challenges of gig work [11, 86, 101], on platforms, including Uber [3, 96], Airbnb [6, 79], and Amazon Mechanical Turk [84, 151]. More recently, researchers' focus has expanded to include self-employed workers,

such as content creators [45] and creative entrepreneurs [95], working on platforms including YouTube [15, 110], TikTok [137, 138], and Instagram [46, 121]. We build on this growing scholarship by examining the opportunities and challenges of the digitalization[1] of the romance industry[2].

Digital platforms have allowed many romance novelists to shift from leveraging a publishing house to self-publishing online. Traditionally, novelists worked with publishing houses for support with aspects of production, marketing, and sales [33, 152]. Now, novelists can choose platforms to publish (e.g., Amazon) and market (e.g., Facebook and Instagram) their novels [33, 152]. However, digital platforms have a strongly ambivalent character [50]. They may offer some flexibility [103, 149] and instantaneous feedback [37, 38], yet, at the same time, they could be precarious [136, 137], biased [19, 53], and difficult to navigate [14, 31]. In this paper, we ask: *How has digitalization impacted romance novelists' work practices in their transition to self-publishing via online platforms?*

We conducted a survey and interviews with romance novelists to learn about the practices and the platforms they used for publishing their work. To analyze the data, we use the lens of feminist political economy [13, 118] because it assists in foregrounding diverse types of labor—economic and non-economic, material and immaterial, as well as visible and invisible. We report our findings in three sections, beginning by describing how self-publishing has given authors greater control over their work, examining how self-publishing has required authors to take on new types of work, and finally highlighting how authors have sought unpaid and paid assistance with their work. We build on these findings to recommend implications for designing digital labor platforms to facilitate integration and intermediation, foreground algorithmic moderation, support post-capitalistic values, and address identity-based marginalization. Our work aims for a deepened understanding of what self-employed digital workers, such as content creators (e.g., artists, influencers, podcasters) and digital entrepreneurs (e.g., freelancers, photographers), may require from digital labor platforms to achieve successful professionalization and monetization, towards establishing a more sustainable, inclusive, and collective future(s) of digitally-mediated work.

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[1]We use the term digitalization as Brennen and Kreiss [21] defined it, distinguishing between *digitization* as "the material process of converting analog streams of information into digital bits" and *digitalization* as "the way many domains of social life are restructured around digital communication and media infrastructures."
[2]The romance novel industry is often known as the romance industry.

2 BACKGROUND AND RELATED WORK

We review work within and outside HCI and CSCW to motivate our research and highlight our paper's contributions. First, we describe the impact of digitalization on romance authors' work practices and how it relates to the work reported on the fanfiction communities. Then, we discuss feminist political economy, which we use as a lens to analyze our data. Finally, we present the challenges and opportunities of work digitalization as noted in the literature.

2.1 Digitalization of Fiction Writing

The rise of online platforms, such as Amazon, has encouraged many novelists to move from traditional to self-publishing by allowing authors to upload and disseminate e-books to readers [20, 132]. Waldfogel and Reimers [153] have found that online platforms have allowed authors to lower their book prices by avoiding the costs associated with traditional publishing, with cheaper novels leading to increased demand. Romance novelists have experienced significant benefits in the online publishing space. Some researchers have estimated the total sales of digital romance novels to be around $1.4 billion [4, 94, 100] or 23% of the United States book market [29]. A reason for this popularity may be that e-books have made it easier for readers to avoid the stigma associated with reading romance [57, 70]; on an e-reader one cannot tell what someone is reading and a reader can read without guilt. Yet, despite being a best-selling genre and a billion-dollar industry [98, 145], little is known about how writers within the romance industry have adjusted to digitalization, with just a few studies of authors' social media use [71, 87, 134] and the economics of self-publishing [111, 112, 135]. For example, Sharma et al. [134] have studied how romance novelists navigate online platforms with precarious algorithms. They noted that the novelists form algorithmic folk theories individually, collectively, and with each other's assistance to recruit new readers, maintain existing readers, and increase novel sales online.

Research focusing on the fanfiction communities has demonstrated patterns of activity and content production similar to the novelists, noting the use of digital media as a primer for connection and collaboration with readers [32, 123]. For example, Pianzola et al. [124] have analyzed Wattpad fiction and the behaviors of writers and readers, reporting that the interactions with readers online provided writers an ability to adapt and further connect with their audiences. Others have reported that online platforms provide valuable insights into new ways in which writers engage with their audiences as a part of their writing process [56]. For example, Fiesler et al. [56] have noted how feminist values were built into the platform, Archive of Our Own, presenting it as a case study of value-sensitive design. The platform's creators used their own experiences to affirm the need for accessible, inclusive tools. They described the relative autonomy afforded by creating a site not subjected to changes outside the control of users and where they could support their collective values as creators [56]. Similar practices of communal collaboration can be observed among romance authors, as the success of the genre has resulted in the creation of online and offline forms of community, as Sharma et al. [134] have observed. Our research contributes to HCI's scholarship on the impacts of digital platforms for self-employed digital workers by focusing on romance writers whose work is mediated digitally.

2.2 Feminist Political Economy

Feminist activists and theorists have identified the immaterial, non-economic, and invisible labor that workers perform in support of their economic work as feminist political economy [40, 54]. Lazzarato [99] defined immaterial labor as the labor that produces and manages cultural and informational content, including negotiating obsolescence or adjusting to work-related changes. Hardt and Nergi [74] considered immaterial labor as the labor involved in nurturing relationships, producing an emotional response, and generating information and knowledge. Feminist political economy highlights the diverse forms of labor that workers perform [77]. It emphasizes the gendering of work practices by traditionally marginalized workers, including women [13, 118]. This attention to the diversity of labor is particularly important for our analysis as it supports the exploration of work practices that would remain hidden by other economic theories. Within HCI, Raval and Dourish [127] have used the lens of feminist political economy to study immaterial labor ride-share drivers perform in addition to driving, including managing emotions, time management, and appearance. Researchers have primarily studied economic, material, and visible labor of romance writers [71, 87, 111]. That focus has, however, overlooked other forms of labor, such as the labor of engaging with readers or of supporting each another. In this study, we contribute a complementary analysis of the immaterial, unpaid, and invisible labor, which is "often overlooked, ignored, and/or devalued" [77], that novelists and the workers supporting them perform to achieve successful professionalization and monetization online.

2.3 Work Digitalization

Outside HCI, researchers have argued that work digitalization increases efficiency and productivity of workers [88], ameliorates labor exploitation [90], creates more value with less input [23, 58], assists decision-making processes [68], and re-skills or up-skills workers [30]. HCI researchers have, however, found that work digitalization reinforces traditional hierarchies and provides increased control to employers [28, 102, 116], while pushing workers into the margins, making their labor invisible and poorly compensated [50, 104, 129]. For example, Amazon Mechanical Turk (MTurk) has over 500,000 registered workers [43] and around 2,000-5,000 workers online at any given moment [83], but the average wage is just $2 per hour [84]. Digitalization has led to the replacement of jobs [60, 61], widening the digital divide between low-wage and professional workers [76], worsening precarious working conditions [136], and failing to change the power relations between employer and employee [82, 141]. Munoz et al. [119] have detailed three forms of inequality in online freelance work: allocative discrimination, i.e., minority workers are assigned certain jobs; job wage disparities, i.e., minorities are paid far less to conduct the same work as their white male counterparts; and valuative discrimination, i.e., certain groups are paid less because they are valued less, even when they possess equal skills. Consequently, digital workers may find themselves accommodating to such inequalities by modifying their practices or else suffering the consequences [129].

2.3.1 Algorithmic Moderation. Algorithms in digital workspaces manage the work practices and social ties between workers [108, 109]. Research has shown that these invisible [64] and opaque [122]

algorithms exert and perpetuate power dynamics [92, 160], primarily benefiting the employers [41, 105]. Bucher and Waldkirch [24] have identified ways platforms, such as Upwork and Fiverr, encouraged workers to develop a level of "anticipatory compliance." The algorithmic management of these platforms has been linked to *Focaultian panopticism*, where instead of prisoners, the workers faced uncertainty with the level of scrutiny that impacted their promotions [24]. Workers attempted to regulate their interactions with clients to prevent algorithmic intervention or punishment in the form of bans or gig deprioritization [24]. Even when algorithmic moderation may cause frustration, burnout, and anger, workers may feel powerless to stand up against online platforms and the corporations that own them [11, 86, 116].

HCI researchers have reported that to regain control, individually and collectively, workers try to resist, switch among, or invent techniques to manipulate platforms [86, 116]. For example, Lee et al. [102] have found that Uber drivers resisted the system by rejecting rides from users with low ratings, switching between the platforms by working on Uber and Lyft simultaneously, and manipulating the platforms through collective sensemaking via online forums. Cameron [28] has noted that rideshare workers deal with algorithms through compliance (e.g., surge chasing by ride-share drivers), engagement (e.g., switching off the application strategically), and deviance (e.g., rejecting certain ride requests). Sawyer et al. [131] have described workers building "infrastructural competency," i.e., developing sociotechnical practices to manipulate algorithmic management and complete tasks [86].

2.3.2 News forms of Labor. Research has demonstrated that digitalization has resulted in increased self-employment and entrepreneurship [18], requiring workers to develop new skills to work online [63, 81]. In a study of musicians, Baym [9] has found that digitalization via social media meant that musicians felt more pressure to cultivate online relationships with fans who wanted direct contact while balancing it against their own needs for privacy. Duffy and Wissinger [47] have reported that the blurring of work-life boundaries online led fashion influencers to engage in emotional, entrepreneurial, and self-branding labor to create a specific online identity. Butler et al. [27] have studied the shifting boundaries between authors and readers online, noting that authors' attempts to replicate in-person experiences online increased their workload as they tried to make platforms designed for marketing and sales work. Ge and Lee [63] have similarly analyzed freelancers on Fiverr, an online service marketplace and distinguised "super sellers" from regular participants, observing how these sellers proactively reviewed and engaged with customers. Super sellers left their work samples on the platform, focused on their titles and descriptions, and increased exposure through tags to maintain high levels of availability, quality, and social presence. Struckell et al. [140] have noted that workers need financial literacy to understand how to be successful online, demonstrating how this skill was correlated with the likelihood of pursuing and maintaining self-employment, a correlation more pronounced among women. These studies show how the new capacities of independent creative work may require alternative forms of labor to successfully perform work online. In our research, we describe the impacts of digitalization on romance writers who publish online, detailing the forms of labor unique to

independent, technologically-mediated employment as experienced by the authors.

3 METHODS

3.1 Participant Recruitment

In 2018, we attended the Romance Writers of America Annual Conference, where we participated in workshops and talks about the impact of digitalization on the industry, which informed this research. We collected data from January 2021 to April 2021 after approval from our university's Human Subjects Review Board. A novelist from the conference became our first study participant. We used snowball sampling [89], asking participants to tell other novelists about our study. Several participants shared our recruitment script with other novelists by directly messaging them, posting it on novelists' social media groups, or sharing it on their social media profiles. The script contained details about our study and a survey link to participate.

We designed a survey to screen interviewees. We filtered respondents to interview based on their experiences with self-publishing. For example, if respondents had self-published novels in the last five years, we asked them for their names and contact information to schedule a follow-up interview. The survey also collected respondents' demographic information, tools they used for publishing, details about the novel production process, and a brief description of the workers they employed and the tasks performed. These survey responses helped us tailor interview questions.

We had 124 survey respondents, of which 50 agreed to be interviewed. Of those 50, 40 listed the United States, and 3 listed Canada as their country of residence; the remaining 7 listed a different country. We reached out to these potential interviewees to see whether we could find a good time for an interview. While many responded to our call, due to scheduling and pandemic-related constraints, we ultimately ended up with two participants from Canada, 12 from the United States, and 1 from Europe. Thus, this study is heavily skewed towards North America (see limitations below). The study gives visibility and insight into the technologically-mediated challenges and opportunities of the romance industry that is of economic significance in North America due to its size and revenue. Also, motivated by the economic dominance of the romance genre of fiction, we chose to focus exclusively on romance authors. As we describe in the findings (see for example 4.2.3), romance genre conventions emerged as being meaningful in the ways that some of our participants did their work. Future work could explore how different fiction genre conventions influence patterns of labor.

3.2 Data Collection

We started interviewing in March 2021. We contacted the respondents who agreed to be interviewed through email in a survey response order. We conducted 15 interviews, also using theoretical saturation as a guide to finishing [35]. All interviews were conducted via a cloud-based video-conferencing platform, ten using video and audio and five audio-only based on the interviewee's preference. Virtual interviews allowed us to conduct this study during the COVID-19 pandemic as we all quarantined as well as maintained physical distancing and travel restrictions. We audio-recorded all the interviews after the interviewees consented. All

Name	Age (years)	Location	Publishing Type	Publishing Duration	No. of Publications
Moira	50	Boston, USA	Traditional & Self-publishing	8 years	70 novels
Eleanor	Undisclosed	New York, USA	Self-publishing	3 years	>10 novels
Diana	50	New York, USA	Traditional Publishing	18 years	>10 novels
Olivia	53	Utah, USA	Self-publishing	>5 years	>10 novels
Georgina	50	Missouri, USA	Self-publishing	>5 years	>10 novels
Serena	42	Kansas, USA	Self-publishing	>5 years	>10 novels
Isabel	36	Toronto, Canada	Self-publishing	>5 years	>10 novels
Dorota	31	Vienna, Austria	Self-publishing	>5 years	>10 novels
Taylor	50	Utah, USA	Self-publishing	1—5 years	>10 novels
Kathy	39	Georgia, USA	Self-publishing	>5 years	>10 novels
Anita	46	New York, USA	Self-publishing	<1 year	<5 novels
Jenny	45	New York, USA	Self-publishing	>5 years	>10 novels
Alexis	73	New York, USA	Traditional & Self-publishing	>5 years	>10 novels
Penelope	54	Philadelphia, USA	Self-publishing	1—5 years	<5 novels
Blair	42	Ontario, Canada	Self-publishing	>5 years	>10 novels

Table 1: Interview participants' demographics including publication types, duration, and count

the interviews were conducted in English, the preferred language of the interviewees. The interviews lasted from 30 to 90 minutes with an average of 70 minutes.

All the interviewees self-identified as women ranging in age from 31 to 73. Three interviewees were women of color; two Black and one Latinx; rest were white. See Table 1 for more information about interviewees' demographics and their publications. Many novelists used pen names which they shared with us. In this paper, we use pseudonyms to hide their pen names for anonymization.

The first author conducted in-depth, semi-structured interviews, to investigate the benefits and challenges of self-publishing online. We asked novelists about their novel production process and the pros and cons of tools they used for writing, publishing, and marketing. The first author transcribed the data and met with the last author regularly to discuss the data collected as well as adjust the interview questions as necessary.

3.3 Data Analysis

We followed the inductive interpretive coding approach that Merriam and Grenier [115] have proposed for data analysis. We first familiarized ourselves with the data, then coded the data, going through the transcripts and highlighting everything related to the interviewees' work practices online. Example codes included "maintenance labor" where the novelists assisted each other to reach new audiences online through cross-promotions and "identity labor" where they managed their personal and novelist identities separately online. Through multiple rounds of iterations, the authors inductively analyzed the codes to identify themes. The process included organizing, reorganizing, and combining codes into themes. We returned to the data to ensure that the themes represented the data well. Finally, we formulated three high-level themes presented in the paper, discussing what each theme means and how it represents the data.

4 FINDINGS

Our findings examine the impact of digitalization on romance novelists' work practices. First, we describe how self-publishing has increased the novelists' agency, giving them greater control over their work. Then, we discuss the new forms of work that the novelists reported taking on with self-publishing, resulting from losing access to the work done by a publishing house. Finally, we present the new paid and unpaid workers who assisted the novelists with self-publishing online.

4.1 Incentives to Publishing Online

Participants described digital self-publishing as providing more control over their own work which we break down into four types of agency: *managerial*, *creative*, *financial*, and *informative*. We define agency as the process of overcoming alienation by becoming agents of one's own activity in order to direct and shape the activity [12, 91]. Self-publishing meant that the novelists no longer had to deal with decisions made by publishing houses about, for example, what constitutes a good novel. In this section, we describe each agency in turn. We conclude by discussing a new type of limitation on the novelists' work imposed by online platforms.

4.1.1 Managerial Agency. We define managerial agency as the romance writers' ability to make independent decisions about their novel production, for example, setting the timeline of their production process. Alexis, who started writing novels in 1994 moved to self-publishing in 2011. After publishing over 30 books, she knew the restrictions that publishing houses placed on her work which prompted her to move to self-publishing online. She told us, *"I love having more control in self-publishing. I do not have a page count that I have to reach. I do not have to fit into the guidelines that they [a publishing house] set."* By publishing online, Alexis decided how to proceed following her vision of novel production.

Many of our participants' decision to switch to self-publish was about gaining more managerial freedom over their production process which had not been available to them when working with a publishing house. In addition to control over the process, authors also reported gaining speed, no longer having to wait for checks imposed by employees of a publishing house. Also, authors could lower novel prices since they did not have to pay, often large amounts, to the publishing house which further resulted in increased demand, as Waldfogel and Reimers [153] have also noted.

4.1.2 Creative Agency. We define creative agency as having more control over the writing of a novel, including the context, characters, and story arc. Participants reported that they enjoyed creative freedom associated with digital self-publishing without being answerable to or restricted by the narrative guidelines set by a publishing house. They can situate their novel in the contexts they want, with the characters they like, and the story-line that best serves the context and the characters. Isabel, who was Australian but had been living in Canada for over five years, told us that the publishing houses she worked with had controlled the novel structure:

> *"There was pressure for me [from publishing houses] to set my books in the United States, whereas in self-publishing, I set my books in Australia because that [context] is what I am the most familiar with. So I get more freedom with self-publishing. I can introduce new contexts to the American audience. Whereas in traditional publishing, I have to convince someone else. So in self-publishing, I get a little more freedom."*

The United States is a big market for romance novels. So, publishing houses may feel that readers prefer stories with familiar settings [29]. However, attempting to increase sales by insisting that stories be set in contexts that the majority of the readers can easily relate to, curbs the creative agency of novelists. Bounded by a contract of following the orders of a publishing house, in traditional publishing, novelists had to write stories catering to the American audience. For Isabel and other novelists, with self-publishing online, the ability to write books set in other places was freeing. Our findings corroborate Murray's [120], who have reported that self-publishing gave writers more control over their stories.

4.1.3 Financial Agency. We define financial agency as the writers' ability to collect the entire revenue for each book and being able to decide how to invest in the publishing of their novel. Most importantly, self-publishing meant that authors no longer had to send some of their revenues to a publishing house. Participants told us that by self-publishing they received all the profits generated from sales and had full control over the allocation of money to the various aspects of the novel production process, i.e., writing, publishing and marketing. For example, Penelope shifted to self-publishing online after she wrote her second novel and used the analogy of a U.S. Health Savings Account (HSA) to explain the agency she gained. She said:

> *"You get to reap a better percentage of sales [in self-publishing]. You keep more money in your pocket, but it is kind of like health care ... In an HSA, you have to put the money upfront, then you use some of it, and*

> *then what you do not use, you get to keep and you keep rolling over. This is what it is for indie authors."*

Participants realized that self-publishing required them to spend money upfront on novel production, hoping that sales would generate enough revenue to cover these expenses. Yet, despite the risk of spending more than they would earn, the novelists we interviewed still preferred the financial freedom of self-publishing. Furthermore, novelists enjoyed being able to decide how to allocate money to different stages of novel production.

4.1.4 Informational Agency. We define informational agency as the knowledge of the novel production process. In traditional publishing, along with publishing houses novelists were also expected to market novels; however, the houses never shared the information about, for example, the novel sales, including the total revenue generated, which hindered the novelists in the marketing process. Isabel described what happened after she submitted her manuscript to a publishing house as being *"blackboxed."* In traditional publishing, she *"did not exactly know what my split was. I just get a number that is how many books have been sold, but on what platforms, I have no idea. I do not even have access to the data to tell if the marketing is worth doing."* Isabel compared publishing traditionally with her own experience of self-publishing where she knew about every aspect of the process. This informational agency enabled Isabel and other novelists to increase their sales. Penelope mentioned:

> *"If you have a publishing house behind you that was going to do all your work, then maybe you never have to learn any of this stuff and worry about how you can increase your novel sales. But most novelists, like me, are hustlers. They do it because they like to control their destiny. Self-publishing provides you with information to do all the things that a publishing house would do for you, but in a better way. You do get to reap the rewards, a better percentage of sales."*

The shift to self-publishing online was *"empowering"* for many, as Eleanor emphasized, *"I do not have to try and query a traditional publishing house. I do not have to try and get an agent. I really do not need anybody except myself. Of course, this also means that if something goes wrong, you have nobody to blame but yourself. But this overall is very empowering."* Although our participants felt empowered, they were aware that they had to manage issues on their own. Still, participants felt that self-publishing was better because of the various abilities it bestowed on them.

4.1.5 Limits to Publishing Online. Self-publishing removed the restrictions imposed by publishing houses; however, it put constraints on the novelists' work, this time coming from the decisions encoded in the algorithms of the platforms they used. For example, Eleanor, who had been self-publishing novels since 2018, told us how the advertisement algorithm on Amazon moderated her ads. She had been advertising two books online for over a year. Amazon suddenly took them down, giving her a notice that the ads violated their platform policy. Eleanor said:

> *"Two of my books got categorized, after being on the market for a year and a half, as erotic books. One book got a couple on the cover. The lady got her head back and the man was kissing her neck. They said that is*

too erotic and that I cannot advertise it. My other book had the word alpha, a super common in paranormal romance, for the idea that there are wolf shifters and that there is the alpha of the pack. For some reason, Amazon decided over a year ago that alpha is some kind of code word for sexual deviancy."

HCI researchers have reported algorithmic moderation that workers (and users) face online [86, 92]. To address such moderation, digital workers may resist online platforms, switch between the platforms, or invent techniques to manipulate the platforms [80, 125]. However, instead of resisting or finding workarounds, we noticed that our participants saw the algorithms as "technical arbiters" [45] developed and leveraged by "powerful intermediaries" [159] with an intent of maximizing profit. For example, Taylor said:

> *"You are like getting in bed with a company that just wants to take all your money and they do not give a shit about if you make money. In spite of having all this ability to publish whatever you want online, you are still at their whim. They know that you have to use their ad platform."*

In other words, our participants acknowledged the difficulties of self-publishing online and put up with it to get the benefits that they valued. Jenny, who had been publishing novels on Amazon, told us, *"You know what, the shitty thing is I cannot afford to not sell on these platforms because they have billions of users. They are the biggest game in town. 50% of my income is from Amazon. That is really depressing."* A few participants emphasized the need for alternative platforms, such as *"a dashboard for tracking all novel-related details"* (Anita) or *"a platform for novel publishing and not for big companies profit-making"* (Moira), that could support their work. However, more work is required to design such novelist-centered platforms, considering the specific needs, preferences, experiences, and practices of novelists.

4.2 Labor of Publishing Online

Digital self-publishing provided writers more control over their novel production. However, at the same time, it also added forms of individual and collective labor that the novelists had to perform—labor that publishing houses would otherwise conduct in traditional publishing. Novelists engaged in *relational labor* by building and maintaining their reader community, work that musicians also did online [9]. Novelists engaged in *maintenance labor* by supporting other authors in the romance industry (sometimes known as "Romancelandia"), akin to care work [148]. Novelists also performed *identity labor* of managing the personal and novelist identity online. In this section, we describe each form of labor in turn and explain how conducting them was important to achieve successful professionalization and monetization online.

4.2.1 Relational Labor. Relational labor refers to "communicating with people over time to create structures that can support continued work" [9]. Baym [9] has introduced the concept to describe how musicians build ongoing connections with audiences online. Our participants used paid advertisements on social media platforms and retail platforms to reach new readers; however, they did

much more. We describe the relational labor novelists undertook to maintain and strengthen ties to readers.

All participants talked about the importance of their existing reader base. One aspect of this was to turn newer members into enthusiastic readers of their work. To do this, some produced podcasts, others broadcasted live on their social media platforms to engage with newer readers. Being mindful of the reach of social media, Penelope made it a habit to post content on various platforms to reach new readers. Penelope said:

> *"I am on these social media platforms every single day, interacting with the newer audience. That is just a constant wheel of promotion. You have to make your presence felt. You have to be willing to spend at least half the time marketing, if you really want the novel to be successful."*

The posts shared contained content about forthcoming books, but similar to some of the musicians as Baym [9] have described, the posts were intended to share facets of the author's life, whether it be about pets, children, cooking, or a personal event. Authors used online newsletters to promote their next release and share personal anecdotes, as Serena explained, *"Readers read quickly. They take three to six hours to read your book which you have spent months writing. After that, they are just waiting for a six to eight weeks turnaround for your next book. So, you get them excited about the next book, by sharing 'hey, this is my cover.' And they are like, 'I cannot wait to read'."* Participants conducted book giveaways on social media groups they created exclusively for their readers. Although giveaways reduce sales income, they helped strengthen connections with readers, as Taylor mentioned:

> *"In terms of a tangible increase in sales from having spent the hours of preparation and the 30 minutes of actually running the expensive giveaways have never moved the needle for me. However, it helps in engaging readers and creating a tighter relationship, and telling readers we appreciate them."*

Some participants built connections with their readers offline via book signings where they *"typically go to half a dozen or more independent bookstores in a region and sign books and connect with their readers in person."* They also attended conventions that have a book signing events, as Olivia asserted, *"which is a big way to stay in touch with readers."* Other novelists sent physical postcards, updating readers about the release of their new novels or greeting cards during festivals, such as Christmas and Valentine's Day (because it is the day of romance). Blair commented:

> *"It [sending cards] is a fan service and builds goodwill with your readers. A brand that they buy into and are supportive of. It is a business expense. But this branding is bringing in revenue, where it makes sense to spend some of that on something which doesn't have an obvious ROI. I could do it online. But I think that loses some of the analog-like surprise and the value that is associated with a physical object."*

We conducted our study during the COVID-19 pandemic. Based on newsletters we have read and the presence of mass book signing

events at conventions, we believe the number of authors who engage in such outreach is far higher than reported in our study, as many limited their travel and practiced quarantining.

The Romance Writer Association has posted many *"two-minute tips"* YouTube videos, teaching writers "how old school promo items [such as, postcards] can be used to maximum effect" [128]. For example, in a YouTube video, a novelist mentioned that she periodically mails physical items to her readers to avoid *"crazy algorithms"* online. Commenting on her video, many other novelists have responded, saying that *"The bonus with the bookmarks and postcards is that it's easier to lay your hands on something mark your page without damaging the book"* and *"These days, anything that comes through snail mail (especially if it has real human handwriting on it) feels like a gift!"*

All our participants took great effort and care to establish stronger relationships with readers. Serena told us about the importance of strengthening connections with readers, saying *"You need to create superfans, somebody who is going to buy every single book that you publish, and they are going to tell their friends to buy the book."* Creating superfans, we noticed, provided novelists with some level of security against prevalent precarity and lack of total agency online.

4.2.2 Maintenance Labor. Maintenance labor is the labor that workers perform by collaborating, cooperating, and providing interpersonal support to each other [148]. We talk about two types of work authors provided to their novelist colleagues: helping them find new readers and providing community support.

Some participants used social media to promote their colleagues' novels. For example, Kathy promoted other novelists' books by either sharing their posts on her social media profile or posting them on groups and pages that she had created for her readers. Jenny described social media's *"takeover parties,"* saying:

> *"We help each other release books by doing a Facebook Party on our social media groups for readers. Whoever is doing the party, they invite 12 or so authors. Each author gets some time to interact with the readers by posting a bunch of posts or maybe going live."*

All participants reported cross-promoting novels via *"newsletter swaps"* with fellow authors. Jenny told us about her swaps, saying *"For marketing, I do a ton of newsletter swaps, where I put my book in somebody's newsletter and then I put their book in my newsletter. That is a huge part of my marketing to reach newer audiences."* These swaps were free as Kathy commented, *"And it is a way to kind of get a free promo. It is another method of marketing."* Some participants also used Bookclicker, a tool designed to support newsletter swaps. These swaps had other benefits as Moira explained:

> *"She [a novelist friend] might ask me to put a link to her new book in my newsletter. If I am not releasing a book, it might be a nice way to reach out to my fans and offer them information about this new book that they might be interested in reading. When it is time for me to release, my friend helps me. So, that kind of crossover marketing had been really effective in the industry."*

Newsletter swaps were free ways for novelists to find new readers. But as Moira observes it was reciprocal; the expectation was that the swap works for both authors. Further, it was also used to engage existing readers, who were waiting for the next release from the author they get the newsletter from, by offering them a recommendation. While many swaps we heard about were between author friends, writers would sometimes consider cross-promoting with those they were not friends with as well. In such cases, participants' decisions to cross-promote depended on three criteria: if the fellow novelist wrote in the same sub-genre, their readers would be interested in reading the author's book, and the size of the fellow author's reader base. Participants used Amazon author profiles and book reviews to find answers to these questions.

A more labor-intensive approach to reach new audiences involved co-writing books together. Some novelists partnered to write a single story together, using the combined reader bases to get the word out. Other authors came together to write anthologies with each author producing their own story for the collection. The latter was particularly useful for new writers. Anita told us:

> *"My first publication was with other authors, a collection of novellas. Because we did it together, it was a little bit less intimidating than doing it on my own. Then I got a feel for the process. Since then, I have put out a few of my own works, and still participate in collections with that group of authors.*

Romance writers also supported each other as a community. For example, authors provided support to other writers at times of stress. Although self-publishing gave authors control over their process, stress was not uncommon at book releases (a deadline often announced in advance to their readers). Several participants reported that it was easier to explain the stress to another writer than their family members or friends. Olivia asserted:

> *"I was up until 7 o'clock this morning. I got a message at 4 o'clock from another novelist. I asked her 'what are you doing messaging me at 4 o'clock in the morning?' and she said, 'girl, I am coming up on my deadline and it is not done.' So, she could know exactly what I was going through. I said to her 'girl, me too'."*

Our participants spoke of giving and receiving emotional support from each other. This labor of helping their peers came with the expectation that they would receive it when they needed it, whenever that might be, sooner or later.

When we asked participants why they engaged in maintenance labor, they explained that they wanted to support *"Romancelandia"*, the romance writers community. Participants believed that they can individually succeed only when the community, as a whole, does. Helping each other to write better novels as well as grow and maintain a large audience for romance, strengthened the genre, as Serena put it:

> *"I help other writers because if they look good, they make me look good. If they look bad, they make me look bad. It is not a Kumbaya that we are all in this together. If you are associated with somebody who is not doing what they need to do, it does not look good on you."*

Novelists connected on common struggles and the labor they had to perform online to build a stronger community among each other and with their readers.

4.2.3 Identity Labor. Identity labor involves establishing, maintaining, and altering identities during social interaction [22]. We describe the identity work authors performed online.

All participants published novels under pen names, instead of using their real ones. Some used pen names worrying that if people knew they wrote romance novels, it would have a negative impact on them and their family members. For example, Taylor said, *"If people know I was writing scandalous romantic material, they might misconstrue that to take liberties that would make me feel uncomfortable."* Anita told us that she used a pen name *"to provide a layer of protection for the people around me."* Others wrote under pseudonyms due to the stigma associated with writing romance—"illegitimate work" [106], "schlock" [39], or "trashy" [155]. They did not want their family, friends, or anyone to find out that they wrote romance. For example, Jenny, who secretly wrote romance for over 2 years without telling her family, told us:

> *"The American culture is so steeped in puritanical Christian values that I did not want people in my immediate community, my neighbors, my family, my kids, to know that I am writing sex scenes. However, unfortunate, it was a big no. I did not want my mom to know, I was writing books with steamy content. I know so many women who are successful writers whose husbands do not even know they write romance."*

Some participants told family and friends that they wrote romance, but did not feel comfortable enough sharing it with non-novelist co-workers; many participants wrote novels in their spare time while holding full-time jobs. Olivia, who worked as a teacher, explained:

> *"Imagine a kindergarten teacher who writes erotic romance. Do you want to send your kids to that teacher? Your novelist identity is something that you are never allowed to have out there, especially when you are in a position of dealing with children."*

Olivia worried that her students' parents would judge her negatively if they knew she wrote romance. Others thought they would reveal their identity when they become successful. Until then, the pen name would provide a cover. For example, Isabel mentioned that with pen names *"no one would know who they really are,"* saying:

> *"I also did not know if it was going to be a success. So there was a part of me that is like, 'Oh, well, if I have a pen name, and it is a horrible failure, I d not have to tell anyone about it.' So once I got published, I started telling people and people were generally very supportive. But in the beginning, I had no idea it could have crashed and burned."*

Many participants wrote in different romance sub-genres. They talked about using multiple pen names in order to write in diverse sub-genres, simultaneously. Participants used different pen names to *"differentiate the [sub] genre,"* as Anita mentioned, *"hit different audiences,"* as Georgina declared, and *"not confuse readers … because if they went to the bookstore and picked up one of your books, they would not know what type of book it is,"* as Diana asserted. Thus, participants used different pen names to maintain a separation between their reader groups and cater to their reading needs. For example, Penelope reported that she used two pen names because:

> *"Some novelists create multiple pen names because they write in multiple genres and they do not want to confuse the readers. So if you write YA [young adult] fiction and you have a following of younger readers, but then you go out and you write other books that are more contemporary romance, steamy or not, you do not necessarily want young readers jumping to that pen name for that content, because it is not something that is going to interest them, and you want to be able to market it separately."*

Participants created new names with the aim of using them to manage and increase their readership. While they used pen names to preserve anonymity, complete concealment was not always the point. Having multiple pen names helped novelists with marketing as well. Taylor, who wrote historical romance novels with cowboys as the characters and contemporary romance novels centering around military heroes, mentioned that with separate pen names *"[I] actually recognize that I am selling in two different lanes and to market that accordingly."* Georgina used separate pen names to regulate her marketing efforts for different audiences. She said:

> *"I am really hitting two very, very different audiences. So I thought, well let us just make it an absolute clean break and say, this is very specifically what this author does. So, Sophie Turner writes contemporary. Ella Carlson is a hot mess. If you [readers] hit up Ella Carlson, you might not get a very clean, cute paranormal romance. You might get a steamy sci-fi romance."*

The majority of our participants were white, which reflected the lack of racial diversity in the romance industry [66, 139, 158]. The lack of diversity among writers is also mirrored in readers, with romance readers being 82% female, 73% white, and 86% heterosexual [130]. Participants of color mentioned using white-sounding, middle-aged, female pen names because readers expected their writers to be like them—white and female. For example, Serena told us:

> *"I am brown. I am Hispanic. I am Latina. I picked a name that could make people think this novelist has blond hair and blue-eyes because such authors sell more than brown-haired and brown-eyed people with brown skin. The people who read most are actually in their 50s and they are retirees and they are generally white. It sucks. But sometimes you got to whitewash yourself a little bit to get a little bit farther."*

Participants used pen names to protect their real identities. For our white identifying writers it was a perception of stigma attached to romance books and their desire to keep that away from friends, family, and their employers. In addition to avoiding stigma, novelists of color, however, may not reveal their identities because they feared marginalization and being not picked by the readers. The same was true if a novelist does not have an English-sounding name (e.g., Eloisa, Mary, Sarah, or Victoria) as such names may not be "romantic enough" [147]. Usually, British names were favored; nothing ethnic beyond Irish or Scottish. Kathy said *"I am a woman of color and I am Muslim. I have a very ethnic name. My readership is white, middle-class, republican, Christian, women who prefer their authors to be white, middle-class, Republican, Christian, women."* Kathy used an English-sounding pen name to conceal her identity

of being a woman of color and Muslim. She was single, parenting three toddlers. She added:

> "This [writing romance novels] is my income and I cannot afford to really experiment and play around. Like I know a couple of sisters [fellow novelists], who are women of color and use their name, but they got husbands at home and a second income. I cannot really afford to play around like that."

Researchers have also noted that male romance novelists write novels using a feminine-sounding pseudonym [126, 144]. For example, Tom Huff, one of the most successful romance novelists, wrote under the pseudonym of Jennifer Wilde.

Although novelists maintained their separate professional identities online, they were aware of the digital traces that can be easily tracked and linked to their real identities, as Isabel said:

> "Readers can be able to find your real name if they want to anyway. Stacey Abrams [pen name: Selena Montgomery] wrote several romance books under a pen name. Once she got onto the national stage, I think that became pretty well, pretty quickly, despite the fact that she had a pen name."

Our participants who identified as non-white also saw how pseudonyms reflected the racism within the romance industry [69]. Their use of pseudonyms made relational labor difficult as they were unable to go live and post pictures of themselves in order to conceal their identity, just like their white peers could. For example, Serena said *"I do not have a picture because I am and I look Latina. Along with a pen name, I picked what is called a logo and that is what it is on all my things [online]. So, readers do not find out what my ethnicity really is because they care about it."* While the romance industry continues to tackle racism [69], participants of color felt the impact, losing opportunities to build and maintain relationships with their reader base that facilitate online book sales in a large way.

4.3 Laborers of Publishing Online

We found that new workers had emerged, assisting the novelists with self-publishing online. Some workers provided paid assistance and were employed, working on a specific task for a certain duration of time and getting paid for their work. Other workers provided unpaid assistance and were part of the novelists' social network of family members and friends and even readers. This ecology of paid and unpaid workers made it easier for novelists to leverage online technologies to self-publish their novels.

4.3.1 Paid Workers. Participants reported that they paid people to help them with novel production. Unsurprisingly, some of these functions were those that publishing houses once performed in traditional publishing, such as cover design, translation, and editing. For example, some participants used a single editor to make multiple passes, while others used a sequence of different editors. Participants also differentiated between content and development editors. A content editor *"give[s] you feedback of things that may not be working in your story,"* as Alexis told us. A development editor helps with plot development, the story arc, and overall narrative structure *"to make sure that the story is tight and cohesive,"* as Blair mentioned. Hiring editors independently meant that novelists were

not contractually bound to incorporate the editor's feedback but could instead choose to do so. Jenny said:

> "She [the editor] gives suggestions for polishing it up. I actually probably only take about 50% of her suggestions. Sometimes she changes the meaning of how I meant to say it and sometimes she gives a suggestion and I won't take."

Authors also hired cover designers, translators, as well as people who reflected the importance of social media in sales such as book bloggers who posted book reviews on different online platforms, and managers who placed online advertisements. These workers, part of the gig economy, were hired to provide assistance with specific tasks for a certain length of time. Some novelists hired a few workers, others hired many more. For example, best-selling novelists we interviewed had an entire team of workers. Moira, who had several best-selling novels, said that she had *"30 contractors who work with me on production, editing, formatting, graphic design, social media, legal affairs, business affairs, financial management, and more."* She told us about how such gig workers helped her with self-publishing online, saying:

> "I contact them when I need them. So it is episodic. I am not literally juggling 30 different people every week. I can go two years without contacting somebody and say: 'hey, I have a new book in that series or hey, we are putting the series into French, can you take the English covers which tested well and put these French titles on them.' But I have daily contact like with my assistant, who lives in Florida."

While editors and other workers were hired episodically, some of our participants also hired an administrative assistant who supported them remotely. Some authors hired assistants to focus on a specific part of the process, others hired assistants to support the entire process. For example, Taylor hired someone to manage social media. She reported, *"My assistant is in charge of all my social media. I do not do those posts anymore. I go interact with my fans in my group, but I pretty much stay off social media because it is a time suck."* However, Jenny sought help for the entire process. She asserted, *"My virtual assistant takes over all the stuff that either I hate to do or I procrastinate doing, so it gets done."* The main reason for novelists to hire these virtual assistants was to avoid doing the routine, repetitive work needed to publish their novels online. Alexis said:

> "Virtual assistants can take some of the clerical or repetitive tasks that take your time away from writing. I would not be as successful without her [assistant] because she really helps me keep a lot of the balls in the air. She does a lot of the things that drive me nuts and does them excellently."

Some novelists shared assistants, with the assistant helping multiple authors at once. This worked because the writers were in different phases of novel production and had different needs.

4.3.2 Unpaid Workers. Given the absence of the human infrastructure when self-publishing, it is perhaps not surprising that our participants hired help with some of the functions. We noted that beyond paid assistance, participants relied on unpaid workers to

provide a variety of services. Some sought assistance from family and friends to navigate online self-publishing. Moira, who sought her husband's help, told us that, *"There is one system for KDP [Kindle Direct Publishing], but we have this other account on Author Central. You do not upload books. You do not sell books through it. But it is where you control your biography, your author photo."* She added, *"There is some problem in their system, where every time I upload a new version of a book, it overrides my book description, and I have to go into this whole other piece of software and reformat my book description."* Moira's husband, a software developer, helped her to understand the issue. He also created web tools that Moira could leverage to navigate online platforms for publishing. Moira said:

> *"There are certain things online that are not intuitive and there are certain things that happened that are indicative of really bad spaghetti code. He [the husband] was able to help me in the early days with things like formatting my books so that they have to be formatted a certain way. When I started, there were no software programs to do that for you. Now there are, but in 2011, there were not. So, he would create custom pieces of software help me, like a dashboard for tracking sales."*

Other participants received help from friends. For example, Taylor told us about her music composer friend who assisted her with creating audiobooks. She said, *"He [her friend] narrated some of my audiobooks. He had the recording software and hardware to do that and make quality recordings."*

We found that three groups of readers were another source of help to our participants: "alpha readers," "beta readers," and "advanced review copy (ARC) readers." Alpha readers reviewed an early draft of a story. They were usually a close friend or family member, but could also be a fellow novelist. Participants sought their assistance with ideas, relying on the Alpha reader to understand the genre, the author's style, and any previous world development in which this new story was set. Penelope told us:

> *"Alpha readers see very early bits and pieces of the story and they kind of help direct it along. They would look at it and say, 'well, you know, that does not really make sense' or 'I need to know more about the motivation of this person, why are they doing what they are doing'."*

Beta readers helped novelists with editing once the first draft had been written but before it was sent to an editor. Beta readers were usually enthusiastic readers who had expressed interest in helping a writer in exchange for reading an early draft of the forthcoming novel. They examined how a character developed, how different parts of the story were tied together, or as Melody mentioned *"if the pacing is engaging and where is the story getting bogged down."* Finally, ARC readers got a post-edited version of the novel shortly before the release date. ARC readers played two roles, another editing check and digital marketing, as Kathy said:

> *"ARC readers are getting final copies. Every so often they catch any of those small typos, or things that have slipped through the cracks, that can still be corrected because no matter how many sets of eyes go through a manuscript, there is always something that escapes. They also run all over social media telling everybody to buy it. I give ARC readers my books and three places*

> *to post reviews so that it is easy for them to go leave a review. That is another way of marketing. It is like, person-to-person marketing."*

ARC readers created attention for novel releases via social media. All our participants, who had been publishing for over two years, perhaps enough time to establish a strong readership, had the ecology of alpha, beta, and ARC readers assisting with publishing. They emphasized the importance of having this ecology; for example, Serena reported:

> *"A reader only sees what is on the page, not what is in your head. So if a reader is only seeing what is on the page and not what is in your head, you need to make sure you have been able to convey all of that in the story. That is why you need an outside person to read it. Because they do not know what is in your head."*

In addition to email or mailing lists, various online platforms have emerged to support authors by distributing pre-publication versions of their books to these readers. These platforms involved subscription-based platforms, such as Patreon, which emerged to capitalize on the assistance that readers provided novelists in which *'"superfans give money every single month and in return, they get to read the new chapters as I write,"* Jenny asserted. However, except for one, none of our participants used such platforms because they preferred a non-monetized relationship with their superfans.

Finally, one participant talked about the role of social media influencers, who might not have any professional or personal connection with the novelists, in marketing. The influencers liked, commented, and also shared the novelists' posts on social media which boosted the marketing algorithm, as Penelope described:

> *"There is one guy on Instagram, [hikeWithJohnDoe]. He sells products for hiking. Months ago everything I posted he started to like and comment. Likes and comments are what boost the algorithms. So, I started doing the same thing for him. We have now become a little tag team. That is really part of the game because again posts and boosts reach and it just widens the net to allow other people to see it."*

While the unpaid assistance that family members and friends provided to novelists was not reciprocated or at least we did not observe that in our study, the assistance that other unpaid ecology of workers, not from the personal network, offered was reciprocated in ways beneficial to all involved. For readers, it was getting access to earlier version of novels before they become publicly available.

5 IMPLICATIONS FOR DESIGNING DIGITAL LABOR PLATFORMS

We now discuss the findings, situating them in HCI scholarship on digital work, to reflect on the practices and demands of self-employed digital workers. We suggest implications for designing worker-centered labor platforms toward a more sustainable, collective, and inclusive future(s) of work.

5.1 Facilitating Integration and Intermediation

Many HCI researchers have suggested increasing the functionality of various contemporary digital platforms, including social

media, that workers use for work [36, 52, 107, 119]. Our findings suggest that we might want to (re)consider the incorporation of technologies that have existed for a lot longer. For example, all our participants worked hard to grow and maintain a dedicated reader base—superfans. They used social media and even paid advertisements. They sent e-newsletters to market their novels and the novels of their fellow writers. Participants' efforts also moved beyond contemporary digital technologies, and even beyond the technological landscape. They sent physical postcards and attended in-person book signing events. They used well-established digital communications, but also retained a focus on non-digital forms of communication. Our participants reminded us that while we, as HCI and CSCW researchers, designers, and practitioners, often focus on designing a novel innovative digital experience, more traditional approaches to community building are equally or more crucial to account for, especially when the system supports collaborative work beyond that conducted online. As we design technologies for collaborative work, we could consider designs that integrate the management of social media alongside email and printing hardcopies to support creative workers in facilitating the totality of their outreach to consumers. Collaborative work might be supported through a multiplicity of components that require bridging, integration, and articulation to work together. By bridging high-tech and low-tech solutions, we can support the totality of their work, rather than compartmentalizing online from offline.

High-tech–low-tech integration could provide some level of security to the novelists, especially when they face challenges, such as algorithmic moderation, that high-tech running on algorithms are usually prone to. However, care could be taken in facilitating this integration as it might put a burden on workers, especially on those who lack high technological literacy, to navigate such integrated, oftentimes algorithmically-mediated systems, while managing their non-technology-mediated work practices. As we design for integration, we could critically examine the degree of integration required and limit designs when the implication might be not to integrate certain work practices. In such cases, we can, for example, ask if the high-tech we envision could be replaced by an equally viable low-tech tool, as Baumer and Silberman [8] have suggested.

Our insights highlight the ecology of workers that emerged to assist novelists, from gig workers, such as editors and cover designers, to friends, family, and readers. These intermediary workers supported our participants, helping them secure their livelihood, despite the precarity of online work. As we design digital labor platforms, we could take a broader ecological perspective [7] that supports intermediary workers "out there" [146], providing critical labor. This would necessitate a further understanding of the many ways in which intermediary workers assist workers to perform their work successfully in order to support such intermediation digitally towards a more collective future(s) of work.

We found that intermediary workers can be compensated differently. Some workers, who assisted the novelists, were paid but others were not. Some got paid as financial compensation, but others got paid in non-monetary terms. For example, readers who assisted the novelists were given copies of books before the publication as compensation for their work. In addition to reading the story before the public, they got to build a relationship with the author. Our research suggests a range of economic relations beyond paid labor

that could be taken into consideration when designing digital labor platforms that support compensation via material commodities—a good meal, love and appreciation, pride, or a sense of self-worth. This recalibration might be one approach to addressing the concern on digital platforms, such as increased precarity [55], by exploring alternatives that lead to collective digital workspaces.

Temporality also matters for workers [154]. Intermediary workers work at different lengths of time (e.g., specific tasks versus longer periods) and at different tempos (e.g., how often they were hired). Researchers have focused on dimensions of this temporality including flexible work schedules, time management, and efficiency [127, 133]. Our research shows how temporality matters in the design of digital work platforms for intermediary workers as well. We found that some workers, working for longer lengths of time (e.g., virtual assistants) managed others (e.g., editors, cover artists), who worked on a specific task for a certain amount of time. HCI researchers have focused on the power relations between employers and employees in digital labor platforms [82, 92, 117, 141]. Our research suggests examining temporal hierarchies within and across the gig work and how such temporal activities might be experienced as well as conducted.

5.2 Foregrounding Algorithmic Moderation

Digital technologies provide agency to self-employed workers to perform their work without being dependent on traditional infrastructures [97]. For our participants, online platforms provided them with a managerial, creative, financial, and informative agency; however, at the same time, digitalization introduced moderation, with algorithms acting as "technical arbiters" [45] embedding themselves "into a labor relation" [127], influencing novelists' work practices. Some scholars have argued that algorithms lack intention and therefore cannot produce biased outcomes [114]. Such arguments, however, dismiss intended [26, 122] or unintended [86, 92] consequences of algorithmic moderation on workers and their work, especially when algorithms make subjective decisions without "anchors or correct answers to check with" [150]. Algorithmic moderation demonstrates that algorithms online are not "neutral" or "objective." They reflect the socioeconomic and political values of the organizations that design them [44, 75], like when Amazon's marketing algorithm did not allow authors to advertise their novels. When making algorithmic moderation more transparent, designers might focus on digital infrastructures, i.e., the information technologies and organizational practices, values, and structures that embed themselves in algorithms as well as the facilities and services important for an enterprise to function. They could also examine the values of developers and investors that might have shaped the structure and working of algorithms. However, algorithms usually evolve over time and their standards are (re)defined. Designers can study algorithms as dynamic entities, changing over time, place, discourse, and community by taking a more longitudinal approach.

Authors recognized that platform designers have built algorithms that prioritize profit maximization. Participants developed this awareness through repeated use of platforms [16, 67, 142] and also when algorithms produced unexpected results, such as moderating content inappropriately [25, 36, 107]. Our research suggests that while writers felt the presence of algorithms they still needed

help understanding why algorithms operated the ways they did. Designing for algorithmic comprehension and transparency seems crucial to supporting online work. A worker-centered design approach could empower workers by giving them choices in how to engage with algorithmic moderation. The design could include feedback mechanisms to help workers understand how their actions are being controlled online, as Eslami et al. [52] have suggested.

Our study participants also wanted platforms that had no algorithmic moderation. They used mainstream online platforms to reach readers while reverting to traditional publishing when even heavier moderation was not an option. By centering workers in the design of digital labor platforms [59], we might gain richer insights into their working patterns to design systems supporting their work and creating a more sustainable future(s) of work. Doing so may provide opportunities to prepare workers against the practices that trigger algorithmic moderation and support them in forming a much deeper understanding of how to situate their work practices alongside algorithmic systems.

5.3 Supporting Post-Capitalistic Values

Digitalization of work may introduce new forms of labor that workers have to perform without the support of traditional work infrastructures. As novelists moved to self-publishing online, they conducted relational labor of building stronger connections with their readers, maintenance labor of collaborating, cooperating, and providing interpersonal support to each other, and identity labor of managing their identities online. However, digital labor platforms are often designed around the needs of the job rather than those of the worker, and barely around their labor [34]. As we design such platforms, particularly to support self-employed workers, we could consider how the design can facilitate the diverse forms of immaterial labor that workers perform online, independently and collectively. We could create technologies, for example, a visualization tool, that can foreground the often invisible immaterial work that digital workers, working more or less solo, perform, just as Dhaundiyal et al. [42] did to make domestic work visible to "provoke and thus enable reaction, reflection and hopefully subsequent change in the society."

The platform economy reconfigures human labor online instead of replacing it [51]. We found that platforms introduced new (to the workers) forms of labor and sometimes new types of workers. Our insights suggest a link between the economic system and work practices, with the platform economy exerting control over workers rather than granting them autonomy over their work. Tasks such as editing and marketing was pushed to readers with authors engaging in relational labor to manage this work. While novelists benefited from this work via book revenues, the platforms also got value from the (heteromated) labor [51] and not returning profits amassed from the production of user data via tagging, sharing, liking, commenting, and so forth which is subsequently sold to other companies [62]. Platforms, such as Patreon, have emerged to explicitly monetize the writer-reader relationship. Our participants were aware of how these platforms operated but they also understood that those platforms owned huge shares of their actual and prospective markets. The result was often a virtuous circle leading to a winner-takes-all market, as we noticed with novelists

using Facebook primarily because their audience was on it which reinforced the centrality and monopolistic nature of the platform.

The economic agendas of the corporations whose platforms we leverage in the design of digital labor systems have not been a central topic for HCI research, perhaps for sociopolitical reasons [48, 49]. Instead of taking it as a foregone conclusion, questioning how the platform features can be designed to benefit workers as much as they do the growth of the platform economy could lead to better designs. We could acknowledge that the presence and growth of digital platforms supporting online labor markets are premised largely on neoliberal market mechanisms [1, 143]. Platforms have become central to market economies, so asking questions about whether they promote competition over cooperation, or whether they perpetuate aspects of a market that are not necessarily the only, let alone the best way, to operate [5]. We can consider designing features that help workers understand how their marketing practices are being controlled by online platforms and, in turn, how their practices shape the working of online platforms and underlying algorithms. Doing so would assist us to think about ways in which we can design labor platforms that are not centered around neoliberal values but around care, reciprocity and mutual aid which form the basis of much work for self-employed workers.

Our study showed that competition among authors was much less pronounced than what traditional economic perspectives might suggest. Our participants helped each other with advertisements and promotions. They marketed each other's novels via their social media profiles, reader groups, and newsletters. They cooperated and coordinated rather than competing, as Larson [98] also found. Specifically, their acts relied on reciprocity, looking out for one another, while trusting that they would receive the same help in return when needed. While reciprocity is often seen outmoded and inefficient in the market economy [65], our participants considered it essential. Their cooperation challenges neoliberal discourses of individual success via a competition which posits a speculative challenge to designers to make platforms beyond supporting communities that are primarily using technologies "for the money" [17]

Our research adds to the argument that digital platforms could nurture worker cooperation via supporting community building. Creating mutual aid communities online is similar to the Turkopticon system that assisted Amazon Mechanical Turk workers by allowing them to provide ratings of employers to help each other pick the best tasks [85]. Taking reciprocity into account could help HCI design alternative future(s) of work in which workers are less vulnerable and isolated. Supporting a wealth of work relationships through design might require us to "de-couple design from its modern, industrialized roots so that it can be re-situated and re-conceptualized as a method, approach, mindset, and ontology, centrally grounded in respectful, reciprocal relationships" as Akama et al. [2] have proposed. Doing so would require us to form a deeper understanding of rewards and incentives, power and politics, and the digitally-mediated relationship between workers and their labor that could help us support a more collective future(s) of work.

5.4 Addressing Identity-Based Marginalization

Our participants of color described experiences of marginalization and managing their identity to appear white in order to appeal

to readers. They limited potential relationship-building with their readers to avoid the risk of revealing their real identity and consequently losing their audience. They could not use online tools to build the types of relationships as other (white) authors to recruit and maintain a loyal audience. While employer-employee power relations in digital work have been researched [92], our study highlights how certain identities, especially race, impact self-employed workers using digital platforms. Our findings echo Munoz et al.'s [119] insights that marginalized groups experience inequities in digital workspaces (e.g., wage disparities) despite the possibilities presented by digital platforms. As more work becomes digitized, it becomes crucial to understand what it means for workers who have historically faced marginalization and whether they are pressured to engage in identity management with their customers.

While white participants reported using pen-names to separate their writer identity from their personal one, our participants of color undertook much more significant identity management. In addition to adopting white-sounding pen names, they mentioned about how race influenced their story lines and characters. Digital platforms, and the need they create for writers to engage with readers, surface questions of how they become arenas in which some are excluded while others are privileged based on whether it is possible for everyone to engage equally (e.g. whether everyone can use video for conversations). In 2020 a romance writer called out racism in the community, an action for which she was censured and had her Romance Writers of America (RWA) membership cancelled [157]. This, in turn, outraged other members who ultimately forced RWA's leadership to resign [157]. Romance novelists continue to confront issues of racism within the community, and our research suggests another dimension to this reckoning, which shows how the tools writers use perpetuate or even exacerbate discrimination.

HCI has begun to identify how technologies can perpetuate marginalization [78, 93]; for example, seen when Google Photos labeled images of Black people as "ape" or "gorilla" [72], or how the compensation online freelance workers received was impacted by the race and gender of their profile pictures [73]. As we described, our authors of color talked about managing/hiding their online identity, which impacted their ability to create superfans and gain the security of a dedicated reader base to ameliorate some of the precarity of online work. These cases demonstrate that the design of digital workspaces is not exempt from critical conversation. Baumer and Silberman [8] have argued, and we agree, that "when we do build things, we should engage in a critical, reflective dialog about how and why these things are built." As we design labor platforms, we could critically consider that technologies may perpetuate marginalization that they attempt to address, as Ruha Benjamin [10] has suggested in "the New Jim Code" as well.

HCI has begun to identify how technologies can marginalize or oppress certain communities and people [10, 72, 78, 93]. By focusing on digital labor platforms this research is another voice for critical examination of how those technologies discriminate against some workers [10]. Explicitly identifying how digital labor platforms reproduce systems of marginalization is a critical step toward producing design guidelines that break that cycle. Design recommendations should include focusing on established platforms so that they better support self-employed workers of color. Designing for marginalized workers requires careful examination to tease

apart practices that perpetuate inequity while also maintaining and enhancing aspects of the work culture that employees find rewarding. We also need to ask what we do if, despite our best intentions, the systems we deploy continue to marginalize people. Finally, and following calls from others, we see this work also challenging us to ask when we should not design or apply technology [8, 156].

6 LIMITATIONS AND FUTURE WORK

The lack of gender and racial diversity among our participants reflected the lack of diversity in the larger romance industry, which is overrepresented by middle-class, white, cis-gender, women [66, 139, 158]. In 2019, for every 100 books published, people of color made up a mere 8 of these books [113]. In the survey responses, 100 authors self-identified as female and two as male; 24 participants did not identify their gender. Due to these imbalances, our work may not extend to ethnically, racially, sexually, and socioeconomically diverse novelists. We additionally acknowledge that North America was the contextual point of focus throughout and our study may not represent the experiences of novelists in other parts of the world. Despite these limitations, our discussions with authors outside of these demographics illuminated larger issues of marginalization experienced by those who do not fall within the demographic majority of romance authors.

Challenges that the novelists from marginalized communities face online demand attention. Future work can focus on forms of marginalization caused by sexism, ageism, ableism, classism, and colonialism in contexts different from our participants'. We can study experiences of the novelists from ethnic minorities, sexual minorities, and gendered minorities, with disabilities, or from geographically diverse contexts, such as from the Global South where social, economic, and political realities could be different or even contrasting. We could specifically examine novelists of color's attitudes with work digitalization and how it might disproportionately impact and marginalize them. We can ask (a) how their identity-based factors map onto their work practices online, (b) what additional forms of labor they have to perform for achieving successful professionalization and monetization via digital platforms, and (c) how they adjust and alter their existing work practices while adopting new practices to navigate digitally-mediated marginalization. As designers of work and workflows, systems and interfaces, as well as technologies and infrastructures, our work could suggest guidelines to build a more inclusive future(s) of work.

7 CONCLUSION

Our research focused on self-employed romance novelists who adapted to a changing set of work practices caused by digitalization. The survey and interviews, we conducted, highlighted the impact of digitalization on the romance industry and revealed how novelists altered existing work practices and created new ones to self-publish successfully. Digital platforms gave novelists greater control over publishing; however, they created new types of work for the novelists who sought new types of help from an ecology of paid and unpaid workers. Based on our findings, we recommended four implications for the design of digital labor platforms supporting self-employed workers: facilitating integration and intermediation, foregrounding algorithmic moderation, supporting

post-capitalistic values, and addressing identity-based marginalization. Our work contributed to an increased understanding of what self-employed digital workers, such as content creators (e.g., artists, influencers, podcasters) and digital entrepreneurs (e.g., freelancers, photographers), need from digital labor platforms to establish a more sustainable, inclusive, and collective future(s) of digital work.

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