

# Object Intermediaries: How New Media Artists Translate the Language of Things

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## ABSTRACT

This paper uses Walter Benjamin's concept of *translation* between people and things as a focal point for analysis of the work of contemporary new-media artists Paula Gaetano Adi and Lindsey French, who utilize robotics and interactive technology to explore interspecies communication. Framed by materialist, poststructuralist, and posthumanist theory, along with recent discourse in object-oriented ontology, this paper poses the work of Gaetano Adi and French as potential models for visualizing object-oriented and vital materialist interactions. In the age of the Anthropocene, thinking beyond the human has become increasingly vital in both ethical and ecological terms, making the ability to envision less anthropocentric, more object-oriented worldviews both novel and timely.

## Introduction

In Walter Benjamin's 1916 essay "On Language as Such and on the Language of Man," which can be considered a precursor to contemporary discourse surrounding posthumanism and object-oriented ontology, he suggests that much of art practice is founded on "languages issuing from matter" [1]. According to Benjamin's proposition, art-making involves the translation of these "thing languages" into a shared dialect between people and things. Recently, several new-media artists have been using technology to intervene in or expose the relations between people and things in ways that open up a more object-oriented discourse. Particularly, artists Paula Gaetano Adi and Lindsey French use interactive technology and robotics to translate non-human modes of perception and experience into the realm of human experience.

Revisiting Benjamin's essay 90 years later, filmmaker and media theorist Hito Steyerl elucidates Benjamin's claim as a political, and ultimately timely, one [2]. By applying the theory of translation to that which occurs between humans and non-humans, rather than solely between cultures and nations, Benjamin acknowledges the effects of material forces and non-human agents on human politics and power dynamics. Acknowledgement of the force of material or non-human agents in human politics is of key importance to ecologically focused aspects of object-oriented ontology, posthumanism, and what political ecologist Jane Bennett calls *vital materiality* [3]. According to Steyerl, translating the language of things is not a matter of representing things, but involves creating "preposterous articulations of objects and their relations" that could become "models for future types of connection" [4]. I want to suggest that this type of futuring might occur when we look at the work of artists such as Paula Gaetano Adi and Lindsey French as models for alternative interactions. I argue that using these works as such allows us to visualize object agency and non-human utterances in ways that are approachable within our own symbolic mode of understanding.

Several artists in the realm of bio-art have been working with interactions between humans and other animals, including Natalie Jeremijenko and Amy Youngs. In terms of plant life, Eduardo Kac's *Natural History of the Enigma; Botanicalls* by Rob Faludi, Kate Hartman, and Kati London; and *100 Monkey Garden* by Cory Metcalf and David Stout each use emerging



technologies to bring awareness to the needs and behaviors of plants [5]. Conceptual designers Dunne & Raby, Auger-Loizeau, and Kelly Dobson have been making work that investigates connections between people and machines and the characters, personalities, and expressive traits they exhibit [6]. Both French and Gaetano Adi are more concerned with ontology and phenomenology than epistemology, which sets them apart from other work in their fields. Where *Botanicalls* and *100 Monkey Garden* use digital technology to visualize information about plants, French uses live input from plants paired with research into plant communication to create collaborative performances and texts that spark more questions than they answer. Likewise, Gaetano Adi's work is more focused on the actual encounter between human and machine bodies than it is on the narrative around such interactions. Because most writing in the vein of posthumanism only concerns artists working with interspecies communication as it applies to interactions between humans and other animals, I would like to extend this discussion both to non-living (in the case of Gaetano Adi) and non-conscious (in the case of French) beings.

Over the past several years, my own views of the relation between the “animate” and seemingly “inanimate” world have been continually sparked by discourses arising in the visual, mostly media-based, arts and, more recently, in parallel discourses in ontology and metaphysics. Stemming from the writings of Graham Harman and what he termed “object-oriented philosophy” in 1999 [7], object-oriented ontology has been expanded in the past few years by philosopher Levi Bryant, videogame designer and critic Ian Bogost, and ecological writer Timothy Morton, among others. It is related to the pursuit of de-centering the human to actor-network theory [8], which explores objects as they participate in networks or relational-webs, and to vital materiality [9], which recognizes the agency or participation of nonhuman forces and objects that possess the power to produce effects (in nature, in society, in politics) with or without causal will. Because of the emphasis on objects as things in themselves, object-oriented ontology is also heavily tied to materialism and its many iterations, which is why related ideas are found in the writing of Benjamin, Steyerl, and others.

#### **Paula Gaetano Adi**

Paula Gaetano Adi, an Argentinian artist working primarily in the United States, uses robotics and performance to muddy the frontier between natural and artificial life. When speaking of her work, Gaetano Adi states:

My work is always an attempt to promote a bodily and corporeal “interspecies” encounter...Before making any work, I usually ask myself: Who is the subject? What is Life, and who is alive? Who possesses agency...What are the roles machines and animals (and any other “significant others”) play in the self-definition of human beings? [10]

By referring to interactions between humans and machines as *interspecies* encounters, Gaetano Adi suggests a broader category of things that encompasses humans, animals, and machines, along with other animate and inanimate forms. The question then becomes not how humans interpret the world at large, but how members of these various species encounter, perceive, and interpret each other. This moment of reciprocal, *interspecies* observation is a key element of much of Gaetano Adi's work with robotics.

While the product of great conceptual and mechanical acumen, Gaetano Adi's robots often carry out seemingly simple processes that are poetic and visceral rather than what one might consider typical of artificial *intelligence*. One such project, titled *Alexitima* (2006/7), is a robot with a strangely flesh-like exterior whose “skin” is constantly secreting (Figure 1). Though



Figure 1. Paula Gaetano Adi, *Alexitima*, 2006/7. A viewer interacts with *Alexitima*, an autonomous robotic agent that secretes “sweat” through its skin. © 2007 Paula Gaetano Adi. Photo courtesy of Espacio Fundación Telefónica.



Figure 2. Paula Gaetano Adi, *Anima*, 2009. A viewer interacts with *Anima*, an autonomous robotic agent that performs a “breathing” function. © 2009 Paula Gaetano Adi.

*Alexitima* occupies the gallery somewhat humbly and is otherwise immobile and mute, it communicates with viewers using its skin as an interface, producing what we might interpret as sweat at greater volumes in response to proximity. Similarly, *Anima* (2009) is a robot whose only function is to “breathe” and whose breathing pace becomes more and more rapid as observers approach, expressing a sort of robotic anxiety (Figure 2). Both *Alexitima* and *Anima* invoke a sense of fragility and empathy within the framework of artificial life and intelligence.

By adopting the appearance of very basic life-signaling functions, the two corporeal robots challenge common assumptions of how and to whom “life” can be attributed. Furthermore, due to the way that both robots are programmed to process stimuli and respond to their environment, the encounter between viewer and either *Alexitima* or *Anima* is not an instance of a subject perceiving a stable object, but an instance wherein one subject encounters and perceives another subject who is reciprocally perceiving; as a viewer encounters and experiences *Alexitima*, *Alexitima* perceives and responds to the presence of the viewer in its own particular way, by sweating. Though the

way that our human viewer and *Alexitima* perceive each other is not the same in method or mechanism, both life forms—natural and artificial—are actively processing stimuli. One way to fathom this concept of non-human perception and experience is to draw an analogy to how Eduardo Kohn describes different, non-human ways of representing one’s surroundings in his book *How Forests Think: Toward an Anthropology Beyond the Human*. He reasons:

Contrary to our assumptions, representation is actually something more than conventional, linguistic, and symbolic...Nonhuman life-forms also represent the world. This more expansive understanding of representation is hard to appreciate because our social theory—whether humanist or posthumanist, structuralist or poststructuralist—conflates representation with language [11].

While Kohn describes the experience of non-human *life forms*, I would like to extend his concept to the context of non-living things as well, not necessarily in the capacity to represent, but to *experience* and affect other entities within an environment.

In both *Alexitima* and *Anima*, Gaetano Adi stresses non-linguistic, even non-conscious, modes of communication. She states that *Anima* was guided by the conceptual premise of a “non-linguistic embodied communication,” and similarly that *Alexitima* “interacts and communicates with the environment” through “tactile...perception” [12]. Both robots *communicate* through physical expression; they exhibit information about their status within their environment by

responding physically. Furthermore, Gaetano Adi calls this a “non-purposive approach to interactivity,” meaning that *Anima* and *Alexitima* are not programmed to communicate specific information about the surrounding environment for human use, but simply *to communicate* [13].

*Alexitima* and *Anima* are autonomous robotic agents, both of which respond to but do not depend upon the presence of human viewers [14]. They possess a form of agency untethered to will. Similar to early cybernetic devices, *Alexitima* and *Anima* mimic human behavior [15]. However, to Gaetano Adi robotics is not a tool to elucidate human life, but to explore non-human modes of embodiment. Rather than reveal *Alexitima* and *Anima* as mere representations of human qualities and capacities, we might consider the non-human means by which both robots exhibit human-like qualities as equally expressive. As both Ian Bogost and Levi Bryant explain, object-oriented ontology proposes that all objects “equally exist” without the need to “exist equally,” meaning that while objects can function in many different ways or participate in collectives to a greater or lesser degree, all things exist in a way that is ontologically valid [16]. Both robots force us to consider how an object that responds to its environment in ways we associate with *living* (breathing, perspiring) but does so as a result of different processes, might still be *living* in an entirely different way from the humans that encounter it.



Figure 3. Paula Gaetano Adi, *TZ'IJK*, 2012/13. 3D render of installation with five mobile mud robots situated in a gallery space. © 2012 Paula Gaetano Adi and Gustavo Crembil.

Gaetano Adi's robots beg for a re-evaluation of what delineates natural from artificial, human from mechanism. Her recent project, *TZ'IJK* (Mayan for “mud”), continues this trajectory by investigating the foundations of “humanity” itself (Figures 3, 4). *TZ'IJK* (2012/13) takes its inspiration from a Mayan creation myth detailing the gods' initial “failed” attempts to make man [17]. According to Gaetano Adi, the legend explains that the gods first created man from mud, but discovered only “a useless, clumsy creation that moved around without understanding, insight, or perceptiveness” [18]. *TZ'IJK* is a high-tech/low-tech incarnation of the Mayan myth that features massive spherical robots with motorized interiors and mud-thatched exteriors, crafted using traditional technologies and materials indigenous to Latin America.



Figure 4. Paula Gaetano Adi and Gustavo Crembil, *TZ'IJK*, 2012/13. View of layered sphere structure: interior mobile mechanism inside the polycarbonate geodesic skin, with armature made with “angarilla” wood, which is then covered with the exterior “quincha” system of mixed clay mud and thick grass. © 2013 Paula Gaetano Adi and Gustavo Crembil. Photos courtesy of Alejandro Borsani.

Unlike many of Gaetano Adi's other robots, which perceive and respond to viewers, these proto-humans act according to the Mayan description of early man and wander the

gallery space clumsily and unperceptively, encountering external agents but acting independently. Like Mariela Yeregui's installation *Proxemia* (2000–2008), *TZ'IK* features a community of robots that navigate freely within their environment; but in contrast, *TZ'IK* is blind to sensory information and is a reflection on proto-human rather than human interaction [19]. "Robotics has always been applied to successful intelligence," Gaetano Adi states. "[*TZ'IK* will] apply that high technology to an ancient idea regarding the inadequacies of the mud-humans the Mayan gods saw as a failure" [20]. By moving away from robotic technology as practical, rational, and utilitarian, and incorporating the classically "human" realms of folklore and mythology as well as ancient human technologies, Gaetano Adi brings robotics and artificial intelligence out of the sciences and into the humanities. Though positioned as *failed* humans, the mud-thatched robots of *TZ'IK* do not seem entirely inadequate as life-forms; by embodying the form of humanity's mythical antecedent, *TZ'IK* suggests a continuum of life-forms that might exist on a sliding scale, rather than on either side of a "human" marker.

### Lindsey French

Lindsey French is an American artist who approaches plants as "individuals" rather than a homogenized landscape, and whose work investigates a "phytcentric perspective" [21]. In *Concert for Plants by Plants* (2012), French assists an act of long-distance plant communication (Figure 5). When recounting the event, French states:

On April 26th, a cherry tree in western Massachusetts delivered a live performance to an audience of invited houseplants in Chicago, Illinois.

Attached to the cherry tree was a piezo sensor, which measured the tree's

vibrations. These were uploaded to the world wide web using an Ethernet Pro as a server and a friend's wireless router, configured to allow port forwarding. On the Chicago end, a Processing sketch gathered the data and wrote it to the serial port in my laptop. An Arduino attached to the laptop delivered the data to transducers, which were attached to ceramic saucers...as the medium for the vibrations [22].

Though it might seem technically excessive to anybody who does not wish to recreate the event, I see French's breakdown of the performance as an acknowledgement of the many actors who participated in the event.

As one who had the privilege of witnessing the performance, I can testify that the "concert" occurred on multiple perceptual planes. In the renditions where there is a human audience present—French also created a version of the work that runs on its own without human supervision—listeners perceive a rapid, tinny tapping resembling Morse code without the decipherer's key. The invited houseplants, on the other hand, experience the transference of the cherry tree's vibrations, the vibrations of each other, and of the room in which the concert takes place.

*Concert for Plants by Plants* demonstrates that multiple ways of sensing or experiencing are both possible and valuable. It also suggests that these ways of sensing can intersect to produce stimulating effects that do not have to result in explicit understanding to constitute engaged



Figure 5. Lindsey French, *Concert for Plants by Plants: LATARX PO installation*, 2012. A plant receives transmitted vibrations from a distant plant translated into vibrations in the wooden shelf it rests on. Photograph from artist's website. © 2012 Lindsey French.



cross-species interactions. French uses technology to act as an intermediary between people and plants, and brings both human audience and plant audience to a common ground. Although both audiences experience the same concert in a technical sense, the two have disparate but convergent experiences because each species receives phenomena differently. *Concert for Plants by Plants* also invites speculation on plant perception as a wholly different, but not discounted, mode of experience.



Figure 6. Lindsey French, *Phytovision: Road Trip*, 2012. Still from one video within an installation of several videos depicting visual stimuli as plants might perceive them, based on research into plant perception. Photograph from artist's website. © 2012 Lindsey French.

A related project, *Phytovision: Road Trip* (2012) is part of an ongoing body of work that “invites the viewer to adopt a phytocentric perspective” by utilizing scientific research into what visual stimuli plants perceive and using these findings as parameters for visual expression [23] (Figure 6). The project consists of several videos documenting the journey of a plant as it is transported across state lines, hence the subtitle “road trip.” The videos are not documents in the sense that we see exactly what we might see were we traveling *with* the plant, rather they are framed from the assumed perspective *of* the plant and limited to the visual stimuli plants are believed to experience—in this case light, shadow, red and blue. Though inevitably mediated, *Phytovision*

confronts human viewers both with new knowledge into how plants may perceive their world and with the recognition that perception is not limited to the human brand.

It is important to acknowledge that the works of both French and Gaetano Adi are created by and ultimately presented for a human audience. Though French is more invested in what plants perceive in *Concert* than she is with making sound that would be pleasing to humans *using* plants, she still relies on symbolic systems to translate the “phytocentric perspective” into one that is intelligible to humans [24]. In translating the nonhuman, both artists engage a certain amount of anthropomorphism. While anthropomorphism can be misleading in the context of object-oriented ontology because it suggests that in order to exist, things must act in a humanlike fashion, I agree with Jane Bennett that it can still be instrumental in fighting anthropocentrism [25].

There has been a recent surge of interest in animism as exemplified by both the exhibition *Animism* (2010) at M HKA, Antwerp, which used the writings of Bruno Latour as a conceptual framework, and *Talk To Me* (2011) at MoMA, New York, which featured many works of new media art engaged with interspecies communication [26]. How might restoring a sense of anthropomorphic or animistic wonder, one that Bogost says “has been all but eviscerated in modern thought,” aid in the transition to an object-oriented or vital materialist worldview [27]? Bennett believes that doing this might prepare us for “detecting (seeing, hearing, smelling, tasting, feeling) a fuller range of nonhuman powers circulating around and within human bodies” [28]. As Bogost states, without this sense of wonder, objects “bear interest only as products or regulators of human behavior and society” [29]. Re-invoking a sense of wonder toward the nonhuman, though it might be mired in anthropomorphism, nevertheless instigates a heightened sense of attentiveness between people and things that is crucial both for a vital materialist worldview and for the propagation of the more ecological and sustainable lifestyles that Bennett holds as her motivation.



**Figure 7.** Lindsey French, *Novel by an Oak Tree*: performance still (from *Written by Trees*), 2012. French sits with her back against a tree to transmit vibrations. For *Written by Trees* she reads with her back against the tree to transmit vibrations from her voice. The resulting vibrations that the tree makes in response to each word she reads aloud is used as a code to translate the tree's subsequent vibrations into text. Photograph from artist's website. © 2012 Lindsey French. Photo by Carson Andrews.

*Written by Trees* (2012) is another ongoing series by Lindsey French, one that takes the idea of translation more literally. The series began when French sought to “establish a common language” between herself and an oak tree in pursuit of a collaborative novel [30]. By reading aloud with her back against the tree in order to transmit vocal vibrations, and monitoring the tree’s vibratory response per word via a sensor attached to its trunk, French established a code for translating the tree’s subsequent vibrations into words (Figure 7). What have resulted thus far are two novels written by trees, several performances, and an installation in which viewers can experience the novels in both textual form and original vibration, transmitted through a special

wooden floor. *Written by Trees* is not a speculation as to what trees might think or say if they spoke English, but a literary investigation into what a common language between people and plants might look, sound, and feel like, regardless of whether it “makes sense.”

### Conclusion

To return to Steyerl’s call for models for future connection, the lesson we might lift from Gaetano Adi’s autonomous agents and French’s queries into phytocentric perspective is a newfound awareness of different modes of existence that are not deducible to human-defined, consciousness-based *life*. In the case of *Anima* and *Alexitimia*, we might ponder how other beings we encounter might act or perceive in ways that, while not analogous to human action or perception, are no less valid. In the case of *TZ’IJK*, we might ask how a being without distinguishable perception might still have agency to affect those it encounters. In the case of *Concert for Plants by Plants*, *Phytovision: Road Trip*, and *Written by Trees*, we might consider how our interactions with non-humans, be they auditory, vibratory, or literary, might constitute a shared language and lead to new, complex understanding. Both artists create work that is object-oriented in the sense that it splinters dichotomous definitions of living and inert, subject and object, human and non-human. While the end goal may be to *actualize* what things have to say, as Steyerl suggests [31], we (humans) still need artistic work to visualize object agency, and both French and Gaetano Adi help us make the leap to thinking beyond the human *as* humans think—symbolically. They act as translators of non-human utterances and experiences that otherwise might pass under our radar.

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