II

Integrating and Informing Posthuman Practices

ReCAPTCHA (RC) precedes the imaged-based ReCAPTCHA V2 that I covered in section one, and the former version (RC) is the program that I will focus on here. This is not an image-based CAPTCHA program per se, but it does rely on a similar test to differentiate a human from a computer. This version of the program requires the user to type into a text box randomly generated and distorted words, which is normally a set of two words (see: Figure 2). However, this test causes unprecedented challenges for Google—the owner of the program version—since RC must uphold a similar human-technology dichotomy as I outlined in the previous section. One challenge, for example, is the susceptibility of the program due to repeated image use; when text-based images are re-used by RC, computers are more likely to solve and pass the test (I will cover this issue in section three). More importantly, though, RC also produces opportunities for Google to use the CAPTCHA program for their advantage. Since RC tests millions of users every day, its engagement with human-users is very high, and this interaction is used to gather information for other Google programs. At the intersection of challenge and opportunity, the RC program mutates to be not only a test that distinguishes the human-user but a *tool* to further conceptualizations of the human condition. Let me explain.

When Google realized RC can be used alternatively for their advantage, they turned to programs that would benefit from the transcription of images. That is, as the human or computer is asked to transcribe text-based images in RC, Google pulls text from Google Books, Google

Maps, and Google Street View (Plantin 498). For example, Plantin explains this aptly as a crowdsourcing technique:

> "Dedicated staff has to review and curate images and detect relevant information following this simple question: "Am I looking at an address or not?' Click. Yes. Click. Yes. Click. No" (McMillan 2014, para .1). But such a task can also be completed by relying on crowdsourcing, through the ReCAPTCHA application. Since Google acquired this technology in 2009, it has been using it to crowdsource the transcription of images from its various scanning projects, such as Google Books and Google Street View. A user will, for example, transcribe a house number through a ReCAPTCHA—that is, manually process data from Street View, which can eventually be used to update Google Maps" (498).

Once the RC test is completed, the results indicate to Google that, 'yes, this is an address for XYZ'—thereafter updating other Google programs. Honestly, it's genius; if you have millions of users engaging with a program to test their humanity, might as well benefit from this encounter. And that is exactly what they do, while also simultaneously working with the challenges and opportunities of the program version.

However, this process is highly problematic since technology is prioritized to reaffirm Western, humanist conceptualizations of the human—is it not? While Google uses RC merely as a cheaper and expedited transcription service, this framework is unconsciously grounded in the use of technology as a tool to reaffirm the condition of the human. For example, let us refer back to Figure 2. When thousands to millions of human-users type "8001" into the RC, Google is able to update their Maps program. Then, the next time someone looks for that specific address, they will be able to better access directions to such address. When Google Maps is informed by RC,

isn't technology prioritized to reaffirm human difference that allows users to identify address 8001? What I am articulating is another one of the "incipient modes of interaction between computers and human, and the ways in which this relationship becomes codified" through alternate routes of engagement (Justie 32). In this sense, conceptualizations of humanity are only confirmed and furthered through this interaction with RC, and Google's underlying framework is responsible.

My issue with RC, then, is that it regurgitates Western humanism as this epistemology is prioritized in Google's framework. Since the prioritization of tools (technology) serves to uphold human difference, we are returned to paradigms that are rooted in Western, humanist epistemology. I don't believe this act is purposeful, but it does exhibit how we understand technology in the 21st century. For as technology is prioritized to transcribe addresses instead of "dedicated operators hired by Google" (Plantin 498), a framework is exercised that depends on RC to uphold the Western, humanist human. Therefore, *RC technology is prioritized in Google's framework as a tool to reaffirm the human condition*—a notion that sounds strikingly familiar.

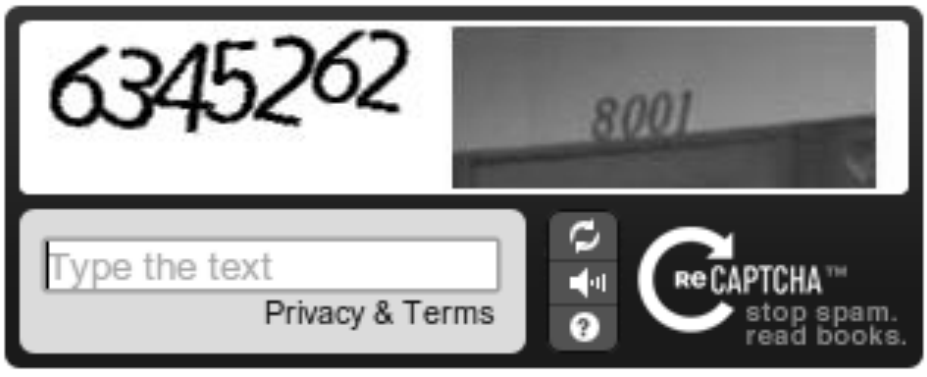

Figure 2: ReCAPTCHA address transcription (Shet 2013)

My concern with posthumanism is similar to my concern with CAPTCHA's RC; I too believe that posthumanism prioritizes technology to reaffirm the human condition. As humanity is conceptualized in relation to technology, our theory "works toward elaborating alternative ways of conceptualizing the human subject" in terms of these technologies (Braidotti 37). Posthumanism highlights technology's role in how the human condition is understood, which is how our theory affirmatively engages with alternative directions outside of Western humanism. When our posthuman theory emphasizes information-communication technologies, artificial intelligence, brain-computer interface technology, mesh networks and alike to theorize "powerful alternatives to established practices and definitions" (Braidotti 54), we are returned to the restrictions of humanism. This is problematic as "there is a *posthuman agreement* that contemporary science and biotechnologies affect the very fibre and structure of the living and have altered dramatically our understanding of what counts as the basic frame of reference for the human today" (Braidotti 40, added emphasis).

This relationship between posthumanism and technology is best illustrated through the impact of one of the three major strands of posthuman thought, which is offered by science and technology studies. The "analytical posthuman" offered by science and technology studies is one of the most important facets of the "three major strands in contemporary posthuman thought," which also includes moral philosophy's reactive posthuman and Rosi Braidotti's critical post-human (Braidotti 38). As I am sure it is apparent by the name, science and technology studies mainly contribute an analytical posthuman that focuses on science and technology (surprise, surprise!). This strand of theory offers "a global sense of interconnection among all humans, but also between the human and the non-human environment, including the urban, social and political, which creates a web of intricate inter-dependences" in our technological world

(Braidotti 40). Also, unsurprisingly, since Braidotti claims science and technologies "affect the very fibre and structure of the living," it makes sense that she accounts for the fields' contributions in her understanding of posthumanism (40). That is why the analytical posthuman is integral to understanding posthumanism's—especially the critical post-human's—framework; what science and technology studies offer is one of the guiding principles in understanding the posthuman condition.

Although, science and technology studies differ from moral philosophy's reactive posthuman and the critical post-human in that the former fields are reluctant to acknowledge subjectivity (Braidotti 42), which contributes to Braidotti's understanding of posthumanism. I say this because her sense of posthumanism combines moral philosophy and science and technology studies on the basis of subjectivity, in part. Since science and technology studies "introduce selected segments of humanistic values without addressing the contradictions engendered by such a grafting exercise," Braidotti turns to a combination of the two fields to generate her "critical post-human" (see: Pages 45-50 of *The Posthuman*). To quickly summarize, she calls for connectivity between the mistakes of science and technology studies and the productive components of the reactive posthuman, which, in combination with her anti-humanist philosophy, generate her third strand of theory (42-43). It is also here where she calls for the "need to review this segregation of discursive fields and work towards a reintegrated posthuman theory that includes both scientific and technological complexity and its implications" (43) in a posthuman world. At this intersection, posthuman theory accounts for a sense of subjectivity and interconnectedness of humans and "others" *in* and *through* a technologically complex and messy world.

Even though Braidotti's critical post-human is a combination of discursive fields, posthumanism prioritizes a sordid technological foundation as articulated by science and technology studies. We cannot say that contemporary posthumanism does not prioritize technology just because the "critical post-human" has a new name and includes subjectivity—that is not enough. And I don't think Braidotti is claiming for her critical post-human to *not* have a technological foundation, among others (moral philosophy, etc.). What I am claiming is beyond the importance of what she is arguing for; I am simply stating that science and technology studies have provided a very important part to posthumanism through the analytical posthuman. Even Braidotti states this: "The analytical post-human of science and technology studies is one of the most important elements of the contemporary posthuman landscape" (42).[4] Furthermore, I shouldn't have to say that what I have just outlined inherently illustrates Western humanism, but I will anyway: *Posthumanism's prioritization of technology illustrates a framework that is based in Western humanism to conceptualize the human condition*. In our need to account for "the current scientific revolution, led by contemporary bio-genetic, environmental, neural and other sciences" (Braidotti 54), it seems that we are only returning to a framework we spend a copious amount of time attempting to abandon.

This notion is problematic for not only posthuman philosophies but interdisciplinary theories that rely on contemporary post-human philosophies in their framework. In accordance with this project, I am referring to rhetorical theory, and how could I turn to the overlap between rhetoric and posthumanism without mentioning Casey Boyle's book, *Rhetoric as a Posthuman Practice*? I couldn't—it is impossible; just as Charlie must bite his brother's finger, it must be

[4] See chapter 4 of *The Posthuman* for more on Braidotti's prioritization of science and technology studies in theories of posthumanism, specifically her critical post-human.

done. Boyle's work develops a notable posthumanist rhetorical practice that depends on the technological foundation that I have just outlined. One of his first foundational claims is that

> "today's pervasive information-communication technologies challenge the implicit paradigms framing our notion of bodies and, with it, the practices that follow. Increasingly compounded by digital forms of mediation, our fast-evolving information moment interrupts long-standing divisions between human subjects and nonhuman objects as evident in an increasing dependence on those mediations for maintaining even the most basic aspects of social practices" (Boyle 6).[5]

In his turn from humanism, he suggests that what must be taken into account are technologies that have caused this moment, and for new and representative theory to account for this. Further, this depicts a reliance on what science and technology studies illustrate as the analytical posthuman. Boyle continues in this vein, stating that our "era of information technologies…reformulates the commonplaces upon which many of our long-standing humanist institutions rely" (7). It is in his claims of practice and/as information where this prioritization of technology is furthered, and I will spend the rest of this section discussing both.

Boyle's sense of practice is informed (in part) by ecologies, which defies the limited Western, humanist paradigms that on which rhetorical practice formerly rested upon. His orientation to rhetorical practice understands rhetoric as "*a practice that exercises serial encounters within ecologies to inform bodies*" outside of humanist practice (27). I would like to mention that his rhetorical practice explicitly emphasizes ecologies, and this is very important to his claim. It is within and through these ecologies where rhetoric exercises serial encounters to

[5] Boyle is using the term "bodies" here as "a multiple array of processes" (Boyle 5).

inform bodies. Thus, without this ecology model, his claim to a posthuman practice would not function accordingly. We must understand his

> "practice to be a process through which its practitioner, in encountering and accumulating different senses and thus different orientations, becomes imperceptible to its prior categorizations and open to inventive incorporations within any ecology…*practice becomes an ecology of relations* that include but is ultimately irreducible to a human's conscious awareness of its activities" (Boyle 29, added emphasis).

Boyle's emphasis on ecologies is due to the influence of technology, to state it simply. It is technology that has challenged our humanist paradigms (as I have discussed) which call for new paradigms (ecologies) to conceptualize our current moment. Therefore, this ecology model functions beyond the restrictions of Western humanism (see: Jenny Edbauer-Rice's "Unframing Models of Public Distribution: From Rhetorical Situation to Rhetorical Ecologies"). This is why his posthuman practice is explicitly situated in and dependent upon ecologies to function accordingly. This situation is where his practice functions beyond and in contradiction to Western humanism's orientation to rhetorical practice.

As Boyle's posthuman practice relies on this framework, his theory develops on the fact that technologies are prioritized to facilitate ecologies. This is because as "networked media help facilitate more of our interactions, [humans] are becoming more practiced in that betweenness and more sensitive to being in relation to an innumerable number of technological systems" (Boyle 43). His posthuman practice relies on ecologies that are facilitated by the technological, networked media and others that incorporate rhetorical practice. I have to be careful with my wording here because I don't mean to claim that technology is *fundamental*, *essential*, *intrinsic*,

or *necessary* within any ecology; however, I am suggesting technology is *prioritized* (sick of hearing that word yet?). Also, just because Boyle's practice relies on ecologies does not mean practice relies on technology—it is not that simple. In these "ecologies that in and through practice unfold," such a posthuman practice is understood to rely on "an ongoing "mangle" of relations" (Boyle 48) that *includes* the prioritization of technology. With this information (pun intended), it is the use of technology within ecologies that influence practice, which is where I will turn my focus.

In his second chapter, "Posthuman Practice and/as Information" (60), Boyle employs practice and ecologies to form a foundation on which information functions. As he understands it, "information is neither the content of media nor the media itself but instead the *mediating process* through which signals emerge" (Boyle 81)—which is to say that "rhetoric becomes primarily an ethical act of information," not the other way around (Boyle 88). He says this to parallel his posthuman practice to information, building on what I have just outlined in terms of practice and ecologies (61). Boyle expresses that "the informing of bodies…becomes rhetorical in that they are problems to resolve through a pragmatic orientation to ethics and not an orientation reducible to morality alone" (89), which simultaneously illustrates how we should consider information as a practice and to build on his posthuman foundation. Moreover, this too builds on the use of ecologies I have just explained. His theorization of information is in terms of a practice that may exist within and through an ecology. In this sense, ecologies of practice are a foundation on which information functions as "a continuous exercise"—or "in-formation"—as Boyle states when speaking to Gilbert Simondon's informational approach (74). It may sound complicated, but it is not; one must *only* forget and redefine everything they previously knew about rhetoric, practice, information, and just about everything else.

Information as an other-than-humanist, continuous exercise, represents a posthuman state where technology is prioritized within ecologies. This is similar to what I have claimed so far, but with a small difference: Boyle's information is in-formation (62). To elaborate, he claims that if we should "think about information as a practice, we would be well served to bring back once more how an ecology of practice is necessary to activate a body, be that body a human, a brick wall, a flowerpot, a database, or a digital image" (61). When he posits information as *in-formation*, In(-)formation is such due to the blurring of humanist distinctions due to technological affectability and interconnection. Boyle's articulation of information functions on a prioritization of technology that challenges humanist paradigms and contributes to ecologies that cannot function on "the conscious thought of human actors" (60). Let me ask this more concisely: *How can information be considered in-formation and/as a posthuman practice if the prioritization of technology does not develop a condition that precedes such conceptualizations?* Thus, it is the fact that in-formation functions as a result of technology's conditioning for a posthumanist rhetoric that is of specific importance.

With this entire section in mind, let me make one thing clear: I am not arguing against Boyle's claims or posthumanist rhetorical theory in general. I do believe that our moment requires representative theory, and it is posthumanism that does this most accurately. My claims throughout this section stand in accordance with the theorists that have called for these same orientations and epistemologies. *However*, what I am suggesting is a recognition of the mistakes of our theories (and adjusting accordingly, which I will cover in section three). It is imperative that we recognize how Western humanism infiltrates posthumanist rhetorical theories in the form of technological prioritization. While rhetoric as a posthuman practice becomes a "practice of informing bodies" within "ecologies that [do] not center on human activity" (Boyle 192), we are

briefly returned to the restrictions engendered by ill-fitting practices and regimes. This is why I turn to Boyle in this section, and this calls us to ask a few questions as well: What happens to Boyle's claims when they are revealed to develop on a precondition that is rooted in Western humanism? What happens to our understanding of rhetoric when our theory is not any more a representation of the current state of humanity? These questions and alike are where I will turn to in the next section, and this is also where we may start to engage a more representative conceptualization of the human condition.