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Computers and Composition 55 (2020) 102543

Computers and Composition

www.elsevier.com/locate/compcom

Your Digital Alter Ego - The Superhero/Villain You (Never) Wanted Transcending Space and Time?

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Abstract

This article explores the dynamic bodies of information taken through surveillance, or what I call our "digital alter egos" as superheroes/villains. It highlights our digital alter ego's flair for institutional intertextuality and provides a framework for understanding our digital data. While the superhero may not be the first thing someone thinks about when talking about surveillance and information, the "digital alter ego" provides a memorable heuristic to understand contemporary surveillance practices.

Keywords: Surveillance; Data bodies; Digitial bodies; Identity; Myth; Superheroes, comics

Introduction

Superheroes and villains possess a wide range of powers. For instance, according to Pop Chart Lab's (2017) "Omnibus of Superpowers," Sage has super intelligence; Invisible Woman is invisible and hard to reach; Nightcrawler can teleport; Time Trapper can time travel; Mystique is shape-shifting; Crazy Jane has multiple identities; and Hulk has super strength. Each superhero or supervillain holds some type of superhuman skill which enables them to complete tasks in ways mortal folk cannot.

While these comic book characters are fictional, each one of us, in a way, has our own superhuman "digital alter ego" [2] – or bodies of digital information taken through surveillance practices that coalesce in digital spaces, rhetorically exhibiting these superhuman powers: the abilities to convey large amounts of data, the power to be invisible, transcend

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[2] I will be using the term "digital alter ego" in this article to refer to a specific view of bodies of our digital information. Although, as will be discussed, there are various other terms already in existence which attempt to identify this construct, I add this additional label only because I am carving out a particular understanding for this digital data in the context of computers and composition. Although I hesitate to use yet another term, I also don't want to add meaning to other existing terms not understood in the same way. Further still, these bodies are not "alter egos" in the sense that Jane McGonigal (2015) might use when referring to a game; instead, as I will show, they almost take on a life of their own and represent us beyond our control, circulating in spaces that defy constraints of physical bodies.

https://doi.org/10.1016/j.compcom.2020.102543

space and time, change shape, and perform as powerful actants – often serving as a proxy for us, allowing us to be ranked, sorted, privileged, or disadvantaged.

Computers and Composition scholars increasingly study these bodies of data. For instance, called the "visible" or "invisible digital identity" by Beck (2015), Beck and other scholars have explored the data being assembled and stored through writing posted online, participation in learning management systems, time spent researching on the internet, digital portfolio storage, and other activities.

When it comes to reiterating the importance of surveillance, though, I've found it's often hard to move past the "nothing to hide" argument. Some assume that because they have nothing to hide, there is no harm from surveillance (see Solove (2011) for more discussion on the "nothing to hide" argument). This is especially because the scope of the information gathered through surveillance for our digital identities is not always articulated due to invisible and intangible nature of our bodies of digital data.

To bring this body to life, I find it helpful to use a superhuman metaphor to see that a body of digital data gathered about us creates a "digital alter ego" (DAE) that acts as our superhero/supervillain, granting and denying us affordances often without our knowledge or control. This metaphor not only utilizes superhuman imagery and creates a superhuman character, but it also utilizes and facilitates a rhetorical space through which to talk about surveillance. This article intends to introduce the audience to the DAE, the superhuman that is our digital data, and then articulate the benefits for composition scholars in using this metaphor.

Studies of Writing, Surveillance, and the Digital Body

The idea of a digital body and a DAE is popular and well-theorized. Beyond Beck, outside of *Computers and Composition*, scholars have assigned various names to bodies of our digital information to represent nuance to their descriptions such as (among many), "data doubles" (Haggerty & Ericson, 2000, p. 606), the "digital dossier" (Solove, 2004, p. 1), the "digital persona" (Clarke, 1994), or the "dividual" (Deleuze, 1995, p. 180). The variations of these terms all in some way revolve around a collection of data taken from or about the human body, which is turned into electronic information to be used by governments, corporations, or various other entities for, as Haggerty and Ericson (2000) state, "access to resources, services and power" (p. 613).

Writing studies scholars have been researching these bodies of data, and these conversations focus on different aspects of online data and generally follow at least four different research threads.

First, scholars have focused directly on these digital bodies by looking at the body of digital information as an entity unto itself. Beck, Grohowski, and Blair (2017) address the fundamental idea of digital bodies by showing how course/learning management systems can turn students into a compilation of data points that "are abstracted from their physical, social, and cultural settings." Beck (2015) also discusses "the invisible digital identity" where she shows that computers track the activities we make through technology like cookies or web beacons which contribute to our bodies of digital information.

Second, the conversation is further picked up when scholars delve into conversations about the *participatory* nature of online writing and the digital versions of ourselves that exist because we participate in practices which can monitor and track our behavior. In these instances, we provide details about ourselves to others. For instance, Hawisher and Selfe (1991), Janangelo (1991), Healy (1995), and Burley (1998) examine student participation in online conferencing and discussion boards and the surveillance present when students participate in these online spaces. Anderson (2006) looks at similar power relationships in the mediated, distance learning environment. DeVoss, Cushman, and Grabil (2005), Beck (2016b), and Rose (2007) also look at student participation in learning/course management software.

Third, scholars also discuss how we share information more indirectly. For instance, Gonzales and DeVoss (2016) discuss that students actively share information when they engage in all types of online spaces such as their searches in internet browsers. Hawkes (2007) also talks about the surveillance danger of one's search history for not just students but any digital researcher either maliciously from "cyber exploiters" (p. 342) or legally by government. McKee (2011) also discusses data mining of web activities based on what we write and do online. The information we provide informs retailers or other interested agencies about our preferences and activities. Scholars have also examined the collection and storage of metadata information that results from online work (Reyman, 2013), surveillance through information we provide in emails (Moran, 1995), and surveillance information obtained through social media activities (Colton, 2016; Fielding, 2016; Reyman, 2013; Rose, 2007; Vie, 2008; Walls, 2015). The focus on the analyses in this category

are not directly on a separate entity of digital information gathered, though. Rather, the scholars discuss that we provide digital information about ourselves in mediated spaces.

Finally, writing scholars also address the bodies of our digital information by analyzing the databases which store the information. While databases can also involve student participation, the focus of this research is less about active, online participation and more about the storage of this information. For example, Crow (2013), Kimball (2005), and Tulley (2013) discuss that eportfolios are stored in databases which facilitate student writing to be compared against records of other writings, and Marsh (2004), Purdy (2009), Rose (2007), and Zwagerman (2008) talk about the ability to upload student papers to plagiarism detection software databases. Crow (2013) also looks at writing assessment in databases, and Vie and deWinter (2016) remind us that corporations store data when participants play mobile games. Further, Hawkes (2007) looks at the purpose of these databases and defines the term "data warehousing" as "the process of storing the mined results in a large database for linking to other databases" (p. 340). Vee (2010) and Beck (2016a) also examine codes, algorithms, and how software and code that mediate information collection. In all these areas, the scholars point to the ways in which databases hold information about individuals such as students or gamers, which can lead to the creation of larger repositories of information. In this thread of research, the focus is more about the storage of information and less about the active participation of providing this information.

The Superpowers

While all this research provides critical and necessary discussions for the field, the body of digital data remains in a more ethereal, bodyless form, circulating in digital space rather than taking a more material existence. Our digital information is very real, however, and it has many consequences, both good and bad, for ourselves and for others. Visualizing our data as a more material body then, even if it is a digital one, helps see our data as real and consequential. Importantly, a superhuman form is a particularly useful image for these bodies because it allows for the characteristics that our digital data possesses: at least eight superhuman feats that operate in ways our physical bodies don't typically maneuver but allow us to be watched, stored, and ranked. It also provides supplemental rhetorical affordances. Therefore, it is important to see our body not just as an indistinct or separate shadow body of data, but as a more dynamic, distinguishable superhero/ supervillain of us, acting to grant or deny us certain benefits. This body not only helps understand the breadth of reach for our surveillance data, but by using the affordances of myth and rhetoric, it also scaffolds a conversation for composition scholars in ways other metaphors cannot.

I will now demonstrate these points using a brief sketch of superhumans which possess similar powers and then offer a larger conversation about the usefulness of this metaphor in the discussion section.

Super Intelligence

To see this, we can first think that the DAE has a superpower of super intelligence. For illustration purposes, a superhuman with representational powers is Marvel's Sage. At times associated with the X-men, Sage can record vast amounts of information and can "function as a living computer" (Marvel, "Sage", 2019). Like her "computer-like mind," our DAE has super intelligence because it has a computer-like memory because it is actually computerized data about us, a vast body of data recorded about us from a variety of sources. From browsing history on our computers, to our medical information stored in someone else's database, to our credit scores: our DAE is comprised of a mishmash of information stored and all constantly being reassembled to create digital body versions that represents our history and future.

Called the "surveillant assemblage" by Haggerty and Ericson (2000), the technological nature of contemporary surveillance-gathering practices takes discrete flows of information from various contexts (such as our biometric bodies, our search histories, our credit history, etc.) either visibly or invisibly and arranges these bits to form digital snapshots of us (or what they call "data doubles") for surveillance purposes. For example, if an employer wants to see if a candidate is a good fit for a job, they may request fingerprints, educational transcripts, driving records, an online job application, or other pieces of information to determine job suitability. By themselves, the pieces may not amount to much. But, when looking at a whole assemblage of surveillant information, an employer might decide to hire, or

not to hire, that individual. By assembling together intelligence about us, previously scrutinized bits of our bodies and behaviors become data points subject to larger-scale assessment and categorization.

(In)visibility and Intangibility

On the other hand, though, just who these DAEs are visible to, is another question and leads to the next two superpowers: invisibility and intangibility. Illustrating this power is Invisible Woman, a member of the Fantastic Four superhero team who can make herself invisible and difficult to reach (Marvel "Invisible Woman" 2017). Like the often imperceptible Invisible Woman, the DAE can be 1) invisible to us or 2) out of reach either due to our lack of knowledge that the DAE exists or due to our inability to see what our alter ego is made of.

Demonstrating this, first, we may be unaware our data is being recorded, or even further back, we may be unaware we are even being watched. According to Marx (1988), a characteristic of "new surveillance" is that "[*i*]*t has low visibility or is invisible*" (p. 217) [emphasis in original] because it is hard to tell who is being watched and who is watching. Technology has facilitated surveillance through distance (both socially and geographically) and miniaturization, and one can be watched from afar in almost invisible ways such as through digital technologies, with no clear direction of the watchers.

Additionally, our DAEs may be invisible or out of reach because, even if we know our biometric or digital information or our actions are being recorded, we may not have access to this data. This is especially true due to the perceived ownership of our digital information. Particularly in the United States, the DAE is often not in our control, and rather, it manipulated by those like corporations gathering the information. The 2018 implemented General Data Protection Regulation (GDPR) in Europe and the lack of large-scale data protection regulations in the US highlight this. Whereas the GDPR legislates personal control of information in Europe, this provision is overwhelmingly absent in the US.

These superpowers are also characteristics of the notion of ubiquitous surveillance. Based on developments in ubiquitous computing, as Andrejevic (2012) explains, surveillance "is increasingly difficult to escape the proliferating technologies" that gather, store, and sort information about us. (p. 92). Technologies can be monitoring us at many times even if we are unaware it is happening.

Transcending Space and Time: Teleportation and Time Travel

The DAE's next two superpowers are teleportation and time travel. Illustrating these powers are super-persons Nightcrawler and Time Trapper. Nightcrawler, also associated with the X-Men, is reported to be the son of the more well-known superhuman Mystique (Marvel, "Nightcrawler", 2019), and Time Trapper is a supervillain known to work against DC's "Legion of Superheroes," a group consisting of teenage heroes like Superboy and Supergirl (Doughnut42, 2018). Like Nightcrawler's ability to teleport, and Time Trapper's ability to "travel through time, freeze it, alter it, send beings across timeline" (RazielWraith, 2017), the DAE can travel across time and space and go where physical bodies cannot go. These multiple versions of DAEs can pop up in various places separated by time and distance.

The ability to be called up by algorithms in many places facilitates this power. According to Marx (1988), this transcendent and teleportational properties characteristic of new surveillance allows our surveillance data to "*transcen[d] distance, darkness, and physical barriers*" (p. 217) [emphasis in original] because technology has reduced physical boundaries that formerly constrained watching. For instance, sound and data can be transported beyond closed doors, and a watcher is no longer limited to institutional situations. Algorithms allow bits of data to be called up by whomever has or is granted access to such information. For instance, the goal of the profession of the data broker is to assemble and sell personal information (McKee, 2011).

Further, Marx (1988) continues that our data "transcends time" because "*its records can be stored, retrieved, combined, analyzed, and communicated*" (p. 217) [emphasis in original]. In this area, our data is frozen in time from whenever it was gathered or recorded, but it can be called up when algorithms need it from databases. Digitized information is portable and transferable, so thus, it can be called upon quickly or it can seemingly be in more than one place at one time. Our data can originate in one company in California, exist in a database in Utah, but be transferred to another company in Maine as fast as data can travel. Our data thus has a flair for institutional intertextuality.

Shape-Shifting and Multi-Powered Personalities

The DAE's next two superpowers are shape-shifting and possessing multiple, multi-powered personalities. Transformational like Mystique and with multiple identities like Crazy Jane (Pop Chart Lab, 2017), these two superpowers show the versatility of the DAE due to its digital, fluid environment. Associated with the X-Men and popularly dramatized by actresses like Rebecca Romijn and Jennifer Lawrence, Mystique has the ability to change shape and form. Crazy Jane is associated with DC's Doom Patrol and has sixty-four different personalities with "no control over who comes out or for how long" (Comic Vine, 2019). Similarly, our data can transform into various iterations of ourselves, often beyond our control.

However, although DAEs can represent us in many places as discussed above, each alter ego is not a replication or a clone in a sense like the superhero Multiple Man. While Multiple Man creates identical duplicates of himself in various locations (Wikia, 2017), DAEs are not clones, but assemblages of information put together in different ways for different purposes. These are rhizomatic assemblages of information flows, to be reconstructed again and again in changing ways depending on the whims of those gathering our information. For instance, one entity may only want our consumer information like purchasing history while another entity may want our driving record. Separately, those two data sources creating our profile may tell two different stories; one, they can tell that one has visited a bar and grill establishment[3] or that one has no traffic violations attached to their driver profile. Together, though, they may tell another third story that one drinks responsibly if there are no alcohol related driving accidents. Depending on who culls the data into being and for what purposes, the DAE will look different.

Also, the identity of the DAE also has multiple personalities due to the nature of definitional difference between the word "identity" and "identification." As Lyon (2009) makes the distinction, *identification* is a more formal idea of self, imposed from above through power. *Identity* is more personal. The state engages in *identification* through things like social security numbers or official IDs noting brown hair or the need for corrective lenses. However, one forms an *identity* based on personal attributes such interests in sushi, dogs, or writing. Specifically, for DAEs, there is no higher thought capacity for digital information to make its own self-identity; the agency of the digital information lies mostly outside of the body of data itself. One may not share the identity of a thief, but if an employer has a police report saying an individual stole something as a pre-teen, then that person may be identified as a thief from external sources. The DAE, although made up of our personal information, is not just the identification we give ourselves or our digital information, but it is also an identification imposed by others. This point should spur additional questions for us as to how our agency as writers and creators of our identities through our DAEs contrast to the ways those that use our data supersedes our agency and writes our stories for us.

Super-Strength

The final, eighth superpower is super-strength, and this power is represented by the super-human Hulk. Hulk, a member of Marvel's Avengers is probably one of the most well-known of the super-humans with appearances in many comics and cinema and more recently played by actors like Edward Norton and Mark Ruffalo. According to Marvel, Dr. Bruce Banner "the mild-mannered scientist transforms into a powerful being called the Hulk whenever he gets angry" (Marvel, "Hulk," 2019). Further, according to Marvel, the Incredible Hulk possess a great amount of strength which, of note, has sometimes been used by others to complete their ends (Marvel, "Hulk," 2017).

Specifically, though, for this superpower, I'm not referring to strength as in brawny muscles, but I mean strength as in power. The DAE has a form of super strength because it roots and grounds us into categories, or in other words, it enables others to assign an *identification* to us (as discussed above). Subsequently, those identifications are used to *sort* us, or to grant or deny us some type of benefit or put us into categories of control.

Sorting is one of the most important characteristics of the DAE because the purpose of contemporary surveillance is for social sorting (Bauman & Lyon, 2013, p. 13). Lyon (2009) explains that social sorting is "characterized by the classifying and profiling of groups in order to provide different levels of treatment, conditions or service to groups that have thus been distinguished from one another" (p. 41). The sorting could range from softer types of categorization designed to influence our purchasing to more complicated or troublesome categorizations where a resident of a certain

[3] Creditors use merchant category codes to classify data – for instance, a drinking establishment is code 5813 (Gilliom & Monahan, 2013).

area is sorted into a particular risk because statistics indicate a neighborhood has a higher probability of crime. The first example shows an example of what Lyon (2002) might call "categorical seduction" where one is enticed to join a category, and the second example exhibits characteristics of what Marx (1988) might call "categorical suspicion" where one is sorted to be guilty until proven innocent.

Important to this point though, is that like the Hulk's super-strength which has been used by others to complete their ends (Marvel "Hulk," 2017), while our DAEs are strong enough to sort and root us into particular categories, they are often placed into categories by others to complete someone else's ends. As Lyon (2009) states, sorting is enabled "by the use of searchable databases and associated techniques such as data mining" (p. 41), so whomever controls the algorithms, databases, and the underlying assumptions behind those entities, controls how where we're sorted. Overall though, this is due to the strength of these DAEs and their abilities to function as a synecdoche to stand in for our physical bodies.

Discussion

Overall, recognizing our data as separate, dynamic entities possessing superhuman characteristics then is not just useful, but it is almost necessary to understand the breadth of surveillance. These eight points help articulate how our DAEs act as superhumans on our behalf to grant and deny us benefits.

In addition to putting our data into a bodily form, though, the superhuman metaphor is particularly fitting for composition scholars because it scaffolds a conversation that can't be replicated through other metaphors. Namely, it blends both myth and rhetoric together to help not just identify the powers of our data, but to also interrogate the whole system of surveillance. As Winslow (2009) states, "Comics are a blend of myth (fictional characters imbued with symbolic values and ideology) and rhetoric (serious, formal interrogation of principles) in the more 'serious' pieces as the characters deal with complex issues" (p. 51). These two characteristics help understand surveillance and the value of using the superhuman metaphor at a deeper level.

Myth – A Blend of Fictional Characters and Symbolic Values and Ideology

Exploring these affordances, first, the superhuman metaphor allows for the creation of a superhuman character in general that offers three conventional affordances: mission, powers, and identity (Coogan, 2003). Each one of these affordances comprises the superhuman's myth.

Looking at each convention, first, a superhero has a mission. A character must have some type of purpose, and a character's mission ultimately defines the superhuman's values and ideology. Coogan breaks down the superhuman into three different entities: a superhero, a superpowered protagonist, and a supervillain. A *superhero*'s mission is to s̈elflessly to aid others in times of need,̈ a *superpowered protagonist* is one ẅho gains personally from . . .[their] powers,äand a *supervillain* pursues their own interests ät the legal, economic, or moral expense of others" (p. 365). For the second convention of powers, the superhuman has some type of exaggerated power more than a mortal or exceptional human can possess. The powers aren't just slightly increased; they exceed far beyond normal. Finally, the third convention of the superhuman is an identity. Identity for superhumans often comes in two forms: the main identity of the individual as well as the secret identity which often comes with a costume which embodies the name of the character.

These three characteristics are especially beneficial for the surveillance and DAE conversation because first, the *mission* convention allows the audience to assess purpose and values of the use of our digital information to see how the DAE is operating. In the case of the DAE, at times, the data can act like a superpowered protagonist, acting to either grant or deny a particular benefit like a credit loan or lower insurance rate. For our DAE to be functioning as a superhero or supervillain, the data would be used in more collective ways for the benefit or detriment of others. This is a very real situation because our information (to include metadata) is combined with others to create overall predictive patterns of behavior that are turned into algorithmic interpretations used to grant or deny benefits (Millar, 2009). For instance, information about the credit loan we were granted may be then used in the larger collective aggregate to identify the type of people that are granted or denied credit loans. Overall, seeing the data sorted through these three categories helps define cultural values and assess the reach and limits of the use of our digital data.

Second, conventions of the superhero can help visualize the *powers* of our DAE. As I outlined before, our DAE possesses at least eight powers which make it a powerful entity. By creating a character of a superhero in the first place,

the those accustomed to the myth of the superhero can see how the DAE is a similarly powerful entity if the DAE possesses the same exaggerated abilities that other contemporary superhumans do. Our data does not always idly sit and wait for us to put it to use – it circulates in the digital sphere, being called and culled by others who have power to control algorithmic discourses to provide the power to get us sorted.

Third, the identity convention helps establish the DAE as a type of superhuman in the first place. Before any other characteristic or benefit of a super person can be examined, a body (at least in simulation) must exist. For the DAE in general then, a superhero metaphor allows the DAE to come to life, so to speak. Calling our data a super-person carves out space for this materiality, even if the body only exists in a hyperreal of what we know and believe about superhumans. The audience can visualize what their data might look like as a superhuman through the values and ideals of a graphic novel world. The "costume" of the DAE or what makes it different from our primary identities is that it lives in the digital realm and exists in more techno-materiality and looks like code.

Important to add, in the classroom, I find it is also useful to have students make their superhuman even more real by actually drawing out in comic form[4] what they envision their DAE could look like and annotating that character with ways in which their body is made of data. This serves a function much like the action figure. As Winslow (2009) notes, in the case of superhero replications in the form of physical action figures, the figure informs both body image and "reiterates the figure-as-individual" (p. 68). When confronted with a more visual depiction of the superhero, the audience is confronted with a more visible representation of the often invisible and intangible DAE. For those in the classroom, too, superheroes are an especially engaging genre because as Schrems (2016) comments, students "relate to the personal issues these heroes face, creating a personal bond with the characters." (p. 58). Romagnoli and Pagnucci (2013) add that the superhero is s̈imultaneously representative of the common man and all that he stands for in a world that can be inherently corrupt and dangerous(p. 5). Appendix A following this article demonstrates a sample 5-week lesson plan revolving around surveillance and superheroes illustrating where the student creation of a personal superhero fits into a larger academic schedule.

Rhetoric – A Serious, Formal Interrogation of Principles

This ability to relate to the characters leads to the second benefit of the superhuman character – the rhetorical world of superhumans is already imbued with stories of surveillance. Many tales of comic literature are filled with superhumans dealing with monitoring and everyday surveillance, and superhumans also provide a space through which to examine surveillance in a more macro view with their mythic simulations of the real world and topical surveillance plotlines. As Winslow (2009) states above, comics are also rhetorical with "serious, formal interrogation of principles" involving "complex issues" (p. 51). So thus, in addition to helping illustrate our DAEs, superhumans and comics can also provide the audience with examples of surveillance that help communicate symbolic values and ideologies inherent to surveillance issues.

For instance, several surveillance-friendly popular superheroes like "The Watchmen" and "The Punisher" deal with themes of surveillance. For DC Comics' The Watchmen, this group of superhumans gets it name from the phrase "Who Watches the Watchmen" (McMillan, 2009) and focuses on surveilling those that surveil. Also, Marvel's The Punisher follows Frank Castle seeking revenge for his family's killings, and as depicted in the contemporary Netflix iteration, features scenes of camera monitoring, mysterious identities, conspiracies and monitoring (Netflix, 2019). Overall, themes of surveillance even dominate the whole idea of a superhero – a character that watches over loved ones of the community to ensure safety and sustainability is steeped in surveillance themes even if the surveillance is motivated by benevolence and care.[5]

Each of these superhumans allows a platform for exploring not just our data as a site of surveillance, but also exploring these fictional worlds to see what we consider surveillance, what is acceptable, and provide insight into who can carry it out. This is especially helpful in the classroom because the superhero genre can create a "Bakhtinian notion of third space" where instructors don't have to function as an authority on the subject and students can equally share

[4] One could even use Marvel's own superhuman builder at https://www.marvelhq.com/create-your-own-super-hero as suggested by the anonymous reviewer of this article.

[5] There are both positive and negative theories of surveillance (Fuchs, 2011), and as discussed by Wise (2016), some readings of surveillance recognize the "ostensible benevolence" of surveillance and societies of control (p. 84).

their knowledge of comics and superheroes (Schrems, 2016). A space for more popular texts that students may be more familiar with can provide students with the confidence in understanding and analyzing the plotlines of stories (Schrems, 2016; Williams, 2014). In this instance, too, the students can also see how their data, or the DAE of themselves, operates in ways like its own superhuman, thereby giving them a solid connection to the narrative.

Conclusion

As illustrated above, our bodies of digital information take on almost superhuman qualities: the abilities to convey large amounts of data, be invisible, transcend space and time, change shape, take on multiple identities, and allow us to be ranked, sorted, privileged, or disadvantaged. By harnessing the power of myth, rhetoric, superhumans and comics, our bodies digital data, and theories of surveillance, in the larger scheme of things, this is a helpful metaphor to understand the depth of our surveillance data. Having a concrete, power-filled image in mind when thinking about a more nebulous idea of our digital data can help make us pay more attention to the data that exists on us, the data that is often invisible, transcendent, time-travelling and powerful. While the superhero may not be the first thing someone thinks about when talking about our digital data, the "digital alter ego" becomes a useful heuristic to understand, depict, and remember contemporary surveillance practices.

As a field, for future research directions, there is much room to grow in studies of surveillance. As I've shown here, these discussions don't have to be dry or separated from studies of composition. Constructs like superheroes facilitate compatibility with composition studies through areas like myth and rhetoric and expand conversations on surveillance to show how surveillance transcends walls and borders. As writing scholarship delves deeper in these paradigms and subject areas, the field benefits with more robust explorations of surveillance and writing in a digital age.

Declarations of interest

None.

Acknowledgement

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Sklodowska Curie grant agreement No 707404.

Appendix A

The following demonstrates a framework for a five-week unit (which could be expanded if one spends more than one week with each superpower) that ends in the students' creation of their own alter-ego superheroes. For each week, I provide one sample lesson with a driving question, an activity, a weekly assignment, and a reading that could scaffold each week. A discussion of the project follows the sample unit schedule.

Week 1 – Super-intelligence

Driving questions:	What is surveillant assemblage, and how does it facilitate a super intelligent DAE?
Activity:	**Tuesday:** Students research superheroes known for their intelligence and share results. Students then discuss the ideological perceptions of the differing types of intelligence and their cultural, rhetorical implications. **Thursday**: Students discuss surveillant assemblage and come up with a list of five pieces of data that could be assembled about them and stored in databases.
Assignment:	Students take their lists from class and comment on how those five pieces are both the same and different compared to the existing superheroes discussed in class Tuesday. They comment on how this translates into their own DAEs.
Reading:	Haggerty, Kevin D., & Ericson, Richard V. (2000). The surveillant assemblage. *British Journal of Sociology, 51*(4), 605-22.

Week 2 – (In)visibility and Intangibility

Driving questions:	How are superheroes/villains invisible and intangible, and how does the concept of ubiquitous surveillance facilitate a DAE that is either/or/both invisible and intangible?
Activity:	**Tuesday**: Have students research superheroes known for their invisibility or intangibility. Share results. What ideological perceptions do the differing types of superheroes connotate culturally and rhetorically? **Thursday**: Discuss ubiquitous surveillance. Have students research places of surveillance and then share with the class. Discuss Europe's General Data Protection Regulation and discuss the United States' legislation on data ownership.
Assignment:	Students reflect on their ability to know what their data says about them or their abilities to access it.
Reading:	Andrejevic, Mark. (2012). Ubiquitous surveillance. In David Lyon, Kevin D. Haggerty, & Kirstie Ball (Eds.), *Routledge handbook of surveillance studies* (pp. 91-98). New York: Routledge.

Week 3 – Transcending Space and Time, Shape-Shifting and Multi-Powered Personalities

Driving questions:	How do superheroes travel across space and time and change shape, and how do our data bodies exhibit similar motions?
Activity:	**Tuesday**: Have students research superheroes known for their abilities to move through time and space, shape-shift, and have multiple powered personalities. Share results. What do these superheroes say about the larger cultural space in which they circulate? **Thursday**: Discuss Marx's (2016) theories of new surveillance and identify how technologies help facilitate the movement of data through space and time as well as the appearance of the assemblage culled in each location.
Assignment:	Reflect on and describe how one's own data can travel and how different places can call up the same data in different ways to make one's profile appear different.
Reading:	Marx, Gary T. (2016). So what's new? Classifying means for change and continuity. In *Windows into the soul: Surveillance and society in an age of high technology* (pp. 40-59). Chicago: University of Chicago Press.

Week 4 – Super-Strength

Driving questions:	How are comic book heroes and villains strong, and how do our digital alter egos have the strength to sort us into categories?
Activity:	**Tuesday**: Have students research superheroes known for their strength. Share results. What do these superheroes say about the larger cultural space in which they circulate? **Thursday**: Discuss Lyon's chapter on social sorting. Identify key principles about everyday surveillance and explain how and why sorting is carried out.
Assignment:	Students examine how they might be sorted by having them look at their BlueKai registry (Beck, 2015), their own social media profiles (Merrill, 2016), or do a small study of the ads that pop up in their browsers during any given time. Students reflect on their knowledge of being sorted and their comfort with the categorization.
Reading:	Lyon, David. (2003). Surveillance as social sorting: Computer codes and mobile bodies. In David Lyon (Ed.) Surveillance as social sorting: Privacy, risk and digital discrimination (pp. 13-30). New York: Routledge.

Week 5 – Creating a Superhero

Driving questions:	How do superheroes tell stories, and how does your data/DAE exhibit super powers?
Activity:	**Tuesday**: Students discuss the basics of creating superheroes and look for examples of superheroes they like as potential models for their own visual representations. Students sketch a preliminary superhero for peer review. **Thursday:** Students present their final project to the class.
Assignment:	Students submit the final project.
Reading:	Romagnoli, Alex S. & Pagnucci, Gian S. (2013). Superhero storytelling. In Enter the superheroes: American values, culture, and the canon of superhero literature (pp. 101-114). Lanham: The Scarecrow Press, Inc.

Description of the Unit Project

Students create a visual version of their DAE. They design a figure and annotate portions of the drawing that corresponds to the superpowers, supporting their choices using both surveillance literature and literature about superheroes and comics. This can be fulfilled by computer with a program like Photoshop, through drawing by hand or putting together magazine clippings and turning these into digital products, or some other way as imagined by the student as long as the project can be submitted digitally and annotations can be added. Accompanying students' images are also artists' statements (as inspired by Shumake, 2017) which are question and answer documents asking about the moves the students made as far as design and superpowers. More emphasis is placed on the written elements of the projects that guide the students to reflect on the rhetorical choices of their work and the underlying surveillance principles rather than the students' crafting and design abilities of the superhero.

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