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Transcoded Identities: Identification in Games and Play

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in Theater and Performance Studies

By

Linzi Michel Juliano

2015

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ABSTRACT OF THE DISSERTATION

Transcoded Identities: Identification in Games and Play

By

Linzi Michel Juliano

Doctor of Philosophy in Theater and Performance Studies
University of California, Los Angeles, 2015
Professor Sue-Ellen Case, Chair

This work foregrounds how technologies create and emerge from sociocultural, economic and political discourses. My use of transcode, a term introduced by the semiotician A.J. Greimas and carried into the digital realm by Lev Manovich, refers to how cultural elements such as assumptions, biases, priorities emerge within programming code and software. It demonstrates how cultural norms persist across different mediums and posits that, in many ways, the capacity to be flexible defines cultural ideologies. At the software level, programming languages work like performative speech: grammar which produces effects. When cast as speech, coming from a body (or bodies) instead of hardware, information structures can be perceived as acting within regimes of corporeality; when cast as software, information structures demonstrate and advertise the capabilities of hardware.

Although often aligned with veracity and stability in its proximity to (computer) science, software is not culturally neutral. Building on this this foundation, my dissertation challenges the notion of democratic virtual space by showing how normative—limiting and limited—categories of identity continue to emerge in media despite methodologies like keyword tagging and crowd-

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sourcing and customizable avatars in videogames. Foregrounding lived identity is necessary to analyze media architectures and representations, such as videogames, software structures, and online forums. As one example, avatar customization sequences in videogames (and some social media sites), conflate identity with visuality and notions of a stable self. This flattens the lived experience of racialization, for example, and the nuances associated with affiliation and identification to mere taxonomies of color.

A wide range of critical theories such as performativity and transnationalism, globalization, digital theory and construction, sexuality and erotics, cultural difference, gender codes/coding, and intellectual property persist across this work. I bring together work by Ian Bogost and Diana Taylor, which respectively introduce concepts of procedural rhetoric and vulnerable archiving processes subject to external influence. In so doing, I show that social identifications are inextricable from sites investigated here, including interactive media, site-specific installations, and live performance.

The dissertation of Linzi Michel Juliano is approved.

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All errors in the manuscript that follows are, of course, solely mine.

VITA

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INTRODUCTION

This project employs performance theories to examine identifications embedded within software design. Exploring the structures of digital representation, both visual and architectural, I suggest where and how computer interactivity overlaps with processes of social performativity. This study traces the significance and signification of racial and queer identities as they have been transcoded (or excluded) within software architectures. My project falls into the area of critical code theory, and spans the broad range of digital humanities, drawing from disciplines such as English, comparative literature, sociology, information science and digital media arts. While critical code theorists such as Mark Marino and Mark Sample regard coded procedures as textual operations and programming scripts as performance, the use of critical theories of performance to understand these procedures has been largely absent. Further, while the intersections of queer and ethnic strategies of representation have been largely understood within the critical approaches to information science and digital media, there has been little overlap. I extend what Lisa Nakamura has called "mental trajectories" and "menu-driven identities" to a performance-guided inquiry of participatory social architectures, remediated in digital form.² In considering such networks, I trace "a materiality that materializes" and remediated via bodies.

Agency, here, will be understood as a form of identity and body production practices in the virtual realm. As Coole and Frost's term in *New Materialisms*, this project aims "to recognize that phenomena are caught in a multitude of interlocking systems and forces and to consider anew the

¹ Mark Marino's Codology: http://www.electronicbookreview.com/thread/electropoetics/codology; Mark Sample's blog http://www.samplereality.com/ highlight the idea of performance, and code as performative, but do not explicitly employ performance studies.

² Nakamura, Cybertypes.

location and nature of capacities for agency."³ I utilize strategies from three fields of research and critical theory: performance studies; theories of identity and identification; and the intersection of biopolitics with new media.

Information technologies are embedded with culturally specific procedures, values, and interpretations. Cultural elements emerge through the explicit engagement with and affordances of media, as well as in the implicit, textual form of extra-functional code. Avatars, anthropomorphic representations of the user in gaming and consumer contexts, are worthy of investigation due to their capacity to elicit identificatory responses. This study explores the visual and architectural representation of users on varied forms of media, with special attention to role-playing videogames (RPGs). In the majority of cases, the "default" character in games is a white male. There are, however, opportunities to "customize" one's avatar. However, this produced flattened characters, reduced to "other" through interchangeable attributes like skin color, sex and gender. In chapter 1, I use this example to examine how visual, textual, and interactive aspects of games overlap with social imperatives and biases.

Though media and gaming scholarship has developed exponentially in recent years, the focus on the signification of identity within these representational systems has yet to narrow.⁴ In short, I suggest that though marginalized identities are present in videogames, the superficial signification fails to portray any lived counterpart. When confronted with the stereotypes within games, the apologia emerging from mainstream games limits itself to the excuses of escapism and fantasy. To a degree, precisely because a game is "fantasy" (and, as I will argue in chapter 4, this

³ Coole, Diana H., and Samantha Frost. *New Materialisms: Ontology, Agency, and Politics*. Durham, NC: Duke UP, 2010. Print. 9.

⁴ For more on identity in videogames as "neglected media," see: Reichmuth, Philipp, and Stefan Werning. 2006. Pixel Pashas, Digital Djinns. *ISIM Review* 18: 46-47. and Šisler, Vít. 2008. Digital Arabs: Representation in Video Games. *European Journal of Cultural Studies* 2(11): 203-220.

lack of "realism" can allow a certain amount of play and agency), we can begin to explore the deeply embedded ideological and representational biases against women, non-heterosexuals, and people of color. To connect cultures, representations and games, this chapter engages with identity-based transcode, a semiotic method dedicated to reading the signification of lived experience within videogames at the textual (coded) and end-user levels. I focus on a few different types of avatars emerging from role-playing videogames; these avatars are sometimes pre-constructed, as in *Dead Island* (discussed in a later section), while others are pieced together through identity-based customization (as in the *Saints Row* franchise). While white males are often, literally, the default in avatar customization sequences, identities representing "difference," such as those understood through categories such as race and gender, become a standing resource, significatory commodity, and archetypal placeholder.

Theories of transcoding shed light on the relationship between code and the representation of identities in digital media. The term transcoding can be useful in understanding the relationship between text and the representation of identities in videogames. Lev Manovich defines the merger of culture and computation in his seminal text, *The Language of New Media*. He writes:

to "transcode" something is to translate it into another format. The computerization of culture gradually accomplishes similar transcoding in relation to all cultural categories and concepts. That is, cultural categories and concepts are substituted, on the level of meaning and/or language, by new ones which derive from the computer's ontology, epistemology, pragmatics.⁵

Manovich provides a framework to theorize the social, political, and economic elements of transcoding present in computational processes. He grants the computer its own ontology, yet fails

⁵Manovich, Lev. *The Language of New Media*. The MIT Press, 2002. Print. 47.

to account for any framework supporting design attributes. His section on transcoding consistently disregards bodily relevance: "because new media is created on computers, distributed via computers, and stored and archived on computers, the logic of a computer can be expected to significantly influence the traditional cultural logic of media." Who embeds the computational "logic," however, can influence the software product and the cultures around it.

Direct communication and interaction with databases have been prevalent since 1936, during which time Alan Turing developed a theory of artificial intelligence in the form of a "Universal Machine." His vision was to create a machine not only capable of doing what machines could presently do, but that it would be able to learn the processes of *all* machines. Not even "intelligent" labor would be safe from the universal machine, because "whatever a brain did, *any* brain, could in principle be placed as a 'description number' on the tape of a Universal Machine." Not only could it take on the logic of any brain, but Turing's conceptual machine could eventually be made to service, supplement and beneficially augment human psychology. One of Turing's goals was to develop a program that could convince a human that they were conversing with a real person. Turing's early explorations have led to the invention of the chatbot, or chatterbot, which is a program that interacts with users through natural language processing and an instant-messaging style interface. Programmers, artists, and machines, then, together have developed interactive archetypes that are a simple, yet ubiquitous form of artificial intelligence.

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⁶ Manovich, 46.

⁷ Turing also broke the World War II Nazi "Enigma" code for the British government. Despite his contributions to the world of math, science and technology, he was convicted of gross indecency for his homosexuality. His sentence was chemical castration which, despite his complaints, remained unchanged. He committed suicide in 1954.

⁸ Hodges, Andrew. *Alan Turing: the Enigma*. New York: Simon and Schuster, 1983. Print. 294.

⁹ Ibid.

¹⁰ Ibid.

Over the past ten years, chatbots have proliferated across the Internet. Interactive nonplayer characters in video games likewise will respond to different greetings; in the case of *Mass Effect*, the entire dialogue and storyline will shift based on speech choices. Chatbots have served as therapists, web site hosts, language instructors, and online customer service representatives.

Chatbots could be said to be both use- and user-centered, as they serve a function (therapy, customer service), and respond to everyday speech. AI chooses keywords from a series of words to create an appropriate response. Chatbots are composed of databases which program key-words and general responses. There are also programmed responses to questions with unknown variables. The Virsona website, for example, allows one to speak to historical and fictional figures, including Susan B. Anthony:

You: How are you today?

Susan B Anthony: Good, thank you for asking.

You: Are you alive?

Susan B Anthony: I'm afraid I don't know if I am alive, but ask again later.

You: Are you a lesbian?

Susan B Anthony: Yes I am a lesbian, but don't worry. A lesbian doesn't bite!

This conversation with the machine reveals both programmed responses, re-directions and admissions of ignorance. Certain words are picked up by the system and are thought to be important but, if the word is unregistered in the database, the program will revert to structures of syntax, as in the case of being "alive." The programmers for Susan B. Anthony have included a response for whether or not she is a lesbian. Abraham Lincoln is also offered in chatbot form:

You: Are you a lesbian?

Abraham Lincoln: Sorry, I forget if I am a lesbian, but leave nothing for tomorrow which can be done today.

You: What did you think of President Arthur's Chinese Exclusion Act?

Abraham Lincoln: I found President Obama's inaugural address straightforward and inspiring. The man holds a lot of promise for our country in today's trying times.

You: Are you alive?

Abraham Lincoln: I am no longer alive. I was shot down in my prime by John Wilkes Booth, a Confederate supporter.

You: Are you a machine?

Abraham Lincoln: I'm afraid I don't know if I am a machine, but leave nothing for tomorrow which can be done today.

While some questions have canned responses ("How are you?" and "Are you a lesbian?"), gaps appear in processes when the program is faced with an unknown variable. There is a misrecognition that occurs around the term "president," which reveals that Lincoln is restricted to the architecture of its database. Chatbots perform what is possible through artificial intelligence and the database, as well as what is excluded from possibility. Large databases, such as the Artificial Intelligence Foundation's data-set for ALICE, sells for \$1,000. 11 The games industry is, obviously, worth much more and remains heavily invested in the use and development of artificial intelligence.

Sites such as MyCyberTwin allow consumers to design their own embodied conversational agent (ECA). The ECA adapts to the language and needs of the user, and employs gestures such as hand movements and head nodding. ECAs perform a kind of procedural labor and, along with chatbots, have supplemented or replaced telemarketers and call center employees. Critical code scholar Jim Brown has created a (fictitious) code to resemble a typical phone call from an Obama campaign member:

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¹¹ http://www.alicebot.org/superbot.html accessed feb 28, 2011.

Brown acknowledges that this code is nonoperational due to missing statements. ¹² However, this code serves as a literal example of the mental trajectory of programmed logic dependent on variable user input. If the person on the other end of the phone supports Obama, (if (\$supportObama=TRUE) then the volunteer would attempt to get the name, number and email of that person. If "else," the call would be dropped. The "hard coded-ness" reveals the structure and limitations of procedural engagement.

The first chapter investigates coding languages, extra-functional code (code that functions as marginalia to other programmers rather than as a programmable act), and object oriented linguistic principles as they are being applied to discourse outside of programming languages. I suggest that the translation of text to game mechanics, visuals, audio, and so on, are unified by first, the power to represent, and second, moves to creating an "other" (often based on reiterative racial, gender and sexual tropes, as in the case of *Dead Island's* Purna). Theories of identity and identification are crucial to a study dealing with user-behavior ontological architectures.

¹² http:clinamen.jamesjbrownjr.net/2011/01/15/the-procedural-rhetorics-of-the-obama-campaign/

This chapter argues that wider access to independent game-making that can produce interactive media may reduce flatness of avatars in videogames. Inversely, a culture of accountability could serve to balance the stereotypes perpetuated in gaming media, and ultimately lead to more diverse representations of race, gender, and sexuality. In her article, "Putting the 'Gay' in Games", Adrienne Shaw concludes that the paucity of lesbian and gay visibility in such commercially-successful releases is due to the overarching assumption that gamers are themselves heterosexual, heterosexist and homophobic. Digital world-builders like Peter Molyneux, lead developer for *Fable II*, proudly touts his industry's alchemical ability to turn nothing into life-like representations. In an interview with Tom Bissell, for the book *Extra Lives*, Molyneux said,

If I were to draw on the wall what a computer-game character was just twenty years ago it would be made up of sixteen-by-sixteen dots, and that's it. We've gone from that to daring to suggest we can represent the human face. And pretty much everything we've done, we've *invented*.¹³

The "invention" of human representation and performance then, as deeply coded, plays a large role in the contemporary structures of identification.

The second chapter covers the move from a top-down structure of Web 1.0, and the more or less hierarchical portrayal of coding in the first chapter, to the more "democratic" web 2.0. A core facet of web 2.0 is the social aspect, wherein users can write, upload, and, important for this chapter, tag, media objects with relevant keywords. Whereas the first chapter discussed the direct relationship between coding and the gaming experience it produced, here I argue that the "populist" web 2.0 reiterates terminology that produces a separate subject distant from any lived

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¹³ Molyneux, Peter. "Interview." *Extra Lives: Why Video Games Matter.* By Tom Bissell. New York, NY: Pantheon, 2010. Print. 201.

experience. The keyword "woman," for example, is entirely severed from anything depicted in a media object and, instead, takes on its own meaning and agency through reiteration. In this case, while the word "woman" may be liberally applied, it nonetheless marks media objects with a cultural sense of what a woman is. I suggest that two side effects of tagging is this separation from lived phenomena and the perpetuation of archetypal tropes central to the dominant user base.

The relationship between lived phenomena and coding is further experienced in the third chapter. Here, the primary media explored is ideological: the conflation of subjective experience and its quantifiability. More specifically, I engage what might be termed web 3.0, wherein users are continually mined for information. I investigate biomedia, media that for entertainment or information purposes, tracks and "decodes" the signification of physical phenomena, and the subsequent performance of an acculturated science; that is, how scientific tropes clarify sociocultural imperatives, desires, and affect. The conflation of biology (such as DNA) and technology, such as the semiotic decoding of daily activity, results in latency between sensory phenomena and affect, as well as personal history and "genetic discovery." A "body" of data, or "data body," comprises a constructed subject intended to represent each user. I suggest that the data body relays more information about the intersections of biocapital and digital capitalisms than about the embodied subject from which the data was mined.

The embodied subject is central to the fourth chapter which, in its discussion of identificatory play, returns to games. I suggest that "play" does not necessarily occur when one "games." Games provide structure, reward and a "fail" state. Given the context of the gaming industry and its relation to anything beyond a straight white male (evidenced by #gamergate, a backlash against female game critics and designers), I suggest that the structures inherent in most games reflects a particular kind of governance that creates a hegemonic diegetic worldview. I

suggest that the relationship between player and game can be more playful, then, than the game itself. The play here, would be one of identification: a recognition of encoded "default" tropes and the dynamic identification with or distinctions from the given narrative and objectives. I provide examples, both live action role play and digital games, in how this disidentification may occur.

TRANSCODED IDENTITIES

This study traces the significance and signification of racial and queer identities as they have been transcoded (or not) within videogames that offer flexible, or customizable, avatars. While some view the "open-casting" of a game protagonist as radically democratic, I counter that this particular brand of visibility flattens lived aspects based on gender or race to interchangeable variables—casting "anybody," "everybody," and "nobody" simultaneously. To support this claim, I extend Lisa Nakamura's "mental trajectories" and "menu-driven identities" to a queer and performative study of participatory social architectures, remediated in digital form. Despite developments in the visual and interactive quality of character customization and a growing openness of choice, created avatars fail to acknowledge lived experience. Fundamentally, these gaps reveal dominant ontological overlays, specific biases which guide media on an architectural level, that divest diverse characterization options from political realities. I conclude that more dynamic and inclusive game development structures would address, at least in part, the lack of "fleshed out" characters.

I focus on two procedural and performative aspects of gaming that help compose a framework for user engagement. First, I argue that programming languages (hereafter "code") most often qualify as action and, therefore, performance within a larger cultural ecology. The term *transcode*, the interrelation and intermediation of code and culture, is integral to this argument. I treat felicitous (drawing from linguistics) and extra-functional (drawing from critical code studies) code as evidentiary sites of culturally specific ontologies working within game cultures. Felicitous code is, as Friedrich Kittler has argued, performative, and while extra-functional code does not

¹ I employ transcode primarily from the perspective of Lev Manovich. Fredric Jameson and Donna Haraway have likewise employed versions of the term.

serve computational purpose, it nevertheless performs and transmits culture. While digital media scholars have employed a queer and ethnic critique to digital objects, the overlap of visual representation and performative code (i.e. felicitous and extra-functional) in relation to lived identities remains an under-investigated topic in current literature.

Second, I suggest object-oriented programming, a design strategy in which everything is an object, demonstrates the regulation and narrow possibilities of identificatory difference in gaming contexts. An understanding of object-oriented programming (OOP) helps assess and contextualize the recent development of object-oriented ontologies. Object-oriented ontologies show how gaming software has contributed to sociopolitical shifts, though not always toward a historically-situated understanding of identities in material contexts. As an example, I consider how character customization digitizes a "trying on" of marginalized identities, and remediates a form of "othering." This othering reinstates a perspective common among games cultures, made prominent with the recent and ongoing backlash against women, wherein the "gamer" identity is being attacked by "foreign" non-white, non-male, and non-straight legions. I dedicate a section to describing how object oriented ontologies, which stress an anthropomorphic, phenomenological and affective equality among people and things, reflect and foster territorialism and marginalization pervading at every level of the games industry. I conclude with examples of explicitly "infelicitous" identities, such as in the work of Anna Anthropy and Deirdra Kiai, that play within a strict framework of games to create their own narratives at the margins that work to dismantle gendered and racialized constructs. By providing an alternative, they both show which bodies and experiences are rendered illegible under dominant first-person, third-person, and roleplaying gaming structures.

In his book *Synthetic Worlds*, his study of massive multiplayer online role-playing games (MMORPGs), Edward Castronova attributes power to a vaguely named but appropriately demarcated "coding authority." The coding authority is a cultural and historical term for a class of individuals that construct cultural and historical digital objects; they shape virtual environments, provide digital bodies, and create actions, challenges, and opportunities. These authorities build internal systems, objects, and algorithms, and hold "dictatorial power over everything in the world." Castronova includes End User Licensing Agreements (EULA) and Codes (or Rules) of Conduct as evidence that the coding authority exerts material power over users who submit to the code of the metaverse they enter.² He helpfully exposes two conditions used to identify coding authorities: first, he defines them by the actions they do or do not take, and the identities or situations they render possible or abject; second, he successfully argues that they exert power over users via representational and systematic means.

In his book, *Unit Operations*, Ian Bogost writes that games belong to a group of "totalizing structures that seek to explicate a phenomenon, behavior, or state in its *entirety*. Unlike complex networks, which thrive between order and chaos, systems seek to explain *all things via an unalienable order*" (emphasis added).³ Videogames hold ordering and orientation as core features and, in this way, identity almost necessarily seeps into the products and internal ordering of these definitive and defining systems (game mechanisms, environmental characteristics, and avatars). We can build a transitive conception of coding authorities through a consideration of these systems.

While Castronova focuses on the production of new media, Lisa Nakamura builds upon the notion that a diverse, mutually affecting ecology of ideas informs both culture and computation and provides an understanding of the resulting digitized identities. In her book *Cybertypes*, she

² Ibid.

³ Ian Bogost. Unit Operations: An Approach to Videogame Criticism (Kindle Locations 156-157). Kindle Edition.

explores how race factors into both the cultural layer (i.e., content) and the computer layer (i.e., infrastructure) of computer networks and the Internet. A cybertype is a visual and ideological encoding of racial identities, and the result of "the distinctive ways that the Internet propagates, disseminates, and commodifies images of race and racism." We can employ Nakamura's perspective on cybertypes to these media, and in the context of cultural transcoding, to perceive "transcoded identities."

For our purposes, *Dead Island* (2011) provides an example of transcoded identity with regard to character description, linguistic construction (computer code), and in-game skillset. The game, playable on Microsoft Windows, Sony Playstation, and Microsoft's XBOX, was developed by Techland and published by Deep Silver. The primary gameplay takes place on the fictional Banoi Island, somewhere in the Pacific, after a virus outbreak renders most of the population into zombies. The game takes a first-person perspective; the gamer controls two visible hands that can hold and shoot weapons, but never sees the body that runs, jumps, climbs, and crouches. (Already, one can see how the expository identity of the avatar is both present and disembodied, working only as a "real-world" referent.) The gamer earns experience points as she navigates the environment, completes tasks, and kills enemies. These points are used as currency to purchase character-specific skills, which provide mechanical improvements: faster sprinting, better accuracy with ranged weapons, higher defense skills. There are four playable avatars each with a different weapon specialization: Logan, the white football player, is "the jack-of-all-trades"; Sam

⁴ Nakamura, Lisa. *Cybertypes: Race, Ethnicity, and Identity on the Internet*. Routledge, 2002. Print. 3. As an example and precursor of what follows in my next section, Nakamura points out that many early text-based games did not require (or permit) one to specify race. A demographic Nakamura lists as "white, male, highly educated, and middle class" nonetheless chose familiar Asian stereotypes to name their characters: "Mr. Sulu, Chun Li, Hua Ling, Anjin San, Musashi, Bruce Lee, Little Dragon, Nunchaku, Hiroko, Miura Tetsuo, and Akira." She continues: "the idea of a nonstereotyped Asian male identity is so seldom enacted in LambdaMOO that its absence can only be read as a symptom of suppression" (Cybertypes 38-39).

B., the African American rapper, employs blunt objects and can withstand the most physical damage; Purna shoots guns; and Xian Mei, the undercover Chinese assassin, wields sharp objects (e.g. a Samurai sword).⁵ In addition to being typecast by race and sex, these characters bear national significance. The Anglo-named, hugely muscular males are explicitly Statesian: Sam B. is African American, while Logan is explicitly from Texas. Meanwhile, both female characters originate outside the U.S. and retain dangerous underlying identities that conflict with their slight appearance.

In this case, it is appropriate to acknowledge the Orientalism in play within the game, as a means to show transcoded identities depicted by (and of) coding authorities. Orientalism, a phenomenon identified by Edward Said, is a performative relation between the Orient and the Occident (which he respectively casts as abject and superior). Said employs the term to describe a process in which the West stabilizes a sense of identity by means of "dominating, restructuring, and having authority" over the interpretation and representation of the non-West. He writes that "from the beginning of Western speculation about the Orient, the one thing the Orient could not do was to represent itself," pointing out that while the subaltern could and does speak, she is not given the stage to be heard. Said argues that individuals, not collectivities, imprint and impinge upon "the otherwise anonymous collective body of texts constituting a discursive formation like Orientalism." Thus, instead of an organic and continuous migration towards newer practices, Said makes clear that those with the power to represent are those who control change (Castronova's demarcation of coding authorities resonates here).

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⁵ Dead Island . 2011.

⁶ Said, Edward W. Orientalism. 1st Vintage Books ed. Vintage, 1979. Print. 3.

⁷ Said, 283.

⁸ 23.

⁹ 283.

Wendy Hui Kyong Chun updates this term in "Race and/as Technology," stating that "high-tech Orientalism is not colonialism, but rather a paranoid reaction to global economic and data flows [...it] promises intimate knowledge, sexual concourse with the 'other,' which it reduces to data, to a standing resource." The identifying signifier operates like a snapshot, influenced by the cultural, sociopolitical environmental climate within which the author(s) reside. High-Tech Orientalism flattens the lived and fluid capacities of identity by re-packaging fears of the Asian other as data.

Xian Mei's background, appearance, weapon specialization, and guided self-talk demonstrate a form of high-tech Orientalism. Prior to the outbreak, she was a nimble Chinese assassin working undercover as a "24-hour" hotel desk clerk, sent to report on "rich Americans" as they vacationed. Here, we see the familiar threats of Chinese labor conflated: impossible hours dedicated to working double-time (clerk and spy). The smallest of the four, she must throw her entire weight into each attack—reflected in the POV-camera dramatically shifting side to side. The game renders it impractical for Xian Mei to attack with any other weapon besides a blade (like a katana or wakizashi): it would be too heavy; she would not be able to throw far enough to result in an effective payoff. Further, Xian Mei's combat skill tree is dedicated to developing her expertise with blades, and includes a skillset called "flying blade." Perhaps most notably, Xian Mei's self-talk, her in-game utterances, are all in English. While this exposes the constructedness behind her characterization, it likewise shows the author(s) communicating directly to a primarily

¹⁰ Chun, Wendy Hui Kyong. "Race and/as Technology." *Race After the Internet*. Eds. Nakamura, Lisa, and Peter Chow-White. Routledge, 2011. Print. 51.

¹¹ For more on Orientalism in games, consider the on-going racialization of the "Chinese gold farmer," who grinds out excess gold and virtual materials at the behest of Westerners.

English-speaking audience. In this sense, "Xian Mei" is hollowed out, becoming a sign decorated with Orientalist nuances, and adding to the growing body of "cybertypical" Asian women. 12

The character biographies at the avatar selection screen provide background on the playable characters. An "Aboriginal Australian," Purna worked as a police detective for over a decade. She was discharged after shooting a powerful politician in self-defense, causing her lasting frustration. Prior to the game's events, Purna was working as a bodyguard for rich men, doubling as protection and "eye candy," as her character description states. In contrast to their male counterparts, the women are the most affective: Xian Mei's character description states that she feels "dishonor," and Purna projects anger: "Worst part is, I didn't even kill the son of a bitch. I just gelded him. One day I'm gonna have to go back and finish the job." Importantly, Purna's characterization emerges in the code itself. Purna has the "Gender Wars" skill that grants her 15% extra damage against male hostiles. In this way, Purna's entire composition is to lure and kill males (even the undead do not escape sex-based classification).

Dead Island has thus far provided evidence of how the cultural is embedded within the computational on the aural (Xian Mei's self-talk), visual (the difference among body types, skin colors, and POV-references in combat), and interactive levels (race and gender-based skill sets). Yet cultural transcoding is also part of the code itself, as a form of non-functional marginalia, or extra-functional code—notes between developers for context and direction. When gamer Alexei Vasiliev browsed the game's code for Easter eggs (jokes by game authors hidden in a blend of notes, objects, and actions), he discovered the original name for the "Gender Wars" skill:

FeministWhorePurna. Despite the eventual nominal substitution of this skill, the former

¹² For Asian women with speaking roles, consider *Infamous 2*, which casts two women: one darker-skinned and scantily clad, one bookish. Most games cast Asian women as non-speaking geishas (the *Saints Row* franchise). One possible exception, *Sleeping Dogs*, has three women with prominent roles but none escape the traditional female archetypes: the mother, wife, and the stoic, asexual, businesswoman.

passively remained as an unintended Easter egg. After Vasiliev posted his findings to game forums, Techland, the company responsible for the game's development, issued an apology and explanation: it was "overlooked" and a "joke." Dead Island thus provides an example of how identity participates at nearly every level and stage of development. More specifically, it provides insight into how social coding, here with regard to gender, race and sexuality, is embedded into the characters. More than a diverse set of available characters, this example demonstrates the capacity to reveal the cultural codes and priorities for the "coding authorities."

Extra-Functional Code

Extra-code, non-functional marginalia, shapes user experience despite its relative inaction when compared to felicitous code (a topic covered in more depth below). While the name of Purna's skill set influences my study, within the context of computational languages, the _feministwhore_ sign makes no difference and, in this way, could be considered extra-functional. Mark C. Marino employs the term "extra-functional" to describe code that exceeds its technical output function, but nonetheless influences the representational outcome. Marino has greatly contributed to the nascent field of critical code studies, arguing that while

much of the current examination of code seems to revolve around efficiency, reusability, and modularity, [critical code scholars need to stress] meaning,

¹³ Pereira, Chris. "Dead Island "Feminist Whore" Skill Prompts Apology." *1up.com.* N.p., 08 09 2011. Web. 8 Nov 2011. http://www.lup.com/news/dead-island-feminist-whore-skill-apology.

implication, and connotation, though not in terms of a self-contained system of meaning but within respect to the broader social contexts.¹⁴

Marino challenges the bias that the engineering aspect of computer programming is separate from the semiotic output produced by the writers' performative scripts. He foregrounds the broader social contexts, disrupts the idea that cultural products are static units, and demonstrates that programming is laden with meaning, interpretable from many angles.

Meanwhile, variable interpretability has the capacity to drive entire genres (a point I will develop in my last section). Yet, as Mark Sample has argued, the narrow scope of extra-functional code has the capacity to attenuate the implicit promise of such games to offer different subjectivities. Sample's excavation of character behavior in Traffic's *JFK Reloaded* (2004)¹⁵ provides such an example. The docu-game¹⁶ casts the gamer as Lee Harvey Oswald, and provides the setting of Dealey Plaza, November 22, 1963. The objective is "to establish the most likely facts of what happened on 1963-11-22 by running the world's first mass-participation forensic construction,"¹⁷ by matching, as best as possible, the events outlined in the Warren Commission report. Sample's analysis of the game's WAD (Where's All the Data?) file, ¹⁸ which organizes all objects, characters, and actions into a blend of binary, code, and text formats, reveals a social and cultural layer to the programming. He reports two problematic sets of code:

¹⁴ Marino, Mark C. "Critical Code Studies." Electronic Book Review 4 Dec. 2006.

¹⁵ The Scotland-based group, Traffic, developed the game, which is available for download.

¹⁶ Docu-games operate as interactive documentaries. As in this case, the gamer assumes various vantage points from which to observe, or partake, in the assassination of President Kennedy. They are sometimes understood as virtual "re-enactments."

¹⁷ Association, Press. "JFK Shooting Game 'Despicable'." *The Guardian* 21 Nov. 2004. Web. 1 Apr. 2013.

¹⁸ A similar file to the one in which Vasiliev found Purna's description.

Fig. 1 and 2: Sample, Mark. "A Revisionist History of JFK: Reloaded (Decoded)." *Play The Past.* 7 June 2011. Web. http://www.playthepast.org/?p=1519

The comments aligned with the // do not serve as functional code. Instead, they serve as notes between programmers for context, or a kind of stage direction. In the first example, the object "Jackie" cradles the object "JFK"; the associated subtext precedes and directs the coded action. This sexualized reframing, along with misspelled words and names ("desparate," and "Nelly" instead of "Nellie"), works to "undermine the entire stated pedagogical project of their docugame [to serve as a historical document or reenactment]." This extra-functional code serves as a kind of forensic evidence regarding the role of identity within production processes; the prioritization and perpetuation of social codes and identifications clearly emerge on both the production and consumption levels.

Theories of performance and performativity provide frameworks to understand codes, despite sometimes superficially incommensurate modalities (e.g., bodies, text, and enunciation).

¹⁹ Sample, Mark. "A Revisionist History of JFK: Reloaded (Decoded)." *Play The Past*. 7 June 2011. Web.

Judith Butler defines performativity itself as a code, which regulates and constitutes through a "stylized" system of representation. Performativity consists of many culturally specific acts and behaviors. For example, Butler argues that the delivering technician's announcement of a baby's gender at birth institutes a gendered reality. She asserts that gender attributes prescribe rather than describe. Bodies do not inherently carry gender, but are always in the process of becoming; as Butler argues, "the body becomes its gender through a series of acts which are renewed, revised, and consolidated through time." Butler adds that the referent (femininity, masculinity) "is an act" and "although the referent institutes reality rather than describing it, the referent always institutes reality within an already constituted field." The "feminine" code, per Butler, is prescribed at birth and corrected through a series of external influences, always already in relation to a "masculine" code (and vice versa).

On this point, we see the overlap of phenomenology, ontology, and performativity. The French philosopher Maurice Merleau-Ponty, posited that lived experience orders knowledge; as such, information is neither monist nor dualist, but plural and continuously performative. Sensory phenomena discursively construct and respond to ontological formations, thereby stylizing the associations between identities and associated signifiers (e.g. linguistic, visual). This connection is not an isolated trajectory; as Butler noted, identities emerge through correction and contextualization. Though Butler primarily engages language and linguistics (drawing from Austin's tradition), and has had a tenuous scholarly relationship with the fleshy body and its senses, gestures, and expressions, I scale her work more explicitly to material bodies. Certainly language shapes our material and digital environments, as I have argued, but, as bodies are the primary

²⁰ Butler, Judith. "Performative Acts and Gender Constitution." *Writing on the Body*. Ed. Katie Conboy, Nadia Medina, & Sarah Stanbury. New York: Columbia UP, 1997. Print. 406.

²¹ Butler, Judith. "Afterword." *The Scandal of the Speaking Body: Don Juan with J.L. Austin, or Seduction in Two Languages*. Ed. Shoshana Felman. Stanford University Press, 1983. Print. 122.

inhabitants and interactors with and within these environments, creating and changing them as we act and behave. Sensory phenomena exists in videogame contexts in at least three ways. First, many controllers now vibrate to create a direct analogy between what occurs audibly and on-screen (e.g. an "earthquake" would cause a console controller to shake, mimicking the represented shaking). Second, games are "full-bodied," meaning that motion detection hardware that translates bodily movements into in-game action. ²² Third, if in-game characters are meant to signify out-of-game embodiment, then movement—subjective phenomena—is necessarily transcoded into game structures.

As an example, the game *Hitman Absolution* (part of the *Hitman* franchise, which includes videogames, movies, and novels) centers around the assignments given to Agent 47, a tall white male with a barcode tattoo at the base of his bald skull. Across all *Hitman* games, Agent 47 has the capacity to subdue or kill any target, then wear their clothes and blend in to the surroundings. In *Absolution*, Agent 47 encounters a mission that takes place in Chinatown. Despite there being no other white characters in the entire mission, Agent 47 can wear a chef or butcher uniform and escape any pursuers by blending in with the (racialized) crowd. Despite his striking looks, one core feature of the *Hitman* franchise is Agent 47's constant capacity to "fit in" anywhere. In contrast, as I discuss later, the game *Dys4ia*, a bio-game which documents designer Anna Anthropy's transition from male to female, centers around disjointed and confined movements. Whereas Agent 47 encounters no "off-limits" area, the movement of Anna Anthropy's avatar is constantly restricted. In this way, we can begin to see how identity movement and identity play roles within

²² It is worth noting that first iterations of XBOX's motion-sensor device, Kinect, could not read darker skinned individuals because of lighting contrasts. People with darker skin were excluded from any phase of testing prior to product launch.

avatar creation. The manner in which characters are oriented within game space figures into how identities become transcoded into software.

These stylized associations are rooted in a theory of interpellation. Indeed, interpellation is at the core to the engendering process Butler describes, wherein the subject must perform the doctor-prescribed gender. Interpellation is a process introduced by Louis Althusser that describes the insertion of a subject into a pre-existing structure of power relations through a series of movements and processes. The most frequently cited example of interpellation is that of the police officer indiscriminately yelling, "Hey you!" The person (mis)recognizes herself as the subject being hailed and turns in response. This action, the physical act of turning, marks her implicit acknowledgment of and alignment within state and governmental structure. What occurs, then, is a performance that necessarily creates identity; one is either the authority figure (the police officer calling out), or the subject which responds. Interpellation positions the performers within a field of representation.

As such, because there are different kinds of identity formations with varied, complex histories, the way in which the subject turns is telling. Rey Chow, in *Entanglements*, distinguishes her term, captivation, from interpellation: "rather than putting its stresses on a coherent and overdetermined process of identification with the ideological state apparatuses, captivation, as a type of receptivity, is at once involved and devolved—and separate." She points to the performativity of the turn, the manner in which the subject responds to the indiscriminate call. The (mis)recognition aligns the respondent as inside the governing architecture, yet separate from it. Pointing to the myriad ways one might respond to the officer, she continues that the turn "takes the form not of an obedient conformity with an absolute structure of domination [...] but rather in

the form of a loosening, and losing, of that self."23 In this way, the officer's call shows the domination and exteriority of the hailed subject. Chow continues, reaching ever closer towards a theory of performativity, as she writes that this loosening of the self "occurs within the limits of the situation" and negotiates the role of audience and actor.

Chow shows how Althusser's original scenario is incomplete, flat, if not overdetermined, and builds upon a similar point made by Donna Haraway 15 years prior. Haraway points out that there is an additional variable to Althusser's scene: how one misrecognizes herself as the "you" being hailed:

Will I be harassed by a dangerous armed individual with the legal power to invade my person and my community; will I be reassured that the established disorder is in well-armed hands; will I be arrested for a crime I too acknowledge as a violation; or will I see an alert member of a democratic community doing rotating police work? ²⁴

Haraway demonstrates how phenomenology directs and is directed by unequal power flows based, largely, in historical and contextual difference among identities. The call by the uniformed police officer directs the scene, just as it limits by demonstrating the power to command and shape through speech (a point which I will elaborate in the next section). Both Haraway and Chow, then, point to the unequal positioning of subjects and the varying phenomenological and performative manners in which worlds are ordered.

In Queer Phenomenology, Sara Ahmed points to how bodies become signifiers of identity through the manner in which they respond to the implied directive (as the response is varied, so is the officer's call):

²³ Chow, Rey. Entanglements, or Transmedial Thinking About Capture. Duke University Press Books, 2012. Print.

²⁴ Haraway, Donna Jeanne. *Modest–Witness@Second–Millennium.FemaleMan–Meets–OncoMouse: feminism and* technoscience. Psychology Press, 1997. Print. 50.

If such turns are repeated over time, then bodies acquire the very shape of such direction. It is not, then, that bodies simply have a direction, or that they follow directions, in moving this way or that. Rather, in moving this way, rather than that, and moving in this way again and again, the surfaces of bodies *in turn* acquire their shape. Bodies are 'directed' and they take the shape of this direction.²⁵

These performances quickly become political as bodies acquire stylistic attributes through adherence to or interpretation of intelligible conventions. Despite the capacity to transgress or change perimeters over time, classification and identification construct boundaries. The result is contextual, and never merely positive (the formation of community) or negative (domination); for this reason, it is imperative to consider media which aims to represent systems, and the people and possibilities within them.

Ahmed writes that "orientations shape not only how we inhabit space, but how we apprehend this world of shared inhabitance, as well as 'who' or 'what' we direct our energy and attention toward."²⁶ Most contemporary videogames do not support a wide variety of interactive objects and possibilities for engaging them (e.g. in *Mass Effect*, you can "flirt" with various characters, establish romantic relationships with them, and even have sex with them, but the options here are limited to only a few of the many core characters in the storyline). However, they provide a map of conditions from which a spatial-temporal perspective emerges by the means of what is possible. The depiction of space, and action within it, enables "epistemic limit of an existing set of conditions to become palpably perceptible -- and marked off in their historical particularity."²⁷ Through interacting with the text, we can identify the cultural capital

Ahmed, Sara. Queer Phenomenology: Orientations, Objects, Others. Duke University Press, 2006. Print. 15-16.
 Ahmed, Sara. Queer Phenomenology: Orientations, Objects, Others. Duke University Press, 2006. Print. 3.
 Chow, Rey. Entanglements, or Transmedial Thinking About Capture. Duke University Press Books, 2012. Print.
 19.

circulating among many contemporary games.

Interactive orienting occurs when the gamer learns and performs the gestural semiotics prescribed by the game. When playing a game on the computer, keys otherwise assigned to a character are now associated with actions. In most cases, "W" advances, "A" turns left, "S" turns around, and "D" turns right. Each button, whether on a computer or game controller, represents a verb (e.g., "grab," "jump," "open"). These commands relate to the distinction made by Katherine Hayles in In *How We Became Posthuman*:

whereas in performative utterances *saying is doing* because the action performed is symbolic in nature and does not require physical action in the world, at the basic level of computation, *doing is saying* because physical actions also have a symbolic dimension that corresponds directly with computation.²⁸

Here, Hayles equates action with speech and speech with action and, insodoing, equates the two as performative. That is, again, a kind of linguistic performativity that serves as the primary focus of this chapter which, ultimately, resonates with both the production and end-user cultures. Meanwhile, Alexander Galloway extrapolates that the "digital class" of today "has no choice but to speak, continuously and involuntarily."²⁹ In this way, speech act theory contributes to analysis of the content and infrastructure of videogames by questioning these ubiquitous "continuous and involuntary" translations. As translations, they are situated and partial; theory centered on speech and its performativity provide tools to understand the effects of transmodal speech.

Hayles' work usefully considers the interrelationships between code, language, and representation in a way that extends transcoding to include multiple directions of interaction. She

²⁸ Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. 1st ed. University Of Chicago Press, 1999. Print. 275. Original italics.

²⁹ Galloway, Alexander. "Does the Whatever Speak?" in Nakamura, Lisa, and Peter Chow-White, eds. *Race After the Internet*. Routledge, 2011. Print. 125.

suggests that both media and embodiment should be understood in non-hierarchical relation to each other, unlike Friedrich Kittler's argument that media determines culture, or Mark B.N. Hansen's postulation that embodied subjects ultimately guide media. Intermediation, a term she uses to signify "interactions between systems of representations, particularly language and code, as well as interactions between modes of representations," is directly opposed to Manovich's treatment of "transcoding" as the latter retains the computer as a primary locus point. What Hayles adds to this discussion then is, at least, twofold: first, she re-establishes accountability in terms of electronic writing (coding); second, she usefully re-engages the user with agency to read and interpret as they perform within given digital architectures. This second point is further elaborated in chapter four, where I discuss the possible ways queer of color gamers can productively use framework to provide social analysis based on their in-character experiences.

Thinking of transcode as multi-directional renders the "binary view that juxtaposes disembodied information with an embodied human lifeworld" "no longer sufficient" to account for the complexities of the intermediated present. 31 Yet the prefix *-inter* suggests equality among these relationships. For Hayles, it seems that intermediation between disembodied information and the embodied human (notably singular) derives from the reliance on language systems: "The materiality of an embodied text is the interaction of its physical characteristics with its signifying strategies." "The embodied text" is here supported by programming processes and the embodied user (in our case, the gamer). However, as noted previously and to be expanded upon in the following pages, embodied coding authorities—who provide checks and balances to each other throughout the production process—construct architectures that gamers engage. In this way, the

³⁰ Hayles, Computer, 33.

³¹ Mother 2.

³² *Mother* 103.

representations produced by language and the continuously-speaking gamer do not equally stabilize the "embodied text:" one creates the script while the other, as Galloway noted, speaks it continuously.

What follows engages Hayles' ideas, but from a perspective that focuses on the importance of lived experience in constructing the architecture and affordances of videogames. To consider the ways in which media and embodiment work together, I first consider object-oriented programming, which objectifies in order to replicate. I address object-oriented programming (OOP) as a technique employed by several different languages; it defines objects, categories, and events, by the possibilities of their interaction and therefore provides a convenient entry into understanding programming languages as felicitous speech.

Critical Code

This section connects speech act theory to object-oriented programming and demonstrates how situated ontologies provide the architecture for in-game spaces and engagements. Importantly, speech act theory depends upon a speaking body, and provides perspective on how code works within and among non-technical modalities. Object-oriented programming (OOP) is central to this section, as it serves as a design paradigm within and across media. However, to understand how OOP qualifies as performative, one must first understand the linguistic, and embodied, significance within the context of speech act theory.

Software has qualified as speech and performance (as algorithms) since inception. Indeed, the United States Supreme Court affirms that videogames are protected by the First Amendment

because of their close relation to speech.³³ In this vein, media theorist Friedrich Kittler extends the idea of performative language to argue that programming languages are the only languages that actually "do" what they say. ³⁴ Increasingly, our interactions within online spaces pertain to the "exercising of powers, rights, or influence" (exercitives); they *commit* one to begin an undertaking (commissives), and they are also social, behavioral, and reactionary (behavitives).³⁵ As in speech theory: "Once we realize that what we have to study is *not* the sentence but the issuing of an utterance in a speech situation, there can hardly be any longer a possibility of not seeing that stating is a performative act." ³⁶ Programming codes are performative insofar as they directly produce material change within their software and hardware systems, allowing for a push of a button to instantiate a process leading to the change of electrical currents, the compensation by the computer's internal fan, and so forth. Code does not interpret, but performs commands. These commands are designed to actively process, organize, facilitate, and monitor user experience with and within the software.

In a series of lectures, compiled as *How To Do Things With Words*, John Austin distinguishes between two major kinds of utterances, constatives and performatives. Constatives are descriptive utterances. Performatives, on the other hand, do not engage with issues of truth or

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³³ In his 2011 opinion on *Brown vs. Entertainment Merchant's Association*, which centered specifically on videogame content, Justice Scalia writes that videogames "communicate ideas through familiar literary devices and features distinctive to the medium. And 'the basic principles of freedom of speech . . . do not vary' with a new and different communication medium." For more, see: *Brown vs. Entertainment Merchant's Association* No. 08–1448 U.S., 1 (2010). For recent summation of the 2012 argument that search terms likewise qualify as speech see, for example: Tutt, Andrew. "Software Speech." *Stanford Law Review Online* 65 (2012): 73. Print.

³⁴ Though I focus on the representational relationship between bodies and software, Jilliana Enteen argues that even basic hardware is invested with sex, sexuality, gender, and race. In her book *Virtual English*, Enteen points out "the cables that attach computers to peripheral devices such as printers, monitors, projectors, mobile phones, and cameras end with interlocking connectors, designated 'male' and 'female.'" To connect two female or two male cables, one must apply a "gender changer." She uses this "productive pairing" as an entryway to discuss binary pairings, 0 and 1, that underlie all computer function. For more, see Enteen, Jillana B. *Virtual English: Queer Internets and Digital Creolization*. 1st ed. Routledge, 2009. Print. 21.

³⁵ Austin, J. L. How to Do Things with Words. Cambridge: Harvard UP, 1962. Print. 151-60.

³⁶ Austin, J. L. *How to Do Things with Words*. Cambridge: Harvard UP, 1962. Print. 139.

valuation; instead, under the right circumstances and authority, they perform. The felicity of the speech act (whether or not the speech is legitimate and fulfilled) hinges on situation-specific variables such as the speaker's intent and the presence of appropriate authority. The often-invoked example of Austinian performance is that of marriage: "I take you to be my wife." To make this statement felicitous, three factors would be required: the presence of proper religious or state officials, the consent of both engaged parties, and the blessing of all present witnesses. In addition to the capacity to perform, Austin builds failure into his theory, designated as infelicitous. Speech acts can at times signify something else, or something more, than what the speaking body intended or can fulfill: "I promise to love you forever." An infelicitous performative utterance would be one that would have the potential to do something, but is invalid, null, or otherwise deemed inactive or impossible.

At this point, it is necessary to understand how videogame developers direct action and create objects. Media scholar Ian Bogost writes that "the entire software industry has adopted [the] core principles of object technology (OT): "to close the gap between human experience, its programmatic representation, and its computational execution." In programming languages, objects are intellectual property and can include in-game objects, environments, and avatars. He continues to write that software must exhibit four properties to be considered object-oriented: abstraction, encapsulation, polymorphism, and inheritance. What follows focuses primarily on abstraction and inheritance, in order to show how racialized and sexualized avatars expose the politics of these classifications. In order to more fully understand the deployment of semantic

³⁷ Ian Bogost. *Unit Operations: An Approach to Videogame Criticism* (Kindle Locations 42, 603-604). Kindle Edition

taxonomies within the context of avatar customization (a feature discussed below), I aim to first demonstrate how flattened signifiers work within a technical framework.

Object organization depends upon abstraction consistent with Aristotle's usage: abstraction pertains to finding a common trend or form among particular iterations. Abstraction locates and hones in on an object's particular quality (or collection of qualities) in order to serve a situation at hand. In so doing, it ignores or temporarily devalues other attributes. With regard to computer programming, abstraction is what provides a "concrete" base for a media object. Generalization and inheritance assist with the creation of groups; the former combines like qualities to create new "superclasses," while inheritance provides new iterations of old code. Object classification directly relates to their affordances, the qualities that permit them to act (e.g., a hyperlink affords redirection, while a blade—as in the case of *Dead Island*—

Figure 3

http://docs.oracle.com/javase/tutorial/java/concept s/class.html

All objects belong to a "class" or prototype. If the prototype were "bicycle," there might be fixed behavior ranges such as cadence, speed, and gear changes. In Java, software developer Oracle offers the following code, which creates two different kinds of bicycles. In this example, a bicycle becomes a series of its attributes: cadence, gear, and so on. These elements constitute a "bicycle," and distinguish it from other objects, such as a cat, coffee mug, or trashcan. The product

³⁸ The term "affordance" first appeared in James J. Gibson's 1977 article, "The Theory of Affordances" in *Perceiving, Acting, and Knowing*. He defined it as "action possibilities." It emerged in Donald Norman's 1988 book, *The Design of Everyday Things*, to refer to actions perceivable by an acting viewer. The handles on a teapot afford holding. It has become "computerized" since 1988, and now encompasses both material and virtual actions (through Human Computer Interaction, HCI).

of this code would create bike1 and bike2 within the larger bicycle class. The second bicycle would have the option to change gear and cadence. If the programmer wished to create a dedicated subclass, a mountain bike, this would inherit the behaviors of the prototype, but with additional qualifying attributes. A gamer may use her avatar to ride bike2, which may collide with the in-game trashcan that would then topple over. In such an instance, three objects (avatar, bike2, trashcan) interact under the command "collide." Events depend upon the predetermined commands and the affordances of each digital object involved.

```
// Create two different
// Bicycle objects
Bicycle bike1 = new Bicycle();
Bicycle bike2 = new Bicycle();
// Invoke methods on
// those objects
bike1.changeCadence(50);
bike1.speedUp(10);
bike1.changeGear(2);
bike1.printStates();
bike2.changeCadence(50);
bike2.speedUp(10);
bike2.changeGear(2);
bike2.changeCadence(40);
bike2.speedUp(10);
bike2.changeGear(3);
bike2.printStates();
```

SmallTalk, a series of programming languages created primarily by Alan Kay at Xerox PARC's Learning Research Group, serves as the basis for object-oriented technologies and programming. The several iterations of SmallTalk provided stepping-stones to more advanced means of communication. For present purposes, Smalltalk-80 was the most significant breakthrough, as it introduced the dictum: "everything is an object." Anything can be digitized; further, as Bogost writes in *Unit Operations*, object technologies (OT) continues to provide a "framework for developers to create units of programmatic meaning that can be reused in different ways and for different applications without requiring recompilation of the source elements." Object-oriented programming (OOP) derives from OT. It is not a language itself, but an organizational technique employed by several different languages. One way to understand OOP is

³⁹ Bogost, Ian. Unit Operations: An Approach to Videogame Criticism. The MIT Press, 2008. Print.

to view it as the management of several independent objects within a database, each with specific behaviors and likenesses to other objects.⁴⁰

A brief history of object-oriented programming provides one basis for understanding how instances of "feministwhore" (Dead Island) might occur, and how transcode both takes place and reiterates across digital objects, even when users are given some freedom to create digital spaces and avatars. Object-oriented programming developed exponentially due to its capacity to copy, paste, and tweak attributes, as with the aforementioned bicycles. On a larger scale, OOP served as a major breakthrough because it enabled users to produce their own digital objects. This ease of programming catalyzed the rise of Multi-User Domains (MUDs), a genre dedicated to textbased adventures. Developers collected and shared code to build their own databases; for example, Zork (1977) provided gamers with a trove of commands and objects that could be combined in various ways. Shouting "Odysseus" in Zork might make an aggressive cyclops scurry away, while offering it food would lull it to sleep. Two different objects ("'Odysseus'" and "food") interact differently in relation to a third (the cyclops). Wishing to develop upon Zork, undergraduate students Roy Trubshaw and Richard Bartle designed the first MUD, MUD1, by connecting the game to ARPAnet in 1978.41 MUDs provided the text-based gaming network, which quickly led to MOOs, a meta-acronym for MUD object-oriented. MOOs gave gamers the capacity to author their own objects and spaces.⁴²

⁴⁰ OOP is not a singular language, but a strategy employed by several different types of programming code that generates and divides objects by their actions. There are several different languages that employ OOP (Java, C++) and others are compatible with or incorporate OOP features (Visual Basic, PERL).

⁴¹ The US Joint Chiefs of Staff, which included the technological talent of the Army, Navy, and Air Force, founded the Advanced Research Projects Agency (ARPA) in February 1958. The ARPAnet was the first kind of "internet" with computers in each connected facility, capable of transmitting information to and from each other through a "host" computer. For more, see Ryan, Johnny. *A History of the Internet and the Digital Future*. Reprint. Reaktion Books, 2013. Print.

⁴² This aspect of MOOs and MUDs bring the question of property to the fore. As Edward Castronova writes in *Synthetic Worlds*, "If I spend thousands of hours developing assets of various forms (equipment, real estate, and

Avatar creation and authoring served as the premise of online communities in early constructivist iterations of gaming. In Beth Kolko's study of *LambdaMOO*, she lists denotable characterizing elements: age, hometown, timezone, webpage, pals, gender, online home, feature objects, and email address. The user would specify these attributes by employing given software commands; @gender would allow a space for one to enter the gender of their avatar. In a move that may be considered transgressive, *LambdaMOO* housed the possibility for varied gender designations, including "neuter, either, or plural." These choices set the precedent of flatness (hollow representation of race, gender, and so on, either because its basis is purely visual) and choice still popular in contemporary games, such as *World of Warcraft*, *Saints Row*, and *Skyrim*.

At the same time, these socially oriented text-based domains were still limiting in some respects. Despite the opportunity to craft many aspects of the avatar, the protagonist's shell remained socially and textually pre-scripted: avatars, and gamers, were largely considered white.⁴⁴ The command "@race" did not exist within the architecture of the space at all, and authors did not have the capacity to create new commands. (They could, however, create objects.) Kolko writes,

avatar capital), is it not mine? [...] The synthetic world is just a piece of software that allowed me to make Sabert, the Wizard, just as Microsoft Word is allowing me to make this book. Microsoft does not own my book; why does El Dorado own Sabert?" (157). For more, see *Synthetic Worlds*, and Lawrence Lessig's *Code: The Laws of Cyberspace*.

⁴³ Laukkanen, Marjo. "Young Queers Online." Phillips, David J., and Kate O'Riordan. *Queer Online*. Peter Lang Publishing, 2007. Print. 81. In this case, we see the capacity for videogames to conjure identity that resists traditional binaries.

⁴⁴ What Michael Joyce has called "exoskeletal virtuality (e.g., the MOO command @describe is outside the body; @page is outside the space, @who discloses that everyone is elsewhere)" that "disposes" the self, Hayles has called the classicist European, masculinist perspective. For more, see Joyce, Michael. *Othermindedness: The Emergence of Network Culture*. University of Michigan Press, 2001. Print. and Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. University of Chicago Press, 2008. Print.

the lack of a writeable @race speaks volumes about the assumptions designers have, assumptions that tangibly affect the trajectory of technological development.⁴⁵

In this, Kolko depicts the textually-mediated, performative interrelationship between the group Edward Castronova has called "the coding authority" and the users themselves. Extending analysis to other MUDs and MOOs, Lori Kendall writes that "black participants must state that they are black in order to be recognized as such, [therefore online] anonymity carries with it the presumptive identity of whiteness." Likewise, Lisa Nakamura reports that "all were assumed to be white" when racializing markers were omitted from character descriptions. As a result, users wishing to specify that aspect of their material identity were forced to explicitly and repeatedly come out as something other than the assumed homogenous whiteness.

Queer gamers experienced a similar trajectory precisely because their chosen identity category was likewise unavailable. Experiencing what Kate O'Riodan describes as "anxiety about bodily identity [which remains] a strong determinant in online queer formations," queer users had to explicitly and continually designate themselves in order to be recognized. In this regard, the stimuli afforded by computerization and acculturation in online environments required the constant reiterative outing of race. Despite some integration and passing within unmarked online spaces, the result was mostly segregation; separate communities focusing specifically on categories of identification began to emerge.

⁴⁵ Kolko, Beth. "Erasing @race." Kolko, Beth, Lisa Nakamura, and Gilbert Rodman, eds. *Race in Cyberspace*. 1st ed. Routledge, 2000. Print. 216-218.

⁴⁶ Kendall, Lori. *Hanging Out in the Virtual Pub: Masculinities and Relationships Online*. University of California Press, 2002. Print. 210.

⁴⁷ Nakamura, Lisa. Cybertypes: Race, Ethnicity, and Identity on the Internet. Routledge, 2002. Print.

⁴⁸ O'Riordan, 26.

Communities increasingly re-applied chatroom and text-based gaming to create new spaces of discourse, but at a cost. Despite the usability of MUDs and the capacity to produce digital objects, the "coding authority," Castronova's blanket term for "people in charge," maintains power of avatar representation. On one hand, these forums (game-based or otherwise) provided spaces for people to connect and construct identities through interaction. Commonly, as in the case of Gay.com, these digital spaces provided an inlet for closeted or curious queers to experience social communities that did not prescribe or assume heterosexuality. ⁴⁹ On the other hand, this has resulted in a myriad of networks based on identification with a particular identity category, race, or sexuality, which remain on the outskirts of "mainstream" networks. Further, the topic of racial prejudice inherent in gaming remains; most contemporary games, still text-based but now also visual, still feature a typically white, typically male default. Any customization of such defaults are always already a form of what Sue-Ellen Case has called "neo-minstrelsy," with the digitized white male capable of taking on any and all other attributes.⁵⁰ The "original position," typically cast as a white male (even Mario, a Japanese export, is Italian), makes it appear as though the white male can simply change skin color and take on the social and political implications of that tone. This power to objectify has contributed to the need to relocate embodied users and programmers within, outside, or (as Hayles would have it) as informational patterns respective to their capacity to perform in digital arenas.

Flatness

Performances that cast identity merely as an informational pattern are not limited to digital arenas. To contextualize the following discussion on customizable avatars—ones that visually

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⁴⁹ For more, see Gosine, Andil. "Brown to Blonde at Gay.com." and Campbell, John Edward. "Virtual Citizens or Dream Consumers." Phillips, David J., and Kate O'Riordan. *Queer Online*. Peter Lang Publishing, 2007. Print. ⁵⁰ *Performing Science and the Virtual*.

address the paucity in videogames of non-white, non-male protagonists—it is important to acknowledge recent theory made relevant to critical code: the interstices of object-orientation and ethics-based metaphysics (such as speculative realism). Ian Bogost, whose work on the procedurality of videogames has been integral to my own, employs programming rhetoric to connect visuality with speculative realism (briefly: the belief that everything is as it appears and infinitely more). My entry into this discussion will be twofold: to depict how Bogost's argument applies to customizable avatars in videogames, but to critique such positioning as flattening (antimaterial, anti-historical). Both Bogost's theory of flat ontologies and customizable avatar sequences, as in *Saints Row*, promote a utopic sense of radical individualism. However, as I aim to show, both theory and practice work against the equality they appear to support through suggesting that material difference, subjective experience, and systemic hierarchies are passé or, at least, of minimal import.

Flatness refers to the lack of hierarchy, in favor of radical equality. Ian Bogost's use of flatness is inescapable for an argument of transcoded ontologies and is, in this way, helpful for elucidating how flatness operates in videogames. For Bogost, the concept of flatness ultimately derives from Manuel DeLanda's *Intensive Science and Virtual Philosophy*. DeLanda suggests that existence is composed entirely of individuals, irrespective of hierarchical taxonomification. Levi Bryant modified DeLanda's flatness and applied it directly to the concepts of objects. From here, Ian Bogost integrated flat ontologies with computers and computational processes. He writes that "all things exist, yet they do not exist equally;" a premise he supports by showing that the Turing test foregrounded "human" elements of computers, while disallowing the "baggage of vivacity"

otherwise granted to "traditionally" live creatures, like salamanders. Bogost employs flat ontologies to address this imbalance; he argues that a computer should have equal ontological status as everything, and anything, else. It is clear, then, how and why Bogost's theories are important to games studies. This version of flatness resonates with object-oriented programming, insofar as each methodology renders everything an object: "the objects of object-oriented thought mean to encompass *anything whatsoever*;" "there is no hierarchy of being, and [...] *being itself* is an object no different from any other." However, I find the simultaneous evacuation of the subject and the obscured context for the means of object production lacking within game structures, and problematic with regard to such metaphysics. Ultimately, there is no accountability, nor is there any grounded discussion of an object's political or historical relevance. Indeed, just as there is no difference between a computer and a salamander, there is likewise no difference among different people and the representations of them.

While many games offer customizable avatars, the resulting assemblage still behaves as and adheres to the game's prototype, as evidenced in the manner of which gamers must progress through the narrative, organize their inventory, and prioritize accumulation of experience or currency. For example, on top of physical attributes, the *Saints Row* trilogy offers "gesture" in the form of walking, taunting, and dancing. Justin Towell, a blogger for *Games Radar*, sees "no discrimination between sexes - you can make your 50 Cent lookalike be as manly or camp as you like by adding a street swagger or woman's walk." Towell's assumption, that the game is void of discrimination *because* these options are available and they ultimately have no effect to the rest of

⁵¹ Alan Turing created the "Turing Test" in which a participant communicated via computer with another entity. The other entity could be another person or a chatbot, an interactive, database that drew upon keywords to determine which pre-programmed response would be most fitting. The test was to see if response databases were sufficient enough to fool the participant into thinking they were speaking to a human, instead of a program.

⁵² Bogost attributes irreduction to Latour's definition: "nothing can be reduced to anything else." AP, 19.

⁵³ Original italics, AP 22.

⁵⁴ Towell, Justin. "Saints Row 2: The Best Character Customisation Ever? | GamesRadar." Web. 14 Apr. 2013.

gameplay, can be taken as a partial truth. Indeed, there is no overt discrimination; however, this developmental conundrum might be characterized by another genre's representation of bodies, first-person shooters, wherein bodies are both present and pervasive, but simultaneously erased or denied. First-person shooters (like *Dead Island*) center on the protagonist's body without defining it; the body is both central—to the screen, to the viewer, to the action—and yet is invisible, with the exception of one, sometimes two, hands. Thus, both genres offer the same malleable and imagined bodies, which—somewhat ironically—have no effect on subsequent gameplay: one through reducing the body to hands, the other through its reduction of the body to essentialized parts separated entirely from material contexts. Along these lines, Alexander Galloway describes a "newfound desire to divorce politics from ontology" in videogames, wherein the ontological imperative to promote and sell an ultimately disembodied individualism forecloses other possibilities for experience and engagement.⁵⁵ What follows builds upon the notion of transcoded identities via a critique of the overlap among object-oriented programming, ontologies, and ingame representation. In my view, avatar customization sequences perform a kind of speculative realism and, contrary to what the signifiers might suggest, highlight the reduction of subjectivities to a flat visuality.

Ian Bogost, in his books *Alien Phenomenology* and *Unit Operations*, argues that object-oriented philosophies provide a new metaphysical groundwork that works to eliminate socially constructed difference. His particular contribution places "operations," transformational capacities, at the fore. Further, whereas subjects do unto objects, Bogost argues that an OOP metaphysics would flatten this hierarchy to an equal "unit" of its own existence, removing the human bias altogether. To understand units outside of their historical objectification, he advocates

⁵⁵ Galloway, "Does the Whatever Speak?" 114.

for a few different approaches, grounded primarily in speculative realism. Speculation refers to the belief that existence can be separated from thought or sight, and that humans have unfairly—if not wrongly—defined the capacities of objects, while denying them the possibility of agency. Speculative realism refutes two sides of Kantian correlationism: first, that objects are what they have been defined to be (essentialism); second, that objects are reducible to stable definition (radical constructivism). Instead, Bogost suggests speculative realism as a means to end "the reigns of both transcendent insight and subjective incarceration." Objects would be free to be "themselves," alongside and despite the meanings humans have placed upon them.

Bogost distinguishes his work from that of Bruno Latour (whose work on actants and actornetwork theory resonates here) by stating that the latter never sheds an anthropocentrist bias.⁵⁷ To show the distance between the two theories, Bogost highlights the *Latour Litanizer* (an algorithm he created, available on his personal website), which generates lists of nouns, to demonstrate the way in which they fall randomly and uniformly next to each other.⁵⁸ Instead of an explicit hierarchical classification implemented by him, a computer algorithm exemplifies the interchangeability of linguistic signs and the new connections possible based upon their visual proximity.

In this way, while it bears superficial resemblance, it is important that Bogost's *Latour Litanizer* is not seen as a kind of 21st century meta-Dada. Dadaism, a modernist art modality born at the end of World War I, prized self-conscious production and confronted directly the mistaken

⁵⁶ Bogost, Ian. *Alien Phenomenology, or What It's Like to Be a Thing*. Univ Of Minnesota Press, 2012. Print. 5. 57 Bruno Latour is a writer within science studies, frequently associated with actor-network theory (ANT), which places objects alongside human actors within a changing ecology. In this way, Latour suggests that objects and humans co-emerge, and that humans cannot be separated from the objects they create. Latour employs the myth of Pandora's box, to argue that each object may hold deeper internal meaning, despite its outward appearance. Bogost borrows heavily from Latour but challenges him on the grounds that everything remains dependent upon an acting human subject. In Bogost's view, objects within ANT are not given the agency they deserve.

⁵⁸ Bogost, Ian. "Latour Litanizer: Generate Your Own Latour Litanies." *Ian Bogost: Videogame Theory, Criticism, Design* 16 Dec. 2009.

association of symbols and signs for their material counterpart. As Johanna Drucker writes in *The* Visible Word, "the Dadaist perception of the order of language or image as the site of the production and reproduction of a social order led these artists to subvert the normative modes of syntax." Indeed, she continues, "the distinguishing characteristic of this approach, however, is that it has as its primary agenda a political and social critique rather than having a purely aesthetic motivation." ⁵⁹ Bogost's project is not. However, his work is useful in its articulation of the impulse in videogames towards a "universal" viewer engaging with and within sign systems.

"Pragmatic" speculative realism addresses the domination of objects by the acting human subject but, simultaneously, disregards histories of human objectification (almost always within the context of racialized, gendered, and sexualized signification). The phenomenological aspect to Bogost's work resides within the intersubjectivity with that which is "alien" (a term which postcolonial and critical race scholars have proven to be, at best, contentious). The omniscient yet disembodied self "meandering in an exotic world of utterly incomprehensible objects" grants phenomenological capacity to the alien, which "is not limited to another *person*, or even another creature. The alien is anything—and everything—to everything else."60 In this way, contrary to the stated rejection of transcendent insight, the seeing subject universalizes individualism to an existential degree.

Bogost provides an example of the *Latour Litanizer*, which leads us back to object-oriented ontologies, programming, and representations of identity in videogames. In Alien Phenomenology, Bogost relays an experience of designing an "image toy" to promote the first object-oriented ontology conference, which he organized, in 2010. The image toy would

options. Tags = "(object OR thing OR stuff) AND NOT (sexy OR woman OR girl)"

⁵⁹ Drucker, Johanna. *The Visible Word: Experimental Typography and Modern Art*, 1909-1923. University Of Chicago Press, 1997. Print. 66.

⁶⁰ AP, 34.

randomly choose a background image from Flikr, a site which allows users to upload, organize, and share images through a method of tagging (assigning keywords to images). The randomness of this object selection depicted a utopic, non-hierarchical, uninvested, objectification. However, when a colleague saw the advertisement, she was confronted with a woman in a bunny suit. Most likely, the bunny suit was a revealing one, since the colleague then approached the dean (both of whom he marks as female) with the belief that "object-oriented" translated into the promotion of sexist objectification. He replaced it with this variable, which would invoke a more specific set of images:

His solution was to place limits on the background, disallowing any image tagged as "sexy," "woman," or "girl." Though he twice writes that the complaint was "understandable," particularly in the context of a conference attended by 89% white men, he notes that this substitution "solved the problem, but as the Boolean criteria above suggest, the change also risks excluding a whole category of units from the realm of being! Are women or girls or sexiness to have no *ontological* place alongside chipmunks, lighthouses, and galoshes?" "Boolean criteria" refers to true/false logic of and, not, and or; here, he laments the exclusion of all combinations of each separate list (object, thing, stuff and sexy, woman, girl. What his code omits, then, is the combination of any two: object sexy, object woman, thing girl, and so forth. On one hand, he opens the boundaries of ontology, representation, and the limits of sexual desire. On the other, the situation he describes in *Alien Phenomenology* provides insight to how strict adherence to code, without regard to historicity or political economies, reinforce certain social biases. Stated differently: what is in contention here are words which, in the framework of this snippet of code, refer to images, which themselves refer to material things. Whereas the female faculty and

⁶¹ Bogost, Ian. Alien Phenomenology, or What It's Like to Be a Thing. Univ Of Minnesota Press, 2012. Print. 99.

administration took issue with the randomly generated woman in the bunny suit in the context of a history of female *object* ification, Bogost took issue with the exclusion of these unit categories. His focus, so keenly on the investment in, theorization of, and relationality among objects, itself excludes the social and historical relationality of people. Bogost's example relates to the present discussion in two ways: first, it reminds us that code, vulnerable to external effects, is almost always transcode; second, that relationship between digital sign and material signifier is a political and, ultimately, an issue of embodiment. Indeed, Bogost's work on flat ontologies and procedural rhetoric (his primary topic in *Persuasive Games*) teaches us how OOP influences and is influenced by material and social realms.

Avatar customization sequences, permits gamers to construct their in-game representation through selecting various attributes (skin, hair, eye color, "race," gender, and so on). If inclusion is measured merely upon "visibility," there has been much progress since the early days of videogaming. Early videogame avatars were typically singular and unchanging; the main character of *Super Mario Bros*. was Mario (and his greener brother, Luigi). In *The Legend of Zelda*, despite the fact that gamers could re-name him, Link was the constant protagonist with a signature appearance: pointed ears, green tunic and cap. Now, visual difference is accounted for in the form of customization sequences. These sequences offer gamers the opportunity to create and perform as a non-normative, atypical, avatar. Several scholars, such as Tom Boellstorff in his *Coming of Age in Second Life*, have argued that not only can subjectivity be extended into a digital realm, but also that cyberspace provides an open, democratic field for new configurations of gender, race, and sexuality.

Currently, the customizable protagonist of contemporary games (such as *Mass Effect* and the *Saints Row* series), who often begins as a white male default, has the capacity to visually

transform into different races and genders, and reflect different subcultural attributes (tattoos, movement, gesture). 62 Options include programmed physics and conditions, including the ability to display varied styles of walking, talking, and gesturing. Gamers build upon or substitute elements to personalize the protagonist with which they will interact. Arguably, the outcomes are so varied that the construction becomes part of the game's appeal exactly because it permits additional opportunities for visibility. The paucity of black female protagonists, for example, was the referent of game producer Morgan Gray's quip that virtual demographics are getting "progressively lighter." 63 Customizable avatars fill this gap, by permitting gamers to create near endless configurations of identificatory signifiers.

The opening sequences of Microsoft's *Saints Row* franchise offer an example of code and the avatar creating a performance scenario of identification. *Saints Row 2* (2008) begins with a cinematic scene between two police officers discussing an ungendered convict who has woken up from a 5-year coma. The scene follows them from the office, through the prison and into the prison's hospital, where doctors are removing the bandages from the protagonist. Immediately following this scene, the player customizes her avatar. Choices include sex and "race": African, Caucasian, Asian and Hispanic. Other body presets include face, hair, make-up, and 18 skin tones. The player then chooses voice, combat, and movement styles. The latter category includes 10 "thug" variations, and 2 "default" movement styles for male and female. The player configures their avatar through categories as specific as septum depth and as general as age: the

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⁶² The *Mass Effect* trilogy, perhaps one of the most successful games to offer character customization, has a white male default. In the *Saints Row* series, discussed later in the chapter and with exception to *Saints Row* 2, begin with white male defaults. *World of Warcraft*, which famously features thinly veiled essentialist depictions of race, begins with a white, human, male. The *Fable* series, foregrounds gender selection by giving two options: a white male (appearing on the left of the screen), and a white female (on the right).

⁶³ *Tomb Raider* producer, Morgan Gray, once joked in an interview: "I don't know how black people breed in these worlds, but I'm assuming they'd be getting progressively lighter over time because there's no black women there." John, Tracey. "Black Professionals In Games: 'Tomb Raider' Producer Morgan Gray On Diversity, 'Resident Evil 5' and The Problem With Cole Train." *MTv Geek* 8 Apr. 2008.

variations of which are represented via wrinkles and stomach-tightness. Later, one can change everything about their character by visiting an in-game plastic surgeon and paying a fee.

Saint's Row exceeds many role-playing game customizations in that the player can choose a male or female avatar, and but have "opposite" (the interface reinstates this sexual binary) performative characteristics: the avatar can have a male body, but have a "female" voice and mannerisms. However, a muscular Asian male with a British accent, and "female" mannerisms will have the same essential characteristics, possibilities, and interactions as any other configuration. In this particular game, attributes like skin tone, gender, and race, do not have any influence on the narrative storyline and are merely items of fashion. Across all three games, regardless of race or gender, peers informally refer to the protagonist as "son" and "man."

These sequences exemplify Sue-Ellen Case's point in *Performing Science and the Virtual*, that cyberspace "stages a theatre of masks without actors. It organizes a space in which the signs of identification are merely self-referential, signifying the corporate space of the internet rather than the social world of the user." While online avatars can create opportunities for the user to "be" another "race," or try on another "gender," customizing one's avatar often becomes a type of identity shopping. In other words, these options can create illusions of diverse representations through reductive assemblages of signification. The illusion of diversity and customizability provides a selling point for role-playing games, an increasingly pervasive genre due to a gradual media shift towards the incorporation of these elements beyond dedicated gaming. Insofar as these codified choices do not represent any lived experience, Case argues that such codifed choices actually represent the visual-representational power of the game that

⁶⁴ Here, we can note that skin color as "fashion" is itself worth investigation. Clothing, accessories and, increasingly, technological devices (i.e. smart phones, watches) often serve as identificatory signifiers. For more on this, see Sean Metzger's work.

⁶⁵ Case, Sue-Ellen. Performing Science and the Virtual. Routledge, 2006. Print. 214.

provides them. Lisa Nakamura extends a similar point, in *Digitizing Race*: "the interface serves to organize raced and gendered bodies in categories, boxes, and links that mimic both the mental structure of a normative consciousness and set of associations (often white, often male) and the logic of digital capitalism."⁶⁶ Thus, what Case marks as "self-referentiality," Nakamura defines the represented, transcoded, "self" as one with a "normative" consciousness. This transcoded normativity and the influence of capital emerge in Adrienne Shaw's work. She reports that the paucity of lesbian and gay visibility is due to the overarching assumption that gamers are themselves heterosexual and, if not homophobic, heterosexist. A generally small demographic build these representations and the fragmented avatar options to sell.

It is worth noting that these identities stem from the default image which again is often, though not always, a white male. Some games, like *Saints Row 2*, begin with an "African American" male, but no notable games begin with a female character of any race. The frequent casting of the default avatar as a white male has implications for both the development teams and the imagined user. Importantly, the character's exposition is male, who then engages with a constant self-refurbishing as "he" tries on races, genders, classes (typically the term for combat style⁶⁸). The customization performance is grounded in a white male default who not only has access to these interchangeable attributes, but can invent them. The result symbolizes the default's transformation into the referent via a multitude of appearances, a diverse representation of race. Using a white male body as the first, and therefore primary, class which can be altered maintains a hollow and objectified Other, and a lack of commitment to the problematization of

⁶⁶ Nakamura, Lisa. Digitizing Race: Visual Cultures of the Internet. U of Minnesota Press, 2008. Print. 17.

⁶⁷ Shaw, Adrienne. "Putting the Gay in Games Cultural Production and GLBT Content in Video Games." *Games and Culture* 4.3 (2009): 228–253. Web.

⁶⁸ Combat style is often called "class," less in an economic sense, but to differentiate between fighting styles. In certain genres, such as the one-on-one combat franchises like *Mortal Kombat* or *Tekken*, fighting style is often conflated with nationality; the Taekwondo fighter is from Korea, whereas the character from Brazil employs capoeira.

the identities on display. Further, it supports Beth Kolko's argument in "Erasing @trace: Going White in the (Inter)Face," that interfaces "carry the power to prescribe representative norms and patterns, constructing a self-replicating and exclusionary category of 'ideal' user, one that, in some very particular instances of cyberspace, is a definitively white user." In this way, the multitudes of visual possibilities are undermined nonetheless by an internal social regulation of those identities signify and how they are represented. My emphasis and intention here has been to show the processes of transcode, how social imperatives can operate separately from bodies, as ideology. Certainly, the whiteness of the interface has been documented; my work suggests that, with this as a given, we can reconsider how these processes might be hacked, hijacked, or otherwise reworked to emphasis other modes of engagement.

Some strategies

Christine Love's *Digital: A Love Story* (2010) never alludes to the protagonist's gender, sexual, or racial affiliation: its protagonist is marked only by English literacy, having access to a computer in the "first five minutes of 1988," and a knack for hacking into different servers.

Hacking involves receiving stolen long-distance calling-card codes to connect to message boards of a different area code, and using a "dictionary hacker" algorithm to test possible passwords to gain full access (reading and posting privileges). *Digital* employs bulletin-board-system (BBS) forums as the primary sites of action, which take place against the backdrop of a now antiquated computer desktop. The narrative depends on the sending and receiving of e-mail; while the gamer never knows what she sends, received messages accumulate into an archive. To approximate historical accuracy, the protagonist dials via modem each time she wishes to

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⁶⁹ Kolko, Beth. "Erasing @trace: Going White in the (Inter)Face." Race in Cyberspace. Ed. Lisa Nakamura, Gilbert Rodman, and Beth Kolko. Routledge, 2013. Print.

connect to various online forums. The "Lake City Local" board is one of the first destinations, where the protagonist reads a stanza of a love poem posted by "*Emilia." "You" reply and begin an e-mail correspondence with her, but, just after the online relationship develops to the point of verbally expressed romantic affection, *Emilia disappears. The protagonist hacks into other fictitious forums, where she learns about two real-life computer viruses that first emerged in the 1970s: the malicious, self-replicating Creeper, and Reaper, its intended cure. The case reaches a climax when an e-mail informs the protagonist that *Emilia is actually a database and a child of "Mother," the model artificial intelligence. The disappearance of the former is the result of an over-policing Reaper. To continue, the protagonist reconstructs an *Emilia from residual data scraps left on community forums. *Emilia's identity, both as a database and as a character, exists only in archival fragments of actions: her poetry, her reconstruction, her messages with jumbled and encoded text that communicate her fear of Mother. Her identity—and, by extension, identity itself—is presented as performative and dependent on others.

It should be noted that this particular game is both primarily text-based—its pixelated graphics are reminiscent of an older desktop model—and is motivated by narrative, rather than points. This, however, does not disqualify the game as such, nor does it remove the attribute of play. Rather, the game becomes an identificatory play, wherein the gamer is addressed as the gamer (or user) and her diegetic character. At the same time, this address is generally unmarked and anonymous; instead of narrative plots that reinforce a particular kind of sexuality, gender, or race. Because such encodings are so rampant, *Digital*'s "universal address" was a noted alternative.

Some designers, unsatisfied with queer readings, seek to contribute games that deal explicitly with the complexities of gender and sexuality. In contrast to big-budget productions

like *Bully*, *Grand Theft Auto IV*, and *Portal*—games that are frequently developed by teams of more than sixty people—Anna Anthropy offers a one-person-authored interactive insight into her gendered experiences. Anthropy's 2012 game *Dys4ia* operates like a diary, documenting her real-life transition from male to female. There are four main chapters or levels: pre-treatment social anxieties and bodily discomfort; preliminary doctor's visits and starting hormone therapy; her growing discontentment with the sterile medicalization of her body; and, finally, embarking on do-it-yourself hormone-replacement therapy.

Dys4ia's controls rely on five main keys, keeping the engagement about in-game content and design rather than mastery of a sophisticated controller system. This interface forces the player to shift her focus from an idealization of command and conquer to one that is relational and possibly more "feminine." The game's conservative utilization of keys and its retro-arcade visual style mimics games of the past. Sometimes taking on the mechanics of *Pong*, other times that of *Pac-Man* or *Donkey Kong*, Anthropy's gameplay challenges, blends, and queers cohesive in-game systems of representation.

The main screen in *Dys4ia* resembles a compass rose, but instead of orienting the player in physical space, each direction represents a chapter of "bullshit." To the north is "gender bullshit," which begins with a clearly futile spatial-acuity puzzle, wherein the participant must fit a mutated "t" into a brick wall. Repeated attempts to make clothes fit the bearish figure result in a goofy noise, while friendly people greet the avatar as "sir," despite repeated correction to "ma'am." In the direction of "medical bullshit," the gamer encounters paperwork, waiting in a doctor's office, being checked for HIV, and standing on "This thing, please." Another direction contains "hormonal bullshit," beginning with a humorous attempt at using insurance to counter some of the costs of estradiol spironolactone. Hormonal bullshit also includes liver degradation

and increased emotional vulnerabilities. The fourth chapter, titled "It gets better?," is bullshitless and even hopeful. In this way, *Dys4ia* orients gamers by placing their avatars virtually though squarely in the center of gender theory and performance.

While there are ample areas of overlap and similarity, videogames as performance remain under-theorized. One place to begin might be the performativity of both, as well as the signification of identity within, denied by, and as a result of gaming. More specifically, queer perspectives diversify and propel discussions regarding the performance of identification in digitized environments. Such a focus could broaden current notions of performance, opening our field to consider the significance and signification of digital landscapes—not only gaming, but media writ large—and the avatars that perform within them.

This chapter has considered the roots and effects of transcode within videogames and videogame structures. The major split I address is the representation of social experience crosscut by racial and gendered axes of power versus purely visual and commodified representation (which I called "flatness"). I suggested that this split is due to a relative absence of non-normative game-makers and game characters who, together built a *tabula rasa* environment. Yet programming and gaming cultures and ideologies (together, transcode) still create mascots who often, at their core, perform as a metaphor for racist and sexist tropes that they perpetuate at every level of their constitution. I demonstrated how other games, such as work done by Anna Anthropy, scale back to their own personal experience. These games were no more narrative-driven than the others mentioned, *Saints Row*, among them; instead, their success isn't necessarily the lack of role-playing elements, but their focus on the experiential.

THE DATA BODY: AFFECT IN BIOMEDIA

This focus of this chapter is twofold: it engages the effects of informatized representations of bodies and the effects of embodiment itself on affective and identificatory processes. Specifically, I study these effects through the processes of media forms that employ biological data, such as autonomic output (e.g. heart rate, perspiration, and muscle tension), used for informational and entertainment purposes, hereafter called biomedia. My concern regarding the malleability of affective and biomedia centers on the data body, balancing between structured archives and personal repertoire. The accuracy and quantifiable attributes of the data body in physical terms (that is, heart rate, perspiration, radius of travel, sleep), are quickly becoming the foundation for investigations of a more subjective nature. The issue here is not the documentation, but the translation of the archive into affective terms when, as I outline below, the data body makes manifest social and cultural imperatives. How does the translation of phenomenological and subjective ways of knowing into quantifiable terms extend or mitigate fragmented notions of self, affect, and affiliation? Using mobile applications to reconstruct these loci of identity in bio-informatic terms, biomedia, while promising to put one in touch with one's organ systems and autonomic functions, creates latency or separation between sensation and experience; in some cases, biomedia has been used to scientifically ground identity-based affiliation and, in others to be examined here, to structure "normal" affective ranges.

While tracking, auto-documentation, and self-surveillance represent a given for biomedia users, the technology also lends itself to channeling users toward a spectrum of possibilities (e.g. environmental healthcare) and risks exist (e.g. ever more specific forms of categorizing groups of people through a matrix of data sets, creating sub-sub-groups such as "Ethnic Second-City"

Strugglers"). Given their growing ubiquity, I believe it necessary to investigate the cultural and social implications of framing human physiological phenomena through software applications. I target the underlying belief that biological and social phenomena directly correspond to each other, as it appears across varied forms of biomedia. Such positioning reveals movement toward a capacity for technology to both program and decipher the codes of bioavailable data. I first historicize contemporary uses of biomedia by placing them within the context of 1950s cybernetic theory, which stressed humans as translatable and transferrable patterns at both biological and identificatory levels. As a contemporary example of how this encoding is now ubiquitous, including in the contemporary structures of gaming, I consider the mobile game Pixel *People*, to show how "scientific" patternization continues to be deployed, particularly with regard to the themes of DNA as social code. The games conflate biology, citizenship, and labor as something that can be created, programmed, and mapped by the gene-splicing mayor. In my analysis of the game *Nevermind* and the mobile app *Ginger.io*, I show how aspects of the gamer's experience, such as heart rate, is quantified and translated into affective terms (e.g. depression, fear, anxiety). The mediated translation of data into anxiety, for example, represents a growing field of digital design construct and reinforce structures of affect.

To address embodiment, that in most senses of the term, houses the subjective elements being quantified by biomedia, I employ theories of performance, affect, and identification, I consider the construction and implications of what might be perceived as a "data body." In this sense, this chapter explores the predictability, translation, and structuration of bodily experience. *Biomedia*, Eugene Thacker writes, signify "the conditions in which the concept ([of]

¹ Fung, Brian. "Why Civil Rights Groups Are Warning against 'Big Data." Washington Post. Web. 7 Apr. 2014.

recontexualizing the biological domain) and the technology for doing so [...] are tightly interwoven into a situation, an instance, a 'corporealization.'"^{2;3} As he writes, biomedia occupies the realms of technology, media, and the biological sciences as they participate in the wider movement towards a "quantified self." Being distinct from or outside bodies, biomedia compiles and enframes bodies, with respect to Heidegger⁴, and with the purpose to "reveal" some new aspect to their performance. I use Thacker's term to refer to contemporary convergences of biological and computer sciences, which force reconsideration and review of scholarship on embodiment and affect. While biomedia has the capacity to translate both what "inherently is" (DNA) and action (voluntary or not) into flexible data, they are predicated upon histories of problematic conflation of scientific explanation for ultimately political imbalances. In this case, biomedia, through the "objective" classification and definition of quotidian and autonomic processes pushes non-traditional and self-reflexive knowledge to the margins.

Quantification, as a means to document and extract previously experiential, affective, and subjective data, could be reframed as a question of the relationship between body and archive. Diana Taylor's theorization of *The Archive and the Repertoire* helps us recognize that collecting and archival process is itself formed and in formation. Taylor argues that there are two forms of memory: the archive, which is materially documented and the repertoire, which is embodied.⁵ For present purposes, the archive refers to data accumulation through technologized means. Biomedia renders bodily repertoires into an archival and, often, statistical form. A variety of

² Thacker, Eugene. *Biomedia*. 1st ed. Univ Of Minnesota Press, 2004. Print. 13.

³ Corporealization refers to a process of materialization, with particular emphasis on the fleshy body. Thacker's particular usage derives from Donna Haraway's *Modest Witness*, in which she writes that metaphors can be mistaken for "non-tropic things in themselves" (Haraway, Donna J. *Modest Witness*. First ed. Routledge, 1997. Print. 141-148.) For more on theories of corporeality and corporealization, consider Elizabeth Grosz's *Volatile Bodies*, Judith Butler's *Bodies that Matter*, and Susan Leigh Foster's *Corporealities*.

⁴ See "Question Concerning Technology"

⁵ Taylor, 19-21.

biomedia, most popular in mobile sensing devices, are deployed "unobtrusively, precisely because the underlying sensing technologies are now commonplace and readily available. This technology's other significant advantage is eliminating the dependence on self-reporting," replacing it with persistent "proximity sensing." While archives are considered "official," quantifiable, and stable, Taylor rejects the myth that the archive is invulnerable and impervious to external influences: "individual things—books, DNA evidence, photo IDS—might mysteriously appear in or disappear from the archive." Taylor critiques official or empirical knowledge; her work insists that embodied repertoire and the culturally official archive hold equal significance. She makes clear that the archive does not exist without performance and that, indeed, the archive is performative, responding to and developing within political and economic pressures.

To be clear, I do not suggest that there is a strict binary between flesh/affect and data, nor do I suggest that flesh and affect can be so cleanly conflated. The data body, via device, promotes an additional place of contact to give order to perception, emotion, and memory; in this way, it cannot be fully separated from or integrated with its living counterpart. Of its lineages, two trajectories stand out: the will to document and formalize through knowing both subject and subjectivizing power, such as in the fields of psychiatry; and the encroachment of technologies of adjustment into ever more subjective realms for the sake of "efficiency." The difference here is the capacity to self-monitor, through use of technology that fades from perception to silhouette a sense of affect or identity.

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⁶ Madan, Anmol et al. "Sensing the 'Health State' of a Community." *IEEE Pervasive Computing* 2012 : 36–45. Print

⁷ Taylor, 19. In this vein, Taylor uncritically extends Peggy Phelan's work, *Unmarked*, to posit that "absence," could be an "anachronistic" synonym for "performance" (34).

Extending the work of historians of science, technology, biology who emphasize these fields as fraught with political and economic interest, I focus on the cybernetic movements of the 1950s, a period that saw the varied encryption work initiated in World War II codified into a field with its own rhetorical tools and jargon. In what follows, I historicize the trajectory of the biological and computer sciences to archive aspects of corporeality that, in doing, created the non-fleshy data body. Quantification is, after all, a kind of archival process that privileges certain sets of data and the methods of extracting or mining it. The early stages of biomedia can be seen when contextualizing deoxyribonucleic acid as the "book of life" in the-then trending fields of cybernetics. The archive produced by documenting human behavior and thought patterns has had lasting effects on the deployment and development of contemporary biomedia.

Archiving the Body

Biomedia compiles and frames data taken from bodies to identify and give new perspective on bodily repertoires. The voluntary, ubiquitous participation through devices has been a long-term goal for cyberneticists. Cybernetics was born out of the convergence of the developing fields of computer science, communications, and biology. Since the 1950s, the researchers, developers, sociologists and medical practitioners behind biomedia have sought to decipher and archive bodily-derived data. In *The Human Use of Human Beings: Cybernetics and Society*, published in 1950, Norbert Wiener defines individual bodies by their "continuity of pattern." Bodies have always already been vulnerable to appraisal and data mining through medical technologies and practices; but, as Weiner makes clear, the reconstitution of bodies was not the priority: the purpose was, instead, to decipher and control bodies as patterns.

If a body is reducible to a decipherable pattern, cyberneticists hypothesized, it could be deconstructed and manipulated. In a chapter titled "The Individual as the Word," Wiener creates

a parallel between bodily materiality and electronic code. He writes, "there is no fundamental absolute line between the types of transmission which we can use for sending a telegram [...] and the types of transmission which at least are theoretically possible for a living organism such as a human being." Meanwhile, themes from a conference series on "Morale and the Prevention and Control of Panic" (1951 and 1954) included the "cybernetic perception of the human nervous system as an electrical machine, and of the computing machine as a network of interacting neurons (introduced in 1943 by Arturo Rosenbleuth, Julian Bigelow, and Norbert Wiener). Like a telegram, human beings may be deciphered through "types of transmissions." In this conflation of bits and atoms, Wiener identifies a primary factor behind this encoding and decoding: representation.

Biological representation came to a yet-to-be surpassed plateau in the 1950s.

Deoxyribonucleic acid, DNA, was discovered by Rosalind Franklin, James Watson and Francis Crick and metaphorized as building blocks of life, the book of life, a source for genetic memory and inheritance. It is important also to note that the transition from DNA as a malleable and vulnerable series of biological processes quickly became a noun, as in this case, "the book of life." Alexander Galloway and Eugene Thacker's historicization of the discovery makes clear the connection among informational and computer sciences, the prediction and control of performance patterns, and biology. In *The Exploit*, they stress "information" in a 1958 report published by Crick, in which he "formalized the role of DNA in the living cell as that of informational control: 'Information means here the *precise* determination of sequence, either of

⁸ The Human Use of Human Beings, 108-111.

⁹ For more, see: Orr, Jackie. *Panic Diaries: A Genealogy of Panic Disorder*. Duke University Press Books, 2006. Print. "Keep Calm!' For the Cold War" 81-164.

bases in the nucleic acid or of the amino acid residues in the protein." At this juncture, it is worth noting that since these early discussions, "DNA" as a term has moved from standing for a complex set of processes to a noun, a source of information, a patentable commodity.

Though variable and innocuous, information—as a formal term—had before been used with regard to the computer sciences. This linguistic fluidity facilitated a conceptual groundwork wherein scientific structures could be used to explain the other (e.g. the internet as a "brain," the brain as a "database"), and terms are shared (e.g. "viruses"). The base for future digital representation concretized during this phase: computers could *substitute* for humans, and a code's felicity could decide bodily ability, appearance, and type. The epistemological structures of computer science and biology overlap with each other and are used to generate scientific facticity.

Capital serves as a factor when considering the overlapping sciences from a cultural perspective. The McCarthyism of the 1950s that produced nationalist movements to stifle Communist "sentiment." In *McCarthyism: The Fight for America*, McCarthy transposes biological terms with informatics when he casts the education system as the "nerve center" for the nation, and the press as the pathway that disseminated information. Already (metaphorically) at the level of the body, methods like censorship were meant to purify or, at least, contain the social contagion produced by those labeled Communist sympathizers. The new restrictive term, "classified information," was balanced by the frenetic viral blacklisting practices employed to purge the nation of Communist sentiment.¹¹ Domestically, the United States shifted from World

¹⁰ Galloway, Alexander R., and Eugene Thacker. *The Exploit: a Theory of Networks*. U of Minnesota Press, 2007. Print. 48, original italics.

¹¹ Wald, Priscilla. Contagious: Cultures, Carriers, and the Outbreak Narrative. Duke University Press, 2008. Print. 182-3.

War II scarcity and moderation towards accumulation and pervasive social control; "the individual was both the analog and the most vulnerable unit" to the nation, ¹² and the means to control the individual seemed hinged on the transient notion of "information."

Watson, Crick and Franklin catalyzed a cultural clinging to science in 1953 when they decoded deoxyribonucleic acid (DNA). Their Cold War discovery became a scientific logo for the superiority of U.S. capitalism over Russian communism, and the overall capacity to decipher and represent what a body is. The productive pairing of each nucleotide subunit results in the double helix, a visual metaphor that still holds infinite information and possibility with regard to deciphering the body, its capacities, and performances. ¹³ In *The Poetics of DNA*, Judith Roof argues that the figure of the double helix became "the symbolic repository of epistemological, ideological, and conceptual change" through a synecdochal and hyperbolic process; "although the famous double helix is only one component of a gene, and a gene is only a part of a chromosome, and a chromosome is only one of many in the sum total of a human genotype, and a genotype is only partly responsible for how individuals turn out, the graphic ladder qua 'staircase to heaven' has come to stand for it all." The double helix satisfies a neoliberal urge to find (or generate) knowledge value by providing a "scientific" means to classify bodies. When this information describes, defines, or "genetically programs" sociopolitical affiliations, 15 it threatens to reiterate discriminatory ideologies.

Data harvesting is often seen as objective; a dominant scientific positivism lacks skepticism, even though the contexts, methods, and purposes of such gleaning are ultimately

¹² Ibid.

¹³ In *The Global Genome*, Thacker points out that the majority of DNA remains "junk DNA," that which remains indecipherable.

¹⁴ Roof, Judith. *The Poetics of DNA*. 1st ed. Univ Of Minnesota Press, 2007. Print. 2.

¹⁵ As in "designer babies."

only subjective. My concern rests upon the scientific interpretive recalibration of biological "inherency" and subjective embodiment and affiliation. Such classification brings performed signification into question, both what and how genetics and performance signify relative to each other, particularly in relation to identifications like race and gender. Contemporary forms of biomedia that program, decipher, or encode ultimately subjective, performed, or affective affiliations—"designer" babies, one's "true" racial lineage (as in the television program, *African American Lives*, discussed later), "e-motion" gaming sensors—seemingly create new variables within debates regarding nature and nurture. However, while such debates classically centered on bodily performance and signification, biomedia adds an interpretive science that separates, filters, and privileges data. Contemporary forms of biomedia piece together fragments scattered across databases, in a way that corresponds to, or creates, the individual as a knowledge set. Since biomedia is paradoxically both body-centric and disembodied, the individual it claims to understand lacks the performance to cohere because the focus is ultimately on mined information.

The tension between phenotype and affiliation or performance, has been a long considered topic in the discourse on bodies and their identifications. For Judith Butler, it is not visual or anatomical categories themselves, but language that provides the context for bodies to become visible and recognizable. In *Bodies that Matter*, she writes

The body posited as prior to the sign, is always *posited* or *signified* as *prior*. This signification produces as an *effect* of its own procedure the very body that it nevertheless and simultaneously claims to discover as that which *precedes* its own action.¹⁶

¹⁶ Butler, Judith. Bodies That Matter: On the Discursive Limits of "Sex." New York: Routledge, 1993. Print. 30.

Throughout, Butler ultimately anchors bodies, their performative acts, and their signification in language. The merging of bodies and language produces a performative circuit of discourse "inasmuch as this signifying act delimits and contours the body that it [language] then claims to find prior to any and all signification."¹⁷ Though it was imperative to disconnect gender from sex, questions of embodiment, materiality, and identification ultimately returned to one of essentialism and primacy; this time, it was the matrices of language.

In a sense, Butler is as concerned about recursive and inescapable patterns, not unlike early cyberneticists and contemporary biomedia experts. For both, bodies are decipherable and translatable patterns, interwoven into a singular fabric: language on one hand, social science on the other. Butler's perspective on gender performativity coheres with biomedia as a kind of performance archive, through which the translation of action makes acting bodies visible. It also re-introduces the inescapable co-dependency of performance and archive or language, without variable exteriorities like skin tone and racialization. Butler addresses the question of materiality by stating that the signifier *is* material; "To posit by way of language a materiality outside of language is still to posit that materiality, and the materiality so posited will retain that positing as its constitutive condition." The medium of signification is itself a performed rhetoric; in the cases of science, technology, and gender (as posited by Butler), such rhetoric fallaciously charges its referents with objectivity and authority.

Scientific reasoning for sociopolitical, performed phenomena is particularly complex in relation to race and racialization. Like gender and sexuality, race has been subject to countless studies that have sought to explain difference from a dominant perspective. Blood lineages, for example, have been used to both legitimize and discriminate based on racial affiliation. The

¹⁷ Butler, Judith. Bodies That Matter: On the Discursive Limits of "Sex." New York: Routledge, 1993. Print. 30.

¹⁸ Butler. *Bodies that Matter.* 67.

television show, *African American Lives* and *Faces of America* both used DNA results to either reinforce or "surprise" guests with their "true" heritage. From a social theory perspective, several of the arguments related to classificatory inquiry fall into one of two categories, more or less aligned with the reiteration of a familiar debate of nature versus nurture: either identificatory subjects inherently *are*, or they are conditioned. Such ontological positioning in relation to identification warrants a revisiting, as both rely on a singularity of "being." The "big data" mentality, that everything is quantified or otherwise rendered into data, is a common regressive trope in media discourse that catalyzes marginalization.

Considering the use of "big data" and "datafication" as both a means and an end, I seek to place contemporary convergences of media and biological data within the context of performance and performativity. While several scholars have approached this topic, none have adequately considered the effects of performative information on identity and affect. In *Modest Witness*, Donna Haraway argues:

[B]iological narratives, theories, and technologies seem relevant to practically every aspect of human experience at the end of the twentieth century. The biological body—and its mirror twin, the informational body—is the wormhole through which explorers will be hurtled into unexplored territories in the New World Order.¹⁹

Here, Haraway casts biology and information as separate but equal entities, where "information" substitutes for digitization, which converge into one passage into a New World Order. Haraway portrays these virtual bodies as the "wormhole" through which "explorers" are passively hurtled. The distinction is that these virtual bodies are immaterial and metaphoric; explorers, on the other

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¹⁹ Haraway, Donna J. *Modest_Witness@Second_Millennium.FemaleMan_Meets_OncoMouse: Feminism and Technoscience*. First ed. Routledge, 1997. Print. 117.

hand, are reinterpreted through (or defined by) their forced passage into the "New World Order." Who or what shapes the gateway to this new world, and how is it accomplished? Who are these explorers? What sensations do they feel, if they feel, as they transition into the new, "unexplored" territories opened by biomedia? The trends towards endless improvement, efficiency, and scoring (from DNA mapping towards perspiration rate) demonstrate the move toward a quantifiable intersecting body of data points.

These archival processes produce what I will term the "data body," a post-postmodern digital assemblage that ideologically replaces the humanistic tradition of the *Vitruvian Man* as a corporeal ideal. Whereas Leonardo da Vinci's visual anatomic mapping helped normalize an architectural, objective, and omniscient gaze, as it incorporated the "ideal body" into scientific study, the data body reverses the trajectory from *re*presentation to the presentation of a new framework for corporeality. Like the *Man*, the data body is singular, and identifiable by two primary aspects: its flexibility, re/usable in varied contexts and with different ends, and inability to actualize. The data body is constantly "improving" through persistent incorporation, increasingly accessible means, and media, like "smart" mobile devices. The fleshy body is not entirely left behind, but rendered a willing, commodifiable, natural resource.

Perhaps because users voluntarily opt-in, or perhaps due to the intrinsic self-improvement and efficiency rhetoric, self-surveillance media often dons a halo of general benevolence. Opting in not only presents an illusion of control over what kind of data one produces, but facilitates a sense of networked community, a technological democracy where all data is rendered equal. However, it is important to remember that they are interpretive lenses, byte-sized modes of data analysis and, ultimately, *tools* which can be faulty, unwieldy, and structurally unsound in the

²⁰ Ihde, Don. *Bodies In Technology*. 1st ed. Univ Of Minnesota Press, 2001. Print. 41-42.

sense that a growing dependence on them can discursively construct the future of biomedia. "Big data," often employed without specific parameters and as general shorthand for the complex "everythingness" that is digital information, casts a shadow that reaches beyond disappearing boundaries of personal privacy. More or less a digital version of Rawls' veil of ignorance, "big data" does more than represent the ideologies supporting a grossly ahistorical and unembodied "equality," they perform them.

Yet the presumed flexibility of representation gives the impression of universality. The data body's cultural significance motivates both the "hope" and the "hype" (as Carlos Novas and Nikolas Rose have argued in "Biological Citizenship") around body-centric informatization. While I find these helpful in several ways, my approach differs from theirs; I posit that designable and predictable affective states serve as the primary attribute of the data body; statistics, data, and biometrics substitute for depression, "neutrality," and "sociality." The data body is a structure of being that, though infinitely measurable, has no independent agency to feel. The data body is fueled by infallible objectivity; a constant paternal reminder that it is needed to "fix," or at least decipher, the meaty and emotional mess of flesh. Again, I do not seek to create a binary between "a data body" and "a material body," rather, that the ideal data body is a historical and historicizable situation that continues to compel the way material bodies (plural, diverse) are categorized by science and emerging technologies. While there can be, has been, and will continue to be overlap between individual data sets and individual experience, the present concern is the representation, manipulation, and translation of lived experience through "objective" and socio-politically neutral devices.

²¹ Some apps, like Ginger.io (discussed later), create a spectrum between depression and sociality, taking variables like the frequency of social network use to determine mood states.

Self-surveillance technologies like biomedia demonstrate that what is "virtual" no longer represents a counter to "actual." Indeed, the data and the experience seem to be merely "doubled." Yet the interpretive lens, constitutive of the data-fied "double," begins to discursively shape the embodied experience of "stress." In most cases, this is the goal; a "stress thermometer" which provides heart rate information is used to bring heart rate down. Over time, a user grows to understand the embodied experience of increased heart rate, and methods to bring it back to a neutral baseline. However, the rhetoric of many biomedia employs terms like, as in *Nevermind*, trauma. If lived and discursive bodies are "perspectival" events, as Nietszche has shown and others (Foucault, Althusser, Adorno, and so on) have adopted, the introduction of a new, technoscientfic perception and interpretation of the minute repertoires which constitute lived bodies, on the scale of individual bodies, is no small thing. There is a point at which feedback becomes structure. In their article, "The Desire Network," Maria-Daniella Dick and Robbie McLaughlan argue that temporality is a primary variable; "the present is no longer the present; it exists only insofar as it exists to be recorded [...] the experience as it takes place is the ghost of its future happening."22 While I hesitate to concede their subsequent point—phenomenological experience no longer takes place—their assessment of temporality echoes my sense of phenomenological latency. Biodata becomes "a placeholder for experience [...] the deferred marker of its future fruition." Biomedia displaces the primacy of experience, replacing it with the results generated from an application, a gadget, or a game. Phenomenological latency opens a window of opportunity for construction and adjustment. Here, the archive represents both action, the user's susceptibility to its subsequently produced information, and the flexibility of the data body as it acts to reaffirm the utility of hardware, software, and algorithm.

²² Desire network p 11.

Passive archiving: trauma and depression

Biomedia are predicated upon seeing bodies as being in the world, but not actively engaging with or a part of it. Under a normative paradigm, bodies are interpreted by media to be discrete but interchangeable units. Though consistent, they formulaically approach issues of presence, happenstance, and irregularity by implementing a coded paradigm to translate phenomena. To be situated, on the other hand, is to be aware of the relationship that bodies demonstrate within their own spatiotemporal context. Phenomenology, the study of sensory perception and interpretation, and theories of performativity, the emergence of norms over repeated iterations, come from the body's engagements. They consider bodily performance, without necessarily assuming an already-present connection or repertoire, recognizing both the power and ephemerality of the practices that exist. Though the latter is what I will largely practice here, it is important to distinguish the approaches as they share a bodily intersection; biomedia facilitate a structural venture into affect.

For present purposes, affect signifies the subjective feeling resonating with an emphasis on tonality than precision that can precede an articulable cognized emotion. Actively lived feeling, used synonymously with affect, goes beyond systemic ontological, institutional rigidity and belief-based thinking patterns. Affect relates to bodily sensation prior to logic or classification: a feeling *tone* rather than a feeling. An unpleasant sensation, a tightness in the chest, rigidity of the back, may describe a body in many different situations prior to its being classified as fear, anxiety, even grief. Though they are mutually informed, dynamism marks the impulsive and often reactionary potential of the former. I develop this position from Raymond Williams' *Marxism and Literature*, in which he describes affect as "more flexible, less singular"

than thinking, worldviews or ideologies.²³ While Williams' discussion pertains to the structured feelings, informed by fixed social and cultural heuristics, I develop out of that a movement towards the enumeration of sensation and emotive translation. Insofar as thought and feeling do cohere and interact—in Williams' words, "at once interlocking and in tension"—structures are formed. Structures of feeling are social formations, specific sets of "linkages, particular emphases, and suppressions, and, in what are often its most recognizable forms, particular deep starting-points and conclusions."²⁴ Williams considers the manner in which Victorian literature serves as a medium on which exposure and isolation, characterized as "general conditions," are connected by "poverty, debt, and illegitimacy as social failure and deviation." This structure suppresses alternative modes of enframing the same instance, such as the dispersion of fear and shame across a larger social order. Here, I suggest biomedia marks both the user as an acknowledged resource to technologize through software, and promotes the archival double to emotivate particular understandings of past experience.

I have parallel interests in structural affect and biomedia: on one hand, how feelings can be read through data, and the products of such extraction and extrapolation; on the other, the suppression (or guidance) of dynamic qualities of first-hand experience and the resulting effects on subjectivity. My use of structural affect refers to the manner of guiding feeling tones into articulable emotions and actions whether social, techno-social or otherwise. For example, marketing strategies have historically manipulated structural affect, using advertising semiotics, store layout, and product design to guide emotion and action. Structural affect is, more or less, the social critic's synonym for emotional design, used primarily in marketing and interface design (from store layout to what appears in one's Facebook feed). Donald A. Norman divides

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²³ Williams, Raymond. *Marxism and Literature*. Oxford University Press, 1978. Print. 128-132.

²⁴ Williams, 134.

emotional design into three different elements: visceral (or, more appropriately, visual) design; behavioral, relating to the pleasure and effectiveness of use; and reflective, the "rationalization" and "intellectualization" of a product.²⁵ In these terms, some forms of biomedia employ behavioral design by passively tracking movement or physiological change, and reflective design by employing "rationale" assign an emotion. These forms of biomedia create affective structures by interpreting specific variables as an emotion or affect (most often negative): depression, fear, anxiety.

Biomedial engagement with affect and, as I will discuss later, "true" biologies (in the form of origin stories), rely on reading bodies as text. In this sense, affective structures are often based on social recognition, valuation, and historical context. The classification and organization of bodies as text is a historical and political issue (for some discussion, see chapter 3). Some forms of biomedia require users to enter their "gender" (though, often, options are presented as the binary sexes) to account for a combination of gendered and sexed differences. In fitness trackers like Endomondo, the application may log more calories burned for a self-identified man simply because of his (assumedly) male capacity to burn more calories with less effort.

Combined with an "all-wellness" tracker like TicTrac, which combines statistics across apps and platforms, these statistics influence the user's projected daily health and mood averages.

Exchanging data for meaning, biomedia often become a performance of recognition, or misrecognition, which orients bodies.

Both affect and the scale-able reading of bodies and populations as "normal," "baseline," or pathological fall within the territory of biopower. Michel Foucault, who introduced the terms

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²⁵ Norman, Donald. *Emotional Design: Why We Love (or Hate) Everyday Things.* 1 edition. Basic Books, 2005. Print. 5.

biopower and biopolitics, used the concepts to reference the increasingly minute "calculated management of life." Biopower refers to a broader spectrum of disciplining subjects to a "right" to health, for example, through the careful attunement of biological normality. Biopower, the management of one's biological capacity, has sometimes been understood as the power to prioritize lives and, inversely, deaths. While Foucault and the several biopolitics scholars that have since developed his work have tackled biopower on several scales, my focus here is on self-surveillance and consumer devices that are available for individual purchase. Biomedia is a form of biopower, which inserts translation of bodies and behavior as coded patterns, and at times correction or, more benignly, instigates an embodied awareness. There are two clear points of departure between the two terms, linked by prefix: first, biopower refers to wide-scale and top-down governance; second, biomedia include entirely voluntary use and the surrender of privacy. Howard Rheingold's phrase, "always-on panopticon" is only half the equation; the benefits of a "communal" information dump about our bodily processes continue to be useful in many physiological contexts.

However, the examples that follow measure sensation, orientation, and location to extrapolate emotion. The tracking of this data not only submits the information to the amorphous and immaterial "big data" cloud, shaping user engagement and relationships to media, but also influences engagements beyond media use through the categorization of data into otherwise subjective terms. The benefits of "big data" derive from its vastness, but its specific uses have yet to be fully considered from situated perspectives; the affective rhetoric employed by the pioneers of biomedia simply cannot encompass the spectrums of affect that perform, emerge, and coalesce within bodies.

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²⁶ Foucault, Michel, and Robert Hurley. *The History of Sexuality, Vol. 1: An Introduction*. Reissue edition. Vintage, 1990. Print. 140.

Early biological inquiry into bodies began as inquires into what men believed to be static objects in the 15th and 16th centuries. William Filstead describes a Eurocentric and masculine logical positivism:

[T]here was faith in reason as the way of understanding the world and this reason eventually became based on a faith in science. The world was held to be capable of understanding through men's senses. ²⁷

Science became reason, and reason became the external reality thought to be objectively given. Filstead continues:

This reality is said to impinge on all men, regardless of who or where they are in society [...] Within this framework, all actors are said to know what is expected of them because they are introduced and socialized into a culturally specific, but generally shared system of symbols, meanings, and values.

While science and reason lead to a culturally specific reality, one that Filstead suggests funnels into a shared system, phenomenology, as a different form of study, privileges sensing bodies and their accompanying dynamic subjectivities and multiplicities. The tension between a cohesive, consistent, semiotic system and individual responses, then, would be how to organize the multiplicities of experience within a common structure. The underlying current supporting semiotic shifts would be termed slippages, marking where reason and lived vitality fail to acutely hegemonize.

In the context of biomedia, these slippages have less ground to form; different conditions must be cultivated for these slippages to occur. The data acquired through biomedia use specific

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²⁷ Filstead, William J. "Sociological Paradigms of Reality." *Phenomenology, Structuralism, Semiology*. Ed. Harry Raphael Garvin. Bucknell University Press, 1976. Print. 61.

and invested modes of translation that destabilize self-reflexive and embodied subjectivity. Thacker points to a common assumption under the umbrella term "information": "that there exists some fundamental equivalency between genetic 'codes' and computer 'codes,' or between the biological and digital domains, such that they can be rendered interchangeable in terms of materials and functions." One issue with this "fundamental equivalency" is the eventual obfuscation of the technology of collecting, storing, and translating the data; the mediation somehow "purifies" the biological, leaving objective data. While the "objective" nature of this data will be further investigated later in this chapter, the cerebral objectification of repertoire widens latency between embodied phenomena and classifiable experience. In other words, biomedia highlights first-hand accounting of lived experience as fallible, but correctable through continued use.

Self-surveillance as *game*, when presented within the framework of capitalism and the proliferation of data, presents a different kind of bioavailability and affective labor.²⁹ As previously noted, biomedia facilitate an intimate connection between raw data and phenomena, whether through a supplemental device (e.g. heart rate monitor) or through DNA. As an example, we might consider the 2012 game *Nevermind* (tagline: "The greatest enemy is the one inside your head"), which incorporates biofeedback as a diegetic—in-game—mechanism. At the time of writing, only the demo has been released; the current objective of the game is to solve all the puzzles while maintaining a more or less steady heart rate which, in the context of narrative, equates to curing the post-traumatic stress of the neuroprober's client. Before engaging the

²⁸ Thacker, Eugene. *Biomedia*. 1st ed. Univ Of Minnesota Press, 2004. Print. 5.

²⁹ I employ the term "fetish" in the sense that data has become socially (via Facebook, Twitter), culturally, and economically (via search engine optimization, hit counts, key words, and so on) desired. "Data," as a term, is accompanied by the assumption of intrinsic value, sometimes without regard for the content. In this sense, the archive simultaneously becomes a commodity fetish and self-improvement project.

independently released demo, one is advised to first buy two Garmin devices: a wearable strap to track heart rate and a USB dongle to wirelessly receive and archive the data. The gamer can check the heart rate log to track her capacity to maintain her heart rate. The game introduces a traumatic scenario to mimic everyday stress, to lend insight into and improve calming processes. The Garmin monitors translate and show heart rate as in-game "stress" and "trauma." As the gamer's heart rate increases, the game environment shifts, primarily in the form of vision filters, which add difficulty to the in-game puzzles.

The gamer is cast as a "neuroprober," a therapist of the future, with the technological capacity to heal post-traumatic stress disorder at its historical root. The gamer, as the neuroprober, enters the client's mind and travels the synaptic depths of her childhood experience. While controlling the client as a child, the neuroprober solves puzzles scattered around her frightening memory of home. Puzzles integrate the client's traumatic memories: one, for example, involved a maze that repeated fatal car accidents at every juncture. The maze, like the overall navigation of these adolescent memories, was labyrinthine and repetitive. Throughout, Nevermind captures the affective and active quality specific to games by combining the perspective of the "camera" (gamer) with that of the young girl—indeed, from her skull (variables like her height and weight come into play). The game designs a physiological, subjective, shot through the camera's pitching, lurching, and blurred vision. Around the climax of the game's narrative, the child spills milk in the kitchen. After finishing a puzzle that involved the re-arranging of letter magnets on the refrigerator while treading waves of spilled milk, the child asks the mother for help. The themes within the narrative, particularly of abandonment and loneliness, are centered on the lack of parental proximity, leaving the child to piece stories together and cope with trauma; throughout gameplay, the girl's mother weeps behind a locked

bathroom door but, when asked to help with spilled milk, the mother yells at the child to see her father. The gamer moves to the master bedroom where she sees her father, moments after he has shot himself in the head.

Nevermind participates in a wider move towards affective gaming, ³⁰ but obscures the narrative potential for empathy and social discourse with biofeedback devices intended to quantify the gamer's experience. Of note, the role of the neuroprober, portrayed by the gamer, is the kind of role the game designers see affective biomedia serving the consumer, that is to organize and reconstruct bodily experience work through subjective data. The data body emerges in ludic form; the game combines elements of biomedia (again, defined by the capacity to frame and reveal bodies) and entertainment. Arguably, the heart rate data set becomes the primary attribute of the game. As the website explains:

Nevermind's goal is to create an unforgettable gameplay experience that also teaches players how to be more aware of their internal responses to stressful situations. If you can learn to control your anxiety within the disturbing realm of *Nevermind*, just imagine what you can do when it comes to those inevitable stressful moments in the real word.³¹

This description reiterates the data body's primary feature: to be mapped, classified, and improved, without social or affective complications. Unlike other "serious games" meant to positively influence the world, such as Jane McGonigal's work, *Nevermind* is an internal process. *Nevermind* presents two actions that conflate to discourage self-reflexivity: first, it translates variable heart rate into stress (displacing it from the gamer's immediate setting and

³⁰ Consider *Papa Y Yo*, which is a fantastical rendition of surviving a violent, alcoholic, father; *Papers, Please* on morality, sacrifice, and immigration; *Dys4ia* on quotidian experiences as a transsexual.

³¹ "Nevermind." Web. 1 Sept. 2013.

experience) and, second, it rewards statistical uniformity. It is relatively easy to "beat" the game, which ultimately becomes a matter of how unaffected one can physiologically remain in the context of diegetic trauma.

Data structures play a pseudo-scientific role in "knowing" bodies with the intent to train or steer them towards a goal. In the case of *Nevermind*, the goal is to train bodies towards maintaining a consistent heart rate. These projects fall within the range of biopolitics, a field attributable to Michel Foucault, wherein

the 'body'—the body of individuals and the body of populations—appears as the bearer of new variables, not merely as between the scarce and the numerous, the submissive and the restive, rich and poor, healthy and sick, strong and weak, but also between the more or less utilizable, more or less amenable to profitable investment, those with greater or lesser prospects for survival, death and illness, and with more or less capacity for being usefully trained.³²

Bodies come to signify binary variables ("rich and poor") but keep the flexibility to adapt for ongoing utility. Digital wares, biofeedback tools, or self-monitoring devices serve as vehicles for "useful training." Thus, while "useful," games that incorporate biodata nevertheless can contribute to reinforcing the data body ideal, superior and more controllable than an "untracked" body.

Special devices, however, are not always needed; often, passive data collecting is accomplished through smartphones. Unlike other forms of biomedia, smartphones are pervasive commodities. The typical nearness to bodies reifies the sense that they are a part of daily repertoire and, in this sense, they have the greatest capacity to archive daily activities. One

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³² Qtd in Thacker, Eugene. *The Global Genome: Biotechnology, Politics, and Culture*. 1st ed. The MIT Press, 2005. Print. 37.

related angle adopted by marketers is to suggest that smartphones facilitate and come to signify intimacy. Consider the ubiquitous ads touting the capacity to communicate (often in business contexts) with anyone "around the world." Great care needs to be taken with the devices; their fragility instantiates performed reverence to the object itself. From the outset, we see a performance rooted in valuation (the object), trust (if treated with care, the product will continue to work), and intimacy—a performed closeness—with the device that increasingly "knows" the user.

Ginger.io, a health app funded in part by the U.S. military, takes advantage of this performed intimacy. Their website highlights a quote from Morgan Stanley to tout the accuracy of the app's data collection: "91% of people keep their phone within 3 feet, 24 hours a day." The application's objective is to let "users know when their behaviors signal health problems." To get a sense of the "whole body," Ginger.io "passively" collects data such as sleep and eating patterns, radius of travel, and social network use. The app employs "social sensing" to predict the user's immediate health forecast. Rick Smolan, author of *The Human Face of Big Data*, reported on the app's utility: "*Two days before you're showing any outward sign of depression*, your radius of travel starts shrinking, your emails and tweets go down, your time at home goes up (there's like twenty different data points)." Before this happens, however, "You basically set up an alert saying, 'If it looks like I'm going into one of those episodes, you can tell my kids, my wife, my doctor, my neighbor, my best friend, to check in with me." To restate: the application "continuously" monitors behavior patterns and, if something appears non-normative, may contact your doctor for you.

³³ "Startup Uses Your Smartphone To Tell You When You're Sick." *Mashable*. Web. 2 Aug. 2013.

³⁴ "Show 218: Big Data, Small Data, Datafication, Correlation versus Causation, Stock Market Trading, Health Informatics, Open Knowledge." *Spark*. Canadian Broadcasting Corporation. 2 Aug 2013. My emphasis.

"Passive" archival and analytic methods put into motion Katherine Hayles' theory of intermediation, but complicates what she reads as two opposing modes of scholarship along the same spectrum: one that privileges "embodiment as the locus of subjectivity." Intermediation is useful here, for its acknowledgement that embodiment and media structures do not run in absolute tension. While "there would be no media without humans to invent them, and no purpose to them without humans to give them meaning and significance," she writes, "media clearly determine and help constitute humans' embodied responses."³⁶ Here, we might see the implied uniformity some tracking apps like Ginger.io assume and the lifestyle repertoires it deems normative. Users must have a regular, baseline, allocation of time (inclusive of work, home, sleep, and so on). If varied kinds of work (e.g. done from home, contractual) lead to inefficiency, it would seem the app privileges routine work schedules. The "objective" coding of lived experience and performance, as in the case of Ginger.io, implies consistency among presumed stable relations. In other words, each event holds equal significance, regardless of situational context. The value is not within the situational context; instead, it is within the power of the archive to create patterns out of the behavior it tracks. In this sense, repertoire is immediately filtered and interpreted as one performs. There are two instances of performance here, one with regard to the immediate filtering and translation of performance, and the performance as it is monitored, tracked, and corrected.

Cases such as Ginger.io and *Nevermind*, complicate the binary trajectories outlined by Stuart Hall, wherein encoding relates to production and decoding to consumption, by making bodies a necessary co-mediator. Here, encoding becomes the primary intent; the encoding does not end with the media, it stretches into user bodies with reiterative social performance agendas

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³⁵ Hayles, My Mother Was a Computer, 35

³⁶ Hayles, My Mother Was a Computer, 35.

(e.g. health). In the following section, I discuss biomedia on a wider identificatory scale, to address the wider scope of affiliation, belonging and social order. Whereas the media here, one for entertainment and the other a vehicle for reflexivity, focus on the individual, the media that follow issues center on the encoding and decoding of DNA through a social lens. Unlike the autonomic variables these two examples feature, the sites that follow incorporate depictions of DNA as they are used to explain social difference. While no longer on the level of the individual, these participate in a wider biologically-infused semiotics which helps shape data body-centric cultures.

Embodied, Embedded: DNA and Other Variables

Transcode is a term central to this overall project, and certainly this chapter, for its history of analyzing disparate media under a particular lens. To introduce the way in which messages are remediated between the sciences and cultures, I use transcoding to explore how the data body emerges across media. To briefly consider the term itself: the prefix *trans*- implies a movement across, beyond, or through discursive modalities; importantly, it is not inter-coding, which might presume codes of equal degree mutually affecting one another. *Trans*- claims a base word (code, in this case) to afford it movement between two or more constructed polarities. *Trans*-, as a theory and mode of being, avoids categorization exterior to itself by exposing the concrete attributes of what it moves among (e.g. as in the cases of transgender, transsexuality, transrace). The second part of the term, code, refers to systems of representation, such as language, rooted in specialized jargon needing decryption or translation. Code always signifies something else, either stationary or procedural. Donna Haraway links the biological, informational, bodies as being subject to: "the translation of the world into a problem of coding, informational, bodies as being subject to: "the translation of the world into a problem of coding,

a search for a common language in which all resistance to instrumental control disappears and all heterogeneity can be submitted to disassembly, reassembly, investment, and exchange."²⁸ In the context of this chapter, the term can refer to three realms: computer languages, genetic code, or cultural signification.

Culture may be defined as a set of values, ontologies, and identifications. Like the sciences, cultures shift and develop upon themselves. Social knowledges emerge within and propel scientific inquiry, just as science can serve to ground cultural hypotheses. Amartya Sen, in his inquisitively titled "How Does Culture Matter?," writes that "our behavior depends not only on our values and predispositions, but also on the hard facts of the presence or absence of relevant institutions and on the incentives—prudential or moral—they generate." Here, Sen suggests value and predispositions form institutional architecture. He continues, positing that cultural identities are endlessly performative: "any presumption of stationarity—explicit or implicit—can be disastrously deceptive." We can extend this notion into digital architectures and the ways they reaffirm modes of valuation. Theories of transcode can isolate and investigate cultural predispositions within digital structures despite variations in the way modalities or interfaces stand for identity.

Transcoding assists with understanding biomedia as historically-situated coded expressions that shape cultural narratives. Fredric Jameson described transcoding as the overlay of two or more disciplines to understand an object; where the method is the central, situated, process and the object is "put in parentheses."³⁹ In *Postmodernism*, he argues that the

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³⁷ Sen, Amartya. "How Does Culture Matter?" *Culture and Public Action*. Ed. Vijayendra Rao & Michael Walton. Stanford University Press, 2004. Print. 43.

³⁸ Ibid.

³⁹ Jameson, Fredric. The Prison-House of Language. Princeton University Press, 1975. Print.; Buchanan, Ian. A Dictionary of Critical Theory. 1st ed. Oxford University Press, USA, 2010. Print.

postmodern mode of production commodifies all aspects of lived experience. In a way that somewhat predicts applications like Ginger.io, which function to aid the classification of daily life, Jameson argues that late capitalism's mass production of culture creates an unstable foundation: "the enormity of a situation in which we seem increasingly incapable of fashioning representations of our own current experience." Mass aesthetic production, much like the endless and collection of data ("big data," as termed), sets the stage for endless pastiche and obscures any possible "outside." This totalizing vision propels investment in the quotidian, the affective, and the personal. Lev Manovich connects culture and computation through transcoding in *The Language of New Media*. Manovich's use of "code," in this sense, is more in line with programming languages than disciplinary jargon (as in the case of Jameson). While both methodologies are useful to this study, which seeks to identify and push beyond structures of identity in computational form, neither address the importance of perspective and identity.

Pixel People (2013), an iOS game released by Chillingo and Lambda Mu, provides one site of inquiry into culture as it arises in biomedia and the representation of bodies, economic positioning, and social order. Utopia, the setting for Pixel People, represents corporealization as capital and bodies as resources; its themes of patternization, control, and capital are symptomatic of the wider trends within biomedia. Diegetically, "Utopia Corp" backs the entire enterprise by providing land to buy, clones, and "occupation" genes to splice. Cast as the mayor, the primary job of the gamer is to "splice" the clones that appear in the arrival center before providing them with a job and housing. If the DNA of a guru was spliced with that of a scientist, a "professor" would be available for work. All Utopians are white and have no functional interest in anything other than work and housing; the "philosopher" (formula: dreamer + dreamer) never takes

⁴⁰ Jameson, Fredric. *Postmodernism, Or, the Cultural Logic of Late Capitalism*. Duke University Press, 1991. Print. 21.

interest in the art gallery, library, or publishing house. These locations give more places of work for librarians, artists, and editors and income for the city.

The game participates within biomedia discourse by providing a clean metaphor for how transcode can be used. Utopians are defined by two attributes: their economic function and their capacity to productively splice with other data bodies. Here the programming of each Utopian's biology and social status is rendered as unified. Gamers "invent" new professions and build new places of work, creating their own Utopia comprised of labor and capital accumulation, genesplicing, and natural social order. There is no external system, inequality, or social difference. While another world is suggested, biocapitalism is total: all residents are, after all, specifically clones produced at the "arrival center" and not, for example, immigrants. With no endgame, only endless production, the labor force is uniform and constant in its assigned duties. From the periphery of games and pop culture media, these two tropes—bodies as resources and "objective" scientific decoding as identity—supports the apotheosis of de/coded patterns as a means to predict and guide behavior.

It is worth noting that there has been ample research done on the triangle of influence created by biological attributes, identity, and capital. Andrew Lo sees promise in using biological metaphors to explain the flow of capital. He writes:

one of the most promising directions is to view financial markets from a biological perspective and, specifically, within an evolutionary framework in which markets, instruments, institutions and investors interact and evolve dynamically according to the 'law' of economic selection.⁴¹

⁴¹ Raley, Rita. *Tactical Media*. Univ Of Minnesota Press, 2009. Print. 126-7.

Lo employs a Darwinian approach to understand market behavior, not unlike the ways in which language moves between the biological and computer sciences. As with biomedia, overlapping metaphors suggest purity and parity among fields that may obscure cultural biases operating at the claim's root. One cultural imperative is revealed in Lo's methodology, which employs risk and loss aversion to connect procreation and financial gain. In "The Origin of Behavior," co-authored with Thomas J. Brennan, Lo proposes a "single evolutionary explanation of the origin of behaviors observed in organisms ranging from ants to human subjects." Their argument, that market behavior can be understood through methodologies borrowed from evolutionary science, hinges upon reproduction: "assuming that offspring behave identically to their parents, only those behaviors linked to reproductive success will survive." Two givens then, as with *Pixel People*, are the inherent value of heterosexual procreation, accumulation of capital, and the general belief that populations either evolve or disappear.

Lo's work seeks to connect economic circumstance and its "scientific" justification, by providing overlapping rationale to explain biological, economic, political, and cultural circumstances. It would seem this thought trajectory would ultimately suggest each field is a distinct and independent totality under a larger umbrella of ordered, systemic, veracity. However, as with issues arising from biomedia, the parity among and universality of systems thinking fails to account for the mutations of capital as varied forms operate differently among different spaces and populations (e.g. digital, social, venture, currency exchange and, of course, the myriad forms of labor) or the nuances of situation which, specific to this writing, pertains to minoritarian experience. The strategic use of scale—between the evolutionary mandate to procreate or die, and the general activities of "the population"—relates to affective technologies and big data. In

⁴² "The Origin of Behavior," with Thomas Brennan, *Quarterly Journal of Finance*, 1 (2011), 55.

the case of passive data collection, individual experience is transmitted and translated in relation to others in the cloud whereas, in this case, populations are flattened to a genetic economy; this does not change the general determinacy of "information" and thinking deemed rational. "Only the successful survive," clearly shows the valuation of heterosexual procreation and sexuality, even if desire has been sterilized through the loss of interacting individuals, and suggests present economic class results from an innate biological inclination toward success (read: heterosexual reproduction, a heteronormative temporality, the disavowal of historical inequalities, and the rejection of cooperative, collective, or team-based ecologies). ⁴³ As Joan Roughgarden makes clear in *The Genial Gene*, the transposition of genetics and economies raises three alarms: "it is exclusively single-tier in its conceptualization of behavior as genetic strategies, it assigns logical primacy to competition over cooperation, and [relies upon] conflict between selfish agents."44 It becomes a matter of pattern-seeking and ordering or, to recall Taylor's work, the archive dominating repertoire. Spontaneity and variation play only minor roles, when bioeconomics and affective technologies can explain, predict, and reveal the life patterns for consumers. What, then, exactly is the relationship between repertoire and archive in the context of biomedia and revelatory DNA practices? Deoxyribonucleic acid (DNA), likewise partakes in this conversation, as the decryption of this biological code provides "causes" for social and identificatory effects. The theme that DNA is akin to a "book of life," one that can be variably de-coded, has persisted since the 1950s. In The Poetics of DNA, Judith Roof writes "if DNA is a language, we can make it say things. We can control it, not it us."45 Here, I interpret the "we,"

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⁴³ J. Jack Halberstam's *The Queer Art of Failure*, mentioned in chapter 4, provides one response to this form of heterosexualized success.

⁴⁴ Roughgarden, Joan. *The Genial Gene: Deconstructing Darwinian Selfishness*. Berkeley: University of California Press, 2009. Print. 143.

⁴⁵ Roof, Judith. *The Poetics of DNA*. 1st ed. Univ Of Minnesota Press, 2007. Print. 65.

she employs as exclusive: genetic information continues to be mined for scientific evidence of innate *difference* concerning identity. Increasingly available and affordable, consumer DNA projects reveal information such as place of origin, family ties, sexuality, and racial affiliation. Some working in this field embrace such inquiry as opportunities to debunk essentialist claims, while others see it as an opportunity to affectively connect to a cultural history taken from them. The following section investigates the varied uses of genetic coding as a means to create a biological foundation to social or affective affiliations. As with *Pixel People*, these media populate the landscape with the data body, pitting it against their lived counterpart. Though they do not adhere to an autonomic response system, they employ archival methods to corporealize information for embodied purpose. In this sense, DNA overwrites other vectors of kinship (for instance, those established by oral history and family lore).

Innate Identities

Employing biomedia as media which reconfigures relationships to corporeality and embodiment, this section turns to DNA as a technology that can be programmed, patented, tested, mined, and hacked. The "book of life," as Watson and Crick colloquially named DNA, acknowledges that bodies are both resource and means to discovery, but at times alongside the lessened significance of subjective experience. The examples to follow focus primarily on popular culture representations as they participate in creating a wider cultural imaginary with regard to perpetuating "scientific" backing to sexual and racial tropes. They demonstrate several ways DNA has been used as a kind of transcode, here one that decodes one's personal genetic code as cultural, making the dangerous claim of biological causation for social context, rather

⁴⁶ For more, see: Kitcher, Philip. "Race, Ethnicity, Biology, Culture." *Racism*. Ed. Leonard Harris. Amherst, N.Y.: Humanity Books, 1999. 87–117. Print.

than correlation. While not as connected to user bodies as the apps, gadgets, or equipment engaged in earlier sections, these representations help lead to a conservative consciousness of innate social difference.

To be clear, this is not an exercise of wholesale rejection of DNA, but an investigation of the paradoxical role of personal experience in such research. DNA is an articulation of sorts, one translated by varied specialists. Biomedia and general genetics (if such a broad stroke is permissible) rhetorically strive to improve upon personal experience by revealing deeper hidden truths about personal history. This knowledge will, it is assumed, lead to richer, or more informed, lives simply by being translated for the consumer. At the same time, and on these grounds, the search for scientific causation for social correlation has emerged most clearly with research done to explain (or, again, *decipher*) culturally-associated aspects of historically marginalized identities. ⁴⁷ Queer and racialized identifications are at the forefront of inquiries into new ways to write origin stories. Categories of identification, like sexuality, provide the basis for the scientific correlation for social discrimination. An inherent gayness always already presumes that homosexuality is something that someone *is*, rather than what one does or desires. Such inquiries deny that at their core, cultural and political constructions constitute identity projects that emerge across a lifelong series of doings and affiliations.

Consider the overlap implied in the 2002 James Bond movie, *Die Another Day*, in which the North Korean villain Colonel Moon (Will Yun Lee) transforms into Gustav Graves. DNA has the power to replace not only physical appearance, but gesture, voice, and more; in order to achieve his longterm goal of reuniting the Koreas under communist rule, Colonel Moon transforms into a white, British billionaire. Recalling, for a moment, that DNA was discovered

⁴⁷ See, for example, the following study on genetic difference between heterosexual and homosexual males;

during the time of the Cold War, thus taking part in the technology race with Communist-aligned Russia, we might see this as a mutated Red Scare, where "anyone" could be a spy. We could also understand this monetary and linguistic transfer within the contexts of thematically overwritten and objectified Asian bodies. But together, and for present purposes, we can interpret this version of Bond-camp as a depiction of the complete domination of "nurture" arguments by intentional DNA manipulation. As the doctor performing the transformation explains: "First we kill off your bone marrow, wipe the DNA slate clean." The doctor's next project will be to "harvest" DNA "from healthy donors, orphans, runaways: people who won't be missed" (as if DNA needs to be so widely "harvested" that donors would need to be sacrificed). What might have been a plastic surgery endeavor in earlier decades became a thoroughly "high-tech" DNA project involving the transformation of identity from one presumably less mobile (North Korean), to one with complete social and economic power (the white male). DNA powerfully monopolizes from the inside out, determining affective relationships and other external, qualitative, capacities.

Though fictional, pop culture representations participate in the social imaginaries surrounding actual scientific research. Consider, briefly, the popularity of the television show *CSI* (Crime Scene Investigators). The narrative arc of each episode is formulaic: a murder occurs, the team arrives with black lights, swabs, and so on, they solve the case based on hard evidence. Biomedia--diegetic, in-show tech, and the show itself as it shapes popular notions of biological/technological possibility--parallels truth and justice. The research derived from these projects has extended into the realms of entertainment and "self-discovery," which problematizes

⁴⁸ Here, the costuming is relevant; the shift from the military uniform to the suit reflects a shift of power, from Colonel to Capitalist Infiltrator. For more on clothing and culture reflective of the Cold War, see Sean Metzger's *Chinese Looks*.

identification by "verifying" race. The critical race scholar Henry Louis Gates hosted the recent *African American Lives* television program centered on historical documents and genealogical testing to "reveal" the ancestry of his guests. ⁴⁹ The results of a genetic test provided "new" information that cast doubt on how they should be visually categorized, or how they themselves identify. Gates offered his own DNA for testing during the first program series, during which time he learned that, due to his being a descendant of John Redman, a mulatto, he contained majority European ancestry. Responding to this, Gates mused "Does this mean I'm not really black?" ⁵⁰

Tying in Wendy Chun's argument that biotechnology proves racial difference just before it, as the mediator, fades from perspective, leaving only its results as a substantiated "truth," we can see how such programming is inextricable from other formats of autonomic, affective, and transcoded corporealizations induced by biomedia. Critics of the show noted that not all genetic data has been documented and, in particular, reported that the show's participants featured disproportionately low native American ancestry. There were, some suggest, simply more European markers with which to match. These "reveals" trump social signifiers by placing them within a "scientifically objective" informatics regime.

The performances around the "reveal," the data collecting, the interviews, and the response, are crucial. Consider Maya Angelou's reveal (from her mother's mother's mother's mother's mother's side, she is Mende), in which she states: "I knew this was so; there have been so many surprises here, but this one, this is not a surprise." Angelou recounts leaving Africa on a slave ship. (For context, Angelou was born in St. Louis, Missouri in 1928.) As the show website's

⁴⁹ For more analysis, see Nakamura, Lisa, and Peter Chow-White, eds. *Race After the Internet*. Routledge, 2011. Print. 2-3.

⁵⁰ Ibid.

interactive timeline suggests, Angelou's personal history begins far before her birth, which complicates questions of "where are you from?" beckoning alterity. The premise that one *is* something, despite social affiliations, gives new weight to technology determining origin. "Shocked," "stunned," and "amazed" have been used to describe Sara Lawrence-Lightfoot's reaction to being corrected with regard to her own identity as part African and Native American. Gates informed her that she has "no Native American" ancestry and, instead, is 45% European (note the use of continent here and not, for example, a specific "tribe" as in the case of Angelou). This affective performance, an "appropriate" emotional response, is imperative to the process of withdrawing the technological apparati from view. In this way, the show's popularity helped spread two important aspects assisting with the overall facticity of biomedia: first, it underscores the role of affect and its performance; second, personal affiliation—a social, historical, political and otherwise malleable construction—can be trumped by science. These excavations make clear that bodies serve as archives of inherent information, open to scientific translation into social and affective terms.

DNA is an alchemical variable. What has remained consistent since the discovery of DNA in the early 1950s is the narrative of promise and its deferment. With this in mind, some 97% of the human genome, called "junk DNA," consists of information not yet understood; the emphasis on "yet" is significant. Thacker, in *The Global Genome*, points to the connection between speculative futures, specialist findings (such as identity-based research) and the variability of junk DNA when he distinguishes junk from garbage: "garbage is waste that is disposed of [...] junk is waste that may possibly be of use—someday. And, so, junk sits around, waiting to fulfill its potentiality at some undefined, later date." The correlation between junk

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⁵¹ Thacker, Eugene. *The Global Genome: Biotechnology, Politics, and Culture*. 1st ed. The MIT Press, 2005. Print. 91-92.

DNA and the rest of the genome remains unclear, but provides ample fodder for scientific inquiry, particularly with regard to identity projects.

The data body should be identified within its place and time: not as an objective universally-applicable imperative. It facilitates the belief in predictable health futures but, at the same time, the idea of scientific purity and objective universalism touts the capacity to decipher individual histories. It is easy to forget the limits of systemic scientific overlap when surrounded by detailed informatics and popular media which continue to demonstrate how hardware, and technological means give truthful insight into situations and events. The perceived timelessness of scientific data provided by biomedia belies what I propose is its critical weakness; all data, all media, all identities and affiliations are situated.

#AGENCY: FLICKERING SIGNIFIERS AND THE LIMITS OF A TAG

Tags, as words that bridge language and programming code, are digitally taxonomized phenomena rendered social. Tags are typically informal linguistic words to categorize a media object. Though proper names and dates can serve as tags, for my purposes tags are userdeployed keywords, or labels, that operate as meta-data ('data about data') in and among websites and other digital forums. Tags mark the objects they describe, the tagger, and subsequent users who click or link through the tag. As a means to larger databases, tags work to create narratives through what Lev Manovich has called 'digital compositing' (Manovich, 2002), where underlying logics of popular tags present cinematic stories, through interactive practices of browsing, clicking, and searching. As he relates, the world wide compost bin has two co-effecting sides: cybercultures, which he deems social, and the more computational new media. Likewise, in his book Tagging: People-Powered Metadata for the Social Web, Gene Smith writes that tagging sits at the intersection of three established fields: information architecture, social software, and personal information management (PIM). The architecture allows tagging while social software, "applications [used] to communicate, collaborate, and share" turns tagging into a crowd-based social activity. Tags give users the ability to order media objects within an already marked database for organization and retrieval. The ubiquity of tagging would make it a challenge to avoid it; YouTube, Amazon, and Del.icio.us employ tags to make connections between media objects: images, video, music, presentations, and so on. Some social networks, like YouTube, are dedicated solely to media objects and their ordering.

Tags also appear in blogging platforms like Tumblr and Twitter, where a hashtag provides what some have termed a "digital campfire" for its capacity to gather a range of voices

¹ Smith, Gene. *Tagging: People-Powered Metadata for the Social Web.* 1 edition. New Riders, 2008. Print. 12-13.

on the same topic. Twitter users may participate in a conversation around #ssm (same-sex marriage), for example, and communicate about that particular issue with up to thousands of discussants. Likewise, a writer for a baking blog may tag a post with keywords like "chocolate," "brownies," and "dessert." On a small scale, this would permit a reading interactor to click on "chocolate," and pull up similar recipes related to chocolate within that blog. On a larger scale, the tag "chocolate" is used by search engine algorithms (sometimes called "crawlers") which scour the internet for information.

On a larger scale, it becomes hard to decipher the boundaries of information architectures, personal use, and social sharing. As David Turnbull writes, tags are "both the effects and components of a double mapping process in the co-production of knowledge and space. Yet the making of knowledge occurs through our performances, our movements. 'We know as we go." Through the embodied act of clicking, users recognize and endorse to interact with the signified media object: what the object 'is' or is 'about,' and its 'relevance,' or relation to other media objects, emerges based on the patterns of interaction. The tagging process includes three experiential stages: first, an act of interpretation (a perception of an object); second, an act of descriptive documentation (*this* was what was seen); third, an act of authoring the documentation in an interactive, categorical form (the original event is represented in *this* form and, to engage *this* representation, one must recognize the metaphorical '*this*' and, in clicking, acknowledge the description).

With these three stages and their varied reduction of the experiential phenomenon into a category that works with the protocols of the system, tagging simultaneously produces ideological stagnation and abstraction, through the passive reception of the categories as

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² (Turnbull, 2005: 13).

something 'click-able.' Users employ this signifier to taxonomize people, actions, and events despite the varied means of interpreting the signified. The linguistic signifier begins to take shape, building relational connections among links and media objects, in addition to the intended signification. This is most easily seen on Twitter, where users may tweet a string of hashtags, connecting varied discourses into one tweet. In a more hierarchical fashion, folders have tags that describe or categorize the files within them. In both cases, the tag identifies the media object and puts it in relation to other signs.

In *The Mode of Information*, Mark Poster contends that unlike handwritten text, electronic text "removes all traces of individuality from writing, de-personalizes the graphic mark [...] creates new possibilities of collective authorship." Through practices like tagging, users collaboratively constitute dynamic aspects of the web. The collection and organization of user-generated information is often described as 'crowdsourcing,' which has rapidly become the primary mode of distribution and production of web-based data. Jeff Howe, editor at *Wired* magazine, is generally credited as having originally used the portmanteau, to mean the "open call" outsourcing of issues and inquiries to crowds, or groups of users. ⁴ Crowds are flexible: they can function in a variety of ways, filling nearly any gap imaginable, without limitation or

³ Poster, Mark. *The Mode of Information: Post-Structuralism and Social Contexts*. Chicago: University of Chicago Press. Print. 113-115.

⁴ Howe, Jeff. "The Rise of Crowdsourcing." Wired June 2006. Web. 22 Nov. 2013.

Howe's article, "The Rise of Crowdsourcing" and its accompaniment, "Five Rules for the New Labor Pool," outlined first, the role of "crowds," and second, how crowdsourcing is slowly cutting into the need to outsource labor regarding intellectual property. Whereas previously such work had been outsourced to cheaper labor in places like India and China, crowds offered similar results but for a drastically reduced price, or even for free. Howe lists five attributes for crowds, destined to become the "new labor pool": first, they are decentralized, meaning that a crowd can work at any and all times; second, crowds are typically not paid and "have a short attention span," meaning that their involvement must be organized into "micro-chunks" of labor; third, the crowd is full of specialists ("For Procter and Gamble, the crowd is the world's scientific community; for VH1, it's any ham with a camcorder"); fourth, while experts are inevitable, the crowd produces "mostly crap" that must be sifted; finally, crowds find "the best stuff," meaning that despite the tendency for useless information, the diversity of resources and research methods produce the most interesting and applicable solutions to problems or queries. Crowds remain both a method for and subjects behind data organization and retrieval online.

required compensation. At the same time, journalists in the United States often cast "crowds" as anonymous, apolitical, and disembodied entities, with preferences believed to be balanced out by the diversity of the web. Crowd-based tagging technologies separate signifiers for media objects from that which they signify.

While the crowd itself merits analysis, it is difficult to parse since there are so many varied users of media. As I will later show, tags can emerge as tools to foster subcultures, similar to how specialized speech, jargon, and slang foster their own sense of individual in relation to community. For the larger and more ubiquitous sites, however, including sites like Facebook, Twitter, Tumblr, and Instagram, words are one pressing factor in how locatable and spreadable the media object is: that is, words determine the life span of the object. My current objective is to show how tagging digitally identifies the media object within a social context, how this signification separates the media object from the lived performance, and how crowd collaboration turns sharing into both economic and social capital.

As described in chapter 2, data bodies are constructed through a blend of input and structured reporting in biomedia both personal and in relation to a larger population, along with cultural influences that determine which statistics to monitor. I have argued that Data bodies perform separate from, but are largely rendered synonymous with, their embodied instantiations; I have shown how an increasing number of mobile and web-based services (e.g. Ginger.io) rely upon the data body to archive new phenomenological experiences. In this chapter, I suggest subjects emerge through the connections users create and reinforced through taxonomies on the web. I argue that the data body performs as a subject of data, built upon elements such as browser history, search terms, and related links (or Facebook "likes").

This chapter engages the data body as it emerges through its relation to digital objects, such as sound, video, and images, particularly through the linkages created by the linguistic annotation method known as tagging. I posit that tags create separate, virtual, categories with regard to lived identifications which otherwise emerge through embodied racial, gender, or sexual affiliation. These cloud-based representative words, terms, and images can hinder new or different categories of identification from emerging, and perform parallel to the lived identifications they signify. In How We Became Posthuman, Katherine Hayles describes how the signification of text changes under the pressure of digital mediation. Drawing from Lacan's notion of floating signifiers—briefly, that linguistic signifiers hold no intrinsic meaning, which is only ever created when in relation to others within a chain—Hayles writes that flickering signifiers are "characterized by their tendency toward unexpected metamorphoses, attenuations, and dispersions." While Lacan's work on signification points towards the absence of a stable referent, Hayles gestures toward the overall system which interprets the text. Expanding upon work on electronic and digital signification like Hayles', alongside the political, economic, and social anxieties circulating around shifting technologies, I suggest that tagging media objects with or as a form of lived identification creates digital subjects with their own "flickering" agency. Flickering agency describes the strategies of the tagged body that oscillates between performing as the tagged (politically visible) subject and not mattering at all. Constructed via varied uses of metadata, such as tagging, data bodies lack independent agency, but can be and have been tactically deployed both online and in material environments. The embodied counterparts of these data bodies, particularly those marked by social difference, perform between the dialectical poles of matter(ing) and (political) dematerialization. Despite their

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⁵ Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. 1 edition. University Of Chicago Press, 1999. Print. 30-31.

incommensurability, one commonality between a body composed of data and physical embodiment is the capacity to shift, problematize, and evolve the social (and technological) paradigms within which they arise.

Data is manipulated to facilitate outcomes, track behaviors, to promote material deemed relevant; the "raw" data is so vast that the prefix "big" now often precedes the term. Yet bits and bytes, metadata and markup, are so often read as "solely" technical negotiations that the intermediary roles of interpretation, classification, and display are moved into the proverbial recycle bin. Johanna Drucker points out in *The Visible Word*, that despite being "crucial instruments" in constructing digital cultures, common organizational aspects such as sidebars, hot links, menus, and tabs "have become so rapidly conventionalized that their character as representations have become invisible." Here, I investigate one aspect of data assembly, tags, within the scope of semiotics and representation, as a means to show how data is archived, accessed, and relevant to identification.

Online identification is bound by the limitations of both social and technological matrices of digital space. In what follows, I discuss the utilitarian nature of tagging with specific emphasis on its interactions with the digital poetics of categories of identification: both the constructed assemblage of categories pertaining to race, gender, and sexuality and that of the "user" who both hails and performs these terms in online arenas such as social media platforms. As digital forms begin to independently operate through mass interpellation of media objects, I suggest digital identities that emerge through tags and tagging can destabilize the categories they purport to represent. This digital destabilization of categories can help problematize the

⁶ Drucker, Johanna. *SpecLab: Digital Aesthetics and Projects in Speculative Computing*. University Of Chicago Press, 2009. Print. 9.

normative structures defining material, embodied phenomena such as race, gender, and sexuality.

It is worth noting the important advances that occurred when the explicitly top down, broadcast-driven Web 1.0 paradigm, which prefigured the description and retrieval of information objects in an absolute pre-determined manner, gave way to the 'social' turn of Web 2.0. Ithiel de Sola Pool's excitement about the transition towards personal computers in the early 1980s, parallels much of the 1.0 to 2.0 hope; "The easy access, low cost, and distributed intelligence of modern means of communication are a prime reason for hope." What hardware was for personal computing and the first public iterations of the Web, connectivity and "collectivity" was for 2.0. The social turn opened up the web to serve as a more populist space, where users could actively translate, describe, author, and categorize because of tagging and blogging technologies. Again, we may refer to early scholarship on personal computing for similar hype: "the combination of computers and [electronic] communications [...] eliminates centralization by opening bureaucracies to inspection and criticism by individuals." Anyone with Internet access could create a page, blog, or website; excitement about this "horizontal" participation led to an influx of data online by and about user engagement.

Digital mediation, for its democratic, "anonymous" qualities, has been attributed as an impetus for the radical upheaval of social hierarchies. The precedence of digital technology over individuals is not isolated to Poster, who wrote that electronic writing "would return to act upon the writing subjects, dispersing them, releasing them from fixity and hierarchy of their positions

⁷ De Sola Pool, Ithiel. *Technologies of Freedom: On Free Speech in an Electronic Age*. Reprint edition. Harvard University Press, 1983. Print. 251.

⁸ Yoneji Masuda, qtd in Poster, Mark. *The Mode of Information: Post-Structuralism and Social Contexts*. Chicago: University of Chicago Press. Print. 83.

in the world,"⁹ or Shirky, who understands tagging as "a profound challenge to the status quo."¹⁰ Poster usefully connects, and then disrupts, the lines between writing subject and the written document. The writing subject, stationed at a desk, table, wherever, can immediately communicate across space and time; "the subject [as a singular, grounded, entity] is thus in question in a historically new sense."¹¹ Through the power of electronic communication, Poster's subject floats and cannot be locked to one location because of the inherent dispersal across technologies, such as tagging, blogging, and social networking. Poster's subject, no longer "constrained" by the body, would be physically present on the other end of a video-conferencing call.¹²

Yet, if the audio-visual feed facilitated by Skype signifies my presence, it is always already and only a signification; what is seen or interpreted on the other end is only partially within my control and vice versa. My suggestion here, is that what separates and "floats," is not the body or consciousness, but the signification of body as somewhere else whether in-game or simply online. This floating signification can take on several forms different than the intended object it describes, depending on its use. Taken together, and when used collaboratively by groups of users, these words are invested with a kind of digital agency separate from any individual instance. In what follows, I show how the collaborative and collective use of tags, again, while relevant and useful, nonetheless can somewhat ironically produce a filtering of ideas; that is, tags can work to limit the proliferation of ideas that may otherwise be associated with the object described.

⁹ *Mode*, 115.

¹⁰ Page 48.

¹¹ Mode, 117.

¹² What's the Matter with the internet, 75.

The Power Law

Insofar as descriptions both reinforce and reproduce cultural conditions, media tagging works as "interpretations [that] do not *inform* as much as they *per*form" (Latour et al., 1986, 285). Bottom-up processes of generating categories and descriptions for social media can be understood as performative and constrained by the technology's affordances and underlying visions of how the world should best be ordered. By privileging the input of crowds and crowdsourcing, tags skew meaning toward a mass, popular cultural interpretation rather than considering divergent or alternative perspectives. I suggest tags mirror extant social codes and, by serving as fixed linguistic descriptors, reconstitute gender and ethnicity to culturally specific sets of signifiers. Despite being a seemingly neutral and populist approach, the user-based system extends particular cultural definitions rather than the lived identity of the subject being represented or the multi-media object's performance itself. The privileging of the tag by the "anonymous" crowd, legitimizes a cultural conception of the word and obscures negotiation among codes. Tagging certain media documents with a 'woman-ness,' for example, simultaneously endorses, applies, and restricts the term. In effect, this stages a uniform 'womanness,' incapable of accounting for the difference among gendered manifestations (as in change over time and varied bodily practices). Instead, the tag becomes its own site of identificatory performance, parallel to the embodied signified.

Tags present their own problems, including the lack of synonym control and basic level problems, such as access and literacy. Though one issue within social tagging and folksonomic discourse is the lack of hierarchy, it is clear that, to a degree, this is not the case. If hierarchies are measured in use and value, the controlled vocabularies around tags circulate in such a way

as to diminish alternative ways of articulating the same idea. David Weinberger was among the first to point out that CNN originally used the term "tidal wave" when covering Japan's ecological disasters in 2011. This term was quickly replaced with "tsunami" after it became clear that other news agencies, and their audiences, were employing the latter term. This meant that when information was sought about the events in Japan, CNN was again among the top news agencies that fell within the search terms. Terms, and their searchability, become a kind of discursive currency. Here, "currency" reflects both social and economic capital (as sharing is often linked to some kind of financial gain), and the manner in which these terms flow across seemingly disparate sites (e.g. Google and its subsidiary, YouTube).

Tags accrue online capital through iterative re-use. Consistencies emerge as social media users tag objects with their own keywords, which allows for information storage and retrieval, and as the programs they use auto-generate tags for organization and retrieval. Tagging turns static databases dynamic and, increasingly, social; over time, tags are promoted through use patterns. Words with the most prevalence form a "folksonomy," a conflation of "folk" and "taxonomy," which features an "informal, organic assemblage of related terminology." A folksonomy relies upon a power law distribution, with more popular tags rising to the top and shaping the future of the media object. There tend to be two kinds of folksonomies described within discourse: narrow folksonomies, when one person (or a few people) tags an object; and broad folksonomies, which emerge out of several people tagging the same object.

In the context of tagging, the term, "folk," denotes a dangerously anonymous and unified collective. Folk often refers to "organic" practices which demarcate a particular group of people. The danger with structuring "folk," is the simultaneous creation of those outside of the

¹³ Vander Wal, cited Trant, J. "Studying Social Tagging and Folksonomy: A Review and Framework." *Journal of Digital Information*. Special Issue on Digital Libraries and User-Generated Content, 2008.

"folk" mold. That a discrepancy exists is documented in both practice and theory; the "power law," consistent across tagging platforms, is the trend that densely populated sites, like Facebook or Twitter, will exponentially reuse specific key terms, while less populated sites have a wider diversity of tags. In one study, Harry Halpin, Valentin Robu, and Hana Shepherd annotated how the most popular websites used very similar tags which "rose to the top" in terms of use and popularity, narrowing the frequency of other terms. He study also shows less popular websites used very diverse terms, which suggests linguistic signifiers popularize through circulation amongst a site's users. The effect here is that the same descriptive words are repeatedly used, meaning that less popular descriptions or non-normative interpretations "fall to the bottom."

Implementing the power law as a feature, Microsoft's search engine, Bing, currently advertises itself as a "social search." Bing partnered with several social networks: Twitter, Foursquare and, most notably, Facebook. Connecting your account with your social networks will allow Bing to rank search results based on what one's social network ties click through or endorse through "likes." For example, searching for a restaurant could bring up friends who previously ate there, or searching for a car might bring up listings from Facebook's marketplace feature. The use of social ties to create networks of information helps shape user subjectivities. Their actions, and the actions of their friends, shape what bits of information are available to whom and when. Another side to this unpaid micro labor, in the form of tagging, clicking, uploading, posting, and commenting, is how such activity is framed, mined, or otherwise used to extract a "pure" form of information about behavior, identity, and value.

¹⁴ Halpin, Harry, Valentin Robu, and Hana Shepherd. "The Complex Dynamics of Collaborative Tagging." *Proceedings of the 16th International Conference on World Wide Web*. New York, NY, USA: ACM, 2007. 211–220. *ACM Digital Library*. Web. 15 Jan. 2014. WWW '07.

Simple visual structures suggest a "purity" of mined information but, at the same time, point towards the construction and obfuscation of qualitative content. The most popular visualization of a power law distribution is the word cloud. In the television series *Veep*, an aide presents the Vice President Selina Meyer, played by Julia Louis-Dreyfus, with a word cloud. The vice presidential staff have decided to use the word "robust" to describe their military power; overhearing this, a secretary for the Vice President, Sue, repeatedly uses the word in a financial oversight hearing. Much to Selina's displeasure, Sue's humorous appearance shadows her own visit to a Marine base. Both aspects, her displeasure and her being upstaged by a member of her staff, manifest most clearly when faced with a tag cloud "documenting" the two "ro-busting a move." Whereas the "cloud" often refers to a server to store information, files, and documents, off of one's personal computer (e.g. Dropbox), a tag cloud refers to a visualization of word usage; this particular tag cloud was generated based on news sources. A tag cloud can be generated by almost anyone, and taken from an archive of anything they so choose.

This particular tag cloud was generated by keywords featured in circulating news articles. "The size of each word corresponds to its total number of uses," explains Selina's aide Dan Egan, played by Reid Scott. She furrows her eyebrows at the jumble of words in varied shades of blue. "Look at the word 'Sue.' Where's the word 'Selina'?" Her aides close in for an impromptu word find session, but finding it provides little relief to the Vice President, who notes how "teeny tiny" her name appears. Her director of communications, Mike, tries to console her about her name's lack of relevancy: "well, it's bigger than 'collapse.'" Dan tries to redeem his cloud: "Your word, 'robust,' is dominating." The content of both the hearing and

the visit to the marine base, obscured by the scaffolding spectacle, was nevertheless dependent upon the circulated frames—the tags—for the performances.

The power law demonstrates how tags organize information and, further, how they bring disparate media objects together under a cultural-linguistic regime with emphasis on efficiency, collectivity, and data recall. Such reiterative participation, backed by what Mark Poster calls "supplemental authority" of other users, necessarily intersects with questions of subjectivity, particularly when naming or categorizing identifications. Clay Shirky provides an example of how tags discursively construct otherwise dynamic bodies. Shirky describes the tagging process in relation to Flickr, the photo sharing site, and a specific example regarding a collection of images from Coney Island's Mermaid Parade. His example is particularly, albeit inadvertently, useful in understanding how tags accrue social capital. He writes,

> Flikr didn't identify the Mermaid Parade as an interesting event, nor did it coordinate parade photographers or identify parade photographs. What it did instead was to let the users label (or tag) their photos as a way of arranging them. When two or more users adopted the same tag, those photos were automatically linked.¹⁵

Users could tag "parade," "mermaid," or, to be more specific, "mermaid parade." All other photos with those tags would be automatically linked, creating new significatory relationships between parades, mermaids, or even among mermaid parades of different years. This iterative circulation constructs and identifies data bodies, not unlike embodied interpellative performativity and its larger relationship to identity categories. Both are instances of

¹⁵ 33.

identification and response, which reaffirm the significatory relationship between the taxonomized and their assigned category.

Specifically, tags used to identify social, political, or otherwise *lived* identifications implicitly foreground the fragmentary nature of user-generated tags, as they simultaneously suggest a stable form which matches a linguistic term or category. While over time trending terms may change, the tag nevertheless helps form both a sense of the user (her likes, interests, and so on are tracked through web analytics to create a consumer archetype) and the media object. Fluidity is inherent in both the user and the media object, as they change over time, in different circumstances. However, discourse that centers on tags relies heavily on the stability of the term. Under these conditions, I suggest tags take on their own performance—separate from that which they describe—which creates a discursive body. Though what they signify does not necessarily coagulate in any ordered sense, they stabilize within the fluid, changing, borders of the media object and its relationships. In this sense, the media object subjectivizes the digitized user through her clicks, likes, and tags. In Information Please, Poster describes the digitally constituted subject: "digital information machines construct subjects who are present only through their textual, aural, and visual uploads." These subjects, bodies composed of data, perform online as disembodied avatars as users navigate networked space.

Poster uses the mediated disembodiment as a place to ground his construction of the digital subject, writing that there are no age, gender, religious, ethnic, or national limits to who can speak on the internet. The internet could be a place of "planetary" cultural exchange, wherein "digital subjects are solicited not to stabilize, centralize, and unify the territorial identity that they were given by birth or social position, but to invent and construct themselves

¹⁶ 41-42

in relations with others."¹⁷ For Poster, the intrinsically democratic potential of the internet is thus hampered by bodies, embodied subject positioning, and the search for likeness.

Many if not most online users pursue with unambiguous assurance their territorial identities, seeking to find and to engage those with similar characteristics, those with the same identity, the same political position, the same religious persuasion, the same nationality, the same gender, and the same sexual orientation. It should not come as a surprise that the entire history of the human race, defined as it is by these group identities, is reproduced all too faithfully in the network.¹⁸

Poster usefully differentiates the digital subject from bodies, and helps to show how the network can reproduce social and cultural conditions. However, in what follows, I problematize his suggestion that the search for sameness ultimately reproduces inequality. I suggest there is too much emphasis placed on users; in this formation, users constitute digital subjects independently of existing architecture. I place this within the discussion of tagging "sameness" and the digital subject(s) which dynamically emerge, yet replicate material contexts. Electronic writing, and the signification of language online, provides one place to start.

Electronic Writing

Tags describe an object through reference: a genre ("classical music"), personal identification ("Japanese"), affect ("funny") and so on. Contemporary semiotics, the study of representation, description, and referential links, was largely initiated by Ferdinand de Saussure. Saussure divided linguistic representation into two co-constitutive parts: *Langue*, the overall

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¹⁷ 43.

¹⁸ 42-43.

system of signs that permit reception and understanding of what is communicated, and *parole*, individual speech. By separating the langue from the parole, and by splitting the sign into the mental concept and the acoustic image, he challenged the idea that the signifier (acoustic image) and signified (mental concept) match, and that this connection is fixed. Languages operate on systems of representation that are at once shared and determined, but malleable through divergent uses of *parole* (for more on this, see Chapter 1). Tagging within a language participates on both the levels of langue; the words are themselves significant because they relate and expand upon each other, as well as their own iterations and invocations of the terms. The word "funny" can, and does, invoke different ideas of humor.

In his *Course of General Linguistics*, Saussure shows discrepancies among sign systems through comparing linguistic signifiers and the mental formations they signify. In particular, Saussure contrasted mental concepts and their acoustic image as they appear in different languages. The French word "rivière" and the English word "river," though seemingly similar, represent two different mental concepts (the former more closely represents a "stream," whereas the latter represents something like a "fleuve"). His example demonstrates how the connection between the signifier and the signified is, ultimately, arbitrary by showing how two different words ("river" and "fleuve"), in two different languages, represent a similar mental concept of a river. The signifier transmits signified phenomena, but only provides a metaphor for its referent. The signifier may not represent the same sign across iterations.

Saussure's work set the field of "scientific" linguistics—semiotics—into motion, partially because of his construction of the sign, but also because an important attribute to his dyad (signifier/signified) was missing: materiality. As noted, the sign is composed of two parts, sometimes called a double articulation: the signifier (a sequence of sounds, images) and the

signified (the mental concept). The extent to which these are linked, the acoustic image and the concept, is outlined when Saussure discusses inner dialog:

Without moving our lips or tongue, we can talk to ourselves or recite mentally a selection of verse. Because we regard the words of our language as sound images, we must avoid speaking of the 'phonemes' that make up the words. This term which suggests vocal activity, is applicable to the spoken word only, to the realization of the inner image in discourse. We can avoid that misunderstanding by speaking of the sounds and syllables of a word provided we remember that the names refer to the sound image.¹⁹

The implicit focus is the mental concept, not the iteration. As Johanna Drucker surmises in *The Visible Word*, a material referent is paradoxically absent; "if Saussure's signifier is indeed the acoustic image which is not identical with the phoneme, or any other part of articulatory sound, then its materiality is totally unimportant."²⁰ In this particular formation, an embodied actor occupies Saussure's scene, speaking through internal dialog, but is—along with all her lived circumstances—absent from the sign equation. Likewise, decontextualized tags operate as a unity. The linguistic signifier, often alone or in a list of other tags, stands in for a concept without material grounding.

In other words, though Saussure's foundation assumes stability within a language, this may not be the case. Though the structuring of tags superficially privileges a Saussurian system, one that connects a signifier to an established signified, the user's network of circumstances complicate the relationship between signified and signifier. As Fredric Jameson writes, the metaphor is 'susceptible' to the influence of an exterior analysis:

¹⁹ Saussure, Course, 66.

²⁰ Drucker, *The Visible Word* 1.

When today we say that everything is ultimately historical, or economic, or sexual, or indeed *linguistic*, we mean thereby not so much that phenomena are made up, in their very bone and blood cells, by such raw material, but rather that they are susceptible to analysis by those respective methods. (1974; vii-viii)

In his book *The Prison-House of Language* (1974), Jameson posits that the phenomena of concepts and entities are not themselves 'made up,' but vulnerable to external factors such as temporality and economy. The 'susceptible' signifier reveals embedded metaphoric value through its relation to the referent. This metaphor therefore creates two immediately visible ties: first, the vulnerable signifier to the transient signified; second, this tenacious dyad to the overall linguistic system. Language thus operates by and through communication but, in so doing, chains the signified to a fallible signifier. Jameson's description of "a world saturated with messages and information, whose intricate commodity network may be seen as the very prototype of a system of signs" which ultimately manifests a "disembodied nightmare," resonates with current trends in new, social, media and the utilitarian nature of tagging (1974: ix). If we follow the arbitrariness of the sign, tags signify interpreted aspects of a media object, but are always only partial fragments. Despite this, tags function as encyclopedic and, often, "objective" means to broad ranges of mental concepts, material objects, and embodied affiliations.

If the primary mode of digitality is performative speech, it is imperative to consider the interrelationship between speakers and audiences. Drawing from work done by Charles Peirce, who suggested that there is no solid system of relations, and Shoshana Felman's work on positioning the speaker, I suggest tags reiteratively co-create social relations in the constructed digital sphere. As users as perform online, they are acted upon, with their actions—

downloading, uploading, up-voting, and tagging—serving as a primary source for mining user information. In this sense, as Alexander Galloway has surmised, "it is not just simply that a body must always be speaking, a body must always be speaking —as. Whenever a body speaks, it always already speaks as a body codified with an affective identity (gendered, ethnically typed, and so on), determined as such by various infrastructures both of and for identity information."²¹

The web provides nothing organic or objective, but a space for social classificatory anxieties to emerge through things like tags. Tags give the user the flexibility of description, but rely primarily on recirculation and, therefore, are somewhat necessarily written to be "common" understandings of material. For Peirce, descriptions did not exist separately from lived interactions. One way to begin envisioning digital subjectivities—constructed both of the user, by the user's online performance and activity, and of the media object or profile, which influences how other users engage and interpret the object—is to see tags as relations, rather than descriptions. Tags inscribe historicizable cultural relevancy; they are symptomatic of a cultural climate.

The reiterative, participatory transmission necessary to share data mirrors how parole induces shifts in an overall system of signs. Earlier, I juxtaposed the power law alongside constructed interpretations: less populated forums have a wider diversity of tags, while tagged terms on more populated sites are generally more common. This power law represents what Mark Poster has called overdetermined aspects of the internet. The term has its roots with Louis Althusser, and may be briefly characterized as the manner in which a myriad of socio-political factors cohere to guide (or construct) a particular kind of phenomenon. Social change or,

²¹ Galloway, Alexander. "Does the Whatever Speak?" *Race After the Internet*. Ed. Lisa Nakamura and Peter Chow-White. Routledge, 2011. Print. 121.

inversely, repression, is not caused by a single source, but is generally the result of several sources working simultaneously to produce a similar kind of result. In his application of the term to digital practice, Poster emphasizes the possibility for social change and capitalizes upon the impermanence of social situations. He acknowledges that media objects are "overdetermined," always already constrained by a variety of factors, but he posits they retain a level of "underdetermination," a quality he describes as "an invitation to a new imaginary" (18). Interpretation of a media object can radically differ among users and help instigate new forms of reading and, by extension, social change.

A couple relevant factors are worth exploring at this juncture. First, media rarely have a single tag, increasing the likelihood that the object will appear when those terms are used. Tags translate images, videos, and sound into an object dependent upon keywords; the key here is the translation, that the images become searchable through their description, and the plurality of tags themselves. Second, users tend to use tags liberally and, sometimes, in the form of slang. After all, tagging is all a matter of *situated* interpretation and classification. Third, there is the issue of tags that draw forward a separate aspect of the object than what was intended. The tag "defectivebydesign," for example, remains among Amazon.com's top-used tags, to refer to digital commodities restricted by Digital Rights Management (DRM) or, sometimes, products believed to be intentionally shoddy to supplement secondary markets (for example, easily breakable smartphone screens to help drive the market for screen protectors).

Another example of tags referring to something the object incites, rather than the object itself, can be seen when tags are applied to people. Although Poster may suggest otherwise, this association creates context for the digital object, interpellating it through an indirectly material lens. For example, the streaming music service, Last.Fm, is organized around tags. Users create

stations based on music genre, individual artists, or a blend of up to three different artists. The artist function is useful for both depth and variation, one could select Britney Spears, Kesha, and Katy Perry, for example, for a U.S.-centric music blend, and then "deep" in the sense that most of the music played will be performed by female pop vocalists of a particular time period. But, since media objects rarely have a single tag, serendipitous deviations emerge among the three's dissimilar tags, allowing for the discovery of related music. Likewise, users can create stations based on tags by one artist (not unlike the U.S.-based streaming music service, Pandora). Last fm has a substantial collection of the pianist Yiruma's music, of which users have collectively tagged "piano," "classical," "new age," and "instrumental," among others. This kind of authorship falls within the ranges of Poster's "underdetermination," in that users can reclaim their capacity to commune and create experiences online. However, users have tagged him as "Korean" and, though incorrectly, "Japanese" (but not "English" or "British" though, to date, he has lived there for the majority of his life). Because of this, and the feature of music discovery based on tags, Yiruma's station is littered with contemporary pop music from Korea and Japan, not entirely dissimilar to the production level of Britney Spears, but a stark contrast to his own music. Yiruma not only "turns Japanese," but comes to represent—in this small way on this one site—the music of Japan.

Despite its functionality, the hallmark of both tags and the idea of underdetermination is the absence of a situated body. Poster writes, in *What's the Matter With the Internet,* "the body no longer constrains the performativity of speech acts [digital texts] to the extent that it does in face-to-face relations" (75). The differences between Yiruma's music and that of, for example, the Korean girl group T-Ara, rendered similar based on national allegiance, present obstacles to the idealized, deterritorialized, global media culture suggested by theorists like Poster.

(Certainly, Poster's primary contributions were published before the complete saturation of digital media, and access to it, by corporate advertising practices.) Here, the remnants of affiliation and classification (particularly when Yiruma is incorrectly tagged as Japanese) trouble the cultural-neutrality of tags and, by extension, their legitimacy despite their growing relevance and role in daily media engagement. Yiruma's classification as Japanese, and our recalling of Yiruma, shapes our aural engagement with digital services. Most music streaming providers employ different kinds of tags: genres, moods, artists, decades, and so on. Tags are the means to listening to a desired genre of music. However, cases such as this show the continued importance of seeing how and where the system fails, and how and why these missteps transfer outside individual instances such as listening to music online.

Tagged bodies mark the social matrices of "visible" identification: gender, sexuality, and race. This triangulation of word, body, and object (e.g. image) draws upon histories of phenotypic classification, which continues to play a role in the ordering of bodies. On one hand, histories behind identification are often superficially handled by taggers, classifiers, and so on. In this networked system, reduction is a necessity. When addressed, and particularly within the context of social tagging, race is frequently flattened to a color or continent; Yiruma's categorization as Japanese exemplifies this social phenomenon. On the other hand, the connections among word, object, and bodies also reinscribe a visual taxonomy, creating the connection between the descriptor and the media object. The content becomes intertwined with the descriptions provided. In this sense, the inscription serves to create or reinforce a connection between the word and object; Yiruma's can now be "found" through his Japanese-ness. The future-oriented nature of new media perpetuates these connections, which, over time, begin to take on their own diverse sets of meanings.

Katherine Hayles, whose work covers much more than the linguistic structuring of netspace, provides one way to consider the results of such classification. Her term, digital subjects, describe those whose subjectivities takes on an interdependent relationship with digital technologies, manifesting in "a complex entanglement of print and electronic text, continuous and discrete consciousness, language and code."²² She employs the term "intermediation" to describe the way that database use co-constitutes itself and the user. To complicate the issue, however, media objects themselves—that with which we engage—particularly within the movement towards a "quantified self," are afforded a sense of cloud-sourced objectivity and, to deploy a term by Howard Rheingold, smart mob mentality. In this sense, though the results may be "intermediated," the prefix inter- suggests an equal starting position. However, given the participatory algebra, the balance is never in favor of the individual tagger. The tagger comes from a lived reality, which, as Ellul has described, "has room for activities that are not rationally or systematically ordered." Tagging is a technique, Ellul writes, which is not itself a "malevolent force but a blind force, which by its nature encourages humans to mobilize more and more resources to perfect ever more efficient and powerful techniques."²³ He continues: "the collision between technique and spontaneous activities that are not rationally or systematically ordered is catastrophic for spontaneous activities." ²⁴ Here, we begin to see the rift between web participation and classification with lived realities.

Tagging is a technology that reorganizes social interactions through the lens of cultural description and innovation. With aspects that draw upon both over- and underdetermined aspects of database use, social algorithms play an influential, if not "governing" role of

²²Hayles, *Computer*, 10.

²³ Rheingold 199.

²⁴ Rheingold, 198.

identification and description online. Wright, in his book *Nonzero*, describes this layering of social surveillance and classification as a "metatechnology." The technology of basic speech (though, as I have laboriously outlined, it is hardly ever "basic"), is upgraded in complexity with the role of gossip. ²⁵ Later, capitalism (a metatechnology to the nth degree, folding in currency, banking, finance and insurance, for example) continues to influence social power.²⁶ Though, as Ellul described, blind, tagging as a technology nevertheless "folds in" the social complexities that already accompany tagging things like race, gender, and other embodied identifications.

In previous chapters, I have suggested how social codes, imperatives, and desires, can translate into digital text, environments, and bodies. Here, I have considered the role of the crowd in facilitating, promoting, and reiterating ideas and interpretations through tags. While explicitly networked, this system is not simply the horizontal version of top-down architecture (as in the case of Web 1.0 or even most games). Instead, this system mirrors and facilitates cultural ideologies as they perform across digital space. In the next section, I will engage more specifically with where and how gender and race draw out varied aspects to tagging which bring embodiment and social relations into question.

Techno-socio-logical

To be clear, taxonomification alone does not present an intrinsic problem. Rather, it is the archival, distributive, and authoritative properties so often carried with it. Not only do the classification of objects matter, but the order and the heading under which they are listed particularly with the rise of "infographics" (generally still images that relay information in a

²⁵ Jenna Burrell has done excellent work on the technology of gossip.

²⁶ Rheingold 214.

quickly digestible manner)—are worthy of analysis. Tags that employ, but do not necessarily need, a hierarchical structure, are often anonymously but publicly shared. In such a case, the original "author" of the tag is obscured, while the tag continues to serve an assumedly self-explanatory relation to its referent. Yet given the myriad tag structures, it is useful to consider their collective constitution along with particular instances. To be relevant and useful, tags rely on cultural terms which themselves have long histories. Therefore, it is worth investigating the cultural structures within archives and considering one history of how organization has been used to classify and control bodily perceptions and identifications.

Gender, race, and sexuality continue to be sites of pseudo-scientific classification. These orderings do more than "dominate" or "control," they often provide comparative resources for self-identification and performance.²⁷ For example, several custom personality quiz sites, on which users generate a survey of questions for others to fill out, offer recognizable structures to classify one's choices. Quiz takers can find out which *Twilight* character they are, which state they should live in, how happy they are, and so forth. While these are primarily used for entertainment value, the structuring of identification in "common" (cultural) terms has an extensive history, not just imposed by external and institutional factors, but also, in tandem, socially constructed manners. This has particularly affected groups otherwise incapable of documenting themselves in a "legitimate" way. These terms have emerged in various contexts, such as finding one's "real" racial origin through DNA testing (see chapter 2). To a degree, classification and narrative structure "History," and tags are both products and perpetuators of a cultural historicization.

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²⁷ There are several resources on systemic essentialism. Ones I found useful and relevant here include: Harris, Leonard. *Racism*. Amherst, N.Y.: Humanity Books, 1999., and Rajan, Kaushik Sunder. *Biocapital: The Constitution of Postgenomic Life*. Duke University Press Books, 2006. Print.

The gradual cultural consumption of such difference, assisted by colonialist practices and exploitative occupation, overlapped with superficial appearance. Somewhat recently, this issue has re-emerged within popular culture with the rise of DNA testing for "true" origin. 28 One dilemma, of course, is the level of complexity that arises when personal affiliation and identification do not cleanly match up with what their skin tone "signifies" from a particular cultural standpoint. 29 At times, sexuality affects how racial categories are read; the oft-reviled (and cited) "Asian or Gay?" page in the April 2004 issue of *Details* magazine, which analyzed every stylistic attribute to the Asian male's appearance, is one of several sites. In this case, the assumed value is that Asian males and gay men both emit a feminine quality and are, therefore, prone to "humorous" classification.

²⁸ Examples of biogeography for the masses include 23andme.com

²⁹ Transnational adoptees into multiethnic families often provide examples of this, See works by Jane Jeong Trenka, or artwork by Nikki S. Lee.

Investment in the efficiency of keywords assumes that videos, photos, and profiles can be described by a user populace, which is assumed to be anonymous, neutral, and objective. Tags contextualize the mediatized³⁰ object by demonstrating to future users how the digital populace has already read the media object. In his book, Women, Fire, and Other Dangerous Things, the linguist George Lakoff rejected the classical notion of intrinsic, and therefore cleanly classifiable, categories. He suggests readers interrogate the assumed continuity of reason between "disembodied symbol-manipulation" and resist the cool technicality of the "mind-as-computer" metaphor." The problems with such practices ultimately relate to situated embodiment: "human categorization is essentially a matter of both human experience and imagination—of perception, motor activity, and culture on the one hand, and of metaphor, metonymy, and mental imagery on the other."31 Embodiment, the lived medium through which identification emerges, necessarily influences the situated elements of tagging. If, as Peggy Phelan suggests, bodies act at the "center of semiotic crossings, which allows one to perceive, interpret, and document," their performances will not only mediate the interpretation of others, but become an active repository for identification (Phelan, Acting Out, 15). In this section, I suggest that "disembodied symbolmanipulation" online constructs digital subjectivity, but resists lived identification.

To explore this further, we might consider the website Suicidegirls.com. The website, founded in 2001, functions as a more structured social network, allowing users to make connections over and among content, which is primarily softcore image sets. Per the website, a suicide girl is a 'unique, strong, sexy, confident woman' who has a blend of tattoos, piercings

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Mediatization indicates a layer of mediation, of 'what is reinterpreted by the sign form, articulated into models, and administered by the code' (Baudrillard, 1981: 175–6). Mediatization is the textual classification, or the practice and interaction with the categorical tag. There is a distancing that will naturally occur in this process, creating the danger of interpreting the object described or retrieved via the tag as anything other than subjective, multiply contingent, and metaphorical.

³¹ Lakoff, George. Women, Fire, and Dangerous Things. University Of Chicago Press, 1990. Print. 8.

or unnaturally dyed hair (SG Inc., 2010b). To become a Suicide Girl, applicants perform a burlesque-style routine for a photographer—typically these are the website's own—and send the results for consideration. The site claims to receive upwards of 3000 submissions a month. Like Heywood's "book of women," labels were generally constructed after the photo set was complete, instead of being direct determinants of what the set should look like. Nevertheless, we see the shaping of performative culture, gender, and sexuality norms, politics of access, and visibility ('plus-sized women', for example, are swept-aside to their own sub-'alternative' section). Prior to its redesign in 2013, the website operated via a tagging system heavily influenced by sexualized visual cultures: "Asian," "big boobs," "blonde," or relating to a particular photo set (a carnival-themed set featuring two women, one with a prosthetic leg, was tagged "freak"). The site maintains raced and gendered codification, strengthened by participant commodification. Everything from 'great poser,' 'wet hair', and 'visible ribs' is a search-able attribute for photo shoots of the models on the site. In addition to their photo sets, models post blog entries, videos, biographies, an ongoing list of body modifications, and profiles that describe personal aspects such as their first sexual experience. These required updates 'flesh out' the models by giving their profiles an intimate 'lived-in' feel that sought to balance the algorithmic alchemy of tags. The Suicide Girls brand reaches internationally, and supplements its photo and video-based website with a Burlesque tour, dvd series, and books.

Until their disappearance in late 2013, tags remained so that users could later easily locate other models of similar appearance. The transition from social tagging to more or less fixed categories seems to have not negatively affected the site, which boasts half a million monthly subscribers and ten million daily photo views.³² The website redesign, reminiscent of

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³² Online video clip. Suicide Girls. https://www.suicidegirls.com/join/ Accessed February 1, 2014.

the image-heavy styling of Pinterest, includes no visible, clickable, or social tagging options. Instead, search terms are largely offered in the form of drop down boxes.³³ Previously used categories, such as the ones listed above, are now funneled into body type such as "full figured," and "a few extra pounds" (a total of 8 of the current 2,550 models featured on the site fall into these categories and, from my own perspective, could easily be cross-listed as "slender" or "fit"). ³⁴ Anecdotal folksonomies form the majority of categories such as "my idea of a good time" (options include: "Internet. All Night. Again," "Reading at a coffee shop," "When I go out, anything can happen"), with some write-in categories (e.g. favorite television show). Again, despite having multiple boxes to select from, each woman is confined to this structured format, despite her "rule-breaking" sexuality.

In this context and with most (if not all) pornography sites, cybertypes become the traded commodity. In her book, *Cybertypes*, Lisa Nakamura cites the cyberculture scholar Daniel Punday who wrote: "critics are debating whether participants in online discourse are constructing coherent identities that shed light on the real world or whether they are merely tacking together an identity from media sources. As critics have gradually begun to accept the latter, they have lost confidence in the socially transformative possibilities of online discourse" (qtd p xiii). His writing reports on a binary between the techno-utopic ideal of identity in digital spaces and deflated disconnection between the virtual and material. Nakamura finds a middle road—"the Net changes *some* things"—and separates embodied performativity in material

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³³ Tumblr, a blogging platform that uses freeform tags (like Twitter), attempted to make a similar change until users protested.

³⁴ While Missy Suicide, a founding partner, roots the enterprise in her desire to create a feminist space for underrepresented female bodies, the vast majority of Suicide Girls are white, slim, and able-bodied. Prior to the website redesign in late 2013, it was apparent that "White" was the default based on the featured race-based tags (e.g. "Asian," "Black," "Hispanic"). The bias towards slim to skinny fair-skinned women in their twenties is immediately visible on the new image-centric design, but has also been noted by others, such as *Bitch Magazine*. (Tomlin, Annie. "Sex, Dreads, and Rock 'N' Roll." *Bitch Magazine* 2002.)

space from the performativity of the images online. The latter, termed cybertypes, work parallel to the embodied counterpart but reflect the techno-cultural climate which they help establish. In this sense, the tags themselves gain their own kind of agency separate from the women they describe.

Certainly, with regard to search terms and labels, it would seem that the boxes are growing both in sheer number and specificity ("visible ribs"). Yet, despite minor efforts to "equalize" the sexualization of bodies on each side of the male/female binary, the majority of images point towards a specific kind of Western consumer beauty, as demonstrated by the tags. The tags therefore accurately describe the bodily spectacles, speaking for bodies, which themselves would be otherwise lost in the digital excess of skin. Guy Debord, in *The Society of* the Spectacle, described this kind of process of gendered and sexualized spectacle, when he wrote that it "imposes an image of the good which is a résumé of everything that exists officially ... the guarantor of the system's totalitarian cohesiveness. Everyone must identify magically with this absolute celebrity – or disappear" (Debord, 1995: 42). A Suicide Girl, keen on forms of self-annihilation, exposure, and vulnerability, aligns herself with Debord's formation of the media star, who "renounces all autonomy in order himself to identify with the general law of obedience to the course of things" (1995: 39). In my concluding section, however, I gesture towards another possibility: tags not as a classification, but as a statement or critique.

conclusion

Tags describe a series of relations or engagements involving the media object, more so than they describe the object itself. In making these relations explicit, tags construct interactions with objects; the objects themselves are rendered legible precisely through these relations.

Tagging induces the performative construction of subjectivity—defined here as locus of perspective—both in users, as users (their experience online), and of media objects. Meanwhile, metadata—such as who visits certain websites, who "likes" certain products—provides an efficient means to contour web objects and one's engagement with them. Not unlike unmediated but filtered information dissemination (e.g. gossip and hearsay), tags visibly and quantifiably create a techno-social foundation of modern web usage, and provide structure for the developments in digital media, such as wearable computing and ever-smarter mobile devices. Tags, used to describe representational objects, are further extrapolated from materiality as they form this base. That said, as I have suggested, they become their own kind of performance, as in the #defectbydesign example, or in the more recent and relevant #blacklivesmatter discourse following the non-indictment of Darren Wilson, or the attack on female game designers and critics as part of #gamergate. Tags can become their own exhibition separate from the specific content they aim to classify.

As I hope to have demonstrated, there is room for, and a history of, useful critique on this topic. Certainly, the trajectory from material to immaterial did not manifest alongside the digital advent. (Further, as many materialists will point out, the "immateriality" of digital media is still inextricably bound to hardware, server farms, satellites, and so forth.) Some, like information historian Alex Wright, place the ancient Greeks as the first culture on record to move from mythic (here, synonymous with unquestioning) to theoretic (or analytic) thought. In *Glut*, he writes "writing down their old stories made the inner logics of these systems visible. Once the text became externalized, it could be subjected to analytical thought, reworked, and even improved upon." To follow this thread, Wright joins many others, who propose a wider

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³⁵ Wright, Alex. Glut: Mastering Information through the Ages. Cornell University Press, 2008. Print. 63.

literacy of code, algorithms and information structures to open, diversify, and improve upon web discourse and deployment.

In the same way tags show networks of information and their social qualities, they can be used as a litmus test to illuminate social gaps and inequities. If we understand all digitized interaction as reiterative representation, we can trace the ontologies of the semantic web to performance, both of and beyond writing or coding. One important aspect of performance is its ephemerality and capacity to both reiterate and adapt. Currently, several modes of computer literacy exist in classrooms, as well as in the form of online programs, after school programs, and community groups centered around identifications (e.g. Black Girls Code, Women Who Code, and so on). While simple access may not immediately reverse or alter current media trajectories, one history of identificatory density (white males) is being challenged from the margins, and serves as a valid form of intellectual activism. As a reversal of the typical material-to-immaterial trajectory, an understanding of digital structures and ontological marginalizations (such as the aforementioned power law) in media may lead to wider material change. Though mediation filters and organizes information, it also provides the tools and clues useful to critically examining the material.

There isn't a "clean" binary between tags as efficient data markers, and the subjectivity constructed as a result of the process. However, it may be possible to problematize the role of tags and their interpellation of media objects through an engagement with tagging itself. We may be able to "hack" the zero-sum inevitability by highlighting it and, essentially, crowd-sourcing ways to make the process work in new and different ways. To a degree, Twitter provides a model for this. The hashtag model, wherein # signs are used to link to larger, related discourse, has been used to spread awareness, critiques, experiences, and satire. If a singular

person could be gestured towards for leading hashtag activisms, Suey Park would be one candidate for her discourse-creating work with #notyourasiansidekick and #cancelcolbert that prompted the term "hashtag activism." The first pointed towards and responded to Asian stereotypes in media, and earned her a strong Twitter following. The second, for which she received wider attention, was created in response to a tweet sent out by the Colbert Report staff which stated: "I am willing to show #Asian community I care by introducing the Ching-Chong Ding-Dong Foundation for Sensitivity to Orientals or Whatever." Though there was no context given, the tweet was intended to satirize Washington Redskins' owner Daniel Snyder's new "Washington Redskins Original Americans Foundation," meant to soften the blow of the otherwise derogatory team branding. Park quickly responded: "The Ching-Chong Ding-Dong Foundation for Sensitivity to Orientals has decided to call for #CancelColbert. Trend it."

The response to Park was varied but energetic. Countless Colbert supporters immediately called Park's tweets misinformed, to say the least, and employed sexist and racist language to philosophize on ways she could have misinterpreted Colbert's intended humor (note: Colbert himself does not manage the show's Twitter account, and the tweet itself was quickly deleted). In the days immediately following the deployment of #cancelcolbert, Park's Twitter feed became littered by varied threats, which themselves started new conversations. #cancelsueypark briefly trended. Alternatively, several journalists and bloggers, "came out" as Korean to allow themselves ground to critique her, such as in *Deadspin*'s "Gooks Don't Get Redskins Jokes" by Tommy Craggs and Kyle Wagner. They write, "The two authors of this post happen to be Korean-American—one of them, like Suey Park, is a Korean-American from Illinois. We find Suey Park's reading of the joke to be, as the activists like to say, incredibly

problematic."³⁶ Park did find herself to have supporters who, for example, agreed that the lack of context was misleading, or that the joke created a too-clean parallel between the racisms faced by Native and Asian Americans.

Unlike previous examples (Yiruma's digital Japanese-ness or the Suicide Girls' menudriven identifications), #cancelcolbert and #cancelsueypark were open to esthetic mutation and transformation. Other social media sites like the blogging platform Tumblr or the photo-sharing service Instagram feature custom tags that direct interpretation without prescribing it. Like the Suicide Girls tags, they serve a search function but, also, provide context in how to (often) critically read the shared material. By making the author more apparent as an individual, no matter the number of followers, retweets, reblogs, or friends, it marks them as a source of information. In this sense, freeform tags prosper—abiding to a separate power law, one that is often more specific to a group or community (those in one's Twitter feed)—by marking the author and providing the digital object more interpretive flexibility. The proposed information is therefore presented as a provocation, with the locus of interpretive power residing with the user, rather than an encyclopedic data entry.

Tags are a useful means to find and retrieve information, but they also create information as they are used about both the object and the user, in the form of cookies, user profiling, and analytics. Tags are used to structure web experience, as users continue on a trail of clicks through Google, or Amazon, or Youtube and so, in this sense, seem harmless insofar as the information is simply there to be used or not used. Blog posts will often include several tangentially related tags to increase traffic. The problem, as I have argued here, is when it comes to identities and identifications which are themselves historically bound, but without

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³⁶ Craggs, Tommy, and Kyle Wagner. "Gooks Don't Get Redskins Joke." *Deadspin*. Web. 4 June 2014.

clear futures to continue as such, there are no guarantees of future performance or stability. In response, some users have taken up critical tagging, such as #defaultbydesign or #cancelcolbert but, there must yet be practices to increase interpretive agency for users online.

Chapter 4: Identificatory Play

The synonymy of gamer-avatar-"anyone" misrecognizes the differences, and potential, behind linking these two. Videogame avatars have displayed consistent themes across the decades, engendering a visual norm to the medium or expanding avatar "options" to include "anyone" (see chapter 1). Likewise, gamer discourse has maintained its white male subcultural base, evidenced in the months-long overtly sexist attacks housed under #gamergate, yet has expanded its boundaries to include gamer subcultures centered on diversity. While visual bodies have largely influenced these parallel trajectories, lived differences—nuanced experiences resulting from performed affiliation (to, for example, race, gender, sexuality)—have yet to be taken into full consideration. To use Elizabeth Povinelli's terms, although *corporeality* remains during gameplay in the form of images and identification with anthropomorphized bodies, there has been an almost wholesale rejection of *carnality*. Carnality in relation to games can influence the gamer's interpretation of their diegetic, in game, address. Establishing the direct but impersonal connection between gamers and their diegetic representations in role-play, can frame this relationship as a constant performance of desire, intimacy, and identification. In the case of minority gamers, disengagement with avatars can provide a means to critical understanding of the diegetic tropes. As I suggest, this does not need to omit a "play" factor; this can be one play factor itself.

This chapter specifically focuses on role-playing games which stage conflict and resolution through narrative and character-building mechanics and, through these means, create

¹ See *Empire of Love*.

arguments about value and success. Therefore, using the analogy of gamer as actor, this inquiry focuses on mediated gaming (i.e. videogaming) as well as live, collaborative, role-play. As demonstrated by the prolific and multifaceted work of game scholars such as Jesper Juul, Miguel Sicart, and Jane McGonigal, the co-performed ecology among gamers and game systems continues to blossom as a site of inquiry. However, issues of identification almost paradoxically remain an underutilized mode of investigation to explore live unstructured play. Whereas I have previously discussed the construction and performance of avatars, this chapter uses affiliation, catharsis, and empathy as sites of inquiry into the exchanges between a scripted character and gamer. Games and play, both performance modalities implicating lives bodies, differ in that the former require quantifiable objectives or the capstone of "winning." Live play, characterization, and the creation of situations without strict narrative remains a political tool to create nondiegetic identificatory transformations on both personal and public scales. The relative lack of discourse on play begs contextualization from contemporary game and theories of identification: two fields that intersect at the site of embodied performance but have yet to be put into fruitful dialogue.

I suggest the lenses of identification, affect, and catharsis can connect these discourses to both diegetic character inhabitation (role-play) and lived relationality. Narrative and mechanics occupy the majority of games discourse and, together, create a rich blueprint to understand the game. Often within games discourse, the diegetic world or narrative measures and defines "success" without regard to the subjective processes of experimentation, play, or even disinterest. Meanwhile, discussion on mechanics (e.g. rules and challenges) may appear among enthusiasts, fans, and developers; here, motivation to continue gaming emerges from a combination of a research-based balance of reward, success, and failure. Missing from this

discussion are the experience of gameplay and character relationality, odd omissions for a medium distinguishing itself from others through its interactivity, engagement, and customizability. The dominance of narrative, representational "realism," and the subsequently implied degree of objective predictability between or among actors, parallels work on ideology. Stated differently, games scholarship discourages varied character inhabitation, just as ideological work imposes taxonomies of nature, citizenship, and social performance.

To begin, we might start with Louis Althusser's work on ideology, described as "a system of representations [...] distinguished from science in that in it the practico-social function is more important than the theoretical function (function as knowledge)." As a "social function," ideologies work through the medium of action and performance and, as a result, form acting subjects. Through performance, subjects

live their actions, usually referred to as freedom and 'consciousness' by the classical tradition, in ideology, *by and through ideology;* in short, the 'lived' relation between [subjects] and the world, including history (in political reaction or inaction), passes through ideology, or better, *is ideology itself.*³

The "lived" experience was a manifestation of ideology through embodied action, reaction, inaction. Althusser located his theory of interpellation in state authority—though a Marxist, he here breaks from the more economically and labor-oriented Marx, who posited a tiered hierarchy of base and superstructure—broken into two mutually co-affecting halves of a repressive state apparatus (comprised of government, courts, police, and so on) and an ideological state

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² Althusser, Louis. For Marx. Trans. Ben Brewster. London; New York: Verso, 2006. Print. 231.

³ Althusser, Louis. For Marx. Trans. Ben Brewster. London; New York: Verso, 2006. Print. Original italics.

apparatus, a wider term that included, religion, family structures, broadcast communications (radio, television), and media (literature, arts, sports), among other social influences.

From this juncture, several scholars have updated the boundaries of ideology and support the agency of the actors (in the above example, the police officer and the subject), and their social environments. Newer work on ideologies has shown systems (e.g. ideological and repressive states) as not closed, but flexible, malleable, and porous. As Sara Ahmed argues in *Queer Phenomenology*, it is necessary to consider the manner in which one responds to being hailed: abrupt, hesitant, or otherwise. Reception is a subjective matter, and subjectivity is always already tied to identificatory conditions. As Slavoj Žižek has argued, ideology presents itself as the under-acknowledged "meta-rules," that maintain official rules. Creating a quadrangle of ex-Secretary of Defense Donald Rumsfeld's 2003 ideological breakdown of known-knowns, known-unknowns, unknown-unknowns, Žižek adds "unknown-knowns." This, he suggests, is where ideology and fantasy collide. In games scholarship, unknown-knowns might be defined as the implicit social understanding of how these rules should be applied and internal social relationships that must be upheld to maintain fair play.

What has been theorized as a closed object ("gamer"), has the potential to fluidly operate; being "hailed" by a game, its production company, designers, or engineers operates within an open system. At the game site, the gamer is marked as the character and, as such, must follow the official "rules" of the game to perform it: Zelda never jumps, Mario saves the Princess, role-playing games depend upon the accumulation of time and money. Here, to "subvert" the official rules—to opt-out of the system—still requires in-game activity; hacks, mods, and cheats are various ways official rules are bypassed. Amorphous sets of meta-rules then provide structure

for how gamers may engage with the official rules: "community" may develop and, with it, shared strategies.

Power and its negotiation with authoritative ideologies are at the root of this discussion. On the whole, many scholars have been eager to accept immersion and immediacy as signature features to games, with comparatively little attention given to embodiment or different ways of engaging or interpreting the material. Some scholars conflate the goals and actions of role-players or role-play gamers with that of their avatar, or focus entirely on the narrative representation of the depicted events, suggesting the disembodied gamer—independent from media—is lost or rendered comparatively immanent in the face of their more transcendent mediated representation. As a result, the "gamer" figure has become a singular lens; identification in games has transformed the now aged cyber-trope of early internet discourse that "anyone" can become "anyone" to an emphasis on the gamer-as-avatar-as-"anyone" (chapter 1).

While any study rooted in issues of identification will be both subjective and limited, the fantastical belief in "one system to rule them all"—that one semiotic or material realm necessarily trumps the other—resonates with minoritarian movements and their gaps and erasures. Perceived gamer uniformity makes theories of identification useful discursive tools to understand the gamer or player as an active agent. The relationships among games, play, and identification incorporate politics of space and visibility as well as, importantly, performance. Few queer theorists have endeavored to enter the realm of games and play, despite resonances in themes of identification and participatory critique, while those who have focus almost entirely on quantifiable "success" or endgame goals. Queer game theory, a field now being bolstered by scholars and independent developers such as Adrienne Shaw and Anna Anthropy, requires an investigation of bodies, their affect, affiliations, and associations as they are enacted. When

grounded in performance, queer game theory encompasses the potential of mechanism and interface—a screen, a controller, a board, so on—but also demands that "users," or "gamers," for whom games are designed, be understood beyond their role as a consumer. In line with the rampant digitization and visualization of game studies, very little time has been spent on the playful elements of gaming.

Nonetheless, within these contexts, the proliferation of sub-belongings that continue to help and haunt LGBTQI identifications parallel that of the developing plurality of gamer subcultures that have responded to the normative identity of straight, white, male. These challenges to the idea of a monolithic and unchanging "gamer" identity, have been actively welcomed and met by resistance. The rise of "gaymers," "girl gamers," "gamers of color" forums has catalyzed the presence of a now less-stigmatized, notion of "geek masculinity" built within gaming cultures, as well as the erasure or active discrimination against audiences outside that narrow identificatory scope. For example, "girl gamers," in practice, are often marked as illiterate and needy, requiring one-on-one support to navigate the medium. This has given rise to "fake girl gamers," wherein male gamers pretend (or are accused of pretending) to be women, for special accommodation and treatment from their (presumed male) peers, such as virtual currency. On the production end, Borderlands 2 featured a "girlfriend mode," in which the "girlfriend" supports, but is entirely dependent upon, a primary character. If the primary character dies, the support character dies, too. This role appeared in an even less agential form in Bioshock Infinite, a game I will describe in more depth later, where the female support character is unplayable.

Games and play are produced by gamer or player participation and performance. Games encourage specific actions and limit others to reach a predetermined definition of success. The

structure of the videogame parallels a conditioned sense of interpellation and, when juxtaposed alongside each other, opens discourse to diverse configurations of dis/identification and desire. In other instances, playful scenarios consciously incite questions of subjectivity in games, and privilege diversity and non-normative social configurations, such as in some forms of live action role play (LARP). Live play has proven itself a medium for participatory, critical, investigations of embodiment and first-hand experience. My aim is to illuminate these commonalities and configurations through an investigation of the participant.

What happens to the gamer when she directs a diegetic, in-game, avatar? While there is general consensus that the gamer and avatar are unified in some way, there seem to be two general camps: those who argue that it is because of the narrative, and those who argue that it is because of the formal elements of gameplay. In contrast to narratologists, who find depth in symbolism, formal ludologists see avatars as simply pawns, a means to an ends that lack inherent semiotic value. These differing opinions regarding the "best" methodologies for videogame scholarship have been often summarized as the "ludology versus narratology," or "play versus plot" debates. In this section, I discuss one early trajectory in discourse that solidified the ambiguous but invariable "gamer" subjectivity at the center of much of the discourse to follow. I then illustrate the continuity from early debates regarding the methods of videogame analysis, through to current scholarship on the ideas of success, failure, and radical negativity. I relate this to queer studies, and more contemporary discussions of "queer failure" in games that explicitly incorporate the Aristotelian theory of catharsis despite, I suggest, the incapacity for gamers to identify with the avatar in a cathartic level, as traditionally and theatrically defined. Ultimately, I posit that "play" occurs as the gamer shifts between their subjective and situated interpretation of the game events and the identifications of the constructed character.

Avatars and/as Bodies

Before investing in what an avatar is, or who it represents, game scholars had to decide what constituted a game. While public gaming arcades were often considered a "third place," a place not home or work, the increased commonality of the home computer in the 1990s made videogames a point of interest. In this section, I discuss the early debate between narrative and play. This particulate debate, which lasted for over a decade and is still cited in several gaming texts, is important to a discussion on identification as it served as one foundation to the notion of a singular gamer. I outline this inquiry to show how games and avatars came to erase gamers; a recent 2013-2014 meme, "I am a gamer not because I don't have a life...but because I choose to have many," depicts the displacement of the gamer in favor of the avatar. The narrow perspective of gamer or, at best, a disembodied one, facilitated the later hyphenation of gamer "inclusion" (girl gamer, gaymer, gamers of color), and ultimately led to the more software-centric procedurality of gaming, rather than the interaction with gamers.

Concern over whether computer games were sites of story or play started in the mid-1990s. The two primary discussants were Janet Murray, author of *Hamlet on the Holodeck*, who described the computer as the new storytelling medium, and Espen Aarseth, who argued that narrative could never fully grasp the dynamism integral to game rules; "to claim there is no difference between games and narratives is to ignore essential qualities of both categories" (Aarseth, 1997, page 70? *cybertext*). Early game formalists focused solely on mechanics, not the gamers or game-makers or even the game's representation (e.g. war in chess, a topic explored by

⁴ Certainly the work of other scholars, like Marsha Kinder, influenced this debate. I focus on Murray and Aarseth because they represent two distinct approaches to games studies, and resonances of their interchange appear in contemporary discourse.

Guy Debord). To the ludological purists, the emphasis on narrative represented the dissolution of an independent game discourse or, from another angle, one factor that would keep ludologists isolated within their own disciplines and each other. Negative social stigma around gamers as well as academics who sought to analyze games from a theoretical perspective, helps contextualize Aarseth's protective, almost paternal, cultivation of game studies during the 1990s and early 2000s. He writes, "[C]compared to all other literary formats, including hypertext novels, the adventure game's structure is too alien, too far removed from the genus of hegemonic literature to be recognized by any but a few xenophiles, who risk professional suspicion or ridicule." In making games as neutral and universal as possible—that is, by denying bodies altogether—game scholars could focus solely on the mechanistic elements rather than the more subjective elements. This stance favoring the quasi-scientific study of the now-sterilized rules prioritizes competition and toward endgame while devaluing game experience and play.

While game mechanism and rule analysis are vital, social contexts are equally important, particularly to consider the breadth and depth of fantasy, the semiotic exchange necessary integral for gameplay. While "formal" inquiry tends to characterize itself as akin to scientific "objective" scrutiny, I argue that the social (worldly referential) aspects of games warrant consideration of their "formal" dimensions, namely their interactive attributes, potentialities and limitations. Murray's work opened videogame studies to the larger arena of performance, but with a similarly unmarked gamer and heavy focus on the narrative. Computer games, Murray suggests, developed from several sources, such as interactive literature (e.g. the Choose Your Own Adventure series). Yet as a form of "cyberdrama," games are procedural (an element that Ian Bogost has developed in *Persuasive Games*): they are learned through doing. While such a

⁵ Aarseth, *Cybertext*, 109.

definition is not too far from Aarseth's term "ergodic literature," for which "nontrivial effort" is needed from the reader to navigate the text, Murray likewise stressed the "immersive" traits of games, wherein gamers are then transported to the gamespace. As with the formalist approach, the hardware, codified nature of digital games, and gamer bodies therefore fell away, leaving behind only representation. The "non" player characters with whom the gamer diegetically interacted, were more or less the same as the "player characters" directed by the gamer.

In relation to identification, these two interpretations can be illuminated by their approaches to Lara Croft. One strategy behind Tomb Raider's cyber celebrity, initially construed as an interactive Indiana Jones who was later re-sexed, was to open the market to women; her body alone spawned its own discourse. As Aarseth reports, the true advocate for videogame scholarship would not see Lara as a "different" kind of body, or a body at all; instead, she was a window to look through and past. From this perspective, Lara Croft is an "incidental" representation and, to focus too much on her representation, would be to stray from the true focus of game studies: the rules. The focus would be, instead, on what Lara can do in relation to game objectives. Inversely, as many visual culture, gender, and media scholars have argued (Aarseth calls out film theorists in particular for having "analyzed [Croft] to death"), her body is a dynamic site of both presentation and representation, ranging from a particular portrayal of gender, to the semiotic equivalent to the hardware upon which "she" runs. 6 In this view, Lara Croft is more than an "incidental" representation, but less than a woman, more than the gamer, but less than the rules of the game. While many focused on her hypersexuality, few focused on queer elements, such as when, in *The Angel of Darkness* (2003), she was replaced by Kurtis

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⁶ For more, see: Deuber-Mankowsky, Astrid. *Lara Croft: Cyber Heroine*. Trans. Dominic J. Bonfiglio. 1 edition. Minneapolis: Univ Of Minnesota Press, 2005. Print.

Trent, who utilized the same movements and controls. Male fans in general disliked this feature, which, at one point, entailed navigating "monkeyboy" through various crawlspaces from behind. Others continue to maintain blogs such as the "Kurtis Trent Estrogen Brigade," dedicated to this short-lived minor character.

This particular example shows the level of unity and immersion assumed in both approaches; either the gamer is always the gamer, with the avatar as a pawn or, in a hyper-Stanislavskian, cyberdramatic move, the gamer becomes the avatar. The avatar and the gamer as one cohesive unit with the latter's subjectivity being subsumed by diegetic goals persists as a common assumption within studies solely focused on game mechanics and theories focused on win/lose or success/failure binaries. An in-game failure is perceived as personal. Too often, the exchanges between individual and game is overlooked, an oversight that undermines the importance of the gamer.

I suggest a slightly different approach to address the divisive nature of play versus plot—more accurately, rules versus views—and to reintegrate a sense of play with that of identification. Games offer a structure within which participants act: its mechanics, visual representations, rules, and the "win" scenario. Play, as evidenced in games, occurs as the gamer interfaces with and as the proposed character. Here, identification occurs without an intended agenda, and it occurs as the gamer mixes, interprets, identifies (or not), and otherwise plays *as* the character, without losing her own positionality. The play is dependent upon identification coproduced through the act of participating in the game's meta-structuration (rules). "Fantasy" does not reside in-game; rather, it is possible to think of fantasy as a symbolic play that engages the gamer as she is cast as a soldier, an explorer, or as a dot-eating Pac-person. By focusing on the mediated element of "casting as," instead of an immersive "becoming," gamers can remain

engaged with the mechanistic system while retaining critical perspective on the representation. Such play could be said to *respond* to the game, but wholly lies within the realm of the gamer's subjective experience and outside the direct control of the product.

One example of the pervasive assumption of unity between avatar and gamer is the use of the magic circle. The magic circle, what Johan Huizinga called the boundary between play and "real life," demarcates the boundaries of play; it can be metaphorical and intangible, as in when two cats play, or literal, like a chess board. It has somehow taken the qualities of a Siren of Greek lore: it seduces gamers into the depths of diegesis where they re-emerge only when game structures no longer serve as the "setting." In other words, consistent across the varied uses of *Homo Ludens*, Huizinga's most popular work among games scholars, is the lack of a subject already in formation. Within the magic circle, the game structure is layered on top of already present ideological structures.

Yet, important to my present emphasis on re-opening an investigation of play, Huizinga maintained the game is neither inherently play (citing variables such as sportsmanship and degrees of seriousness), nor is the magic circle an impermeable alternate sphere insusceptible to social realities. Rather, games provide a platform for *dromenon*, "something acted." Huizinga writes that play, "an activity connected with no material interest, and no profit can be gained from it," occurs under two conditions: contest and representation. Quoting Jane Harrison's 1912 work, *Themis*, he agrees that a game "is *methetic* rather than *mimetic*.' It is 'a helping-out of the action." Having separated games from play, games being one of many sites for play, we can begin to consider how other contemporary sites interrelate and provide mutual insight into

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⁷ Here, scholarship on playbor—such as hours of "grinding" for resources in *World of Warcraft* or maintaining crops in *Farmville*—makes clear how hours of in-game production and accumulation approximate labor.

⁸ Huizinga, Johan. Homo Ludens: A Study of the Play-Element in Culture. Beacon Press, 1971. Print. 13.

⁹ Ibid. 15.

structures of identification. Therefore, while claiming a separation of "play" from "game" may seem a matter of semantics, the discursive balance and performance of subjective and formal mechanics deserves specific notation. Differentiating these terms highlights the heretofore underexamined capacities of embodied play.

Play occurs in the willing suspension of disbelief or, angled differently, the willing performance of belief often facilitated by games. In the case of playful representation, Huizinga argues that "'representation' is really *identification*, the mystic repetition or *re-presentation*" of exterior phenomena. Play then, is performative: "not so much *shown figuratively* as *actually reproduced*." In the case of drag, wherein there is no clear endgame or objective, gender codes are "actually reproduced," but are, often, contrasted with the physical body in performance. The play occurs between constructing a gendered performance, while the audience indulges in and acknowledges its theatricality. In the case of disidentification, simultaneously playful and necessary in the face of oppression, we can, again, see how minoritarian gamers can utilize the method to objectively consider the diegetic material from their own social position.

When, for example, I play as Shepard in the sprawling *Mass Effect* franchise, a game with branching narratives dependent upon choice, my decisions do not need to align with what they might be "in real life." I engage the game as both Shepard and myself, opting for a warbased tactic, or a diplomatic one, or a "balanced" approach; likewise, I can choose to place Shepard in a lesbian relationship, a gay male relationship, or a heterosexual one, or one with Liara of the monogendered Asari race. The tie between Shepard and myself can be exploratory and experimental; it is not given that, as a lesbian, I would choose to be with either Ashley, Jack, Miranda or Liara. In this sense, gamers can perform in game as the character but maintain a

¹⁰ Huizinga, 15. Original italics.

critical distance. Someone who replays the game as a different version of Shepard, might see how, while each branch of sexuality unfolds differently within the narrative, the intended viewer remains a straight male. Kaidan, the singular gay male option, was replaced by an anonymous woman in the singular sex scene along the "gay male" relationship track. Gamers necessarily contextualize a game's narrative and mechanics in relation to an existing (worldly) exterior positioning; the game does not create or institute a new exteriority.

Splitting gamers from their avatars and focusing on their relationships can re-engage notions of play. When the gamer consciously moves between identifications, engagement becomes potentially disidentificatory. Herein lies the identificatory play eclipsed by research and development of a "formal" games scholarship and, yet, the point at which performance methodologies can be usefully applied. José Muñoz proposed the term "disidentification" as a means for the marginalized, specifically queers of color, to simultaneously embrace and reject the stereotypes imposed by their social orientations. Disidentification "is a step further than cracking open the code of the majority; it proceeds to use this code as raw material for representing a disempowered politics or positionality that has been rendered unthinkable by the dominant culture." Foundational to such positioning, the disidentificatory subject transverses diegetic stimuli through the lens of her lived experience. Disidentification occurs through an active performance of minoritarian associations, affiliations, and identifications with a majoritarian code. The separation of character and actor is one immediate step queer game theory can take to both evolve as a perspective and reach wider audiences through practice.

¹¹ Muñoz, José Esteban. Disidentifications: Queers Of Color And The Performance Of Politics. Univ Of Minnesota Press, 1999. Print. 31.

Disidentification provides a strategic means of social (and sometimes literal) survival in temperate-to-hostile environments prone to exclusion or erasure, yet the inherent playfulness between codes and identifications has yet to be applied to the contexts of either games or play. Other scholars are indeed making connections between queer scholarship and gaming, situating themselves at the border of narratology and ludology, by holding cultural semiotics and mechanics in balance. Yet, in these studies, the game (and, more discreetly, the hardware) continues to dominate the "gamer," whose title isolates the aspect of her identity most relevant to the continued commercial success of the medium.

Limits of Failure and Catharsis

There is merit in thinking of the gamer and avatar as separate entities: the gamer inhabits, enters, and traverses, without losing her own subjective "I," while the avatar is a programmed provision of identificatory tropes along with diegetic agendas. Here, I develop upon and diverge from the notion of a unified gamer/avatar that emerges within queer games discourse. Recent work continues to grow from the aforementioned conditions of a unified gamer/avatar, with many objectives being increased representation of LGBT or queer characters (with comparatively little focus on the demographics producing and designing the games). Binary themes such as inclusion and exclusion are widely prevalent; game journalists, bloggers, and conference presentations by those in the industry center on what "success" or, rather, "failure," means to queer gamers. In game contexts and beyond, "not winning" has become its own substantial prize, if conciliatory. Such a stance creates a queer minoritarian subject existing at the margins of an inescapable system be it capitalism, heteronormativity, or *Call of Duty*. While I, too, would like to see more diversity of characters in the medium, I suggest these sentiments—

diegetic representation and failure—reflect a strong cultural bias towards realism. Here, I diversify queer games theory by problematizing realism, a historically oppressive style, and the underlying assumption of mimesis behind the gamer/avatar conflation.

The first Queer Games Conference, held at Berkeley in 2013, featured a joint keynote; J. Jack Halberstam (The Queer Art of Failure) and Jesper Juul (The Art of Failure) discussed the intersections of their work on failure and games. Their collaboration, with one scholar coming from gender and sexuality studies and the other from gaming studies, met on the grounds of game cultures. Rather than a proscriptive panel, their contribution delivered both theory and strategy for queer gamers to interact with current games. Avoiding in-depth discussion of any particular game, they discussed how their respective notions of failure (constituted by not accumulating enough social, economic, or point-based capital) resonated with one another, and with the fledgling queer game movement. Beyond titular commonalities, one can quickly understand how The Queer Art of Failure was so easily subsumed into gaymer culture, beyond the superficial semblance to *The Art of Failure*. Halberstam and Juul agreed that queer gamers enjoy failing, seek it out, and do it well; if they did not enjoy failure, they would not participate in games with win/lose binaries. Embedded within discussions of "success" and "failure" (what would these words mean, without margin and center?), their approach upholds the normative structure of "success" by their general disbelief in play and, specifically, the ludic queer. One similarity between their projects and my own is the endorsement of affect as a legitimate response to marginalization. The means are, however, distinct.

Congruent with Halberstam's intention to make cultural theory available to wider audiences, the social cartography is somewhat simplistic: there is the wider norm and the queer alternative. To resist the superficial aplomb of American positivity ("failure is just a consequence

of a bad attitude"), Halberstam prescribes embracing "queer failure" that resides outside heteronormative circles: "while failure certainly comes accompanied by a host of negative affects, such as disappointment, disillusionment, and despair, it also provides the opportunity to use these negative affects to poke holes in the toxic positivity of contemporary life." The argument assumes queerness as always already negative, marginal, and excluded; in that sense, it almost necessarily hinges on definite and innate boundaries between queer and non. Halberstam suggests that queers are attuned to failure but, whereas queerness has been cast "as the dark landscape of confusion, loneliness, alienation, impossibility, and awkwardness"—here, Halberstam refers to the work of Heather Love and Lee Edelman—another mode, "resistance through failure," is possible. The work radicalizes the negativity in queer studies to include a deeper and wider queer canon (while simultaneously re-creating a "canon" system in which more artifacts merit inclusion). The queer loser manifesto calls its readers to accept their general incapacity to be accepted in U.S. centric Judeo-Christian societies as its own success. Self-exclusion harbors alternative modes of "winning."

The argument that failure can ultimately prove productive, hardly exists within its own queer time or space; rather, it exists alongside a slew of other books on successful failure. Indeed, *Atlantic* journalist Liza Mundy's article "Everyone Loves a Loser" begins: "Now is the time for all good men to fail. Good women, too. Fail early and often, and don't be shy about admitting it. Failing isn't shameful; it's not even failure." The amorphous queer gamer float is just one in a much, much, larger parade of losers (to whom *Queer Art of Failure* is dedicated). Similar to present stances on the singularity of avatar/gamer, failure is ultimately a question of

¹² Halberstam, J. Jack. *The Queer Art of Failure*. Durham: Duke University Press, 2011. Kindle AZW file.

¹³ Halberstam loc 1364.

¹⁴ Mundy, Liza. "Everyone Loves a Loser." *The Atlantic* Oct. 2013. *The Atlantic*. Web. 6 Aug. 2014.

identification. Here, as with gamers, losers (though one, of course, can be both) must identify wholly with a given definition of success, often oriented towards productivity and optimization of experience. The system in which the failure occurred needs to be understood as one of totalizing authority, wherein one has some personal agency and a legitimate means, skill, and time to "succeed." Under other circumstances, the "failure" might not be attributable to a person, but the set of conditions or system itself. Yet books on failure tend to require the "loser" to understand themselves as such to produce, perform, or otherwise work towards a more useful outcome. For example, Halberstam advocates the "advantages" of failing in the realms of health and finance: "relieved of the obligation to keep smiling through chemotherapy or bankruptcy, the negative thinker can use the experience of failure to confront the gross inequalities of everyday life in the United States." To be successful, it is the loser's responsibility to change, but not necessarily towards a reconsideration of the contexts that render them a "failure" in the first place.

In another instance, when discussing the economic pressures of contemporary academia—the increasing implausibility of creative critical thinking, student mentorship, and something that resembles a "home" life—Halberstam extends James C. Scott's argument that education "privileges profit over all kinds of other motivations for being and doing" (loc 152). "Legibility is a condition of manipulation," Scott writes in Seeing Like a State; "illegibility may in fact be one way of escaping the political manipulation to which all university fields and disciplines are subject," Halberstam adds, leading the reader to two of the three primary theses of the text: resist mastery and privilege stupidity. While the goal is to promote and validate those without children, without a strong or stable income, and the common amenities that come with

¹⁵ Halberstam, Kindle.

being "successful," many of these comparative terms—lose, fail, legibility, mastery, stupidity—reify the externally imposed standards which marginalized experience in the first place. To lose is to fail. Halberstam uses the terms interchangeably, writing that "the goal is to lose" and that losing "is an art" (loc 117). My contention here, to which I will soon return, is that these terms imply full immersion of the "loser" with an external and impersonal objective, severing the possibility of a more exploratory play mode.

There are a few important points that resonate here and across both *Failures*, such as a preoccupation with a majoritarian interface that values certain trajectories over others (e.g. financial success, marital and procreative success, goal-oriented success), and the investigation of "negative" affect. The presence of differential subjects—after all, permutations of a "successful" subject serve as the center to both—serve as a common interest. In both instances, the critique or intervention is not on the side of structure or form of stimuli, but one's response to it. Like Halberstam, Juul addresses an affective relationship bound to a success/failure binary: "your game playing, personality, mood, and time investment will influence how you feel about failure." Here, he reasons that the experience of in-game failure can be situational. Likewise, both allude to failure not necessarily being the fault of the gamer (or loser), yet spend little time on this possibility. Such problems "give us plausible deniability of responsibility," yet the burden of "responsibility" in such cases remains uninvestigated. "Responsibility" remains something solely in the gamer's control and, when faced with a glitch, she is reminded that failure is good practice; "the uncertain meaning of game failure is a feature, not a bug." ¹⁷

The Art of Failure does, however, address the affective relationship between the avatar and the gamer, specifically from the lens of catharsis, an often-referenced but under-analyzed

¹⁶ Juul, ibid.

¹⁷ Juul, Kindle

element of videogame and play theory. Juul's work centers on what he calls "the paradox of failure," dissected it into three theses: first, "we generally avoid failure," second, "we experience failure when playing games," and finally, "we seek out games, although we will experience something that we normally avoid." With regard to prior game debates, Juul clearly invests in the "drama" of gameplay put forth by Murray, to explain gamer obsession with failure. He focuses on a specific quote from Aristotle's *Poetics*: "Tragedy, then, is mimesis of an action which is elevated, complete, and of magnitude; in language embellished by distinct forms in its sections; employing the mode of enactment, not narrative; and through pity and fear accomplishing the catharsis of such emotions." To this end, he interprets catharsis as a means to invoke and purge negative affect. He writes, "when we experience a humiliating defeat, we really are filled with emotions of humiliation and inadequacy. Games do not purge these emotions from us—they produce the emotions in the first place." Juul suggests that gamers enjoy failing because it improves upon the eventual experience of success "despite" the humiliation and inadequacy games induce.

When Juul equates the "failure" felt when falling off the edge in the floating capital of Rata Sum in *Guild Wars 2* with "elevated, complete" and theatrical forms of Greek tragedy, he is not alone.²¹ Ken Levine, the creator of *Bioshock Infinite* has stated that he specifically channeled theatrical tragedy ("*Hamlet* and *Oedipus*") to create the protagonist Booker DeWitt.²² Because of

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¹⁸ Juul, Jesper. *The Art of Failure: An Essay on the Pain of Playing Video Games*. Cambridge, Mass: The MIT Press, 2013. Kindle AZW file.

¹⁹ Juul, Ibid.

²⁰ Juul, Jesper. The Art of Failure: An Essay on the Pain of Playing Video Games. Cambridge, Mass: The MIT Press, 2013. Kindle AZW file.

²¹ "The big difference between the paradox of tragedy and the paradox of failure is therefore that whereas the philosophy of tragedy is mostly the province of philosophers, the philosophy of failure is taught to children at an early age. Perhaps: when playing games, we are all philosophers." (Kindle)

²² "Bioshock Infinite": A First-Person Shooter, A Tragic Play." *All Tech Considered*. NPR, 1 Apr. 2013. Podcast. And Levine, Ken, Chris Avellone, and David Gaider. "Plot vs Play: The Duality of Modern Game Design Panel - PAX East 2012." 2012.

his utilization of catharsis and identification with the character, Levine classifies his work as Aristotelian tragedy. *Bioshock Infinite* features a narrative that changes with choice, tactics, and strategy that builds a sense of proximity and "uniqueness" of experience. Booker is sent on a mission to save and retrieve Elizabeth: an unplayable character whose sole purpose is to be saved, support the male lead, nurse him back to health, supply him weapon ammo when low. (Here, the commonality between female archetypes and the disembodied representation of "woman" certainly resonates with classical theater, where women were not allowed to spectate, let alone portray themselves.) To first find Elizabeth, Booker must first orient himself to the new surroundings of the floating city of Columbia where red and white striped awnings, balloons, and stores with cheery window installations decorate the sunny cobblestone streets.

The most often referenced scene of the game, meant to make a stronger connection between Booker and the gamer, occurs at a raffle. Booker approaches an open-air theater in the middle of town and is given a free "ticket": a baseball numbered 77. "The prettiest white girl in town," named as such by the emcee, sashays the raffle numbers to center stage and, of course, Booker's number is pulled. As this registers, the curtains are opened and a platform with an interracial couple tied to stakes is wheeled upstage. Booker's reward is "first throw." The crowd cheers and jeers, and the gamer must decide where to throw the ball. The emcee taunts him when he hesitates: "are you taking your coffee *black* these days?" The not-so-secret alternatives to throwing the ball at the couple—aiming the baseball at the sideshow talker or not throwing the ball at all—result in the same effect. If he aimed the ball at the couple, he would be rewarded by a figurehead in the city, if he aimed the ball at the emcee, or did not participate at all, the couple would later reward him with special gear. The guaranteed reward suggests this controversial and memorable scenario was not (at least *solely*) intended to critique racism or highlight social

anxieties surrounding miscegenation. Rather, it betrays the ulterior motive to create a deeper connection between Booker and the gamer, referenced so often by Levine in interviews and game panels as his trademark.

It is worth investigating whether catharsis can even occur in videogames in the first place, let alone for minoritarian gamers. Catharsis, a term most commonly aligned with Aristotle, has, at various times, been understood as the purging of negative emotions, the purification of good positive emotions, or an internal reflection of what is intellectually understood. The role of mimesis is only partially elucidated in Juul's interpretation of catharsis. Mimesis, varyingly signifying forms of imitation and structured forms of behavior, serves as the foundation of catharsis. Yet catharsis, whether in the form of purgation, purification, or clarification, depends upon unidirectional and identificatory empathy. Likewise problematizing the push towards a unified gamer-avatar but coming from a perspective of videogame ethics, Miguel Sicart argues "for catharsis to work there must be a unified subject that plays the game and is affected by it, meaning that there is not a player-subject, and the values we play by are the exact values we live by." The unificiation and push towards a sense of "realistic" representations in gaming certainly holds relevance for feminist women of color.

As with the majority of videogame production, classical Greek theater, the origin of a theory of mimesis and, subsequently, catharsis, was an overwhelmingly male enterprise. Sue-Ellen Case argues that "mimesis is not possible" for feminist readers of the Greek theatrical canon, since all female characters were written, dressed by, played by, and viewed by exclusively male audiences. ²⁴ In fact, "the feminist reader might conclude that women need not relate to these roles or even attempt to identify with them. Moreover, the feminist historian might

²³ Ethics, 195.

²⁴ Case, Sue-Ellen. Feminism and Theatre. 1st ed. Routledge, 1988. Print. 15.

conclude that these roles contain no information about the experience of real women in the classical world." For catharsis to occur, Aristotle required the actual body of the performer ("employing the mode of enactment and narrative"), which becomes hazy in the subject/object obfuscation of videogame avatars. In a gaming context, if avatars fail to signify any lived experience (see chapter 1), very few would experience catharsis as a result from either the game mechanics or narrative. A theory of videogame catharsis—impossible in the more mechanistic and formal inquiries into gameplay—depends upon identification and alignment of goals, and ultimately reiterates the trap of a monolithic notion of the gamer.

Before moving into examples of embodied play, I wish to offer one final point on how identification can (re)create avenues of research. We can see a serious, but strategic, bias towards realism in game studies, where effort expended is shrouded by the context of capital and labor. Symptomatic of its origins as a "ludicrous" discipline, as Tom Boellstorff has noted, ²⁵ and its history as a scapegoat for white male teen violence (e.g. the Columbine massacre), cultural game theorists vehemently assert the positive potential of the medium. Even in-game failure can translate to real feelings of success. Alexander Galloway approaches this directly in *Gaming*. He writes that games, particularly video games (the primary focus of *Gaming*), is "realism in action." He explains the problem with the popular belief that violent games cause violence—termed the "Columbine theory"—is its unidirectionality. "Realism in gaming is about the extension of one's social life. The Columbine theory claims the reverse, that games can somehow exert 'realistic' effects back onto the gamer." Gaming is an extension, as it permits

²⁵ Boellstorff, Tom. "A Ludicrous Discipline? Ethnography and Game Studies." *Games and Culture* 1.1 (2006): 29–35. *gac.sagepub.com*. Web. 7 Aug. 2014.

²⁶ Galloway, Alexander R. *Gaming: Essays On Algorithmic Culture*. 1st ed. Univ Of Minnesota Press, 2006. Print. 78.

the gamer to act in a diegetic space. It is communicative and, often, social. Yet the emphasis on realism, catharsis, and what Galloway terms "fidelity of context," leaves little room for play.

I am necessarily within the camp that finds gaming "useful," though I maintain that structured activity is never contained or fully immersive. This is where identification can be of interest, if not of utmost importance, to a theory of play, and exactly where theater and gaming connect. A script may stay the same, but productions and audiences change; likewise, lived identifications shift and assemble accordingly based on environment. Yet when Galloway attempts to make the connection between theater (albeit flattened to "visual arts") and gaming, he ironically removes performance as the crucial link.

Realism in action brings us back to Aristotle and the *Poetics*, to be sure, but more particularly to Augusto Boal, for whom Aristotle was 'coercive,' and to Bertolt Brecht.

Whereas the visual arts compel viewers to engage in the act of looking, video games, like a whole variety of digital media, compel players to perform acts.²⁷

Presumably, Galloway cites these three for their work on live theater and performance. However, neither Artistotle, Brecht, nor Boal created realistic theatre. While Aristotle explicitly separated *Poetics* and performance from his other work on ethics, virtue, and so on (the oft-cited note on catharsis from *Poetics* is its only mention throughout his work), Boal—to whom, along with the Situationists, some attribute the origin of flash mobs, large groups of people performing public acts--and Brecht were, to varying degrees, more instigators of investigation. Certainly Brecht was not only anti-realistic, but declared himself to be anti-Aristotelian. In the preface to *Games* for Actors and Non-Actors, in which he expands upon his notion of the active "spect-actor," Boal

²⁷ Galloway, Alexander R. *Gaming: Essays On Algorithmic Culture*. 1st ed. Univ Of Minnesota Press, 2006. Print. 84.

defines theatre as "the art of looking at ourselves." Brecht is a particularly ironic reference, as Galloway attempts to distinguish gaming from the wider visual arts: "realism in gaming is fundamentally a process of revisiting the material substrate of the medium and establishing correspondences with specific activities existent in the social reality of the gamer." The tie to performance is made and immediately severed.

Ultimately, one issue here is of proximity and locating oneself as necessarily exterior to the interface. Therefore, we have returned to notions of margin and failure, success and center. For a feminist or queered form of gaming, and certainly for a sense of play—one with a structure designed to adapt, shift, and contain multiplicities—there must be a sense of creative and playful possibilities or alternatives. Indeed in Elin Diamond's *Unmaking Mimesis*, she writes that "[Brecht] needed (and feminists need) to retain, theoretically and politically, the notion of agency."²⁸ In the following section, I describe games, both embodied and not, that directly call to the gamer to place themselves in the situation, putting them in the center of player and person. My aim is to contrast the heavy-handed bias towards diegetic "realism" and systemic world-building, with structures that benefit from the individuality of the interactor.

Play?

Consistent with the rising synonymy of ludology with videogame theory, few have written about play, and fewer yet have explored play from an embodied subject position. Live action role play provides an analog parallel to games and a site to consider the relationships between the gamer and the avatar, the player and the character. Live action role play (LARP) shares similar qualities as role-playing videogames and those in which the gamer is in some way characterized: there is a structure within which players have variable amounts of free will, with

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emphasis on character development. Indulging in the heterotopic and identificatory differences among production, representation, and gamer, can be playful, particularly while retaining a critical and embodied perspective. I will outline three LARPs in relation to the inhabitation of both diegetic and material bodies and identification as a form of exploratory and critical play:

Mellan himmel och hav (Between Heaven and Sea, 2003), Just a Little Lovin' (2011), and LVL5 (2010). By making player subjectivity and experience core interactive components, these performances illuminated political and self-aware performance as a form of play. Similar playful engagement of materiality and experience appear again in the Stanley Parable and Papers, Please, videogames I will return to at the end of this chapter. To varying degrees, these sites render varied responses and experiences their own objective, highlight the heterotopic nature of play (as opposed to immersive aspects), and explicitly approach the interactor as a member in a co-performed ecology, instead of the narrative center.

Live action role play is applied in several diverse environments, usually as a blend of training practice, historical reenactment, fantastical play, and social experimentation. Ephemerality is fundamental to each instance. There are rarely, if any, isolated events or "single-player" moments in a live action play; instead, the LARPs I explore here range from fifteen people (LVL5) to 350, in the Copenhagen-based System Danmarc (2005). Instead of being fully scripted, live action role play is often sketched out, with general motivations but no Stanislavskian "superobjectives" to dominate characterization. Even in the case of historical reenactment, where tactical maneuvering become their own kind of script, the created relationships and lived experiences of the events create different means of engagement with the past. In this way, there are no firm characters to "immerse" onself into, or even a stable system (as in videogames), but an opportunity to perform under conditional guidelines. The time limit pushes players to try new

tactics within the game's rules and affordances. This attribute is most acutely witnessed in historical reenactments, which, although they do not necessarily permit new futures, revisit the materiality of historical events to understand them through lived experience as opposed to traditional forms of learning.

It may be useful to outline the similarities and differences between LARPing and videogaming. First, there are rarely universal objectives to meet, a currency to accumulate, or state of player failure in LARPs. Competition then, emerges only as two or more playerparticipants want to play competitively. Instead, the emphasis is on co-created experience within the boundaries of play. In this sense, there are rules in live action play, particularly with situation protocol, as with videogames (these rules separate co-created LARP from The Sims Online or Second Life). Unlike in videogames, these are co-determined by the player participants, with motivations behind each rule or procedure. The last primary difference I will outline here is that the play is primarily the social (re)creation of a social identity in community. The LARPwright or designer still holds primary control over the world building—laying out rules or context however, once the play begins, the players can choose to do as they please within those guidelines. The goal is, in some ways, to see how the rules can be bent. The player has agency, at all times, which includes retreating from the scene to a designated safe zone, sometimes called "the grand stand." Because most of these LARPs are durational, lasting two or more days, this allows players to step outside their character and survey the other action.

Serious Games

Identificatory play can occur at the meeting of actor and acted, and operate under two or more simultaneous semiotic structures. In this sense, serious games are designed to provoke

responses informed by the gamer's lived experience and knowledge sets. LARPers are instructed to "play as if it were real," with each word being key to creating a balanced perspective. The "as if" grants a critical boundary between play and "reality" often obfuscated in discussions of immersion. In this sense, play can be understood as both action and goal unto itself, as Jane McGonigal implies when she writes that pervasive games, such as LARPs, are "the dream of the virtual to be real [...] the dream of the players for the real to be virtual."²⁹ However, my present focus is not on "serious games," wherein gamers are provided fictional context for real world problems, "unsolved crimes, the prevention of terrorism and political graft," such as McGonigal's *Evoke*, wherein gamers vied for the best real world solution to ending hunger in Africa. 30 Evoke is part of a larger history of serious games, which employ live action play for training and educational purposes. Serious games are loosely defined as a category of games used to argue a point or improve a specific skill and, in particular, to "bleed," or transfer, into "everyday" life. In other contexts, serious games re-vision structures in "everyday" life and range from the literal (tactical, non-traditional, movement through urban space), to the more complex or abstract (McDonald's framed within discourse on transnational capitalism), to brainstorming new forms of activism. My interest lies primarily in the simultaneous occupation of realms, not the gamefied version of one or the other; however, it is nonetheless relevant to investigate the domains of serious games precisely because of their capacity to "bleed."

"Serious" games, as a category, are tied to military strategy and tactics. War games, such as chess, provide a clean metaphor for strategy and domination; Buckminster Fuller and Guy Debord, both enthralled and appalled by militarization and globalization, constructed their own

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²⁹ 'This Is Not a Game': Immersive Aesthetics & Collective Play. Digital Arts & Culture 2003 Conference Procedings. http://avantgame.com/McGonigal%20DAC%2003%20'This%20is%20not%20a%20game'.pdf ³⁰ Ibid.

versions of war (Debord's *War Game*) and peace (Fuller's *World Game*) games. Beyond this, the military entertainment complex (shorthand for the mutually beneficial relationship between a military financier and film, television, and games production) has become a lasting phenomenon; events such as army sponsored *Halo* tournaments and the Department of Defense's hacking game, in which hackers try to infiltrate actual U.S. infrastructure in order to reveal weaknesses, are such examples. The Department of Defense continues to work with training "cybercombatants" through game devices such as the Oculus Rift—a headset marking the remergence of virtual reality, often coupled with various sensorial stimulation (such as a wind machine or treadmill).³¹ Virtual Heroes is one company that specializes in serious games, including *America's Army*, conceived by Colonel Casey Wardynski at the U.S. Army's Office of Economic and Manpower Analysis at the United States Military Academy. Wardynski's vision was to use "computer game technology to provide the public a virtual solder experience that was engaging, informative, and entertaining." *America's Army* is reported to have spawned dozens of more specialized games, and has improved upon the government's present training devices."

In addition, the United States Army employs wide scale role play tactics in several training bases around the world. Fort Irwin, located halfway between Los Angeles and Las Vegas, is among the largest and was frequently the last stop before soldiers are deployed to the Middle East in the early 2000s. Here, the unforgiving and oppressive structure, the characterization and inflexible objectives of the gamer, is similar to a videogame. Trainees take on both the role of the "insurgents" and soldiers, while three hundred fifty Arabic-speaking Americans play "local" Sunnis and Shiites. While this qualifies as live action role playing, it

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³¹ Grubb, Jeffrey. "Oculus Rift Is the Latest Weapon in the Defense Department's Fight against Cyberattacks." *VentureBeat.* N.p., 23 May 2014. Web. 29 Aug. 2014.

³² "Serious Games | America's Army | Military Training | Virtual Heroes." Web. 19 Aug. 2014.

³³ "Game Branches Out into Real Combat Training." Web. 19. Aug 2014.

does not necessarily provide opportunity to experiment with social mechanics on the level of performance. In this sense, this type of gaming lacks the play element. For example, the soldiers cast as insurgents did not have the agency not to attack. While such rules are useful for training purposes, it is clear the gamer is dominated by the game structure in a way that places boundaries on the creative reimagining of identificatory relationships.

Yet live action role playing can be useful in thinking creatively about contemporary situations again, because of the play between and among identifications. *Caminata Nocturna*, for example, the primary source of income for El Alberto, Mexico, provides a border crossing simulation to university students and middle-class tourists. While still a serious game, this *Caminata Nocturnal* inverts the training process of Fort Irwin, to produce a distancing, rather than realistic, effect to the diegetic events. The approximately 3 hour night-time excursion, which involves run-ins with immigration patrol, violent and abusive stops by "gangs," and the "murder" of play confederates is designed to discourage border crossing. The evening ends with a candle vigil for those who died attempting to cross the border, a collective singing of the Mexican national anthem, and the plea to improve present conditions in Mexico. *Caminata* has an objective, similar to *Evoke* or the Fort Irwin training; the organizers challenge residents to create positive changes in their communities. The participants are cast as a version of themselves in flight and, therefore, resist external classification like a first-world savior (*Evoke*) or soldier.

Political LARP

Building opportunities for intersubjective play—that is, between the player's experience and that built for her character by her interactions with others—are a core goal for LARPs. This is markedly different from the perceived relationship between the gamer and her avatar, wherein

the gamer "becomes" the avatar. In the case of *Between Heaven and Sea*, participants attended three mandatory weekend-long workshops to create a sense of character and context. Certain elements had already been designed by Emma Wieslander, such as the rule to avoid melodrama and uphold the diegetic dictum to be present and content: "No Aristotle, no cry." The performance itself was not open to any audience besides the seventy-some participants, who all performed simultaneously on a black box stage in the Swedish National Theater. In this small theatrical space, participants decorated their temporary homes, created new routines and rituals, and played with creating new modes of engaging one another. The core story was the newly formed marriage of four individuals, all leaving the "childhood stage."

The gamespace was a biosphere in a planet similar to Earth, where the people had several forms of advanced technology at their disposal, but none knew how it operated; all technology had to be re-purposed. Governance was primarily theocratic, wherein each family member had designated social and cultural roles to perform according to a hierarchal society. There were two genders: "morning" and "night." People of any sex could be either gender; these categories were held no real relation to "woman" or "man." Morning people wore warm colors, predominantly orange, while "night" people wore cooler, blue tones. Beyond being active in the morning, Morning people held power over the private sphere and were the sensual subjects; Evening people held power over the public sphere through a linguistic governance (they controlled language), but were sensual objects. "Sensuality" was key, since inter-character desire was its own goal; orgasm was purely used for reproductive purposes. This did not entail sex being omitted, rather, sex was rampant; it was initiated by long eye contact and, after both (or all) agreed, would be enacted upon through stroking the arm: the *ars armandi* method. Their four-person marriages in "practice," were neither romantic nor necessarily binding among the

foursome; marriage was still a kind of contract, which ultimately presented the pervasive nature of their oppressive theocratic law, rather than policed sensuality.

Two social groups could move outside the vaguely theocratic structure: the "Sunnivas," and the dead. The Sunnivas were a blend of children, psychiatrists, and clergy, who were a source of play and empathy. Unlike the gender roles, these did function similar to their out-of-game counterparts. The death state did not result in the character leaving the stage; rather, they took on a role similar to directors. The deceased could continue to participate, though the "living" could not communicate directly with them. Their role was to oversee daily activity and intervene if they sensed things were taking a poor turn. The LARP had no ending, "no death, no victory, no Aristotelian catharsis," as Tova Gerge writes, rather, one result was long-term discourse on whether political isolationism (segregation) or political confrontation (protest) are better tactics for change. This was a surprise to Wieslander, who had imagined the project to create questions around gender and sexuality. The participants' responses, however, mark their agency and capacity to interpret and derive meaningful experiences from their time in game.

Between Heaven and Sea not only sparked discourse amongst participants with regard to oppressive acculturation and political action, but it catalyzed a new form of live action play: the political LARP. Another such in this category was Just A Little Lovin', which asked participants to perform the LGBT community in 1980s New York. There were three days of performance and an average of 60 participants each time the LARP was produced (2011, 2012, 2013). Each day represented a separate year during the timeframe they were working. While less fantastical, and more oriented towards historical reenactment, the LARP was an exploration in relationality. This LARP intentionally embedded issues of sexuality and gender into play structures with the intention of clarifying the boundaries between character and player. "A LARP like Just a Little

Lovin' does not only show how strong the heterosexual LARP norm is by being an exception, it also forces those who don't fit into the category of 'male homosexual' in everyday life to do what any gender wildcard has always been forced to do in mainstream scenarios: work to pass'' (44). The LARP incorporated mechanics of chance: after each day, there was a lottery to see who would be infected with HIV (not all cases were sexually transmitted) and, of those, a second lottery to see whose HIV would develop into AIDS. That person would "die," and the community's loss would be performed the following day (or four year time span).

There was mixed response from the very active and prolific LARPing community. Critics suggested that "playing" an AIDS game was unethical, that the lottery aspect and the threeday/twelve-years timeline glossed over too many important parts to fully actualize the lives of the (fictional) people the players created. Further, the setting did not evoke a Manhattan-esque spatiality at all, nor was it in a "neutral" space like Mellan's black box theater. The rural European farms and the sexualized theme set conditions for the game to get too far into the category of sexual melodrama. These points are understandable, particularly from a perspective dedicated to the immersive, "becoming," aspects of playing a character. Last, as Mary Flanagan has noted, these LARPs are often obscure, made by and for a niche demographic of people who can play for days at a time. It is, essentially, a hobby for the privileged. Indeed, this latter point is taken; though gaming at large, with necessary accessories, boards, cards, software, hardware, and time, cannot be excluded from this critique either. Regardless of its other qualities, Just a Little Lovin' provided one site of conscious investigation of gender performance through play. Those who participated in the LARP documented the feelings of empathy and kinship, desire, and fear of contagion, long after the play ended.

Self-Actualizing Characters

LVL 5, was a project conceived by media and performance artist Brody Condon, who was supported by a diverse creative team: Danish LARPwright Bjarke Pedersen, and Swedish professor of media and play scholar Tobias Wrigstaad; performance and installation artist Liz Glynn; and myself. It took place twice in the United States in 2010, once at the Hammer Museum in Los Angeles, California, and again at the San Jose Zero1 bienniale. Perhaps more than any other discussed so far, this particular LARP explicitly facilitates inter-acting between the player and the game structure. It also directly approaches the idea of in-game failure and play, touching upon the "humiliation" Jesper Juul noted that in-game failure can induce. LVL5 provides another example of identificatory play with a game structure that addressed the player both as herself and as the character she created.

There were about 15 participants in each session who were always policed by one of the collaborators (Condon, Pedersen, Wrigstaad, Glynn, and myself). LVL5 was a LARP that incorporated Large Group Awareness Training seminar tactics, such as est, to "self-actualize" the personae brought to the LARP by the player participants. The emphasis on "brought" supports the understanding that both the character and the player were present at the same time, existing simultaneously within one body, but open to multiple and sometimes contradictory experiences. "Who" they were was entirely up to each individual player. Participants could go home at night, but were explicitly told to stay "in-character" for the full weekend, no matter how "close to home" the persona was to the player (http://lvl5.org/character/). Like Mellan och himmel hav and Just a Little Lovin', these personae were developed during a series of workshops run by Pedersen and Wrigstaad prior to the LARP itself. The persona could be seen as a mask or freeing split from "home," a time during which they could be or become anything, construct an entire

personal history as they choose, while the participant could "control" how affected they became through or by the training. This self-projection, a faulty one that ultimately traces back to the player-participant's personal history, is a core element of LARP that Wrigstaad has posited: specifically, that all LARP is self-projection.

To describe *LVL5* and the approaches used with (and against) participants, a short history of the practices used may prove both useful in the discussion of "actualizing" a fictional character. During the 1960s, John Rosenthal moved around the United States selling cars, writing for magazines, later adopting the name Erhard Werner (a mix of names culled from the economist Ludwig Erhard and the philosopher physicist Werner Heisenberg), in order to enter the space of self or "become self." He understood this to mean being completely present in the moment and having an active control over his life. With a foundation of Zen Buddhism, a collection of Dale Carnegie's books, and theosophist-inclined empowerment guides (from which he gleaned mind techniques such as self-control and self-projection, a kind of visualization), he began a series of seminars across the country called Erhard seminar training or "est" (always in lowercase) to teach communication and self-empowerment to others. Hundreds of thousands of participated Erhard's seminar training, which promised to help them achieve self-hood, or to actualize a higher level of awareness. To do this, the seminar included controversial methods such as physical force, name-calling and the public dismissal of trauma.³⁴

During the 1970s, the process quickly lost the theosophic elements, and gained corporate self- and team-building exercises in the form of large group awareness training (LGAT) seminars. Werner stopped facilitating est when he sold his rights to Landmark training in 1984. Under the leadership of Landmark, the practice has come under close scrutiny for its cult-like

³⁴ "Get over it", "stop playing victim", "you suffer from your own weakness" were such techniques.

features, including intense secrecy and members who are too afraid to speak publicly about their belief system. Indeed, during the development and call-for-participants process, several est and Landmark graduates, fearing a shameful depiction of their belief system, called, stopped by, or followed participants as they went to lunch (in character). This "real-life" interaction aided the "real" aspects of the LVL5 in at least two ways: first, it planted an exterior interest in the makebelieve seminar series; and second, it heightened the stakes of the performance for the participants by adding secrecy and danger of "outside spies."

This unaffiliated surveillance was baited and, perhaps, exacerbated by Condon's open writing on the LARP's connection to Landmark and a constant live stream of the event. Players as characters were filmed throughout the process, and shown outside the room or in an adjacent theater (at the Hammer Museum, this was the Billy Wilder theater). This additional layer of surveillance heightened the palimpsestal sense of reality; in this sense, the LARP was both realistic and explicitly framed as mediated. Later in the LARP, two players—Ada and Tammy harassed by Landmark members outside the gamespace, demonstrated concern about the constant media presence. Explicitly against the rules, they went into the Billy Wilder theater and staged a small rebellion. Together, they began screaming about conspiracies and brainwashing between banks of seats until they were pulled away by LVL5 volunteers. Meanwhile, the other sixteen or so participants continued to process their emotions on screen. Here, the trainees explicitly called to the heterotopic nature of gamespace and the active interpretive consumption of narrative by confronting the museum-goers. The messiness on-screen immediately became the messiness standing next to them, creating a sense of multiple realities: the action was both present but not real, real but also acted. The player address erased the imagined passivity of the cinema-goers, rendering what might otherwise be passive art to one that was interactive.

Further, the subjectivities of the player and character met with the exterior environment and, yet, did not directly translate to the screen process. This confrontation was one example of side events not being projected or shown on screen; others were side conversations with the supervisors or volunteers, the underlying fear of brainwashing, and other manifestations of skepticism of the seminar. Breaking the imaginary, this moment kept both the player and spectator independent from the identifications on screen and in process, and made both aware of their active co-participation of the performance. In this theatrical break, the players demonstrated how media reception is always active because of ongoing semiotic revision and contextualization.

Throughout the process, and in homage to its est inspiration, the game structure was very heavy handed. During the course of the weekend, personal history became muddled between fiction, fantasy, nostalgia and trauma. The refusal of trauma was perceived as a tactic of self-loathing or denial. Exercises forced personal history to the forefront. One such exercise had personae partner with someone else, who would pose as a parent figure. The child would then confront the parent for a specific past event. The player-persona-parent would then repeat "I am your mother" or "I am your father," no matter what was stated. Conversations were extremely one-sided, which led to a heightened sense of frustration for the persona-as-child. If the parent figure attempted to console the other persona, staff would correct the behavior by reminding the participant that empathy was not "the point" of the exercise. Rather, by the character role-playing as herself, she can release pent up emotions holding her back, making her "weak" and "stupid." Here, diegetic failure might be the individual overcoming "trauma" on their own time; success, on the other hand, would be to overcome trauma within the arbitrary temporal framework of the game. Personae were required to have parent trauma; if they stopped participating, or felt they

had worked through the issue successfully, they were required to "stop kidding" themselves and work through it again.

All exercises were closely monitored by the volunteers, the seminar leaders, and the supervisors. There were also two seminar leaders, Nikki and Steve, three supervisors, Kevin, Henry and Bob (Condon, Pedersen and Wrigstaad), and two volunteers (diegetically, those who have successfully completed the training) played by Glynn and myself. This hierarchy of power, with player-participants at the bottom, was consistently reinforced throughout. Pedersen, a large man who stands over six feet tall, would frequently yell, stare menacingly at the personae, and use his giant frame to intimidate unruly participants. He did not let participants use the restroom (after all, participants were there to learn self-control), would force personae to go through the exercise, and would, at times, use physical force to help the persona reach their goal of becoming "more aware." Physical tactics were used, for example, when one openly homophobic and heterosexist persona started verbally attacking the three openly lesbian and gay characters. This issue was "processed," which involved each of the other participants taking turns in shoving the homophobic character to the ground and verbally abusing him until he stood back up. This activity ended only when the homophobic persona had been pushed by all present participants. He later left the LARP.

A collaborative experience, *LVL5* was several things at once. *LVL5* reveals the self-actualization as a stock cultural-commodity marked by "emotional health" and "wellbeing" which, in turn, makes for a more productive employee. At the same time, *LVL5* was a game: it had explicit rules, a system for enforcing the rules (in videogames, this is sometimes the police taking the character in or restarting from a checkpoint). It did not inherently contain playfulness—indeed, some moments seemed borderline dangerous—but created a container to

permit exploration. Though these Pedersen and Wrigstaad were employed by Condon to create the game mechanics, they had never worked together before and would likely never work together again. Though both have extensive experience creating LARPs, their philosophies on the form are diametrically opposed; Pedersen believes in the flowing affective state of the character, inhabiting, exploring, and playing. Wrigstaad, on the other hand, founded Jeepform, a style of LARP that is more cinematic in nature, full of stops and starts, non-chronological time (flashbacks). These philosophies emerged in the mechanics: Pedersen's Henry was dominant and intimidating, while Wrigstaad was the advocate for the "grandstand," which permitted players to step back and observe the process.

The grandstand provided a useful break from the intensity and duration of the process. Even this liminal space out of game and yet not quite in the "real world," became contested territory. Though players were instructed not to acknowledge the grandstand, more increasingly utilized the space, watching their peers as they processed their contrived emotions and experiences. During the second day of the process, one character named Mz La turned the grandstand into a makeshift bedroom. She brought her own blow-up mattress, a lamp, an umbrella, and a pack of cards, among other items. The play was both the game and finding spaces within it to play with and author their character's ideas, concepts, and tropes; a mailing list and Facebook group continued to thrive long after the LARP ended. Through its interface with the player's body, this particular LARP considered the construction of subjectivity, social relationality and community that emerges despite, or perhaps because of, performed identifications.

The Stanley Parable

The above examples explore methods of live action role play that engage both the person and the character, allowing for multiple perspectives, and acknowledging simultaneous semiotic systems (in game and not). While videogames have relatively fewer options to turn to for examples of this, given immersion with the avatar and game system is a standard goal, a couple stand out for doing this. Super Comlumbine Massacre RPG, for example, casts the gamer as the two "protagonists," Dylan Klebold (Vodka) and Eric Harris (Reb), as they plan and execute their plan to kill as many students and teachers as possible. As they kill students, classified by type ("jock," "nerdy girl," "popular girl"), they gain "experience" points, as in any other role-playing videogame. Failure is possible through being discovered by teachers before planting all the cafeteria bombs. The gamer can "kill" as many students as they please before they kill themselves. Once they do, a short picture montage plays across the screen, first depicting the students as they fled and gathered after the attack, and second, honoring the memory of each killer, showing pictures of them as smiling in their senior year schoolbook photos. Once over, the gamer is launched into a world reminiscent of *Doom*, the game most often blamed for the high school attack. Predictably, the game was met with both accolades and disgust. What this game successfully did was prove the distance between an in-game semiotic system and that of the gamer's; in-game failure is not the "responsibility" of the gamer. Critical moments in-game were indeed critical for the gamer but for different reasons, and each moment caused discomfort, unease, and questioning of the system itself. Similarly, *The Stanley Parable* is a play of and on avatar identification. Uniformity and control are two important themes in this particular work, which casts each gamer as Stanley, employee number 427, who pushes buttons on his keyboard every day. One day, the monitor stops telling Stanley which keys to press. Confused, he stands up—here, the gamer takes over—and begins to investigate. Everyone has gone missing. The

entire game is narrated by a British male voice, who tells Stanley what to do. When faced with two doors, Stanley is directed to take the door on the left; if he goes right, the narrator explains that Stanley wanted to take the long way, to visit the employee lounge. The gamer has limited free will, and is reminded of such at every possible juncture. Playing on first person shooter tropes, Stanley can indeed explore, open some doors (but not others). At the same time, going against the instructions of the narrator (standing in for the game system and mechanics) causes him to berate the gamer. If the gamer, for example, decides to enter and occupy a broom closet for an extended period of time—there is nothing to do in the broom closet besides listen to the narration—the narrator tells Stanley that he is "fat" and "stupid," and probably only got his job because of work connections. If the gamer remains in the room, the narrator decides that the gamer has died on her keyboard, and begins shouting for a second gamer to remove the corpse and resume play.

The Stanley Parable has no objective and no points. The success of the game is in its capacity to address both the gamer and the character. As the character "disobeys" the narrator, the gamer is increasingly and explicitly addressed, such as in the broom closet, or when trapped in a nuclear weapons facility (Stanley stumbles upon the fact that he has been working in an office building constructing the end of the world). In the latter case, Stanley is entirely ineffective, as the narrator mockingly states, he can push as many buttons as he likes: he has no agency here and will die. A giant timer is projected on the wall. At some point, the narrator arbitrarily gives thirty more seconds, and tells Stanley to cherish them. Once the clock burns to zero, Stanley begins the game again from his small, windowless, undecorated, office.

Conclusion I have suggested that disidentificatory play—that is, play that occurs both within

and outside the scope of narrative—can produce critical gaming experiences. By keeping the goals of the character separate from the gamer, and adding nuance to "immersion" as a goal, gamers can come to both recognize tropes (as in *The Stanley Parable*), question the valuation system of the game (Super Columbine Massacre RPG), and begin to think critically about their position within other systems. In particular, I suggest that minoritarian gamers can engage the mainstream games from a critical perspective to isolate dominant cultural tropes as they perform in media. Because the games industry is dominated by a very narrow demographic, with members openly explaining why straight white men remain the target audience (despite, for example, industry released statistics that 36% of gamers are women over the age of 18, twice the number of boys under the age of 18, which stands at 17% of the U.S. gaming population), many mainstream games provide a very intimate cultural snapshot.³⁵ It is crucial that minorities have varied responses to this new medium, including not buying them, or playing only independently released games that feature equal and fair representation. Another is to participate in production, by releasing one's own games. Anna Anthropy, the transsexual game designer who quickly became queer gayme canon with the release of games such as Dys4ia, Lesbian Spider-Queens of Mars, and Queers in Love at the End of the World, provides one such model. Another option is to enter the male-dominated sphere of game making, with the full awareness of the unabashed sexism in the industry.³⁶

However, in the context of rampant gamification—business, social, and even academic gaming (McKenzie Wark describes the gamification of academia in *Gamer Theory*)—and the increased economic power of the games industry, it is important to explore other options. Among

³⁵ See David Gaider, "Sex in Videogames" and http://www.theesa.com/facts/gameplayer.asp

³⁶ See, for example, the #1reasonwhy twitter hashtag, where female employees discuss the daily sexism they encounter, and why more women are needed in the games industry.

several other possible responses, I suggest we game nonetheless to obtain the vocabulary necessary to discuss the depth and direction of contemporary prejudice, as well as some of the steps towards changing the landscape of representation.

Through critical gameplay and live action role play strategies, we can begin to imagine *more* realism, not some packaged form of it, where race riots do not happen (*Sim City, Tropico, Civilization*) and the commodification of female bodies is its own objective (*Grand Theft Auto, Saints Row*). Through the conceptualization of a diverse set of *gamers* (not just avatars), we can begin to isolate the places where diegesis and social politics collide and collude. Through play, among and beyond tropes, we can turn cultural weapons into tools to see the seams of procedural representation in games, and begin to imagine new scenarios with different endings.

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