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Navigating an Identity Playground: Using sociomateriality to build a theory of identity play

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Abstract

The construct of identity play, which involves the exploration and experimentation with possible future selves, is underexplored in organizational literature. To extend theory on identity play, we take a narrative inquiry approach and examine qualitative interview data in the context of virtual environments. Using a sociomateriality perspective, we contribute to theory on identity play in three ways. First, we reveal how identity play unfolds via the sociomaterial intertwining of not just human agency, but also material agency, situated work practices, and self-representations. Second, we offer a new definition of identity play that goes beyond the exploration of possible selves and uncover identity play narratives on the possible self, the improbable self, and the impossible self. We demonstrate how identity play, particularly with impossible selves, shapes *others*' experiences and thus has implications beyond the self. Finally, three identity play affordances emerged: plasticity of appearance, plasticity of behavior, and plasticity of perspective.

Keywords

identity play, possible selves, sociomateriality, virtual worlds

> I was meeting with ... some people about molecular modeling, so I had this avatar that was just a big caffeine molecule ... I said "I am caffeine" ... the contextual relevance of the avatar was always very playful ... I've always had a lot of fun with identity like that, trying to be playful and trying to have my identity somehow connected to the environment that existed. (Judge)

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Identity scholars have called for a better understanding of how identities are constructed and performed (Schultz, Maguire, Langley, & Tsoukas, 2012) in ways that go beyond the often-studied concept of identity work (Alvesson & Robertson, 2016). Identity answers the question, "Who am I?" and offers "a general, if individualized, framework for understanding oneself that is formed and sustained via social interaction" (Gioia, 1998, p. 19). An underexplored, yet crucial, element of identity construction is identity play, or the "crafting and provisional trial of immature (i.e., as yet unelaborated) possible selves ... concerned with inventing and reinventing oneself" (Ibarra & Petriglieri, 2010, pp. 13–14). This definition suggests that identity play can be a central process in identity construction, as it involves rehearsing "a variety of possible selves" in exploration, rather than performing an identity to strengthen it or attain a goal (Ibarra & Petriglieri, 2010).

Despite its role in identity construction, identity play has received little attention. Indeed, much of existing research on identity explores "identity work," or "people's engagement in forming, repairing, maintaining, and strengthening or revising their identities" (Ibarra & Petriglieri, 2010, p. 10; Snow & Anderson, 1987; Sveningsson & Alvesson, 2003). However, recently scholars have been re-evaluating this focus on identity work, questioning "whether '*work'* is always a good word to use in relation to identity" (Alvesson & Robertson, 2016, p. 12). To create a counterpoint to identity work, Alvesson and Robertson (2016) propose the idea of teflonic identity maneuvering, where rather than engaging in identity work in response to identity threats, individuals simply deflect issues of identity. By moving beyond protecting (via identity work) and deflecting (via teflonic maneuvering), identity play offers significant potential as a generative approach to engaging with identity that shifts the focus from validation to discovery.

Identity play unfolds in the liminal threshold between fantasy and reality, involves suspension of the rules, and requires a safe psychological space that allows an individual to explore self-concepts without fear of judgment (Ibarra & Petriglieri, 2010). A liminal space is one where a person or place is "bracketed from yet connected to everyday action in the organization" (Howard-Grenville, Golden-Biddle, Irwin, & Mao, 2011, p. 522), such that individuals can break free from institutional constraints of both space and time and experiment with new behaviors and identities (Bucher & Langley, 2016; Furnari, 2014). Liminal spaces reflect the realm where "possibility and the ambiguous—the simultaneous presence of the familiar and the unfamiliar, the existing and the new—not only prevail, but are heightened" (Howard-Grenville et al., 2011, p. 525). In organizations, such safe haven conditions may include off-site meetings or sabbaticals.

Theory on sociomateriality provides an important lens through which to gain deeper insight into the construct of identity play, as it purposefully takes into account the material, a critical dimension of liminal space and identity processes. Leonardi (2012, p. 29) describes the material as the ways in which "physical and/or digital materials are arranged into particular forms that endure across differences in place and time" and include examples such as the human body, the keyboard upon which someone types, or a digital meeting room. Scholars have identified the "need ... to ensure that analyses of identities take adequate account of the socio-material conditions within which they are produced" (see Brown, 2019, p. 17). The sociomaterial perspective suggests that the social and material cannot be understood in isolation from one another (Orlikowski, 2007; Orlikowski & Scott, 2008), being so inextricably intertwined that they shape one another, an idea captured by the term "mangle of practice" (Pickering, 1993; Orlikowski & Scott, 2008). While organizational scholars have begun to explicitly include the material (see Boxenbaum, Jones, Meyer, & Svejenova, 2018), studies of identity rarely take the material into account (see Mazmanian, 2013; Symon & Pritchard, 2015; Turkle, 1995, for notable exceptions). Furthermore, while we know from research in immersive environments that individuals may "play" with expressing ideal selves (Gal, Jensen, & Lyytinen, 2014; Schultze, 2014), there has been little focus on understanding the process of identity play, whether it might extend to self-concepts beyond the ideal self, and what the outcomes

might be. Thus, we have neither a complete understanding of the construct of identity play nor a comprehensive understanding of how identity play unfolds. To this end, we broadly ask: W*hen viewed through a sociomaterial lens, how does identity play unfold?*

We explore this question using narrative inquiry to analyze identity play in the context of a virtual world. Virtual worlds are three-dimensional computer environments in which individuals can generate a customizable versions of themselves (i.e., avatars) to represent themselves graphically and interact with others. Immersive work technologies, such as virtual worlds (Schultze, 2014), can be regarded as liminal spaces (Garcia-Lorenzo, Donnelly, Sell-Trujillo, & Imas, 2018) where both the social and material are malleable in ways that are not common in the non-digital world and thus could provide a context for identity play. This study adopts a sociomaterial perspective (Orlikowski, 2007; Orlikowski & Scott, 2008) combined with theory on identity play (Ibarra & Petriglieri, 2010) as its theoretical foundations. We draw on interview data from individuals conducting work in a virtual world to examine the identity play that was produced in a sociomaterial mangle.

We make three contributions to theory on identity play. First, in using a sociomaterial perspective our study reveals a rich picture of how identity play unfolds that includes the intertwined action of not just human agency, but also of material agency, situated work practices and self-representations. Second, we expand the definition of identity play to go beyond exploration of possible selves and uncover three identity play narratives centered on the *possible self*, the *improbable self*, and the *impossible self*. Improbable and impossible selves foster learning and growth through exploration of selves that are unlikely to ever be taken on permanently. With these narratives, we demonstrate that identity play can shape others' experiences, and thus has implications that go beyond the self. Finally, from these narratives, three identity play affordances emerged: plasticity of appearance, plasticity of behavior, and plasticity of perspective.

Conceptual Framework

Identity play

We take a social psychological perspective on the self, such that the self is multifaceted and cognitively constructed of multiple self-representations (Baumeister, 1998; Higgins, 1996). From this theoretical perspective, in addition to the actual self, the self includes ideal selves, ought selves, past selves, and future selves (Obodaru, 2012). Self-representations are "attributes the person sees as self-descriptive and can be either self-definitions that describe the person as they are currently (e.g., humble, teacher, mother) or self-comparisons that describe aspects of the self that do not currently define the person (e.g., past self, possible self, ideal self)" (Obodaru, 2012, p. 36).

Identity play, as it is currently conceived, involves the "engagement in provisional but active trial of possible future selves" (Ibarra & Petriglieri, 2010). Possible selves are "the images one has about who one might become, would like to become, should become, or fears becoming in the future" (Ibarra & Petriglieri, 2010, p. 11; Markus & Nurius, 1986). Identity play is distinct from identity work in important ways. Primarily, identity work is driven by goals and objectives to obtain external validation or internal coherence for an existing identity, whereas identity play is concerned with experimentation, enjoyment, and discovery in order to invent or reinvent oneself (Ibarra & Petriglieri, 2010). During identity play, though individuals may rehearse many possible selves, they may never be fully adopted. Whereas identity work unfolds in a more immediate sense (i.e., the here and now), identity play unfolds at the threshold between fantasy (i.e., possible selves imagined) and reality (i.e., concrete possibilities). Furthermore, as experimentation promotes the experience of positive emotions, which in turn foster creativity (Isen, Daubman, & Nowicki, 1987),

identity play may have a unique capacity to support ongoing generative creativity. For example, Shepherd and Williams (2018) theorize that identity play may facilitate recovery after the loss of a work identity.

Of the limited research that exists on identity play, a small subset engages in an empirical examination of the construct. In one example, Savin-Baden (2010, p. 26) examines experiences of learning and teaching in a virtual world, finding that individuals experimented with their avatars in order to extend identity repertoires (i.e., identity tourism), embody a "left behind identity" (i.e., changelings), or transform into a different persona altogether (i.e., shapeshifters). While this research suggests some intentions for identity play, it does not illuminate *how* identity play unfolds, nor how the human and material intertwine in the process. Other research examining identity in virtual worlds focuses on experimentation with alternate cultural identities (Diehl & Prins, 2008) and the constraints and costs of such experimentation, such as a loss of trust from misrepresentation (Boon & Sinclair, 2009). Overall, we need to better understand how identity play unfolds—inclusive of human and material agency.

Sociomateriality and identity play

We combine a social psychological perspective of self with a sociomaterial perspective to study identity play where "material means are not so much tools to be used to accomplish some tasks, but ... are constitutive of both activities and identities" (Orlikowski & Scott, 2008, p. 455). In our view, each different self-representation may itself be sociomaterially constructed. Research into affordances, or "how the materiality of an object favors, shapes, or invites, and at the same time constrains, a set of specific uses" (Zammuto, Griffith, Majchrzak, Dougherty, & Faraj, 2007, p. 752), has demonstrated the unique interweaving of technology in identity processes, including via the expression of ideal selves (Gal et al., 2014; Schultze, 2014). However, affordances are not "unvarying indicators of capacity for action. The capacity for action comes from the enmeshing of material affordances, human understanding, situated practices and cultural discourses as a sociomaterial assemblage" (Symon & Pritchard, 2015, p. 244). A sociomaterial perspective, including the construct of the sociomaterial assemblage, is one approach that allows us to take into account affordances and the interweaving of context in the process of identity play. Specifically, identity play occurs among individuals during the course of their day-to-day actions inside their organization in order to accomplish work, which we refer to as situated work practices (Alby & Zucchermaglio, 2006; Parmigiani & Howard-Grenville, 2011). In our study, "the term 'practice' distinguishes the abstract from the real ... connotes the taking of action ... particularly repeated and rehearsed action" (Schultze & Boland, 2000).

We build on Pickering's (1993, 1995) theory of sociomateriality, which captures the dynamic nature of the sociomaterial assemblage. Pickering describes the "dance of agency" (Pickering, 1995, p. 21) that occurs as social and material agencies intertwine in a recursive tuning process whereby no one element can be known in advance, but rather are "mutually and emergently productive of one another" (Pickering, 1993, p. 567). These constructs capture the idea that, for example, while an individual may intend to put on clothing that represents a new identity, the clothing may not fit or may be interpreted by others to represent an identity very different from what the focal actor intended. The individual may then adjust the clothing or the identity they seek to take on in a process of resistance and accommodation (Pickering, 1995).

Recent research underscores the value of using a sociomaterial perspective to study identity. For example, start-up entrepreneurs constructed identities of "rock star, vital entrepreneur, and buddy," in which the role of sociomaterial agency in this process strengthened the individuals' attachment to their organizations (Katila, Laine, & Parkkari, 2019, p. 1). Additionally, Mazmanian (2013)

examined lawyers' adoption of smartphones for work and found that as individuals incorporated these devices into their work practices, identity threats emerged that challenged the lawyers' sense of their professional selves. Symon and Pritchard (2015) also examined the use of smartphones and the sociomaterial performance of identities, and found that connection to work colleagues can be seen as a sociomaterial assemblage that performs being contactable and responsive, involved and committed, and in-demand and authoritative. From this research, we see that individuals' identities can be sociomaterially constructed, performed, and threatened, yet these studies do not address questions around identity play.

Methods

We used narrative inquiry (Andrews, Squire, & Tamboukou, 2013; Clandinin, 2006; Clandinin & Connelly, 2000) to examine our research questions using interview data from individuals conducting work in a virtual world, Second Life. Orlikowski and Scott (2008) recommend narrative inquiry to study how the social and material are intertwined, and scholars have fruitfully employed this approach (see Czarniawska, 2011; Rhodes, Brown, & McIntyre, 2006). Narrative inquiry has been used across disciplines (see Clandinin, 2006, 2016) and is an inherently story-based approach, where researchers collect stories that reflect how participants experience the world. While the scope of narrative inquiry can vary significantly (Andrews et al., 2013), in this study we focus on specific events rather than identity development over the life course. Specifically, we unpack patterns of identity development around key events that emerged as individuals accomplished work in a virtual world.

Virtual worlds offer an extreme case (Eisenhardt, 1989) of a liminal space, which uniquely enables our direction of inquiry. Second Life is a highly malleable environment whose culture and materiality encourage experimentation. This research setting thus may provide a context where identity play is encouraged and facilitated (Savin-Baden, 2010), making more visible our construct of interest (Eisenhardt, 1989). While identity play may be more visible in a virtual world setting, identity play can occur in a myriad of less extreme settings (see Kark, 2011; Kets de Vries & Korotov, 2007). Initial study participants came mostly from the educational sector, with additional participants from the software industry. To generate our sample, we began by sending a blanket email to our professional networks in the Second Life Education Listserv, Linden Lab Community Stewards, and the Second Life Community Conference. This allowed us to recruit individuals from a variety of workplaces deeply immersed in work in a virtual world.

We then used a snowball sampling approach, asking the initial participants to recommend others conducting work in Second Life. There were common themes regarding the types of work practices participants engaged in within the virtual world, including making presentations to groups, working with teams, and building prototypes of tools and environments to aid collaboration and learning through engagement. Participants' organizations sanctioned the work being conducted in Second Life. For example, several interviewees were professors at universities and were officially assigned to teach classes in Second Life; one participant was a senior scientist at a museum and was tasked with creating museum exhibits inworld to extend the museum's reach to a wider audience; and in another case a participant was a community builder at a software company and was tasked with building communities in Second Life to support the company's user base.

A total of 25 interviews lasting between 60 and 90 minutes were conducted with 14 participants. Interviewee characteristics including gender, age, title, and industry are summarized in Table 1. We conducted approximately two interviews per participant at different points in time to cover topics of interest within one to two hours while avoiding participant burnout. Only one interview was

Table 1. Characteristics of Individual Interviewees.

Interviewee	Pseudonym	Number of interviews	Gender	Age	Title/Industry
1	Sandstone	1	F	38	Director, technology/higher education
2	Fiona	2	F	34	IT analyst/higher education
3	Esme	1	F	39	Lecturer/nursing education
4	Astro	2	F	44	Asst. professor, Spanish/higher education
5	Esther	1	F	40	Asst. professor, counseling/higher education
6	Blossom	1	F	52	Asst. professor, digital arts/higher education
7	Artimus	2	M	48	Director, technology/higher education
8	Kobe	2	M	46	Director, technology/higher education
9	Archer	2	M	33	Consultant, instructor/higher education
10	Dover	2	M	39	Professor/higher education
11	Plato	3	M	61	Scientist/museum
12	Enrique	2	M	41	Director, technology/higher education
13	Judge	3	M		Community developer/software industry
14	Dudley	1	M	60	Graphic designer/software industry
Total		**25**			

conducted for five of the participants due to scheduling constraints; however, in two cases we conducted a third interview.

We used two interview protocols—one that focused on work conducted online, and one that asked about identity in virtual environments and how this related to their work (see Appendix A). During the first interview, we asked interviewees to walk us through several examples of the types of work they routinely engaged in while "inworld," and about what tools were used in this work, why they were used, what challenges they faced, and how their work evolved over time and across situations. Interview questions such as "How might this work change from situation to situation?" and "How ... have you modified these actions to adapt to a new situation?" triggered responses from participants that reflected the contextualized and situational nature of the work conducted. We used the term "routines" in our interview protocol to trigger discussion around our participants' regular patterns of work; however, in our analysis we use the term situated work practices, which reflects a more practice-based approach to routines.[1] The second protocol focused on identity processes, such as how the participant developed their avatar, how they expressed themselves online, and whether and how their work inworld affected their sense of self. Conducting two separate interviews allowed us to identify follow-up questions that could be addressed in the second interview. When only one interview was possible, a combined and condensed version of both interview protocols was used.

All interviews were conducted by two authors inworld in Second Life (SL). A narrative inquiry approach involves "engaging with participants through telling their stories or through coming alongside participants in the living out of stories" (Clandinin, 2006, p. 47). For each interview, the two authors joined the participant inworld and watched as the interviewee demonstrated work practices. One author had four years of experience in SL and was an expert user of virtual environments. For the interviews, this researcher used a unique and highly stylized avatar that did not conform to traditional norms of beauty (a gargoyle body with tattoos on his head). The second author who participated in the interviews was, in contrast, new to virtual worlds and used a female "off the shelf" avatar which any experienced SL user would recognize as being standard issue.

Taking this approach allowed us to ask questions about identity from both an experienced SL member and a beginner's perspective. During the interview process the inexperienced author often asked follow-up questions (e.g., "What do you use this for?") that an experienced SL member would take for granted, while the experienced author knew the specialized language to use for follow-up questions (e.g., "What alts [alternative avatars] have you created?").

The majority of our interviewees had a significant amount of experience using virtual worlds. Virtual worlds require time, effort, and motivation on the user's part to learn and fully engage with the tool (Stanko & Richter, 2011). Not all users are willing to dedicate the time and effort needed to move up the learning curve. This attrition may shape our sample in that those who continue to use the virtual world may be more open to technology and more willing to experiment with virtual tools and identity. It may also mean that we see fewer examples of identity play "failure" where individuals were unsuccessful in their attempts to experiment with new identities.

Data analysis

To analyze our data we began with multiple iterations of open coding (Andrews et al., 2013; Clandinin, 2006; Clandinin & Connelly, 2000). Interviews were recorded, then transcribed and imported into NVivo qualitative analysis software. Each author read the interviews and coded themes that emerged. Multiple rounds of coding were conducted, with the authors comparing codes in each round to ensure consistency. After each round, the research team discussed codes and emergent themes. In the first round, coding focused on identifying fundamental levels of nodes (categories). In the second round, we condensed nodes into themes, and in the third round we identified aggregate dimensions. For example, early coding generated nodes *changing avatar appearance* and *changing avatar clothing*, which later converged into the theme *plasticity of appearance* and the aggregate dimension of *identity play affordances*.

In the early rounds of analysis, we coded the data without preconceived notions of what the codes should be. This allowed us to keep an open mind about emerging themes. In our final rounds of coding we used a narrative inquiry approach where we coded for sociomaterial constructs, including human agency, material agency, situated work practices, and self-representations and clustered these codes into overarching narratives of identity play. For human agency, we coded excerpts that reflected decisions our participants made (e.g., choosing to adopt a female avatar) while material agency was coded where the material enabled, facilitated, or forced individuals down a particular course of action (e.g., SL forces choice of gender). Excerpts that reflected work being conducted (e.g., working with faculty to design online classes) were captured with the situated work practices node. Self-descriptions and self-comparisons were coded as self-representations.

The narrative inquiry approach allowed us to capture clusters of codes around experimentation with identity and tell more nuanced stories that captured the enmeshing of sociomaterial constructs. Using this approach, we saw three overarching identity play narratives emerge involving possible, improbable, and impossible selves. Our coding revealed 41 instances of identity play narratives across participants (19 narratives around impossible selves, 13 around possible selves, and 8 around improbable selves). When we looked across the narratives, we also saw three types of identity play affordances emerge, including *plasticity of appearance, plasticity of behavior*, and *plasticity of perspective.* Within the three narratives around identity play, we examined the intertwining of human agency, material agency, situated work practices, identity play affordances, emergent self-representations, and interactions with and reactions from others.

Interviewees often made a distinction between the "real" and the "virtual" world. This is antithetical to a sociomaterial approach where the social and the material are inextricably intertwined;

however, this is a commonly made distinction by users of virtual worlds. In our analysis, while we retain the use of these terms in our quotes in order to preserve data integrity, we do not make this artificial distinction in our theoretical interpretations. In our own analyses, we use the terms virtual world or inworld, versus offline, to distinguish the context in which the main action is occurring.

Findings

In addition to the narrative around possible selves, which are an established focus of identity play (Ibarra & Petriglieri, 2010), we found a second key narrative of identity play included experimentation with *improbable selves*, which we define as selves that are possible but highly unlikely to ever become part of the actual self, and a third type of identity play narrative involved *impossible selves*, which we define as selves that will never become actual. Impossible selves are similar to but distinct from *alternative selves*, in the sense that while alternative selves are "not real, were never real, and will never become real" (Obodaru, 2012, p. 35), they *could* have been real (e.g., an individual could have become a doctor if they hadn't dropped out of medical school). Thus, alternative selves represent much more narrowly the self that could have emerged from a path not taken, while impossible selves reflect more broadly any self that will never be (e.g., being a caffeine molecule). Experimenting with possible, improbable, and impossible selves sparked reflection about the contrast with the *actual* self, who one actually is.[2]

Each narrative reflects a unique intertwining of human agency, material agency, and situated work practices that create different forms of identity play and result in self-representations that impact the self and others. Each narrative reflects the "dance of agency" (Pickering, 1995, p. 21) as possible, improbable, or impossible selves emerge. In our sample, identity play had an impact on future sociomaterial constructions of the self as well as others. Identity play with possible selves often resulted in self-realizations and future self-actualization of ideal selves, while improbable selves cultivated feelings of empathy. In contrast, identity play with impossible selves often had larger effects on cultivating mindsets in others, for example creating cognitive dissonance and encouraging exploration. When participants engaged in identity play in concert with others this often resulted in a shared sense of vulnerability and facilitated communication.

We found overlap across these different narratives in the types of affordances that emerged as enmeshed with identity play: plasticity of appearance, plasticity of behavior, and plasticity of perspective. We define plasticity of appearance as the capacity to reinvent one's appearance by playing with clothing, hairstyle, or body type in novel ways. Plasticity of behavior is the capacity to experiment with different ways of behaving including different ways of walking, speaking, or interacting with others. Plasticity of perspective reflects the capacity to see ideas, information, people, places, or objects juxtaposed in new and surprising ways or from different angles.

Identity play with possible selves

The first type of identity play narrative involves the possible self, which can include who one would ideally like to become (ideal self), should become (ought self), or fears becoming in the future (Markus & Nurius, 1986; Tomlinson & Colgan, 2014). The identity play narratives in our data around the possible self ranged from trying on a more attractive self, to being a more creative person, to being someone who speaks multiple languages. We begin by describing a narrative from Fiona around identity play with a possible self that affected future psychological and physical self-actualizations. Fiona's narrative highlights how situated work practices, human agency, and material agency intertwined to co-constitute a thinner and more comfortable version of Fiona. Fiona's situated work practices often involved working with faculty:

> The first category of work that I and my team do is working with faculty who are teaching classes in SL ... Sometimes we help them build a specific learning environment ... The second category of work that we do ... we're working with faculty or researchers who've received a grant to do something in SL, and usually they're hiring our team as part of their grant, to build [in SL] for them ... That's very collaborative and intensive.

The situated work practices often involved colleagues who Fiona worked with offline, and who were overwhelmed by the newness of the virtual environment. Fiona thus desired a possible self that was "not so wildly different from [her] real self." Highlighting human agency, she expressed a desire for experimentation amid a sense of continuity and, in turn, the situated work practices and materiality of her body influenced her choice of avatar design:

> I know that the technology of virtual worlds is something that is extraordinary for people who've never experienced it and it's sort of mind-bending and confusing and causes a lot of fear, and so ... I took great pains to have my avatar in SL represent me, the real life me ... I didn't want there to be this cognitive dissonance, like "Oh, she's a big blue butterfly in SL and this is what she looks like in real life." I wanted there to be sort of a continuum ... I try to do a similar body build, just slimmer. Similar hairstyle.

Despite being clear that she wanted to minimize cognitive dissonance by having her avatar represent "the real life me, as closely as possible," she also describes her avatar as "thinner and prettier than me in real life"—evidence of experimentation with a possible ideal self. This experimentation reflected the interplay of human and material agency in the affordance of plasticity of appearance. In this example, situated work practices (e.g., "working with faculty ... who've received a grant to do something in SL") enmesh with human agency (e.g., "I ... take great pains to have my avatar in SL represent me") and material agency (e.g., the technology is "mind-bending") to create a possible self. Indeed, it was this sociomaterial mangle, which also included the sociohistorical force of concepts of ideal beauty, that produced this "slimmer and prettier" version of Fiona.

Consistent with the idea of the sociomaterial mangle, Fiona's identity play narrative suggests that identity emerged in ways that were not always anticipated by the individual. The material affordance of having a "screen to hide behind" and a "slider" to present a thinner possible self led to emergent unintended outcomes for Fiona in terms of her comfort zone and her sense of control. She expressed the effects of the sociomaterial entanglement that provided her with an understanding of having control over her body:

> I think over time seeing myself every day looking the way I want to look on the screen, made me realize that I can ... I have control over this body of mine.

Ultimately, identity play with a possible self had physical effects on Fiona' material body:

> I ended up losing like 40 pounds. I think for me being able to visualize myself as attractive and being able to experiment with how my virtual self looked ended up having a positive impact on my own way of looking at myself, of my body image ...

The virtual world had an agency to make Fiona express self-actualization and an increase in her communication "with so many different people from so many parts of the world, and to learn to feel comfortable with [herself]." This is consistent with the idea of the Proteus Effect (Yee, Bailenson, & Ducheneaut, 2009) where individuals become more like their idealized avatar.

Fiona stressed the importance of experimenting with possible (in her case ideal) selves, as opposed to experimentation with fantasy-based selves to effect change, making the "transformation easier."

> I think there can be dangers when the fantasy isn't always achievable in real life. I think that sort of transformation was easier for me because my ideal self in the virtual environment was not so wildly divergent from my real self ... I never wanted to have a crazily "different from me" avatar ... I was never interested in deceiving anyone.

The idea that the transformation would be easier if one retained a sense of self amid experimentation has parallels to the similarity–distinctiveness paradox (e.g., Cuganesan, 2017), the idea that individuals want to be both similar to yet distinct from others. In this case, the similarity–distinctiveness paradox could apply to tensions between one's own actual and possible self-representations as well. We heard evidence of the importance of continuity amid experimentation with possible selves across participants. Sandstone explained:

> There are certain things that come through like the pink hair, I have pink hair, and my avatar has pink hair, it makes people feel more comfortable with me because they recognize my avatar as being me.

These findings have implications for identity play theory with respect to differing results by degree of experimentation and type of self-representation. Those who wish to experiment with self-actualizing change while maintaining trust with others may be wise to experiment with one aspect of themselves at a time to maintain a sense of continuity. More radical experimentation may have less self-actualizing effects, risk breaking trust, or make others uncomfortable if the self becomes unrecognizable.

Identity play with improbable selves

Though extant identity play theory involves experimentation with possible selves, as with Fiona, we found evidence of experimentation with improbable selves as well. For this type of identity play, we focus on Plato's narrative to illustrate how situated work practices, human agency, and material agency intertwine to produce the improbable self of Plato as female, which was a contrast to his physical self as male. Plato as a woman is an improbable self because though the possibility existed for Plato to transition his physical self from male to female, or to be transgender, this was not his intention. Plato's identity play with an improbable self allowed him to empathize with the experience of being female and had emergent effects on his sense of self, communication style, and work relationships.

Plato, a physicist, conducted work in SL where he interacted with his offline colleagues as well as strangers. He described his situated work practices as he began his work in SL:

> [My boss] thought we might try to be the first ones ever to stream a live total solar eclipse in SL ... I began to make exhibits [in SL] that helped people understand what an eclipse was, and I have a whole series of them that are all still built.

Over time, Plato expanded his work in the virtual world:

> I've given scientific lectures in SL using the tools of SL, and I'll use slide screens and I will use sounds and I will rez [appear] on the stage three-dimensional objects. I'm also a planetary physicist ... If I give a

> lecture about Mars I rez a full-sized Mars Rover right there which the audience can use their cameras to investigate closely.

In Plato's case, the material agency of being forced by the SL avatar creation process to select a gender, combined with the human agency of a desire to experiment, triggered the creation of a female avatar:

> The first thing I was presented with was "OK, male or female?" and I thought I've been male my whole life; maybe this would be a chance to see what female was like, so I did, I created ... a female avatar ... she didn't start out very realistic. She's more realistic now. She's actually my height and my weight, definitely female instead of male, but that's kind of interesting. So I made [her] and I came inworld to actually build exhibits ... It was actually partly, a science experiment. I'm really a guy. I don't want to change sex and be a woman.

Though embodying a different gender required significant changes in appearance, like Fiona, Plato exercised human agency to maintain aspects of himself—his avatar was the "same height and weight" as his actual self. It was also important to Plato to be honest and open with others about who he was: "anyone who asked me straight out, I'd tell them who I was."

Plato dressed as his avatar at an offline cultural event as well—showing that though the virtual world is an extreme liminal space for identity play, our participants engaged in identity play offline as well:

> Here's a picture of [me dressed as my avatar] at Burning Man ... I found a wedding dress for $7 at Goodwill. That's me wearing a wedding dress, and you get the idea that [my avatar is] really a muscular climber.

Highlighting the intermeshing of situated work practices, human agency, and material agency in identity play of improbable selves, Plato dressed differently in the situated work practice of giving a lecture:

> I will change ... into professional physicist professor Plato right now. I'll bring up that clothing ... It's a Coco Chanel outfit converted into SL ... in good taste I hope. This outfit I got in consultation with a really good woman friend in SL who runs a business in SL ... She took me shopping and showed me the Coco Chanel place in SL ... this is how [my avatar] dresses when she gives lectures in SL.

Plato's narrative also includes experimentation with behavior (e.g., adopting speech patterns while "hidden" behind text chatting, trying on "feminine gestures") as a unique aspect of identity play, demonstrating the dance of agencies in identity play. This enmeshing of agencies reflects the affordance of plasticity of behavior. In Plato's case, the entanglement of the social and material led to new skills, including how to communicate in a more feminine manner:

> At first I wouldn't go a day or even an hour talking to [strangers] in SL who wouldn't figure out that I was a guy, I mean chatting, with text chat. I can do better now. I've learned something ... I'm really short, really abrupt as I type. Now I'm a little wordier and I stretch it out a bit.

Overall, experimentation with an improbable self inspired reflection on comparisons to the actual self, perhaps greater than those created by experimentation with a possible self. Plato described his female avatar as "softer" and "nicer" than his actual self:

> Its really funny when someone ... finds that I'm a physics professor then argues with me about Newton's laws. You're not going to win ... But [my female avatar] will always treat them really nice ... If someone comes up to me on the street and wants to argue physics, I'll insult them. [She] might not.

Appearing and behaving as a sociomaterially co-constituted female allowed Plato to take on a new perspective and learn more about being a woman. This allowed him to empathize with the experience of discrimination as a female scientist:

> I thought this might be a good thing ... to be ... a female physicist in SL and just see how it went ... there have been a couple of occasions where people just would not accept that there could be a female that knew anything. That's shocking, but I suspect that women have this happen to them all the time ... Just being a female avatar in [SL] and seeing how other avatars address you and treat you. You might read books about gender differences, but you can live it in Second Life.

Beyond discrimination, Plato elaborated on experiences and perspective that emerged via his identity play as a woman in an environment where there was no "physical danger." He reflected that "that one choice [to select a female avatar]" triggered by the material agency of the avatar creation process led to unexpected consequences in this "social experiment":

> Every experience [as a female] is quite new. Being picked up in a bar, having the guy that picked you up at the bar dump you and go with the bartender, these are things that only women really understand ... That's a really interesting thing for a guy to experience ... I never expected this to happen, but that one choice of Plato meant that for me it's quite a social experiment ...

Plato's experimentation with the female physicist identity offers evidence of another important affordance, plasticity of perspective. In part due to emerging perspective and empathy from identity play, Plato's interactions with others, particularly his female colleagues, evolved:

> I began noticing that I was having these interactions and learning things, and once many of the women at work found out I had a female avatar, they began to talk to me in real life in ways they'd never talked with me before. I had great conversations about the relationship between men and women, so it was quite an amazing learning experience ... I have discussions about clothing and about behavior in SL with some of the women who I work with. And that has opened up general discussions at work about relationships, and they treat me differently.

In addition to Plato's narrative, several participants' narratives involved improbable selves as disabled people in wheelchairs. Participants described a lesson that a professor taught about disabilities in the virtual world, and the value that experiencing being in a wheelchair had. Archer described how "even though you're talking about a matter of finger movements on a keyboard or a mouse, they still mentally feel how challenging it was being in a wheelchair ... they get to identify with that." Blossom described how this experience cultivated empathy:

> We built the schoolhouse for a professor that wanted to do an experiment with her students [in SL]. And it was a class that focused on disabilities ... so some of the students had to hop into a wheelchair and some of the students could walk, and they had a task where they had to go to a library and find a certain book. And so people in the wheelchair had to take the ramp and then had to take the elevator, and people that could walk could take the stairs and walk all around. And it was a timed race between the two groups and so, the people in the wheelchair were always frustrated, and so it provoked a discussion about how it really feels to be in a wheelchair.

We see that identity play with improbable selves lends itself to developing empathy for unlike others. In Plato's case, identity play generated empathy with women's life experiences and the discrimination female scientists face and enabled him to better connect with female colleagues at work.

Identity play with impossible selves

Unlike identity play with possible and improbable selves, where it was important to maintain aspects of the actual self, identity play with an impossible self casts aside a large part of the actual self. Judge's narrative is one of identity play with many impossible selves, including a bird, a fish, a dragon, a polar bear, a caffeine molecule, a robot, a bee, and a "Pathfinder" avatar with yellow glowing eyes. The identity play that emerged in Judge's narrative created cognitive dissonance, encouraged exploration, and challenged others to move beyond the visible, which in turn had implications for his identity. In contrast to extant literature suggesting that people seek to construct recognizable selves through narratives (Chase, 2008), impossible selves are often constructed to be intentionally unrecognizable. Judge described the dance of agency (Pickering, 1995) and entanglement between the social and material that produced impossible selves:

> To me it's very interesting how easily our brain maps ... tools become extensions of our bodies ... when you're driving a car, which is a tool, you never say, "Oh your car hit my car!" you're like "you hit me, you hit ME." ... on a deeper level, [the car] feels like it's part of you. And the same thing happens with virtual worlds.

In his situated work practices as a community developer, Judge was interested in stimulating learning and interactions between the community and the environment:

> I'm really very focused on people and environments and the interactions between people and other people in environments, interactions between people and their environments ... my continuing underlying focus is always education, and learning, and I was like wow this is an environment where ... you can have learning outcomes that are potentially much better because [people] feel like they're really there ... it goes to another level of being connected to a space.

Judge's identity play with many impossible selves was facilitated by the material affordance of countless options to choose from regarding appearance. Reflecting that affordances, including plasticity of appearance, are "not unvarying indicators of capacity for action," one of Judge's intentions entangled within this play was to create cognitive dissonance and challenge others' assumptions about appearances. This example of identity play with impossible selves is consistent with the concept of the "double mangle" such that "human agents seek to channel material agency to shape the actions of other human agents" (Jones, 1998, p. 297). Participants described how they hoped to challenge assumptions through play with impossible selves. Sandstone explained:

> I might turn into a dinosaur in the middle of a talk ... just to get their attention, to drive home a point ... Make people realize that they do have assumptions about "what does an instructor look like?" "what does a professional look like?" "how does a businessperson behave?" Why do we have these expectations of seriousness? Or of conformity when we really could let those walls down and have a whole lot more fun.

As a community organizer, Judge created an "adventurers club" in the virtual world. We see human agency via Judge's intentions of creating interactions between people and their environment

intertwined with material agency to produce an avatar, "Pathfinder", with glowing yellow eyes. This narrative highlights the idea that while identity play often resulted in something intentional and positive, that was not always the case. Pathfinder's glowing yellow eyes did not always have the desired effect on others, again highlighting the role of material agency intertwined with human agency in impossible selves in an unpredictable "mangle of practice" of resistance and accommodation (Pickering, 1995):

> I wanted to kind of convey the idea that I'm watching, I'm an observer ... I had a few times though where I had unintended effects of that avatar where people were like "you're just creepy looking, where's your face? You're just a pair of eyes." And I'm like "no, I'm a good guy ... I'm just an observer and my face is really unimportant."

The story of Pathfinder's glowing, yellow eyes suggests that while impossible selves may be successful in creating cognitive dissonance, others may not react as intended. Judge accommodated by experimenting with the material via trying on a variety of new appearances to achieve his desired impact, thus continuing the dance of agency in a recursive tuning process (Pickering, 1995). Play with impossible selves also was intertwined with the situated work practice engaged in, as in this example where Judge is giving talks about making models and decides to become a bee to illustrate his point:

> I would give talks about making models in Second Life ... I had a bee avatar and I'd be like now I am a bee and you can see me walking across the petals, and here is where the pistils brush my back and the pollen gets stuck on my pollen sacs and things like that ... I've always had a lot of fun with identity like that ... trying to have my identity somehow connected to the environment that existed.

At other times, manipulating the environment, rather than the appearance or behavior of the self, effectively produced identity play. For example, Judge created aliens that looked evil, but were "actually very nice" in order to "evoke ... cognitive dissonance" and to drive home the point that "identity is a lot more than just what you look like." Through co-constitution of human agency (wanting to be evocative) with the materiality of the environment (being able to craft aliens), and the situated work practice of building community, Judge could experience being the self-representation of an "evocative community builder" that rewards exploration. This example reveals plasticity in the appearance and behaviors of the *environment* as another option for identity play which in turn influences perspective. Judge described how his situated work practices enmeshed with the material and human agency to become evocative:

> Phrases of who I am? Well I would say explorer, community builder ... kind of evocative. Like I want to, whatever I'm doing, be it my own identity or whatever I'm working on, to be evocative, to evoke certain thoughts and ideas and you see that with the little alien thing built here ... they [people] start really looking around the region, they'll find [the aliens] and they'll get rewarded by this interesting little story, these funny little creatures.

Though extant literature considers identity play primarily with respect to the self, our sociomaterial perspective reveals how Kobe's identity play with impossible selves in concert with others may have relational outcomes as well. He experimented with being an Oompa-Loompa with a colleague as they opened a chocolate shop to "explore the economics" of the virtual world. Playing together with appearance and behavior created a "full-on encounter" that created "vulnerability" and facilitated communication:

> We started a little shop ... and we were merry chocolatiers, we were actually freed Oompa-Loompas ... When we're playing together though, it really facilitates that kind of full-on encounter. So I think it all depends on your commitment to the environment. If you're focused on the environment fully, then it supports your communication ...

Impossible selves, perhaps because they were the most different from the actual self, were often used to trigger cognitive dissonance in others, showing evidence of the double mangle that shapes others' experiences, often evoking a sense of exploration. Interestingly, playing with impossible selves may not just incur the risk of loss of trust that we see when identity play involves moving too far from the possible self, but may also trigger more potential for "failure" in the sense that the identity play does not have the outcomes participants may have originally intended.

Discussion and Conclusion

Our narrative inquiry makes three theoretical contributions to the literature on identity play, positioning it as a generative approach to engage identity outside of identity work and teflonic identity maneuvering (Alvesson & Robertson, 2016) and incorporate the material (Brown, 2019). First, we take a novel theoretical approach that holds the social psychological and sociomaterial approaches to identity as complementary, revealing how human and material agency intertwine with affordances and situated work practices to produce identity play, thus extending extant understandings that privilege human agency. Second, we expand the definition of identity play beyond possible selves, to include the exploration of improbable and impossible selves. Our analysis reveals the self-actualization that occurs with identity play of possible selves, the empathy that develops through play with improbable selves, and how identity play with impossible selves creates cognitive dissonance inspiring exploration in others. Finally, emergent from our analysis were three sociomaterial identity play affordances—plasticity of appearance, plasticity of behavior, and plasticity of perspective—deepening our understanding of how identity play occurs.

A sociomaterial perspective on identity play

Our theoretical approach reveals how human and material agency intertwine with affordances and situated work practices to produce identity play. This work extends theory on identity play by revealing that the self is indeed multifaceted, and that possible, impossible, and improbable self-concepts may each be sociomaterially enacted in identity play. The extant conceptualization of identity play emphasizes the role of human agency such that identity play is concerned with inventing and reinventing oneself according to one's own internal motivations and guidelines. Yet, the sociomaterial perspective in our narratives reveals the inextricably intertwined nature of the human *and* the material in the creation of Fiona, Plato, and Pathfinder, for example, proving again that "all materiality [...] is social" and "all social action is possible because of some materiality" (Leonardi, 2012, p. 32). The intertwining of complementary identity theories provides insights into how the social and the material become intertwined in identity processes (Brown, 2019) and what the effects might be (Boxenbaum et al., 2018). In our study, the sociomaterial construction of distinct self-concepts reveals distinct effects.

Prior research proposes that identity play processes involve exploring a repertoire of behaviors associated with possible selves (Ibarra, 1999; Ibarra & Petriglieri, 2010), yet our sociomaterial approach reveals that repertoire extends to improbable and impossible selves as well. Whereas individuals may ultimately adopt a possible self, they may only adopt pieces of improbable selves, or change elements of future enactments of the self upon reflection on impossible selves. Further,

our analysis reveals that the purpose of identity play extends beyond inventing and reinventing oneself, to challenging the assumptions or encouraging the behavior of others, such that identity play is a powerful tool for generating reflexivity in both the self and in others. From a sociomaterial perspective, we see how the "dance of agency" and double mangle (Jones, 1998; Pickering, 1995) work to socially construct one's own identity through the effects on others, particularly as self-representations extend beyond the possible. Though the double mangle is in motion in all identity play, its reach and force vary, becoming most visible and impactful in identity play with impossible selves. Impossible selves seem to affect others in proportion to the cognitive dissonance they create, while possible selves seem to bring about the most change to future enactments of the actual self when cognitive dissonance is minimized.

Expanding the definition of identity play

Our work deepens our insights into how experimentation with possible selves generates reflexivity and provides a more nuanced understanding of how identity play relates to future enactments of the actual self. First, our work revealed that individuals were most likely to experiment with *ideal* possible selves (e.g., Fiona's narrative of a thinner self), which has parallels to research on similar concepts of preferred and desired selves (DeRue & Ashford, 2010; Thornborrow & Brown, 2009). Our findings demonstrate how individuals experiment with preferred selves not just in identity work (Thornborrow & Brown, 2009), but also in identity play. We also show that the self-esteem that flows from constructing desired selves (DeRue & Ashford, 2010) may also be generated from identity play with possible selves. Further, our participants expressed the importance of maintaining a sense of the actual self amid experimentation with possible selves, which made ideal selves seem more attainable. This finding extends our understanding of when and how identity play may lead to change in future enactments of the actual self. Experimentation with ideal selves along one dimension may thus inspire more change in future enactments of the actual self than those with more sweeping differences.

We introduce the concept of improbable selves to theory on identity play, which also affects future enactments of the actual self by triggering changes in perspective, self-concept, ideas, problems, and empathy for others. By fostering empathy for others through perspective taking, individuals can better understand a greater diversity of motivations, behaviors, and reactions, and thus forge stronger working relationships with colleagues (Roberge & van Dick, 2010). Research suggests that perspective-taking simulations increase cognitive empathy with longer-lasting effects than traditional perspective-taking (Herrera, Bailenson, Weisz, Ogle, & Zaki, 2018; van Loon, Bailenson, Zaki, Bostick, & Willer, 2018). Our research shows that engaging with perspective taking through identity play has similar results.

Uncovering identity play with the impossible self highlights how identity play triggers identity development in both the self and others, for example by creating cognitive or emotive dissonance to challenge assumptions. While we found that identity play with possible, improbable, and impossible selves was conducted in a dance of agency with the impact on others in mind, the further the self-representation got from the actual self, the more impact on others it seemed to have. Thus, impossible selves seemed to have the largest impact outside of the self (i.e., Judge's narrative). Prior work has demonstrated that emotive dissonance in a work environment stimulates pressure to adhere to one's social and personal identities, increasing the salience of these identities while at the same time "impair[ing] one's sense of authentic self" (Ashforth & Humphrey, 1993, p. 89), likely triggering self-reflection on one's identities. Our study builds on this work expanding the realm of influence of identity play beyond the self as well as illuminating the important role cognitive and emotive dissonance may have in stimulating identity play by others. Further, we find

evidence that individuals who experiment with impossible selves in tandem with others, something like co-identity play, experience a deep connection.

Identity play affordances

Our third key contribution illustrates the identity play affordances that enmesh with human and material agency in the experimentation or rehearsal of new behaviors and identities (Furnari, 2014; Ibarra & Petriglieri, 2010). As stated earlier, identity play is theorized to unfold in conditions of liminality (Ibarra & Petriglieri, 2010). Though extant literature theorizes conditions for identity play as "largely psychological" (Ibarra & Petriglieri, 2010), our work both provides empirical evidence that the "suspension of the rules" that comes with liminal spaces is important and also highlights the idea that materiality may play an important role in liminality as well. Indeed, liminal psychological conditions are fruitful for the emergence of plasticity of appearance, behavior, and perspective, affordances key to identity play processes. Plasticity of appearance, behavior, and perspective were often afforded in tandem—perhaps each inspiring the others—allowing for a higher-fidelity experience of how it would feel to be someone different and observe social reactions. Furthermore, though plasticity of appearance, behavior, and perspective affordances emerged in the virtual world, a methodological contribution of our work, they may be replicated in offline spaces. As prior work has focused on the role of physical spaces and cultural contexts that permit the experimentation of new practices and routines (Bucher & Langley, 2016; Furnari, 2014; Howard-Grenville et al., 2011), future work could also explore how to facilitate these affordances in the workplace to encourage identity play.

Limitations and future directions

Though the plasticity of the virtual world provides a unique context to study identity play from a sociomaterial context, as compared to the offline world, the virtual world is limited in its sensory experiences, and does not include sensations of taste or touch or offline non-verbal behavior. For example, though trying on a new, thinner, physical appearance online allowed Fiona to experience the positive social feedback and self-image associated with these changes, the virtual world did not allow her to experience the self-control related to food choices or the physical pain of exercising that the offline world requires. Future work could examine the process of identity play in the offline world, to understand how plasticity of appearance, behavior, and perspective may interact with physical sensations. Might plasticity of touch, taste, and smell emerge as identity play affordances as well? Alternatively, the virtual world may serve as a context to study other phenomena that flourish in liminality such as the genesis of innovative practices (Furnari, 2014). Liminal spaces include "small-scale settings where individuals from different fields interact occasionally and informally around common activities to which they devote limited time (e.g., hobbyist clubs, hangouts, workshops, meet-ups)" (Furnari, 2014, p. 439). Research in such settings may uncover additional insights into identity play.

Our participants were a unique sample who were very comfortable operating in the virtual world, a majority of whom worked in higher education. These highly educated participants displayed high levels of intellectual curiosity. As such, they may have been more open to virtual environments and identity play in comparison to others. It could be that those open to virtual world experiences may also be higher in promotion focus, when "people's growth and development needs motivate them to ... bring themselves into alignment with their ideal selves" (Brockner & Higgins, 2001, p. 35), which facilitates identity play (Shepherd & Williams, 2018). Future research could explore how identity play evolves over time in a virtual world, for instance by following

virtual world novices as they learn to use virtual worlds and observe how their identities evolve in comparison to those more experienced in a virtual world environment.

Our participants conducted work in the virtual world, which may have limited their identity play. The self is multifaceted, and our narratives uncovered identity play with three distinct self-concepts. Yet, identity play may extend to additional self-concepts. For example, possible selves also include feared selves, the persons one would like to avoid becoming (Oyserman & Markus, 1990). Identity play with feared selves may be a fruitful avenue for future research, perhaps as a motivational tool.

Practical implications

Our work has implications for practice. For example, recent work suggests that identity play may be key to recovering after job loss (Shepherd & Williams, 2018). Through identity play, creating a new positive work identity after job loss hinges on diversification of thought trials. Our work reveals that identity play may be even more generative in terms of trying on not just possible, but improbable selves. Careers thought not possible may become possible after experimentation or offer unique insights into the intersection of the self and a career path.

Additionally, there are implications for perspective taking and diversity. Some of our participants found success in teaching others about diversity by asking their students to play with improbable selves using a wheelchair, and Plato developed empathy through identity play as a female scientist. These powerful learning experiences allowed participants to cultivate empathy for those with physical disabilities or who experienced bias. This same type of perspective-taking exercise would be useful for appreciating differences related to other types of diversity such as race. Co-identity play may help individuals develop emotional attachments and empathy, influencing identity construction (e.g., Petriglieri & Stein, 2012). In such ways, organizations wishing to cultivate values around diversity and inclusion could train employees using identity play. Identity is important to leadership development (e.g., Petriglieri & Stein, 2012), and our work may allow for experimentation with myriad leadership styles prior to becoming a leader. Similar to work showing how experimenting with the child role as a parent develops empathy and parenting skills (Hamilton-Giachritsis, Banakou, Quiroga, Giachritsis, & Slater, 2018), leaders may benefit from experiencing leadership styles from the perspective of the employee. Further, those struggling to negotiate seemingly impossible conflicting identities, such as constructing an "olderpreneur" identity as an older entrepreneur (e.g., Tomlinson & Colgan, 2014) or negotiating competing desired group identities (e.g. Croft, Currie, & Lockett, 2015) may benefit from exploration with identity play.

Conclusion

In conclusion, we extend research on identity play by expanding the definition to include play with impossible and improbable selves with outcomes extending to others, as well as the self. A sociomaterial perspective reveals that material agency, human agency, and situated work practices are mutually implicated in identity play and uncovers key affordances that organizations in other contexts may wish to facilitate in order to trigger identity play among their own employees.

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Notes

1. The routines literature is generally formed into two camps: (1) that founded on capabilities, which largely looks at routines as a "black box" and is mostly focused on the outcomes of routines and (2) that founded in a practice perspective, which focuses more on the "how" of the day-to-day actions engaged in by individuals in accomplishing their own work (Parmigiani & Howard-Grenville, 2011, p. 5). While context matters in both camps, "Those working from the practice perspective regard human action as situated in a specific set of circumstances, which may or may not lead to individuals enacting routines as they are designed" (Parmigiani & Howard-Grenville, 2011, p. 5).
2. Though participants also described the sociomaterial construction of actual selves, we focus on the more novel self-representations of the possible, impossible, and improbable selves.

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Appendix A: Sample Interview Protocol Questions

Sample Work Practices Protocol Questions

Please take a few minutes to consider some of the following examples of types of work you and your colleagues may conduct in Second Life. (e.g., attending meetings, brainstorming, product design, giving feedback, resolving conflict, etc.)

1) Can you please describe in detail one routine you use in Second Life for work? (repeat for two or three examples)
   a. Will you demonstrate for us by showing us the tool or taking us to the place in Second Life where you use this?
   b. As you demonstrate, describe this routine in terms of the steps you take. What actions might you and your team members take? How might this work change from situation to situation?
   c. Can you articulate what you're thinking about when you use this work routine?
   d. What purpose does this routine serve? How is this routine helpful (enhance shared understanding, enhance ability to communicate, etc.)?
   e. What limitations does it have? When is it not helpful, if ever (e.g., slows process down, causes misunderstandings, etc.)? How do you overcome these limitations?
   f. Does this routine change how you feel? Does it make you feel more/less frustrated, more/less powerful, more/less competent, more/less effective?
   g. How might you—or have you—modified these actions to adapt to a new situation?

Sample Identity Protocol Questions

1) Tell me about how you created the avatar you use for work. What was your thought process? What did you focus on and care about as you created your avatar?
2) Is your image, or how people perceive you, something you think about consciously shaping when conducting work in Second Life?

3) What methods do you use to shape how you are perceived by individuals you are working with online when you are using Second Life for work-related activities? And what are you trying to accomplish or communicate to others with the methods you use?
4) Do you feel like the methods you use in Second Life are effective? How easy/difficult is it to change how others perceive you in Second Life?
5) Think of some of the work routines we talked about in our first interview. Do you feel like your use of these routines in Second Life shapes how others perceive you (or how you think about yourself)? If so, how? In what ways?
6) Have you changed in any way since using Second Life for work?