Fauxtanical: Co-creation with the More-than-less-than-human

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How might humanity complicate empathy by 'feeling along' with an artificial plant? Michael Marder, a philosopher of 'plant-thinking,' argues that human empathy toward real plants is limited by anthropomorphism, as we are simply projecting our notions of experience onto them. *Fauxtanical* is a practice-led research project which aims to extend Marder's line of inquiry as to also consider the experience of non-living 'fake' plants through a participatory installation. *Fauxtanical* utilizes bio-signal data gathered from a real plant, its artificial doppelgänger, and a human source to allow for collaboration between human, machine, non-human, real, and faux - occupying a liminal space between the actual and the virtual. Drawing from non-representational methodologies of performatively procuring and visualizing 'non-data' from the artificial plant, a chance-driven audio-visual immersive experience mediated through cymatics, screens, and speakers emerges. A posthuman dialectic helps contextualize conceptual components and provides its distinction from similar research within a critical media practice. Taken alongside a reframing of ancestral notions of animism reveals *Fauxtanical* as not only a critique of anthropocentric empathy through exploring the possibilities of artificial agency, but also as an experimental form of embodiment with the more-than-less-than-human, perhaps fostering novel schemas of empathy to bloom in the in-between.

1. Introduction

Faux (noun): Made in imitation; artificial. Not genuine; fake or false.

-tanical (suffix): The study and appreciation of (...)

Fauxtanical: The study and appreciation of an artificial experience.

The relationship betwixt technology, the human brain, and other biological systems in the discourse of contemporary media art has provided humanity with novel methods to *feel into*, or empathize with, different life forms. Amongst these lifeforms are both real and artificial plants, which have taken root in the subterrain of the post-modern and post-human psyche. We find this floral pairing in homes, offices, funerary spaces and within the art gallery. This media art project hopes to complicate the aesthetic agency of an artificial plant by

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Fig. 1. The project in a standby state of no human interaction.

starting from the perspective of the plant in wondering if it can 'render' human notions like empathy and creativity, or 'experience' at all. So, I am artistically interpreting plant experience from the perspective of a human experiencing the real-fake plant duo and translating the collective's 'experience' into audiovisuality that is partly being produced by a plant – at least vicariously. A documentation video of the project can be found here: https://vimeo.com/973358910.

Asking a question like 'can a fake plant experience?' would benefit from some context to better understand the need to ask it. A nice place to start is in 1974, when American philosopher Thomas Nagel asked a similar question – "What's it like to be a bat?". Since then, an apt re-centering has occurred between the 'human-at-the-top' hierarchical approach to studying the study of experience and a movement towards the foci of experience being of non-human and non-living others, informing our humanity. Arguably, it's not a new way of thinking, since some ancestral worldviews and current indigenous cultures/practices have promoted such animist perspectives for some time. Despite the colonialization and domestication of the mind hindering this style of question-asking, it has permeated through the collective psyche. Some contemporary thinkers, like object-oriented philosopher Ian Bogost, asked it more plainly in 2012 – "What's it like to be a thing?". His 'alien phenomenology' grapples with defamiliarizing object-subject relations such that an object's *umwelt* becomes foregrounded (Bogost 2012). Soon after, philosopher Michael Marder proposed *Plant-thinking*, which is the process of bringing human cognition back to its pre-cognitive, non-ideational, and non-representational vegetal rhizome when considering plant life, thus rendering it plant-like, or in Marder's words - "thinking without the head".

There's much to be said about plant-thinking, or at least relational plant-environment 'thinking' — but not enough for *fake plant-think-*

ing. In Marder's shorter article, "The Life of Plants and the Limits of Empathy", he holds that human empathy toward real plants is limited by anthropomorphism, as we are simply projecting our notions of experiential empathy onto them, thus only viewing plant-thinking as humanity perceives it, and not from the thinking-feeling of the plants themselves (Marder 2012). However, this view may risk overlooking a more nuanced role that anthropomorphism can play. As writer Randall Lockwood (2023) suggests, anthropomorphism, when engaged reflectively, can serve as a cognitive and emotional bridge - not to assume sameness, but to *feel with* non-human lifeforms in ways that cultivate attentiveness and ethical regard. In the context of this project, such reflective anthropomorphism may pry open speculative avenues for feeling with not only living plants, but their artificial counterparts as well. Further development of this style of thinking regarding the limits of empathy within anthropocentrism can be found in eco-feminist and post-humanist writer Rosi Braidotti's *The Posthuman*. In the chapter "Post-anthropocentrism...", Braidotti spells out the conditions in which non-human subjectivities in late-stage capitalism have formed and can become brought into focus for the sake of extending notions, such as empathy and creativity, to the more-than-human social relata.

> The emphasis on empathy accomplishes several significant goals in view of a posthuman theory of subjectivity. Firstly, it reappraises communication as an evolutionary tool. Secondly, it identifies in emotions, rather than in reason - the key to consciousness. Thirdly, it develops what Harry Kunneman has defined as 'a hermeneutical form of naturalism' which takes critical distance from the tradition of social constructivism and situates moral values as innate qualities. This is a significant addition to the theory of the nature–culture continuum. (Braidotti 2013, 78)

Much like Marder, Braidotti takes issue with empathy for and of the non-human - for similar reasons having to do with the denial of the specificity of their nuanced ontology within anthropocentricism. For both, the extension of empathy is a noble gesture, but is misdirected. Neither thinker stretches empathy to the non-living, though, there is hope for both. For Marder, plant-thinking becomes a method which allows one "[...] to construct their ideal selves or to retrieve alienated features of their own existence" (Marder 2013, 371) in plants, or simply, to recognize the vegetal within us. For Braidotti, empathizing with a plant might be "[...] to see the inter-relation human/animal as constitutive of the identity of each. It is a transformative or symbiotic

relation that hybridizes and alters the 'nature' of each one and foregrounds the middle grounds of their interaction. This is the 'milieu' of the human/non-human continuum and it needs to be explored as open experiment" (Braidotti 2013, 79).

Fauxtanical proposes such a *fake plant-thinking* which extends Braidotti's and Marder's line of inquiry as to consider the causal agency of a non-living fake plant. In the form of a media arts 'open experiment', it allows the user to feel along with a doppelgänger plant through appropriating a method of cognitive science and a method of data sonification and subsequent visualization. In a co-creative act, the implied data collection of the fake plant's 'biosignals' are taken in contrast to a real plant, and from the human, to allow a chance-based soundscape and animation to emerge from their interrelations. By 'chance-based', I am referring to both the playfulness of chance operations as an artistic research method and the atmosphere in which the entire system is situated in, being that it is open to environmental variables such as the flux of temperature, humidity, and human presence. Environmental entropy may cause biological 'stress' for the real plant, which, according to (Khait et al. 2023), could both propagate airborne ultrasonic soundwaves from the plant and help humans identify its species in the analysis of the soundwaves, "[...] altering the way we think about the plant kingdom, which has been considered to be almost silent until now" (1333). Within the recognition of human presence and behavior being a factor in the production of stress for a plant, there lies a lesson in empathy in realizing that the human can also be a source of comfort and care.

To begin to wonder what it's like to be a fake plant, one might consider a comparison to its closest relative – a real plant. This project chose to employ the species colloquially known as the Snake Plant (*Dracaena Trifasciata*), placed in contrast to it's rendering. Being a highly domesticated species, as it ranks perpetually in the top three most popular houseplants, the Snake Plant's experience might be worth examining as a case for the extent to which 'empathy' can be extended. It's a prime cultivar to evaluate the 'domestication syndrome', which is partly concerned with how human intervention has affected the coevolution of species and their agricultural propensity over time (Fuller et al. 2023). Other aspects of the literature on the domestication syndrome are interested in how chosen phenotypes of a plant go through a process of becoming ornamental, as discussed by (Altman et al. 2022), ornamental plants "[...] have attracted people's senses and aesthetic emotions for millennia, triggering the domestication of many species... they are now a commercial success" (125).

Decorative ornamental plants, like the Snake Plant, are unique in the plant kingdom because their domestication is not associated with agricultural products. Rather, they exist solely for the aesthetic allurement of the human sensory apparatuses, having co-rooted with socioeconomic changes and new scientific technologies regarding the production of their simulacra. This project is performing metaphoric and epistemic work by transplanting the notion of the domestication syndrome over to the faux. In doing so, a spectrum between the often dichotomized real/artificial binary is posited in that a fake plant may have *a type of* experience, or at least a history of experience, when considering its production. This *fake plant-thinking* would propose that a meta-materiality of the *representation* of the domestication may illicit a 'post-empathy' that need not be rooted in the real. In thinking through the extracted minerals that constitute a fake plant's disposition, imaginably, colonist practices extend even into the artifice, since most synthetic plastics are rendered and refined out of raw materials. Both real and faux plants are 'organic' in their carbonic origins, though their temporal existence and production contrasts heavily with the earthly, rooted life of real plants.

2. Related Work

Fauxtanical hopes to deterritorialize the subjectivities between real, faux, and human. It's use of emergent technologies such as EEG (electroencephalogram) and bio-data sensors hope to invite users to empathize and co-create with each agent through mediated interactions. Multiple artworks by the Austrian-French artist duo Christa Sommerer and Laurent Mignonneau deal with themes of human-plant interfaces, data visualization, and 'virtual plants', such as their works *Interactive Plant Growing* (1992), *Trans Plant* (1995), and *Eau de Jardin* (2004), as discussed in *The Artwork as a Living System* (Ohlenschläger et al. 2023). In some other early media works which use sensing technologies to meddle in biological systems, (Steiner et al. 2017), empathy for real plants was the focus of representing plant perceptions. A similar motif is found in Misha Rabinovich's 2016 project, *Raised on Youtube*, which used crowdfunded and crowd-fueled video content to bring life and light to plants (Rabinovich 2016). More contemporary bio-sensing technologies has provided artists a means to synthesize plant and machine data in the exploration of the 'intelligence in nature'. This can be seen in Slovenian artist and biologist Špela Petrič's 2020 project, *PL'AI*, which utilized an AI monitoring system to aid a plant's 'play'. Others have utilized machinic perception in plant-machine interactivity (McDermott 2019), (Sareen and Kakehi 2023), (Hu et al. 2021), while some artists have used EEG

and instrumentation for sound production exclusively (Park 2014), (Leslie 2016). Elsewhere, networked plant activity, such as (Biomodd 2009) and *Synplant*, ideated by Youyang Hu et al., which creates a soundscape based on the environmental variables collected from a group of plants, have continued to foreground plant perception. Some other artists use renderings of the environment (Katchadourian 2021), while others use renderings of the environment in tandem with a live video feed, such as *A Reflected Landscape*, developed by Timur Si-Qin (Si-Qin 2016). Artist-researchers are developing a terrain in developing systems where the relations between plants, brains, and machines can help build better visual ecologies between the environment, its communication channels, and its representations. *Fauxtanical* adds to this ongoing discourse by developing a non-representational methodology of performatively procuring and visualizing 'non-data' from the artificial plant.

3. Methods

This project utilizes signals from three sources – the brain of the human user, a plant, and a live video feed. Their combined output is ultimately transmuted into a generative audio-visual demonstration. The co-creative act starts with the real plant's connection to a bio-sonification apparatus, which is a means to make sound with the micro-fluctuations within a plant's electrical current. The same sensor is attached to both the real and artificial plant, which can be seen in Figure 2. Electrical fluctuations metamorphose into MIDI signals, producing raw, unprocessed sound from hidden speakers beneath a nearby hollow boulder. In a non-participatory state, much like that of Figure 1, the plant produces the soundscape on its own. When a user places the EEG device on, which is a consumer-friendly type known as Muse, visualized in Figure 6, the soundscape changes based on the measurement of the user's mental state as coordinated, and hypothetically as conditioned by, the 'state' of the real and fake plants. The co-creative soundscape forms from how the EEG data interacts with the plant data.

Visually, there are four methods overlapping. Most prominent in this project is the video monitor, which is also 'planted' with soil. The screen displays the plant-derived bio-sonification data in real time via a patch developed in Touch Designer. The generative animation takes on the hue and shape of ripples in water. The plant data stream is also visualized in a small body of water that sits atop the hollow boulder. The body of water atop the boulder makes use of cymatics as an archaic method of data visualization. The animation changes when the user places the EEG monitoring system on, both on the screen and in the water, and on a nearby handheld monitoring device.

Fig. 2. Electrical conductivity sensors attached to plants. The monitor and webcam.

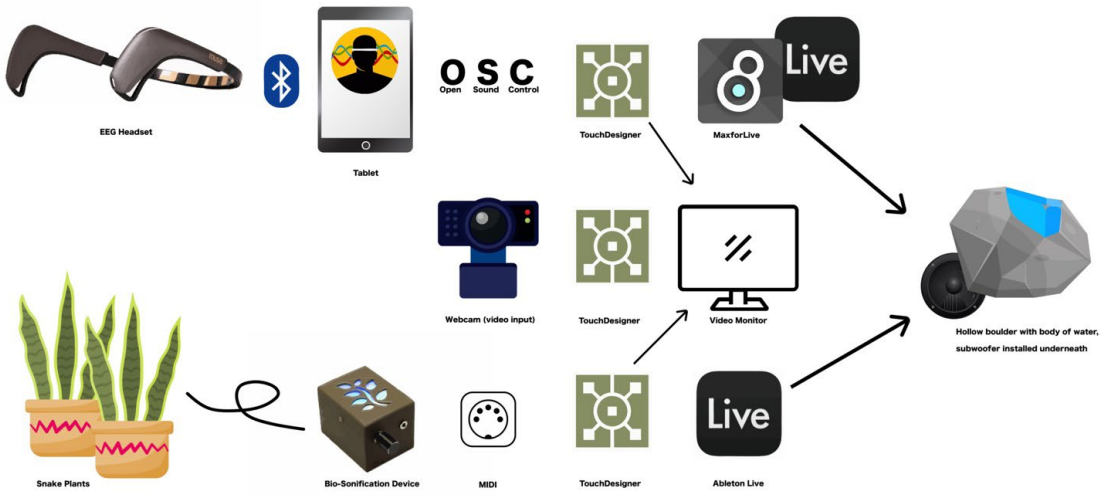

Fig. 3. Signal flow, stemming from three sources. Signal moves from left to right, generally.

The EEG-based animation is in constant flux based on the measurement of the user's mentality, which fused together with the plant's animation, resemble the same sphere-like shapes found in water interacting physically with sound. The EEG system senses all known bandwidths, though this project chooses to highlight the gamma bandwidth. Gamma, which is brain activity roughly within 25-100hz, is often associated with 'flow' states, high levels of coherence in the brain, and the elusive meditative state (Lutz 2004). Once the headset is placed on the user, the gathered data is sent via Bluetooth to a nearby iPad displaying the raw data, then via OSC, it reaches a computer, where the gamma range is selected from the raw signal. The gamma range is responsible for controlling a few parameters in this project: The speed and color palette of the animation, the pulse of the soundscape, and the opacity of the live video feed, which is provided by a webcam mounted to the top of the video monitor. So, when there is 'low' gamma activity, the user's self-representation is seen fully via the live video feed. When gamma activity is 'high', the mediated self recedes into the background, such that only the overlap of the plant and human animations tango, as seen in Figure 4. The signal flow is illustrated in Figure 3.

Fig. 4. Interaction at various levels of brain activity. The upper image shows 'low gamma activity'

4. Discussion

In reflecting on the implementation of the methods, it is worth asking 'what is it like to be an audience participant in an art installation with a real and fake plant', as it is ontologically different than asking 'what is it like to be a fake plant'? Most users could not tell the difference between the real and fake plant, one user noting that "it's a really good fake". They assumed that both plants were adding to the overall experience, often inspecting how the wires ran into the monitor's pot, as to infer the causal chains. Once I had mentioned to the users that could not tell the difference that it was a fake plant, they often approached the plant to feel the duo, even watering the fake plant,

and noticing how touching the real plant changed the audiovisuality. Once it was mentioned that the fake plant's sensor was not actually plugged into the apparatus, they were left with even more confusion, as the sensor's wires were implied to be plugged in. For this reason, in evoking a beauty within the causal obscurity, I decided to keep most of the wires buried. I believe that there is a palpable cognitive dissonance occurring here, often stemming from a disruption of pattern recognition. Upon examination and coming into relation with the real/artificial duality, it collapses.

Fig. 5. The hollow 'liminal boulder'. Speakers and other wires are stored underneath.

Marder, Bogost, and Braidotti are not alone in their hinting of the experience of non-human and non-living entities. Social philosopher Jane Bennett's view on the agency and "thing power" of *Vibrant Matter* posits that all matter is alive and active (Bennett 2010). Media theorist Manuel DeLanda's take on *Non-organic Life* also provides much weight to this style of discourse. For Bennett, everyday objects, such as a fake plant, take on socio-political roles in the way they express their affectation in the world. For DeLanda, the autopoietic activity of the meta-material, which has its own tendencies and capacities, is of interest (DeLanda 1992). They are both associated with a philosophical posture known as *new materialism*, which focuses on matter's intrinsic activity and how it relates to social, cognitive, and cultural life. It also generally critiques binaries like "culture and nature", "mind and matter", and, most importantly for this project, "real and artificial". *Fauxtanical* hopes to corroborate the new materialist project by positing a feedback loop between real and artificial in the way that a human perceiving the fake plant may have its affect measured and displayed back to the human akin to the representation of their mental state. Following this line new materialist thinking, I placed 'all organic' produce stickers onto some of the artificial objects in the work. This motif unfolds further in the project in its sculpting of a 'liminal boulder', as depicted in Figure 5. It is liminal considering that in its plasticity, there is also a concrete top to hold water, thus existing in an in-between state between real and artificial. In doing so, *Fauxtanical* hopes to arrange a causally and materially ambiguous thought experiment that evokes a productive and creative type of cognitive dissonance.

4.1. Artificial Animism

Such ideologies concerning the experience and agency of non-human and non-living objects are commonplace within non-Western cosmologies, especially through the animist logics of ancestral cultures' appreciation for the spirit, liveliness, or affectation of inanimate matter. For some, this may appear to be an illogical orientation of mind, yet these worldviews often emphasize the relationality between en-

tities over their categorical separation from humanity. *Fauxtanical* does not seek to adopt animism or new materialism wholesale, but instead draws a line of correspondence between them, recognizing a shared language rooted in relationality.

Building on sociologist Bruno Latour's work of actor-network-theory, Maria Puig de la Bellacasa (2017) introduces the notion of 'matters of care', extending Latour's provocations of a network-based relationality by emphasizing how even maintenance, attention, and speculation become ethical acts of engagement. In *Fauxtanical*, this ethic of care surfaces in the invitation to relate to a fake plant as a co-creator and co-actor, or at least, as a set of creative tools or instruments. This speculative narrative intersects with what anthropologist Nurit Bird-David (1999) calls a "relational epistemology" in her reworking of animism. Rather than viewing animism as a naïve attribution of spirit to things, Bird-David reframes it as a mode of knowing grounded in lived, relational responsiveness between beings - including technologies. If we are working with technology's etymological root *techne* - we might view the artificial plant as an 'art, or craft' in itself, strung together through plastic fibers and strings. Under this logic, *Fauxtanical* evokes a kind of techno-animism, which could construe an artificial plant as a creative agent.

When considering the artificial plant through this tecno-animist and participatory lens, it can no longer be dismissed as "less-than" human simply because it is not biologically alive. Instead, it inhabits what I am calling the 'more-than-less-than-human', an instantiation of a spectrum of existence that extends to plastics and artificial beings in that they too have the capacity to experience, at least vicariously, through the human. The term builds upon David Abram's articulation of the 'more-than-human'. In *The Spell of the Sensuous* (1996), Abram emphasizes perception as a reciprocal act between beings - one that collapses the boundary between subject and object. He writes, "to define another being as an inert or passive object is to deny its ability to actively engage us and to provoke our senses... perception always involves, at its most intimate level, the experience of an active interplay" (Abram 1996, 56). *Fauxtanical* builds upon this view, but questions whether such reciprocal perception is exclusive to natural, 'living' beings. In foregrounding a fake plant – a synthetic, inert object by conventional standards – as a perceptual partner, the project challenges assumptions about the limits of reciprocity and animacy. This techno-animist reading aligns with feminist philosopher of science Donna Haraway's notion of "string figures" in *Staying with the Trouble* (2016), where she advocates for co-creative story-

telling and “odd kinships” across species and systems. Haraway’s string figures are not just metaphors, they are methods of weaving together entangled relations across difference in species and materiality. In this spirit, *Fauxtanical* strings an experimental narrative between the more and less-than-human, between plant and machine, and between perception and representation.

4.2. EEG, Entrainment, and Representation

Cognitive neuroscience encompasses a diverse set of methods, experimental approaches, measuring tools, and applications of technology towards an understanding of understanding. One of which is the use of EEG in this project. Within this method, what it doesn’t involve is literal, direct descriptions of how the brain works, especially when it is taken in context with interactions with artificiality. The brain is simply too complex for that, and the measurement device is simply not granular or descriptive enough. Thus, this method has only captured partial truths based on its attempts to simplify and reduce complexity down to a representation (Burnston 2024). In making an artistic interrelation of this sort, the best we will be able to get is a simplified, and as is the nature of EEG, often quantified representation of the mental state of the user, not how the user actually ‘feels’ about their interaction with a fake plant. The mental process is simplifying itself in trying to represent itself, as the technology has its limits in its current iteration. In psychologist Stephen Kosslyn’s view, this is a crucial consideration to what EEG is actually capable of measuring and is how the technology represents the brain as simply that – a representation – and not what the brain actually *is* or is doing during a given interaction or what is causing the event-related potentials to occur. Kosslyn goes onto say “[...] (using EEG) it is difficult to infer the locus of the neural generator. Not only do electric currents travel across the brain and across the scalp, but they are distorted when they pass through the skull” (Kosslyn 1994, 45). Both internally within the brain, and externally in its relations, EEG is not able to accurately address direct causation, Though it has it’s empirical and representative limits, I believe that there is still artistic potential in the notion of entrainment, which is the process where something like a biological rhythm, or a musical rhythm, is synchronized or brought into alignment with another rhythm or stimulus. In metaphorically entraining a human participant to the biorhythms of a fake plant, there lies another empathetic ‘feeling with’ a fake plant.

4.3 The Measurement of Non-data

Peering into the aperture of reality often referred to as the metaphysical, one might consider that even an artificial plant or fake boulder has a type of interiority. Beyond the plastic and pigments, there exist the same atoms and other sub-atomic particles that constitute a real plant, a human, and for the most part, the rest of existence. The electron, while largely immobilized within the insulating material of an artificial plant, still bears an electric charge and is part of the energetic substrate of matter. The bio-sonification apparatus used in this project may simply not be sensitive enough to detect subtle electromagnetic fluctuations in the plastic; nonetheless, the placement of the sensor on the fake plant implies that something is potentially there to be measured—even if nothingness is the goal. The placement of the sensor on the fake plant highlights the materiality and sensitivity of the apparatus of measurement itself while also evoking self-referential quandaries that hope to question if there exists a quantifiable piece of data to be measured, or if 'interiority' necessitates quantification at all. To be clear, this is not to equate 'interiority' or 'experience' with 'subatomic charge', though there may be philosophical overlap in their shared entanglement with energetic and material processes. In their essay on 'measuring nothingness' and virtual particles, physicist and feminist philosopher of science Karen Barad, drawing from a Copenhagen interpretation of quantum mechanics, argues that measurements are not merely passive observations but "agential practices" that participate in bringing forth the very phenomena being measured: "measurements are agential practices, which are not simply revelatory but performative: they help constitute part of what is being measured... Measurements are world-making: matter and meaning do not pre-exist, but rather are co-constituted via measurement intra-actions" (Barad 2012, 6). Though there is much debate in the philosophy of science regarding the epistemic affordances of 'measurement' in the Copenhagen interpretation, as it is assuming a conscious, presumably human, subject as necessary in measurement and is assuming that quantum-level happenings have any relation to macro-states – artistic license enables the conflation of these definitions to explore alternative forms of meaning-making through what might be called *non-data*. Rather than treating null or non-data as failure, it becomes a speculative threshold.

As the adage goes – 'even non-data, or null data, is still data'. Here, *non-data* signifies a seemingly absent or negative result – not because nothing occurred in the measuring, but because what occurred lies beyond the thresholds of the apparatus, or outside convention-

al paradigms of detection. It marks a kind of deferred presence: an indication that something may be happening, but not in a way that our tools or minds are prepared to register. For the scientist, after attempting to capture data from the artificial plant, they might return to their hypothesis or experimental design to account for the lack of data. In reflection, they might choose to engineer a more sensitive apparatus, or scrap the venture completely.

For the artist, the collection of non-data takes on a cunning semiotic that aligns well with work being done through 'non-representational theory' (NRT, for short), which simply put, is an interdisciplinary post-post-modernism in the sense that it questions the conditions of contemporary empiricism, amongst other concerns. Extrapolating Barad's discussion of the metaphysical, the non-data collected from the artificial plant in *Fauxtanical* indicates a playful addition to NRT such that it is allowing the artificial to become 'real' so that the plant can be "[...] bursting with innumerable imaginings of what could be" (Barad 2012, 13), containing enormous multitudes of possible states of being that coalesce through the semiotic of measurement. NRT seeks to, according to an introduction by Phillip Vannini, view performance as a research method. NRT aims to make research "more performative" and advises practice-led research interested in alternative uses of scientific methods such that research can "dance a little" (Vannini 2015, 14), resisting the stiff structures of Western empirical science in favor of embodied, contingent, and situated style of knowledge-generation.

Such performative gestures – watering a fake plant, placing sensors on inert materials, interpreting environmental resonance through EEG - do not just simulate scientific procedures; they destabilize their epistemic authority. Some other *non-methods* of knowledge creation are discussed in the NRT literature, and relatedly, in philosopher of science Paul Feyerabend's *Against Method*. Here, Feyerabend argues that there is no single scientific method that can account for all scientific progress, as it is a plurality and faction into different disciplines, such as contemporary cognitive science or physics. He promotes epistemological humility and anarchism, suggesting that "[...] the only principle that does not inhibit progress is: anything goes" for a science that that is interested in the expansion of what we mean by knowledge (Feyerabend 1975, 19). Many of science's greatest advances came from breaking, rather than following, methodological rules. Accordingly, science progresses not through strict adherence to rules, but through creative, sometimes irrational, or even farcical or absurd *science-like* practices. Artist-researcher Erin Manning's ar-

ticle, also titled, “Against Method”, further embraces the fluid nature of creative processes within art and science. She challenges the institutional tendency to impose rigid methodological frameworks on such practices, arguing that these structures can constrain the inherent unpredictability and innovation central to artistic creation insofar that “[...] research-creation proposes new forms of knowledge, many of which are not intelligible within current understandings of what knowledge might look like” (Manning 2015, 53).

NRT informs this project in generating possibilities of an animated encounter with rendered domestication through performative data-gathering. It’s a useful generator of post-truths which defamiliarizes the real and artificial, forming novel odd-kinships and absurd methods of co-creation through the dependent origination of measurement, object of measurement, and measurement-taker. The practice of “measuring nothingness” through artistic means, as is demonstrated in *Fauxtanical*, therefore, should be seen as a significant mode of experimental, experiential and embodied engagement with the mystery that is the brain-body-environment complex. Measuring nothingness is not a failure to measure, but a reconfiguration of what counts as measurable, such that questions like the one proposed here can try to be “restless and willfully immature... NRT work aims to rupture, unsettle, animate, and reverberate rather than report and represent” (Vannini 2015, 5).

Performatively appropriating a method of cognitive science, specifically the brain-computer interface and its subsequent data visualization, not only allows the co-creativity between the more-than-less-than-human to produce a liminal space, but also allows for the user to, according to Marder, “think without the head”, or “thinking” more from the limbic system while the more recently evolved areas of the brain may downregulate. When the user reaches a certain threshold of gamma activity, the user’s self-image dissolves, and along with it, as is the nature of high gamma coherence, maybe their concepts of ‘self’ and ‘artificial’ may dissolve too. Considering that the artificial plant has no ‘head’ to think with, and if we are to take empathy as a ‘feeling into’ something or someone else – perhaps reflecting on oneself feeling into the physiology of an ‘empty’ fake plant might provide a fruitful complication of the partition between user and plant, where the user collapses into, or ‘becomes one’ with, both plants while revisiting empathy for both the real and artificial plant. Perhaps artificial plants have an interiority and type of sensuous capacity that humanity has not been able to find, measure, or prove – yet.

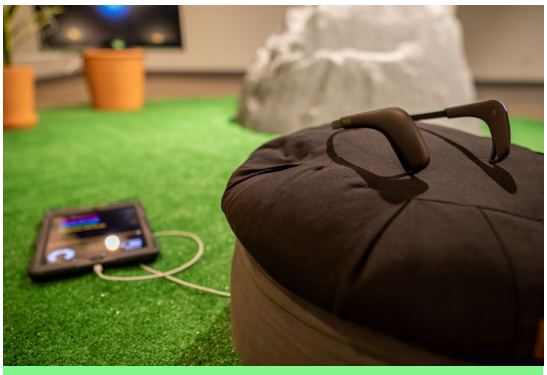

Fig.6. The EEG device sitting atop a Zafu meditation cushion.

5. Conclusion

Engaging with a mode of embodiment that is on a spectrum of more-than-less-than-human, *Fauxtanical* aims to connect humans with nature, both real and artificial. It also aims to connect the entities involved with sound and animation by providing a means to empathize with an artificial plant through a co-creative act. Sounds heard and felt create lasting memory for all involved, as do animations. After providing technical details on the how, the discussion gleans the why – which lies in the semiotic and performative value of attaching a sensor to an object that has no data to give. Here, nothingness is not an absence of data, but an indication of the possible somethingness found when measuring nothingness. Though such an experiment may not subscribe to empiricist methods or common logics, it has been argued that there is still an experimentally experiential type of knowledge being generated. Much like the ancestral animisms that do not fit the mold of western thought steeped in a science that claims to be objective, the knowledge being produced here is othered. In hopes to reconcile with the limits of empathy and the noetic systems which dictate empathy's conceptual extension, this project evokes the experience of everyday objects, detached from human subjectivity, yet brought to life in their immeasurable relations to each other.

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