Article

Channelling the Unknown: Noise in Art Ecosystems

Paul Goodfellow

Department of Arts, Northumbria University, Newcastle NE1 8ST, UK; paul.goodfellow@northumbria.ac.uk

Abstract: At both the individual and societal levels, we are entangled within environmental, social, and technological systems that shape our material and emotional states. Contemporary art needs to integrate and challenge the information circulating within these interacting systems to address our increasingly complex lifeworld. This systemic understanding emerged in the 1960s as part of a broader growth in relational thinking within the natural and social sciences, which extended the conceptual boundaries of the artwork. The ecosystem, a model originally developed within ecology, is an example of a systems model as it describes the flow of matter, energy, and information through the physical world. This model has evolved into a powerful analogical tool to describe contemporary culture’s entanglement with nature and technology. The ecosystem model is invoked here to describe how information flows through the artwork. The paper suggests that art is a vital form of communication as it can channel noise or unknown information. This channelling is demonstrated with the artwork, The Creation Myth (1998), by Jason Rhoades. This work anticipated the convergence of natural and technological systems, and it demonstrates the ability of the arts to channel unknown messages or noise, thereby disrupting the dominant signals of contemporary culture.

Keywords: noise; ecosystem; contemporary art; Systems Art

1. Introduction

Since the millennium, culture has awoken to the dangers of the climate crisis, pandemics, and the collapse of Late Capital, as well as the threat to our lifeworld from technological systems such as algorithms, which manipulate personal behaviour and shape society. This woken state requires more from art than textual analysis, and the post-contemporary artwork must reflect the vulnerable conditions of the early 21st century. Art must critically engage with the systems that radically alter our material conditions and dislocate our sense of self. In particular, we need an ecological-systems understanding of the world that extends beyond the traditional descriptions of the Earth as the natural stuff of oceans, forests, and minerals, to include all human- and machine-created stuff, including technologies and information. This expansion of the “ecosystem” as a description of everything entangled together is approached in the writings of Gilbert Simondon ([1958] 2017), Félix Guattari ([1989] 2000), Timothy Morton (2012), Erich Hörl (2017), and Peter Haff (2014). Haff, for example, suggests that “The technosphere represents a new stage in the geologic evolution of the Earth” (Haff 2014, p. 2). This expanded notion of the ecosystem, which fuses the ecological, the technological, and the informational, is employed here to reconsider the morphology of the contemporary artwork and its capacity to communicate the complexities of contemporary culture through the channelling of noise. It is important to differentiate between the employment of the term “noise” in this discussion, which is derived from information theory, and its employment within common parlance, where it refers to unimportant or trivial information that clogs up news channels, such as celebrity gossip. However, both forms of noise (the unknown or disruptive signal discussed here, and the trivial information of mainstream media) contribute to, or disrupt, the circulation of information.
2. The Emergence of Ecologically Infused Systems Art

The systems view of the world articulated in ecological thinking, systems thinking, and cybernetics was developed in the 1940s, with the concept of the ecosystem being established as the dominant description of the physical environment with the publication of Eugene Odum’s, *Fundamentals of Ecology*, in 1953. The ecosystem model describes the world in terms of three observable properties, and these can be applied, on an analogical level, to the complex artwork (Goodfellow 2020, p. 10). Firstly, an ecosystem is made up of observable objects, such as trees. Secondly, each object has measurable attributes, such as a volume, a mass, and an arrangement of atoms. Thirdly, there is a relationship between objects that is a product of the interaction of their attributes and the wider environment (Odum [1953] 2017).

By the 1960s, these relational ideas had started to inspire a generation of artists to investigate the underlying structures at work within the material and social worlds, which culminated in the art movements of Minimalism, Conceptual Art, and Systems Art. This “systems turn”, which was spearheaded by Roy Ascott in the United Kingdom, and Jack Burnham in the United States, can be understood as part of the broader systems awakening during this era. Ascott’s work is important as it synthesises the two poles of systems thinking by fusing technological, or cybernetic, ideas with ecological ideas, and proposes that the artwork functionally extends beyond the material object to include the other actors within a system, stating:

I could see that the artwork was a system arising from a process, the system including the artist, the artwork, and the observer, coupled in a semantic relationship, where the aesthetic experience emerged from the interaction of these three elements (Brown et al. 2009, pp. 11–12).

This increase in ecological-systems awareness was also demonstrated in Allan Kaprow’s “environment” installations (from 1958), the environmental simulation works of Hans Haake, such as *Condensation Cube* (1963–1965), and the earthworks of Robert Smithson, such as *Spiral Jetty* (1970), and Nancy Holt, such as *Sun Tunnels* (1973–1976). It was also evidenced in the conceptual walking-based art of Richard Long and Hamish Fulton. This work can be understood as “de-materialised”, as it operates without a material art object to locate the work physically (Lippard 1973). Jack Burnham articulated this shift from the material art object to the immaterial conceptual artwork across several essays and in the text, *Beyond Modern Sculpture* (Burnham [1968] 1982), in which he stated:

It is a refocusing of aesthetic awareness [ . . . ] on matter-energy information exchanges and away from the invention of solid artefacts. These new systems prompt us not to look at the skin of objects but at those meaningful relations within and between their visible boundaries (Burnham [1968] 1982, pp. 369–70).

During the 1970s, ecology changed the focus away from ideas of cooperation and turned it towards the more competitive ideas of natural and genetic selection that were articulated and popularized by Richard Dawkins in *The Selfish Gene* (Dawkins [1976] 2016). This shift was also observable within the culture as the shared ideals of Modernism and the collectivist ideals of the 1960s, which were transformed into the individualist goals of the 1980s. Art also reflected this as it moved from the ecological to the textual and reflexive. François Lyotard described these seismic shifts within postmodern society in terms of “fragmentation”, as the “grand narratives” of Modernism were replaced with competing perspectives and interests (Lyotard 1984). At the heart of this fragmentation was the challenge made to authorship wrought by philosophical and technological developments as culture moved from the passive consumption of information delivered via books, newspapers, and broadcast media, to the active participation in the construction and reconfiguration of information that was made possible through information systems such as Hypertext and the Internet. This shift in the relationship between the text and the audience, which was facilitated by technology, had been anticipated decades earlier in the work of Umberto Eco ([1962] 1989), Jacques Derrida ([1967] 2001), and Roland
Barthes ([1970] 1991), with each imagining the text freed from the interpretations imposed by the author.

These new tools initially empowered the reader, the researcher, and the art audience to freely navigate information. However, as the 20th century drew to a close, the innocent and open engagement with systems ended. This was seen with the shocks to the information-based systems with the “millennium bug”, to the financial system with the “Dot-com bubble”, to the political system with the “9/11” terrorist attacks, and to the planetary ecosystem with the “climate crisis”. Suddenly we became aware, at both the personal and societal levels, that we were entangled within complex systems that we could not fully comprehend, and in ways that we had not anticipated or planned.

3. The Creation Myth

A key artwork that anticipated and performed this complex entanglement between the individual actor and the more expansive ecological and technological systems in operation is The Creation Myth, first created by Jason Rhoades in 1998 (see Figures 1 and 2). In this complex installation, Rhoades explores the creationist and evolutionist stories, or myths, surrounding material and cultural creation, and how these are filtered through ecological, cybernetic, and artistic system descriptions. The Creation Myth is an assemblage of materials and information, which operate explicitly as a dynamic living system, with Rhoades evolving the installation through the addition and subtraction of the materials. The work is constructed from readymade products, including plastic toys, buckets, cables, and tables, as well as electronic devices, including computers, printers, and lighting, and it has been described as “a seemingly random-to-chaotic pile of stuff [. . . ] transformed into a meaningful, metaphorical, and functional system” (Schaffner 2014, p. 56). Ingrid Schaffner, in Jason Rhoades: Four Roads (Schaffner 2014), describes The Creation Myth ecosystem as having three distinct zones. At the centre sits the “temple of the mind: thirty-eight wood laminate banquet tables stacked roughly into a pyramid”, and two further zones occupy opposite ends of the gallery: the “constructed reality” and the “vital organs”. Rhoades described this as a “Psychobiological” system (Schaffner 2014, p. 56). Rhoades explicitly understood the relational dynamics of the work and how the exchange of material, energy, and information contributed to the stability of The Creation Myth’s ecosystem. This can be demonstrated by the inclusion of wood logs and an axe in order to transform them into either a substrate for information (books and magazines), or into energy as a fuel source for a fire. Schaffner suggests that the installation operates as a morphological description of how Rhoades views and seeks to represent the world, and as a performative consideration of how this understanding evolves through the addition and subtraction of materials and information (Schaffner 2014, pp. 56–59).

In this work, Rhoades performs the human need to systematise and communicate our interior model of the world, what Niklas Luhmann describes as our “psychic system”, and to corroborate this externally within our shared “social system” (Luhmann [2002] 2013, pp. 180–2011). The Creation Myth demonstrates the complexity of Rhoades’s interior model of the world while simultaneously demonstrating the impossibility of fully communicating this, as reality is infinitely complex, and the artworks and systems we construct to describe it are simple models in comparison. As Nicholas Rescher states, “As beings with finite physical and intellectual powers we live in a world whose complexity is in fact infinite” (Gross et al. 2011, p. 46). Consequently, the more complex the systems we seek to describe, the more complex and chaotic the resultant artworks appear. The work can be understood in ecological terms, as it has continuous input and output, not only of materials, but also of information through the use of the Internet and the addition of magazines and compact discs.
Thus, *The Creation Myth* can be understood as a model or picture of the world experienced by Rhoades; however, once created and exhibited, the work gains an independent life as a semiautonomous system operating within culture. Such a work acknowledges that contemporary lived experience is both complex and labyrinthine (such as the maze of the Internet), and without a singular path or perspective. *The Creation Myth* spatially and materially performs the idea of the labyrinth, as the audience needs to walk through the jumble of materials, which suggests a walk through the mind of Rhoades. The installation can be understood as representing Rhoades’s understanding of the world, which was drawn from deep within his psychic system. As such, there is a strong symbiotic relationship between the external artwork and the artist’s mind.

Humberto Maturana and Francisco Varela developed the cybernetic and biological concept of “structural coupling”, whereby two complex systems express a dialectical interdependence, such as the relationship between the cells and the body (Capra and Luisi 2014, p. 135). From this perspective, Rhoades is structurally coupled with the artwork, and the artwork is structurally coupled with the broader cultural ecosystem. However, the work is a dynamic system, and although it was initially structurally coupled with Rhoades, as the person maintaining the work, this relationship ended in 2006, when he tragically died at the age of 41. The work has since been exhibited as a system that is frozen-in-time.

The work remains a vital artwork; however, and this is independent of the diminished role Rhoades inevitably played in its ongoing sustainability as *The Creation Myth*, once created, is not operating solely with regard to the artist, but rather within the broader cultural ecosystem. That is, the boundaries of the work will inevitably grow over time to encompass the other actors who are participating within and acting upon the work. For example, *The Creation Myth* and the legacy of Rhoades’ work are managed by a complex network of private galleries and public museums, and this extends the work, as such complex works are not singular objects but living ecosystems with porous boundaries. They have a dialectical relationship with the broader systems they seek to describe, and the boundary between what is the subject and what is the description of the subject (the artwork) becomes ambiguous. In particular, in seeking to engage with and describe the subject, the artist is altering and extending it. Likewise, as the audience engages with...
the artwork, they both complete and extend the operations of the work. This dialectical relationship between the audience and the artwork is compliant with the second-order cybernetic and thermodynamic view of the world, which suggests that the observer interacts with and changes what they observe (Lee 2006, p. 66).

Figure 2. Jason Rhoades, The Creation Myth 1998/2015. Installation view. BALTIC Centre for Contemporary Art, Gateshead, United Kingdom. Friedrich Christian Flick Collection, Berlin. Photo: John McKenzie © 2022 BALTIC Centre for Contemporary Art.

Thus, although artworks such as The Creation Myth are profoundly sophisticated models of the world, they have, in the process of engagement, effectively altered the subject and, through translation and production, inevitably decoupled from the subject to create something new. This does not invalidate their status as descriptions of the world, but gives them a new status as “simulacra,” as they extend reality through simulation (Baudrillard 1994). Thus, the focus or subject of the artwork, be it an imagined “nature” or the concept of “climate change”, are themselves mental constructs. Consequently, The Creation Myth is a second-order simulation (or a simulation of a simulation), and the primary experience for the audience is not the withdrawn subject of climate change, for example, but the model of the subject—created by the artist and completed in the minds of the audience.

4. Art and the Channelling of Noise

Contemporary artworks do not operate in a vacuum as discrete unchangeable objects, but instead function as complex ecosystems within the greater ecosystem of culture. This perspective shifts our understanding of the contemporary artwork from a vehicle for simple discrete messages to a “channel” that transports complex signals as part of a broader system. These signals will contain information known by the artist, as well as unknown information or noise.

Such artworks contrast with other forms of culture, as these complex works are open, intellectually demanding, noisy, and difficult to decode. In contrast, mainstream media, advertising, and political messaging transmit simple and largely noise-free messages, even if concealed in sugar-coated language and images. This is particularly true in contemporary
culture where the climate crisis, the collapsing of Late Capital, uncontrollable pandemics, and the destabilizing effects of technology are either ignored by the mainstream media, or are filtered through economic, political, or technocratic agendas. The rise of populist rhetoric and disruptive events, such as Brexit, for example, have been driven by relatively small interest groups who have employed the reach of social media to disseminate simplistic and misleading, but compelling, narratives.

Whilst this new populism has been challenged, particularly in generational terms, with the young countering the messages of the old to advocate for increased action on the climate, there is an underlying twofold suspicion towards the employment of simplistic messaging. Firstly, there is the reasonable suspicion of descriptions that oversimplify, and therefore misrepresent, the processes of the Earth and culture. Secondly, there is an understanding, which is derived from Baudrillard, that the power, or “truth”, of a message is reduced through over circulation, as well as a concern that well-intentioned sloganeering will, in the long term, be counterproductive (Baudrillard 1994, p. 81). Such simplistic messaging is demonstrated in mainstream culture with informationally light films that offer only spectacle, in Guy Debord’s sense of spectacle as a “delusion and false consciousness” (Debord [1967] 2009, p. 24). Examples of this are the climate disaster films, *The Day after Tomorrow* (Emmerich 2004), *Greenland* (Waugh 2021) and *Don’t Look Up* (McKay 2021), which are visually spectacular but offer little in the way of complexity or nuance to disrupt or challenge our thinking. Erik Swyngedouw argues that such films effectively short-circuit the dialogue surrounding the crisis through the production of easy answers (Swyngedouw 2013). *Don’t Look Up* (McKay 2021) is an interesting example as it presents the disaster film as satire and focuses on the pernicious erosion of information as it circulates through social media, celebrity culture, and politics, paradoxically performing the limitations of such discourse by foregrounding the knowing performances of the Hollywood actors over the complexities of the climate crisis, the purported subject of the film. This personality driven film can be contrasted with Andrei Tarkovsky’s, *The Sacrifice* (Tarkovsky [1986] 2002), which forces the viewer to viscerally feel the sublime horror of impending disaster.

The current climate changes and the biodiversity collapse are understood as the products of human action, a position that is categorically supported by science. However, the tools and language to fully describe our contemporary condition, including how we mourn the imminent loss of species, habitats, and home, or our inability to imagine the future, are largely missing from the mainstream discourse. The compound effect of this existential aphasia is an underlying sense of melancholia and dread that permeates every aspect of contemporary culture, a condition that has been greatly exacerbated and accelerated by the COVID-19 pandemic. These traumas have encouraged a culture of looking backwards, or of what Fredric Jameson describes as the “nostalgia mode.” Although Jameson is describing cinema’s fixation on the past, this description captures the contemporary yearning for a simpler past and a lost sense of nature, stating that we have “become incapable of achieving aesthetic representations of our own current experience” (Jameson [1998] 2009, pp. 9–10).

Several writers have sought to counter this retrograde culture by articulating the future. These include: the poetic writing of Donna Haraway, which decentres the human experience (Haraway 1991, 2008, 2016) so that it becomes one-amongst-many species on planet Earth; Timothy Morton’s uncanny writing, which reimagines the Earth as operating beyond the romanticized concept of “nature” (Morton 2012, 2013, 2016); The posthuman writing of Katherine Hayles (1999) and Rosi Braidotti (2013, 2019), who imagine futures in which human-ness is either expanded or eclipsed by new forms of technology-augmented consciousness; and the melancholic writing of Mark Fisher (2009, 2014, 2016) as well as the profoundly chilling work of Eugene Thacker (2011, 2015a, 2015b), both of whom confront our inability to address the future philosophically, with Thacker stating:

The world is increasingly unthinkable—a world of planetary disasters, emerging pandemics, tectonic shifts, strange weather, oil-drenched seascapes, and the furtive, always-looming threat of extinction. In spite of our daily concerns, wants,
and desires, it is increasingly difficult to comprehend the world in which we live and of which we are a part. To confront this idea is to confront an absolute limit to our ability to adequately understand the world at all (Thacker 2011, p. 1).

In addition to these critically important texts, we need a contemporary art discourse that addresses the planet and the future. Artworks such as *The Creation Myth* do not offer practical solutions to our current crises, but rather information-rich environments in which to think through the world in open-ended terms. Such art is radical, as it positions the audience directly in the work, both physically and mentally, forcing the participant to experience the system and to differentiate between the messages and the noise amidst the chaos. The morphological structure of *The Creation Myth* installation—a chaotic and dynamic, or “living”, system—embodies complexity and demonstrates that all messages are, to some degree, altered during communication, and that both the artist and the audience should actively embrace this. Art achieves this by channelling both the message and the noise into a single artwork, which forces the audience into the position of the decoder. Such work is not chaotic in the strict sense of pure randomness; instead, it is exceptionally complex, acting as a glitch, or disruption, within the broader information systems of culture.

The term “glitch” is employed here to denote a disruption to the system of communication that exists beyond the technological substrate. However, the term “glitch” also applies to a form of production found in art, design, and music that explores the aesthetics of digital systems failure. From an art perspective, this work has been referred to as “Post-Internet Art” or “Postdigital Aesthetics”, with the prefix “post” referring to the givenness of the technological (Internet and digital) environment. Paul and Malcolm Levy define a “glitch” as a technologically mediated image that has been “created by adjusting or manipulating the normal physical or virtual composition of the machine or software itself, or by using machines or digital tools in methods different from their normative modalities.” (Betancourt 2016, p. 3), which suggests that such work is primarily focused on the procedural and aesthetic potentials of these chance disruptions. This aligns them less with this discussion of the unknown, and more with earlier art movements that employed chance, which leads back to Marcel Duchamp and his work, *3 Stoppages etalon* (Betancourt 2016, pp. 1913–14), that was created by dropping three one-metre threads onto a canvas and fixing how they landed (Judovitz 1998, p. 35).

The term “glitch” is employed here to denote a disruption to the system of communication that exists beyond the technological substrate. However, the term “glitch” also applies to a form of production found in art, design, and music that explores the aesthetics of digital systems failure. From an art perspective, this work has been referred to as “Post-Internet Art” or “Postdigital Aesthetics”, with the prefix “post” referring to the givenness of the technological (Internet and digital) environment. Paul and Malcolm Levy define a “glitch” as a technologically mediated image that has been “created by adjusting or manipulating the normal physical or virtual composition of the machine or software itself, or by using machines or digital tools in methods different from their normative modalities.” (Betancourt 2016, p. 3), which suggests that such work is primarily focused on the procedural and aesthetic potentials of these chance disruptions. This aligns them less with this discussion of the unknown, and more with earlier art movements that employed chance, which leads back to Marcel Duchamp and his work, *3 Stoppages etalon* (Betancourt 2016, pp. 1913–14), that was created by dropping three one-metre threads onto a canvas and fixing how they landed (Judovitz 1998, p. 35).

The discussion here concerns the broader communicatory role that contemporary artwork performs when it channels the unknown, as well as precisely what types of communication occur. These complex artworks can be understood as “postconceptual”, a concept that was developed by Peter Osborne (2013) in *Anywhere or Not at All: The Philosophy of Contemporary Art* and in *The Postconceptual Condition* (Osborne 2018), in which he defines the contemporary artwork as having a threefold nature, being fundamentally conceptual, “irreducibly relational”, and having an “ineliminable—but radically insufficient—aesthetic dimension.” (Osborne 2013, pp. 48–49). Unfolding this, Osborne argues that the postconceptual art object is by nature conceptual, and that, consequently, it carries conceptual information from the artist via the artwork to the audience. Such work is also “radically distributed”, meaning that its structural and conceptual coherence sits across all of the materials that sustain it as an artwork. *The Creation Myth* demonstrates this relational state. Finally, the postconceptual artwork will inevitably have an aesthetic dimension, as all material objects are experienced aesthetically on some level. The work will therefore embody aesthetic and affective information. Thus, these characteristics (conceptuality, relationality, and aesthetics) are forms of information transported within the complex artwork, either intentionally or unintentionally, by the artist.

Marcia Bates, one of the preeminent writers with regard to the ontological status of information, argues that if we assume that “the universe is not total entropy, or total undifferentiated chaos or disorder”, then there must be differences, patterns, and structures that are perceptible via sensation or reason (Bates 2016, p. 7). These patterns can be understood as “information”. Bates refines this by suggesting that there are two forms of patterned
information. Firstly, Bates employs Edwin Parker’s definition of information as the “pattern of organisation of matter and energy” to describe patterns that exist independently from the observer (Bates 2016, p. 7). Simple examples would include the volume, mass, and arrangement of the atoms that define the art object. In contrast, the second form of information refers to the “pattern of organisation of matter and energy given meaning by a living being”, which would include the work’s conceptual, relational, and aesthetic content (Bates 2016, p. 18).

Some information that is unintentionally transported within the artwork will be meaningful for some audience members but not for the artist. For example, the configuration of materials may have been random from the artist’s perspective; however, it could trigger an emotional response in someone as they experience the work through the lens of their own memories. Therefore, this category of meaningful information is potentially infinite, and the artist will not be consciously aware of the wide range of information transported within a work. Thus, the chaotic assemblage of The Creation Myth is “a pattern of organisation of matter and energy given meaning” by the artist and audience (Bates 2016, p. 18).

It is, therefore, useful to briefly consider Claude Shannon and Warren Weaver’s model of communication, which states that information consists of signals, messages, and noise, with noise being the chaotic stuff between the signals and messages (Shannon and Weaver [1949] 1998). In this communication model, the message is sent through a channel or medium and is subject to disruption through noise. Once the message is received, a response can be fed back to the original sender of the information. This model can be applied to the flow of communication within art as the artist (sender) wishes to communicate ideas, emotions, and affect to the audience (receiver) through their art (the channel), and this communication is disrupted by noise. This flow of information is illustrated in Figure 3 which presents an adaptation of Shannon and Weaver’s model as applied to the artwork.

![The circulation of information & noise](image)

**Figure 3.** Flow of information from the artist who encodes the known and unknown information in the channel or artwork. This is decoded by the audience, and this may include decoding via curators and historians, who will, in turn, respond to the receipt of new information and this will be fed back to the artist. This diagram is an adaptation of Shannon and Weaver’s model of communication (Shannon and Weaver [1949] 1998) which suggests noise disrupts communication as it is channelled and this revision suggests that noise or unknown information is present at each stage of the communication process.
In the traditional model of communication, the noise takes place within the channel, and it is assumed that the informational content of the message is known and is fixed by the sender. This is not the case with art, as the artist will not know at a conscious level the full range of information they are transmitting within an artwork. Consequently, noise disruptions can occur anywhere during communication, including in the production, transfer, and reception of the information. For example, at the point of production, the artist may struggle to translate their ideas into an external art object, or they may imbue the work with information and ideas drawn from the subconscious, or they may add elements that actively disrupt the informational intent of the work. Likewise, the messaging and informational content of the work will be disrupted at the point of reception, as it will be distorted by the social, institutional, and historical framings of the work and the sociocultural and emotional contexts of the audience.

Art has traditionally dealt with artists seeking to communicate their ideas through stories and pictures of the world. However, as the world has increased in complexity and connectedness, art has shifted from the communication of known messages to the transmission of unknown material in the form of abstraction or noise. Human tools, such as science or art, cannot fully describe the Earth and its social and technological extensions. However, they can reflect on what is known, i.e., meaningful patterns or messages, and on what is unknown or noise. This explicit appreciation of the unknown is central to understanding noise, and it is a mechanism of art that Joseph Nechvatal describes in the following statement:

Noise [. . . ] (as art) merits the adjective polysemic, a word which stems from the Greek phrase meaning many signs. A polysemic awareness of noise acknowledges the hypothetically infinite range of meanings of noise that result when determinacy is replaced by indeterminacy, an awareness which contradicts the verisimilitude thought to correspond to the assumed exactitude of naive naturalism (Nechvatal 2011, p. 36).

From this perspective, noise is not “noise” in the strict information theory sense, but something open, complex, and indeterminate. Noise may not technically be noise at all, but rather patterns of matter and energy that exceed the artist’s (and audience’s) apprehension, but that can still be channelled through the work. Moreover, the artist may only determine the underlying meaning of the work by engaging the audience in a feedback network, as is noted in Figure 3. Knowing through channelling in this way is similar to forms of mysticism, as both tools (mysticism and art) employ techniques that allow for patterns to emerge through the employment of repetition and feedback. From an art perspective, the artist seeks to unearth the fundamental conceptual and aesthetic patterns that operate within the noise. Within telecommunications and music, “white noise” is understood as absolutely random, and it consequently contains no patterns or messages. However, both the white noise of the electromagnetic radiation from space, or the seeming chaos of a complex artwork, may contain messages that are difficult to read because of their complexity. As Sha Xin-Wei suggests, noise “is not just the random in space, or time, or shape, but the hovering of patterned material (matter, energy, symbol, affective field) at the limit of measurement, and therefore observation” (Vernallis et al. 2015, p. 104).

As with Bates (2016), Laura Marks describes perception in relation to the receipt of information. In A Noisy Brush with the Infinite: Noise in Enfolding-Unfolding Aesthetics, Marks draws from Leibniz, Bergson, and Deleuze to offer a vibrant and original description of perception, which is always in a state of flux (Vernallis et al. 2015). Marks describes how we have only a limited perception of reality, which can be understood as patterned information or images, and that this contrasts with the withdrawn infinity of all the things we cannot apprehend and that are, therefore, considered noise (Vernallis et al. 2015, p. 104). Marks equates noise to all the things we do not know, and so, from this perspective, artists who channel noise seek to extend our perceptual reach. Marks also notes the psychological and mental demands in channelling noise (or vast quantities of hidden signals), as we are neurologically adapted to sift through the noise:
To be radically aware of the world in its infinite multiplicity constitutes the greatest goal of some philosophy (and mysticism). Yet, at the same time … trying to be aware of infinity—especially an infinity that is not reducible to a One but consists of innumerable connections—can paralyse and destroy the person making the effort (Vernallis et al. 2015, p. 105).

This understanding alludes to the undercurrent of suffering present in art, which channels noise and abstraction. For example, the exquisite but painstaking serial paintings of Agnes Martin, or the durational sonic performances of La Monte Young, operate at the border between what is known and what is unknown, which induces both pleasure and eerie dread for the artist and the audience. Such work has the power to transmit affective sensations and other forms of abstract information buried deep within the psychic system of the artist to the psychic system of the audience-participant.

5. Conclusions

There is a calculated and cultural dimension to the employment of noise within art, as noise both extends and disrupts the signal, and forces the audience, the recipient of the message, to decode the material they receive. Suppose the artwork is too conceptually obvious, such as the portrayal of a burning forest to denote the climate crisis. In that case, there is nothing to decipher, and the recipient will not be engaged in the communication process. As Baudrillard noted, the power of a message depreciates through repetition and overfamiliarity (Baudrillard 1994, p. 81). This is seen, for example, with new ideas that are quickly reduced to memes on social media. Likewise, the power of contemporary art to confront and distribute new ideas is diminished through the reuse of signs and symbols that are already widely employed within the culture. For example, the presentation of potted houseplants juxtaposed with technology may represent our alienation from nature and may be readily distributed as an image on social media. However, it communicates very little in terms of the conceptual complexities of the climate crisis, or the emotional and psychological costs of contemporary culture. The clarity of such simple signs and symbols conforms to the idea that communication should be clear: the sender should understand the message and communicate it directly. However, contemporary culture is bombarded with simplistic and misleading messaging that trivialise and distort the complexity of contemporary experience. Nuance is lost on social media, for example, when the “self” is represented by algorithmically filtered images, when the facial expression is reduced to a recorded meta-language of exaggerated gestures, or when linguistic communication is limited to 280 characters.

In contrast, contemporary art can consciously disrupt the signs, symbols, and signals of contemporary culture and challenge the systems that support their circulation. Art can achieve this by revealing the complex ecological, technological, and social systems in operation by focusing on the indeterminacy at the heart of many of these incomprehensibly complex systems. The unknown and unknowable at the heart of contemporary culture is revealed through the channelling of noise, or unknown messages, which is, according to Marks, “the definition of art in the Information Age” (Vernallis et al. 2015, p. 105). This paper has proposed that the contemporary artwork should be understood as an ecosystem, which extends beyond the material artwork to include the artist, the audience, and the broader social relations and information networks. The roles of such cultural objects are to reflect the complexities of our contemporary experience and to challenge the operations of society by acting as noise to reveal, disrupt, and question the messages that are being circulated. These noise disruptions will become important thinking tools as the Earth is destabilised by climate change and as our lifeworld is increasingly controlled by technological systems.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Not applicable.
Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The author declares no conflict of interest.

References
Barthes, Roland. 1991. S/Z. Translated by Richard Miller. New York: Farrar, Straus & Giroux Inc. First published 1970.
Bates, Marcia J. 2016. *Information and the Information Professions: Selected Works of Marcia J. Bates*, Vol. I. Berkeley: Ketchikan Press.
Baudrillard, Jean. 1994. *Simulacra and Simulation*. Translated by Sheila Glaser. Ann Arbor: University of Michigan Press.
Betancourt, Michael. 2016. *Glich Art in Theory and Practice: Critical Failures and Post-Digital Aesthetics*. Abingdon-on-Thames: Taylor & Francis.
Braidotti, Rosi. 2013. *The Posthuman*. Hoboken: Wiley.
Braidotti, Rosi. 2019. *Posthuman Knowledge*. Hoboken: Wiley.
Brown, Paul, Charlie Gere, Nicholas Lambert, and Catherine Mason. 2009. *White Heat Cold Logic: British Computer Art 1960–1980*. Cambridge: MIT Press.
Burnham, Jack. 1982. *Beyond Modern Sculpture*. New York: George Braziller Inc. First published 1968.
Capra, Fritjof, and Pier Luigi Luisi. 2014. *The Systems View of Life: A Unifying Vision*. Cambridge: Cambridge University Press.
Dawkins, Richard. 2016. *The Selfish Gene: 40th Anniversary Edition*. New York: OUP Oxford. First published 1976.
Debord, Guy. 2009. *Society of the Spectacle*. Polegate: Soul Bay Press. First published 1967.
Derrida, Jacques. 2001. *Writing and Difference*, 2nd ed. London: Routledge. First published 1967.
Eco, Umberto. 1989. *The Open Work*. Translated by Anna Cancogni. Cambridge: Harvard University Press. First published 1962.
Emmerich, Roland, director. 2004. *The Day after Tomorrow*. DVD. Los Angeles: Twentieth Century Fox.
Fisher, Mark. 2009. *Capitalist Realism: Is There No Alternative?* Winchester: O Books.
Fisher, Mark. 2014. *Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures*. Winchester and Washington, DC: Zero Books.
Fisher, Mark. 2016. *The Weird and the Eerie*. London: Watkins Media Limited.
Goodfellow, Paul. 2020. The artwork as an ecological object. *Technoetic Arts: A Journal of Speculative Research* 18: 3–17. [CrossRef]
Gross, Thilo, Robert Konig, and Stefan Schmidt. 2011. *World and System: Contemporary Art between Analysis, the Search for Meaning and Dilemma*, Bilingual ed. Edited by Gisbert Porstmann and Johannes Schmidt. Nürnberg: Verlag fur moderne Kunst Nurnberg.
Guattari, Félix. 2000. *The Three Ecologies*. London and New York: Continuum International Publishing Group Ltd. First published 1989.
Haff, Peter K. 2016. Humans and Technology in the Anthropocene: Six Rules. *The Anthropocene Review* 1: 2. [CrossRef]
Haraway, Donna J. 1991. *Simians, Cyborgs, and Women: The Reinvention of Nature*. London: Free Association Books.
Haraway, Donna J. 2008. *When Species Meet*. ISSR Library. Minneapolis: University of Minnesota Press.
Haraway, Donna J. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Experimental Futures. Dehan: Duke University Press.
Hayles, Nancy Katherine. 1999. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*, 74th ed. Chicago: University of Chicago Press.
Hörl, Erich. 2017. *General Ecology: The New Ecological Paradigm*. Edited by James Edward Burton. London: Bloomsbury Academic.
Jameson, Fredric. 2009. *The Cultural Turn: Selected Writings on the Postmodern*, 1983–1998. London: Verso. First published 1998.
Judovitz, D. 1998. *Unpacking Duchamp: Art in Transit*. Berkeley: University of California Press.
Lee, Pamela M. 2006. *Chronophobia: On Time in the Art of the 1960s*. Cambridge and London: MIT Press.
Lippard, Lucy R. 1973. *Six Years—The Dematerialization of the Art Object from 1966 to 1972*, 1st ed. New York: Littlehampton Book Services Ltd.
Luhmann, Niklas. 2013. *Introduction to Systems Theory*, 1st ed. Translated by Peter Gilgen. Cambridge and Malden: Polity Press. First published 2002.
Lyotard, Jean-Francois. 1984. *The Postmodern Condition: A Report on Knowledge*. Theory and History of Literature. Minneapolis: University of Minnesota Press.
McKay, Adam, director. 2021. *Don’t Look Up*. New York: Netflix Inc.
Morton, Timothy. 2012. *The Ecological Thought*, Reprint ed. Cambridge and London: Harvard University Press.
Morton, Timothy. 2013. *Hyperobjects: Philosophy and Ecology after the End of the World*. Minneapolis: University of Minnesota Press.
Morton, Timothy. 2016. *Dark Ecology: For a Logic of Future Coexistence*. New York: Columbia University Press.
Nechvatal, Joseph. 2011. *Immersion into Noise*. Ann Arbor: MPublishing, University of Michigan Library.
Odum, Eugene. 2017. *Fundamentals of Ecology*, 5th ed. Australia: Cengage Learning. First published 1953.
Osborne, Peter. 2013. *Anywhere or Not at All: Philosophy of Contemporary Art*, 1st ed. London: Verso.
Osborne, Peter. 2018. *The Postconceptual Condition: Critical Essays*. London: Verso Books.
Schaffner, Ingrid. 2014. *Jason Rhoades: Four Roads*. University of Pennsylvania Institute of Contemporary, Kunsthalle Bremen, C. Kraus, and Baltic Centre for Contemporary Art. London: Prestel Publishing.
Shannon, Claude E., and Warren Weaver. 1998. *The Mathematical Theory of Communication*. Champaign: University of Illinois Press. First published 1949.
Simondon, Gilbert. 2017. *On the Mode of Existence of Technical Objects*. Univocal Series; Minneapolis: Univocal Publishing. First published 1958.
Swyngedouw, Erik. 2013. Apocalypse Now! Fear and Doomsday Pleasures. *Capitalism Nature Socialism* 24: 9–18. [CrossRef]

Tarkovsky, Andrei, director. 2002. *The Sacrifice*. Svenska: Svenska Filminstitutet. First published 1986.

Thacker, Eugene. 2011. *In the Dust of This Planet: Horror of Philosophy*. v. 1. Arlesford: John Hunt Publishing.

Thacker, Eugene. 2015a. *Starry Speculative Corpse: Horror of Philosophy*. v. 2. Arlesford: John Hunt Publishing.

Thacker, Eugene. 2015b. *Tentacles Longer Than Night: Horror of Philosophy*. v. 3. Arlesford: John Hunt Publishing.

Vernallis, Carol, Amy Herzog, and John Richardson, eds. 2015. *Oxford Handbook of Sound and Image in Digital Media*, Reprint ed. Oxford: Oxford University Press.

Waugh, Ric Roman, director. 2021. *Greenland*. Burbank: STXfilms.