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SEARCHING FOR TASKS: TASK-ORIENTATION AND THE PROCESSUALITY OF DIGITAL SKILLS

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Digital skills can be reimagined with a *task-orientation* approach. We highlight findings from a 2020 pilot research project.

1. Towards a task-orientation perspective on digital skills

Skills are not "out there" to be learned but develop through their enactment in situ. Rather than defining skills using a tool- or media-driven approach, we understand skills as situated, embodied processes known as *'task-orientation'*. Coined by Tim Ingold (2011, p. 195) this term refers to "any practical operation, carried out by a skilled agent in an environment as part of his or her normal business of life". Part of this approach entails taking a holistic, narrative approach to investigating everyday life (Ingold, 2000; 2006; 2011) which some scholars have applied to digital media use (Moores 2017; Sumartojo et al. 2016; Pink 2016, 2015; Pink & Leder Mackley 2013; Pink 2011). We believe task-orientation offers a flexible way to define tasks performed online and offline encompassing three interrelated themes: 1) the processional quality of tool use; 2) the synergy of practitioner, tool, and material; and, 3) the coupling of perception and action.

Our focus for this project is an investigation into how people perform unfamiliar tasks with digital media using the four processional phases. Unfamiliar tasks are an inherent part of our digitally-mediated everyday life to the extent that we have learned to 'cope' (see Sigaut 1994; see Ingold, 2000, p. 332; see also Nicolosi & Falsaperna, 2015, p. 71) with them — making them, in turn, one of our most ubiquitous and essential digital skills.

2. Research Design

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Our fieldwork for the project took place in February 2020 in Vancouver, Canada. Participants were recorded through Lookback.io, a discreet screen and webcam recording software, which we used to track bodily and digital movements. Combining a range of qualitative research techniques, we analyzed screen and webcam videos for behavioural patterns and interviewed participants using the walkthrough method (Light & Burgess, 2018).

Eleven female participants between the ages of 18 and 59 were invited to choose from one of three unfamiliar tasks to complete a self-directed online search to learn a new task. Tasks were developed around common workplace skills, such as communication (a social media audit), creativity (modifying an image in Adobe Photoshop), and technology and information management skills (creating a Pivot or Macro Table in Microsoft Excel).

Narrative is an important feature of task-orientation, and thus the research design, because a thing becomes a tool in context to its story (Ingold, 2011; Van Ittersum, 2014; Lave et al., 1990; Patchett, 2016; etc.). We initially analysed participant stories using detailed narrative description but found it difficult to identify the processional phases. Taking pen to paper, we used a colour-coding system to identify the processual moments (see 3. below) and any key pathways involved in these phases. We used this analysis to create a one-page profile of each participant, on which a visualization specialist developed a graph to show the proportion of time spent in each phase and a footprint showing the order of search phases and pathways.

3. The processional quality of tool use

Tasks are not predefined by a program. Their performance is a processional enactment — an "episode of tool use" (Ingold 2006, p.76) in which "every step is a development of the one before and a preparation for the one following" (Ingold, 2006, p. 67). The process occurs through a range of phases: getting ready, setting out, carrying on, and finishing off (Ingold, 2006, p. 67).

3.1 Getting ready

The starting point of any search for our participants is getting ready, which always moves into setting out. The first part of the getting ready phase is choosing an environment, ranging from a quiet bedroom to a bustling coffee shop. It includes the placement of materials like devices, coffee cups, or pens. On screen, it involves reading instructions, opening browsers and applications. For example, Kendall, an Israeli-Canadian undergrad in her 20s, opens her laptop at a campus coffee shop, opening Google on her browser, and grabbing a notebook and pen out of her backpack. Kendall, like many of our participants, goes through getting ready multiple times in her search process.

For another participant, Stephanie, a female Ghanaian-Canadian in her 20s, setting out can take time, as she gets ready over three different days and work environments.

Rebecca, a Taiwanese Canadian female in her 40s, needs help organizing a computer and the software, which shows help can be part of getting ready.

3.2 Setting out

The moment that getting ready moves to setting out is when "rehearsal ends and performance begins" (Ingold, 2011, p. 54). For all of our participants, setting out to cope with these unfamiliar tasks entails launching Google. Keywords are important devices for navigating their search process, which we call webfaring – borrowed from Ingold's (2000; 2011) concept of wayfaring. With digital skills, there seems to be an inherent "finding your way" through tasks, which makes the essential task of using Photoshop or Excel the searching itself.

Every participant went through setting out after the first stage of getting ready. Early keyword searches help participants *understand* the task while later keyword searches help the participant *do* the task. For example, Rebecca starts her search with: "how to conduct a social media audit." Her later searches include more focused questions like "McDonald's on Facebook" and "What is Whatsapp[?]"

3.3 Carrying on

Carrying on is the rhythm that develops when people work "with instruments and materials... rather than against them" (Ingold, 2011, p. 55). Abra is an Asian Canadian in her 20s and the only participant in the study to complete two tasks. She wants to create a PivotTable but "Excel just did not work," which made her "really stressed out." Abra sits with her smartphone in a quiet bedroom, swiping in and out, rhythmically going between websites and her notes app for nearly half of her work session.

Yasmin and Yesfir work from a couch in their shared living room. They are sisters, both in their 30s, of Iranian descent; Farsi is their mother tongue. Yasmin is an MBA student; Yesfir has a bachelor's degree and is currently taking classes in English and accounting. Yasmin and Yesfir both engage in carrying on at the precise moment they switch to Farsi in their search.

3.4 Finishing up

Not all participants go through the finishing up stage. Some people abruptly leave the search process while they are in setting out or carrying on. Finishing up seems to have a getting ready phase that involves some combination of reviewing instructions, checking work, or a mini-reperformance of work.

While the above materials are only early observations, these findings confirm the value of taking a task-oriented approach to investigating digital skills by demonstrating that digital skills are necessarily embedded in their processual performance.

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