# How we live now: "I don't think there's such as thing as being offline".

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#### Introduction

In the field of New Literacy Studies we have spent the last decade mapping the movement of young people online and offline (Alvermann 2008; Livingstone 2010, 2011, 2014), researching the differences in literate and identity practices online and offline (Carrington 2008, 2012, 2013; Carrington & Dowdall 2013; Davies 2007; Gee 2003; Marsh 2004), exploring the virtual spaces opening up by online gaming and virtual worlds (Black, Korobkova & Epler 2014; Merchant 2009; Thomas 2007), and arguing that as digital technologies embed in the mainstream, young people's preeminent form of literate (and social) practice outside the classroom was increasingly in online contexts (Alvermann 2008, 2010; Chandler-Olcott & Mahar 2003; Davies 2006; Lankshear & Knobel 2002, 2006). All of these arguments, by their very nature differentiated between online and offline, exploring and foregrounding the distinctive nature of the practices, texts and identities that characterize each domain. This focus matched our understandings and experience of the ways in which we, and our research participants, engaged with the emergent digital culture. In particular, we differentiated between being 'online' and being 'offline' as ways of building an understanding of the repertoires of practice and skill being developed by the young using these technologies and the worlds opened up by them. Even as we argued that bridges must be built between 'on' and 'off' our research served to actively reinforce these metaphors and the perceptions and practices that follow.

This paper sets out to explore how contemporary young people understand and experience 'the internet' and 'online-offline'. To do this, the paper will proceed in a series of moves. It will begin with a consideration of the role and importance of metaphor, particularly in relation to online and offline, in the construction of our understandings of the worlds in which we engage. It will then explore the interrelatedness of device and user in the construction of both perception and action, drawing from a postphenomenological orientation to begin to capture the close interrelation between user and his/her technological artifacts. Once this context is established, the paper will turn to discuss the significance of interview data from two young women — Sabine and Hazel — as they explain their understandings of online and offline. Finally, the paper will attempt to bring these different aspects together to consider the implications of the shifting metaphors and embedded technologies that give shape and meaning to the ways in which young people conceptualize their worlds.

## The metaphors we use to build our worlds

There has been an increasing interest in the role of metaphor in how we understand the worlds in which we engage. This approach is particularly useful when trying to see around and beyond the entrenched positions we have adopted in relation to the internet and how we engage with it. Lakoff and Johnson (2008) have built a highly influential case for the power of metaphor in the construction of our everyday conceptual frames and practices. They argue that this is how we construct our views

of the world – through weaving metaphors together to build a coherent, metaphorical conceptual framework, "partially structuring one experience in terms of another" (Lakoff & Johnson 2008, p. 76). For Lakoff and Johnson, "metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature" (p. 3). This is an important point to note. As Markham pointed out (2003), "Metaphors help us make sense of unfamiliar concepts and things, but they also structure the way we respond to those concepts and things". This view was shared by Santa Ana (2013) who noted that, "Metaphor is more than poetic color and superficial ornamentation. It shapes everyday discourse, and by this means it shapes how people discern and enact the everyday" (p. 26). The metaphors we use about the internet and everyday life influence both our perceptions and action. They are not neutral labels or descriptors.

Writing in the field of internet studies, Markham (2003) identified three interrelated, influential metaphors in relation to the internet: internet as tool, internet as place, internet as way of being. These metaphorical structures weave in and out of how we understand and talk about online and offline, each reinforcing the other. Reflecting the view that metaphors allow us to explain and understand one phenomenon in relation to another, Markham (2003, p. 2) describes the ways in which various metaphors have been used to make sense of the internet:

If we do not understand what the Internet means, we connect this unfamiliar term with something familiar. Internet as tool, portal, frontier, cyberspace, superhighway; at first, these conceptualizations help us make sense of something quite unfamiliar. Over time, these metaphoric frames shape and delimit our perceptions of and responses to these technologies. Ultimately, the understood reality of the Internet is taken for granted within these frames.

Key here is the way in which metaphors work over time to 'shape and delimit our perceptions and reflection'. Internet as tool indicates that the internet can expand the reach of our senses across time and space and databases. The internet is conceptualized as a tool or as a conduit - pipes - along which information is transmitted (Markham 2003). The image of the information superhighway fits here as the internet becomes a route for the distribution of information. The internet, in this view, is a container that holds information of various types. When understood as a container, the internet is conceptualized as having boundaries and limits. The notion of the internet as a place has also been particularly powerful in the social sciences including educational and literacy research, building on the emergence of a focus on space and place in the late 20<sup>th</sup> century (Anderson 2006; Castells 2009; Tuen 2001). The internet and new technologies are understood in relation to how our bodies and senses interact with them in spatial and temporal terms. We go into the space of the internet and go to various types of places online – chat rooms, virtual worlds, social networking sites. Some of these spaces – particularly game worlds such as World of Warcraft and Habbo Hotel; virtual worlds such as SecondLife - became delineated places where life could take place. We talked (and continue to talk) about online communities, virtual cultures, cyberspace as if they are a parallel environment. This metaphorical understanding leads to the notion that the online world is a separate place with emerging online spaces and cultural mores where virtual selves can dwell, travel, and interact away from the rules and expectations of the social and physical world. The third key metaphor operating around the existence and use of the internet

is, according to Markham, as a way of being. This is a view of conceptualizing the existence of:

A transparent state wherein the self, information technology, everyday life, and other are vitally connected, co-existent ...(and) focuses primarily on the self and how the self interacts with and makes sense of the world. Technology does not hold a position outside the agency of the human. Rather, the categories are collapsed, to varying degrees (Markham p. 10).

At the time, Markham believed that "very few people would identify this category or describe themselves as being within the framework" (2003, p. 11).

In Lakoff and Johnson's terms, 'on line' and 'off line' are also metaphors, concepts that we understand the world through and additionally, the way in which we use language from one 'reality' to describe and engage with another. The newness of the internet and the workings of digital technologies was something very new and unfamiliar in the 1990s and so it was described by comparison to the known. Connecting to another computer required that data be sent along the existing telephone line; when it arrived it was converted into computer signals and displayed on the desktop. Quickly, 'online' was acknowledged to refer to any activity using a computer that required getting 'on' the local telephone lines. If you were engaged in any such activity - for example using a search engine, playing a game, chatting, watching a video - you were 'online'. If your line was down, or your computer was not connected, you were 'offline'. This reflected a sense of the fixity of spatial location associated with being on line. It also very clearly differentiated between being on the line and not.

In the field of literacy studies, and education more generally, the online-offline dichotomy is central. The conceptual framework that attaches to this very physical representation meant understanding yourself as being either 'online' or 'offline' — where you were using a line to connect your computer to the internet and/or were undertaking activities 'online' that required this connection and could only take place 'online', or you were disconnected from the internet and the computer. You were 'off'. According to Jurgenson (2012), we have learned to "view *online* as meaning not *offline*", creating what he terms a 'digital dualism'. Activities that could be done online were often seen as unique and quite distinct from those that took place offline: joining chatrooms, playing massive multiplayer online role-playing games (MMORPGs) and building virtual worlds. Online — including how to get there and what you did when you were there — was metaphorically constructed and understood to be distinctly different and often in opposition to what happened offline and allowed this new activity to be understood in terms of conceptual landscapes that already existed.

The decision to prioritize a metaphor that creates and reinforces a clear divide between the boundaried containers of the 'online' and the 'offline' is not without agenda. Educational researchers, working intensively to understand the implications of this new zone of activity for learning, identity and literacy, focused predominantly on the unknowns of the new online world opened up by access to the Internet. We focused on the challenges and opportunities of identity construction in online spaces and what this might meant in relation to the student identities anticipated and rewarded in a predominantly offline schooling system; we mapped and argued the case for the importance of the types of literacies and texts prioritized by online life

and in turn, the implications of these new practices and skillsets relative to school-based print practices and the deeply embedded authority relationships that accompanied them. Drawing from the metaphorical frameworks available to us, we conceived of these domains – online and offline - as distinct, creating a research field along the way. As literacy and educational researchers, we continue to undertake often exceptional, research that implicitly differentiates between these containers and orientations (Black, Korobkova & Epler 2014; Winters & Vratulis 2012) reinforcing Jurgenson's (2012) 'digital dualism'. While many will argue that we need to explore the specific implications of digital presence each time we do this, we reinforce this dualism. The online-offline metaphor emerged and became embedded in the era of dial up. It has continued to underpin the ways in which many of us, particularly those of use whose conceptual frameworks are deeply entwined with a set of mutually reinforcing metaphors.

For young people however, the reality can be quite different (Carrington 2014). In most parts of the world, this particular age group has always known about and had access to mobile technologies ranging from phones to laptops to tablets (Merchant 2014); many do not have a personal history that involves dependence on land lines and then dial-up access. This has impacted their perception of the spaces in which they operate and the haptic technologies that enable and filter their activities. It is clear that the old online/offline framing of their activities is no longer sufficient but there has, as yet, been little empirical research that attempts to identify and unpack the emerging metaphors for lives lived across-between-alongside-in-on-outside-inside digital technologies and the social spaces they enable. The technologies, the individual artifacts that we use everyday, do matter. It is to this relationship, explored through the lens of postphenomenology, that this paper now turns.

# We build our worlds with metaphors and artifacts

Postphenomenology is interested in understanding human relationships with technological artifacts. As Sicart notes (2013, p. 26), postphenomenology "allows us to understand how technology, humans, and the world are experientially related". Unlike Object Oriented Ontology (OOO), which rejects the prioritization of human experience (Harman 2005), postphenomenology does not seek to decentre the human experience, however it does challenge the subject-object division and the unquestionable 'truth' of human experience. Verbeek's philosophy of technology (2005, 2006a, 2006b) is of particular interest to this paper in his consideration of how designed, technological artifacts, rather than leading inexorably to alienation from ourselves as human as Heidegger feared, actively engage us in shared realities. It is Verbeek's contention that a key characteristic of contemporary technological cultures that "human decisions and practices increasingly get shaped on the basis of the role technologies play in them" (2009, p. 245). We are the humans we are because of our interactions with technological artifacts. This view moves away from notions of neutral function and embraces central role of technologies and our attachments to them (Ansari 2013) in how we understand and act in the world.

Verbeek argues for the agency of human-made objects in the sense that tasks and responsibilities are delegated to these artifacts by designers, and further that the relationship between the technology and human can result in the creation of new practices (Verbeek 2005, 2008). Verbeek's postphenomenological perspective is

consequently concerned with how subjects and artifacts constitute each other in praxis. This is a move away from the prioritization of human agency and subjectivity over objects (see also Barad 2003; Brown 2001, Braidotti 2013) however Verbeek continues to recognize the anthropocentrism of design with his view that artifacts and users as co-participants in the experience of the world. It is also recognition that things – technological artifacts – are always designed and constructed and used within a socio-cultural context. Verbeek draws upon concept of the 'script' to express this relationship and how this influence is embedded into the artifact. The 'script' is a concept originally developed by Arkrich (1992) and Latour (1992) as a way to "describe the manifold roles technological artifacts play in their use contexts" (Verbeek 2006b, p. 362). Both Arkrich and Latour argued that scripts are the result of 'inscriptions' by the designers: "Designers anticipate how users will interact with the product they are designing and, implicitly or explicitly, build prescriptions for use in to the materiality of the product". These interpretations of potential use by designers are positioned culturally and historically. Verbeek pushes this notion further, arguing that artifacts have, in effect, 'intentions'. He (2008, p. 95) makes the case that:

Artifacts are active: they help to shape a situation which would have been otherwise without the artifact. Artifacts do not have intentions like human beings: they cannot deliberately do something. But they have intentions in the literal sense of the Latin work 'intendere', which does not only mean 'to intend' but also 'to direct', 'to direct one's course', 'to direct one's mind'.

Artifacts direct. That is, they are "not neutral instruments but play an active role in the relationship between humans and their world" (reference). In this, they enact a form of technological intentionality, and this intentionality is not without impact. In this view, artifacts do not exist only as functional resources; they actively co-shape reality both by the meanings attached to them or generated by them, but also by their physical presence. The transformations that take place have the result that some actions and perceptions are amplified while others are reduced (Verbeek 2006a). Technological artifacts, rather than being neutral objects, *mediate* action and perception, the way that users perceive the world around them and as a consequence, how s/he acts within it. For Verbeek, this process of mediation involves both utility and aesthetics, that is, the ways in which artifacts are embedded and used depend on sensual aspects such as visual appeal, tactility as much as their use-function (Ansari 2013).

### How we live now

Drawing these strands together, we live in worlds constructed in interaction with artifacts that mediate our perceptions and actions, worlds that are then understood and explained through metaphorical webs of shared concepts. Technological artifacts and metaphors co-construct, explain but also limit those worlds. Given this, how then do young people living with embedded personal digital technologies understand the metaphorical frames that are guiding and limiting their worlds?

The paper now shifts to Hazel and Sabine, who discuss their understandings of the internet and the relevance of the key educational metaphors of online and offline. Hazel and Sabine are both young women with at least four years of smart phone access. They are in their early 20s, live in different European countries, and while they do not share a common primary language, have both grown up in a culture that is increasingly digital. Sabine is a sole English speaker while Hazel speaks Dutch and

English. They live and attend tertiary education facilities in different European cities. The interviews described here were conducted in English and form part of an ongoing research project focused on tracking shifts in the metaphors young people use as a way of accessing the conceptual frameworks to which they attach. They each have early childhood memories of dial-up Internet and desktop computers but have spent the majority of their 'grown' lives with increasing access to digital communications technologies. They both own current model smart phones — coincidentally iPhones and in this, they are not unlike millions of other young people around the world. Without intention, their smart phones became a pivot point for discussions of their understandings and experiences of the internet and online/offline.

#### The internet

While many of the early metaphors of the internet described by Markham (2003) hinge on links to highways, conduits or flows, neither young woman has a clear view or easy description of the 'internet'. It has seemingly faded from their conceptual frameworks almost entirely. Hazel struggles to describe it: "There's no 'Are you on the internet?' You wouldn't ask, 'Are you on the internet'. When pressed, Hazel describes the internet as "like living in an encyclopaedia". When asked if the internet was now like being immersed or swimming in wifi or 3G, Hazel insists that it is "more like (swimming) in information. You're 'in' information. 'Cause it's all information". Hazel's understanding of the internet has distinct parameters, "Television and movies and contacting". She has, she claims, "always known that the internet isn't a real thing. That it's a nothing. It's ... just a bunch of information. And a bunch of television shows, funny videos of animals. Cat videos". She understands her access to communication via Facebook, Instagram and messaging to be distinct from 'the internet'. For Hazel, the internet has become the place that "provides you with information. And television. I think it's just for looking up facts now". She bemoans that, "the internet is not as exciting a place as it was, I don't think. I think it's a little dull now. It really is just Wikipedia. For me, it's Wikipedia and the television".

Hazel's view of what the internet is and what it is for is strongly positioned in contemporary social and cultural currents and the rapid distribution of internet and wifi:

Before you could say it was this highway in space with all the little dots and things ... it's still there but no one talks about it. It's such a right to have it that not having it isn't really a thing. It's offensive if you go somewhere and there's no wifi. And you're, 'Why are you taking away something that's meant to be there."

Sabine shares this belief that the internet is fundamental: "Like when we go on holidays to the south of France sometimes and it's like a rural area, we're like freaking out! Even my dad. We like, we just wouldn't go somewhere on holiday that didn't have wifi...if I didn't have wifi I'd be like, I'm going home!"

Hazel, however, is conscious of shifts in what the 'internet' is for. Hazel regrets the changes she sees taking place in relation to her experience of the internet. When she was younger she understood that the internet provided her with social spaces in which to 'hang out':

You used to have a whole place, a world that you built, your bebo page, your Facebook page, *that* was your space. But the spaces have been super shrunk

much. Like, Facebook has shrunk the whole page. Facebook used to have a picture and then a whole block of .. you with it all in with writing that you say about yourself and junk. Now, it is two pictures with bullet points of the place you live, your education, your job and if you're in a relationship. Just bullet points. Your space has decreased online. It's very small now. That's why twitter has become big. Short, fast text ... and twitter has no profile page or anything. Just little bits of information. There's no space for you anymore. It's all tiny bits of writing ... you don't .. like I make my website, but there's nothing online anymore that's mine.

When Hazel tells us that the internet has shrunk, she is referring to the amount of space she feels she can experience, but she is also indicating changes to her experience of the encounters. As the personal spaces available for 'hanging out' and customizing your own space have diminished so has the depth of engagement. In a reflection of the accelerated lives we tend to lead in neo-globalization as well as the relegation of the internet to an information-dump, these young women cruise rather than hang out. Hazel describes her cruising as an engagement where she "will flick through, check to see what's happening today, read one story, go to the next story. Then switch to Instagram". While many of her friends would also cruise through to Pinterest and Twitter, Hazel does not. Hazel is seemingly disappointed at the lack of depth of her online experience. While she cruises her suite of social networking sites and the news, she has lost access to the online spaces she built and used to 'hang out' in and notes ruefully that there is "nothing on Facebook that you really need to see at all". Hazel does not trust Facebook itself as a source of information, suggesting that is has "fake headlines just to make you open the article, and then you open it and its nothing". She claims to be 'wary' of the news and the people on Facebook and often googles the news stories on Facebook to check their veracity. Hazel understands that the shallowness and her own cruising behaviour is linked to time as well as her sense of the diminished space available: "It frees up time. We used to sit hours on MSN and wait. But these days, no one is waiting", "Noone is willing to sit and do nothing anymore". The direct notifications that mean you are always 'on' also mean that "you don't have to sit there and wait for the ding".

## Online and offline

When asked of the difference between online and offline, both young women are surprised by the question. Sabine states her position very directly with, "I don't think there's such as thing as being offline". She continues, "I think online/offline is just, you know, rubbish". Hazel believes it is still appropriate to speak of 'online', however she has view of what this implies has drifted away from that originally used in the 1990s and that still appears in contemporary discussions. For Hazel, "you can still say you are online ... most people are always 'on' but not 'in'. Not signed in ....Now it means if you're actually on the thing that you're on". Hazel elaborates:

You're always 'on' the internet, but you're not always 'signed in' to Instagram or signed into Facebook, you know. And 'cause like, everybody, I can get WhatsApp right now ... I'm always on WhatsApp but I'm not always 'online'. When I click into the app and it opens, now I'm online, and if someone else, like if (female friend) goes on hers and clicks on my conversation it will say 'online' at the top.

Hazel does not believe that online or offline are suitable descriptors for how she and her friends experience their everyday realities: "It's something new...it doesn't exist.

No, it does exist, but it's something ... I think any word you come up with will be lame." According to Hazel, being either 'online' or 'offline' is not something that comes up in direct conversation. Instead, the device you are using provides information about presence via the operating app. It seems that there is no longer a reality that requires a differentiation in these states. The metaphor is out of use for these young people and does not feature in the conceptual frameworks from which they draw meaning.

Sabine and Hazel do not share the same metaphor for the internet. For Hazel is a place for accessing information that is accessed predominantly via the screen of her smart phone; for Sabine it is the source of a customized experience, also accessed via her iPhone. For Hazel, the internet used to be a 'place'. She still uses the term 'place' but in her descriptions it is not a place of unending potential and freedom. It is not a place where she goes to hang out. It is a sterile place where information – understood predominantly as facts - is stored and accessed. Hazel and Sabine's use of the terms 'online' and 'offline' has shifted as well. For both young women, the concept of being 'offline' has no currency. Online and offline are merged, and 'online' carries a a meaning for both young women that potentially connects them into a set of metaphorical structures distinct from those with which we began to explore the internet. Rather than a polemic, there is now a deep mutuality between what we would have once described as two distinctly different states and places. The online and the practices that create and sustain it - does not exist without the offline; in most of the global north, the offline no longer exists without reference to the online. Instagram, YouTube and Facebook are dependent on the activities we each take part in for their content. Many of our social interactions are premised on the knowledge that the images and comments will be posted onto Facebook or a similar site. What were once seemingly differentiated spaces linked to distinct practices are no longer (Jurgenson 2012) and are now mutually reinforcing.

### Presence and personalization

There is the sense in these discussions that most of Hazel and Sabine's contemporaries are online, in their understanding of the term, almost all the time. What is also emerging from these conversations – and linked to the experience of being simultaneously in digital and physical locations - is the emergence of a shared metaphor around *presence*. For many interactions, Sabine and Hazel no longer differentiate based on where the engagement is located. For both, the defining features of the interaction are cognitive and emotional *presence* rather than physical location. The conceptual framework developing around simultaneous interface includes a shared understanding of the prioritization of presence over ground location.

As noted, there is no sense that you are ever 'offline' and it seems that the concept of 'online' has become a sign of *presence*. Sabine clearly articulates the importance of being present:

"If you're on Whatsapp and there's another person online, you can see when they're typing, the same as on Facebook chat or something. You're both *there* and especially when you're having like a conversation about what you're having for dinner that night or what you're going to do on the weekend or something then you're both really present in that conversation. More than, you know, where you actually are physically".

For both young women, the emotional loading and expectation of response for chat is as socially pressing and of the same social status as communication with people physically present. This was a strong feeling for both young women. Sabine speaks to the emotional priorities of the communication. Even though she is not physically in a room with someone, "It is just, you know, a connection to them. It's like if you had a cup with a paper strong and they've got the other end of it. You are sort of connected but not ... you're obviously not physically in the same space, but yeah, I do feel guite connected to that person". She explains further, "I think it's obvious that they (physical and communicative space) are different, but it's just really difficult. I don't know. I think that because one of them ... well, you're not physically present when you're online but you *are* present". This dual presence – consistent and persistent, but customized - comes with social rules and obligations. For Sabine, "You know, if someone wants to ask me a quick question then I just want to reply to it so it's out of the way so I'm not, you know...it's just annoying if you send someone a text and they don't reply for like two days. I just think why would you not reply immediately". Hazel describes a division amongst her friends between those who reply right away and those who try not to reply right away. I think the age of pretending you're not there has gone away. All of the Facebook and WhatsApp tell you when someone has read your message and then you get annoyed with they don't reply". As Sabine notes, "There is an etiquette". For both Hazel and Sabine, the communications they are conducting via their devices and using apps are as socially important as those they have with people sharing the same physical space, sometimes more so.

## Conclusion: Does any of this matter?

There are a number of points to note here. Alongside the obvious observations about the ubiquity and taken-for-grantedness of access, there is a sense of *customization and personalization* of experience entwined with these young women's perceptions of their worlds. Applin and Fischer's (2011a, 2011b) work is of interest here. They note that no two people experience what they term a PolySocial Reality (PoSR) in the same way, just as none of us experience *any* reality in the same way. It is their argument that information from all environments – physical and digital – simultaneously interfaces to create a unique reality. They argue that these realities are 'mutually consistent' (p. 4) but not identical. Applin and Fischer (2011b) suggest that individuals can be conceptually located in both physical and network space simultaneously, just as Sabine noted in her descriptions of standing in the line for a coffee and in a conversation using a messaging app. This notion of simultaneous interface also goes some say to providing an explanation for the ways in which Sabine and Hazel talk about the notion of presence.

Also of note is the impact of their smartphones. Sabine makes the point:

I think that most people at least have one device on them all the time and I think its fair to say that if you have a smart phone you're getting notifications from the online realm so it all just kind of becomes one.

Hazel also registers the role of smart phones: "Smart phone is the entry to the world. Tiny little doorway to everything". They both describe the changes made to the lives of friends who have moved from older model phones to smart phones. According to Sabine, her flatmate's life was changed as a result of the entry of a smart phone into her life, saying she is "genuinely different now". The scripting of these devices encourages some activities and perceptions and not others. The size, shape and tactile

feel of the devices encourage holding them or keeping them close to hand. The haptic nature of the devices that requires touch to enable them to function further encourages the close and on-going physical contact between the artifact and user. Use of the device takes place via the touch screen – the world seems to be held and accessed within that small screen. This, in turn, alters sense of self in place (Speed 2011; Verhoeff 2014), effectively bypassing the on-off polemic constructed in the early days of internet metaphors. While Markoff (2003) may have identified the early traces of the internet metaphor of way of being these young women's 'being' is more complex and entwined with their technological artifacts than imagined. The humanistic agency assumed in Markham's work is not helpful in understanding how the lifeworlds of Sabine and Hazel are constructed and connected.

A transformation of perspective takes place and this has implications for the ways in which these young women interpret their world (Sicart 2013). These two young women's perceptions of the world, including the metaphorical structures they use, and their actions within it, are strongly mediated by the technological artifacts embedded in their everyday lives (see also Carrington 2014). For both young women, iPhones and the infrastructures that support their use are central to the realities in which they operate. The internet, for example has become so deeply embedded in their everyday lives that we are unaware of it, it has been rendered invisible or 'ready-to-hand' (Verbeek & Kockelkoren 1998, pp. 38-40), acting as an extension of our bodies, deeply embedded in the minutia of everyday life. The intentionality of the device enables and encourages a range of practices and perspectives; the metaphorical structures work with the device to co-construct the conceptual frames and worlds in which individual users exist. Lakoff and Johnson (2008) understood clearly the role of metaphor and language in the construction of our perceptions and actions, however Sabine and Hazel make it clear that the artifacts embedded in the everyday work to co-construct these very metaphors and their interpretation. In this, Verbeek's move away from the unquestioned prioritization of the human is useful. It allows us to understand the complexities of technologically mediated lives. And, all of our lives are technologically mediated in some way.

That the internet has disappeared is not a remarkable insight. The submergence of the unremarkable fabric/texture of everyday life has been observed frequently and across a range of fields (see for example, Hine 2015). That the internet and wifi have merged in everyday usage for these young women is also not particularly insightful. What is interesting, however, is their very differentiated perspective on what the internet brings. It cocoons Sabine in a highly customized and personalized experience; it disappoints Hazel as its increasingly 'shallowness' means there is no longer a place for her to hang out, pushing her towards 'cruising' behaviours rather than her previous 'hanging out and messing around' (Ito et al, 2013). Hazel and Sabine alert us to the very significant shifts in social practice around communication in these mediated worlds: communication/chatting with someone on iMessage, WhatsApp or another site is as socially important and immediate as with someone who may be physically in the room. This chat presence carries the same emotional and social weight as physical presence. This means that the textual practices that sustain it are highly valued cultural practices. It also means that these practices do not neatly fit into either 'online' or 'offline' anymore.

Jurgenson (2012) argued that we have come to understand online as *not offline*. While this remains an accurate description of how we conceptualize our engagement with the internet and digital media in much educational and literacy research, this is not how Hazel and Sabine describe their worlds. There is only online for them and there is presence. There is no sense of being offline – on and off have merged into 'this is how we live now'. What we would have termed 'offline' and 'online' practices have a deep mutuality and many of them can no longer be disentangled. A range of researchers across many fields are grappling with these issues and are moving towards conceptualizations of contemporary life that do not, of necessity, differentiate between online and offline because, as Hazel and Sabine tell us, the offline has no real relevance for them as a concept (Boyd 2015). There remains, however, an urgent need for new theoretical frameworks that will allow this type of research and analysis to take place. These frameworks will need to map across a new integrated view of the spaces of literacy practice that do not assume the centrality of discourse and humanist versions of identity; they will need to be flexible enough to incorporate increasingly customized lifeworlds; and, they will need to incorporate a more sophisticated view of the ways in which individuals, groups and technologies interact and influence each other. Markham (2003) notes:

When research scientists operate within one metaphorical construct, policy makers utilize a different framework, providers work within yet another conceptualization, and users engage in multiple different methods of meaning, the resulting conflict of perception is the issue of least concern. Everything from policies and procedures to regulations and laws are enacted with little or no attention paid to the way people understand them, using their own metaphoric frameworks. Well-intended research-based policies may, in fact, gain nothing for their intended recipients because the recipients do not respond as expected.

It is the same for literacy researchers. These metaphors create the boundaries of thought and action that colonize educational practice and our engagements with young people and as noted earlier, are not neutral. At the same time, the metaphors being used and embedded by these young women are no less neutral than the older online/offline or visions of virtual places used in mainstream educational research. They work no less to delimit and shape their views, but the point is that their perceptions and actions are different and formed in relation to different metaphorical forms and in close interaction with embedded technologies. They are not the same metaphors in use in educational contexts. As educational researchers, we must endeavour to continuously map these shifting meanings and their implications. If nothing else, we should take away from this paper the acknowledgement is that it is increasingly difficult and inappropriate to generalize about the realities co-created by technologies and the young people who use them. The amplification of perception and practice that accompanies these interactions is seemingly moving us – as a culture inexorably towards increasing differentiation and individualization (see also Beck & Beck-Gernsheim 2001; Bauman 2001).

These shifts, however, have broader implications. Barad's (2003) posthumanist philosophy argues that "language has been granted too much power .... Language matters Discourse matters. Culture matters. There is an important sense in which the only thing that does not seem to matter anymore is matter" (p. 801). This paper is not making a case to discount discourse, not is it arguing for a complete decentering of the human. It is, however, arguing that discourse alone cannot account for the

lifeworlds in which we live now. Reflecting this, there has been an ontological shift towards materiality. This shift has implications for how we might interpret textual practices. If we take this stance – that social realities are co-constructed within our interactions with close technologies – then a text becomes a co-construction – or perhaps an assemblage - where the intentionality of the device as well as the metaphoric resources and cultural positioning of the user are significant influences. This is not a case for technological determinism. As postphenomenology demonstrates, the issues are more complex. The ways in which we understand texts to be produced and interpreted must be reconsidered. Not only is a text a material (technological) artefact (Pahl & Rowsell 2010) that carries cultural weight and is sent out into the world to do 'work' on behalf of its creator, to mediate a reality; it is created in response to a co-constructed lifeworld that is not wholly social or cultural. It is technological and material and very definitely has intentionality. And as Sabine and Hazel have indicated, the reality that is constructed in interaction between these artifacts and humans is both shared and uniquely personalized.

Law (2004) reminds us that different research methods build different visions of reality and that each of them is insufficient to capture the nuances and messiness of life. This analysis is both partial and messy. The use of philosophy of technology alongside semi-structured interviews directs our attention in some directions and not others. It is my hope that it partially directs our attention to the lifeworlds of these young women and the conceptual frameworks they are connecting into a workable whole and further, that it demonstrates that our older metaphors of online/offline are no longer fit for purpose when speaking about the activities, practices and beliefs and priorities of these young people. On the basis of this very small set of interviews, no sweeping statements can be made. However, they do act as what has been termed a 'theoretical console', an object or set of instances that cannot be explained by the existing theories. In this, these young women's views of their converging worlds and their interactions within them are illuminating and challenging and they pave the way for how we might usefully theorize the practices with text and technologies that they carry across different *presences*. They remind us that the discourses and metaphors we use are important, but they are no longer all that we must attend to. The most accurate way to end this chapter is to note that these are ideas still forming and the research goes on, however, as always, this is also a call for more empirical research and the development of new theoretical and metaphorical models. This is obviously a challenge in an era of diminishing research funding for the social sciences, and particularly for exploratory educational research. Nevertheless, this is what is required.

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