Interactivity in Desire

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Figure 1: Paul Sermon, *Telematic Dreaming*, 1992. View of installation with projection and participant.

Paul Sermon's installation, *Telematic Dreaming*, was exhibited in 1992 as an interaction between two locations: Kajaani Art Gallery and the Helsinki Telegalleria, Finland. The installation uses a bed to stage a teleconferencing experience whereby participants interact with another person via projection and television monitor (see Figure 1). The installation utilizes the psychological intimacy of the bedroom environment and the disjointed sensory experience of *touching* a person in their projected image. Sermon (n.d.) explains, "The telepresent image functions like a mirror that reflects one person within another person's reflection" (para. 4). Sermon's *Telematic Dreaming* is an early example of networked media in artworks that ruminate on interactivity, virtual reality, and our network ontology[i]. *Telematic Dreaming*

demonstrates the complicated interaction between bodies, both simulated and flesh, and screens both as projected televisual events and as psychic tears that jolt viewers into emotional provocations. Looking at the installation now, Sermon's *Telematic Dreaming* can be a springboard for understanding the array of networked social platforms that mutually gaze upon us through the screens of social media, video conferencing and cloud sharing software. It allows us to perceive a distance in space and time from Sermon's innovative use of the digital telephone network in the early 1990s and our own contemporary negotiations of ecologies of mobile computing, exponentially increased computing power, and ubiquity of everyday digital audiovisual creators. However dated this visage of the network appears, *Telematic Dreaming* remains a useful reminder of the fraught intimacies and delicate traumas that bind these networked experiences to us as interactivity *in* desire.

Interactivity *in* desire is an attempt to develop theoretical discussion to an important concept of digital network technology, that of interactivity, through the Lacanian concept of desire. Over the past two decades there have been growing contributions from researchers using Lacanian psychoanalysis to literature in art education (Atkinson, 1999, 2002; Hetrick, 2010; jagodzinski, 2004, 2010; Tavin, 2008, 2010; Thomas, 2010, 2012; Walker, 2009, 2010). Utilizing Lacanian psychoanalysis is well established in film studies and literary criticism, especially through concepts such as the gaze, and these early progenitors of psychoanalytic critique have been utilized in visual culture studies, art criticism, and new media studies. It is my thesis that by (re)reading theories of interactivity coming from communication and media studies through the lens (or stain) of Lacanian desire there can be a deeper understanding of art education in a network ontology. In this article I will first outline Lacan's concept of desire, present theories of interactivity (*in* desire) that come from televisual, hypertextual, and gaming media, and provide three provocations derived from these (re)readings relevant to pedagogies of art education within a network ontology.

Lacan and the residue of desire

Desire has cultural cache in the parlance of consumer culture, and it is important to articulate that backdrop to a unique formation central to Lacan and psychoanalysis.

Lacanian desire is distinct from sexual desire or consumer desire, in the form of material accumulation in that desire manifests as a psychic space of lack that feeds upon itself in a sort of endless deferral. Needs for sexual gratification and demands for material objects may be satisfied, but ultimately it is our repetitive insistence for unconditional love, originally sought through the mother, and its ultimate frustration through alienation that creates desire (Evans, 1996). Desire is the surplus produced by the articulation of lack. This articulation is a singular force in which there is only one object of desire: that of the *objet a*. jagodzinski (2004) explains that the *objet a*

> is not the object *per se*, which is the fulfillment of fantasy, but the spectral
> object *cause* of desire—the *objet a* which is something 'in' the object that is
> 'more than itself'…The *objet a* provides the fantasy of an imaginary fullness, as
> if we were subjects who … don't lack, and who seem in full control of our
> egos. (p. 39)

Desire is not a relation to an object, but rather a relation to a lack. Desire is bound in the Other in various complimentary ways, and in order to begin to untangle the cosmology of the Other and desire, further clarification of the term "Other" is needed.

In psychoanalysis there is a bifurcation of the Other that is indicated through capitalization: other and Other. The other, in lower case, indicates the reflection of the subject's ego in the Imaginary register and experienced as a young child looks into a mirror: the specular image is both self and other. The big Other, denoted by capitalization, is the radical sense of all otherness and the notion of the big Other has been used in many discourses of philosophy and cultural theory. For Sartre (1943/1956), it is the Other that gazes upon him in the park as he states in reference "I am for myself only as I am pure reference to the Other" (p. 260). For hooks (1992), the Other is inscribed with a racial territoriality signified within embodied reiterations in skin color, culture, and media representations. Mitchell (2005) uses the Other in contrast to self to designate the "many candidates for the 'someone else' who believes that images are alive and want things: primitives, children, the masses, the illiterate, the uncritical, the illogical, the 'Other'" (p. 7). In these multiple discursive conceptions, the Other is both of the subject and co-constitutive of the subject: we formulate notions of the Other that simultaneously formulate notions of ourselves. As Žižek (2006) states "the big Other…has no existence in itself, it exists only as a point

of reference animated by the chaotic activity and interaction of numerous individuals" (p. 353). The Other exists in signification, outside of the consciousness of the subject, and located in the Symbolic register where it forms in language. In psychoanalysis, it is the Mother who is the first big Other who translates the intelligible cries of the desiring infant into the language codes of the Symbolic register. It is also the Mother that introduces the relationship to a lack that is the big Other: mother/child unity is never total and love is always deficient within language. There is always a signifier absent from the signifiers constituted by the Other, and therefore the Other inscribes in the subject a lack, arising from a failure of signifiers and the alienation from the body that is created by language. It is this lack that binds the Other to desire.

Lacan's (1978) maxim "Man's desire is the desire of the Other" (p. 235) begins to articulate in the subject nuanced relations of desire and the Other. First, desire involves a recognition from the Other, and secondly, that desire is an insistence on what the Other desires or a relation that places the Other's lack as our own. Desire is a need that goes beyond demand. As Lacan (1958) states in Seminar V:

> Why is there need for a beyond of the demand? There is need for a beyond of the demand in so far as I told you, that demand by the necessities of its articulation, deflects, changes, transposes need. There is therefore the possibility of a residue. (p. 279)

In other words, the subject expresses need in the form of a demand, but in the very process of making that demand something of the need is lost or leftover from the need. It is this residue that is desire. Desire is therefore a transformed or mangled need that uses demand as a vehicle for expression within, and that vehicle is sought in the Other, in their lack, in language, and in the *objet a* forever escaping fulfillment.

Desire is itself a deferral of satisfaction and transference of desire into desire: a seamless sequence of resistance to meaning trapped in the signifier that fulfills desiring endlessly as itself not as a need. Lacan called this metonymy: endless deferral of that which cannot be signified in the metonymic movement that is denied in the chain of signifiers. Lacan (1978) states:

> In this interval intersecting the signifiers, which forms part of the very structure of the signifier, is the locus of what…I have called metonymy. It is there that what we call desire crawls, slips, escapes, like the ferret. (p. 214)

Importantly, desire is not like the slippage of metonymic word play, but is metonymy. Desire has no one object, because it is the very nature of endless slippage from one object to another, and this slippage is the very slide of the signifier from the signified.

In the gaze of the *objet a*: Para-social interaction

Interactivity has been a buzzword for both the arts and media education, and early debates focused on the level of interaction and agency the viewer/gamer/student has within the media space (Shapiro, 1999; Bowers, 2000; Trend, 2001). Interaction as a mutual causal effect resulting from an action between two entities can be considered a quantitative knowledge, but interactivity takes on multiple facets that can be considered qualitative in nature. Etymologically, the adding of "-ity" suffix would suggest such a shift towards the qualities of the adjective, but there is also a range of designers, computer programmers, and media theorists that have sought clarity for purposes of research and theory (Bucy, 2004; Kiousis, 2002; Sohn, 2011).

Importantly, interactivity should not be understood as dependent on digital media. Communication theorists Horton and Wohl (1956) introduce the concept of para-social interaction as a way to characterize human interaction with mass media (at the time of their writing they were mainly referencing television). Para-social interaction is the illusion of social interaction between a presenter and a viewer. The illusion is the presenter in televisual interaction is broadcasting a unidirectional message that does not allow for dialogical interactivity, but does illicit a response from the audience as if in participation. Horton and Wohl call this a "simulacrum of conversational give and take" (as quoted in Jenson, 1999, p. 35). Central to para-social interaction is the understanding of interactivity within a necessarily unidirectional, nonreciprocal exchange. As Jenson (1999) states:

> The concept of interaction in media and communication studies is often used to refer to the actions of an audience or recipients in relation to media content. This may be the case *even though* no new media technology is being used which would open up the possibility for user input and two-way communication, but on the contrary, to refer to traditional one-way media. (p. 36)

In this sense, interactivity might appear to return to an internal process occurring

inside the mind of the viewer, but interactivity in desire illuminates another understanding that requires a return to the *objet a* and the screen in Lacanian discourse. Lacan used the diagram below to illustrate the image screen and the gaze in its relation to the *objet a* and the subject.
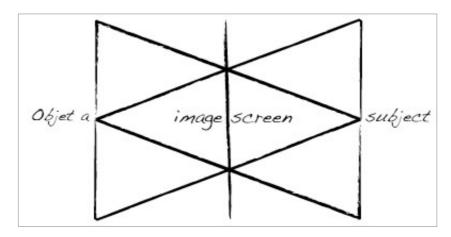

Figure 2: Lacan's (1978) diagram of the Scopic.

In Figure 2 we see the opposed horizontal triangles that suggest the vision field that is the geometry of the gaze. If we imagine ourselves on the right of the diagram, subjects enacting the gaze, looking onto the image screen we see that our gaze extends past the image. There is more beyond what we see; more than we can see to realize the full expression of the *objet a*. The key concept that the diagram illustrates for our understanding of para-social interaction in desire is that the *objet a* stares back at us, and therefore we are in the gaze of the *objet a*. This positions the *objet a* within the psychic register of the Real, unknowable and affective, but as a *transformative* object. As jagodzinski (2004) states:

> Exposure to the *objet a* that supports the fantasy of this perception via the Imaginary register is not, therefore, an unveiling or an unmasking of reality as it truly is, rather the "truth" of the fantasy—*objet a*—makes the shift into another kind of reality possible. We can never perceive former "reality" the same way again once the fantasmatic object of support is exposed, for this means that a *lack* has been exposed, a gaping void appears. (p. 41)

This "lack" leads to desire, and the slippery nature of the *objet a* means that it is always replaced through the metonymic slippage of desire. In this way para-social interactions are always already in desire because of the gaze of the *objet a*. We see the

gaze of the *objet a* when we cry at the same moment of a movie we have already seen, the Real piercing through in that moment to let our leaky eyes form tears as symptom of a lack or when we smile in preparation to laugh at a gimmick that gets played out every week on an overly-formulaic sitcom. These para-social interactions are interactivity in desire in an era of broadcast television, a centralized network structure, and provide an important genealogical backdrop to the rise of interactivity and distributed computer networks.

Someone else's mental structure: Hypertext, interpassivity, and the network
The proliferation of computer technologies has shepherded many technologies into the digital fold, and colonized those visual spaces under the hegemony of the interface. A news broadcast, with running banners on the bottom and sides, starts to look like a website which starts to look like a tablet laid out with app icons and so on and so on. What this confluence of technologies indicates is that interactivity is a complex multimodal negotiation of coding and decoding signifers that cannot be equated with interacting (clicking a link, touching the screen, etc.). As Lev Manovich (2001) states "The psychological processes of filling-in, hypothesis formation, recall, and identification, which are required for us to comprehend any text or image at all, are mistakenly identified with an objectively existing structure of interactive links" (p. 57). Hypertext is an externalization of language association (Lacan's chain of signifiers) and in effect spatializes signifiers onto a distributed matrix of associations contrived by the hypertext author. Manovich suggests that hyperlinking, an essential ontology of digital interaction, lacks the nuance of cognition as a performative act: reacting, hypothesizing, wonder, and randomness all seem to falter in the structured space of the network link. It is a technological attempt to trap the chain of signification and cure language of its indeterminacy.

Manovich (2001) goes on to say, "the fantasy of objectifying and augmenting consciousness, extending the powers of reason, goes hand in hand with the desire to see in technology a return to the primitive happy age of pre-language, pre-misunderstanding" (p. 59). So, here we have the technological apparatus itself as a sort of fantasy, a structure nonetheless of the Symbolic order, attempting to suture the barred subject ($) by a more total language, a more complete signification that gets at

the signified. Of course the utopianism of this "pre-misunderstanding" hyperlanguage is rather bald: the interactivity of hypertext in desire showcases its utter failure, because the chain of signifiers only continues to supply lack to the unending drive of desire. Hypertext in desire forefronts our desire as the desire of the Other, "to identify with someone else's mental structure" (Manovich, 2001, p. 61). We desire what the Other desires, but there is nuance between the singular structure of desire and structures of medium messaging (recall McLuhan's [1964/2006] the medium is the message). The hypertext document is a mangled expression of the Other's mental associations, and the interactivity in desire of this document spells out its failure to be realized. However, what of the object itself, that of the hyperlink: what is the *performing as Other* of this technological structure, as network, as algorithmic code? Here is an important distinction that makes hypertext both performative language and object: linking words to other words or media as simulacrum of the performative speech act and simultaneously an algorithmic object as:

hyperlink!

This capacity to be both a performative language act (signification) and object projects the object as big Other, but can an object desire? Pfaller (2003) and Žižek's (1997) concept of interpassivity as the obverse of interactivity engages this very concept:

Is, however, the other side of this interactivity not interpassivity? Is the necessary obverse of my interacting with the object instead of just passively following the show, not the situation in which the object itself takes from me, deprives me of, my own passive reaction of satisfaction (or mourning or laughter), so that it is the object itself which "enjoys the show" instead of me, relieving me of the superego duty to enjoy myself. (Žižek, 1997, p. 112)

This displacement of enjoyment, or as Žižek calls it a "primordial substitution," can also be a displacement of knowing and believing: the object as big Other takes on these tasks temporarily relieving the subject of owning the lack of the Other, but as we know the metonymic movement of desire moves along. Žižek (1997) states, "the opposition signifier/object overlaps with the opposition interactivity/interpassivity: signifier is interactive, it is active on my behalf, at my place, while object is interpassive, it suffers for me" (p. 116).

Transposing suffering onto the interpassive object reifies the *objet a* and the desiring subject, and constructs the subject over and over again. What interpassivity highlights is the nature of the big Other as object be it algorithm or media file and, even more radically, the network structure itself. So, for example, the very structure of a social media website like Facebook or Tinder can be a desiring Other, a transposing of enjoyment through constant side stepping of enjoyment: the network structure itself does social relation, friendship or envy or whatever, for the interpassive user.

Video game desiring: Kinaesthesia as symptom

The interpassive user highlights a passivity that is engendered, even though this passivity is itself a doing something, in the relations of the Other. However, does this relation persist even as the levels of interactivity erupt in ergodic spaces, such as video games? Video gaming requires a multifaceted form of engagement that can be best characterized as ergodic involvement, that is a "nontrivial effort" (Aarseth, 1997, p. 1). Calleja (2007) goes to great length to develop a "detailed map of the phenomenon of game involvement" that includes up to six frames of ergodic involvement, but for the purposes of interactivity in desire I focus on two: *affective* and *shared* involvement. Affective involvement is the player's "emotional arousal" which can manifest from aesthetic experiences in the game space to excitement in gameplay sequences (p. 244). In shared involvement, the gamer's "presence is made more compelling when other agents respond to the player, whether these agents are human- or AI-controlled" (p. 247). These types of game involvement depend entirely on the desiring subject; in what game space do they look for the Other to fulfill signification? Additionally, what *objet a* of the game in performance will suit their needs?

Ergodic involvement is important to video games to propel this presence, but presence is not only of the virtual body and does transfer to the flesh and blood offline body of the gamer. Darley (2000) discusses radical forms of interactivity manifest in what he calls *vicarious kinaesthesia.* This is the in-the-moment, real-time ability to effect change in the developing action on the screen through the learned manipulation of the controls. Darley (2000) states, "it is precisely the heightening of sensation, evinced through the necessity for skill with controls, and the resulting impression of kinaesthesia induced by illusory participation in acts of spectacular risk and speed that

lies at the heart of such games" (p. 157). Even as Darley fully acknowledges the closed loop of possible actions that expose its "pre-programmed character," the interactivity that he is highlighting is more about the heart palpitations of the game player than the videoscape that unfolds through the screen based upon the choices of the gamer. The closed loop of selections open to the player presents a limited problem-solving environment whereby strategies must conform to a set of actions and sequences that reap reward within the game environment, but the total of player interactivity has exploded with network connectivity. Current massively multiplayer online role-playing games (MMORPG), such as *World of Warcraft*, allow seemingly infinite possibilities for character interaction as multiplayer platforms host 6.8 million players worldwide (Futter, 2014). MMORPGs still provide a structural environment to a game where task accomplishment is rewarded and then followed by further tasks, but the difference is the ability to collaborate, chat, organize, or avoid millions of other avatars that represent Other flesh humans in their virtual bodies through the network.

To understand interactivity in desire, the notion of vicarious kinaesthesia can be understood as a symptom of the unconscious poking through, as desire's surplus is continually denied. The population of avatars serves as virtual puppets of the Other, both the mindless droids of single player games where the user encounters AI-controlled avatars and the population of avatars that are a field of subjects in desire. Each avatar is a virtual representation of the Other, and as such they represent the unconscious in the interactivity of video gaming. As Evans (1996) states "the unconscious is the effects of the SIGNIFIER on the subject, in that the signifier is what is repressed and what returns in the formations of the unconscious (symptoms, jokes, parapraxes, dreams, etc.)" (p. 218). Interactivity in desire exposes vicarious kinaesthesia as a symptom of the Symbolic register imposing the law of the signifier on the subject, cutting across the Real and binding it in desire. This might give us alarming pause in consideration of the death of gamers as the height of interactivity in desire as the flesh of the body returns in trauma.[ii] However, until the totality of the gaming experience, when its cultural and capital rewards overflow from the game space into real life, is understood within desire we can never begin to grasp video game interactivity in all of its complexity. Death by gaming is an extreme example, but sweaty palms, involuntary utterances, and physical movements are all common to

the engrossed gamer. As manifestations of interactivity we may see them as the force of play in the video game world, but as interactivity in desire they become markers of the body and its disaffection with the signifier.

Implications for critical visual culture pedagogies

Interactivity has many expressions in the literature of learning in the network ontology: participatory media literacy (Rheingold, 2009); connected learning (Ito et. al., 2013), connectivism (Bell, 2011; Downes, 2012), and engaging in a "global civil society" (Delacruz, 2009). The technology itself continues to transform questions of interactivity in the networked classroom through developments of more ubiquitous video conferencing, mobile technologies, and massive open online courses (MOOC). These developments present a vast array of the changing classroom and propel my imagination to consider what Sermon's *Telematic Dreaming* may look like if instead of a bedroom the spatial reference point becomes a classroom: teacher and students projected holographically through the classroom space crowded with discourses of knowledge, educators, participant-learners and the objects of schooling. With this in mind, the following is a set of prompts, or more precisely unresolved provocations, for art education in a network ontology through interactivity in desire:

> *Visual culture pedagogies in art education cannot overlook the dialectic of interactivity and interpassivity.*

The transposing of our belief, knowledge and enjoyment onto objects such as algorithmic codes and network structures through interpassivity creates a complexity to civic action and political engagement in the art classroom. Movements in art education to a visual culture pedagogy that make explicit connection to practices of critical pedagogy (Darts, 2004; Tavin, 2003) cannot overlook the deep connections between visual culture and visual technologies, and by extension the complexities of agency that are framed by interactive and interpassive participation. There is participation in both forms, as Žižek (1997) reminds us, as the projection of passivity is itself an action, but it is the action of displaced political agency that may be problematic. Making art itself within this framework can raise the difficult question of what is the empowerment efficacy within a critical visual culture pedagogy if the interpassive subject lets the art work do the political work for them? Or if having a voice is the role of the artwork in that the interpassive subject need not speak?

Interactivity in desire, and by implication interpassivity, ask difficult questions of agency and the autonomy of empowerment, and begs careful consideration of the interconnections between creative practice, material agency, and political voice.

> *Interactivity in desire as an articulation of the objet* a *may help us to engage the intervisuality of the networked screen.*

Mirzoeff's (2006) concept of "intervisuality" is a blending between diasporas and intertextuality: the flow of cultures beyond nation states that is characteristic of diasporas require that visual culture evolve beyond an analysis of "interlocking texts" to "interacting and interdependent modes of visuality" (p. 97). Seeing intervisuality as a part of a larger global visual culture, one that is enabled through networks and visual technologies, provides value for critical thinking in visual culture pedagogies. However, intervisuality, as a performance of the metonymic slippage of desire in constructing social relation through visual culture, also highlights our relation with the big Other and the gazing geometries of the *objet a*. Our interaction with meme phenomenon, online communities, video blogs, and social media all hold rich potential for articulating our relation to the Other as we gaze in desire, but importantly our abilities to reflect on how the *objet a* gazes back at us provides reflexive acuity to critical thinking and everyday image making.

> *Structures of massive online participation hold unknown facets of presence for educators and learners.*

With partnering of MOOC content providers, such as Udacity and edX, and universities in the Untied States there has been an expansion of course offerings, including offerings in visual arts and art education content areas, and emergent research around massive learning systems[iii]. What has emerged is trajectories of MOOC development under two types: xMOOCs and cMOOCs. In xMOOC, there is a focus on video tutorials and assessment aligned with university standards and oftentimes a notable professor. With cMOOCs there is much more concerted effort to focus on the role of connecting learners to knowledge and resources that value principles of connectivism learning theory: distributed knowledge, co-construction of knowledge, and valuing "the connections that enable us to learn more are more important than our current state of knowing" (Siemens, 2004, para. 19). These differences dictate different formations of presence in the learning space for learners

and teachers. Darley's (2000) concept of vicarious kinaesthesia and game play invokes the body as an affective envelope for the Real, an impossible unknown that can only be glimpsed through the body and its affectations. This presence of affect is also in the physical classroom: sweaty palms before a test or fidgeting before a graded presentation. Where is presence in the MOOC and how does it effect learning or the subject's negotiation of signification? While we can focus on the human bodies for this question of presence, the presence of the MOOC structure itself becomes a "body" within the learning space: a delivery body, a distributed body, and a surveillance body as xMOOCs become rich datasets for systems designers to "deconstruct" learners (Kizilcec, Piech, & Schneider, 2013). Interactvity in desire invokes forms of knowing that include the body and it remains unclear what the "massive" body will desire in a network ontology.

The focus of pedagogical discussion on interactive network technologies discursively framed within a new literacy or otherwise, must include understandings not only of the subject performance in production, but how these structures perform on us. Where do frustrations arise from our use of computer interfaces? What do we desire from the Other, as person or language or network structure, in peer-to-peer chatting or through massive learning systems? How do the avatars of teachers, students, algorithms, and network structures gaze back at us when we come to know or believe as a result of learning? Interactivity in desire helps to construct an online/offline embodiment that collapses into a continuum of the desiring subject. It is this new ontology of the subject that needs theoretical scaffolding to wage agency in the democratic and global civil society.

To place interactivity in desire, to understand its magical spell on contemporary technological society and look back historically at interactivity as we look into the future gives us tactics to engage the affective of participatory culture. Through the discourse of desire, interactivity becomes a mapping of the Other, a symptom of lack, and a manifestation of the gaze of the *objet a*. Instead of asking what is interactivity, ultimately an exercise in the failure of language, I have endeavored to understand what does interactivity want from us. It is through this line of questioning that we might better understand its power and attraction within digital media technologies and effects within art education.

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[i] I use the term network ontology to reference the essential innovation in digital technologies as they are deployed in the world through networked connectivity, and the changes inherent in this shift to the ways of being in the world. A network ontology describes the conditions of possibility in the networked spaces of innovation, both online and offline, through the ubiquity of computing.

[ii] See http://newsvote.bbc.co.uk/2/hi/technology/4137782.stm for one such story of a South Korean gamer that died after a 50 hour marathon playing *Starcraft*.

[iii] Conducting a search on the MOOC aggregator http://mooc-list.com brings up lots of course offerings in the arts. Examples of studio courses include "The Art of Drawing and Painting" offered by Jusri Devries through Open2Study and "Introduction to Art: Concepts and Techniques" offered by Anna Divinsky through Coursera. MOOCs that engage pedagogical concepts of arts learning include "Art and Activity: Interactive Strategies for Engaging with Art" offered by Jessica Baldenhofer, Lisa Mazzola, and Stephanie Pau and "Art and Inquiry: Museum Teaching Strategies For Your Classroom" offered by Lisa Mazzola both through Coursera.