

Casey Tang

To Carry The Earth

Supported by Artists Alliance Inc

Cuchifritos Gallery + Project Space

On View June 3 - July 29, 2023

Education Materials

Exhibition Overview

To Carry the Earth, a solo exhibition by AAI resident artist **Casey Tang**, showcases spatialized audio and sculptural installations that speak to the ways individuals, communities, and cultures make sense of the multiscale processes underlying the phenomena we experience.

Drawing from the artist's extensive research into the history of systems science and psycholinguistic spatial frames of reference, the site-specific project reflects on the limitations of Western logic, which is typically centered on an egocentric (the self) world view. Tang's exhibition proposes a different structure for navigating space, referred to as a geocentric frame of reference, that roots humans in our senses and is tethered to place (cardinal directions, locations of rivers and mountains, etc).

Tang's sculpture, *Here we are, hanging out in a Patritus, Bruno, Gassendi, or Newtonian Void*, explores the lineage of Western thought structures, which rely heavily on a logic that often overlooks the importance of our senses and the contextual information that is crucial for situational awareness. The sculpture is comprised of 3D printed and silicon recreations of natural objects—snail shell, lotus flower, log growing lichen, human hand—hovering in mid-air, alluding to the Enlightenment-era emphasis on rational thought, disconnected from embodied experiences and the physical world. As with the audio installation, the levitating objects investigate Western knowledge systems' lack of groundedness in the physical, Earthly realm.

To Expect Worlds To Carry The Earth

To accompany the exhibition, the artist wrote an exhibition essay, titled *To Expect Worlds To Carry The Earth*. The complete essay is available on our [website](#). *To Expect Worlds To Carry The Earth* introduces a new metaphysics incorporating concepts explored in the exhibition: biosemiotics, absolute geocentric spatial frames of reference, together with the logic of Nishida Kitarō's *Basho*, often translated as the logic of place. For your reference, please consult the reference list on p. 5 of this document for a list of terms and their definitions—as well as the authors, philosophers, and scholars—mentioned in the essay.

About the Artist

Casey Tang is an artist and researcher focused on the interrelation between linearity, recursion, agency, organization, and self-organization within large social-technical-ecological systems. Casey graduated from the Massachusetts Institute of Technology (MIT) with a Master of Science in Art, Culture and Technology. He is a recipient of the 2022 LES Studio Program residency with Artists Alliance Inc, 2021

Digital Diasporas Research Fellowship at Chronus Art Center, 2018 Center for Contemporary Art Kitakyushu Fellowship, 2015 Queens Museum/Jerome Foundation Fellowship for Emerging Artists, and 2013 New Vision Award from He Xiangning Art Museum.

<https://caseytang.com/>

Audio-installation sound breakdown:

1. Urban street
2. Temperate forest with Western Capercaillie
3. Oak forest with woodpecker, turkey, and a crow at dawn
4. Tropical rainforest
5. Common Loon, Cornell Macaulay library
6. Desert, Namibia
7. Inside a beehive
8. Bees flying and pollinating
9. Transit hub
10. Swamp with frogs at night
11. Southern Hardwood
12. Forest with owls, crickets, and frogs at dusk
13. Deep sea vessel engine noise (at 1312ft) with foraging sperm whales near Faial Island, Azores Whale Lab
14. Humpback whale at Faial-Pico Channel, Azores Whale Lab
15. Fin Whale at Condor Seamount, Azores Whale Lab
16. Bank Beetle digging inside a Monterey Pine tree, School of Biological Sciences, University of Canterbury
17. Temperate Forest, Massachusetts

Recommended Questions for Discussion

Before Your Visit

- If language can be considered a tool within larger reference systems, in what language do you think?
- When you're walking in your city, or a foreign city, what do you use to orientate yourself when moving around?
- If you're a user of Google Maps (or any digital navigation map), have you ever noticed if you use it differently than other people do?
- Think back on the instances where you have consumed something on the internet that has directly affected your perception or knowledge of what you were searching for. How do you think the online content has shaped your offline interactions?

During Your Visit

- How do your and your parents' (or other people older than you) methods of navigation differ?

- While you are in the gallery, try to orient yourself to the north or south. How did you do it? Did you know before you entered the gallery where these directions were, did you grab your phone and look at a compass or Google Maps, or did you look at the vinyl on the gallery walls?
- Can you identify any of the sounds when engaging with the audio installation?
- Are you in the center of the speaker “circle”, or are you moving around inside the circle?
- Did you have differing audio experiences when standing still or moving around the installation?
- Imagine you're in a completely dark room that contains treasure (candy?) How would you like directions to the treasure to be provided? How would that change if the lights were turned on?

After Your Visit

- If you're a local: how has the exhibition challenged the way you navigate familiar spaces?
- If you're a tourist in NYC: has the exhibition changed the way you think of navigating familiar and unfamiliar spaces?

Artist Narrative

Reflections on the process of developing the exhibition from artist Casey Tang

Identifying and sourcing sounds included in audio installation

“I was looking for species of varying sizes and ecosystems. I ended up searching for scientific ecological recordings, sometimes known as bioacoustics. Recordings range from citizen science contributions to continuous acoustic monitoring for big data analysis. There are also some field recordings I made. It's important to note there are different theories of recording and listening as it encodes and decodes phenomena in particular ways. Two of the biggest ones are soundscapes and acoustemology. The former is the dominant mode steep in universalism, naturalism, and objectivity. It's incredibly prevalent in science, including ecological field recording. The latter treats listening and recording as a relational and constructivist act.”

About spatialized sound

“Spatialized sounds create a 360-degree experience of a sound stage, while stereo sound creates only a ‘stereo image.’ It's only concerned with the front-facing aspect of a listener.”

The four objects in *Here we are, hanging out in a Patritus, Bruno, Gassendi, or Newtonian Void*

“I chose the objects thinking about biosemiotic relationality, Nishida Kitaro's predicate logic, and the Newtonian void. We can deconstruct these terms to explore the dynamics between subjects, objects, multi-scalars, space, and place—their relational nature and collective aggregation. Another layer to consider is the role of the observer-interpreter, both internal and external, in the work. I found myself drawn to various elements that alluded to a multi-scalar composition. For instance, the shell points to the relationship between smaller, slower forms of life, while the branch with lichen points to the intricate connections between organisms and the environment, showcasing different forms of intelligence. It's also an ode to lichen—an extraordinary composite organism comprising cyanobacteria and fungi that break down rock, bridging the gap between biotic and abiotic life.

I was also interested in the symbolism and significance of the lotus flower in Buddhism and its relevance to Nishida Kitaro's metaphysics. Nishida skillfully translated Zen Buddhist concepts into philosophical terms, enabling their integration into the modern and globalized world. This interoperability led to today's iterative (really adaptive evolution) product development processes, such as kanban, lean, and agile methodologies, which have fueled globalization and the proliferation of technology.

Cybernetics' circular causality or our information technologies creates increasingly complex environments. Entities, including technology companies and products, use a globalized business form of Zen Buddhism adopted from Japanese technology companies to navigate these environments and absorb contingencies that arise from increasingly non-linear environments. Buddhism is decentralized and has transformed in every country it has rooted in. It's humorous that Western capitalism and globalization have mutated Buddhism into a product, design, engineering, and business framework. It equips tech workers to operate at the moment through a priori and abductive logic to achieve fitness between their products, users, and environment. Suppose Nishida's framework has proven effective in this context, empowering entities to navigate and survive the complexity of their own making. What would happen if we applied the same framework, including the other levels, to ourselves and our communities? Can we survive as human beings in our current climate instead of capitalist technologies, products, and companies?

The uncanny hand anchors the concept of disembodiment caused by the Newtonian void and Cartesian mind-body dualism. The objects' surfaces and textures are reminiscent of ghost flowers (*Monotropa uniflora*). These parasitic flowers do not rely on photosynthesis; they extract their resources through a fungi network and a tree host. Similarly, without a place, humans only have a host and need to extract resources unsustainably at a much larger scale. The work is also playing with the uncanny.

Essentially, we inadvertently place our propositions into a void by neglecting the significance of place and predicate values in our logical frameworks. In doing so, the subject becomes a mere projection of our biases relative to the observer and their state at the time of contact, all floating aimlessly in an abstract void or a world of meaningless chaos."

Geographic markers in gallery space (vinyl on walls and windows)

"Across psycholinguistics, researchers have identified three spatial frames of reference (FoR); relative or egocentric, intrinsic or allocentric, and absolute, which geocentric falls under. The installation tries to move people's FoR from egocentric to allocentric and finally geocentric. Some cultures that use geocentric with no egocentric frames teach geocentric in phases; they start with allocentric in relation to the geocentric, then transition to a geocentric datum. Some will further subdivide the geocentric into more quadrants and utilize dead reckoning to always root themselves on Earth. Mapping this to my situation, I choose important cultural and topological sites situated in cardinal directions. Waterways are one of the easiest ways for people to orient themselves in an environment. I selected the carrier hotels, but it could be anything that alluded to the structure of the Internet. I initially wanted to create a geocentric mental abstraction of the TCP/IP layer of the Internet, a working model that helps us navigate our relationship to it, including the entities with network aggregation, but I didn't have enough time to complete it. I would consider the hardware layer of the Internet to be pretty stable; the software layer is highly volatile, transomorphic, and currently more influential or downward causation on us."

The importance of collaboration

“I default to working in this mode, which I picked up in my early twenties working for Xu Bing. Several years ago, I tried to leave or balance this modality with more individual-based practice. Still, after going to MIT and experiencing the infrastructure and environment in which influential science and technologies are formed, it made me think about Ashby’s Law of Requisite Variety which isn’t a law per se and more of a principle. Still, it states an entity needs equal or more variable states than the environment it’s navigating to survive or persist in space and time.

If creating novel science and technologies requires a team of diverse and highly specialized skill sets and ample funding and time, an artwork trying to engage with these modes of production, technologies, and their secondary effect must also increase variability. Other issues further complicate this, our dominant information technologies affect us more behaviorally and through embodied cognition, continuously nullifying art’s more symbolic gestures concerning this subject area. According to Luc Boltanski, Internet tech workers and the “creative class” have taken or, we can say, absorbed the artist figure from the turn of the century. We can extend this argument to urban centers; tech companies are no longer confined to suburban corporate campuses like in Silicon Valley, but they are taking up space in cities, further displacing artists and their places for gathering, ideating, and creating. It’s more of a research and development modality, but experimenting with this process is very monetary and timely costly to me, hindering experimentation. I’m still trying to figure this portion out.”

Research and writing

“I’ve been incorporating desk research and writing into my practice because it helps me make sense of a wide variety of materials, disciplines, and complex, large-scale issues more economically. I consider it a form of sketching, sensemaking, and preparatory work. One of the first things I did after leaving MIT was to create a system to streamline my research process. I bring this up because I’m still figuring out what it means to do research outside the support of a research institution and within an art practice. I also think there is a danger to doing “research” in a silo that seems to be becoming prevalent in the art world and labeling it so. Research in academic institutions has a certain amount of rigor, social pressure, accountability, and reciprocity (that has also been questioned) for a specific community. It’s also important to not just use deductive reasoning within this process. One still needs to synthesize, implement, and incorporate feedback. Making artwork is also a form of research and knowledge production. Still, it’s more of a second-order cybernetic operation—a recursive feedback loop within a form about form—ideally to the infrastructure or ideology of centralized power. Research-based artworks, especially those that leak out of the art world claiming to be in the first-order might be more dangerous—all the claims of indexicality and objectivity without recursion, accountability, and checks like the Institutional Review Board. I think the art and science lines of inquiry are both important. At the end of a scientific discovery and artwork is a narrative we tell ourselves and each other.”

Where does To Carry the Earth situate in your general practice? Does this project draw from any of the work that you developed during your residency with AAI?

“In my general practice, I’m interested in how order is created and what organizing force allows relations with strong emergence to persist in space and time—gracefully. Within that, what are the different types of

relations, loops, and structures that create structure-preserving and emergent relations and entities? This is a systems framework, and it's been used with computational modeling to understand everything from the brain, a city, a termite mound, and radicalization on the Internet. In my use case, I'm less interested in computational modeling as proof of phenomena to be published in an academic paper and more concerned with how the macro entities, e.g., Earth, societies, and power, affect the micro, e.g., beings, including humans, quality of life, belief, and action--and vice versa. Ultimately, it's a way to understand or fork human beliefs, behaviors, senses, and aggregation in relation to the functioning of society with and on Earth channeled through a sensorial experience.

The sound piece *To Carry the Earth* is behavioral design. I'm not usually this heavy-handed. I've combed academic papers and interviewed a psycholinguistic researcher to find leverage points within my allocated time to help shift urban-dwelling English speakers' egocentric spatial processing to geocentric. I chose sound because it strips away our ocular bias and helps dampen our egocentric datum, hopefully enough to allow experiences of novel spatial frames. Listening is fundamentally relational; without an ocular anchor, we shift to relational thinking, listening to sound-objects in relation to other sound-objects and places. There are problems with the piece. Since we are an ocular bias culture, without a visual or human anchor, it will probably be hard for most people to enter the work.

During my residency, I started studying a theoretical mathematics. I believe it will likely be the next evolution of systems science, which hasn't significantly changed methodically since the 1980s. This new science will have vast implications for scientific knowledge creation and every other discipline, even how we understand and interact with phenomena and each other. I was learning the new framework to more readily comprehend and grapple with large-scale systemic issues at a more granular level and higher fidelity. It's another cybernetic pharmakon but of a higher-order."

Casey Tang's interview with a linguist

Q.01: If you were a nature guide with a dominant geocentric frame of reference (FoR) taking a group of egocentric English speakers on a tour of a forest, desert, or ocean, how would you help them sense, make sense, and relate to things the way you do?

"Importantly, references to the locations of anything should exclude references to do with left/right/front/back. This is quite common at larger scales for English speakers already (NYC is on the East and LA is on the West, for example), but bringing this down to smaller scale things will be the most novel conceptualization for egocentric-preferring people. A useful tool that many languages employ, is to refer to things twice in a construction, this could help cement and clarify the concepts by giving more opportunities to understand (e.g., the river is to the north and we are to the south). Moreover, anything that is in a fixed position can be under the umbrella (to some degree) of geocentricism, so talking about getting closer or further from salient landmarks (e.g., seaward, mountainward, etc.)"

Q.04: Is there an interaction with a being, object, or environment that makes more sense with geocentric frames than egocentric? And vice versa.

"There is not one particular being, object, or environment that makes necessarily more 'sense' than any other, but we do generally see more geocentric language being used the larger the scale is at hand (as

with English). So, in a sense, some are more 'useful' in certain contexts, especially when egocentric information is not readily available (such as talking over the phone, unaware of someone's orientation). In these instances, a lot of people will generally use a landmark to begin an orientation and then work backwards from there (such as face the building, then head right). These strategies are less important for geocentric descriptions (head downhill)."

Q.05: What are the biggest differences and similarities between people's thinking and behavior with geocentric and egocentric processing?

"Again, I think the Animals-in-a-row task is a good example of this. It shows the degree of which people who predominantly use geocentric frames pay attention to geocentric cues and track directions. This is also substantiated across the language, such as through greetings (Some languages say which way are you going as a how are you equivalent, and the response is still expected to be something like north-northwest). Furthermore, gesture is an area where this pops up too. In metaphorical uses, English speakers will generally gesture forwards when talking about the future (e.g., oh my summer trip isn't for aaaaages with a forward hand motion). Some communities that rely on geocentric frames may gesture eastwards or downhill for events that happened earlier and westwards or uphill for those happening later."

Q10: Considering the objects, the stage, and the level of control mentioned below, how might we help English-speaking urbanites with presumed default egocentric spatial processing to 1) Understand or 2) Experience geocentric spatial frames?

"I think it could be useful to have (perhaps early on) sound that moves from a particular location outwards. You may have a certain sound like an animal or rustling or water and then an audio version of a wave like in a stadium where it moves out and even back from a single point of origin. This could help people think of the entire space in relation to a single landmark, regardless of their orientation. This could even fit in with geocentric metaphors of time if sounds begin in the east and end in the west. I could imagine the narrators voice moving in this way, it'll also avoid a temptation to 'face' the narrator if it is perceived as moving. Additionally, perhaps transition from natural to urban could increase in this wave like pattern in the same direction.

Sound itself is largely independent of egocentric views in that it is largely unaffected by orientation. Although we face things and people we interact with, our perception is not necessarily based on that. So, in a sense, the very nature of sound and the speakers is already aligning with geocentric perspectives (or at least not aligning with egocentric ones). In other words, with sounds, we do not have a 'view' point."

Syllabus

Ontological research

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Reference Terms (as found in the exhibition essay, *To Expect Worlds To Carry The Earth*)

A priori

A Latin phrase used in philosophy to distinguish types of knowledge by their reliance on empirical evidence or experience. *A priori* knowledge is independent from current experience and is innate to human knowledge, examples include mathematics, tautologies, and deduction from pure reason.

Agile manufacturing

Agile manufacturing is a manufacturing methodology that places an extremely strong focus on rapid response to the customer – turning speed and agility into a key competitive advantage.

Agroforestry

The intentional integration of trees and shrubs into crop and animal farming systems to create environmental, economic, and social benefits.

Arborescent

Resembling a tree in growth or appearance.

Aristotelian logic

The traditional system of logic expounded by Aristotle and developed in the Middle Ages, concerned chiefly with deductive reasoning as expressed in syllogisms. A syllogism is an instance of a form of reasoning in which a conclusion is drawn from two propositions (premises), each of which shares a term with the conclusion, and shares a common or middle term not present in the conclusion (e.g., *all dogs are animals; all animals have four legs; therefore all dogs have four legs*). Aristoteian logic represents how most Western societies reason and think today, and underscores the logic of most arguments. **The Peripatetic school** was a philosophical school founded in 335 BC by Aristotle in Ancient Athens.

Autopoietic

The term autopoiesis describes the capacity of living cells to reproduce and organize themselves. Another way to understand the term is that it denotes ability to self-create.

Biosemiotics

Study of signs and meaning in living organisms and systems. Tang's exhibition further explores the ways living organisms and systems orientate themselves and how they make meaning of their environment, as an alternative to how most Western societies follow a predominantly egocentric frame of reference.

Cardinal direction

The four cardinal directions, or cardinal points, are the four main compass directions: north, south, east, and west. Relative to north, the directions east, south, and west are at 90 degree intervals in the clockwise direction.

Constructivist logic

Systems of symbolic logic.

Cybernetics

The science of communications and automatic control systems in both machines and living things.

Dialectical thinking

Logical thinking.

Enlightenment

The great 'Age of Reason' is defined as the period of rigorous scientific, political and philosophical discourse that characterized European society during the 'long' 18th century: from the late 17th century to the ending of the Napoleonic Wars in 1815. During this time the mysticism and religious beliefs that defined (mostly) Western knowledge systems of the Middle Ages were replaced by scientific thought and rationalism.

Geocentric frame of reference

Geocentric spatial frames of reference are a way of describing and understanding spatial relationships in language and cognition using Earth's coordinate system as reference points. Geocentric frames allow us

to communicate and perceive spatial information based on a community's agreed-upon fixed axis rather than our perspective or the position of objects.

Guugu Yimithirr language

An Australian Aboriginal language, the traditional language of the Guugu Yimithirr people of Far North Queensland.

Heterarchical

Form of management or rule in which any unit can govern or be governed by others, depending on circumstances, and, hence, no one unit dominates the rest (authority within a heterarchy is distributed).

Holoarcy/Holorchy

A system composed of interacting holons. In philosophy, a holon is simultaneously a whole in and of itself, as well as a part of a larger whole.

Kanban

Kanban is a scheduling system for lean manufacturing.

Kantian dualism

According to the philosophy of Immanuel Kant, there is a distinction between actions done by desire (therefore, by the physical body) and those performed by reason in liberty (therefore, by the non-physical mind), thus, not all physical actions are caused either by matter alone or by freedom alone. Kant elaborated on the mind-body dualism as set out by 16th century French philosopher, René Descartes.

Lean manufacturing

Lean manufacturing is a methodology that focuses on minimizing waste within manufacturing systems while simultaneously maximizing productivity.

Materialist philosophy

The theory that nothing exists except matter and its movements and modifications.

Medulla oblongata

The connection between the brainstem and the spinal cord, carrying multiple important functional centers.

Meiji-era Japan

The Meiji era is an era of Japanese history that extended from October 23, 1868 to July 30, 1912.

Meontology

The study of non-being.

Metaphysics

The branch of philosophy that deals with the first principles of things, including abstract concepts such as being, knowing, substance, cause, identity, time, and space. Metaphysics is a very broad field, and metaphysicians attempt to answer questions about how the world is.

Mimicry

The close external resemblance of an animal or plant (or part of one) to another animal, plant, or inanimate object.

Morphogenesis

The biological process that causes a cell, tissue or organism to develop its shape.

Neo-Kantianism

A revival of the philosophy of Immanuel Kant, the Neo-Kantians sought to develop and clarify Kant's theories, particularly his concept of the Thing-in-itself and his moral philosophy.

Non-positivist

The study of internal processes represented through emotions, motives, aspirations and the individual's interpretation of social reality, non-positivists emphasize upon using qualitative methods and not the scientific methods similar to the ones used in natural sciences.

Ontology

The branch of metaphysics dealing with the nature of being: how beings exist, how beings cease to exist, what it means to "be".

Organicism

The philosophical position that states that the universe and its various parts ought to be considered alive and naturally ordered, much like a living organism.

Ouroboros

An ancient symbol depicting a serpent or dragon eating its own tail, it is an emblem of wholeness or infinity.

Perturbation

A deviation of a system, moving object, or process from its regular or normal state or path, caused by an outside influence.

Pharmakon

A concept introduced by Algerian-French philosopher, Jacques Derrida (1930-2004). It is derived from Greek, a word that can mean either remedy, poison, or scapegoat.

Phenomenology

The philosophical study of the structures of experience and consciousness.

Post-human

Posthuman or post-human is a concept originating in the fields of science fiction, futurology, contemporary art, and philosophy that means a person or entity that exists in a state beyond being human. Posthumanism stands in opposition to anthropocentric and other biological understandings of existence and relates to a technological future where humans will be replaced by machines and technology, like AI.

Rhizome

A continuously growing horizontal underground stem which puts out lateral shoots and adventitious roots at intervals.

Semiosis

The process of semiosis is the process of signification in language or literature and involves a triadic relationship between a sign or (a first), an object (a second) and an interpretant (a third). The sign is a thing that represents another thing: its object. Before it is interpreted, the sign is a pure potentiality: a first.

Semiotics

The study of signs and symbols and their use or interpretation within meaning making. Tang's exhibition explores alternative processes and references we use to make sense of the world around us.

Syntax

The arrangement of words and phrases to create well-formed sentences in a language.

Systems Science

An interdisciplinary field that studies the complexity of systems in nature, social or any other scientific field.

Transduction

The action or process of converting something and especially energy or a message into another form.

Second-order cybernetics

Also known as the cybernetics of cybernetics, is the recursive application of cybernetics to itself and the reflexive practice of cybernetics according to such a critique. It is cybernetics where the role of the observer is appreciated and acknowledged rather than disguised, as had become traditional in western science. Second-order cybernetics was developed between the late 1960s and mid 1970s by Heinz von Foerster and others, with key inspiration coming from Margaret Mead. Foerster referred to it as "the control of control and the communication of communication" and differentiated first order cybernetics as "the cybernetics of observed systems" and second-order cybernetics as "the cybernetics of observing systems". Its concerns include autonomy, epistemology, ethics, language, reflexivity, self-consistency, self-referentiality, and self-organizing capabilities of complex systems. It has been characterized as cybernetics where "circularity is taken seriously".

Substrate

In philosophy, it's the thing that bears properties, as opposed to the properties themselves, but conceived as an indescribable 'something we know not what' Substance is what makes a thing a general thing, in other words, substance is what makes "a chair".

Authors/philosophers/scholars mentioned in the essay

1. Aristotle (Greece, 284-322 BC) was an Ancient Greek philosopher and polymath. His writings cover a broad range of subjects spanning the natural sciences, philosophy, linguistics, economics, politics, psychology and the arts.

2. Franciscus Patricius (Croatia, 1529-1597) was a philosopher and scientist and was known as a defender of Platonism and an opponent of Aristotelianism.
3. Giordano Bruno (Italy, 1548-1600) was an Italian philosopher, poet, cosmological theorist, and Hermetic occultist. He is known for his cosmological theories, which conceptually extended to include the then novel Copernican model.
4. Pierre Gassendi (France, 1592-1655) was a French philosopher, Catholic priest, astronomer, and mathematician. His mix of perspectives provides a modern view of his own making, one of the touchstones of philosophy and science in his times: our access to knowledge of the natural world is dependent on the constraints and licenses that follow from our epistemic grasp being limited to information provided by senses.
5. Isaac Newton (England, 1642-1727) was an English mathematician, physicist, astronomer, alchemist, theologian, and author who was described in his time as a natural philosopher. He is best known for having invented calculus in the mid to late 1660s, and for having formulated the theory of universal gravity.
6. Immanuel Kant (Germany, 1724-1804) was one of the central Enlightenment thinkers. Among other principles and philosophical beliefs, Kant was a metaphysical dualist who believed in a clear separation between the realms of the body and the mind.
7. Gilles Louis René Deleuze (France, 1925-1995) was a French philosopher famous for his writings about other philosophers with new insights and different readings, and for unsettling particular bodies of knowledge.
8. Pierre-Félix Guattari (France, 1930-1992) was a French psychoanalyst, political philosopher, semiotician, social activist, and screenwriter, he is best known for the books he co-wrote with Gilles Deleuze.
9. Gregory Bateson (England, 1904-1980) was an English anthropologist, social scientist, linguist, visual anthropologist, semiotician, and cyberneticist whose work intersected that of many other fields. According to Bateson, consciousness is the bridge between the cybernetic networks of individual, society and ecology and the mismatch between the systems due to improper understanding will result in the degradation of the entire supreme cybernetic system or Mind.
10. Claude Elwood Shannon (United States of America, 1916-2001) was a mathematician, electrical engineer, computer scientist and cryptographer known as the "father of information theory". Shannon developed information entropy as a measure of the information content in a message, which is a measure of uncertainty reduced by the message. In so doing, he essentially invented the field of information theory.
11. Charles Sanders Peirce (United States of America, 1839-1914). An American philosopher, logician, mathematician and scientist who is sometimes known as "the father of pragmatism". He

saw logic as the formal branch of semiotics, of which he is a founder, which foreshadowed the debate among logical positivists and proponents of philosophy of language that dominated 20th-century Western philosophy.

12. Jakob Johann von Uexküll (Germany, 1864-1944) was a Baltic German biologist who worked in the fields of muscular physiology and animal behavior studies and was an influence on the cybernetics of life. However, his most notable contribution is the notion of *umwelt*, used by semiotician Thomas Sebeok and philosopher Martin Heidegger. His works established biosemiotics as a field of research.
13. Jesper Hoffmeyer (Denmark, 1942-2019) was a professor at the University of Copenhagen Institute of Biology, and a leading figure in the emerging field of biosemiotics.
14. Kitarō Nishida (Japan, 1870-1945) was a Japanese moral philosopher, philosopher of mathematics and science, and religious scholar. He was the founder of what has been called the Kyoto School of philosophy. One of the most famous concepts in Nishida's philosophy is the logic of basho (Japanese: usually translated as "place" or "topos"), a non-dualistic concrete logic, meant to overcome the inadequacy of the subject-object distinction essential to the subject logic of Aristotle and the predicate logic of Immanuel Kant, through the affirmation of what he calls the "absolutely contradictory self-identity", a dynamic tension of opposites that, unlike the dialectical logic of Georg Wilhelm Friedrich Hegel, does not resolve in a synthesis. Rather, it defines its proper subject by maintaining the tension between affirmation and negation as opposite poles or perspectives. (**predicate logic** = predicate logic uses quantified variables over non-logical objects, and allows the use of sentences that contain variables, so that rather than propositions such as "Socrates is a man", one can have expressions in the form "there exists x such that x is Socrates and x is a man", where "there exists" is a quantifier, while x is a variable.)
15. Margaret Mead (United States, 1901-1978) was an American cultural anthropologist who featured frequently as an author and speaker in the mass media during the 1960s and the 1970s. She was a communicator of anthropology in modern American and Western culture and was often controversial as an academic.
16. Heinz Von Foerster (Austria, 1911-2002) was a scientist who combined physics and philosophy, and widely attributed as the originator of second-order cybernetics.
17. Bertrand Russell (Britain, 1872-1970) was one of the early 20th century's most prominent logicians, and a founder of analytic philosophy. Russell's theory of types deals with logical paradoxes arising from the unrestricted use of predicate functions as variables.

Accessibility Information

Note: There is a magnetic field present at this exhibition, but safe for general viewing and pacemakers.

Visitors Who Are Deaf or Partially Hearing

The majority of the exhibition includes an audio-based work that could be difficult to enjoy for those who are deaf or sensitive to sound.

The current exhibition only engages the main room of the gallery. Upon entering the gallery, you will find a circle of tall speakers and, to your immediate left, you will encounter a sculptural installation. This sculptural installation shows one silicone and three 3D printed objects hovering off the top of a wooden pedestal. The objects (a snail shell, lotus flower, tree log and human hand) levitate above a magnetic field. The magnets are safe for pacemakers.

Facility Accessibility

Baby strollers are welcome in Both Essex Market and Cuchifritos Gallery + Project Space. Both facilities are wheelchair accessible and service animals on a leash are permitted.

If you have any questions, comments, or concerns about accessing Cuchifritos Gallery + Project Space or attending programs, please contact Jodi Waynberg at jodi@artistsallianceinc.org or call 212-420-9202.

Restrooms

Restrooms for visitors are located on the second floor of Essex Market, which is accessible via elevator or stairs.

Visitors on the Autism Spectrum

The current exhibition gallery includes the main room and a smaller room that can be accessed through the opening in the left-hand corner of the gallery. Both spaces include large street-facing windows. In the gallery, there are artworks that implement visual and auditory interactions.

Please refer to the pages below for a visual guide to accessing Cuchifritos Gallery + Project Space:

Visual Guide: Accessing Cuchifritos Gallery

Hello, today we will be going to visit the Cuchifritos Gallery in Essex Market at 88 Essex Street in New York City. Walking down the street, you may be able to recognize us! At Artists Alliance Inc., we show contemporary artworks by new and emerging artists.



Our Cuchifritos gallery is located inside Essex Market, where there are a lot of shops indoors. This means that there are many people walking and touring the shops, as well as the people who run them. You will most likely hear the sounds of chopping from the vendor's food prep, the smell of food, and the voices of people talking and interacting with the stores. It is a comfortable social space, and entering our gallery is just as open and welcoming.

CUCHIFRITOS

GALLERY + PROJECT SPACE

a program of ARTISTS ALLIANCE INC

artistsallianceinc.org

88 Essex Street
New York NY 10002

Weds through Sat
Noon - 6p or by appt.

This is the entrance to the Essex Market facing Broome Street between Essex and Norfolk streets. Before entering, we should put on our masks!



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Once we enter through the glass doors, we should head to the right. We can check if we're heading in the right direction by following the vendors: Top Hop, Peasant Stock, Puebla Mexican Food, Cafe D'Avignon, Dominican Cravings, and Zerza (in that order). Once you hit Zerza, you can take a left turn and we should be right next to the gallery!



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Now, we can enter the gallery through the glass doors (which are always open during visiting hours!). There will be someone at the desk to greet you, but we can freely walk around the space to see what we like. On the desk are two stacks of paper: one with the names of the Curator and Artists of the show and one that provides the titles of and materials in the work on view. We can take these with us to better understand the artwork.

To Carry the Earth is largely an audio-based exhibition. Once you enter the gallery you will hear audio recordings playing on six large speakers. There is a magnetic field present at this exhibition, but safe for general viewing and pacemakers.



The exhibition consists of two works. The large audio-installation at the center of the gallery plays a looped 20-minute audio recording over six speakers placed on stands. The other installation has a magnetic field with objects that hover above the top of the plinth on which they are installed. The gallery also has bright fluorescent lights, if you are sensitive to sound or bright lights take caution when you enter the gallery.

The large installation at the center of the exhibition is an audio-based work consisting of six speakers placed in a round. The speakers play field recordings from different natural and urban landscapes and include animal, bird, and car sounds. This could potentially be overwhelming, creating too much sensory information to process at once, and also cause the visitor to feel like they are not in control.



Here we are, hanging out in a Patritus, Bruno, Gassendi, or Newtonian Void

When entering the gallery, you will find this installation on your immediate left. It consists of a wooden pedestal with objects hovering on its surface. The installation has a magnetic field present, but it is safe for pacemakers. The magnetic field enables 3D printed and silicone objects to hover off the surface of the pedestal, as if floating in a void. The objects mimic a snail shell, lotus flower, tree branch and human hand.



Guide to the Bathrooms

To enter the bathrooms, we can head back toward the entrance we came through in the very beginning. Just beyond that, we should be able to see a staircase leading up to the mezzanine. We can walk up these, or...



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We can use the elevators, which you might have noticed on the right side when we first entered the market.



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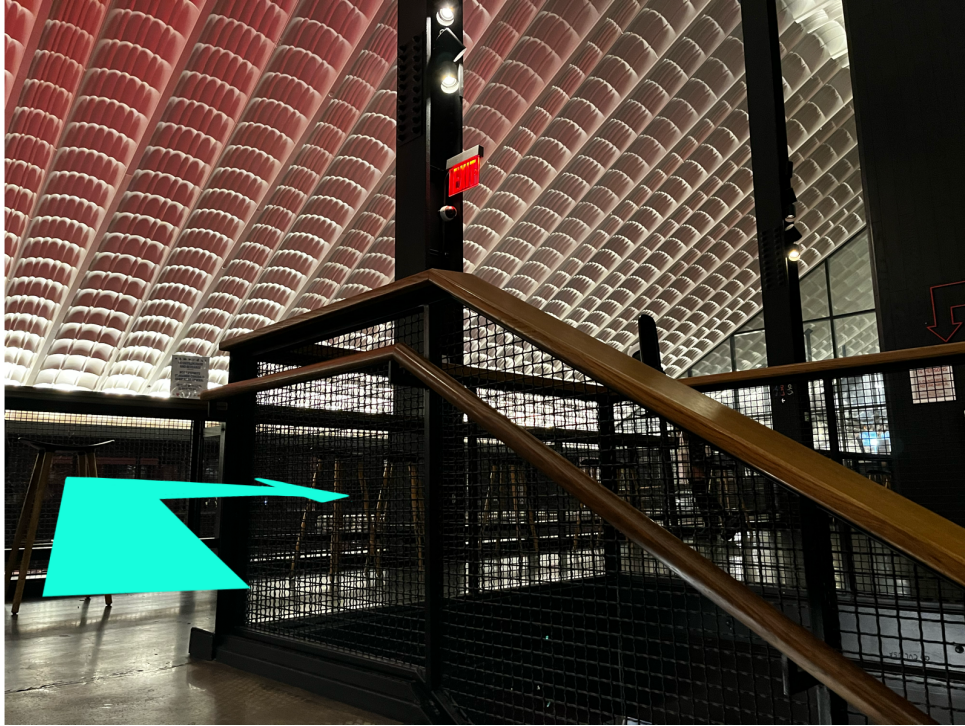
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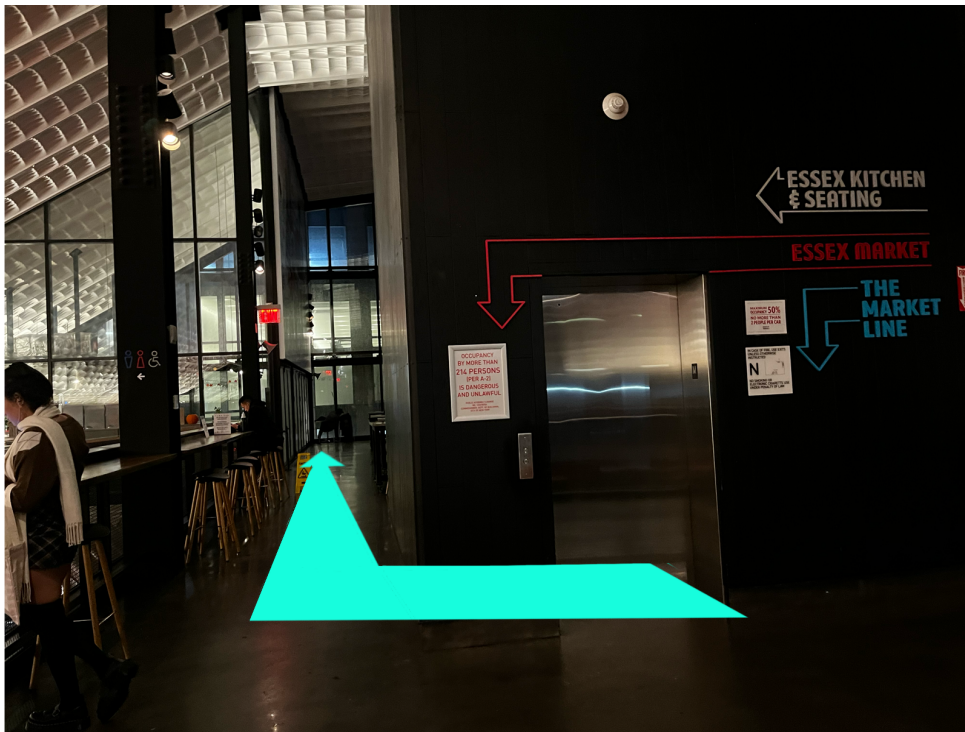
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If we took the stairs up to the mezzanine, we can head toward the right.



If we took the elevator, we should make two right turns



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Then, we should keep walking along the counters and stools to the left, until we see a long, declining ramp. We can follow it straight down until we reach the end of it by the multiple doors and a glowing exit sign overhead.

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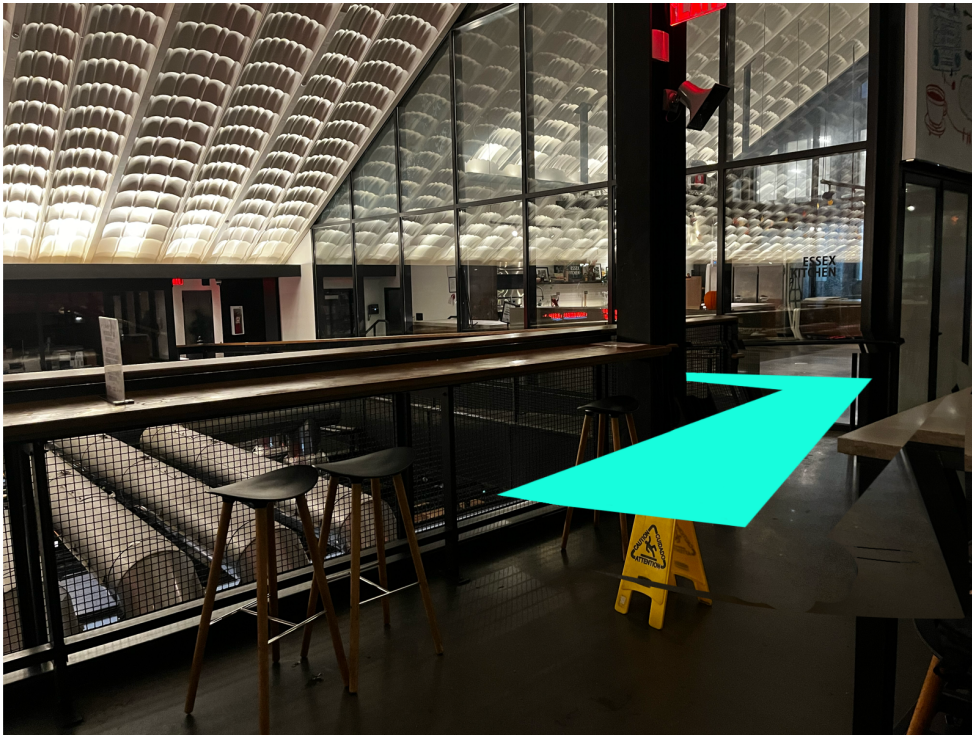
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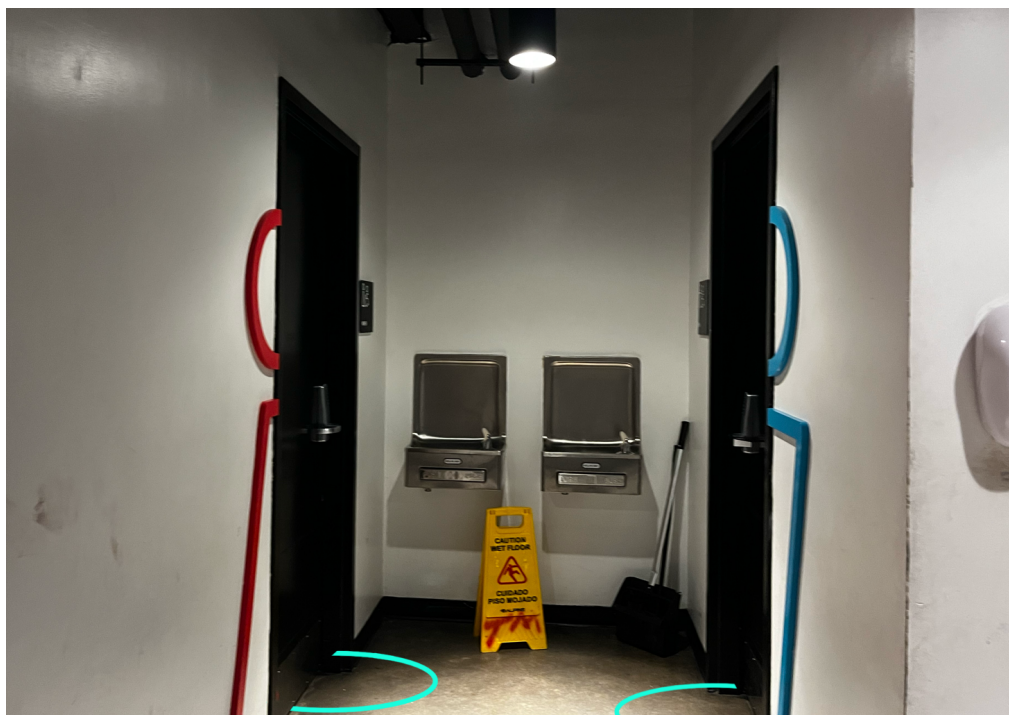
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Once we reach this area, you can take a right turn toward the hand sanitizer dispenser.



There are the bathrooms! The one on the left with red is for women, and the one on the right with blue is for men. To use them, you will need to put in the bathroom code: 80220#



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When we're ready to leave, we can exit through the gallery doors and retrace our steps to the large glass doors of the market. Or you can explore the rest of the amazing Essex Market shops and installments as well!

I hope we can meet again at the Cuchifritos Gallery + Project Space.

