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Cosmos, Values, and Consciousness in Latin American Digital Culture

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CHAPTER 1

Introduction

Abstract *Cosmos, Values, and Consciousness in Latin American Digital Culture* situates digital cultural production of e-literatures and digital art in works that produce subjective positionality, clouded knowledges of quantum theories, and metaphysical patterns grounded in a cultural ideology. This book underlines a conceptual framework for understanding how digital media impacts reading, approaching, and even interpreting social reality. The qualitative analyses interpret of the current *zeitgeist*, and the works selected speak of the diverse, sometimes regionalized, and often multi-ethnic reality of the Latin American experience. The analyses elaborate on how artists reflect the world they live in and reflect a universal consciousness. These artists are not simply "digitalizing literature," and these works are more than techy creations; rather, they make us think of other directions and connections.

Keywords Consciousness · Interconnectedness · Postmodern theories · Technology · Digital media · Perception of reality

> The key to growth is the production of higher dimensions of consciousness into our awareness.
>
> Lao Tzu

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I began exploring with the idea of consciousness and interconnectedness as a leisurely pursuit as I read many of Deepak Chopra's books as a way to gain a more positive outlook on life. In these readings I found a common thread—the quest for understanding our role in life, the responsibility of our connections to others, and a pursuit for purpose. Above all, an emphasis on present awareness practiced through meditative practices was key to achieving a fuller, more connected consciousness. These ideas are not new, of course, they are contemporary renditions of ancient Eastern metaphysical notions of the interrelation of events and things. This interest led me to connect my leisure reading to my scholarly work as I read Fritjof Capra's *The Tao of Physics: An Exploration of the Parallels Between Modern Physics and Eastern Mysticism* (1975), which posits the interconnectedness between Eastern metaphysics and theories of quantum physics. This fascination gave me insight into what Capra terms the paradigm shift that occurs at the turn of the twentieth century. A new way of perceiving a reality with a multiplicity of possibilities and with no certain terms, no prediction of possibilities. A shift in thinking, a *zeitgeist* of sorts that involved not just the scientific field but enriched the reasoning, critique, and analysis in the humanities as well, as seen in postmodern theories that call for a questioning of underlying assumptions, in critiques of normalization of truths and myths, and in finding ways to contextualize our ideas in an effort to understand them holistically. Eventually, this led to a recognition of our connection to, dependence on, juxtaposition with, and competition with technology—effectively leading us to ponder posthumanism, as claimed by recent scholars.[1]

These readings, which began as a personal search for peace of mind and understanding life connections, journeyed into a much more nuanced curiosity of how we are currently communicating with and in digital media. With this lens in mind, I began thinking about how we perceive reality. I began to find the same narrative in current digital cultural productions—partly because I was enmeshed in said vision but also because in some way there is a current universal trend to perceive reality in these particular terms. That is, the connections that emerge from these works to the correlations between Eastern metaphysics and quantum mechanics that Capra speaks of are making themselves quite relevant in these pieces.[2] The artists use the digital medium as a means of communication, and for some, language is no longer necessary: art is made with and from vibrations, for instance. Beauty is achieved by and with forms created by their

play with brain waves transmitted on water, or by the patterns produced by music on sand plates. So, what does this all mean?

These are universal questions meditated on in Buddhist mysticism and whose parallels in quantum physics discoveries have been well researched and continue to be reconfigured with new findings. While some critics may find this approach far-fetched from the works presented here, I maintain that this is not to insist on the author's intent nor the only interpretation. This approach is my personal reflection of what the works represent for me and my analysis of how these do in fact reveal a subconscious and unintentional, at times, reference to this *zeitgeist*. This new paradigm, as Thomas S. Kuhn called it, has also been referred to as the Age of Aquarius or New Age, linking ecological, scientific, and spiritual concerns. Fritjof Capra, David Bohm, and Ilya Prigogine draw parallels in scientific theories in New Physics to those in Tao, Hinduism, Daoism, Zen, and Buddhism, all of which preach the unity of oneness of all things. In chapter 10 of his book, for example, Capra explains that quantum interconnectedness, as highlighted by Bohn and Heisenberg, demonstrates how quantum theory proves the ancient Buddhist teachings of Nagarjuna: "Things derive their being and nature by mutual dependence and are nothing in themselves" (1975, p. 313). That is, matter and basic phenomena are interconnected and must be understood as integral parts of a unified whole. It is in fact "Bell's theorem [that] demonstrated that the universe is fundamentally interconnected, interdependent, and inseparable," explains Capra (p. 313). He explains how quantum physics attempts to deal with the well-established fact that the behavior of subatomic particles, such as electrons, cannot be predicted: there is no certainty and there is no prediction of possibilities. Nick Herbert, in *Quantum Reality: Beyond the New Physics*, explains:

> Quantum theory was devised in the late twenties to deal with the atom, a tiny entity a thousand times smaller than the wavelength of green light. Disturbed by its philosophical implications, many physicists at the time considered quantum theory a provisional device bound to fail outside the atomic realm. Quantum theory continued, however, to propel beyond its inventors' wildest dreams resolving subtle problems of atomic structure, and then extending its reach to the realm of elementary particles (quarks, gluons, leptons) which many believe to be the world's ultimate constituents. (1985, p. 94)

Quantum theories posit an ontological vision of the world with permeable boundaries, inbuilt openness, and multifarious relations. Since the 1975 publication of Capra's *The Tao of Physics*, much has been written on this subject. The ideology adopted by those scientists and James Lovelock's Gaia hypothesis, that the Earth is a living system, an organism that has consciousness and intelligence, was followed by the "transformational politics" concept developed in the early 1990s by political scientists.[3] Their work is serious scientific research that gainfully advocates for a more eco-sustainable use of the environment and calls for a responsible use of resources, and above all, an informed and proactive consciousness.[4]

While this new paradigm clearly has an ideological inclination—as would be expected of most *zeitgeists*—the dogma of New Age and Gaia developed into an "ecological ideology" that conveys the message that humans must respect the Earth and have the responsibility to act to conserve its beauty and resources. Gaia stresses that the planet's survival, success, and endurance are more important than any individual species. Much like Eastern mysticism, it calls for compassion for the natural world, for other species, and for human beings. Ultimately, this philosophy debunks the anthropomorphic hierarchy: the universe, the world, and all its entities are part of an interconnected, cyclical system. What is this new global imaginary? Wouter Hanegraaf in *New Age Religion and Western Culture: Esotericism in the Mirror of Secular Thought* characterizes the nature of New Age thought as twofold:

> Firstly, the New Age movement as a whole can be defined *indirectly* as based on a common pattern of criticism directed against dominant cultural trends. Secondly, New Age religion formulates such criticism not at random, but falls back on a specific tradition: western esotericism. (Hanegraaf 1996, p. 515)

He does not find it to be a unified ideology, even though the inclinations tend to be meant as "alternatives to currently dominant religious and cultural trends" (p. 515). That is, the old age, which the new age seeks to replace and transform, is criticized as being "non-holistic" (specifically a rejection of dualism and reductionism). Important to note is the rejection of dualisms of Judeo-Christian thought (good vs. evil) and the reductionism of Cartesian science. Primary to this system is the belief of a higher self or universal consciousness that is intuitive in the human

self and connected with the divine essence of the universe.[5] While organized Judeo-Christian religious options cater to the needs of the community, New Age practices are believed to suit the needs of the individual and his/her role in humanity's impact on natural resources: advocacy for living in a sustainable manner, shunning consumerism, and countering social disintegration by rebuilding a sense of community.[6] According to Mark Satin,[7] the politics focuses on "psycho-cultural roots" of institutional and economic symptoms, advocating for a holistic view of society's problems, for an understanding of the interrelatedness of what Capra calls an organic and ecological systems' view of reality in order to address social and political issues. Yet the universe may be connected in much subtler ways. Capra shows that these discoveries and this new way of perceiving the world also raises the possibility of relating subatomic physics to Jungian psychology and even parapsychology. The experiments performed by Bohr and Einstein, for example, led to the discovery of connections that are instantaneous and unpredictable. The alternatives that the New Age proposes effectively try to avoid and replace dualism (directed principally against Christian dualisms) and reductionism (in reference to modern scientific rationalism), reconciling science and mysticism as mentioned above. The focus is on personal transformation mirrored in the transformation of society, learning through experiences, and growing through and with them, and thus New Age primarily focuses on providing workshops, lectures, and classes, rather than worship ceremonies.

Changes in these theories inspire changes in a culture's attitudes, and art responds to and shapes these assumptions. These observations gave rise to a significant number of studies focusing critically on the impact of science and scientific ideas on writers and literary texts.[8] Conversely, explanations of quantum theories have also looked to rhetorical devices, tropes, and narrative forms to best describe findings that cannot be rationalized with existing scientific discourse. Panagiotis Pantidos[9] explains that scientific discourses commonly use analogy and metaphor as structures of didactic exposition. Such language is suitable for vividly explaining abstract concepts, and for easing the ability to remember abstract ideas. For instance, quantum theory explains that individual events do not always have a well-defined cause (1975, p. 312). By the late 1960s, interdisciplinary studies of the environment in and through literature became the object of study in ecocriticism, a discipline that poses the ethical dilemmas of conservational oversight and advocates for the solutions to environmental problems.[10] The most relevant connection to this study to

the humanities by far is the Humberto Maturana and Francisco Varela's concept of *autopoeisis*, since noted by humanists such as Cary Wolfe and N. Katherine Hayles as key to understanding posthumanism. For Wolfe,

> the world is an ongoing, differentiated construction and creation of a shared environment, sometimes converging in a consensual domain, sometimes not, by *autopoietic* entities that have their own temporalities, synchronicities, perpetual modalities, and so on—in short, their own forms of embodiment. (2010, p. xxiv)

It is with these scientific discoveries that a sense of uncertainty, ambiguity, and de-centeredness that brought about the postmodern idea of multiple realities (depending on perspective) and called for a change in consciousness, in basic underlying assumptions of not only being critical of normalized truths and myths, but of also finding ways to contextualize these ideas and understand them holistically.

In post-postmodern critical theory, philosophy, and literature, there has certainly been an emergence of sensibility toward anthropocentric views and questioning of ethical responsibility of the environment and (geo)political instability. In philosophy, literature, and art, the Anthropocene is subject to critical inquiry and the ecological implications and end of civilization are assumed to be prompted by an anthropocentric ideology. The answers these scholars propose include mitigation and geoengineering.[11] "Posthumanism comes into play as 'decentering of the human' through its connection in technological, medical, informatics, and economic networks" (2010, p. 2). Cary Wolfe points to this development as "the necessity of new theoretical paradigm…a new mode of thought that comes after the cultural repressions and fantasies, the philosophical protocols and evasions, of humanism as a historically specific phenomenon" (p. xvi). Posthumanism basically calls to attention how we think and talk about humans, their bodies, and their consciousness in relation to technology and in relation to the animal. The virtual body is as real as the corporal body, the animal is equally important in the cycle of life as the human. For this study, what I find most compelling is elaborating on what Wolfe notes:

> …the relationship between language, subjectivity, and phenomenology—systemic reflection and study of structures of consciousness—such as judgements, perceptions and emotions. It can yield greater understanding of

> nature, study how people reflect society they live in, gather conscious experience or 'capta' or reflective attentiveness. (2010, p. xvii)

This is, in fact, the paradigm shift that Hayles also recognizes in *How We Became Posthuman* (1999), *How We Think* (2012), and most recently, *The Power of Cognitive Unconscious* (2017). For Hayles, Posthumanism implies thinking "what human being means," specifically how we are arriving at "new kinds of cultural configurations" (1999, p. 285). Hayles explains that the posthuman is the human in a new paradigm of thought of what it means to be human, a shift from the Cartesian frame of thought. Francisco Varela and Humberto Maturana's concept of *autopoiesis* comes to mind when Hayles explains the vision of the posthuman as a conscious mind as "a subsystem running its program of self-construction and self-assurance" (1999, p. 286). Indeed, the idea of systems thinking and the perception that all organisms are connected through an intricate network can lead to envisioning humans as equally part of multi-faceted technological networks. Posthuman theorists such as Edwin Hutchings and John Searle, for example, agree that humans are distributing their cognitive reach by working with technological systems in partnership to create smarter environments that will produce more comprehensive results, which means that the "thinking" is done by both humans and intelligent machines that, in essence, enhance our understanding. That is, the designer or programmer maintains the creativity and thematic function and uses the technology—be it software, algorithms, mapping systems, bots, and so on—to creatively design the desired effects that the printed page cannot pull off, such as user interactivity, infinite transmittal and replication, transmodal videos, etc. Along the same lines, in and with digital humanities, scholars use technologies in their research while at the same time subjecting those same technologies to humanistic inquiry. Collaboration is key in these types of works as the computer programmer, the visual architect and designer, the literary or thematic director among a myriad of other roles, all work together to create the application, platform, design, and so forth.

As a literary scholar, I feel compelled to analyze and search for meaning and nuanced symbolism in any form of expression. Technology now offers us different ways of writing and reading and with that also different ways of thinking and seeing ourselves in relation to others, to our environment, and to technology itself. The works in this study do reflect back this paradigm shift whether this be by direct manipulation of digital

media to produce a "poetic" expression, or a clear engagement in political and social advocacy. A computerized distant reading can provide compilations of information that we would otherwise not have access to, but careful critique and analysis of that information is still necessary to make sense of it and to relate why it is important to have that perspective. As readers, therefore, it is imperative that we find *meaning* in these imaginations. Readership of these creative works may be limited to a select audience fluent in digital media, even though our overall means of communication is also infused with more visual and less linguistic expression. As readers, we can reflect on how these artists, with or without intent, draw out our "shared patterns of existence," that is, consciousness as a social phenomenon. Consciousness plays a central role as experiences, reflective attentiveness, and agency (be it through or with social anxieties or political concerns). I find that these artists have an intimate connection between our conceptual understanding of the world, our perceived mission of human existence and its potential, and the ethical values that guide our behavior (as illustrated in the last chapter). Their works show the relationship between language, subjectivity, and phenomenology. As mentioned above, the ideology of New Age or Gaia is not an organized and structured religion, but rather a way of living and thinking that not only engages with personal transformation and healing, but also with the understanding that there is an interconnectedness between the universe and all things. Cosmos has consciousness, one that we, as humans partake in, and thus we are responsible for the values that we engage in. I find that the artists in this study do indeed contribute to this new way of approaching the world particularly because with digital technology, they can express the abstract without the need for words.

The digital cultural productions presented in this study have limited reach as these are exhibited at specialized conferences or art galleries. In fact, the readers are limited to scholars, students of digital media, and poets and artists interested in technology, but the general public is either unaware of these works or unable to really appreciate them for their artistic and tech-savvy work. Nonetheless, much work by scholars of digital culture has been done both to compile and to exhibit these works, and to teach them. A few sites with a heavy Latin American representation include: Leonardo Flores's website based in Puerto Rico *I Love E-Poetry*, which houses reviews of international works termed as e-literature; *Revista Laboratorio*, based at the Universidad Diego Portales in Chile, which publishes research and reviews of digital culture in Latin America;

Monica Nepote, at the Centro de Cultura Digital in Mexico City, who coordinates a platform for e-literature and the center promotes exhibitions of digital works; Claudia Kozak, in Argentina, who directs *Ludion*, a research consortium that explores digital poetics and has published several books on digital culture; the Digital Latin American Cultures Network, coordinated by Claire Taylor, Thea Pitman, and Tori Holmes, featuring articles, blogs, and case studies, and also routinely invites speakers and artists to the United Kingdom; and Luis Correa-Díaz at the University of Georgia, who recently directed the Latin American and Latino Digital Humanities/Cybercultures Initiative.[12]

I recently came across an article written by Peruvian writer Mario Vargas Llosa[13] on his call for the importance of reading "good literature" as a "most primary and necessary undertaking of the human mind," indispensable because it teaches us how to think, imagine, speak, and be good citizens. He emphasizes that literature shows us that, in fact, we have more commonalities than differences. Our human condition—desires, fears, goals, constraints—are more universal than we might imagine, and literature gives us "the feeling of membership in the collective human experience across time and space." Yet, his call to reading draws the line on audiovisual media. For Vargas Llosa, good literature does not privilege images over words. I find it therefore even more important to learn and teach how meaning is created in electronic literatures and digital cultural productions. What are these artists finding important to highlight? What do these works tell us about our state of being, our connections to others, ourselves, and our world? And, if they are indeed exploring these ideas and/or we are able to *read* and appreciate notions not necessarily intended by the author, are these works meaningful? How well have we succeeded in reimagining cultural productions and thereby our analytical skills? I thus ventured into my research of Latin American digital culture, seeking an answer to metaphysical questions of life, being, and consciousness.

Why is the discourse of this new paradigm of thought so prevalent in Latin America? For many, it opens up the dialogue with the possibilities and responsibilities of awareness. New Age in Latin America—worldwide spirituality without national, cultural, or spiritual borders—has in fact transformed the ways of signifying living and experiencing spirituality. A collection of essays edited by Angela Renée de la Torre Castellanos, María Cristina del Refugio Gutiérrez, and Nahayeilli Juárez-Hue, titled *New Age in Latin America: Popular Variations and Ethnic*

Appropriations (2016), sums up the hybridization of iterations and appropriations.[14] In this compilation, scholars—mostly ethnologists—find the symptoms of a postmodern culture the presence of a new cultural framework. Researchers observe New Age characteristics as globalizing, individualizing, de-institutionalized, eclectic, and dynamic. In Latin American countries where Catholicism is the predominant religion, New Age is practiced as an individualized or subjective approach that also incorporates popular beliefs. In fact, it is a way of practicing spirituality without the framework of an institution that has historically failed its parishioners. The authors find that devotional practices in Argentina, Brazil, and Mexico included syncretic or hybrid practices. In traditional literature, we can see these views reflected in the work by Ernesto Cardenal, Nicaraguan poet of *The Species and Other Poems* (2011) that examine themes of humanity; in particular, his *Pluriverse: New and Selected Poems* (2009) and *Origin of the Species and Other Poems* (2011) explore themes of humanity, nature, and their relationship to the universe. Paulo Coelho, a Brazilian novelist, has been quite influential, particularly with his *O diário de um mago* (*The Pilgrimage*, 1987); as Antonio Velasco Piña Regina's *Dos de octubre no se olvida* (1987) has been in Mexico. Latin Americans have been similarly influenced by American authors such as José Argüelle's book *El factor maya* (*The Mayan Factor*, 1987); Clarisa Pinkola Estés' *Women Who Run with Wolves* (1992); and David Icke's *Children of Matrix* (2010).[15]

In sum, Latin American spiritual beliefs are open to exploration and experimentation. Thus, the predominance and importance of Catholic religious practices, ceremonies, and culture is not surprising given the history of colonization with forced conversion and eradication of pre-Colombian spiritual practices. New Age validates the ancient practices of and belief in magic (the unseen), occult forces, amulets to guard against bad vibrations, as well as magic and witchcraft healing. The miraculous powers of these sacred forces are certainly not new to Latin American culture. Religious syncretism has historically been the norm in Latin America, but there is now a renewed validation of the substantive symbols and syncretic beliefs. The authors of the *New Age in Latin America* collection overwhelmingly find that New Age revives old syncretisms of cultural resistance in new cultural hybrids and find that the examples featured in their book are more "propelled towards a holistic and cosmic action-thought, in the sense of connecting itself proactively to initiatives

for revaluing various ecological and cultural ethnic worlds, and promoting a commitment to environmental and cultural transformation" (De la Torre Castellanos et al. 2016, p. 373).

Scholars of Latin American digital cultures offer differing opinions over the positionality of this new genre. Claudia Kozak[16] explains that while she does not discount works that produced generalized themes, there is a definite production of art and thought that is uniquely Latin American; she discusses art produced in Latin America and in geopolitical contexts as well as trans-local questions. Kozak points to contemporary critics who explore the "ontological rupture" produced by worlds that exist in constant relational multiplicity.

On the other hand, Leonardo Flores[17] leaves an open question: "Can Latin American e-literature be distinguished from that of U.S., Caribbean or European e-lit?" He grapples with this by leaving the query open to discussion positing that "[g]iven the easy access and transmission of communication, both artists and academics are easily within reach and therefore easily influenced," leaving Latin American e-literature without any regional or cultural specificity, which raises the question whether the local or national perspective is uprooted because e-literature is globally accessible. And, as Flores notes, given that the artists are invariably much more connected with, exposed to, and in collaboration with artists globally, these texts are more than written language (be it in Spanish or Portuguese), their syntax is multi-modal, and the internet has somewhat removed national borders, making texts accessible.

Yet, global contact and cultural and aesthetic influences have forever marked a fruitful exchange between artists and critics. Take for instance, how Latin American *Concretismo* differs in its political inclination in contrast to the purely aesthetic European Concrete movement. So, I would say yes, Latin American e-literature and digital culture, whether situated and generated in the region or transnationally or geopolitically produced, remains grounded in its geo-particularity. Digital culture in Latin America has a long and varied tradition of radical aesthetic media production, centered not only around Concrete poetry, but also around video and new media poetries. In these works, Latin America may be a space where frames of reference and worldviews are socially and culturally constructed. Latin American identity is therefore "glocalized," acquiring new identity features while preserving its core point of reference.[18] The role of the reader in identifying works from this region is not just to rely on the citizenship (or situatedness) of the author/artist and the language used,

but also to identify the cultural *embeddedness* of the work, the social or political implications possibly hidden in the work. I appreciate works for their perspective of seeing the world, for its projection of the anxieties and concerns. For example, what makes Eugenio Tisselli Mexican even though he voices his concern for world demise and resides in Spain and Ethiopia? Similarly, Fernando Llanos' site-specific works speak directly of the issues he finds most notable on his short visits abroad. These artists, much like previous generations of Latin American artists and writers who traveled, studied, and lived abroad (for educational, leisure, and political reasons) gain an international awareness of their own positionality in the world, assume global interests and perspectives, learn from and adapt to other ways of communication and expression and nonetheless; their "Latin Americanness" is not erased nor replaced. Briefly, we can recall Vicente Huidobro's French connection; Octavio Paz in Spain, France, and India; Jorge Volpi in Spain and France; Ulises Carrión in the Netherlands. In fact, scholars find that these writers' voices are actually further enriched by their exile or simply by their international exposure. As anyone that travels abroad for an extended time knows, the experience, the livelihood, and the separation from the mother country actually enhances, enriches, and intensifies the perspective and connection to the homeland.

Cosmos, Values, and Consciousness in Latin American Digital Culture situates digital cultural production of digital works (some recognized as electronic literature) that produce subjective positionality, clouded knowledges of quantum theories, and metaphysical patterns that are themselves grounded in a cultural ideology. Digital technologies help authors conceptualize different ways of understanding by challenging existing narratives and conceiving an awareness of our participation in digital culture. Again, this analysis is not definitive and exclusive, but rather my own reading of the works, thus underlining the importance that the reader has in interpreting as we bring our own experiences and baggage to our readings. Overall, this book underlines a conceptual framework for understanding how digital media impacts our way of reading, approaching, and even interpreting social reality. The qualitative analyses are thus interpretations of the intentions (in some cases), motivations, or subconscious inspirations of the current *zeitgeist* we are all part of. My analyses thus insist that these artists are in some way participating in a conscious or unconscious cultural paradigm of New Age metaphysical thought that assumes humans as co-creators of the world, thereby their works reflect this philosophy of artistic and personal introspection. Furthermore, this

study provides an example of how one might interact critically with digital media and culture. The works selected speak of the diverse, sometimes regionalized, and often multi-ethnic reality of the Latin American experience at home and abroad in the realm of cultural transpositions, sociopolitical appraisal, and socio-cultural diversity. The analyses elaborate on how artists reflect the world they live in, calling attention to how we are all reflecting, responding, questioning, and answering to our reality. Some artists explicitly draw on and are inspired by Eastern metaphysical ideas, other artists not necessarily so, although their works reflect those same ideas. I therefore conclude that these artistic and digital culture expressions are reflective of a universal consciousness of this new paradigm shift. It is certainly exciting in working with digital culture in new directions, at the forefront of different media, playing with the interactions among text, visual art, music, and programming. Nonetheless, the nature of these works is itself ephemeral, as the biggest problem is that of outdated software. In most cases, early work can no longer run on modern systems, and authors of current work may have to constantly revise their pieces to keep it accessible to future systems.[19] New media theory stresses the role of user interactivity or engagement, but it is critical to engage as well with the hermeneutic perspective, accomplished through analysis of what the digital components may represent or how these may be understood by its audience. Additionally, while I agree that understanding how the technological complexity and the dynamics of the mechanics is important (and very relevant in some current research), my appreciation insists on finding, revealing, or merely pondering on tropes (not necessarily all literary, it depends on the medium) that underscore a nuanced importance, a vision of what it means by its references, innuendos, influences, collaborations, and so on.

The digital works selected are creative, fun, and engaging but become intellectually stimulating and emotionally affecting once we dive into a multilayered understanding of the nuances that those evoke. Thus, the book's objective is to show how these artists are not simply "digitalizing literature" and that these works are more than techy creations; rather they make us think of other directions and connections.[20] The dialogue between the technological, the scientific, and the metaphysical is valuable, but even more so is how we may *read for meaning*, and thereby appreciate how digital culture reflects epistemology, or how we know what we know about the world. Simply put, analysis is playing with ideas; reflecting; sharing thoughts, beliefs, or judgments; and suggesting approaches

sparked by the interaction with the works. My reading appreciates these works as having an intimate connection between the artists' understanding of the world, our perceived mission of human existence and its potential. Consciousness plays a central role, as the works underscore experiences, reflective attentiveness, and agency (be it through or with social anxieties or political concerns). The overarching theme of consciousness is naturally positing metaphysical and ontological questions of humanity: What are we? Who are we? How are we connected? When is our entanglement evident? And, ultimately gets to the ideological trepidation, asking: Where are we headed? And, why are we complacent?

Eastern metaphysics and quantum physics both posit that, ultimately, everything is composed of vibrational energy, and that the physical universe is originated from the vibrational energy of sound. It seems proper to start this study with how artists have long been fascinated with the poetic aspect of sound. The works in Chapter 2 insinuate answers to the nascent question *what are we?* Their works feature vibrational elements or qualities either to play with the concept of sound or to feature the nuances of how vibrational frequencies compose all matter. In various ways, each piece experiments with sound and draws connections to the collective imagination—the heartbeat of humanity. The four works selected are illustrative of the transformation of sound poetries in Latin America. The "verbivocovisual" musical adaptations of Concrete poetry produced by Cid Campos (Brazil, 1995 and 2001), specifically his first two albums titled, *Poesia e risco* (Polygram 1995) and *No lago do olho* (Dabliú 2001), echo his father's and uncle's attraction to the poetics of sound and how that feature could be visualized. The exemplar Situationist sound compilations of Iván López Monroy's "dfm e.p." (Mexico, 2005) produce a "sound ecology" of sorts, making us reflect on how the spaces we inhabit affect us with their inherent frequencies. Monroy's piece undoubtedly captures the symbolic nuances of the bustling city and its different sectors in his ambiguous but clever recordings of the *mercados* of Mexico City, resulting in a culturally coded rendition of sound poetics. The more modern sound poetries of Brian Mackern, specifically his acclaimed *Temporal de Santa Rosa* (Uruguay, 2008) feature recordings and images of a storm that metaphorically reverberate the cultural encodings of fear, hope, and anticipation. Lastly, the chapter calls attention to the computer-kinetic morphisms played out in José Aburto's *Partidas* (Peru, 2002). He uses participatory digital poetics that tempt the viewers

to explore the virtual space by producing their own sounds or by "visualizing" sound and its vibrational effects, alluding to an understanding of quantum mechanics of energy and vibration. His poetics also plays with the conception of intention and how that may affect the vibrational frequency of the piece. All of these works remind us that the idea of poetics is irrevocably altered and demands a new cultural practice of reading.

Chapter 3 ponders how artists reflect on the question *who are we?* Ultimately, this chapter implicitly and explicitly points to a framework of metaphysical consciousness, examining how the interactivity and playfulness of the video poetics of Wilton Azevedo's *Atame* (Brazil, 2006) and Alvaro Andrade Garcia's *Grão* e *LivrE* (Brazil, 2012) do not detract from the highly existential questions of corporality, being, and spirit/consciousness. As N. Katherine Hayles reminds us, with digital technologies "it is not about disengaging from the body, but rather extending our awareness of embodiment that virtual existence offers us" (1999, p. 291). The technologies used afford these works ways of experimenting, manipulating, creating, simulating, and translating ideas that are best placed in interfaces requiring participation (auditory, kinetic, visual, tactile) and force us to find patterns in what may seem as chaos or randomness. They also seem to disenfranchise themselves from the rich diversity of human language and the complexities of translation. Overall, I claim that these digital works reflect of the cosmic consciousness or collective unconscious in which we all participate. Wilton Azevedo's digital poetries put these effects in vibrant, hypnotic, and inquisitive motion using language as rapture, in which the rupture of assemblages of body parts, the clasped written word, the repetition of spoken verses, the rhythmic movements, and associative sounds and visuals create a comforting rhythm yet unsettling introspection of the experience of reading and viewing. Each poetic enterprise recovers the significance of sensuality, sexuality, and the female body but ultimately manifests more existential questions of self, existence, and experienced corporality. Azevedo's play with language is visceral: the body, spoken and written word, image, and sounds pronounce an intuitive, almost primal awareness that make us recall the surrealist tendencies of the avant-garde, showcasing not only the aesthetic but also posing questions of the social, psychological, and metaphysical aspects of materiality or consciousness. In Andrade Garcia's *Grão* e *LivrE*, the poetics are an animation of paintings, ideograms, juxtaposed words in/of images that reinforce its symbolism with sounds and

movements that hypnotize its reader. His work is alive—programmable, movable, visual, lurid—but even more so, it is an art, a faith, and an exquisite politics and understanding of the world as interconnected. His affinity to metaphysical ideas is evident with transcultural and transtemporal images that emphasize and disseminate the "sacred," "civilized," "exotic," "primitive," or "Other."

In Chapter 4, five authors reflect in very different ways *how we are connected*. The works selected challenge the questions of space and entanglement of time through very different perspectives. From this study of time, the concepts of time-reversibility, irreducibility, indeterminism, and nonlocality emerge through analysis of Augusto Marquet's and Gabriel Wolfson's *Anacrón: Hipótesis de un producto todo* (Mexico, 2012); Rodolfo JM's hypertext detective/police novel *Tatuaje* (Mexico, 2014); Yolanda de la Torre's, Raquel Gómez's, and Mónica Nepote's *Umbrales* (Mexico, 2014); and Santiago Ortiz's *Bacterias argentinas* (Colombia, 2004). Similarly, analyses of the poetic virtual installation of Karen Villeda's and Denise Audirac's *Poetuitéame* (Mexico, 2014) reflect the interconnectedness of our human condition within social-media communication platforms. The poetic statement this installation makes from collected tweets speaks of collaboration and stereotypes produced and, more importantly, reveals how our interconnectivity is more than digital. The works are an experiment involving the observing mind and the object of observation. This is, in fact, a metaphor for how quantum entanglement and probability give us the conception of poetry as a universe, a cosmology, but also, for how these works are poetic because they are metaphors of a universal consciousness. Their vision of social consciousness is a form of radical consensus of the networked view of life.

Chapter 5 dwells on more ideological connections related to our "shared patterns of existence" as the works underscore the artists' social activism and anxiety of *where we are headed*, and their apprehension as to *why we remain complicit*. The new paradigm of thought rejects Cartesian dualisms and therefore insists on a more holistic understanding of issues at the same time making the individual responsible for personal reflections that lead to advocacy for an interconnected universe. This chapter thus focuses on how millennial artists reflect on political and social issues in their works. Art and advocacy go hand in hand and they reflect how humanity is evolving toward a collective consciousness, transcending political and national boundaries given everything is interconnected.

Fernando Llanos' *videointervenciones* (Mexico, 1998–2011) and Eugenio Tisselli's *El 27/The 27th* (Mexico, 2013) are both examples of social and political critiques in a networked existence. Llanos' videos constitute recordings of urban spaces, sights, and sounds that interfere with the mundane, with the established signifiers, and with projected images that call the onlookers' attention to reinterpret and rethink preexisting notions of culture, hegemonic symbols of power, and taboos. And, so it is with these artistic intrusions that *videoman* assumes the role of cultural activist. Tisselli's generative poetry examines meaning through a chain of semantic relations through sounds and images of words; his work is an amalgamation of playful connections, politics, and uses the floating signifiers of virtual space. His non-normative use of sound technologies and sound hacking makes up his incoherent poetics. These samples draw attention to the networks that we engage in socially, politically, and even historically. The artists make no reservations about their own social activism and political engagement, and they metaphorically call out the reader's complicity in lack of commitment.

This book aims to spark interest in new media works and electronic literatures as well as to facilitate an understanding of Latin American culture from a different lens—specifically how digital culture in Latin America is not just politically activist but also aesthetically rich, dynamic, and quite prolific.[21] This scope of this study covers only a few samples of digital culture and is by no means an exhaustive coverage of the topic, so references are made to other artistic and scholarly works. The theme of cosmos, values, and consciousness in digital culture underscores the systems, structures, and networks that draw out the interconnectedness of discourses so beautifully reflected in the digital works. The scientific discourse of quantum physics, whose discoveries have already been found to parallel ancient Eastern metaphysics, has given rise to the paradigm of cultural thought we are currently enmeshed in. The analyses thus accentuate how the digital cultural products produced by these Latin American artists naturally tend to pose epistemological and ontological questions of humanity, particularly how our perceptions are interconnected and how these artists' conceptions are reflective of that intuitive awareness.

Notes

1. See Donna Haraway (1989), N. Katherine Hayles (1991, 1999, 2012, 2017), Cary Wolfe (2010), Francesca Ferrando (2019), Roberto Esposito (2013, 2015), Neil Badmington (2000), Nick Bostrom (2016), among others.
2. For a detailed analysis of the relationship between science, particularly quantum physics, and examples of electronic literature, see Weintraub (2018). Along the same lines, Drucker (2018) discusses how social processes have been informed by quantum theory and general relativity.
3. See "The New Age of Post-Marxism" in Cloud (1998), chapter 6, pp. 131–150.
4. For a comprehensive overview of the movement, see the edited collection of essays by Lewis and Gordon Melton (1992).
5. Knaup examines this philosophical debate (2018).
6. Research on the New Age movement reveals an uncertainty and almost an apprehension of the movement's ideology that displaces the Cartesian-Christian thought. Gordon Melton, in Lewis and Gordon Melton (1992), for example, conclude: "But just as certainly as the New Age movement will phase in the 1990s, so the New Age will quietly disappear from the churches' weekly schedules. New Thought will continue, having absorbed any elements of New Age it finds useful while it discards the rest" (1992, p. 27). Similarly, Hanegraaff's conclusions seem to focus more on explaining how the "generally shared pattern of culture criticism" of the New Age are negative assumptions (completely the opposition of what the movement calls for) and points to how it *rejects* (his emphasis) transcendental or anthropomorphic deity; rejects the idea that humans are dependent on salvation; *against* the idea that humans are separated from the cosmos; *against* human attitudes of domination and exploitation of nature; *against* the separation between spirit and matter as separate realities; *against* idea of transcendence; *against* the scientific rationality of "parts mentality;" *against* the denial of spirit by materialist ideologies (1996, p. 516). His conclusions seem to demarcate the New Age movement as oppositional and confrontational to current religious and scientific trends, by saying: "It claims that the two trends which have hitherto dominated western Culture (dogmatic Christianity and an equally dogmatic rationalistic/scientific ideology) have been responsible for the current world crisis, and the latter will only be resolved if and when this third option becomes dominant in society" (p. 517).
7. For an overview of New Age politics and ideology, see the works of Satin (1979), Chandler (1988), Kyle (1995), and York (1995).

8. Examples of studies focusing on the interconnectedness between the humanistic and scientific discourses include Amrine, *Literature and Science as Modes of Expression* (1989); Hayles, *Chaos and Order: Complex Dynamics in Literature and Science* (1991); Gossin, *Encyclopedia of Literature and Science* (2002); Pesic, *Seeing Double: Shared Identities in Physics, Philosophy, and Literature* (2002); Livingston, *Between Science and Literature: An Introduction to Autopoetics* (2006); and, most recently, a dissertation by Vierrether, *Merging Literature and Science: Shakespeare Through the Scope of Quantum Physics and Lacan* (2016).
9. See, for example, Pantidos et al., "Incorporating Poeticality into the Teaching of Physics" (2014); Hadzigeorgiou and Schulz, "Romanticism and Romantic Science: Their Contribution to Science Education" (2014). Additionally, Weintraub's recent book *Latin American Technopoetics: Scientific Explorations in New Media* (2018) makes clear connections between the scientific and humanistic discourses, specifically in electronic literatures.
10. The following are comprehensive volumes on ecocriticism: Garrard, *Ecocriticism* (2011); Hiltner, *Ecocriticism: The Essential Reader* (2015); and Kane, *The Natural World in Latin American Literatures: Ecocritical Essays on Twentieth Century Writings* (2010).
11. Current research includes Lewis and Maslin, *The Human Planet: How We Created the Anthropocene* (2018); Purdy, *After Nature: A Politics of the Anthropocene* (2015).
12. I Love E-Poetry (http://iloveepoetry.org/); Revista Laboratorio (http://revistalaboratorio.udp.cl/); Centro de Cultura Digital (https://centroculturadigital.mx/); Digital Latin American Cultures Network (https://latamcyber.wordpress.com/).
13. Vargas Llosa, "Why Literature: The Premature Obituary of the Book" (2001). This idea is also expanded on in Vargas Llosa, *Notes on the Death of Culture: Essays on Spectacle and Society* (2016).
14. Angela Renée de la Torre Castellanos et al. (2016).
15. Cited in De la Torre Castellanos, Angela Renée, María Cristina del Refugio Gutiérrez, and Nahayeilli Juárez-Huet, *New Age in Latin America* (2016), pp. xvi–xvii.
16. Pat Badani, Iliana Hernandez Garcia, Claudia Kozak, and Priscila Arantes, "Introduction N°11- Délocalités, Translocalités Et Activisme Dans L'art Électronique Et Biomédiale Latino-Américain," *Artelogie* (20180112) (2018), accessed October 22, 2019. https://doi.org/10.4000/artelogie.1453.
17. Flores (2017).
18. The term "glocal" or "glocalization" is termed by Roland Robertson in his *Globalization: Social Theory and Global Culture* (1992) as he refers to

the simultaneous occurrence of both the global and local tendencies in social, political, and economic systems.

19. Work has already begun on archiving systems and e-literatures. Dene Gregar, professor and director of the Creative Media and Digital Culture Program at Washington State University, Vancouver, works to archive materials and the computers that will continue to run them. She and Stuart Moulthrop co-authored *Traversals: The Use of Preservation for Early Electronic Writing* (2017). She has curated exhibitions of digital art and electronic literature, including for the Library of Congress and the Modern Language Association.
20. As Roberto Simanowski relates in *Digital Art and Meaning: Reading Kinetic Poetry, Text Machines, Mapping Art, and Interactive Installations*, close readings of digital works are often not done for three reasons: preference for terminological and theoretical debate over less-grounded close semiotic readings; a lack of faith in the significance of the subject; a lack of faith in close reading itself. He goes on to encourage the importance of such venture "of allowing readers to consider the work in a more interesting, even enlightening way" (p. 4).
21. While this study is limited to only a few samples of digital works, for the most part collected in the Electronic Literature Collection or found at international festivals, much more exists and has been studied by colleagues primarily in the Spanish literary field. The anthology by Christina Lux and Ignacio López-Calvo is a collection of essays on the future of the humanities, *The Humanities in the Age of Information and Post-Truth* (2019). See also Busch and Gentic (2016).

References

Amrine, Frederic, ed. 1989. *Literature and Science as Modes of Expression*. Dordrecht, Germany: Kluwer Academic Publishers.

Argüelles, José. 1987. *The Mayan Factor: Path Beyond Technology*. Santa Fe, NM: Bear.

Azevedo, Wilton. 2006. *ATAME: A Angustia do Precário, Texto e Poesias*. Monologo: Fernanda Nardi; Digital Video e Performance: Rita Varlesi; Interface Design: Savana Pace; Production: Universidade Presbiteriana Mackenzie and Estudio UnderLab. See video at https://www.youtube.com/watch?v=YzYF3QYuHiI. Accessed November 23, 2018.

Badani, Pat, Iliana Hernandez Garcia, Claudia Kozak, and Priscila Arantes. 2017. "Introduction n11 - Délocalités, Translocalités et Activism Dans L'art Électronique et Biomédiale Latino-Américain." *Artelogie* (20180112) 11 (2018). http://journals.openedition.org/artelogie/?lang=en. Accessed October 22, 2019.

Badmington, Neil. 2000. *Posthumanism*. Houndmills, Basingstoke, Hampshire, UK: Palgrave.
Bohm, David. 1989. *Quantum Theory*. London: Dover Publications.
Bostrom, Nick. 2016. *Superintelligence: Paths, Dangers, Strategies*. New York: Oxford University Press.
Busch, Matthew, and Tania Gentic, eds. 2016. *Technology, Literature, and Digital Culture in Latin America: Mediatized Sensibility in a Globalized Era*. New York: Routledge.
Campos, Cid. 2005. Personal website. http://www.cidcampos.com.br. Accessed November 10, 2017.
Capra, Fritjof. 1975. *The Tao of Physics: An Exploration of the Parallels Between Modern Physics and Eastern Mysticism*. Boston: Shambhala Publications.
Cardenal, Ernesto. 2009. *Pluriverse: New and Selected Poems*. Edited by Jonathan Cohen. New York: New Directions Publishing.
Cardenal, Ernesto, and John Lyons. 2011. *The Origin of Species and Other Poems*. Lubbock: Texas Tech University Press.
Cardenal, Ernesto, and Luce López Baralt. 2012. *El origen de las especies*. 1st ed. Managua: Anamá Ediciones Centroamericanas.
Chandler, Russell. 1988. *Understanding the New Age*. Dallas: Word Pub.
Cloud, Dana L. 1998. *Control and Consolation in American Culture and Politics: Rhetoric of Therapy*. New York: Sage.
Coelho, Paulo. 2017. *O diário de um mago*. Barcelona, Spain: Editora Paralela.
De la Torre Castellanos, Angela Renée, María Cristina del Refugio Gutiérrez, and Nahayeilli Juárez-Huet. 2016. *New Age in Latin America: Popular Variations and Ethnic Appropriations*. Religion the Americas, vol. 16. Boston: Brill.
Drucker, Johanna. 2018. *The General Theory of Social Relativity*. Vancouver, BC: Elephants Limited.
Esposito, Roberto. 2013. *Terms of the Political: Community, Immunity, Biopolitics*. New York: Fordham University Press.
———. 2015. *Persons and Things: From the Body's Point of View*. Theory Redux. Cambridge: Polity Press.
Estes, Clarissa Pinkola. 1992. *Women Who Run with the Wolves: Myths and Stories of the Wild Woman Archetype*. New York: Ballantine Books.
Ferrando, Francesca. 2019. *Philosophical Posthumanism*. London: Bloomsbury Academic.
Flores, Leonardo. 2017. "La literatura electronica latinoamericana, caribeña, y global: generaciones, fases y tradiciones." *Artelogie*, November. http://journals.openedition.org/artelogie/?lang=en. Accessed May 6, 2019.
Garrard, Greg. 2011. *Ecocriticism*. New York: Routledge.
Glotfelty, Cheryl. 2015. "Literary Studies in an Age of Environmental Crisis." In *Ecocriticism: The Essential Reader*, edited by Ken Hiltner, 120–130. New York: Routledge.

Gossin, Pamela. 2002. *Encyclopedia of Literature and Science*. Westport, CT: Greenwood Publishing Group.

Hadzigeorgiou, Yannis, and Roland M. Schulz. 2014. "Romanticism and Romantic Science: Their Contribution to Science Education." *Science et Education* 23: 1963–2006. https://link.springer.com/article/10.1007%2Fs11191–014–9711–0. Accessed June 17, 2019.

Hanegraaff, Wouter J. 1996. *New Age Religion and Western Culture: Esotericism in the Mirror of Secular Thought*. Leiden, NY: E.J. Brill. http://site.ebrary.com.proxy.lib.odu.edu/id/10089145. Accessed March 7, 2018.

Haraway, Donna Jeanne. 1989. *Primate Visions: Gender, Race, and Nature in the World of Modern Science*. New York: Routledge.

Hayles, N. Katherine. 1991. *Chaos and Order: Complex Dynamics in Literature and Science*. Chicago and London: University of Chicago Press.

———. 1999. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: University of Chicago Press.

———. 2012. *How We Think: Digital Media and Technogenesis*. Chicago: University of Chicago Press.

———. 2017. *The Power of Cognitive Unconscious*. Chicago and London: University of Chicago Press.

Herbert, Nick. 1985. *Quantum Reality: Beyond the New Physics*. Garden City, NY: Anchor Press/Doubleday.

Hiltner, Ken. 2015. *Ecocriticism: The Essential Reader*. New York: Routledge.

Icke, David. 2017. *Children of the Matrix: How an Interdimensional Race Has Controlled the World for Thousands of Years—And Still Does*. Isle of Wight, UK: David Icke Books.

Kane, Adrian Taylor, ed. 2010. *The Natural World in Latin American Literatures: Ecocritical Essays on Twentieth Century Writings*. Jefferson, NC: McFarland & Company, Inc.

Knaup, Marcus. 2018. *Unity of Body and Soul or Mind-Being?: Towards a Paradigm Shift in Modern Concepts of Personhood*. Abhandlungen Zur Philosophie. Stuttgart: J.B. Metzler Verlag.

Kozak, Claudia. 2006. *Deslindes: ensayos sobre la literatura y sus límites en el siglo XX*. Rosario, Argentina: Beatriz Viterbo Editora.

———, ed. 2012. *Tecnopoéticas argentinas: archivo blando de arte y tecnología*. Buenos Aires, Argentina: Caja Negra.

Kyle, Richard G. 1995. *The New Age Movement in American Culture*. Lanham, MD: University Press of America.

Lewis, James R., and J. Gordon Melton. 1992. *Perspectives on the New Age*. Albany: State University of New York Press.

Lewis, Simon L., and Mark A. Maslin. 2018. *The Human Planet: How We Created the Anthropocene*. New Haven: Yale University Press.

Livingston, Ira. 2006. *Between Science and Literature: An Introduction to Autopoetics*. Urbana and Chicago: University of Illinois Press.

Llanos, Fernando. *Video intervenciones*. http://www.fllanos.com/vi_video/videos.html. Accessed August 23, 2015.

López-Calvo, Ignacio. 2018. *The Humanities in the Age of Information and Post-truth*. Evanston, IL: Northwestern University Press.

Lopez Monroy, Iván. 2004. *dfm.ep*. http://textzi.net/dfm. Accessed March 6, 2018.

Lux, Christina, and Ignacio López-Calvo. 2019. *Humanities in the Age of Information and Post-truth*. Evanston, IL: Northwestern University Press. https://muse.jhu.edu/book/63042/.

Mackern, Brian. (2008). *Temporal de Santa Rosa*. http://34s56w.org/xtcs/archivos.html. Accessed October 23, 2017.

Marquet, Augusto, and Gabriel Wolfson. 2012. *Anacrón: Hipótesis de un producto todo*. Electronic Literature Collection, Volume 3. http://collection.eliterature.org/3/work.html?work=anacron. Accessed October 23, 2017.

Moulthrop, Stuart, and Dene Grigar. 2017. *Traversals: The Use of Preservation of Early Electronic Writing*. Cambridge, MA: MIT Press.

Pantidos, Panagiotis, Konstantinos Ravanis, Kostas Valakas, and Evangelos Vitoratos. 2014. "Incorporating Poeticality into the Teaching of Physics." *Science & Education: Contributions from History, Philosophy and Sociology of Science and Mathematics* 23 (3): 621–642.

Pesic, Peter. 2002. *Seeing Double: Shared Identities in Physics, Philosophy, and Literature*. Cambridge, MA, and London: The MIT Press.

Prigogine, Ilya, Isabelle Stengers, and I. Prigogine. 1984. *Order Out of Chaos: Mans New Dialogue with Nature*. Toronto: Bantam Books.

Purdy, Jebediah. 2015. *After Nature: A Politics of the Anthropocene*. Cambridge, MA: Harvard University Press.

Robertson, Roland. 1992. *Globalization: Social Theory and Global Culture*. Theory, Culture & Society. London: Sage.

Satin, Mark Ivor. 1979. *New Age Politics: Healing Self and Society*. New York: Dell.

Simanowski, Roberto. 2011. *Digital Art and Meaning: Reading Kinetic Poetry, Text Machines, Mapping Art, and Interactive Installations*. Minneapolis: University of Minnesota Press.

Tisselli, Eugenio. "The 27th. El 27." Electronic Literature Collection, Volume 3. http://collection.eliterature.org/3/work.html?work=the-27th. Accessed March 11, 2019.

Vargas Llosa, Mario. 2001. "Why Literature: The Premature Obituary of the Book." *The New Republic*, May 14. https://newrepublic.com/article/78238/mario-vargas-llosa-literature. Accessed May 6, 2019.

———. 2016. *Notes on the Death of Culture: Essays on Spectacle and Society*. Edited by John King. New York: Picador, Farrar, Straus and Giroux.

Velasco, Antonio Piña. 2009. *Regina: 2 de Octubre no se olvida*. 2nd ed. Mexico: Punto de Lectura.

Vierrether, Tanja. 2016. "Merging Literature and Science: Shakespeare Through the Scope of Quantum Physics and Lacan." PhD diss., Bowling Green State University. http://rave.ohiolink.edu/etdc/view?acc_num=bgsu1460134452. Accessed May 14, 2019.

Weintraub, Scott. 2018. *Latin American Technopoetics: Scientific Explorations in New Media*. New York: Routledge.

Wolfe, Cary. 2010. *What Is Posthumanism?* Minneapolis: University of Minnesota Press.

York, Michael. 1995. *The Emerging Network: A Sociology of the New Age and Neo-Pagan Movements*. Lanham, MD: Rowman & Littlefield.

CHAPTER 2

What Are We?

Abstract The works in this chapter feature vibrational elements to play with the concept of sound and vibration, illustrating the transformation of Latin American sound poetries. Cid Campos' "verbivocovisual" adaptations of Concrete poetry, specifically *Poesia e risco* and *No lago do olho*, echo and visualize the attraction to the poetics of sound. The Situationist sound compilations of Iván López Monroy's "dfm e.p." produce a "sound ecology" of sorts. Brian Mackern's more modern sound poetries in *Temporal de Santa Rosa* feature recordings and images of a storm that reverberate fear, hope, and anticipation. Lastly, the chapter calls attention to the computer-kinetic morphisms in José Aburto's *Partidas*. These works remind us how the idea of poetics is irrevocably altered and demands a new cultural practice of reading.

Keywords Humanity · Musical patterns · Vocalizations · Communicative vibrations · Electromagnetic connections

> If you want to find the secrets of the universe, think in terms of energy, frequency and vibration.
>
> Nikola Tesla

A. J. Huizar, *Cosmos, Values, and Consciousness in Latin American Digital Culture*,
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2.1 Heartbeat of Humanity

The following set of works provokes the question: *What are we?* This chapter examines how some digital culture works capitalize on the use of sound. Technology enables these artists to explore the nature of sounds including noise, vibrations, the geometric representation of sounds, the absence of sound as meaningful, and the frequencies of musical tones. Their playful yet very thoughtful experimentation with sound presents us with the inevitable interpretation of the predominance of vibrations in consciousness. These texts touch upon the fields of acousmatic, sonic geometry, cymatics, and synesthesia.

Both science and Eastern spirituality agree that all physical matter is a form of resonance and vibration. Science explains the beginning of the universe with a Big Bang, the Vedanta says that the Big Bang is actually a reverberating sound, an OM of conditioned consciousness that continues to this day because without it, even for a microsecond, the universe would instantly disappear. The resounding OM—the collective sounds of the universe—contains all the mantras, sounds, and different vibrations that manifest as the world we know. Vibration, in the mystic sense, is the combination of consciousness and energy. Matter emits vibrations at different frequencies. For the mystics, it is these same vibrations that are also inversely creating matter—reality is dynamic and continually created by intention (consciousness) and breath (energy). Consciousness is not the same as awareness; consciousness is the perception of the self, whereas awareness is the perception of sensation. However, awareness can influence consciousness, and sound can expand or narrow awareness of audio sensation. Science tells us that the 73% of dark energy in the universe is moved by vibration, frequency, and resonance. Given that we are beings of energy, we are also moved by frequency of the resonance of our inner and outer worlds.

Our senses perceive everything in our environment in terms of frequencies. Hearing, smelling, tasting, and touching are achieved only at a limited range, however. Similarly, silence is not static, empty, nor even stable; it has atmosphere. That is, there are stark differences between a loving silence and an angry silence, or the silence inside the self as opposed to the silence in the environment. Silence moves us involuntarily out of the realm of the *I*—the volatile dimension of consciousness, individuality, and identification—and into the *am*, the dimension of sentience, vibration, and being. Yet, while sounds can inadvertently invade the brain, the

act of listening is selective as the brain chooses to attend to a certain voice or to cut out distant sounds and background noises. As we listen to sounds, our brain quickly selects what to identify with, planning how to respond, reconstructing meaning, or simply trying to understand the language heard.

There are several types of sounds that connect us. Charles Taylor outlines the different kinds of sounds and their qualities in "The Physics of Sound."[1] Sound is a wave of air pressure. All particles in the universe have the properties of waves, including the particles of our bodies. Sound is a vibration, a frequency, an attraction. Infrasounds are sounds of frequencies produced below 30 Hz, such as those produced by blue whales. The sounds of frequencies above 20,000 are ultrasonic; used by bats and for imaging. The transmission of sound occurs in the form of longitudinal compression waves in the air, but also through other media. The air temperature determines the rise and fall of sound, as the velocity of the sound in air is dependent on temperature. Reflection of sound characterized by echo and reverberation—the sound reflected by hard surfaces—reinforces the direct sound, making it possible to hear at greater distances. However, too much reflection—for instance, in an enclosed room or in water—would cause the sounds to reverberate continuously, making them difficult to distinguish (as in spoken sound in a pool). In music, there are several ways of producing sound through resonance, reed excitation, with strings or stick-slip motion. However, the physics of sound and musical instruments is complicated, and recently more research has been devoted to the physics of sounds of musical instruments in concert conditions.

The following examples can be appreciated solely for their sound qualities without necessarily being exclusively sound poems. Their main feature is the use of sound and vibrations that make us think about what we are: vibrating energy. I find in these that the recorded sounds can be understood as works having the same critical and depth of meaning as those in the literary canon. Take, for example, the "verbivocovisual" musical renditions of Concrete poetry by Cid Campos, whose recordings attend to sounds of pronunciation, cadence, intonation, syllabification, and repetition in loop of the peculiar sound nuances of language. The sounds produced in Iván López Monroy's sound urban-ecological experiment and Brian Mackern's radiostatic text show us that random sounds can and should be appreciated as poetic. Their texts' use of continuous

sound effects as one of the most effective ways of stimulating the brainwave state by using repetitive sounds and drones.[2] These drones have a calming effect, allowing a change in the state of consciousness. Drones can give the listener or session musician a 'home base' to come back to at the end of a phrase, giving the piece atmospheric and ambient textures.

Sound can also be perceived through non-auditory senses called synesthesia. There are many categories of synesthesia, such as the perception of sound as color. Experiments have shown that people do in fact have the natural ability to visualize sounds. Cid Campos and his father Augusto de Campos explore this in their live performances of the same texts with video backdrops. Since 1982 both have performed the original Concrete poetry with experimental music and multimedia presentations. The idea is to illicit a new experience of the poetry through other senses. Sound perception is understood to be related to other properties, such as those found by the studies of ethnomusicologists on the metaphysics of sound or the healing powers of meditative music on the human body. Artists have long been fascinated with the properties of sound, vibrations, and how they affect consciousness. Christoph Cox, in book on sound in art, *Sonic Flux: Sound, Art, and Metaphysics* (University of Chicago Press, 2018), examines the sounds produced by sound poets and proposes a metaphysical account of this artistic expression. Similarly, Kenneth LaFave, in his *The Sound of Ontology: Music as a Model for Metaphysics* (Lexington Books, 2018), finds that metaphysical ideas of representation are very much inherent in the artistic sound expressions of John Cage, for example. What these researchers find is that artists find ways to signify sound by highlighting the importance that sounds have. Brian Mackern's piece, *Temporal de Santa Rosa* (2008) does draw attention to the interplay between the drone-like effect of the cartography and the correspondence with cultural perception of the storm, which leads us to wonder if his electromagnetic noise text is meant to heal the disconnection between the vibrations produced by prayer and those of technology. José Aburto's poems—*Matters: Electromagnetic Poems* (2016) and *Blot Alive* (2016)—make us aware of the field of cymatics,[3] the study of physical sound, which examines visible sound and vibration, allowing us to see into the otherwise hidden geometry in sound and the frequencies which form matter. Cymatic frequencies have an effect on texture, structure, water, and more. In fact, Aburto's poems point to how sounds and vibrations—even as thoughts, ideas, words, or even music—ultimately affect the changing

shape of molecular structure. In Aburto's texts, *Badly Wrapped, Conception of the Dragon*, and *Grita*, he experiments with the idea of how sound turns matter and energy into form, and how ideas, thoughts, and spoken language can change matter.

2.2 Vocalization and Musical Patterns

Concrete poetry is a perfect example of the discontent with language, meaning, and politics. The poems play with sound, yet it is because of the silences and the vibrations that poetic dissonance can create a deliberate awkwardness that is beautiful. Concrete music is an experimentation of tones and ambient noise using sound as raw material. The Groupe de Recherche de Musique Concrete (GRMC) was founded in France by Pierre Schaeffer in 1949. Schaeffer published *À la Recherche d'une Musique Concrète* in 1952. Artists experimented with recordings of anything that could make sound (a metronome, sand, a faulty alarm clock, a tin can, etc.), which were then played backward, forward, or at the wrong speed producing a very creative concoction of sounds as musical compositions. Concrete music is thus a pastiche of sound, very much like the pastiche found in the poetry by its namesake. But more than its aesthetic characteristics, the pieces have a very revolutionary aspect that was inherent in the Brazilian movement's undertaking: to destroy the state of artistic languages, to create an art of the industrialized society, to practice a radical transformation of the political conditions.

The philosophy of Concretismo—as conceived in Brazil in the journal *Noigrandes* by Augusto de Campos (1931), Haroldo de Campos (1929–2003), and Décio Pignatari (1927–2012)—is certainly a breakthrough in aesthetics, but is also very reflective and even critical of the political state of being that Latin America was experiencing in the mid-1950s. Latin America was at the crux of the effects of the Cold War fueled by the United States and the then-Communist states. Throughout Latin America, capitalism was pinned against socialism, and democratization and progress were valued as synonymous. In Brazil, political democratization and economic growth were highlighted in the motto "Ordem e Progresso," implying that the impeding democratization went hand-in-hand with the country's industrial growth, political stability, and the new and capital of Brasília. It is this idealized, European model of a capital that the poets aimed to mimic (and critique) in their emulated *Plano piloto para poesia Concreta* (1958) (published soon after the *Plano Piloto para*

a Construção de Brasília).[4] In other words, the "verbivocovisual" characteristics of these poetries very much reflected the state of mind of a culture undergoing dramatic changes in envisioning a future, in building political partnerships and economic ties and investments. Just as its modernization and progress was taking place with new technologies (telephones and televisions became more prevalent in households, more affordable automobiles, etc.), the rapid urbanization also produced a culture that was experiencing a rapid surge in communication—all very much reflected in the abstract, sonorous, repetitive, quick readings of Concrete poetry. That is not to say that this poetic movement lived in an aesthetic vacuum: it was certainly influenced and inspired by the European Concretism of the 1930s with Apollinaire, the Futurists, Cubists, and the Dadaists.[5] But more likely by Mallarmé's last published work, "Un coup de dés," which was a "step foward" in regards to symbolism as a poetic movement. But Concretismo, as it was conceived in Brazil, was particularly keen on being critical by exposing their discomfort with the turn in political investments and alliances—certainly not new to the artistic realm, but here done quite sinuously. These were critiques of the inculcation of American culture via the products now consumed in Brazil—all part of an economic model that was soon (by 1964 Brazil faces a military coupe) to crumble under pressure due to public discontent fueled by social movements that pushed for more socialist changes. Ironically, the movement toward modernization and urbanization opened more federal universities, and it was the university students that sparked the questioning of the current political regime and its ideology.[6] Due to this intellectual and critical vibrancy, student organizations sprang up that manifested their political ideals in creative and artistic expression to foment a revolutionary transformation. What was at stake was the reflection of the undercurrent of social and political crisis mirrored as an aesthetic crisis—the poetry opposing the "tyranny of the verse" and traditional poetic forms with the revolutionary effects of use of blank space, color, graphics, and the paper's moldable character, thereby making the object-poem (while at the same time avoiding reductionist visual tendencies of simple calligrams). The word was liberated (at least in poetry) and invited a free nonlinear reading, an emphasis on the visual effects and on sound as opposed to semantics (which echoed the people's distrust in political discourse, which seemed more noise than content). More importantly, Concretismo opened up a cultural conscience of practicing alternative readings and finding new meanings.

As Ferreiro Gullar claims in *Vanguardas e subdesenvolvimento*, art should "speak of the world…Art should again speak of life."[7] In fact, the ideology of the Concrete movement was to "extirpate every singularity," as observed by Mario Cámara.[8] It was not an isolated poetic movement, for it drew inspiration from music, art, and even architecture in its effort to bring in the city in art and art back to the metropolis. Perrone draws out some of these correlations in his study.[9] He underscores the musical elements of the visual poem "cidadecitycité," specifically noting the poem's transformation from different media—paper to computerized to urban art to musical rendition. Perrone proposes that in all adaptations, the poem maintains a keen relationship to the musicality of the tone and its affinity to Caetano Veloso's song "Sampa," a homage to São Paulo. Cid Campos' musical interpretation of his father's poetry adds an acousmatic element with sounds intentionally obscured or made to appear unconnected to their source cause, usually synthesized music, recordings of sound instruments, his own voice, and sounds of the natural environment. The interrelations of artistic media in the Brazilian avant-garde are evident, but one should note how the artists' focus on having their art speak of the world; that is, art should absorb the social conditions and specifically reflect a national form of Portuguese. To do so, artists were drawn to the tone-color melodies of Antoine Webern and the ideogrammatic technique of Pounds' *Cantos*, as well as inspired by the impulses of street advertisements.[10]

Cid Campos (São Paulo, 1958) is a musician, compositor, and second-generation concrete poet-artist, son of one of the founders of Concrete Poetry, Augusto de Campos. He explains that since his infancy, he has been surrounded by poets and artists like Caetano Veloso and exposed to the works of Webern, Cage, Varese, Stockhausen, Beatles, Hendrix, Janis Joplin, and Joao Gilberto, and thus his work is very much influenced and inspired by them. Since the 1980s, he has collaborated with his father in designing musical renditions of Augusto's poems and, most recently, in collaborating on new poetic-musical works. The presentations have been interdisciplinary, such as "O Risco do Movimento" with musical compositions, improvisations with electric guitar accompanied with a light exposition, sound, and movement at the Teatro Sesc Pompéia (1982). Similarly, "Terminal Sonora" featured a music installation, dance, and poetry at the Bienal de São Paulo in 1987.

As noted, Concrete poetry draws both from the visual and the aural components of language, so Cid's transliteration of poems privileging the

sound phonemes of spoken language to musical interpretations is a natural fit. His discography can be accessed on his personal website.[11] I am particularly interested in his first two recordings titled, *Poesia e risco* (Polygram 1995) and *No lago do olho* (Dabliú 2001) because these are less musical accompaniment or interpretation and more clearly demonstrate the "verbivocovisual" characteristics of Concrete poetry.

The sung poems of *Fala da Palavra* (2004), composed by Cid Campos, do feature the dialogue between musical composition and poetic text. In Concrete style privileging the sound of the words, the musical accompaniment complements the recitation and shows how Concrete poetry is very much like rock lyrics in that the repetition of words and sounds is key to the composition. There is clearly a dialogue between the musical composition and the poetic text, making connections between the poems and the language of new poets, and to texts by German poet Quirinus Kuhlman and Maiakóvski, as Cid Campos notes. While I really enjoy Cid Campos' latest productions and find them to be very lively and entertaining (jazz meets hard rock meets Carlos Santana), the focus is geared more toward a musical rendition. The latest CDs *Emily* (Independente 2017) and *O inferno de Wall Street—Profetas em movimento* (Independente 2015) maintain a dialogue between the poetic and the musical, albeit as separate entities. In both works, there is a definite poetic inspiration and even a dialogue of sorts with the works of Emily Dickinson on the one hand and with biblical poetry on the other, all while suggesting a critique with political overtones.

The album *No lago do olho* (Dabilú 2001) features electric guitar music as accompaniment to the sung recitations of Concrete poetry—composed as a homage to the founders of Concretismo (Décio Pignatari, Haroldo de Campos and Augusto de Campos, José Lino Grünewald, and Ronaldo Azeredo). The poetic-lyrics are Cid Campos' own creations, collaborations with new poets such as Walter Silveira, Péricles Cavalcanti, Lenora de Barros, Carlos Rennó and Rogério Duarte, and Eurico de Campos. This particular compilation really lends itself to a visual representation due to the visual component of the Concrete poems themselves. In fact, both father and son have performed these poems at various venues with video and sound installations in addition to readings by Augusto and guitar accompaniment by Cid.

In *No lago do olho*,[12] the musical versions are more than just recitations, as these produce the vibratory effects of rhyming words and repetitive vowels and phonemes highlighted in the original poetry. At the same

time, Cid Campos really brings to life the poems by finding the appropriate tune, intonation, and accompaniments to each piece. "ETC," for example, is sung in a whispering and jazzy tune that brings out the mystery and infinitesimal nature of the abbreviation that can mean anything. The musical adaptation of Walter Silveira's "Banheiro publyko" (Public bathroom) is quite a reading of the erratic, visual graffiti-like representation—its aural interpretation is thus aptly captured with "bad-boy-voice" recitations accompanied by discordant electric guitar sounds and tempo-producing percussion and base. Similarly, "Máximo fim," written and composed by Cid Campos and Arnaldo Antunes, beautifully captures the disjointedness of the words. The concrete illusion is captured aurally in the fragmented, staccato, and guttural reading of the words—and, as listeners become accustomed to the reading, a beat begins to develop with bongo sounds, whirls, and base. A trance-like reading in dual-voice effect repeat the reading, which now makes the poem seem much more accessible, and just at that point it cuts without resolution—much like the disappearance of the letters in the written version.

"Flor da boca" is an original creation by Augusto de Campos and here musicalized by his son. This poem presents the challenge of how to best represent the vibratory effect of the repetition of sounds to create a melodic effect. The selection of the harmonica melody to the reading enhances the effect of vibration that the original written version tries to produce with the repetition of phonemes (*do, da*), while simultaneously diving into a guitar solo that further enhances the idea of the "internalization" of the poem, where words dissolve into sounds with a recurring and alluring rhythm, making these seem more like musical notes in a score. It is also very interesting to note the combinatory nature of the poem, that is, the borrowing and creating of literary pieces from different systems. These combinatorial and permutational literary systems have influences from the Dadaist and the Surrealist visual techniques. In Cid Campos' version, we hear also the acoustical juxtaposition and distortion as the sounds evolve in unexpected ways. Thus, the combinatory nature of the poem allows the reader to experience the poem from various perspectives at once. It is this everything in everything or the interconnectedness of things that is quite prevalent in this piece and speaks of how vibrations connect us. Campos' work reminds us that sound involves a more complex awareness that gives us our rich sense of self.

One of my favorites is "Tempoespaço," an original by Augusto de Campos, which Cid Campos adapts here, correctly interpreting the empty

space as interspersed moments of silence. Augusto de Campos recites non-linearly, while a clamoring of dissonant noise heard in background accentuates the vacillation between the words *um/de*, the prefixes *tem-/es-*, the suffixes *-ço/-po*, and the words *em/um*. The original idea was to create an anti-mimetic effect privileging space as a poetic element and as a silent phoneme that must be "heard." Silence in music is significant, as is the importance of the space of silence resonates the metaphysical state of consciousness entered into for the purposes of connecting with the "divine mind."

"Velocidade," a poem by Cid Campos and Ronaldo Azeredo, is clearly a visual (Concrete) poem whose Concrete music performance emphasizes the disjointedness of the word, the separation of letters to form an artistic effect. The aural representation thus focuses on producing a jumping-effect of very individual separate tones (with piano keys), drumming effects that set an awkward beat, and pronounced echoing of the "v" followed by the syllables of the word. It is not rhythmic, but rather atonal and lackluster, thereby making ironic the speediness—or quick iteration—of the word. Indeed, the concept of velocity determines the distance that an object will travel in a given amount of time. This coupling of space and time are visually represented in the work and interpreted beautifully in the musical version. It is the vibratory effects that connect space, time, and awareness.

Music and life are inseparable; music is one of the most beautiful ways we connect with each other. Sound enters ear, there is a change in air pressure to formulate electrical signal, and once it gets to the brain, sound is fragmented into pitch, melody, and volume. It is processed piecemeal, simultaneously. Music regulates the hormones and neurotransmitters. Now the science of quantum mechanics generally acknowledges that music is nothing more than vibrations, and these vibrations affect mood and may invariably change the constellation of outside environment. Cid Campos' poems draw a connection between the visual and the aural components of Concretismo in Brazil. Important for this analysis is how we can read the connections between both components and how sound adds another layer of communication. The visual version of Concrete poetry highlights the necessary connection between silence and sound, be it by tone, rhythm, rhyme, or enunciation. Cid's performance of such poems further accentuates the necessary connection that sound and simple vibrations in/of language have with meaning and expression. Syntax is not

indispensable, not even the full pronunciation of words is critical in these performances. What is essential is an awareness of and playfulness with the vibratory aspects of language and sounds produced.

2.3 Sounds of Unconscious Mapping

Studies of soundscape ecology emphasizing the ecological characteristics and significance of sounds in landscapes focus on the types of sounds and the relationships among humans and sounds in an environment. These researchers are interested in understanding how humans may affect ecosystems.[13] R. Murray Schafer, in his 1977 book *The Tuning of the World*, develops the concept of "acoustic ecology" and "soundscape" by analyzing the trends in the transformation of sound environments through history. With this study, anthropologists and ethnomusicologists began developing the idea of an ethnography of sound, or sound as a cultural system. The idea of psychogeography is to suggest the psychological experience of geography and how those experiences of the city reveal or illuminate aspects of the urban environment that are commonly overlooked. This idea became very popular with artists that wanted to underscore the marginalized or forgotten aspects of urban life. The psychogeographic approach was developed as part of Situationism, an avant-garde movement, especially Guy Debord's theory of the society of the spectacle. The fascination with sound as poetic enterprise was a success in the early avant-garde poetics of the twentieth century, particularly those of Marianetti's Futurist group, predominantly the inventive music of Luigi Russolo whose focus was on noise as artistic expression. His work is most resonant not only for showing us how musical creativity can work, but also for bridging sound with different disciplines.[14]

Recent work of sounds and even what is normally considered noise may actually be appreciated as a form of poetic cartographies, as Steven Field notes in his study on sounds and music produced by the Bosavi people who live in the tropical rainforest of the Great Papuan Plateau in the Southern Highland Providence of Papua New Guinea. His notion of acoustemology

> explores the reflexive and historical relationships between hearing and speaking, listening and sounding…The ongoing dialogue of self and self, self and other, of their interplay in action and reaction, are thus constantly

> sited at the sense of sound, absorbed and reflected, given and taken in constant exchange. (2000, p. 184)

Field explains that the Bosavi songs are textually constituted as poetic cartographies of rainforest trails. Artists have been inspired by this field and created works featuring the sound ecology as an exploration of how our ambience communicates with us and how the noises we produce speak of our state of being. The work of Claude Schryer,[15] for example, is concerned with sound ecology in the medium of electro acoustics and radio art—much as Brian Mackern does, as observed below. For Claude Schryer, the transmission can be received as "fact, fiction or fantasy, depending on the listener's attention, intention and retention" (1992, p. 219). His works seek the implications of the environment, finding a "respect for the ear and the natural voice [of nature], awareness for the symbolism of sounds," he explains (p. 220). Scientists and artists find that ambient sounds are key to how sounds inadvertently communicate with us and how our conglomeration of urban noise, sounds, and vibrations creates an acoustic environment that affects us and other species. Both artists discussed below—Iván López Monroy and Brian Mackern—participate in the observation of how vibrations are key to our own systemic consciousness and how these impact us. Their curiosity and creativity with the use of sound as an artistic medium draws from these same scientific findings; their works explain and further explore our connections with the vibratory effects in our world. It is important to note that Situationist psychogeography is a notion linked to the collective perception of urban space. The resulting work does explore the relationship between the artist's version—what he may have intended to produce—and a possible collective one, that is inadvertently formed by the elements recorded, that is the resulting product that was not in the author's vision.

Iván López Monroy's recordings document the sound poetics of bustling Mexican *mercados*. These texts show us how noise per se as its own beauty and cultural innuendos.[16] In fact, as Michel Chion notes in his *Sound: An Acoulogical Treatise*, what is considered noise is actually a cultural perception. He explains:

> The French speaker will more often say '*bruit de pas* [noise of footsteps]' than '*son de pas* [sound of footsteps],' whereas in contemporary English 'sound' applies just as much to footsteps as it does to music (characteristically, noises in film are called 'sound effects' in English). (2016, p. 58)

López Monroy's project *dfm e.p.* (2004) is a net extended play, a net-audio loop recording. He defines it as a "Net-EP," a psychogeographic representation of Mexico City.[17] As explained above, this approach underscores the psychological experiences of the urban space as it also reveals those spaces which tend to be marginalized—the *mercados*. López Monroy's works are offshoots of avant-garde influences coupled with the social criticism of the Situationists' work. That is, the isolation of "situations" that in this case highlights an appreciation of common everyday noises that is "unheard" because of its ubiquity. The four tracks of the EP incorporate samples of the *mercados* (open-air markets) of Mexico City. The accompanying CD booklet produced by the author explains his personal connection with the geographic space where these samples are recorded: "Wednesdays are street market days in Mexico City. For a month, we searched out a new market every week. We wrote about the market's surrounding areas and produced tracks that sampled them. Tune in." His pieces can be interpreted as poetic cartographies of the *mercados*; the noises heard in these recordings effectively show how the markets are a poetic fusion of space and time where lives and events are conjoined as vocalized, embodied sound memories. We live in a world with plenty of ambient noise that is not readily perceived unless we attune to it. These recordings remind us that those noises are reflective of the spaces we inhabit and how we must embrace it as part of the experience. Rather than an annoyance or distraction, any sounds that are present become an opportunity to practice "mindfulness of listening."

The sounds recorded from these spaces speak of and reflect on the reality, violence, and noise pollution of the metropolis of Mexico City. In these recordings, voices overlap and echo with surrounding noises that create a dense multilayered, alternating, and interlocking form of expression, poetic in its remixing and adaptation as it speaks for the beauty of sounds found in the most common of all spaces, of noise that is often heard so much it goes unheard. López Monroy's project calls for careful attention to the meaning of these sounds, and with the remixing with music also makes us listen and appreciate it.

In all four samplings, the universal language of the open-air market is heard. Nonetheless, these sounds differ from each location and it is this differentiation that characterizes each space. The historical implications of the areas may be explanatory: Colonia Lindavista is a modern transformation from the early ranch house of Los Pirineos to the 1930s urbanization, it was used as a movie set during Mexico's Golden Age of Film, in

the 1970s the Spanish immigrants populated the area, and currently it is one of the city's most affluent communities. By contrast, Colonia Prado Vallejo is one of the oldest burroughs of the city and is currently plagued by crime, assaults, and robberies. Colonia Tlatelolco named for the legacy of its prehispanic roots, began its urbanization in the 1960s, in 1968 the Plaza de las Tres Culturas was the site of the massacre at Tlatelolco. For its many archeological findings, this burrough is currently considered one of the historic districts of the city. Calle Ricardo Flores Magón is named after a noted Mexican anarchist and social reform activist who is considered one of the important figures that sparked the Mexican revolution. López Monroy's recordings capture the ritual practice of observing and becoming enmeshed in the experience, simultaneously engaging with the complex histories and myths of urban landscapes. This contemplation is useful in showing that the art of listening may in effect dissolve the time–space continuum. Can the seemingly cacophony of a space "speak" of its history and its current state?

The first mp3 or recording, "Calle Etén, Colonia Lindavista," begins and ends with sounds that seem lonely, monotonous, and repetitive, a reverberation of an occupation with the same description. In the middle of the recording, there is an interruption by loud, metallic clamor. This noisy disruption produces a break in the repetitiveness of sound, but also of any unconscious assumptions of the work produced in this space. Noises in this space overlap each other but not overwhelm, the flatness and uniformity produce a peaceful ambient sound that is not disruptive but rather comforting, until the disturbance is heard. Knowing the history of this area, particularly its transition of the space from one use to another undergirds much of the artist's psychogeographic preoccupation.

"Calle Isla de Soto, Colonia Prado Vallejo" is the second sample. The repetition of sound is a unifying element with both spoken words and cyclical techno-music tonalities. In this recording, we hear anxious tones mixed with musical tones, coupled with the constant repetition of the spoken phrases heard in the tumultuous background of the open-air market. The juxtaposition of sounds alludes to the mechanization of people as part of an automatic mechanism. López Monroy's psychogeographic version of the space speaks of the materialist system. In addition to re-enchanting marginalized places, this psychogeographic approach has a historical use particularly in places where the landscape has been affected by crime or

suffering. The consciousness of crime is heard in the anxious tones and the tumultuous background.

The third mp3, "Calle Manuel Gonzalez, Colonia Tlatelolco," begins and ends with the police sirens. We hear the techno-music interspersed with the merchant's sale pitch. The distress signals function as the unifying sound. The music and phrases heard are played speedily and seem to imitate the ephemeral energy in the space. This recording appropriates the hurried pandemonium of the city and urban life. This disarray of sound, movement, and energy is offset only for short moments of calm sounds. A woman speaks on an amplifier as if calling passengers in a metro or train station, capturing a moment in time that may be her only solace amid the hastiness and clatter of the day. Curiously, the haste recorded in this *mercado* is especially poignant given the community's history of massacre and police brutality. Even before 1968, Tlatelolco was the site of the Aztec's last stand against the Spanish. The recordings allow us to *feel* the ebb and flow of the city's energy: this recording is stressful essence of the space that has been part of its history, and now its current condition.

In the fourth mp3, "Calle Ricardo Flores Magón" López Monroy combines brisk and happy melodies commonly heard in shopping malls, sounds evocative of the perfectly functioning mechanism of capitalism. Severing that image, we hear the sound of a person cutting on a cutting board with a knife. The "cutting sound" is also exemplified in the cutting and mixing of sounds, the transposing of speakers or voices heard the cutting or interruption of thought, and the slicing of the text and meaning in the slogan, "La calidad es casualidad" (Quality is a chance). López Monroy alters this phrase, reciting, "La calidad no es la casualidad" (Quality is not the chance). The artist uses Guy Debord's *détournement* as a commentary of the fetishism of commoditization. *Détournement* is a technique of "rerouting" or "hijacking" a situation, scene and imbedding it with almost propaganda type inversion onto itself. The quality of the product sold is only in the mind of the consumer; the change in the slogan points to how it is something that is imaginary. The combination of sounds and tones, of electronic tunes, all are juxtaposed with the muffled sounds of the market. A street named after a revolutionary whose voice echoed the cries for change is now resonated in this recording with the political slogan, questioning "what have we become?" in this market space.

López Monroy undoubtedly captures the symbolic nuances of the bustling city and its different sectors in his ambiguous but clever recordings of the *mercados* of Mexico City. He highlights the importance of everyday unperceived sounds forming the consciousness of the urban space through his selection of four different spaces serving the same function (*mercados*) but clearly stressing the social resonance of distinct parts of Mexico City. These vibratory examples remind us to build our spatial awareness, take in the environment, and examine where we are and how we *feel* about it. It is a mindfulness practice of the noises we tend to ignore that are inevitably charged with so much meaning. Mindfulness of sounds alters our relationship with the city and the way we experience environments, leading us to appreciate multiple perspectives of the same area.

2.4 Communicative Vibrations

Similarly, the sound cartographies of Brian Mackern call to mind the effect of vibrations on our consciousness. All sounds and vibrations carry energy; Mackern's *Temporal de Santa Rosa* (2008) posits that the electromagnetic waves of the storm speak to us, and he in turn speaks to the storm by juxtaposing poetry in this same system. The result is a vibrational dialogue.

Since 1995 Mackern has dedicated himself to his work as a new media artist, developer, and designer of digital and hybrid net-based art projects. His most recent work has included a graduate Netart Seminar at the Universidad Nacional de Tres de Febrero in Buenos Aires (May 2017), a presentation "Glocalidad, *Temporal de Santa Rosa*" at Espacio de Arte Contemporáneo Montevideo (May 2017), and a series of workshops and conferences in Uruguay, Brazil, and Mexico, as well as new residence artwork at the University of Liverpool in 2014. He is the founder of and the contributor to the Latin American database website for digital poetics: http://netart.org.uy/brian.html. Some of these works were presented in the 2004–2005 netart.org/uy Eurolatino Tour that included Uruguay, Argentina, Mexico, Spain, and Italy. He focuses on developing visual sound toys, and in May 2007 he completed a CD entitled, *Soundtoys Remixed (1996–2001)* and *Living Stereo*. The CD has sections—what Mackern calls chapters—displaying soundtoys in "which codes are linked to visuals and as the user navigates the soundtoys. The visuals reflect the nakedness of code." Other chapters show the same processes with "loops

and fragments of iconographic films that are associated with the artist's 'history' as consumer culture." Overall, there is an adaptation of code found on the internet designed for other uses such as physics and formulaic representations.[18]

Mackern's work focuses on process: the algorithms at work within it are simply the structure of the data. Mackern's work is an exemplar of digital cultural productions by bringing into relief cultural paradigms. Readers must participate in the process (by deciphering cultural nuances, technological communication, or implications); the reader is an active participant in the process of decoding digital poetics by contributing to the interpretative process with his/her opinions, realities, history, experiences, and knowledge. Each may perceive the work differently, and it is in that difference of appreciation that the process grows richer.

My interest in his work primarily focuses on the *Temporal of Santa Rosa*,[19] available online. It was originally conceived in 2002 as a sound poetry project that coincided with Uruguay's greatest social-economic crisis.[20] It was subsequently presented on November 13, 2008, at the Cubo del Centro de Cultura Española in Montevideo,[21] and since then has been featured in continuous exhibitions. In 2014, Claire Taylor and Thea Pitman invited him to perform at the University of Liverpool in the United Kingdom; and Taylor, in *Place and Politics in Latin American Digital Culture*, gives a wonderful review of the work's artistic use of the technical qualities of mapping, visualization, cartography, and radio-static noise: "we are introduced to the multilayerization rather than transparency, to ambiguity rather than clarity, and to the simultaneous presence of the antonyms 'organization/desorganization' [*sic*] all of which trouble the conventions of mapping practice" (2014, p. 73). The project has been presented numerous times in recent years, including at the Universidade de São Paulo in June 2018[22] and at the Museo Nacional de História Natural e da Ciência at the Universidade de Lisboa in November 2018.[23] The artist's presentations of this piece have themes of glocalization, and as he notes in his website, "by areas defined by memories and remembrance, urban geographies and affective cartographies, noise, remix, glitch and data bending."

This work calls for a cultural reading of the implications that the myth of the yearly storm of Santa Rosa elicits in the people of the region, while at the same time interpreting the noise produced by the local officials'

recordings of radio frequencies, radio static, and radio programming. Cultural implications of the myth of Santa Rosa might include sensationalism by news media, possible presentation of incorrect information of the storm in popular entertainment, including ideas of safety and false assumptions of the actual size and force of the storm. Given the storm is named after (a city in Argentine Pampas) and a saint (Saint Rose of Lima) whose feast day also falls on 23rd of August, the cultural myths may include false beliefs of being "saved" by prayers appeasing Santa Rosa and availing to self-denial and suffering, as the saint once did. Such myths of folklore are usually passed for generations via artistic forms such as songs and stories. Here we see how Mackern's project takes shape soon after the banking crisis that took effect in Uruguay in 2002; the allusion to the storm and its effects of fear, uncertainty, irregularity is thus somewhat reconfigured, at least symbolically. The Situationist style of this Net Art makes this project culturally and even politically charged, as Mackern makes artistic sense of the "noise" of the storm.

Mackern's choice of sounds is quite revealing. He does not choose to feature the actual sound of rain and the rumbling and crackling of thunder by the vibration of sound of the air affected by lightning. Those sounds are recognizable and clear. Instead, he focuses on the nuanced sound representation of the storm produced by the national meteorological service: radio frequencies. These sounds are not readily accessible; the sounds we don't necessarily listen to or focus on, yet they govern our lives with weather and climate information that helps farmers cultivate their crops and livestock, expand production, and decide which activities to carry out. Meteorological sounds are key to safe navigation and aviation, agricultural industry and animal production, irrigation and water resources, land use planning, and so on. Yet, only a specialized few can understand and interpret such sounds. Situating his sound project against the backdrop of Uruguay's financial crisis of 2002 suggests that we should be more attentive listeners to these "sounds"—the language that constructs and governs our lives and communities. Those complicated but relevant sounds are more often than not muddled by fear-making cultural myths, such as the storm of Santa Rosa.

Mackern's project points to how the sounds of this myth are more prevalent in culture, giving people context and meaning, yet at the same time deafening them to specialized sounds that govern their world. *Temporal de Santa Rosa* is keen on demystifying those sounds in a Net Art

form that is much more ideological than it lets on. In my reading, Mackern clearly calls on us to contextualize the metaphor of sound and to learn to understand those vibrations that regulate our lives.

The recordings document, in various radio frequencies, the electrical interference caused by the proximity of the ensuing storm generally known as the "Santa Rosa," which covers vast regions in Rio de la Plata region between August 20 and September 8. Mackern explains the cultural allusions of this particular storm: the legend of Santa Rosa de Lima, the saint who in 1615 prayed fervently to obstruct the oncoming enemy into the Rio de La Plata region and was able to keep the city out of danger. While this popular storm is common throughout the Rio de la Plata, Uruguayan popular culture has long held that the ensuing storms that take place during this particular period of the year need to be placated with fervent prayer, just as Santa Rosa originally did. This Net Art work uses a multidisciplinary approach to question social reality. *Los temporales de Santa Rosa* reflects and analyzes the religious icons and cultural legends, coupled with the scientific explanations of a natural phenomenon, all insinuated in the sound recordings of the electrical interferences on radio frequencies: "The presence of the storm is unveiled by the 'noise' present within the signal," explains Mackern, "paradoxically, this noise is the 'signal' that defines the information to us: The existence of the storm itself."

Today the Uruguayan National Meteorological Service tries to counteract the resurgence of possible myths by offering scientific evidence of the annual storm occurrence to its constituents: it is simply put forth as an expected storm that falls within that time period, a mere coincidence, scientifically explained as a consequence of the end of the winter and the beginning of the spring season. "It is a product of atmospheric factors, just like any other storm," the NMS assures people, "and, even though it may seem stronger, it is not. It just happens to be that in the winter there are no storms and people become unfamiliar with them." Mackern's piece leaves us to ponder whether these matter-of-fact scientific explanations replaced the cultural myth, or if they should. Can folklore and science coexist? These are important queries given that sociologists, ethnographers, and cultural researchers seem to agree that folktales are an important means of community and cultural and societal identification. Mackern's work touches on this very important aspect of Uruguayan culture. In a way, the legend of Santa Rosa is a call of social obligation of its citizens to unify as a community in prayer to appease the ensuing

storm. It could be said that the popular significance of the Santa Rosa storm goes further than its original religious myth. There is no prayer to appease the storm in many sectors of society. Rather a storm that occurs with certain frequency and gives a sense of circularity of time. Mackern's work also transforms the folktale, traditionally a verbal rendition with a captive audience, into a sonic and visual installation with cryptic messages not easily understood.

In *Temporal de Santa Rosa*, the presence of the storm is heard and understood technologically by the "noise present within the signal," explains Mackern. The work explores the nature of the human condition that asks whether we believe a legend—a cultural and emotive phenomenon—or a scientific account, a rational explanation. His visual and acoustic investigation imaginatively collages the different media and manages to intrigue, challenge, and possibly even mock cultural preconceptions.

Mackern's exploitation of this transversal cultural dialogue in cyberspace is a critical appraisal of how language, as a combination of aural and visual components, functions. These components include electrostatic noise of storm, voices of the radio operators, maps of the region, thermal forecasting diagrams, and visual representations of radio signals and radio towers. Additionally, the "Live Perfomance" features radiostatic interferences that include the telegraphic transcription of a poem by Uruguayan poet Alfredo Mario Ferreiro (1899–1959). While Ferreiro was more of a visual than a sound poet, the following is an example of his imagery of technological sounds[24]:

> Mi tímpano es una paralela de alambre.
> Está tendido en la azotea,
> en un cepo de palos.
> . . .
> Las lamparitas se ríen con luz blanca
> de los chistes de un monólogo.

Ferreiro was strongly influenced by the Futurist movement and the avant-garde of his time, which tended to incorporate the bustling sounds of the city (such as the train, airplanes, buses, etc.). The telegraphic transmission of this poem in *Temporal* is a tribute to the experimentation of the imagery of sound, as expressed in this poem. The resulting piece offers a discordant dialogue of electrostatic sounds, those generated by

the storm and the telegraphic resonance of the poetic transcription. Ferreiro's radiotelephony poem is periphonic, paying homage to how sounds are captured in the periphery particularly those of the radio-electric waves. The poem speaks in the first person, as if the sound waves themselves had depth of thought and feeling, with volition to exist ("Y soy el vértice de todas / las actividades sonoras"). While Ferreiro's verses echo the cadence of a tango, Mackern's telegraphic transposition of these same verses further accentuate the dynamic between spoken language and sound patterns reducing these to vibrations that carry energy.

Interestingly, traditional mappings have conveyed cultural preoccupations with adhering to ritual practice over the actual geographical space. In many cultures, geo-religious belief systems were paramount in planning out boundaries and establishing communities. In fact, spiritual connections contributed to the imagined conception of space and the relationship between humans and their gods and humans and nature.[25] In Uruguay specifically, it was not until 2007 that the broad access-to-information law did away with the residual effects of the military dictatorship that ended in 1985 and provided the framework for a more democratic digital media future. While an oligopoly of wealthy families may still significantly maintain ownership of private media, the digital media environment is developing rapidly due to sustained growth, a policy focus on universal service goals, and a strong legacy of social movements and civil society institutions. In 2012, Uruguay established a new press law favorable to independent journalism.

The performance of the piece includes the visual mapping of the storm's path, enhancing the experience of visualizing the trajectory of the storm but also showing how cartography has dramatically changed our perception of self and community and how it has changed the way we experience our environment. It visually communicates the storm and the areas affected, and desensitizes us to the event with a scientific explanation. The map may even be a reminder of how we represent subjective reality, particularly how the artist has created a map specific to a desired creative use, yet each viewer is interacting with it differently, mapping a personal reaction to the visual and sound variances. The level of variance and mutability is unprecedented. The map reminds us of how we can gain enough distance from our usual view of something so that we not only register its existence but can better understand its place in a larger context.

So, the language of cartography, now readily available to all and not limited to only those in power and with authority, is not a static language. With the proliferation and accessibility of mapmaking tools, most can manipulate and recreate their own personal versions of the spaces they inhabit. Access to data has dramatically changed map functionality and has opened new possibilities of plotting and representation. Mackern's work reminds us of the modes of representation of our very abstract reality. The language of myths is thus not so different than the new technological systems we use to understand the same events. All resonate with sound and vibrations of our spatial awareness and how we experience our environment. Mackern's piece reflects on what might be lost with such technologies. By adopting a more technological reality, are we losing touch with the magic, mystery, and wonder that myths offered? Is faith and prayer a lost tradition and practice? And, in changing these patterns of awareness, are we in a sense losing our ability to experience our culture and folklore and thereby limiting the self of this experience?

Mackern records, manipulates, addresses, and reproduces (that is, his own telegraphic representation of Ferreiro's poem) radiostatic and telegraphic vibrations as well as calls for his audience's participation at exhibitions. The participant is invited to be immersed in the experience of radiostatic sounds, visual installations of maps, and information received (on the myth of Santa Rosa) on cellphone via the Bluetooth transmission in the cube. The installation brings to the forefront the dimension of listener, of awareness of vibration, of attunement, and of interchange of vibratory communication (the camera at the entrance detects movement and communicates it to the computer and projector).

The realm of listening, hearing, or vibration reaches beneath the surface of the conscious mind into the dimension of awareness. The vibrations and sounds move beyond conscious control by undermining the selection process of attention to certain sounds, background noises, or even subtle textures. In the spiritual or meditational sense, this shift into focus on the vibration is the exact deepening needed to allow peace of mind, freedom from entangled beliefs and thought systems, and liberation from restricting illusory patterns of identification. Our body is a perfect transmitter of vibration, being 70% water. In fact, our bodies reverberate to perceivable and even to indiscernible sounds in our environment. Similarly, we all hear sounds simultaneously and in synchronicity. Thus, *Temporal de Santa Rosa*, primarily focuses on sound and vibrations, makes us inquire where this sound is reverberating within. Mackern's work enables

the participant to interact with technology and his/her own personal experience. His work focuses on the process, the total experience produced by the image, sound, links (for the online user), and movement (online viewers also have access to webcam interaction). The piece calls into question the cultural dimensions of the storm, the implications of interpretation, and the loss of mythical quality that technology changes. Finally, it addresses continued interaction with this new media by positing that said sounds and vibrations are in fact reflective of our consciousness.

2.5 Electromagnetic Connections

Vibrations, reverberations, and geometric mapping is the focus of José Aburto's texts. His experiments with sound resonate and allude how these can in fact change matter. It is sound that turns matter and energy into form. Every time we think and feel, we resonate a frequency that in turn makes our environment resonate to that same frequency. For example, sound passing through iron particles and iron filings create shapes. His pieces are about the formation of the collective unconscious, and they challenge those natural thought processes to recognize a universal meaning. As a digital marketing specialist, Aburto reports that his strategy is to begin by thinking of the concept. That is certainly key in understanding his digital works as well.

His *Matters: Electromagnetic Poems*[26] exhibition at the Electronic Literature Organization (ELO) 2016 Conference, and specifically his *Blot Alive* (2016), require a close, slow, interactive reading, as the installation uses iron filings manipulated with magnets that glide over the text, covering a key letter that invariably changes the meaning and context. I am particularly interested in this piece as exemplar of the vibrations and patterns of frequency that this explores. Frequency changes the patterns of vibration: as vibrations increase, the patterns become more complex. Thought, motion, and even feeling are all vibrations; we are always emoting or feeling and therefore always have a vibratory pattern. Thinking sends out sounds that resonate and create vibrating patterns. Sound turns matter and energy into form, whereas bodies resonate to a certain frequency. The vibrations passing through these iron filaments and particles create form, and Aburto goes further by giving a sense of positive and negative energies as the filaments hide and expose the accountable letters.

The poem features words transformed with different clusters of filaments, as these hide and expose the letters:

(t)errores / (d)olor / (p)lomo / (p)lata / o(x)ido

The sliding magnet strips meaning but also produces the hidden, perhaps more poignant meaning. For example, consider the verse

Me muevo corrigiendo
(t)errores
sintiendo como el (d)olor de años podridos
congestionan mis maletas
-mi (p)lomo
de (p)lata
no cubren el o(x)ido de mis decisiones

To show the semantic complexity at work here, I provide my translated version below:

I move correcting terrors/errors
feeling like the suffering/stench of rotten years
congesting my luggage
-my weight of lead/spine
of silver/tin
they do not cover the rust/ears of my decisions

Aburto has cleverly selected the words to produce alter-interpretations and more precisely to highlight the relationship between the magnetic sequential movement and the reader's eye movement, as the magnetic filaments systematically hide letters, thereby writing new meaning. This process alters, manipulates, and guides the reader's focus. Aburto has relayed that his work also experiments with how the materials selected dictate the possibilities that these will open up for expression. Thus, his work shows us our intricate connections to matter and how our readings are also interconnected, producing different readings or interpretations. He also stresses his works' links to the "chemical, sociological and political" aspects of the medium. In this particular work, for instance, the "chemical" components include a neodymium magnet attached to a plotter and a pinch of steel filaments moving at the surface. These moving block letters change the semantics of the text and thereby point to a possible critique of sociological and political nuances of free speech. The magnet blocks the original "t" in terrors to produce errors, but the alluded meaning is now ever more present. Aburto moves to correct "terrors," feeling like

the stench of rotten years (but it is really the "suffering" that is hidden). His spine of tin is actually his lead weight of silver (and *plata* is also a reference to money). Perú, Aburto's homeland, is a society that has a long tradition of making use of metaphoric language, it is therefore not surprising to see Aburto produce a double innuendo in his poetry. Moreover, the materials used also connote the connection between language and the constrictions of open communication. Aburto's selection of "a pinch of steel filaments" to hide the offending letters guided by the strict use of magnet is symbolic of the instability of open communication.

The noise produced by the moving magnets is also characteristic of the political clamor that attempts to muddle messages. In 2016, Peru was faced with an impeding election to correct some of the problems left by Alberto Fujimori's autocratic government and later by Ollanta Humala. President Humala tried to solve some of the country's underlying problems by supporting diversification with technology, industrial centers, and cutting regulations. His government also spent a bit more on health and education, began reforming the civil service, and expanded professionalized social programs.[27] Peru's biggest weakness, however, is its citizens' cynicism toward its leaders.

In the installation, *Small Poetic Interfaces: The End of Click*, Aburto presents a series of three experiential and interactive digital poems: *Badly Wrapped*, *Conception of the Dragon*, and *Grita*. The latter was selected for the Electronic Literature Collection, Volume 3.[28] The users interact with boxes that are connected to screens and perform various actions. The project was featured in the *Hyperrhiz* 14 with the artist's statement and videos of the project in action.[29]

I will briefly highlight the interactivity of the first two boxes and screens. The first cube and screen *Conception of the Dragon* moves from language and communication to the specific creative expression of poetry. The poem is already created, but the "bursts" facilitate the reading. These eruptions of thought are symbolic of automatic responses without much thought that may or may not interfere in communication. It draws attention to the absurdity of language when it is not monitored.

Badly Wrapped (*Estás mal envuelto*) creates a system of communication in which letters are "cells" that together compose a language that is part of the holistic communicative process. The act of "pulling the thread out of the box" and thereby producing cells on the screen that combine to

form words and thus language simulates the give-and-take of communication as well as the entanglement of meaning as the words are interchangeable. The title in Spanish (*Estás mal envuelto*) draws a clearer connection to how language implicates us in what is said, calling into question the responsibility of communication.

Grita has been presented at the Electronic Literature Organization (ELO) conference in 2015 in Bergen, Norway; at the *Ha!wangarda* 2015 in Krakow, Poland; and at the Rutgers-Camden Center for the Arts in 2016. The ELO readers found the *Grita* (2005) cube the most compelling in representing the interactive nature of digital poetics. The participants must literally scream in the microphone-cube to produce a reading of the prewritten poetic lines. The poem's title clearly asks those who interact with it to "scream" and thereby use non-verbal language. Charles Taylor succinctly explains the physics of human sound:

> All sounds involve changes in the pressure of the air. A quiet human voice, for example, involves changes in the pressure immediately outside the mouth of the speaker of about one or two parts per million. (2000, p. 64)

Grita uses a participatory digital poetics of computer-kinetic morphisms that compels the reader to explore the virtual space created by the chords that divide while keeping the verses unified. The musical chords are auto-generated depending on where the cursor is located. The sentences begin to interlock as the reader slowly discovers how to navigate harmoniously in the space. The work ruptures and stirs a certain melancholy, pausing to question how the collective unconscious is formed and challenging those natural thought processes to recognize a universal meaning. The screams will inevitably transmit as electrical and magnetic waves that extend beyond the body into the world around us. This is also exemplar of the use of sound as a meaningful, non-verbal language that communicates with the vibrations creating this world. It is an intimidating work, given that the participants must lose inhibition and project their voice in shrill, sharp, loud resonances to produce the text. This requires a more visceral response connecting human to computer to creative expression. It is a curious exploration of how sound manifests meaning, a call to disavow human inhibitions to produce a skewed "communication" with technology, drawing the sound from the body to the effect on the computer screen thereby transmitting the energy of vibration from the body

to the outside. The poetics is thus an illustration of how our own vibrations create the world around us. It also highlights the positive and negative results of sound. Aburto's *Grita* calls for screams to diagram the visual component of his piece—with predetermined poetic lines that persist only while the scream is audible. This is the technical aspect. The cultural component draws attention to the type of scream that is produced directly related to the visualization. Aburto inadvertently, perhaps, draws on the interconnected elements of thought, vibrations, and resulting effects, leading us to believe in the shared patterns of existence: vibrations, in addition to thoughts and spoken language, create our world. He relates the cause–effect aspect of the sound of screams as the cause for the maladies in society. *Grita* makes us aware and ultimately responsible for our own worlds.

Notes

1. See Taylor (2000).
2. A drone is a sustained sound or repetitive note.
3. See Jenny (2001).
4. Philadelpho Menezes, in his study of Concrete poetry, establishes that the poetry was in fact "intimamente associada ao movimento de *boom* desenvolvimentista que levanta o país nos anos 50, simbolizando exemplarmente pelo plano de criação de Brasília, uma nova cidade idealizada como centro do poder, matematicamente situada no centro geográfico do país… Lucio Costa e Oscar Niemeyer…sonhava construir do nada, em meio ao inóspito cerrado do Planalto Central brasileiro, uma cidade dentro dos moldes mais nacionalistas idealizados pelo urbanismo modernista europeu" (Menezes 1994, p. 42).
5. See Bosi (2012).
6. Ibid., p. 478.
7. See Gullar (1978).
8. See Cámara (2010).
9. See Perrone (2002).
10. See Korfmann and Nogueira (2004).
11. Cid Campos, Personal website (2005), http://www.cidcampos.com.br, accessed November 10, 2017. As of the 1990s Campos has been recording independently at his MC2 Studio—specializing in digital music, for sound trails for films, video, and ballets, installations, and multi-media spectacles with an emphasis on experimental art.
12. The original images of the poems and the recordings are available at Cid Campos' website, http://www.cidcampos.com.br/sec_discografia_view.php?id=1, accessed November 20, 2018.
13. See Pijanowski et al. (2011).

14. See Luciano Chessa, *Luigi Russolo, Futurist: Noise, Visual Arts, and the Occult*. Berkeley: University of California Press, 2012.
15. See L. Radford, "Claude Schryer: Autour," *Computer Music Journal* 22, no. 4 (1998): 78.
16. Monroy received a B.S. degree in Mathematics with a Minor in Spanish literature from the UNAM. He writes *fanzines*, blogs and is a Net Art collaborator with Michael Szpakowski. Monroy wrote his "dfm e.p." with his sister Natalia Monroy. This *dfm e.p.* was prized second place at the XVIII Bienal de Ibiza in Brazil in 2005.
17. The work is available through the Museo de Arte Contemporáneo de Ibiza and in the past could be seen and heard by anyone at http://textzi.net/dfm (unfortunately the link is no longer accessible).
18. See http://no-content.net/LST/.
19. Mackern Temporal de Santa Rosa, http://34s56w.org/xtcs/archivos.html, accessed on October 23, 2017.
20. Mackern, "Temporal de Santa Rosa (2002–2017) Exposición en Montevideo, Uruguay," *Arteinformado: espacio iberoamericano del arte*, March 21, 2017, https://www.arteinformado.com/agenda/f/temporal-de-santa-rosa-2002–2017–136871, accessed November 20, 2018.
21. Mackern, Interferences by Gabriel Galli and radiotelegraphy by Oscar Canario Sánchez. Recorded live performance November 13, 2008, *Temporal de Santa Rosa*, https://vimeo.com/2256192, accessed on October 23, 2017. 15 minutes.
22. See Kiyomura (2018).
23. "Performance *Temporal de Santa Rosa*," *The New Art Fest '18*, Picadeiro do Antigo Colégio dos Nobres, Museu Nacional de História Natural e da Ciência, November 9, 2018, https://www.museus.ulisboa.pt/pt-pt/node/2553.
24. Ferreiro (1927).
25. Nichols (2012).
26. Aburto, "Blot Alive," *Matters* (2016, Victoria, Canada). Author website: http://www.entalpia.pe, accessed October 23, 2017.
27. According to "Choosing a New Broom," 2016. *Economist* 418 (8984). https://www.economist.com/the-americas/2016/04/09/choosing-a-new-broom, accessed October 23, 2017.
28. Aburto, *Grita*. (2005). Electronic Literature Collection, Volume 3, http://collection.eliterature.org/3/work.html?work=grita, accessed October 23, 2017.
29. Aburto (2016b).

References

Aburto, José. *Grita*. Electronic Literature Collection, Volume 3. http://collection.eliterature.org/3/work.html?work=grita. Accessed March 6, 2018.

Aburto, José. 2016a. "Blot Alive." *Matters*. Author website: https://elmcip.net/creative-work/matters-electromagnetic-poems. Accessed March 6, 2018.

Aburto, Jose. 2016b. "*Grita*, a Voice Controlled Interface, and the Little Poetic Interactions." *The End(s) of Electronic Literature: ELO 2015 Arts Program*, edited by Roderick Coover and Scott Rettberg. *Hyperrhiz: New Media Cultures* 14 (1). http://hyperrhiz.io/hyperrhiz14/featured-works/10-aburto-poetic.html. Accessed November 23, 2018.

Bosi, Alfredo. 2012. *História concisa da literatura brasileira*, 475–485. São Paulo, Brazil: Cultrix.

Cámara, Mario. 2010. "Alguna poesía brasileña: entre la algarabía concreta y la generación 00." *INTI* 71/72: 113–139.

Campos, Cid. 2005. Author's personal website. http://www.cidcampos.com.br. Accessed March 6, 2018.

Chion, Michael. 2016. "Noise and Music: A Legitimate Distinction." In *Sound: An Acoulogical Treatise*, translated by James A. Steintrager, 55–82. Durham and London: Duke University Press.

Cox, Christoph. 2018. *Sonic Flux: Sound, Art, and Metaphysics*. Chicago: University of Chicago Press.

Ferreiro, Alfredo Mario. 1927. *El hombre que se comió un autobus (Poemas con olor a nafta)*. Montevideo: La Cruz del Sur.

Field, Steven. 2000. "Sound Worlds." In *Sound*, edited by Patricia Kruth and Henry Stobart, 173–200. Cambridge: Cambridge University Press.

Gullar, Ferreira. 1978. *Vanguarda e Subdesenvolvimento*. Rio de Janeiro: Civilização Brasileira.

Jenny, Hans. 2001. *Cymatics: A Study of Wave Phenomena and Vibration*. Newmarket, NH: Macromedia.

Kirsebom Lanto, Anna Matilda. 2015. Video Assignment for DIKULT203 (Electronic Literature) University of Bergen. https://www.youtube.com/watch?v=6GX6xOzfIxw. Accessed March 6, 2018.

Kiyomura, Leila. 2018. "Projeto Prenúncios e Catástrofes expande os limites do audiovisual." *Journal da USP* (June 25). https://jornal.usp.br/atualidades/projeto-prenuncios-e-catastrofes-expande-os-limites-do-audiovisual/. Accessed November 20, 2018.

Korfmann, Michael, and Marcelo Nogueira. 2004. "Avant-Garde in Brazil." *Dialectical Anthropology* 28 (2): 125–145.

LaFave, Kenneth. 2018. *The Sound of Ontology: Music as a Model for Metaphysics*. Lanham: Lexington Books.

Lopez Monroy, Iván. 2004. *dfm.ep*. http://textzi.net/dfm. Accessed March 6, 2018.

Mackern, Brian. 2008. *Temporal de Santa Rosa*. http://34s56w.org/xtcs/archivos.html. Accessesd on October 23, 2017.

Mackern, Brian, Gabriel Galli, and Oscar Canario Sánchez. 2008. Recorded live performance. *Temporal de Santa Rosa*. https://vimeo.com/2256192. Accessed October 23, 2017. 15 minutes.

Menezes, Philadelpho. 1994. *A crise do passado: modernidade, vanguarda, meta-modernidade*, 42. São Paulo: Experimento.

Nichols, Julie. 2012. "Maps and Meanings: Urban Cartography and Urban Design." PhD diss., School of Architecture, Landscape Architecture and Urban Design, University of Adelaide.

Perrone, Charles A. 2002. "Performing São Paulo: Vanguard Representations of a Brazilian Cosmopolis." *Latin American Music Review / Revista De Música Latinoamericana* 23 (1): 60–78.

Pijanowski, Bryan C., Luis J. Villanueva-Rivera, Sarah L. Dumyahn, Almo Farina, Bernie L. Krause, Brian M. Napoletano, Stuart H. Gage, and Nadia Pieretti. 2011. "Soundscape Ecology: The Science of Sound in the Landscape." *Bioscience* 61 (3): 203–216.

Schryer, Claude. 1992. "Sound Ecology." *Leonardo* 25 (2): 219–220.

Taylor, Charles. 2000. "The Physics of Sound." In *Sound*, edited by Patricia Kruth and Henry Stobart, 34–64. Cambridge: Cambridge University Press.

Taylor, Claire. 2012. *Latin American Identity in Online Cultural Production*. London: Routledge.

———. 2014. *Place and Politics in Latin America and Digital Culture: Location and Latin American Net Art*. New York and London: Routledge.

Taylor, Claire, and Thea Pitman, eds. 2007. *Latin American Cyberculture and Cyberliterature*. Liverpool: Liverpool University Press.

CHAPTER 3

Who Are We?

Abstract This chapter implicitly and explicitly points to a framework of metaphysical consciousness, examining how the interactivity and playfulness of the video-gaming poetries of Wilton Azevedo's *Atame* and Alvaro Andrade Garcia's *Grão* e *LivrE* do not detract from the highly existential questions of corporality, being, and spirit/consciousness. The technologies used afford these works ways of experimenting, manipulating, creating, simulating, and translating ideas that are best placed in interfaces that require participation. These digital works reflect of the cosmic consciousness or collective unconscious, using language as rapture. In Andrade Garcia's *Grão* e *LivrE*, poetries animate paintings, ideograms, juxtaposed words in/of images, reinforcing symbolism with hypnotic sounds and movements. This chapter shows how the transcultural and transtemporal images emphasize and disseminate the "sacred," "civilized," "exotic," "primitive," or "Other." The analyses dive into questions of cultural transpositions and examine the symbolic resonances.

Keywords Consciousness · The body · Language · Energy

> There is neither a painting in the mind
> Nor a mind in the painting
> And yet, where else can one find a painting
> Then in the mind?
> Avatamsaka Sutra

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3.1 Conceptualizing Consciousness

This chapter explores the reflection of the concept of consciousness in two examples of Brazilian digital poetries. But before I dive into the role of consciousness in these works, let's briefly review the metaphysical, philosophical, and scientific development of the concept. Understanding consciousness would lead us to answer existential questions about who we are, how the world works, and how to differentiate "real" from imagined. It would also make us think of questions, such as, *Is the experience of consciousness something we share only with sentient beings? Are thoughts things? How is it that our feelings or experiences arise from consciousness?* And, on a more cosmic scale: *Is there a universal consciousness that is an extension of nature's ongoing creative process? Are we spectators or active participants in this consciousness? Is there a collective consciousness that makes it possible for us to be connected through space and time?*

Consciousness is explained philosophically, neurologically, and lately, through a quantum physics approach.[1] In Western philosophy, Plato philosophized that the outer world was "all in our head," a representation of reality, and possibly a poor one. René Descartes expanded on this idea and imagined that we might each be a mere brain-in-a-vat, fed information by an evil genius. The observer, for Descartes, was an immaterial soul perceiving the world in our head, experiencing the world through the pineal gland.

Neurologists would say that consciousness is the ability to feel something.[2] In the 1960s, Humberto Maturana and Francisco Varela came up with the Santiago Theory, which stipulates that cognition is a process of knowing concomitant with the process of life. That is, life and cognition are inseparably connected. The interactions of a living organism (plant, animal, or human) with its environment are cognitive interactions. Maturana and Varela concluded that the mind is the process of cognition, identified in the process of life. The brain is simply a specific structure through which this process operates. Additionally, the entire structure of the organism participates in the process of cognition, not just the brain. Quantum mechanics reminds us that the universe is ultimately a tightly integrated web. If consciousness has a deeper order of reality, then our consciousness is not limited or confined to our brains; we "think" with our entire body.

Currently, scientists see consciousness as connected to the brain and analogous to a computer, and therefore they have spent most research

efforts trying to map the synapses in the brain to understand the networks. Over the last twenty years, the topic of consciousness has moved beyond a fringe idea to the mainstream. The focus has been on interconnectedness or entanglement or connection through awareness itself. Researchers in the study of consciousness (such as Dean Radin, Frederick Travis, Stuart Hameroff) propose that consciousness is relative to quantum physics in that it can transcend space and time; both are concepts that are not absolute; they are relative, relational, and flexible. In quantum physics, space and time do not exist as we experience them; quantum phenomena occur outside our notion of space and time. At the same time, quanta change behavior when observed, making consciousness impossible to be extracted.

Mathematical physicist and philosopher of science Roger Penrose, in his book *The Emperor's New Mind*, says consciousness is not a computation. Computers compute, but consciousness "understands"; understanding is not a computation. The world is divided into physical and the classical realm on one hand, and the quantum superposition with nonlocal, wavelike, small on the other. We can see in Schrodinger's cat experiment that there needs to be a conscious observer for something to happen. Penrose posits that instead of consciousness causing collapse (Copenhagen interpretation), collapse causes consciousness. Therefore, understanding involves a self-collapse (causing on its own) of the quantum wave function. Influenced by Penrose, Stuart Hameroff, in his book *Toward a Science of Consciousness*, proposes a theory of consciousness that relies on the existence of quantum processes in the brain. He explains that there are two points of view to explain which came first, consciousness or life: neuroscience, psychology, and most Western philosophy say that life gave rise to consciousness, that consciousness emerged from living systems. Therefore, researchers must look beyond physicality. What these researchers have found is that science is now bringing new tools and ideas to understand ancient ideas. In fact, we are finding that how we think about consciousness informs civilization itself. Dean Radin, a parapsychology researcher, explains in his *Entangled Minds* that the scientific approach to understanding consciousness as predicated on the idea of materialism (that everything is resting on matter and energy) has been predominant for quite some time. Modern philosophers like Daniel Dennett (philosopher and cognitive scientist) would say that consciousness is actually an illusion. With the above, we are left with either or both

consciousness and reality being illusions. Adrian David Nelson (psychologist and philosopher) in his *Origins of Consciousness* notes that there is an "Intrinsic Consciousness movement" that is leading to a radical new understanding of the mind and a profound new vision of reality. That is, understanding that there is an intrinsic place for consciousness in the natural order or questioning what degree of consciousness is present in other life forms. This movement embodies varying views and theories from biologists, psychologists, physicists, cosmologists, and philosophers. He goes on to cite recent philosophers who have made contributions in support of this view.[3] They have found that investigating the question of consciousness may also lead to a new understanding of reality.

However, if we were to take the Eastern idea of consciousness, in which the world is sitting upon consciousness and the rest of the physical world manifests or precipitates out of consciousness, then meaning and purpose may be embedded in the structure of reality itself. Eastern philosophy and spirituality contend that consciousness is intrinsic to the universe, that it preceded life. In this latter case, did life evolve to optimize consciousness? Answers to these questions have been long sought in ancient Eastern Vedanta and later in Western philosophies of idealism. In Eastern philosophy, consciousness is intrinsic to the universe. Consciousness pervades everything. Being is somehow intrinsic to the universe as an irreducible feature. In this view, consciousness is ineffable; as mystics say, consciousness goes beyond our human understanding. Hence, the questions *why are we here?* and *who do we think we are?* revolve around the idea of consciousness.

Even more interesting is the idea that there is a continuum of cosmic consciousness against which our individuality builds accidental barriers. For example, the work of Loren Carpenter,[4] computer scientist and cofounder of Pixar Animation Studios, now a visiting scholar at the Institute of Noetic Sciences, has collected data—specifically on the art exhibition of Burning Man (2012 and 2013)—that suggests that our collective conscience and attention can affect reality. His goal is to determine how and why consciousness interacts with matter, investigating how collective minds influence the physical world. Similarly, Adrian David Nelson, in his book *Origins of Consciousness*, addresses the Burning Man Festival and explains that the

> Global Consciousness Project[5] and the independent research it inspired has continued to generate compelling evidence that mind and world reflect

> each other in ways modern science has yet to grasp…These studies also suggest that minds have the capacity to coalesce in meaningful ways—that our minds may not be as separate from each other as we may imagine. (Nelson 2015, p. 91)

Dean Radin reports that by 2005, "more than a hundred field-consciousness experiments had been reported in the United States, Europe, and Japan" (2006, p. 182).[6] Overall, the tests showed that there was indeed a "coherent mind focus of groups of people" (p. 184). The results showed that

> [e]mpirical evidence in the form of single blind experiment protocols provides direct evidence that episodes of Focused Group Energy occur and are both sensed by people and are physically measurable. (p. 184)

While these types of experiments measure the depth of collective thinking, it is not surprising that societies do in fact evolve and build upon a collective cooperation of shared beliefs, values, and goals, as these communities pool their cognitive resources to make better decisions. Philosophers like Nelson find that a lifting of consciousness undoubtedly cultivates empathy, love, and compassion; and optimistically, a society that recognizes its shared collective identity would not find selfishness, slavery, and suppression of others as viable survival modes, as Nelson contends.

Quantum mechanics explains that time and space are relative, and entanglement is a possibility; the experiments and non-definitive results have led scientists to seek more philosophical perspectives for an ontological explanation. For instance, Russian physicist Michael B. Mensky[7] cites research that shows the capabilities of the super-consciousness that "has access to all alternative classical realities…and to alternative realities in all times…All time moments are essentially the same for super-consciousness, there is no 'present,' 'past' and future for it" (2014, p. 77). Parallelism and distributivity are terms developed due to technology to speak of non-linear internal connections that take over producing collective computing. Both bio-logic and socio-logic has replaced the logic of individuals as these work in collective networks (corporations, institutions, workgroups, etc.). We could extend this metaphor to say that the wired logic of the collaborative work is parallel to a collective consciousness. With technology, we are also able to transcend to parallel selves, existing in multiple "worlds" at once with the explosion of visualizing conceptual knowledge;

we can see and read via the interaction of digital technology and visual art, with the abstract thought of the collective project. Researchers of interactive arts and technology such as Niranjan Rajah explain that "representations of new media can be 'simulacral' in the extreme," and the technological radical turn in communication "must mean we are at the threshold of a collective consciousness" (2000, p. 83).

Yet, while we progress more toward a technological dependence and while we use more technology as a medium of expression, we have moved from a materialist conception of the world as a machine to a world that is constantly in process and becoming; this conception is associated with the idealism of the New Age movement. Scientists and philosophers are now operating on the explanatory metaphor of the universe as that of an organism; parapsychologist researcher Rupert Sheldrake asserts in his book *Science Set Free*, the metaphor of the universe as a machine

> …has long outlived its usefulness, and holds back scientific thinking in physics, biology and medicine. Our evolving universe is an organism, and so is the earth, and so are oak trees, and so are dogs, as so are you. (2012, p. 35)

His concept of "morphic resonance"—while characterized as pseudoscience and primarily accepted by the New Age movement—contends that all natural systems inherit a collective memory. We are therefore active participants in the unfolding of cosmic creativity, as Nelson puts it, and "the flowering of the mind" as essential as we begin to recognize that we are deeply and meaningfully connected in awe, meaning, and greater purpose (2015, p. 189). He goes on to ponder what values might we develop with a deeper awareness; might we "enhance our altruistic emotions and suppress the violent?" (p. 181).

We could very well say that the universe is within us and we are the universe. As Neil de Grasse Tyson explains in his *Universe Down to Earth*, the very same elements of the atom within us make up the atoms of the gases of the stars that formed our galaxy, our planet, and the living organisms in it. Others, such as self-help metaphysical guru, Deepak Chopra in *You Are the Universe*, explain from a more metaphysical perspective that consciousness is the same thing as what we refer to as spirit; it conceives, governs, constructs, and becomes the activity of the body. The body is the organism in which consciousness unfolds and expands.

For example, in my analysis I find that Wilton Azevedo's (Brazil, 1956–2016) digital poetries put these effects in vibrant, hypnotic, and inquisitive motion using language as rapture where the rupture of assemblages of body parts, the clasped written word, the repetition of spoken verses, the rhythmic movements, and associative sounds and visuals create a comforting rhythm yet unsettling introspection of the experience of reading and viewing. Each poetic enterprise recovers the significance of sensuality, sexuality, and the female body, but ultimately it manifests more existential questions of self, existence, and experienced corporality. Azevedo's play with language is visceral: the female body, the spoken and written word, the image, and sounds pronounce an intuitive, almost primal awareness that make us recall the surrealist tendencies of the avant-garde, showcasing not only the aesthetic but also questions of the social, psychological, and quantum aspects of materiality or consciousness. Similarly, the interactive digital poem *Grão* e *Livre* by Brazilian poet Álvaro Andrade Garcia (1961) also exemplifies the reflection and exploration of a cosmic consciousness as it examines the cultural transliteration of ideas, concepts, and even beliefs. His digital work is an animation of paintings, ideograms, juxtaposed words in/of images that reinforce its symbolism with sounds and movements that hypnotize its reader. Andrade Garcia's poetics is alive—programmable, moveable, visual, lurid—but even more so, it is an art, a faith, and an exquisite politics.

Overall, I find that these digital works reflect a collective consciousness in which we all participate. Indeed, Tania Fraga, in her explanation of telematic art, says it best:

> Art amplifies consciousness, particularly by these works that allow one to experience and internalize amplified states of consciousness evoked by the artist. This repertoire reflects a direct apprehension of the numinous, the infinite, the epiphany emergent in dreams, the luminous moment of insight or contact with the unconscious that happens to artists and which can be shared with the public. (2000, p. 60)

The technologies used afford these authors' ways of experimenting, manipulating, creating, simulating, and translating ideas that are best placed in interfaces that require auditory, kinetic, visual, and tactile participation.

3.2 The Angst of Consciousness: The Body

The avant-garde literatures showed us how to deconstruct, *pastiche*, and juxtapose ideas. Wilton Azevedo's *Atame: angustia do precario*[8] is reminiscent of cubist work and even surrealist pieces that privilege the metonymies for the effect of the moving gaze. Azevedo was certainly influenced by the avant-garde poets and artists, and he draws from the manifestos of Lettrism.

Language is ruptured; that is, the reader is obligated to read digitally navigating a reading of a variety of signs and syntax. Yet Azevedo's use of processing script[9] does not detract from the central poetics of the work, including the deconstruction of the verbal sign, the overlapping verses, the breakage of traditional syntax fusing with visual and computer-generated order of code, and a sort of code-switching between languages (the verbal, the visual, the patterns of computer-generated codes). Sure, digital media has caused fundamental changes in communication where grammar and syntax are replaced by bulleted lists and short phrases or key words, for instance, or where graphics have inconspicuously taken center stage. There is certainly a combination of these modes prevalent in most artwork; they simultaneously represent each other: words are seen as art and images as language. Undoubtedly, Azevedo taught this to his students of graphic design and lectured on the importance of creating bi-dimensional metaphors that call forth readings a complicated process of translation. In fact, a central issue in our relationship to images is one of interpretation. Reading requires imagination—watching does not—that is, images are much more open to interpretation and imagination, therefore one could say that images *re*-present reality. By the same token, words today are seen as abstract signs and arbitrary markings defined by convention. Narrative in the digital medium is thus tightly linked to the verbal or sound components demanding an inclusive sound–visual–digital reading. Given that our reading practices are reconfigured with the digital, text then easily becomes graphic art and images become links (or at the very least intuitive references).

What we find in *Atame* are overlapping verses that serve as metonymies for the moving gaze and are vibrant, hypnotic, and inquisitive. That is, the poem clearly breaks with traditional syntax to fuse with the visual and computer-generated order of code. It is a sort of code-switching between languages (the verbal, the visual, and the patterns of computer-generated codes). Poetic language of how the principal circumstances or part could

stand for the whole (synecdoche), or as an instrument or signal that could stand for a thing (metonymy), and how a thing could represent another that it bears resemblance to (metaphor). For example, at the 2:26 mark, we find that the section "face" shows the metonymy of an eye as opposed to the metaphor of a face, one devoid of color, with blackened lips, and a slightly tilted Mona Lisa-like smile, and sharply contrasting the black eye, hair, and camisole. We can note similar effects in the sections of "o que faço" (8:10–9:49), where the narrator explains that she has just realized that her body is simply parts ("apenas tem percibido que o meu corpo e pedaços / faço da impressão que so existo do pedaços"). Similar observations in "tudo espero" (7:31–7:59), where the spoken word and the key poetic words are the metonymy of the omnipresent eye. This dismemberment of the body accentuates the idea that consciousness is not solely of the mind, but rather we experience and "think" with our body. Azevedo shows us that consciousness comes with each capacity we have (to feel, to see, to taste, etc.) and our consciousness is the way we feel about those capacities. His singling out each part shows how the consciousness is present in all body parts.

Atame is a good example of the complicated process of digital reading, given that perception and interpretation are central issues in our relationship to images. Yet, this digital poem shows how reading requires imagination. As readers we must imagine and interpret at once. To understand the image, we must also know its language, discourse, community, and social context. This is certainly the case in the sections "nada tem a resposta" (11:40–11:49) and "nada!" (1:00–1:51) where the reader has to decipher the context and culture of the impressionist images of faces represented in this section. Nothingness is the description of a condition that is given by consciousness—that is, when we think of nothingness, we are consciously giving the concept meaning. So "nothing' is something that exists and has energy.

This digital poem also has elements of *synesthesia* of sorts in which there is a transduction of meaning from one semiotic mode to another: how one might experience sound visually, for instance. Azevedo's work proposes an understanding of how the different modes (sound, visual, kinetic, interactive, etc.) function individually and how these interact in concert. "Quero deixar as coisas" (2:57–3:52) is a prime example of this *synesthesia*. At first glance, it is a state of nightmarish images with the juxtaposition of color, sound, image, and poetic recitation that further accentuates the illusion of turmoil, anxiety, and hypersensitivity to stimuli.

Similarly, in "a compaixão" (5:01–7:28), sound reverberations, the image of breasts from an angle above with the embedded written poetic verses, and sound effects reflect a sutra-like or weaving effect that the verses aim to provoke.

A compaixão para limpar
A testa suada
Durante a operação
Á uma lição
sempre pronto
Exige disciplina de cirurgião
da renúncia
Em um testamento Recortar
Se faz
dos versos
das mais duras
que a gente não vive
E a poesia
Fica impressa
a própia história

Writing poetry is compared to a surgical procedure requiring precision, discipline, and an unnerving resignation to the end result. Poetry requires punctures and incisions that leave gaping wounds as testament of how humanity does not fully live but nonetheless remains imprinted in its history. These verses leave a robust imprint on the senses of existential questions. Conscious manifestations of synesthesia—multi-sensory interactions may differ in terms of vividness, frequency, or specificity. The verses tend to liberate and expand the poet's mind by being truly liberated from the physical self and the physical world. These verses thus play on the idea that consciousness is not directly relational to that which is logically explained as perceived or experienced.

While the body is broken into parts, it is not a fetish. The body is a house for the spirit or consciousness. It disavows itself through "fetishistic" fantasy through a mystical transcendence of the body and ascension to a higher spiritual level. As the body produces jerks and movements seemingly uncontrollably, unmotivated by intention or desire, the concept of agency is severed from the association with the human, leaving the space for fantasies of a magical or mystical controller. The breakdown into body parts is rather a fragmentation of the psyche and a disavowal

of cultural norms, thereby deconstructing hegemonic boundaries such as social norms and binary classifications of the body.

Azevedo uses meta-video as it frames the subject of memories (*lembranças*) and makes us wonder what purpose the video serves when the poet recites the poem, making the inter-textual poetic language much more poignant. The body as rupture is characterized by visceral language, the fragmentation of the female body, the juxtaposition and play of spoken and written word with image and sounds. In the following fragments, the camera is an intimate way to expose the role of gesture. The section of "self" (2:27–2:34) highlights images of three bright white lights perceived from an angle from below (a closer look reveals these are lit candle sticks), the image of a woman's breasts viewed from an angle from above, while her legs and caressing hands imply sensuality and wanton abandon. All this is wrangled with looping digital music that induces a Tantric-like experience. The body is similarly spliced in "pessoas" (2:37–2:42), hands, mouth and lips, and hair. The poetic recitation is even more poignant, asserting that people are just parts or pieces, yet it is these parts that produce passion, whereas love is created by and for the whole entity.

> Não cruel eles
> Apenas tenho percibo que meu corpo
> Desde as puntas do cabelo até o meus pés
> Passou da impressão que sou do pedaços
> Registros de pedaços
> Acrédito que as pessoãs si amo os pedaços
> Si todo acontecei sou por inteiro
> Não havia a paixão, sou amor

Atame is only a beautiful sample of Wilton Azevedo's poetic and metaphysical explorations of the meaning of life, love, and poetry. His works exude a sense of curiosity and discovery of what consciousness is and how we fit in the scheme of ideological, sociological, and cultural contexts. And, furthermore, what does it mean to exist? How is corporality perceived, and why do our bodies (as physical matter and combination of parts) determine our sense of personhood and how we are related to other bodies? His poetry displays a fascination with matters intricately intertwined with the social, psychological, and even ideological contexts of Brazilian culture. One can sense a hope of easing a feeling of powerlessness and satiating it with a sense of spiritual or otherworldliness of

the physical body. *Atame* is therefore an attack on the void or emptiness of the physicality of our bodies because, after all, life is ephemeral, our bodies are transitory, and time is illusory. These seemingly competing concepts of emptiness and form are the subject of a Buddhist *sutra*, as Fritjof Capra explains:

> Form is emptiness and emptiness is indeed form. Emptiness is not different from form, form is not different from emptiness. What is form that is emptiness, what is emptiness that is form. (cited in *Tao of Physics*, 2015, p. 215)

That is, while bodies have form and mass, they are inconsequential as these die and decay and while consciousness (or spirit) is intangible, it is enduring. Azevedo's poem seems to tackle the epistemological question of existence and our human roles as spectators and actors in the drama of existence, as Eastern philosophical and religious traditions perceive it. In the following stanza, Azevedo echoes that life is indeed a dream and more poignantly warns that the stories we weave are not important at all.

> "ataque"
> (nada! Interspersed as warning sign in the forefront of video)
> nada me resta
> nada
> e estranho saber que o unico botan que tenho para percar
> pode contar estar uma paissão
> mesmo que com tempo
> esa historia de ficcão
> não tem importancia
> não tem importancia alguma

Like the weaving of a *sutra*, Azevedo unravels the concept of consciousness encased in the body and finds that while the body functions in unison, these are only parts, the only thing that persists is consciousness that transcends the fiction of the physical materiality of our being. The poem ends as a spiritual experience of the recognition of the separation and the unity of mind and body. While the body has been systematically sutured, just as Capra explains, the spiritual experience of separation from the body is also one of unity: "this experience of unity transcends not only the separation of mind and body, but also the separation of self and world. The

central awareness in these spiritual moments is a profound sense of oneness with all a sense of belonging to the universe as a whole" (1975, p. 8).

To be clear, I find this work to fit notions of spirituality as outlined above for poem's insistence on conceiving a love that goes beyond the constraints of human emotion and devotion. It is not a love of infatuation, attraction, or affection. It is certainly not filled with selfishness, ego, ignorance, or dissatisfaction. But rather, it is a spiritual experience of transcendence devoid of ordinary qualities. It is precisely because of this otherworldliness that the body is dismembered as each part is uniquely devoted to the loving of a spiritual consciousness that is pure beingness, present in every body part and everywhere, that is somehow innate conscious and the essence of joy for the author and the reader. My reading of Azevedo's poems thus is how love is woven into the fabric of the universe, which of course puts it at the center of our own being (of the body he adores). For me, his poems do indeed highlight a profoundly impersonal and universal quality of both disembodiment and spirituality.

3.3 Energy of Language

Poetry reflects the reality we live in and that we have designed and built. It may pose questions of how justice, hope, and compassion are exemplified. *How is it that we matter? What is the nature of our universe? Who are we?* Ultimately, these poetics reveal how we are participants in this world, not just observers. Alvaro Andrade Garcia's digital poetics works on deciphering such questions in his *Grão* (2012, Ciclope, 6′ 45″ software by Lucas Junqueira[10]). From the outset, we are told that it is an inquiry into questions of life, being, and mysticism as he reveals that the poem is a liberal translation of the Durgasatanama Stotra do Visvasara Tantra. It is interesting to note that tantras promote a transformation and liberation of energy—including a sense of nobility, heroism, and mastery—and encourage adventure and play, thus provoking a sense of delight, a sense that the actual world should be enjoyed, enhanced, and engaged with. The body is portrayed as indispensable for compassionate action and thus the main figure is that of a woman, who, in tantras, tend to be inherently spiritually superior.[11] This ode for Durga speaks of her multitude of names, of her virtues of chastity, courage, victory, as liberator of births and deaths. She/he is above all a savior, but also a spouse, mother, and daughter. She

is a beautiful and terrifying ruler embodying all other great rulers with intellect or wisdom.

But what evolves in *Grão* is more than a digital loom; it is an exploration of language, sound, image, and meaning. Words serve as metaphors where language is divorced from the structure of syntax, grammar, meaning, and sound. Sound and word converge setting the mood of a sacred space, a *tantra* that sets the symbolic disposition. It is a translation and transliteration on multiple levels: linguistic (Chinese/Sanskrit/English/Portuguese), cultural, and design (ideograms, sound, images). The poet informs us that this is a graphic play of divination—of spiritual exploration—that seeks to identify how we fit in this universe that privileges the *I* above all. The digital work is, in essence, a graphic play of the ideograms: Words become graphics, images become ideograms, both become translations of the interpretation of the inspired elegy. Just as Durga is omnipotent, we as humans embody the universe within. Light, air, water, and fire (as electricity) are elements we share with Earth. The "I" or human is the "grão" or seed of creation, and it is our words (*palavras*) that secure our importance or primordial state in creation. The ideograms in Chinese are always present, while the words appear and disappear, sometimes read in English translation while written in Portuguese to accentuate the translatability of the metaphors. Yet, the spoken and even written word disintegrates by the pronouncement of "est/tse"—a play with the phonemes—followed by an echoing scream and a whiteout screen.

Andrade Garcia designs the digital poem with nine episodes (*fluxos*) clearly marked by the changing images, ideograms, or visual effects. The epigraph, as he calls it, serves to set the theme of the work: an exploration of the values espoused in the Durga tantra. He describes the images in his website as clear depictions of Indian paintings from the seventeenth and eighteenth centuries followed and juxtaposed by images specific to South America. The poem starts as an inspired translation with homage to spiritual Indian figures of kali yantra, Shiva from the Temple of Perur in Coimbatore. The vision of the kali yantra is accompanied by a tantric recitation of single words in Portuguese with written images in Portuguese, English, and Sanskrit evoking a sense of merging cultural nuances setting the stage for a semantic exploration.

primordial / trinetra / supporte da lança / consorte

maravilha / austere / emana / desperta / eu / forma / consciente/ pira / conhecimento / substancia dos cantos / realidade / natureza / graça / imensa

It is a primordial, three-pronged support, an austere marvel that emanates and awakens the *I*, the form, and consciousness. It is a funeral pyre of knowledge, of the inspiration of the ancient verses, of reality and nature. It is immense grace. But the digital poem quickly transforms into an exploration of consciousness, inadvertently asking: *What is the essence of being? How does consciousness fit in the universe?*

While the Durgasatanama Stotra is a hymn of praise of a divine omnipresent and eminent individual that is one and all at once, for Andrade Garcia this expression of adoration has inspired his own questioning of the matter of the *I* (*eu*), of how humans come to be and how the presence I (*eu*) is essential and dominant. Just as the splendor of Durga is ever-present and powerful, the poet shows how the human essence is exquisite because of its power to create language. The poem explores where the "eu" or "I" falls in the creation of the universe. The subject's unique feature of voice and language ("palavra") is born out of light, empty air, and fire. It is the sound of the word that predominates and makes humans "primordial." Thus, the poem functions as a sensorial ideogram that invokes the reader to speculate the essence of humanity, just as the Durgasatanama Stotra sings the innumerable qualities and affinities of the goddess Durga. Clearly the word—with its sound, semantics, and images—is the highlight of this work.

In the fourth *fluxo*, "Palavra," Andrade Garcia focuses on how words are simply a combination of sounds generated by a vessel that constitutes a body, operated by a mouth. The echoing sound of a scream is accompanied by the image of a bonfire in the child's mouth, followed by the breakdown of the word "palavra":

palavra (word) / alavra / lavra (mine) / lava / ava / elo (nexus) / ala / eva /ovo (yolk) / novo (young)

Words are our metaphorical fire. He chooses to highlight the Chinese, Sanskrit, and Hindi characters, accompanied at times by the written word in Portuguese and English. There is thus a translatability of cultures, ideas, and beliefs.

The next six *fluxos* reimagine the creation of the universe. By the fifth *fluxo*, the power of language is sequentially washed away, symbolized by the moving image of the waterfall.[12] Water is a maternal persona, according to Andrade Garcia, whose characteristics are inextricably interwoven: water, feminine divinities, ruler, mental substance. The words scrolled ("emana / manas / mae / maya / yara / yoga") are also attributes very well aligned with the qualities expressed of Durga. Interesting, however, is how the poem plays with language, particularly sounds and semantics. The words are purposefully left in Portuguese without a spoken translation, providing an opportunity for the immediacy of awareness and concentration on the actual sound qualities of the word recited. In the sixth *fluxo*, while the word is the principal aspect of the poem, images of the sun are metaphors for the reproductive cells (*gameta*) merging in a seamless yin/yang visual design. The words appear: "progenitor / profeta / geme / germe / genitor / gema." The poem is progressively imagining the creation of life with the elements and the words are giving meaning to this life. The sun is the designer of all creation. The electricity of the lightning, on the other hand, in the seventh *fluxo* is the rudiment that ignites sound. The words chime in—"raio / germ / verb / vers / y / litera / tora"—along images of another version of the fire produced by the electricity. Light and darkness merge. But just as deafening is the vibration of silence. Andrade Garcia calls it the "empty air" ("ar vazio"). The poem explains that silence is an ardor, disseminated and scattered like the rain; and after much clamor, this episode gives us not a reprieve from noise, but rather a more consciousness awareness of the lack of sound of vocalizations. Sound and silence are equally fulfilling. And with this travail of re-envisioning life, the "ancestral Id," as Andrade Garcia calls it, in the ninth *fluxo* fills the empty space with a blow and generates eternal spirits of the universe ("ánimas etéreas do universo"). Death and life are intertwined with pictures of funeral pyres while the poetic recitation echoes how the breath of life expands, disseminates, turns, and disperses.

Light follows in the tenth *fluxo*, producing the image of earth after the Big Bang and images of light, cosmos, amalgamations and fusions, astronomical tempests. An exploration of the origins of life is unequivocal, but most remarkable is how he reinvents semantic signs, giving them

new meanings, testing new symbolic nuances, and articulating manifold knowledge systems. The poet recites the English translation of the Portuguese words that paint a rebirth of light, liberation, temper, cosmos, collision, and accidents, yet also words that set the mood of a sacred space, a home. "Palavra" is acoustically broken down to its phonemes and then reconceptualized to rhyming words. Andrade Garcia envisions the conception of the universe with the onset of sound; that is, in this piece, consciousness emerges out of sound. The predominance of the sound of vowels as fundamental to human communication are associated spiritually with the corresponding *chacras*—ancient Sanskrit spiritual practice of the seven life forces energy center; Andrade Garcia connects this cultural and spiritual belief with Brazil's indigenous mythology of how each human is composed of a specific tone and color.[13] In ancient Indian tradition, the human body is also composed of tone and color that affect the spiritual awakening of the individual. This corporal and spiritual tuning is key to the human spirit. These same nuances and tonalities are part of our verbal communication, so the poem further asserts that it is our speech—our spoken sounds specifically—that connects us to the universe. Sound is the creative force.

Finally, the images of the previous *fluxos* (water, sun, lighting, silence, and light) join in a rapid assortment of moving images. Thus, in the eleventh *fluxo* the image of the cobra stands erect as the sound of the vowel "a" reverberates with varying tonalities and nuances. Sound and image swiftly and seamlessly merge to create a symbolic *milieu*.

> Fala (speech)
> Pronúncia (spell)
> Semen (sperm)
> Silencio (silence)
> Arde (burn)
> Ar (air)

Speech or language is the seed of silence that ignites the air—our communicative system that fuels humanity and the universe. Curiously, these one-word episodes speak profoundly and prophetically. In the poet's recitations, we hear alternate words (in quotations) that speak of the more symbolic nuances:

Id (poet pronounces “emanate”)
Dente “awaken”
Dúvida “funeral”
Espaca “pyre”
Dissemina / spande / ásporo / sopro “breath” / anima / torna “turn”
Dimens “disperse”

The individual (or Id) arises, awakens, and disperses with the breath of life, from the pure process of existence. The written Portuguese seems to not correlate to the spoken English, but the connection lies in the suggestive juxtaposition of meaning. Doubt (*dúvida*) of the meaning of life arises at death, at a “funeral,” and it is in the space (*spaço*) of the “pyre” that the meaning of life unfolds and expands as the “breath” of the soul “turns” and “disperses,” merging into the universe. Video images change from a view of the earth to space, all interrupted by a final sound of a human scream—a return to the phonological noise.

Andrade Garcia is clearly inspired by the mystical deductions of the *Durgasanstrama*, making his poem a spiritual exploration of consciousness. It draws from Hindu and Buddhist mystical vision of the world. While the original *tantra* is in the Vedic tradition and written in Sanskrit, we find more contemporary Buddhist views commonly practiced today. The video-poem explores both consciousness as a manifestation of a singular and ultimate reality, as reflected in the themes explored, but also as an intimate awareness of the experience of the reader/user as she/he travails the connections, unravels the meaning, and experiences the visual and sound stimuli. This intermingling of awareness and consciousness, of human and cosmic consciousness, is a question that has been of inquiry in the scientific realm, with Nelson asking:

> The existence of consciousness is a profound mystery, eclipsed only by the mystery of existence itself. Could it be that these two mysteries are deeply intertwined? By learning about one can we reveal insights about the other? (2015, p. 163)

Indeed, Andrade Garcia’s *Grão* plays with language—its musicality and tonality, its translatability (or lack thereof), its symbolic importance—primarily in a playful way, as if creating puzzles to be deciphered and sounds to be appreciated. Images draw from Chinese ideograms, Indian ancient

paintings, universe mapping images, graphic and diagrammatic figures, all in a video tour of images that invite different types of readings.

Digital poetry is as engaging and provocative as traditional poetry, offering an additional dose of symbolic milieu with the explosion of images making a semiotic shift from describing to visualizing conceptual knowledge with the combined efforts in visual art and digital technologies. These contemporary practices and modes of visualization generate a "transoptic eye," as many digital poets have already noted. Our readings are thus scattered, multi-directional, and collaborative. We find that to understand an image, we need to know its language, its discourse community, its social context. Our aesthetic standards now promote readings of confusion, and to find meaning in it we must adapt our visual literacy. We find that we now read images, graphics, and such in two ways: by doing a visual scan of image itself, and then by following with a more in-depth reading focusing on the textures, lines, and colors. Similarly, digital readings process visually (distant and close) and interactively by participating in activating links or movements. Abstract thought is also reconceptualized, as the projects are more often than not rendered collectively. Similarly, the sense of selfhood is reformulated from the unitary "I" to the parallel, mobile, and collaboratively interactive self.

Which leads us to question whether art combined with technology is making us more aware of our connection to others in our collaboration but also as a collective conscience. What are these new digital reimaginings proposing regarding the separation of body and mind (consciousness versus being)? How is the transliteration of poetic style and rhythm in the cinematic or digital screen transforming that experience of sudden insight or discovery ("the ah ha!" moment)? Are these artistic representations a reflection of our consciousness, or are they actively forged? How does the interactive work make the navigator more aware of the self-reflective relationship between oneself and the work?

Notes

1. See the recent collection of essays (2009–2011) in Kak et al. (2011).
2. See Steven Laureys et al. (2015).
3. David Chalmers, Thomas Nagel, Gregg Rosenberg, Galen Strawson, Freya Mathews, Isabelle Stengers, Torin Alter, Phillip Goff, Michael Lockwood, Yugin Nagasawa, William Seager, David Skrbina, Ken Wilber, among others (Nelson 2015, p. 28).

4. See his profile at the IONS, https://noetic.org/profile/loren-carpenter/, accessed December 30, 2018.
5. Global Consciousness Project is a parapsychology experiment led by Nelson to detect possible interactions of "global consciousness." Originally created in the Princeton Engineering Anomalies Research Lab at Princeton University, now housed at the Institute of Noetic Sciences at http://noosphere.princeton.edu, accessed December 30, 2018.
6. These experiments were conducted at Native American rituals, popular festivals in Japan, theatrical performances, scientific conferences, psychotherapy sessions, sports competitions, and live television broadcasts.
7. See Mensky (2014).
8. Azevedo (2006). See video: https://www.youtube.com/watch?v=YzYF3QYuHiI, accessed November 23, 2018.
9. A programming language, development environment, and even online community. See https://processing.org, accessed November 23, 2018.
10. Andrade Garcia, *Grão*, http://www.sitio.art.br/grao/#conteudo, accessed December 30, 2018.
11. See Norbu and Shane (2000).
12. Waterfall of the river Preto at the Parque da Chapada dos Veadeiros, Goiás.
13. Note Andrade Garcia's description of the poem at http://www.sitio.art.br/grao/#conteudo, accessed December 30, 2018.

References

Andrade Garcia, Alvaro. 2012. *Grão*. http://www.sitio.art.br/grao/#conteudo. Accessed December 30, 2018.

Azevedo, Wilton. 2006. *Atame: A angustia do precário, texto e poesias*. Monologo: Fernanda Nardi; Digital Video e Performance: Rita Varlesi; Interface Design: Savana Pace; Production: Universidade Presbiteriana Mackenzie and Estudio UnderLab. Sao Paulo: Mackenzie. See video: https://www.youtube.com/watch?v=YzYF3QYuHiI. Accessed November 23, 2018.

Capra, Fritjof. 1975. *The Tao of Physics: An Exploration of the Parallels Between Modern Physics and Eastern Mysticism*. Boston: Shambala Publications.

Chopra, Deepak, and Minas C. Kafatos. 2017. *You Are the Universe: Discovering Your Cosmic Self and Why It Matters*. New York: Harmony Books.

Dennett, Daniel C. 1992. *Consciousness Explained*. Columbus, GA: Little, Brown and Co.

Fraga, Tania. 2000. "Inquiry into Allegorical Knowledge Systems for Telematic Art." In *Art, Technology, Consciousness: Mind@Large*, edited by Roy Ascott, 59–64. Portland, OR: Intellect.

Hameroff, Stuart R., Alfred W. Kaszniak, and Alwyn Scott. 1996. *Toward a Science of Consciousness: The First Tucson Discussions and Debates*. Cambridge, MA: MIT Press.

Kak, Subhash, Roger Penrose, Stuart Hameroff, and Lana Tao, eds. 2011. *Quantum Physics of Consciousness*. Cambridge: Cosmology Science.

Laureys, Steven, Olivia Gosseries, and Giulio Tononi, eds. 2015. *The Neurology of Consciousness: Cognitive Neuroscience and Neuropathology*. 2nd ed. Cambridge, MA: Academic Press.

Mensky, Michael B. 2014. "Quantum Reality Explains Mystical Powers of Consciousness." *Dialogo: Proceedings of the Conferences on the Dialogue Between Science and Theology* (November 6–11): 76–79. http://dialogo-conf.com. Accessed March 12, 2018.

Nelson, Adrian David. 2015. *Origins of Consciousness: How the Search to Understand the Nature of Consciousness Is Leading to a New View of Reality*. Nottingham, UK: Metarising Books.

Norbu, Namkhai, and John Shane. 2000. *The Crystal and the Way of Light: Sutra, Tantra, and Dzogchen*. Ithaca, NY: Snow Lion Publications.

Penrose, Roger. 1989. *The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics*. Oxford and New York: Oxford University Press.

Radin, Dean. 2006. *Entangled Minds: Extrasensory Experiences in a Quantum Reality*. New York: Paraview Pocket Books.

Rajah, Niranjan. 2000. "Two Portraits of Chief Tupa Kupa: The Image as an Index of Shifts in Human Consciousness." In *Art Technology, Consciousness: Mind@Large*, edited by Roy Ascott, 78–83. Portland, OR: Intellect.

Sheldrake, Rupert. 2012. *Science Set Free: 10 Paths to New Discovery*. New York: Random House Inc.

Tyson, Neil deGrasse. 1994. *Universe Down to Earth*. New York: Columbia University Press.

CHAPTER 4

How Are We Interconnected?

Abstract This chapter focuses works that challenge the questions of space and entanglement of time. The concepts of time-reversibility, irreducibility, indeterminism, and non-locality emerge through analysis of the works of Augusto Marquet and Gabriel Wolfson's *Anacrón: Hipótesis de un producto todo*; Rodolfo J.M.'s hypertext detective/police novel *Tatuaje*; Yolanda de la Torre, Raquel Gómez, and Mónica Nepote's *Umbrales*; and Santiago Ortiz's *Bacterias argentinas*. Analyses of Karen Villeda and Denise Audirac's poetic virtual installation *POETuitéame* reflect the interconnectedness of our human condition. These works experiment with observing mind and the object of observation, a metaphor for how quantum entanglement and probability give us the conception of poetry as a universe, a cosmology; metaphors of a universal consciousness, they form a consensus of life as network.

Keywords Interconnectedness · Universal consciousness · Consciousness · Ideologies · Words · Networks · The "real" · Myth · Death · Therapeutic entanglement

> The fundamental delusion of humanity is to suppose that I am here, and you are out there.
>
> Yasutani Roshi

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4.1 Interconnectedness Toward a Universal Consciousness

The complex question of consciousness is the key characteristic that makes us sentient. How consciousness is transformed in and by technology is a question that Buddhism addresses as it speaks of co-emergence as dependent origination or reciprocal causality. That is, consciousness fashions reality, and reality fashions consciousness. To fully understand would be to transcend the conventional notions of levels of existence or of dualism between self and the world or between conscious and inanimate. Buddhism also says that the observer and the observed can't be separated; they interact and shape each other in a global universe. We are structured by our environment, just as we affect our world through our projections, concepts, and habits. This is much like the properties of quantum mechanics: a complex web of relationships among the various parts of the unified whole, defined through interconnectivity and interrelations among the parts. In quantum entanglement, the boundaries between observers and the observed, subjects and objects, humans and nonhumans dissolve in a web of entangled agencies.

This chapter presents an analysis of the dimension of consciousness from a shared pattern of existence, as a set of networks that give us an intimate connection between our conceptual understanding of the world, the vision of human existence and its potential, and the ethical values that guide our behavior. The works selected vividly show a new vision of the world in this new paradigm that shifts our perception. The artists are more concerned with the whole or holistic perception than with the meticulous understanding of the parts. These samples show how networks are formed and how patterns are prioritized; they are marked by our insistence on a holistic awareness. The works discussed in this chapter reflect the interconnectedness of consciousness as social phenomenon that unfolds as a pattern of relationships in technology. More importantly for this study, to borrow Serpil Opperman's proposition, is recognition and appreciation of how this newfound realization offers a new way of thinking that changes our vision about the world and our participation in it, such as how it affects our cultural discourses. Posthumanist theories address the idea that consciousness is or can be technologically mediated as it distributes cognition in disparate parts, according to N. Katherine Hayles in *How We Became Posthuman*. Cary Wolfe, in *What Is Posthumanism*, insists that

when we think of posthumanism, we must think of "*how* thinking confronts that thematics, what thought has to become in the face of those challenges" (2010, p. xvi).

Not surprisingly, current systems theories also show how networks are infinitely repeated in nature, in the cosmos, and even in our bodies. We are undoubtedly interconnected via the internet, social media, and other technological means. We create a myriad of technological and social networks and are inextricably entangled in them. Our use of technology to connect with others in effect mimics such natural associations. We use our avatars, our Facebook pages as a means of self-representation and self-verification via online interactions with others. Our experience of self is very malleable. How we see ourselves is how we think we are. There is something about the sensory input we process via the visual cortex that is central to our sense of self. In fact, neuroscientists are homing in on the underlying neural structures and processes that give rise to consciousness. So, it appears that these artists were right: consciousness appears to be linked to meditative-like states as a form of integrated information.

How exactly are we connected? Our cybercultural connections began by replicating the horizontal narrative forms of analysis, as observed by Greg Elmer.[1] While the web offers decentered and distributed characteristics, it was organized through hierarchical methods that subtly direct users toward "preferred" content, goods, and services. Unfortunately, not much has changed since 2006, artists and scholars both engage in horizontal and vertical readings, and the web still directs users toward "preferred" content, goods, and services. Critics would also argue how exactly distant readings of the web dealing with questions of technological history and political economy fit particularly in what is now conceptualized as an "algorithmic culture." Elmer finds that what is most needed in studies of cyberculture "in addition to critiques of textuality and cultural expression, is a renewed conceptualization of the *conditions* of networking," in terms of how technologists, historians, economists, and lawyers may approach the analysis. Overall, what is most important is to underline the moment of connectivity: how the information is accessed, saved or revised, uploaded, or downloaded. The question of how social reality is constructed and by whom is critical in understanding the role of technology as deeply integrated in the actions and interactions in the network of society, as Stine Gotved has explored (2006, p. 168). There are ever-present overlappings of culture, structure, and interaction; online

and offline sociality use the same social competencies in slightly transformed ways. The designed ideology, however, is underlined in the technology's interface, in which social structure and organization are tightly intertwined. Gotved outlines four levels of social interactions: the individual, the couple focused on each other, the interconnected network of relations, and the community concerned with defining insiders and outsiders.

When are we connected? The speed of our interconnectedness and communication makes it necessary to think of time differently, especially since new ways of representing global synchronicity are now in place; we can virtually be present at many places at one time. Time is understood by processes and memory, and certainly time differences are not a barrier to communication. Orientation is also facilitated by time within online communication, both synchronous and asynchronous; with archives and FAQ; with the possibilities of content, speed, the interpretation, and so on. All of these cybercultural features of time are evident, for instance, in *Tatuaje* by Rodolfo J.M., where we find ourselves enmeshed in the time of culture, the structure of the piece, and the interaction that is called for by the author to the reader/user.

How are these networks forming us? Cyberneticists concentrated on patterns of communication and control in closed loops and communication which led them to concepts of feedback, self-regulation, and self-organization. As Capra points out, the intent of cybernetic studies was to create an exact science of the mind (1997, p. 52). Cybernetics redefined basic concepts of knowledge, thinking, and communication, and created alternative worldviews. Philosophy and sociology of technology have long considered the social and political aspects of technology for many years. Technological culture is a sociological process that has multiple interweaving stages; its effects are also part of the construction process and have a direct impact on its further development.[2] Wiebe Bijker explains how technology is constructed by enabling and constraining interactions within relevant social groups. In other words, the functionality of technology is socially constructed, and therefore, these "artifacts have politics."[3] These micro-politics can be used as instruments to build up networks of influence, or as a semiotic power structure in which the technology's meaning is fixed. The meaning forms part of the network of practices, theories, and social institutions. New technologies facilitate the awareness of the diverse range of codes and stories within cultural groups. In fact,

because of globalization and the technological revolution, communications have been able to reorganize their relationships among communities, cultures, and countries. This ideological formation through networks is a topic of discussion in Santiago Ortiz's *Bacterias argentinas*. Gone are the days when technological progress has a give and take with culture.

In Latin America, effects of a digitalized culture include the disruption of knowledge with the transformation of discourses into forms that may be more readily available and able to reach a mass audience. The Zapatistas in Mexico and the Sem Terras in Brazil, for example, work with a variety of digital media to promote their political cause and educate the country. New social movements—including ethnic, ecological, and feminist movements—are more readily promoted.[4] Markedly popular or mass culture and high art are now intermixed; innovation and tradition are so intermingled that each is indistinguishable. The priority given to the privatization of telecommunications and the few public broadcasting channels led communication to be more strategic. Nonetheless, as Jesus Martín Barbero notes, on the one hand market forces drive the initiatives and programming; conglomerates dictate the programming "in defense of national culture" and are "in favor of transnational flows" (2006, p. 46). Cultural industries still do produce strategic management of information. Public policy still works with the old concept of nation that tends to accentuate the inequalities of consumption and impoverishes local production. On the other hand, connecting with a national identity is difficult because of the practice of deterritorialized economics and the promotion of world cultures, along with internal liberation differences. Borders are more aptly defined as conceptual differences between class, race, and generations, as opposed to national borders. The immediacy that technology brings has transformed communicative practices in Latin America, which initially took shape as "spreading innovation" and "transforming society," followed by a semiotic study of the ideological complicity of mass communication, to be more strategic (p. 44). Barbero notes a revitalization of short-lived identities that combine their own and discontinuous cultural worlds—cultures without a territorial memory—as well as of local cultures. In his study of telecommunications, Barbero finds that what is most needed in Latin America is public policy on cultural communicative systems that address public and private interests that also address the multiplication of voices through alternative media not supported by the conglomerates.

The digital works examined in this chapter challenge questions of space and entanglement in terms of the concept of time as a process whereby human existence and time are inextricably intertwined. From this study of time, concepts of time-reversibility, irreducibility, indeterminism, and non-locality arise. These texts show how networks and metaphors emerge from space. These works also call attention to how the mediation and remediation of traditional literature intersects with the synchronicity of multiple artificial worlds, as imagined in *Tatuaje* and experienced in *Anacrón* and *Umbrales*. The works experiment with the relationship between the observing mind and the object of observation and present a metaphor for how entanglement and probability give us the conception of a universal consciousness.

4.2 Ideologies, Words, and Networks

Santiago Ortiz, originally from Colombia, works with interactive visualization at Moebio Labs in San Antonio de Areco, Argentina. His *Bacterias argentinas* (2004) was recently selected for the Volume 3 of the ELO Collection.[5] It is designed with generative Flash in Spanish. The voice-over is, of course, produced by an Argentinean accent (Edgardo Franzetti), Ortiz explains in his narrative. This piece is a perfect example of networking modules because it "creates a linguistic-multicellular environment," as the author notes. On the one hand, it mimics basic interactions between organic systems in this virtual ecosystem. On the other, it proposes political innuendos of the 2002 Argentinean financial crisis: Argentina's 2001–2002 economic crisis appeared to herald the end of the country's proud trade union movement. It was dubbed a crisis of neoliberalism that reflected "the collapse of the neoliberal model drastically implemented in the 1990s" (Teubal 2004, p. 174). The infecting bacteria represents the neoliberal and political and economic policies at the time, explains Ortiz—policies adopted in the 1990s of structural adjustment, including

> [e]xtreme privatization program, deregulations of all kinds, in particular with regard to the 'flexibilization' of labor markets; and, a new 'opening' to the world economy, in particular concerning financial interests. (Teubal 2004, p. 174)

Argentina set a new historical mark with "the crisis of 2001," which was followed by a depression in 2002 with the largest debt default by any country, ever. The shift toward neoliberalism began during the dictatorship of 1976, deepened during the Menem administration, and was supported throughout by IMF.[6] Shannon O'Neil Trowbridge explains in a Latin American Studies Conference presentation in 2001 that the effectiveness of the persuasiveness and diffusion of ideas is in fact dependent on the role of crisis created. For example, ideas (or the fragments of sentences) are created under the premise of a crisis of attack by the bacteria; these ideas in turn, may or may not be coherent. We could read this as an analogy for the political crisis that Argentina was facing with the promulgation of neoliberalist ideas that, to the general public, may not have made much sense or may not have had a positive impact on their lives. As Trowbridge explains, the same concept of proximity of liberal economies facilitated the diffusion of neoliberal ideas (2001, p. 10).

Santiago Ortiz draws attention to the ancient Chinese proverbs that confirm that matter, space, time, and even language are pure energy. In 2005, Ortiz exhibited a version of this as *In Silico* and *Palabra de bacteria* at the Centro Cultural de España in Mexico City. Both comprised artificial systems of life, understood as ecosystems that influence each other. Fractal images of lexicons are used in *Silico*, which, with algorithmic processes, imitates the organic and "natural" systems that are born and evolve over time. *Palabra de Bacteria* is conceived as a model of an ecosystem where the organisms tend to consume each other in order to exist and thus carry the genetic trait. What results is a fragmented narration in which the phagocytosis (a cell engulfed a solid particle), in this case the genetic code, determines what is devoured. Both pieces used sound—generated by their movements, interactions, and mutations—in response to their surroundings. Most fascinating is how both works are constantly and mutually modified by external forces (specifically, by the noise produced in the space by the audience), as well as by each other.

Bacterias argentinas alludes to the widespread *laissez-faire* economic policy in Latin America during the 1980s and 1990s, with many countries adapting neoliberal economic frameworks. These changes enabled an opening in the region's state-sponsored subsidies, opening of capital markets, relaxation of labor laws, reduction in public employees, privatization of state-owned enterprises (SOEs), and changes in currency regimes and foreign exchange policies. Yet, as Trowbridge points out,

neoliberalism strengthened the channels for the diffusion of ideas by freeing their expression and encouraging a greater exchange that required greater participation of the population.[7] Particularly interesting for this analysis is how neoliberalism developed networks among like-minded policy experts. She cites numerous private and public think-tanks, educational facilities (in Argentina and abroad), and research institutions that helped build "an elite intellectual consensus" and developed ideas for the general public through newspapers, conferences, speeches, and public announcements, and so forth—much like the network of associations in *Bacterias argentinas*, where words are grouped with ideas, and these are then diffused through the existing system. As Ortiz explains, the *bacteria* have the power to shape the ensuing sentence just as the ideas of liberalism have the power to shape policymakers' worldviews. The user interacts with these *bacteria* that invade the space. Immediately, one can see how this latching on of ideas can play an independent role in shaping perceptions and the ensuing sentence. Trowbridge notes that in order for liberalism to take effect, an "ideational alternative" needs to be constructed, so that once it is adopted it can "set the rules of the game and establish issues of importance" (p. 6). Ortiz's digitalized visualization of an organic process is a metaphor to the networks created by the discourses of politics and economics. Similarly, in *Bacterias argentinas*, this process creates its own rules of contact, connections, and even of expulsion of ideas that don't seem to survive the discourse process. He warns that the bacteria that attract most of the words become the strongest and survive the longest. There are good and bad bacteria, just as liberalism brings different economic policy outcomes in Argentina. Ortiz touches upon the politics of diffusion and acceptance of these ideas in the public realm—paralleling how public support and public opinion might be generated to facilitate implementation and consolidation of reform.

Trowbridge summarizes Argentina's history of liberalist policies, which start with the new military junta and Alfredo Martinez de Hoz, whose liberal economic ideology implemented wide "stabilizing policies" including reduction of export tax and import tariffs, freezing of wages, increasing public utility and food prices, and cutting welfare subsidies: all meant to increase domestic and foreign investment—but what resulted was over inflation (600% in 1976) and fiscal debts. Ortiz's "fat bacteria" run the fastest, carry longer, incongruous text, and eventually pop and

disperse. The general population was devastated by liberalism. Furthermore, Argentina under Menem's liberalism consisted of basic stabilization policies, but all failed to curb hyperinflation and economic instability. Menem implements the Bonex Plan that, among other things, consisted of extending the maturity of public debt to nine years, initiating restrictive monetary policy, floating the exchange rate, and maintaining previous policies. Trowbridge argues that it was the persuasiveness of the ideas that built a new consensus for neoliberal policies:

> Neoliberal ideas reoriented the perceived interests of societal actors, resulting in broad support for the initiation, implementation and consolidation of economic reforms. This diffusion and acceptance was influential both in elite and popular circles, and as a result allowed fundamental and long-term policy change. (2001, p. 9)

Crisis plays an important role in the effectiveness or persuasiveness of ideas. And, crisis seems to play an important role in *Bacterias argentinas* as well, as the bacteria engulf other words and the "weak ones" disappear. It is a survival of the fittest.

Ortiz explains the three networks implicit in *Bacterias argentinas*: the grammatical network, the food chain, and the Argentinean "bacterias" network. The grammatical diagram shows how sentences can be formed from random networking of selected words. An Argentine voice then performs these. This work is fascinating because it clearly draws attention to the formation of discourses, specifically bringing together the organic functions of connectivity, thereby recalling the autopoesis theory of Francisco Varela and Humberto Maturana. That is, Ortiz then declares that similar to the food chain or to an ecological system of interactions, the circulation of ideas is akin to that of the circulation of matter and energy; thus, the directional relationship between words parallels a systemic relationship. While the parallel between the networks is valid, I will focus more on the systemic relationships between ideas, meaning, and their ensuing symbolic representation. Ortiz proposes that the words can be directional in the sense that the relationship between the words dictates the circulation of the energy, in this case of the grammatical structure that will produce the thought. A central or recurring theme of his works is the evolution of the system, which he undertakes by underlining the discursive relations between the scientific vocabulary or premise and the

day-to-day language, as Scott Weintraub notes in his article "Combinatoria, filogenética lingüística, redes de la complejidad científica" (2010, p. 312).[8]

The community of bacteria, in its search for nutrients, loses its energy; these bacteria are differentiated only by their genetic information, which is characterized by the fragment of text. The length of the text shows just how much the bacteria has consumed and thus how much energy it carries. To continue its lifespan, this bacterium must continue to consume and at times it consumes other bacteria. Ortiz establishes that each gene is characterized by the text fragments, but the final sentence fragment can only couple with certain fragments (genes), thereby maintaining the syntax and paralleling the directional relationship of ecological systems. He continues to explain that when bacteria die, new bacteria replace them, and the cycle begins anew maintaining the stability of the system. Bacteria can effectively consume, detect, persecute, compete (with each other), grow, and finally collapse and perish. Those bacteria that have consumed the most (have the longest text) are the fastest. Ortiz finds this competitive streak unfair and names it "neoliberal"; it eventually results in a disproportionate exponential growth that collapses the system. It is this disparity that posits the author's political stance. It is no coincidence then that he focuses on the complexity of the web of bacteria to reflect on the wide circulation of information with the same above-mentioned "promiscuous" characteristics. He thus proposes a reflection of the virus of information in Argentinean politics.

Ortiz's poetry poses the question whether humans can be less fragmented, "la formación de un ser humano menos fragmentado"[9] as Ortiz calls it. Weintraub sees this as a possible reaction to the posthumanist danger of losing all subjectivity in the web of logic and objectivism of technology (2010, p. 315). Indeed, "literature culture" has transformed with these interactive and visual designs precisely because technology has changed the way we communicate, think, and visualize the networks we engage with. Ortiz's work at Moebio Labs is exemplary of the kind of knowledge databases and networks that we seek to understand to better reach a certain type of market, to facilitate connections between huge data sets, to gain deep insight from that data, and to answer strategic questions in every kind of scenario (marketing, political, literary, scientific, etc.). His artistic rendition in *Bacterias argentinas* is an example of

how these discourses are formed, while also revealing how the underlying power dynamics are created. This is an obvious Foucauldian discourse analysis practice focusing on the power relationships in society as expressed through language practices. The relationship between linguistic construction and the behavior of the bacteria is essential in the creation of this discourse. His artistic analysis calls into question the categorizations, the personal and institutional relationships formed in politics with and by ideology. First, he outlines the rules of the discourse, giving specific directions concerning how the statements or texts will be created. The predisposed bacteria already have been limited to what can and cannot be said. It would certainly be interesting to have a close reading of the actual sentences formed and "de-formed," however, my reading privileges the porousness and instability of the sentences. It is precisely this ephemeral aspect of the work that constitutes its organic nature accentuating the interconnectedness and temporality of language. To explicitly assign an interpretation would defeat the purpose of the work. As Ortiz also explains how new statements can be made in and between the spaces making the practice, game, and/or interaction both material and discursive at the same time.

4.3 Discursivity and Presence

One of the most popular social networks has become one of the most political platforms of expression. Yet it is also an avenue of poetic expression. It could be said that we are a culture starved for real community engagement: It may fill the desire to engage in our tribe and quench our craving for connection in Twitterverse. While it reduces face-to-face contact and diminishes verbal and non-verbal skills, it does provide new opportunities to understand an individual through their activity on Twitter: their interests, patterns of tweeting, and how they interact with other users. Does it address some psychological needs such as self-esteem, recognition, and self-actualization? Or, is it simply an exercise in unconditional narcissism? Ultimately, it is a new way to listen and talk; of course, it may not influence face-to-face contact at all, but it is a way of connecting. Psychologists may claim that this form of communication is dangerous for its loss of empathy and rich metalinguistic feedback, such as facial and auditory gestures, that allow complex emotional communication to flow smoothly. There is also the danger of followers turned stalkers and the information overload that multi-tasking brings.

Then there is the danger of losing the boundary between the speed of the internet and our brain's processing speeds that need to "catch up." The raw numerical information of followers or ratings gives the tweeter immediate feedback about what effects certain actions have on people's willingness to follow or respond. Unlike chat rooms or instant messaging, in Twitter no such virtual boundaries exist since individuals are opening up to the highest number of followers to increase the likelihood of being heard. Similarly, there are no moderators. Twitter celebrity is quite common and can change the social relationships in face-to-face interactions and/or create a celebrity persona sought out by marketing firms, thereby changing the lifestyle of the celebrity tweeter. However, this technological connectivity has also led to tighter demarcation between work and social activities, as companies have developed strict policies regarding the use of social media by their employees. Marketing channels on Twitter by businesses (a specific employee is given the task) are widely used to send marketing messages to targeted groups. Indeed, Twitter has profoundly changed communication by pronouncing the immediacy and efficiency of thought in a stream-of-consciousness manner.

Jessica Pressman has posed important questions to consider when posing this communicative process as literary: *What constitutes literary data? And, what methods or modes of interpretation are literary?* (2014, pp. 101–104). Pressman finds that these tweets "make accessible and representable the cognitive functioning of one person's unconscious to others" (p. 104). In fact, social media is part of a genealogy of literary efforts (such as found in Modernism) to "record the experience of reading someone else's thoughts," as it proposes that it presents "a direct transcription of the writer's thoughts" recorded as stream-of-consciousness (2014, p. 105). The hypertextual network created can be streamlined further with Twitter poetry. Twitter poetry is a widespread phenomenon practiced by many, as seen on YouTube videos and poetry contests sponsored by creative writing programs such as the 2015 Twitter Poetry Contest at the University of Massachusetts, Boston. There is even a #haiku channel, @twitterhaiku. This social media genre is well equipped for poetic expression given its short responses with only 280 (increased in 2017, with the exception make in Japanese, Korean, and Chinese) characters. These haiku-like, stream-of-consciousness creations are perfect for this medium given the immediacy of the publication and its ensuing remarks, and the anonymity of the author if she/he identifies with a creative pen-name.

Karen Villeda and Denise Audirac's *Poetuitéame* (2013) featured in ELO Collection 3[10] was originally presented as a poetry installation but works online as "a drag-and-drop interface to perform keyword searches in Twitter to produce a manipulative visual mapping of the results." The hashtags of "poesía, música, dolor, reggaeton (poetry, music, suffering, reggaeton)" create the mapping of the most current use of these keywords (in Spanish) on Twitter. The user selects the visual mapping by dragging and dropping the combination of keywords in the center of the screen. The resulting verses are all in Spanish and Portuguese (although, "reggaeton" does produce responses in English as well). Apparently, "Twitter poetry" is very common and widely practiced. There are several how-to videos on YouTube that explain that the tweet genre is very much like the Japanese haiku expression of short verse. There's even a name for the perfect tweet haiku: *Twoosh!*

This is another example of how we consider "automatic creative writing" generated through the results generated by searches. The user can select the combination of keywords to see how the poem unfolds through the tweets that have used such words. The result is a network of "verses" (up to twelve at a time) whose voices are diverse and unrelated. The poem is visually appealing in its mapped form and limited to 280 characters (with the exception in Japanese, Korean, and Chinese). While the search is limited to these keywords, it is an ever-present activation of the thoughts of its users, reminding us of the community that we engage with and of the voices that emerge. Poetry in this realm is variable given that the results are always "fresh" despite the same keyword being activated several times. The "poets" are real individuals reachable via Twitter where the conversation can continue. So, while we are experimenting with the network of ideas, we can also personally expand our social network by following these tweets. We are enjoying a cyber-zen moment of mindfulness; we are all interconnected, and we are all part of that same thought process. If everything is indeed composed of energy, the information on Twitter is then a universe of the energy of human awareness composed of snapshots of life, thoughts, and reflections. This ambient awareness (peripheral social awareness produced in and by social media) is formed and then imaged as tweet clouds—visual representations of the words most commonly used. We become complicit in the tweets of these voices and can deduce a philosophical understanding of what eventually leads to a Big Bang of global meta-consciousness: What is the general consensus on suffering? How do we conceive of poetry?

Much like the experimentalists of the avant-garde, this poetry shows us that our daily communication practices (tweeting and other social media, for that matter) are poetic. Our new technological communication affords us global connectivity with persons far and near. In fact, the concept of distance now becomes irrelevant. It is interesting to see how the members in this communicative social system interact with one another, and more generally, with their environment. It is very much like an *autopoietic* network because it undergoes continual structural changes while preserving its web-like pattern of organization. Much like living systems, the components of the network continually produce and transform one another (the advertisements associated with the system are integrally related to the social interactions of its members, who are guiding the market), while the network itself may limit the user to certain advertisements, images, or links. The system is continually renewing itself structurally and "thematically" building up new structures, creating new connections, and replacing old ones in continual cycles. And, like living systems, this social and communicative system seems to maintain its overall identity or pattern of organization. The network's pattern of organization and its structure determine its "identity," but at the same time, it is free in reformatting or creating new pathways produced by the programmer. The systemic properties are properties of the whole; the system cannot be reduced to its parts. The organization of these parts and its configuration are functional patterns in the network. This network then could be seen as a main hive mind, where all individuals are corresponding clusters of knowledge, showing an overall consistency of interrelations that determines the structure of the system. This creative process generates configurations that are constantly new. Like living systems, the ontogeny of these networks is not a linear path of development but rather cyclical. The network is in fact interacting with its environment by "reading" the recurrent interactions, each one triggering structural changes in the system. The network may keep a record of its previous development by keeping a history of structural changes (its ontogeny of sorts—the course of development of an individual organism). It can incorporate "substances" from its environment and processes, changing its connectivity with every "perception." While its environment triggers or suggests these structural changes, it does not direct or implement them; in a way, it can be said that it is a "learning system" that informs the programmer.

4.4 The "Real" Is a Myth

Tatuaje (2014), selected work for the third volume of the Electronic Literature Collection,[11] is a hypertext detective/police novel with a digital interface that simulates old videogame frameworks with frames that invite the user to interact to "discover the meaning" of the protagonist's mysterious tattoo. While this kind of project always has a team of contributors that all are essential to the result,[12] it is noteworthy that the author, narrator, editor, and engineer for the project, Rodolfo J.M., is one of Mexico's national prize winners of the Premio Nacional de Cuento Fantástico y de Ciencia Ficción 2011, Premio Nacional de Cuento Joven: Julio Torri, 2007–2008 for his short story collection *Todo esto sucede bajo el agua* (Fondo Editorial Tierra Adentro, 2008), and the IV Premio de Narrativa Breve Tirant lo Blanc 2006, among others. Mexican critics have lauded his collection of seven short stories examining the role of pornography in Mexico, *La vida amorosa de las cigarras* (Conaculta 1998), for its nuances of colloquial language, and realistic description of decadence of perversion and violence. *Tatuaje* had a year-long running exhibition at the Centro de Cultural Digital in Mexico City (August 14, 2016–December 31, 2017).

From the outset, the reader is invited to interact with the different texts, emails, short messages, images, and sounds so as to begin to collect clues that will reveal the meaning of the tattoo and possibly, the key message of the story. Most fascinating are the author's hints of how this piece is in fact "an interweaving of myths emerged and disseminated on the Web" and how "the work itself turns the media into its own language," leading one to question and search answers: *What are those myths? How is the web contributing to this cultural dimension?* The media objects he highlights (emails, phone messages, letters, maps, images and sounds, and even internet searches) are all contemporary means of communication. Rodolfo J.M. very poetically describes this as a "cybernetic palimpsest," interweaving stories within stories with literary, visual, programming, and sound communicative systems. Overall, he prophesizes "somos los sueños de quienes soñamos, los gestos corporals, los nuevos alfabetos" (we are the dreams of those we dream, the corporal gestures, the new forms of writing). The work reveals the interconnected paths of readers. Online reading makes these networks much more open as readers are invited and

lured into active research, recomposing and repurposing of links; identities of the writer, the reader, and characters all merge in this communicative tangled web of semiotics, magic, mysticism, nomenclature, and code.

The user is said to be relegated to the role of detective but is in fact more of a voyeur as she/he dives into the protagonist's personal correspondence and artifacts, which constitute our contemporary means of communication. Additionally, our surveillance is surveyed and recorded as the user is asked to register to record the clues. Yet, the most playful and intriguing clues are those that are not necessarily linked, but rather insinuated in the novel. J.M. works with the concept of communicative processes, and thereby linguistic codes. One of the most noticeable ones is the playful turn on Mexican colloquial expressions, such as "cara de luna" (*pizza face* in English) when referring to messenger Jabamuel. In addition to using idiomatic expressions or Mexican colloquialisms, J.M. uses the concept of language: how we communicate with technology, how magical systems have their own rhetoric and symbolic codes, how dreams and the unconscious unnerve the structure of the conscious mind to create their own symbolic coding (as in the nightmare that the protagonist experiences on Thursday the 27), how the conscious and unconscious mind work to decipher an unknown foreign tongue. And we can't forget the importance of the language of tattoos, in which images are metaphors, homages, memoirs, even hopes, fears, experiences, and beliefs of the wearer, who may not be readily discerned. In the case of the protagonist, the tattoo is a mystery or secret, a text that urges an explanation. One of the key clues, informs Mariluz, is that the meaning of the tattoo has to do with nomenclature and with Hermes, the Greek messenger god, the divine trickster, and god of boundaries and transgression moving freely between the earthly and divine.

The language of shamanism is also very prevalent in this novel, serving as an overarching metaphor of language. The shamans or *curanderas* interpret the language of magic that they are complicit with. They also believe that dreams speak as the spirit travels and inhabits other worlds. Shamanic language cures as it is pronounced in the rituals. It is a vocal and tactile language of chants and massage. It is in this ritual, which Melquiades is given in the "book of language, the book of wisdom," which only shamans understand, because it is the "angels" who speak to them in their hallucinated state. The language of the angels—the Enochian—is linked to John Dee, philosopher to Queen Elizabeth,

using an Aztec/Mayan obsidian show stone and conjured the Enochian alphabet used as "angel language"[13] and said to be a form of magic.

Computer code is another featured linguistic component in the novel that magically works with the language of dreams—transliterated through the Enochian symbols, "Quien lee el correo receibe la visita de un ángel," "Pelirojo" chimes in. The character "Pelirojo" believes that if it can be traced through the statistics generated, and if he breaks the code with an anti-virus, the email messages would cease, then the dream sequences would also stop. "Cara de luna" is believed to be from another dimension (revealed on Friday the 28th). This sense of "reality" or dimension is in effect a collective communication between hackers around the world working on the same task to develop the necessary coding, between the disconnected yet symbolic meaning in dreams and rational reality, between the dreams and the code, between the nomenclature of the "magical" element of the signs and the "angel language."

It is no coincidence that J.M. begins his adventure in La Calle de Don Juan Manuel in Mexico City, a street that is legendary for its ghost appearances of Don Juan Manuel Solorzano (1635)—a childless married man who mistakenly feels betrayed by his loyal wife and makes a pact with the devil to kill his imagined traitor and thereby going on a rampage killing spree asking any stranger for the time and remarking, "dichoso usted que sabe la hora en que muere" (fortunate is the one who knows the time of his death) before plunging his dagger. The myth persists that his ghostly figure still rummages the streets at night asking for the time. Coincidentally, the Calzada México-Tacuba is one of four principal avenues originally constructed by the Mexicas bridging the island of Tenochitlán surrounded by Lake Texcoco with the mainland then called Tlacopan (now Tacuba avenue). It is this avenue that paved the way for Hernán Cortés to conquer Tenochitlán.

Legendary nuances of mysterious characters are also acknowledged in *Tatuaje*; J.M. names his character Melquiades Orozco as a clear reference to the 50-year veteran official commentator at the Estadio Azteca, Melquiades Sánchez Orozco, a legendary icon of Mexico and *fútbol*. One of the clues places Melquiades in a photograph with the Mexican boxing icon Julio César Chávez. Additionally, we find references in the clues (*pistas*) of the police archive. María Sabina is mentioned as having helped Melquiades. Sabina is actually a true historical figure (1894–1985) from the Sierra Mazateca outside of the pueblo Huautla de Jiménez near Mexico City. She was a shaman or *curandera*, knowledgeable of and skilled

in using "magic" mushrooms that enabled her to speak with God and thereby heal her patients. In fact, Melquiades turns out to be the fictional nephew of Maria Sabina, who educated him. Melquiades was last seen at the Mercado Sonora, one of Mexico City's most renowned open markets, famous for its medicinal herbs and magical and occult items including those of Santería, Santa Muerte, and shamanism. The syncretism between folklore, magic, and religious fanfare all come together in this market. It is the most preeminent place of Mexican folklore, where magic abounds in herbs, an amulet, a candle, and a prayer; illness is warded off or healed; and love potions can attract all, even the most reticent of men, with *atrapahombres* (men-trappers) and *amansaguapos* (handsome-tamers).

The protagonist receives email: "Reality does not exist. Language is a virus," a phrase coined by the American writer and artist William Burroughs, one of three primary figures of the Beat Generation (along with Allen Ginsberg and Jack Kerouac) who happened to have lived in Mexico City, where he was convicted of culpable homicide of his common-law wife, Joan Vollmer. The phrase referred to by J.M. is important to this piece particularly for his own treatment of language and his own examination of our culture of communication. Language is now relegated to technology in its many forms, and we can see its viral behavior. Public and private spaces are no longer maintained—email messages, images, music, and so on, may be easily transmitted and copied. J.M.'s reference to such iconic personas, whose life or experience somehow contributes to the shaping of Mexican popular culture and particularly to the role that colorful myths have had on the interconnectedness of these characters, how they lead their lives and interact with each other.

While *Tatuaje* is rich in historical and cultural innuendos, it is the use of hyperlinks that draws the reader in like an accomplice, an investigative partner of the crime. As readers, we are not only given access to the same artifacts that the protagonist has, but we are able to fully experience them just as the protagonist would: we can see them and hear them. We even experience the surreal events of Thursday the 27th, as we are immersed in a video sketching the bizarre nature of dreams and drawing us into the illogical hallucination of traversing through a space without sequence, seeing and hearing the sounds that, in a real dream, would produce intense sensations of ambivalence, anxiety, and fear. Here we also discover the voice of the mysterious Jabamuel. Yet, while dreams are ephemeral, J.M. gives us a recorded account to replay and re-experience, to scrutinize and decipher. Time and space are perpetually present. We,

as readers, experience the fiction and myths as "reality" in the present moment as we become investigators of the crime. Similarly, the cultural myths so creatively intertwined in the fiction are perceived as the reality that contributes to thicken the plot. Those real Mexican icons, myths, and stories seem no more than fictional fabulations. The "real" is thus a myth as much as Rodolfo J.M.'s story.

4.5 Perpetual Presence of Death

Anacrón: Hipótesis de un producto todo (2012) by Augusto Marquet and Gabriel Wolfson, a hypertext Flash poem, was selected for the ELO Collection 3. The poem, inspired by Gabriel Wolfson's *Caja*, is marked with various synchronicities alluded to by the authors: a lost and found book and a virtual collaboration, among other personal connections. In a personal interview,[14] Marquet commented that it is most markedly inspired by the work and poetic manifest of Mexican poet and conceptual artist Ulises Carrión.

The view of death in Mexico has its origins in the indigenous veneration of the concept. In this Concrete poetry, hyperlinked version, it is no coincidence that the recurring metaphor and theme is *la muerte* (death) which persists in both written and visual and audio links. In ancient times, life and death were perceived as vital processes of creation. *Anacrón* presents the tragedy of death and our reactions to them within the larger Mexican perspective on life and death. There is a sense of "comfort," of normalcy of the aftermath of violence in Mexico, but also an unrelenting feeling of distrust coupled with fear, not for one's own sake but for the loss of others—our children, spouses, parents, brothers; we are connected to family and death on the same wavelength.

Mexicans indeed suffer from a peculiar madness of violent oscillation between optimism and pessimism, philosophizes Emilio Uranga, with "episodes of intense elation and joy and bouts of melancholy and desperation" (2013, pp. 193–195). He stresses that to the Mexican, death is not a deprivation of life; it is simply understood as a fact of the cycle of life—a transition from life to death is an extension of existence since "we are always already on the verge of death" (p. 194). For the Mexican, death neither gives nor takes, just as there is nothing to give nor take from life. This is particularly evident in attitudes toward death with a vibrant, colorful, and even joyful celebration of it every November 1. Mexicans celebrate death with food, drink, dance, and music, honoring

the deceased and telling humorous stories about them. Is there an overarching loss of meaning of death, as Octavio Paz discerns in *The Labyrinth of Solitude*? Paz observed death to be "inconsequential, infertile, self-contained," which simply does not point to a cosmic cycle of renewal as indigenous ancestors conceived, or to a transitory stage from early to heavenly life in more colonial and spiritual times. *Anacrón* addresses salient questions of Mexican culture: Have Mexicans become more silent and inconspicuous about death? This work underscores our interconnectedness even through death as it presents itself in this culture as something not to be feared. Similar to Buddhist traditions, death is a natural process of life. Quantum physics laws tell us that life is made of vibrations that escape time and space, and the linear space–time distinctions between past, present, and future time are just illusions of consciousness.

In *Anacrón* poet and engineer are entangled in the current digital poetic adaptation that maintains the philosophical cultural introspection and further draws the reader/user into the theme of death. The technological dimension draws connections with *Anacrón* as a computer program performing periodic command scheduling running continuously. Curiously, it is the metaphor of *la muerte* in *Anacrón* that seems to act surreptitiously in the system of life, like a daemon working on a subconscious plane and ever-present. That process is very much apparent in the written version of the poem and flourishes with Flash technology. The hyperlinks do aim for a deeper meaning beyond technical effect, while allowing the piece to be enjoyed on the level of visual and acoustic stimulation. On the other hand, if *Anacrón* is a metaphor of the Greek anachronism—a chronological inconsistency of time (against time)—then this piece indeed is echoing the absurdity of death in Mexican culture throughout time: an indigenous inheritance curtailed of its sacred worth, whose overextended encounter makes life meaningless.

The hypertext feature of the poem lets the reader experience the vitality and volatility of the elements directly rather than by assimilation through descriptions of them. That is, death is further reconstituted as a metaphor in the dynamic interfaces of images and sound. The recurring elements center on the family: *padres, hermanos, hijos, esposa, primos*, and *niños* (parents, brothers, sons, wife, cousins, and children). The hyperlinks of the death of the cat—a metaphor for "curiosity killed the cat" or the failed "seven lives of the cat"—also experiment with shifting juxtapositions of imagery and sound. The hyperlinks effectively serve to simulate

the volatility of the emotional state of mourning, fear of death, and experience of loss of loved ones. The associations between the images and sounds of the links produce yet another layer of symbolism that the traditional poem may evoke. The link *Padres muertos* (Dead parents), for example, is immediately conjured with gunshots at the foot of a church—death of the innocent bystanders, death by violence, which has been so prevalent in real life and in current Mexican *telenovelas* about drug dealers. No one is excepted *los suyos* (yours) interconnect with *los míos también* (mine as well) link. In effect, the hyperlinks explore shifts in perception and awareness left to the imagination in traditional poetry. Here the user is able to interact with and have a deeper understanding of the poem's process of symbolic creation. *Anacrón* synthesizes this in the link to *El producto* (The product) as it bombards the viewer with a series of images (the Campbell's soup can, the picture of Marquet, pencil drawings), ending with the sound burst of a rocket launching—the end product is exactly this, a collage of juxtaposed images that replace the structures of traditional verse forms such as meter, rhyme, and word repetition. The recurring theme of death—of others, of self, and of us—is hypersensitized with familiar characterizations of the metaphor that may go unperceived in traditional poetic readings.

4.6 Therapeutic Entanglement

Umbrales (2014) is a collaborative work of narrative therapy written by patients at the Emil Kraepelin Psychiatric Ward of the National Institute of Neurology and Neurosurgery Manuel Velasco in Mexico City, led and coordinated by creative writer Yolanda de la Torre, web designed as a hypertext with Javascript by Raquel Gómez, and edited and produced by Mónica Nepote at the Centro de Cultura Digital in Mexico City. It is selected as part of the third volume of the Electronic Literature Collection.[15] This piece is particularly interesting because it breaks the linear space–time illusion and sheds light on the relation between concepts of virtual space (due to the digital space this piece occupies), physical location (the prison or the reader's space), and psychological or conscious space of being. While the concept of time is conceived as coalescing the past and future into a present (of the writer experiencing the presence of the piece in the moment), the authors propose "to place ourselves in the place, mind and heart of another, asking ourselves: Who are we to cross

from one zone to another?" Immanuel Kant, in his *Critique of Pure Reason*,[16] claimed that time and space are only modes of our perception. That illusion is like a computer program that runs and produces consciousness. In *Umbrales*, the only time is the present time of the reader as she/he traverses the different pages. The virtual space makes it possible to coalesce space and time and to be connected via a hidden dimension.

Darkness (*Oscuridad*) calls attention to the subconscious mind, to the darkness of our being, once shaped by past harmful experiences. The page caption offers: "Algunas zonas de nuestra mente a veces permanecen ocultas, ahí subsisten nuestros recuerdos dolorosos, lejanos, aquellos que nos dejaron huella en nuestra forma de vivir" (Some parts of our mind remain hidden, there reside our painful memories, distant; those that left a mark in our way of living). We are prompted to use the mouse as a lantern to illuminate the darkness on the page and thereby reveal the text, with the sound of somber arrangement of ghostly voices followed by a series of flute music, and interfering noises. The notes are handwritten, complete with sketches of images (trees, figures, flowers), and unclear grammar or misspelled words—imperfections or decorations making the text itself feel more human and more real. These are accounts and remembrances of the patients' past, of their recollection of past experiences and retelling of their journey. We are obliged to use the "flashlight" to illuminate the writing and images as we read what may be blurred or illegible, all the while distracted by the noise of blabbering voices that transitions into more soothing woodwind sounds. Their stories speak of familial connections, gratitude, and understanding, and we are the voyeurs. We both (patient and user) end up sharing the experience of "shedding light" on past experiences, as the patients recall their search for answers to a muddled past, and in our digital experience we metaphorically also fixate on discovering links of experience by illuminating the screen. A shared experience: patient and user are not that different after all; there are no pivotal moments in the texts that pronounce change.

Light (*luz*) asks: if with light we create new worlds, imagine new desires, or enliven our reality. Given that the notes are composed by mental patients whose own world or sense of reality may be obscure, the section seems to shed a ray of hope on their imagined future, their desires for recovery and for family companionship and comradery. Each of the writings yearns for healthy well-being in a not-so-distant future. While the writings are positive, upbeat expressions of self, the user may transform them by reorganizing the words in the sentence, and at each movement a

shuddering sound of a violin or a thundering drum is heard. The sounds don't correlate to any words or moods; they function as the cacophony of displacement that the user is asked to partake in as she/he rearranges sentences, disrupting meaning, erasing desire, and, in a way, experiencing the disruption of meaning and the array of chaos as the original very personal and meaningful pieces become irrelevant and incoherent thoughts. By extension, we are able to experience the mental disjointedness suffered by some of these patients suffer. As one patient implores, "Quiero comprensión, amor, que me entiendan, porque me quiero, porque yo me entiendo" (I yearn for understanding, love, that they understand me, because I love myself, because I understand myself). And another says, "me estoy reencontrando con mis sueños, y al reformularmelos en mi cabeza veo cómo realizarme" (I am refinding myself in my dreams, and as I envision them in my head, I see how to fulfill myself). The interface recreates the illusion of entanglement—of the patients' problematic situation, which is difficult to overcome, and the reader's simultaneous presence, where the past is ever-present as the reader interacts with these moments perpetually repeating themselves without change or resolution. Yet, it is in this moment of light that raised-consciousness emerges, and a patient may see how their awareness of their uniqueness may make them more conscious and mindful. One patient recalls, "me siento un feto porque es cuando mejor surgen mis ideas: en una tranquilidad total y absoluta, ese momento es único y solo mío" (I feel like a fetus/freak because that is best when my ideas emerge: in total and absolute tranquility, that moment is unique and only mine). Similarly, our sense of awareness is heightened as we engage with the manipulation of the text, feel our constricted sense of self, as we can't really make effective changes that produce articulate versions of the text. But more important than the recognition of our present ambivalence to making sense is the shared experience of not being understood as we rewrite senselessly; in a very disjointed way our present existence is conjoined with that of the "present" of the author-patient, and for a split-second both times merge in the experience of reading, playing, and manipulating *Umbrales*.

The Past (*pasado*). The reader is left with a lack of control, given that the section is an automated text deletion of the patients' writing. The ephemeral state of the words resonates in the page's caveat: "Las palabras son asunto de la memoria, aquello que nos arde, aquello que nos hace llorar, aquello que nos hace reir, algunas cosas se van otras se quedan" (Words are a matter of memory, that which stings us, that which makes

us cry, that which makes us laugh, some things go, others remain). Like memories, the words on the screen slowly begin to fade leaving voids in the syntax and making meaning less perceptible. The screen deletions function like memories that inevitably lose narrative logical structure, coalescing one with another.

The Future (*futuro*) is left for the users to actively partake in the process of creation by drawing their own visions of what is to come. We become part of the process of creation; the future is our present consciousness. The interface plays daunting tunes as we take the metaphoric pen to sketch what we can save for future viewers. Additionally, the user can opt to simply view the drawings in silence. Either way, the piece extends the metaphor of creativity and creation to us. Here we are confronted with our own "demons" per se, as we listen to the sullen recordings that aim to inspire our vision of a future; Yolanda de la Torre explains, "Todos imaginamos, dibujamos el futuro. El futuro es hoy un trazo, un nombre, una carta." (We all imagine, we draw the future. The future is today a line, a name, a letter.)

We are connected through networks of communication via language, via digital social platforms, via the nuances of cultural icons and myths, via beliefs or faith in concepts, and technology has made it easier to mirror the process of our entanglement. The linear notion of space–time is no longer the only recourse of understanding. In fact, we experience our connectedness and the simultaneity of time and space. The assumption that the physical world exists independent of our observations is now not only apparent but is the essence of what we perceive when we look at our environment. Our universe emerges from the interplay of consciousness and physical reality, from the subjective and objective realms.

Notes

1. See Elmer (2006).
2. See Bijker (2001).
3. See Winner (1986).
4. See Barbero (2006).
5. See Ortiz (2004).
6. See Cooney (2007).
7. See Trowbridge (2001).
8. See Weintraub (2010). See also his recent book *Latin American Technopoetics: Scientific Explorations in New Media*. New Hispanisms: Cultural and

Literary Studies. New York, NY: Routledge, Taylor & Francis Group, 2018.

9. Ortiz, http://www.moebio.com.
10. Karen Villeda and Denise Audirac, *Poetuitéame*. Electronic Literature Collection, Volume 3, http://collection.eliterature.org/3/work.html?work=poetuiteame, accessed November 26, 2020.
11. Rodolfo J.M. et al. (2014).
12. Contributors include Aranda Leonardo Brito (programmer), César Moheno (producer), Carlos Gamboa (illustrator), Gabriela Gordillo (web designer), and Monica Nepote and Ximena Atristain (publishers).
13. Link given in text: http://elespejogotico.blogspot.mx/2014/01/enoquiano-el-idioma-de-los-angeles.html, accessed February 18, 2019.
14. Informal conversation. July 18–22, 2017. Electronic Literature Organization Conference. Porto, Portugal.
15. See de la Torre et al. (2014).
16. See Kant (1924).

References

Augusto, Marquet, and Gabriel Wolfson. 2012. *Anacrón: hipótesis de un product todo*. Electronic Literature Collection, Volume 3. http://collection.eliterature.org/3/work.html?work=anacron. Accessed February 18, 2019.

Barbero, Jesús Martín. 2006. Between Technology and Culture: Communication and Modernity in Latin America. In *Cultural Agency in the Americas*, edited by Doris Summer, 37–51. Durham and London: Duke University Press.

Bijker, Wiebe E. 2001. "Understanding Technological Culture Through a Constructivist View of Science, Technology, and Society." In *Visions of STS: Counterpoints in Science, Technology, and Society Studies (UPCC Book Collections on Project Muse)*, edited by Carl Mitcham and Stephen H. Cutcliffe, 19–34. New York: State University of New York Press.

Capra, Fritjof. 1997. *The Web of Life: A New Scientific Understanding of Living Systems*. New York: Anchor Books.

Cooney, Paul. 2007. "Argentina's Quarter Century Experiment with Neoliberalism: From Dictatorship to Depression." *Revista de Economia Contemporânea, Rio* 11 (1): 7–37.

De la Torre, Yolanda, Raquel Gómez, and Mónica Nepote. 2014. *Umbrales*. The Electronic Literature Collection, Volume 3. http://collection.eliterature.org/3/work.html?work=umbrales. Accessed February 19, 2019.

Elmer, Greg. 2006. "The Vertical (Layered) Net: Interrogating the Conditions of Network Connectivity." In *Critical Cyberculture Studies*, edited by David Silver and Adrienne Massanari, 159–167. New York and London: New York University Press.

Hayles, N. Katherine. 1999. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: University of Chicago Press.

Kant, Immanuel. 1924. *The Critique of Pure Reason*. Translated by Max F. Müller. London: Macmillan and Co.

Maturana, Humberto R., and Francisco Varela. 1998. *The Tree of Knowledge: The Biological Roots of Human Understanding*. Boston, MA: Shambhala.

Ortiz, Santiago. 2004. *Bacterias Argentinas*. Electronic Literature Collection, Volume 3. http://collection.eliterature.org/3/work.html?work=bacterias-argentinas. Accessed February 18, 2019.

Pressman, Jessica. 2014. *Digital Modernism: Making It New in New Media*. New York: Oxford University Press.

Rodolfo, J. M., Leonardo Brito Aranda, Gabriela Gordillo, César Moheno, Carlos Gamboa, Mónica Nepote, and Ximena Atristain. 2014. *Tatuaje*. Electronic Literature Collection, Volume 3. http://collection.eliterature.org/3/work.html?work=tatuaje. Accessed February 18, 2019.

Stine, Gotved. 2006. "The Construction of Cybersocial Reality." In *Critical Cyberculture Studies*, edited by David Silver and Adrienne Massanari, 168–180. New York and London: New York University Press.

Teubal, Miguel. 2004. "Rise and Collapse of Neoliberalism in Argentina: The Role of Economic Groups." *Journal of Developing Societies* 20 (3–4): 173–188.

Trowbridge, Shannon O'Neil. 2001. "The Role of Ideas in Neoliberal Economic Reform: The Case of Argentina." Department of Government, Harvard University. Presentation at the Latin American Studies Association. Washington, DC, September 5–9.

Uranga, Emilio. 2013. *La idea Mexicana de la muerte*, *Análisis del ser mexicano y otros escritos sobre la filosofía de lo mexicano (1949–1952)*. Mexico: Bonilla Artigas Editores.

Villeda, Karen, and Denise Audira. 2013. *Poetuitéame*. Electronic Literature Collection, Volume 3. http://collection.eliterature.org/3/work.html?work=poetuiteame. Accessed August 31, 2017.

Weintraub, Scott. 2010. "Combinatoria, filogenética lingüística, redes de la complejidad científica: Especulaciones sobre los trabajos digitales interactivos de Santiago-Ortiz." *Arizona Journal of Hispanic Cultural Studies* 14: 299–319.

———. 2018. *Latin American Technopoetics: Scientific Explorations in New Media*. New Hispanisms: Cultural and Literary Studies. New York, NY: Routledge, Taylor & Francis Group.

Winner, Langdon. 1986. *The Whale and the Reactor: A Search for Limits in an Age of High Technology*. Chicago: University of Chicago Press.

Wolfe, Cary. 2010. *What Is Posthumanism?* Minneapolis: University of Minnesota Press.

CHAPTER 5

Where Are We Headed? Why Are We Complacent?

Abstract This chapter dwells on ideological connections related to our "shared patterns of existence" as the works underscore the artists' social activism and anxiety. Fernando Llanos' *videointervenciones* and Eugenio Tisselli's *El 27/The 27th* are social and political critiques in a networked existence. Llanos' videos constitute recordings of urban spaces, sights, and sounds that interfere with the mundane, established signifiers, and projected images. With these artistic and poetic intrusions, *videoman* assumes the role of cultural activist. Tisselli's generative poetry examines meaning through a chain of semantic relations through sounds and images of words. These works draw attention to the networks that we engage in socially, politically, and even historically. The artists make no reservations about their own social activism and political engagement, calling out the reader's complicity.

Keywords Political engagement · Technology · Interconnectedness · Globalization · Activism · Interventions

> When we shut our eyes, the world does not go into hiding.
> Noah ben Shea

A. J. Huizar, *Cosmos, Values, and Consciousness in Latin American Digital Culture*,
https://doi.org/10.1007/978-3-030-45398-5_5

5.1 Political Engagement with Technology

According to the editors of *Digital Media and Political Engagement: A Comparative Study*, political participation depends greatly on institutional arrangements, political circumstances, and levels of socioeconomic development. Digital media may energize the political structures, institutions, and channels to enable participation and mobilization. Unsurprisingly, their research showed that young people across the board (economic, demographic, and geographical factors) make most use of the internet on a daily basis; while younger generations may be less versed in traditional campaign techniques, they are highly tech-savvy. Today, our interest in visual culture is technological and interdisciplinary in nature, where the image is highly politicized in often critical representations of culture and society. This chapter specifically calls into question the implicitly political ideology of this new paradigm of thought and cultural discourse. As explained earlier, the New Age movement is a manifestation of this new cultural discourse that influenced business, politics, economics, religion, education, psychology, and medicine (Kyle, p. 281); it is not a religion, rather it is manifested more as a *zeitgeist*. The idea is that the universe is interconnected and therefore a holistic understanding of how things function is necessary. Orthodox religious practices are replaced by the ideology of the importance of the individual's direct connection to the divine via a meditative consciousness, and the inherent responsibility to work against the threats to world survival. Given the networked structure of the universe, a "systems movement" is a worldview and ethics of this new consciousness. This ideology has built momentum and asks that we become responsible for maintaining and advocating for social justice, the environment, and the urgent problems facing our world.

A networked universal existence thus implies a social and political consideration of where are we headed if we do not acknowledge the implications and consequences of an unjust world politics where globalization usurps power from those who lack the most. The paradigm shift that Thomas Kuhn coined in 1962 is more than a mystical practice; it is an ideological change in cultural discourse that responsibilizes the individual in thinking of and seeking solutions in new ways to problems. As mentioned before, due to scientific inquiries and discoveries, concepts of consciousness, of the relativity of time and space, of entanglements, of networks, etc., all gave more unanswered questions than answers. Most poignantly, this paradigm shift acknowledges how our various economic, social, and

cultural systems are increasingly interdependent. Thus, the threat of economic inequities affects the world; ecological imbalances, atmospheric pollution, and radioactive contamination become world threats despite where they may have begun. Fritjof Capra's "systems view" recognizes the interdependence and connectedness while New Age mystics desperately call for an intuitive awareness (a consciousness) of our connection to the universe.

Fernando Llanos and Eugenio Tisselli are immersed in this new cultural paradigm and respond to it in and with their works; they question why we are complacent about the abuse of and inequities in social representation and the deterioration of the environment. Specifically, the work of these digital artists shows how visual literacy must take into account the image's relation to the collective imagination and universal consciousness. Both artists actively engage in this political ideology of intuitively recognizing whole structures of power and patterns of relationships established.

5.2 Interconnected Globalization

Fernando Llanos is one of many artists who have not been catalogued in the ELO Collection of Literature but whose works certainly reaches audiences at galleries and festivals around the world. He received an arts degree with a specialization in video from the Escuela Nacional de Pintura Escultura y Grabado "La Esmeralda" in Mexico City and is currently professor of video at the same university. In 1998, he won the VIART 1998 video contest in Caracas, Venezuela, in the experimental category with "rpm." His videos have been screened at different festivals and galleries, such as the World Wide Video Festival, Amsterdam; Centro Cultural Du Mexique, Paris; Museo de Fotografía de California, U.S.; Video do minuto, São Paulo; Videochroniques, France; Viper Festival, Switzerland; Interference, France; Festival Medi@terra 2000, Greece; Museo de Bellas Artes de Caracas, Venezuela; Museo de Bellas Artes, Montreal, Canada; and, Festival Transmediale, Berlin. His catalogue of "video-interventions" that ran from 2001 to 2010 document episodes he recorded on site in Porto Alegre, Brazil; Mexico City; Guanajuato, Mexico; Madrid, Spain; Morelia, Michoacan; Belo Horizonte, Brazil; Geneva, Switzerland; Buenos Aires, Argentina; and El Paso, Texas. He has participated in collective groups such as Creación en Movimiento and Jóvenes Creadores, both in Mexico City.

His most recent works include: an independent film, *Matria* (2014) that traces the history of the *charros* in Mexico; this project has gained widespread acclaim and recognized him as one of Mexico's leading young independent filmmakers. His current collaborative art direction and exhibition, "Arte y Resistencia: Fernando Llanos para cultura comunitaria" (October 20, 2019–January 19, 2020) at the Centro Cultural Clavijero includes the film *Kuri, somos fuego* (2019) a documentary about the P'urhepecha indigenous community of Morelia, Michoacán. The art exhibition and documentary are efforts that invite the P'urhepecha community to participate in a collective and collaborative artistic creation to give voice "to the past, present, and future of this community." His work continues to be an advocacy for the marginalized but more importantly it serves as an inspiration for artistic partnership with some of the most disregarded communities in Mexico.

The ideological consciousness of immersing the self with the environment and becoming one is played out in Llanos' *videointervenciones*. A full exhibition of his *videointervenciones* was completed in July 2008 in Morelia, Michoacán at the Museo de Arte Contemporáneo Alfredo Zalce. These works critically engage with the play of power in looking at and being seen. Technically, *videoman* (Llanos) carries a self-designed body camera with pre-selected images projected onto a variety of objects; an assistant simultaneously records this action so that *videoman* also becomes part of the spectacle once presented at the galleries or festivals. The spectators become the impromptu actors, the director/recorder is also a participant, and the selected objects and backdrops are inspiration to Llanos' inquiry of and into culture. James Clifford and his theory of "travelling cultures" come to mind as we take into account not only the culture in question, but also the observer's perspective (specifically the camera lens) and the methodological premises used. Llanos' work posits the media's politics of visuality through which the viewer negotiates meaning and social relationships. He shows that the world he records is actually a construct of representations already understood, organized, and mediated through our understanding of reality, leaving the viewer to deconstruct how those representations have been formed. His approach to filmmaking combines video art, the dialogic of video-gaming, elements of biotechnology, and even references to comics. These recordings demonstrate how spaces can and are appropriated, altered, and re-signified. They also posit how the image viewed through the camera lens is subjected to selection, framing, and personalization. The urban landscape, the objects, and even

its dwellers serve as backdrop, as a moving-living screen where the artist's image is also superimposed on walls, billboards, and other people in an effort both to engage its props and to outrage onlookers. His videointerventions are made up of the interaction between moving digital image, moving living-projector (videoman carries the camera and projector), and life subjects encountered in the urban setting. These video segments interfere with the mundane, with the established signifiers, and with imposing images call the onlookers' attention to reinterpret and rethink preexisting notions of culture, symbols of power, and taboos. His work also shows how the medium of expression is mutable, since anything or anyone can become the immediate set: building façades turn into giant screens with an added symbolic meaning depending on the structure used; people compose the setting but also serve as symbolic background footage and are often the subject of speculation. And, so it is with these artistic intrusions that videoman assumes the role of cultural activist; the technological apparatus affords him the ammunition to point and shoot. Llanos' digital works present a leap to a more inclusive awareness, a person with a more integral consciousness.

In effect, the observer becomes part of the performance, much like the techniques of Augusto Boal's *Theater of the Oppressed* (1960s), which give the performance to the people as an instrument to liberate from oppression. The spectator is, for the most part, the principal actor, as his reactions are observed by other onlookers and, in this case, the responses are recorded by the camera. The camera, as both performer and recorder, confronts social and cultural matters. The activism in these projects, thus, consists of the critical and analytical reflection on social issues, civil and philosophical concerns. Specifically, four videointerventions are analyzed in this chapter: *Orgulho gaucho* (Porto Alegre, Brazil), *Sexo/amor* (Porto Alegre, Brazil), *Terrorismo poético* (Mexico City), and *Orgullo local* (Mexico City).

Orgulho gaúcho calls attention to a collective consciousness, particularly in how the Brazilian community has created its historical images, backed by ideologies and traditions unquestionably consumed by society. This filming interferes with the prosaic existence, provokes anxiety regarding the acceptance of pre-established (and trusted) cultural meanings in order to reinterpret and question those same preexisting notions of culture, including the hegemonic symbols of power and cultural taboos. As Natasha Gentz and Stefan Kramer explain in *Globalization, Cultural*

Identities and Media Representation, interculturalism is more complex than communication between colonizer and its object, as

> it expresses itself primarily within the conflict of every society with itself and every individual with himself and with the multiple internal and external influences from which identity or identities are constructed. (2006, p. 4)

This is precisely how Llanos illustrates the impact of globalization on everyday life, as he documents the reaction to his own critique of how Brazilians from Río Grande do Sul idealize the gaucho hero yet at the same time depreciate the indigenous population recognized neither in history nor, apparently, in cultural icons. In *Orgulho gaúcho* (00:51), Llanos questions Brazilians' recognition and appraisal of the most celebrated icon of Rio Grande do Sul, the gaucho, by imposing images on the face of the statue of the Laçador at the Passeio ao Sítio do Laçador in Porto Alegre. The monument is the official symbol of Porto Alegre and is meant to represent the original settlers of the region. The words *orgulho gaucho* (gaucho pride) appear on the statue, raising the question: What does gaucho pride really mean to the native gauchos of the suburban Porto Alegre? Llanos' images remind his viewers that the gaucho is not a dead hero of the past, forever immortalized in a larger-than-life statue. The gauchos are present and very much a part of rural life at the outskirts of this metropolitan city. Additionally, Llanos projects these scenes on the semitrailers that pass on this route, further implying that the gaucho is also symbolically and metaphorically ever-present in the transported goods on the trucks. Llanos produces situated analyses of specific transcultural configurations that take into account both the complex interplay of social experience and the discursive construction of its reception, as well as the observer's specific point of view in interpreting these works.

For many, globalization threatens both community and the nation-state; it appears to represent forces beyond human control. Llanos documents globalization's impact on everyday lives by drawing on spectator appreciation and reactions as well as on his own ideological critique, rather than rhetoric, which lends his work a very different perspective. This example underlines how globalization becomes a threat to tradition and points to how cultural icons are constructed. Specifically, this videointervention then calls attention to how we form cultural knowledge as well as to the process of constructing cultural identities through discursive formations as cultural symbols—particularly, how this work designs or

critiques a collective identity and the cultural self-perception as an "imagined community."

The spectators serve as witnesses, but the images engage the spectator, and every observer is also an object of observation for the observed, in a perpetual circle of performance engaging the image–sound–cinematic–performative aspects. It reminds us of Jacques Lacan's explanation of how the media always returns the gaze of the observer[1]; the media apparatuses and *dispositifs* and the intermedia aspects of the representation of culture have to become the center of attention. Llanos always films his audience, making them complicit and implicit in the symbolic performance. Their reactions and movements are pervasive in all the films presented on his webpage.

Sexo/amor (00:49) is another example of politicizing the image and the importance of the "glocal" in an age of technological connectivity. That is, no longer are local issues isolated incidents; with the internet, everything is made accessible in Llanos' presentation at the Bienal and later through the archiving of the video on his website. Produced in Porto Alegre, it sheds light on the prostitute sector of the city by projecting the video of a sensual kiss right beside the woman who sells those same sexual favors. Daní, the prostitute, poses for Llanos alongside the video projection of the kiss. The video had to be excluded from the Bienal de Mercosur in Porto Alegre because that same prostitute sued Llanos for exposing her identity without her consent. Parents of the woman claimed that they did not know of their daughter's profession until the exhibition at the Bienal. The lawsuit, along with the newspaper coverage, produced additional publicity for Llanos' video. He has opted to keep such news clippings on his webpage, perhaps to increase awareness of his project, but also to demonstrate how culture sets its own limits on lascivious behavior. The event as well as the video use various filmic conventions that examine and underline the social consciousness and the process of constructing identities as discursive formations of cultural symbols.

Llanos' videointerventions certainly resemble the performance theories of Antonin Artaud's *The Theatre and Its Double*, which intend to surprise and impress spectators with unexpected and impactful situations that reveal the cruelty of the reality (of cultural oppression) in which they live in. Llanos' films do show how the urban spaces are re-appropriated, altered, and re-signified. The urban panorama, its objects, and even its inhabitants all serve as backdrop in his performance, much akin to avant-garde theater productions. We see, for example, how Llanos provokes an

introspection of sorts in *Terrorismo poético* (00:49). Indeed, this piece is an ironic turn of how one might view terrorism, for Llanos the *videointervención* is an irony of the fear and assault that is felt. He effectively desensitizes the intimidation of such an act, as he himself is intruding on the space of his "victims" and even of the viewers. Llanos appears at an airport exit terminal (Aeropuerto Internacional Benito Juarez in Mexico City); with equipment in hand, he projects images of plane crashes on the walls and ceilings outside the terminal. Reactions from the onlookers are minimal: a passerby is heard making a sarcastic slip of the tongue, "¡Qué divertido es esto!" (How amusing this is!); the recording repeats in a loop, possibly to avert the nervous tension that videoman is creating with the catastrophic accidents. There are several types of spectators: those captured by the camera; the onlookers not filmed, only heard; those neither heard nor seen but present during the episode; and the viewer of the film clip. The images projected are reminiscent of the 9/11 terrorist attacks: airplanes crashing and exploding, buildings demolished. The immediate viewers (onlookers and passersby) are reminded of the precarious circumstances of air travel. Simultaneously, these images voice silent, private anxieties and expose them so that they are discussed. Videoman (Llanos) and his assistant appear in all of the episodes: he forms part of the spectacle on the recorded version on his webpage. The recording is in effect witness to the silent private anxieties, making them evident and open for dialogue. The final video version produces an analysis of the transcultural configurations that take into account the very complicated interaction between the social experience and the discursive construction of its reception, as well as our perception as viewers interpreting the recorded film left on the webpage. While the terrorism of 9/11 was a direct attack on American culture, it affected air travelers around the world and served as a reminder of the vulnerability that we all face. Llanos takes a dangerous label "terrorismo" and conjuctures it with "poético" to enact in a performative fashion the same type of fear, confusion, and destruction with a renewed perspective: one of spectacle that forces the onlookers to engage with it. This is an act of consciousness that asks us how our participation activates certain possibilities, and how our attention is key to effecting those changes.

Culture is an ideological concept that influences our beliefs, customs, faith, and even intuition. Llanos' *videointervenciones* invite us to have an awareness of how the cultural process works. *Orgullo local*, for example, is filmed at the site of the famous Towers of Satélite by architect

Luis Barragán and sculptor Mathias Goeritz, symbols of one of Mexico City's largest suburbs. The five towers were painted with primary colors (red, yellow, blue) and white in 1958 and were inaugurated as the symbol of the renaissance and modern city. President Felipe Calderón declared the monument a natural artistic patrimony. More than cultural icons, these towers represented to the local community an integration of a once separated and incomplete suburb under construction. The monument soon became a welcoming symbol of fraternal community, and the towers have undergone continuous redesign (for the 1968 Olympics, they were repainted). Today the Mexican government publicizes the towers for their cultural and physical importance.

In his film, Llanos projects historical clips of the suburb on the towers. His camera also projects the political slogan used in commercials in the late 1950s and early 1960s: "Lo que tu hagas ahora, mañana será el beneficio para tus hijos. Repara tus desperdicios." (What you do today, tomorrow will benefit your children. Pick up your trash.) This appears on one of the towers, followed by images of little cartoon martians in the television program and advertisement for the Ciudad Satélite in the late 1960s. This same character has now become iconic for the Satelin-Torres and is known as "satelines." The martians, according to Llanos, "are the reminder that every inhabitant of Ciudad Satelite…is a martian, a foreigner that is passing through Earth, and at night returns to his planetary bedroom."

> el recordatorio de que todo habitante de Ciudad Satélite (y Allende las fronteras del DF) es un marciano, un extranjero que está de paso en la Tierra y que por las noches, retoma a su planeta dormitorio.

This videointervention is meta-theatrical: it recalls how the towers were first used as advertising gimmicks of the flourishing suburb of Mexico City and now as a trailer for the activist group's cause. As Llanos notes on his website, their purpose is "to investigate and expose the conformist ideology of Ciudad Satélite." From the outset, the site offers a view of dissent from the reception of what this community should be according to the Centro, vis-á-vis what it actually means for its local dwellers. The video projected on the towers effectively shows how the images create an understanding of the society that they aim to represent. At the same time, they make us think how the artist manipulates the vision presented and

how the medium privileges the perspective of its author by focusing on the topic at a skewed angle.

There is even a link to the neighborhood's website, http://www.Satelin-Torres.org, which is also projected on the towers. The website, founded by Llanos, is aimed at building up social conscience around culture, identity, and ideology in/of Ciudad Satélite. It serves as a forum to advertise current events in the area. It also advertises the publication of the book *Satélite: el libro* (2011), co-edited by Fernando Llanos, published by the Autonomous Metropolitan University, and sponsored by various enterprises from the area. The book is a collaboration of communication experts, photographers, visual artists, geographers, historians, architects, journalists, writers, and publicists, who pay tribute to the towers, thus reflecting the pride of the local *satelucos* citizens.

In these videos, Fernando Llanos uses digital language to extract a sense of social consciousness and cultural recognition, be it for the sake of analysis or awareness. These digital musings also evoke a sense of perceptive awareness of how we communicate today, via visual stimuli, technological media, and even digital noise. Critics of visual literacy talk of the delirium of simulation, of how the image forms a passive and immobile human consciousness. These works are examples of effective models of visual communication that tap the scope of imaginative thinking (in order to create the artistic work) and invite viewers to explore local–global connections and examine our views, values, and assumptions.

All of Llanos' interventions explore issues of social justice locally and globally. His projects show that spectators do not cease to think and imagine simply because they are part of a cybernetic and telematic society that only represents and visualizes. These works show us that imagery acutely probes how the social imagination is constructed and how we, as spectators, should also question its legitimacy as it tries to become reality. To be visually literate then calls for a keen awareness of how visual culture (television, the internet, photography, films, paintings, etc.) all present the world in artistic terms as surreal, conceptual, or abstract. As spectators, we are compelled to read images critically and actively determine how we can interpret the world around us through the lens of our own cultural background, values, and experiences. It therefore follows that there will be a range of perspectives on any given issue and that we need self-awareness of our own assumptions and must respect and value a diversity of perspectives. Digital technologies give us a new medium of expression and therefore a new method for expressing creativity and imagination.

Llanos' videointerventions are examples of the new generation of artists that experiment with cultural myths and question how our collective consciousness has adopted these as true, and in doing so raises questions in order to reflect upon the intersections between self, culture, and consciousness. He shows us that the first step is to be aware of what we are activating in the world with the power of our attention. With his videointerventions, he then invites his viewers to experience multiple perspectives and diverse ways of knowing. This kind of open inquiry facilitates the emergence of a collective intelligence and future consciousness. As a conscious activist, Llanos is also change agent and bridge builder using the digital medium in his collaborative work with marginalized communities.

5.3 Activist Interventions

This self-awareness of positionality and political activism is even more poignant in the work of Eugenio Tisselli. He is outspoken and clear about how he envisions his work to affect his audience. Today, political consciousness is defined as a way of seeing, caring about, and acting in the world. It is fueled by the desire for human rights, social justice, and an understanding of power and inequity in social, political, and economic systems, relations, and values. Ultimately, it involves caring about community and seeking the common good. Indeed, these examples of digital culture engage a sense of belonging to a common humanity and inviting viewers to become responsible and active global citizens. In general, these authors see political consciousness as an exploration of who we are, how we have been shaped, and how our values, worldview, and actions can contribute to a better world for all. Their works reflect an active critical consciousness that develop a judicious analysis of inequitable systems and structure and take action in order to transform them. Their political consciousness questions current power dynamics and demagoguery and suggests how we might be able to build new forms of more inclusive and transformative power that improves human life and forges bridges of cooperation across cultural, racial, ethnic, and religious differences. Thus, their works not only shed light on the inequalities or incongruences of society, but also promote political consciousness by proposing critical questions, uncovering truths, and affirming collaborative values—in effect, produce consciousness-raising.

In his article "Nuevas reflexiones sobre por qué he dejado de crear e-Literatura," Eugenio Tisselli draws a clear connection between his creative

work and his social activist agenda, reflecting on his role as an author and how it relates or benefits the world: "¿qué diablos estoy haciendo? ¿Tengo alguna idea clara sobre [esto], de su relación con el mundo?" (What the hell am I doing here? Do I have a clear idea over any of this, of its relationship with the world?) (Tisselli 2012, n.p.). Unequivocally, Tisselli is concerned about the remnants of humans on the planet. He elaborates that the responsibility of electronic literature is to have a situated awareness of artistic practice with sensitivity toward its context. He calls for critical engagement by inviting us (viewers, creators) to perceive and be concerned with how digital works are produced and used. He specifically poses questions that demand our attention, responsibility, and consciousness as a community, particularly regarding how our use of electronic equipment affects other communities who must either produce these or dispose of the discarded items and their by-products. In essence, he asks us to recognize the implications in a transdisciplinary and "multi-sectorial investigation," as he calls it, of pollution, global warming, and devastation of the Earth and especially third-world communities produced by these new technologies. He was criticized for suggesting our complicity in the Earth's devastation by some and applauded by others for taking a stance. What is clear is that this turning point for Tisselli is in fact a recognition of how artists, authors, and critics of e-literature are responding to our need for a more holistic and ethical understanding of the social, environmental, and economic effects of our technological advances. In fact, he specifically asks that critics practice a "turn to ethics," per se in their approach to digital works, but more importantly, in facilitating a vigilance and defense of those communities adversely affected.

In *The 27th/El 27* (2014), Tisselli's work clearly aims to inspire his public to assume active roles to face and resolve global challenges and to become effective contributors to civic engagement. His work is an algorithm- and web-based text that relies on JavaScript. Tisselli calls it "algorithmic politics." It systematically translates fragments of Article 27 of the Mexican Constitution into English as the New York Stock Exchange Composite Index closes with a positive percent variation. It was launched on January 1, 2014, precisely the twentieth anniversary of NAFTA. It was subsequently restarted on February 23, 2016. *The 27th* stopped working on October 31, 2017 while it is still online there weren't any more changes since then due to a modification on the website from which the work retrieves the daily index. The reader and user do nothing to instigate this political action. We are passive observers, and curiously enough,

it is that passivity and that sense of inadequacy to effect change that the author wants to communicate. Nonetheless, as some critics have noted, to a certain extent it is possible to interact with the work: by clicking on each translated sentence, it is possible to track the date of the translation and the exact positive percent variation.

The 27th—much like the actual political and economic situation of the marginalized Mexican citizens—is subject to the interplay of outside forces. It proposes that global networks are not always beneficial to all, as these will "badly translate" the cultures and worse, adversely affect the most vulnerable communities. This creative enterprise alerts us to the political importance of recognizing and acting upon the proposals to reshape economic globalization. As Tisselli explains, NAFTA has adversely affected most of the indigenous populations of Mexico who for generations had fought for landownership and ultimately had counted on the implementation of Mexico's 27th Amendment to maintain their land ownership and subsist. Tisselli's work points to the egregious inequalities of economic globalization and with his critique inadvertently calls for a more just networked system, one where forms of ownership are not extractive, but regenerative and sustainable.

Memory plays a part both in the official Article 27 and in the "forgetting" of the Spanish text replaced by the English translation. Tisselli advocates that Mexican citizens must remember their rights established in this particular Article of the Mexican Constitution, given much has been forgotten. There are, in fact, human rights disregarded because the citizens are not knowledgeable of their rights. Osiris Rodas Yañez of the Mexican show *Vámonos derecho*[2] claims that impunity and corruption would be much less marked in his country if his citizens would know their rights as expressed in the Constitution. Article 27 clearly states that only Mexican citizens may own and work the land, yet he cites the numerous foreign firms that have taken advantage, ravaged the resources, and in effect hurt the most marginalized citizens: the indigenous population. In the same Article 27, however, it says that the State can also grant foreign people this right upon certain conditions. Carlos Elizondo Mayer-Serra, in his academic essay "¿Una nueva Constitución en 2013? El capítulo económico," explains that "el petróleo sigue siendo de la nación mientras no se extraiga, pero lo pueden explotar los particulares, nacionales o extranjeros, con base en contratos específicos"[3] (the oil continues to be of the nation as long as it is not extracted, but it can be exploited by

individuals, nationals, or foreigners, based on specific contracts). Mayer-Serra seems to approve of these kinds of changes made in 2013, he even suggests that the changes should have been more radical in their neoliberal orientation. In fact, changes made in 2013 in the Article 27 were regarded as neoliberal.[4] On the contrary, Tisselli's piece denounces this neoliberal orientation.

Language is key: as in Mexican political discourse, the flowery ineffectual use of words to mask real intent and to sound prolific and articulate without much content is common rhetoric. Discourse is based on linguistic acumen or manipulation of meaning and the effects are worst for the most vulnerable, those with little or no education. In 2015, the Secretaría de Educación Pública (Department of Education) launched a literacy campaign, the "Campaña Nacional de Alfabetización y Abatimiento del Rezago Educativo 2014–2018," to focus on educating the 32 million illiterate citizens, hoping to lower the country's illiteracy rate to 3.5% by 2018 (Secretaria de Educación Publica 2015). Yet despite Rodas Yañez's call to read and understand their rights, as established in the Constitution is an important call to action, those most affected may have little recourse to effect change. Additionally, the legalistic jargon and the profuse and verbose style make language even more inaccessible. These points are captured in Tisselli's *El 27/The 27th* as that particular language is slowly and meticulously replaced by the English translations. What is implied is that "language" in the Constitution might as well be foreign, for it is not understood by affected citizens, nor are the laws and rights properly administered.

Greed replaces justice. Tisselli is deliberate in making his political disgust apparent by clearly selecting to launch his piece on the twentieth anniversary of NAFTA, which joined Canada, Mexico, and the United States in partnership. The original accord focused on economics by breaking down trade barriers between them, creating jobs, and closing the wage gap. The agreement, in effect, put millions of Mexican farmers out of work and decimated Mexico's agriculture. Coincidentally, this spurred the waves of migration to the north. Multinational corporations opened factories in Mexico with low-wage jobs that hurt organized labor and disregarded environmental policies, devastating Mexico's industries. Not surprisingly, on this anniversary, protests arose in Mexico, particularly between Ciudad Juarez and El Paso, Texas. Mexico's challenges include income disparity: while the middle class grows at a slow pace, the country's poor education system continues to have a shortage of skilled

labor for high value-added manufacturers considering a shift to Mexico. Additionally, foreign investment is slowed by the still high-visibility of organized crime. The United States' current attention, according to Ana Swanson of the *Washington Post* (2017), includes a plan to reduce the U.S. trade deficit with Mexico and new rules to govern the trade of services including telecommunications and financial advice, as well as digital goods like music and e-books. It also proposed an "appropriate mechanism" to ensure countries do not manipulate their currency to gain unfair competitive advantage. Mexico, on the other hand, has set goals for renegotiating "prioritizing free access for goods and services, greater labor market integration and a strengthening of energy security" (Stargardter 2017). *The 27th/El 27* is clearly calling for a surveillance of how NAFTA affects the Mexican people. Its algorithmic politics is an automatic erasure of Mexican "rights." We as readers are left as ambivalent (passive) as the Mexican citizens who are left without recourse to act, given that these governmental decisions are also very much influenced by a few highly influential citizens whose interests will benefit from such accords.

Davin Heckman, at the ELO 2017 conference, spoke of Tisselli's inclination toward an Anthropocene poetics and a tendency toward media materialism and media archeology as a method for doing media design and art. It is particularly evident how the profound instability of the natural world informs Tisselli's work. Indeed, ecocriticism theories of the 1990s brought attention to how environmental issues should be of primary philosophical and humanistic concern, and we should engage in discussions that take tangible political action, and thus leave aside our role as critics and artists. What this Anthropocene poetics suggests an inherent interconnectivity: that all beings (humans and non-humans) affect each other and that everything is profoundly intertwined. Scholars have been keen to point to the responsibility that we have as global citizens to live more sustainably. Bruno Latour (2018) warns that we must turn to "new sensitivities" that take into account the interconnectedness. Essentially, he calls for the need for a response of social and environmental awareness, experimenting in different ways with what it means to be consciously aware and how we may respond. Ecocriticism discussions find the Earth understood as a process rather than an object (Garrand 2011, p. 178)—theories analogous to what Varela and Maturana (1992) professed in the 1970s—while at the same time realizing the vast interconnectedness among all living things. Capra (2014), a leader in the systems

view of life, with a recent book on the subject now in its third printing, reminds us that the paradigm shift of the early twenty-first century has been to shift from metaphors of the world as a machine to one of the world characterized by networks—that is, to conceive a holistic worldview as an integrated whole "recognizing the fundamental interdependence of all phenomena and as individuals and societies" (2014, p. 12). Capra is a firm advocate, explaining that this systemic collaboration would better eradicate poverty, stabilize population growth and climate change, and restore the Earth's ecosystems. Experts have written about the benefits of such integrated designs in terms of redesigning energy systems; for example, Lester Brown, in his *Plan B 4.0: Mobilizing to Save Civilization* (2009), calls for a myriad of solutions to address these problems. Similarly, Tisselli's work highlights economist processes as limitless driving forces of global capitalism that operate a network of financial flows (free trade rules) designed without any ethics. The implicit point of *The 27th* is that decisions are often made in favor of economic gain and discount the protection of human values. As a consequence, inequality and social exclusion widen the gap between the rich and poor, increasing global poverty. Climate change further exacerbates all these problems. Tisselli certainly reflects his discontent with the trends of globalization, particularly NAFTA, in Mexico. His work shows how NAFTA has disempowered Mexican citizens and how Article 27 in his new version goes in the same direction. Just as Lester Brown theorizes about how to shift from perpetual economic growth to one that is economically stable and affords social justice, Tisselli's *The 27th* computational deletion of the text shows that growth is not linear nor unlimited. It is cyclical and qualitative, and resources may decline and disintegrate but continue to provide for new growth that is more balanced and multi-dimensional; it enhances the quality of life through generation and regeneration.

His artistic work is a reaction to what economists, public policy analysts, and social theorists such as Joseph E. Stiglitz, Jeremy Rifkin, David W. Orr, Amory B. Lovins[5] stress that the global economy is producing rising social inequality, social exclusion, rapid deterioration of natural environment, and increasing poverty and alienation. Additionally, many environmentalists are interested in learning from nature's system of networks and applying designs of systemic solutions such as recycling systems, designs of buildings and cities, and green architecture design, to name a few examples. While Tisselli is very clear that he does not expect political engagement inspired or enabled by his work, what he hopes to do

is *incite an awareness* of the problems he poses. Tisselli has decided not to repair *The 27th* and not to launch it again. In fact, his more recent *Himno algorítmico hiperacelerado de América del Norte* is a sort of continuation of *The 27th*. It effectively accentuates the demise of the situation, as it keeps "writing" and "transforming" without our active role, it shows our ambivalence and uncontested compliance in the matter.

Since 2016, Eugenio Tisselli has been working as Associate Researcher at the Institute for Integrative Biology specifically on the project "Research and Advocacy for Agroecology" (Swissaid Tanzania); in 2018, his role as Director of the Ojo Voz project (an open-source toolkit for the creation of community memories), he has carried out workshops with communities at risk of exclusion in different parts of the world.[6] One of his most recent works, *Monsters of the Machine/Monstruos de la máquina* exhibited at the Laboral Centro de Arte y Creación Industrial in Asturias, Spain (November 18, 2016–August 31, 2017), centers on his work in Tanzania with rural farmers in an effort to help them find ways to use smartphones and a web application to collect information regarding the effects of climate change on the crops. He explains how the farmers transformed the project into a collaborative one that used these tools to learn from each other—a community tool. Tisselli's art project reflects on this collaboration and posits the warning of how the monstrous components in smart phones and computers are part of the root cause of climate change. His work then is both actively engaging with those most affected (by working with them on site and teaching them these new resources) and repurposing the use of these technologies, while at the same time suggesting an attentiveness to our values, principles, and ideologies that ignore those outside the twenty-first century first-world. Thus, *Monsters of the Machine* is a reflection of our "ideological situatedness" as well as an example of how these monstrous devices can turn back on the problem they "created" and help combat the effects of monopolization of seeds by Monsanto and the drastic effects of global warming. Overall, we can certainly respect Tisselli's insistence on using technology to advocate for the most salient political issues.

Yanina Welp and Jonathan Wheatley's (2012)[7] analysis of the impact of digital media on Latin American politics points out that the effect of digital media on politics depends greatly on the rate of internet diffusion and adoption, the demographic profile of group members, and the organizational features of movements. Nonetheless, digital media has opened up a new space for creativity, dissemination of information, and activism. Not

all e-literature or digital art is activist, and certainly most works do not reach the general public—and those that do tend to be more reflective. Both Llanos and Tisselli—two very different artists, and yet similar—show that their work is indeed engaged in a social critique intended to bring about social, political, or environmental change. Llanos tends to be more of a cultural anthropologist and social commentator, and Tisselli is clearly interested in using technology to advocate political concerns and, in some way, to also show our complicity in environment degradation through our use of technology. Both Llanos and Tisselli respond to the analysis of cultural representation and political struggle in finding sustainable ways of coexisting and becoming proactive advocates for social change and human rights. Most importantly, their work shows a keen responsiveness to how our perceptions, ideologies, and even our social networks are intertwined. Both bring to the realm of electronic literature an ideological perspective.

Indeed, these artists' work opens our eyes to the political issues we face today and suggest that we all at the very least should be cognizant of the effects of such concerns. The political engagement of artists is certainly not new to digital culture, but what is interesting is to note how technology has facilitated them with more collaborative, combinatory, and interactive features that engage the spectator/reader/user in a more intertwined and participatory role. The artist, in effect, loses his role as intermediary much like New Age thought disavows the spiritual intercessor.

Notes

1. Referencing specifically Jacques Lacan (1968).
2. *Vámonos Derecho*, aired on 3a Llamada TV, June 15, 2016, https://www.youtube.com/watch?v=6MkpeRjEViY, accessed March 11, 2019.
3. Carlos Elizondo Mayer-Serra, "¿Una nueva Constitución en 2013?: El capítulo económico," *Cuestiones constitucionales*, no. 31 (2014): 29–56. Recuperado en 05 de noviembre de 2019, de http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1405–91932014000200002&lng=es&tlng=es, accessed 5 November 2019.
4. "Congreso mexicano aprobó la reforma energética" *DW* Latin America, December 12, 2013, https://p.dw.com/p/1AXvP, accessed November 5, 2019.
5. Joseph E. Stiglitz, *The Price of Inequality: How Today's Divided Society Endangers our Future* (2013); Jeremy Rifkin, *The New Industrial Revolution: How Lateral Power Is Transforming Energy, the Economy and the*

World (2011); and David W. Orr, *Dangerous Years: Climate Change, the Long Emergency, and the Way Forward* (2014).

6. The Ojo Voz project can be accessed at http://ojovoz.net. Cited in the Digital Social Innovation Fair 2018: Digital Transformation for a Better Society. https://www.dsifair.eu/speakers/eugenio-tisselli/, accessed November 5, 2019.
7. See Yanina Welp and Jonathan Whatley (2012, pp. 177–199).

References

Alba, Martha de, Dante Busquets, Capron Guénola, Fernando Llanos, and Uriel Waizel. 2011. *Satélite: el libro. Historias suburbanas en la ciudad de México*. Mexico City: UAM Iztapalapa.

Artaud, Antonin. 2013. *The Theatre and Its Double*. London: Alma Books. http://public.eblib.com/choice/publicfullrecord.aspx?p=4826732. Accessed March 11, 2019.

Boal, Augusto. 2008. *Theatre of the Oppressed*. London: Pluto Press.

Brown, Lester. 2009. *Plan B 4.0: Mobilizing to Save Civilization*. New York: W. W. Norton.

Capra, Fritjof, and Pier Luigi Luisi. 2014. *The Systems View of Life: A Unifying Vision*. New York: Cambridge University Press.

Gentz, Natasha, and Stefan Kramer. 2006. *Globalization, Cultural Identities and Media Representation*. Albany: State University of New York.

Garrad, Greg. 2011. *Ecocriticism*, 178. New York: Routledge.

Lacan, Jacques. 1968. *The Language of the Self: The Function of Language in Psychoanalysis*. Translated by Anthony Wilden. Baltimore, MD: Johns Hopkins University Press.

Latour, Bruno. 2018. *Down to Earth: Politics in the New Climate Regime*. Medford, MA: Polity.

Llanos, Fernando. 2001–2010. *Videointervenciones*. http://www.fllanos.com/vi_video/videos.html. Accessed February 21, 2019.

Llanos, Fernando, and Museo de Arte Contemporáneo Alfredo Zalce (Morelia, Michoacan de Ocampo, Mexico). 2008. *Videoman: catálogo de la exhibición de Fernando Llanos*. Mexico: Ediciones Necias.

Maturana, Humberto R., and Francisco Varela. 1992. *The Tree of Knowledge: The Biological Roots of Human Understanding*. Boulder, CO: Shambhala.

Orr, David W. 2016: *Dangerous Years: Climate Change, the Long Emergency, and the Way Forward*. New Haven, CT: Yale University Press.

Rifkin, Jeremy. 2013. *The Third Industrial Revolution: How Lateral Power Is Transforming Energy, the Economy, and the World*. New York: Palgrave Macmillan.

Secretaria de Educación Publica. 2015. "Campaña nacional de alfabetización y abatimiento del rezago educativo," Instituto Nacional para la Educación de los Adultos with the Secretaría de Educación Pública, January 9, 2015. http://www.inea.gob.mx/index.php/cam-nal-alfa-rez-edu.html. Accessed March 11, 2019.

Stargardter, Gabriel. 2017. "Mexico Sets Out NAFTA Goals Ahead of Re-Negotiation Talks: Document." *Reuters*. https://www.reuters.com/article/us-usa-trade-mexico-idUSKBN1AH4VW?il=0. Accessed March 11, 2019.

Stiglitz, Joseph E. 2013. *The Price of Inequality*. New York: W. W. Norton.

Swanson, Ana. 2017. "Trump Administration Unveils Goals in Renegotiating NAFTA." *The Washington Post*. https://www.washingtonpost.com/news/wonk/wp/2017/07/17/trump-administration-outlines-goals-for-nafta-rewrite/. Accessed March 11, 2019.

Tisselli, Eugenio. 2012. "Nuevas reflexiones sobre por qué he dejado de crear E-literatura." *Carácteres: estudios culturales y críticos de la esfera digital* 1 (1): 33–40.

———. 2014. "The 27th. El 27." Electronic Literature Collection, Volume 3. http://collection.eliterature.org/3/work.html?work=the-27th. Accessed March 11, 2019.

———. 2016–2017. "Los monstruos de la máquina," Laboral Centro de Arte y Creación, Asturias, Spain. http://www.laboralcentrodearte.org/es/exposiciones/los-monstruos-de-la-maquina. Accessed March 11, 2019.

"Vámonos Derecho," aired on 3a Llamada TV. June 15, 2016. https://www.youtube.com/watch?v=6MkpeRjEViY. Accessed March 11, 2019.

Welp, Yanina, and Jonathan Whatley. 2012. "The Uses of Digital Media for Contentious Politics in Latin America." In *Digital Media and Political Engagement: A Comparative study*, edited by Eva Anduiza, Michael J. Jensen, and Laia Jorba, 177–199. Cambridge: Cambridge University Press.

CHAPTER 6

Conclusion

Abstract This book aims to spark interest in new media works and electronic literatures as well as to facilitate an understanding of digital culture in Latin America as not just politically activist but also aesthetically rich, dynamic, and quite prolific. The theme of cosmos, values, and consciousness in digital culture underscores the systems, structures, and networks that draw out the interconnectedness of discourses reflected in the works. The scientific discourse of quantum physics, whose discoveries have already been found to parallel ancient Eastern metaphysics, have given rise to our current paradigm. The analyses accentuate how these digital cultural products produced pose epistemological and ontological questions about humanity, and particularly about how our perceptions are interconnected and how these artists' conceptions are reflective of that intuitive awareness.

Keywords Media works · Electronic literatures · Digital culture · Latin America · Cosmos · Values · Consciousness · Quantum physics

Electronic literatures and Latin American digital cultures are aesthetically rich, dynamic, and quite prolific, but for the scope of this book only those works that were most accessible and fit this study's theme were considered.[1] While the analyses primarily focus on a central theme, I am not prescribing definitive explanations or interpretations; rather, this study offers

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a model for creative lines of inquiry with a myriad of questions that investigate the works' creative implications. The works presented here offer glimpses into how imagination is both the subject and the object of an art whose designs are multi-disciplinary and multi-modal.

Digital cultural productions have effectively transformed the way we read, interact, assimilate, and evaluate. Referring back Mario Vargas Llosa's concern for the death of the book and the lack of readership of good literature, my response is that yes, good intellectual inquiry is possible in the digital framework. Digital cultural works reveal that we are not turning into a post-literate culture; rather, we are creating and thereby also reading with images, reading by looking and manipulating. Deep thought is not lost; it is only further informed with horizontal webs that allow for a myriad of possibilities signifying more and different at the same time. The digital works presented here thus effectively propose a new way to read and teach literature.[2] At the university level, classes on both electronic literature and digital humanities are invariably changing the way we understand and read the world around us, which is by far more digitized every day.

While digital works may be considered elusive and difficult to interpret, these nonetheless are fascinating their public at art galleries, new media expositions, and electronic literature festivals. The nature of these pieces or works is varied, at times functioning as electronic literature, at other as digital cultural productions, as Net Art, or as part of art exhibitions at festivals and galleries. I have used the terms *author* and *artist* interchangeably because the notion of author seems limiting, as the creator(s) could very well be an artist whose work seems more poetic than artistic. In most cases, digital culture works are collaborative pieces involving artists, programmers, designers, and artistic visionaries whose final product may seem to fit more in the new media digital arts field. Digital culture further closes the gap between that which we read as artistic, literary, or popular culture.

Because of its interactivity with the user/viewer/reader, I find that digital cultural works practice self-awareness as the texts lead us to consider the nature of the participatory subject and its relationship to others and to its environment. These works use a variety of media and thus require at least a rudimentary knowledge of how to "read" or approach film, video and sound poetics, generative works, and so on. For the reader, this is part of the process of deciphering meaning, although each participant mediates that process differently. Hence, the medium itself may have specific

reading mechanisms, but overall this is left open. Given our immediate access to information, this participatory and engaged practice of reading is not unsurmountable. In fact, it is the way we now read everything (or should be reading): researching terminologies and obscure references, contextualizing the text at hand with background information, discovering images that aid our understanding, listening to that piece of music mentioned in the text, and so on. There is a multiplicity of connections and deviations that we all read into every day, precisely because the internet gives us access to that process. Undoubtedly, these works continue to transform our way of being. The visualizations and abstractions of digital culture have invariably changed the ways we interact with, encounter, and respond to and imagine each other. Overall, digital literacy is important to evaluating, communicating, creating, and sharing content.

In general, digital culture contributes to social and community change in the way we communicate and creatively express ourselves. Connections and networks are maintained across the globe, realizing the "glocal" community. Ideally, it facilitates interaction across socio-economic, political, cultural, religious, and ideological differences. This social change gives people a voice, increases civic participation, and enables the creation of new communities. It has changed work requirements, which now include continuously learning and developing new skills, particularly computational systems. It is no secret that digital literacy and leadership is essential for any career. Digital culture has also transformed our subjectivity in different digital contexts, be these via social media platforms, online blogging spaces, video-gaming mimicking platforms for creative expression, video interventions, interactive novels, and neo-Concrete sound poetics, to name a few examples. These have an effect of creating awareness, understanding, producing an emotional connection, and even positing action or mobilization. On the one hand, digital media facilitates social interaction and empowers people. On the other, these same communication strategies may be used to spread propaganda and mobilize followers. As readers and consumers, we must be cautious and question the appropriateness of statements of global norms and values, of how "free" the internet is and how free it should be to safeguard human rights. Censorship or selective search results may change the information that reaches users, can alter decisions, and can pose risk to civil society.

So then, we come to question what values might we develop by creating with new technologies and participating as users and viewers? As we engage in and with technologies, will these distract us from the "real

world," which will eventually become indistinguishable from reality? We can only hope that these forms of communication might enhance more humanitarian reactions that are proactive for creating a more sustainable environment. In fact, this cultural transformation is in part altered by the change in discourses in science that began at the end of the nineteenth century and that in turn affected narratives in the humanities. This notion of consciousness has certainly permeated the millennial generation, whose genuine concern for future generations is evident. Adrian David Nelson, for example, in his book, *Origins of Consciousness: How the Search to Understand the Nature of Consciousness is Leading to a New View of Reality*, elaborates on the ideological inclination that proposes that a view of consciousness is essential in our critical values in response to what he identifies as "social, geopolitical and environmental cataclysms that face us" (2015, p. 181). Eugenio Tisselli's recent work is an example of this perception for the need to advocate for the preservation and restoration of our environment, and to recognize that everyone's activism and contributions are needed to effect these changes. The final chapter engages with the artistic craft of two Mexican authors whose work is a critical analysis of what they perceive as society's problems. They are indeed the "organic intellectuals" Antonio Gramsci called for to engage in a dialectic that connects to the general public. Gramsci called for a more involved role of intellectuals in society as he saw that everyone has the capacity to reason and intellectualize society's problems. These organic intellectuals are therefore apt to articulate their concerns in the "language of culture," as we see here in Llanos and Tisselli's work. Their works expose situations or problems that encourage scholars, political figures, and the general public to reflect on how changes might be prompted. We could conclude that it is in this chapter that the ideological vent is exposed. Initially, that is what I expected, but I came to the realization that the overarching theme of consciousness and interconnectedness is a strong ideological proclivity in itself.

The digital works selected do indeed show the interconnectedness that both the new paradigm of consciousness proposed by Thomas Kuhn and Bell's theorem that emphasizes "that the universe is fundamentally interconnected, interdependent, and inseparable" (Capra, p. 313). As explained in the introduction, in this new paradigm the ecological, scientific, and spiritual concerns are linked. I believe in Capra's assessment that Eastern ideas of spirituality are also acknowledged in scientific terms in quantum physics, which led to Kuhn's understanding of this new

paradigm of thought as a cultural *zeitgeist*, which inadvertently and almost simultaneously led to an Age of Aquarius or New Age spirituality. It is important to note that this New Age practice is a cultural mindset that challenges binary oppositions of the religious and secular realms of life, and dichotomies are seen misperceptions given the interconnectedness of all things.

Given Latin America as a whole was colonized by Catholic religious and political creed that eradicated any other way of thinking or being, a new paradigm of thought is welcomed. While the region remains primarily Catholic, a cultural shift is certainly palatable particularly because, as René de la Torre explains, the syncretic cultural nature of the region is amiable to New Age reformulations.[3] Yet, this new cultural shift with social and spiritual dimensions is certainly not devoid of its own political inclinations as it recognizes the interconnectivity of the universe and its constituents, and therefore it calls attention to the inherent responsibility as individuals to advocate for ecological sustainability, human rights, and be a voice for social and political concerns. This shift which has been taking place for half a century now, calls for a "spiritual and psychological transformation of individual people."[4]

In Latin American culture, this paradigm shift has helped eradicate the long-standing dualisms of center–periphery, progress–underdevelopment, tradition–modernity, domination–liberation, as Argentine-Mexican philosopher Enrique Dussel notes in his *Ethics of Liberation: In the Age of Globalization and Exclusion* (2013, p. 339). With this new consciousness, social and political issues are assessed more holistically, no longer are these perceived through dualisms that only see two fundamental kinds of categories of things or principles. Holistic problem-solving offers a more comprehensive and contextualized solution that recognizes the interconnection of all things. In the 1980s, Latin America in general experienced drastic changes in the political climate as a tide of democratization effected changes of political power from military to civilian rule. Indeed, Latin America had a new outlook after 1989, with transformative new ways of conceiving culture with heterogeneous plurality, fragmentation, differential conditions, and urban and transnational cultures (p. 339). This underscores the systems, structures, and networks that draw out the interconnectedness of the discourses so beautifully reflected in the digital works thus shown. Obviously, this proliferation of digital works with this thematic or ideological inclination toward expressing a networked view of

consciousness is not exclusive to Latin America. As in all artistic manifestations, the end-products are the results of that unconscious symbolic language absorbed by the artists as they communicate their perspective, their way of making sense sensible. The symbolism may be deliberate by its author or subconsciously or intrinsically speaking within its context.

This in fact is the ideological position: that consciousness is the basis for all value and meaning, that it is not bound by the classical constraints of time and space, that the universe has consciousness and humans are all part of it and are therefore interconnected. While social action may not be their main focus, other artists in some form, consciously or not, are participating in the reflection of the premises of this new paradigm of thought. It is artistic expressions that are able to absorb the unconscious levels, metamorphose them, and effectively reorient them back into the social domain. We can see this in works that showcase the interconnectedness of systems, where artists are communicating ideas more as process and less as structure, where the work conflates the role of observer and participant, where the language of abstract forms and natural processes are invariably intertwined functioning as syntactic devices connected to the meaning of the work, where space and time are continuously engaging, encouraging a state of present awareness and contemplation. We can certainly find remnants of this new *zeitgeist* in the digital works presented here, as these are making critical interventions by calling attention to how our awareness of consciousness has actually created an overall worldview deeply embedded in our "collective psyche" and reflected in our most basic values. Yet, this is only my reading of just a few samples of digital culture produced in Latin America; other scholars have other, nuanced interpretations and certainly have recognized these works for the valuable intellectual inquiry and technological components.

The dialogue between the technological, the scientific, and the metaphysical is valuable, but even more so is how we may learn to *read for meaning* and to recognize how digital culture reflects how we know what we know about the world. My hope is that this book, while maintaining an academic tone, is somewhat thought-provoking to a general reader interested in these metaphysical questions and therefore intrigued to read what has been already termed electronic literature, experience digital cultural productions as well as journey into appreciating contemporary new media installations.

Notes

1. Artists beyond the scope of this study are embraced in the research of the following scholars in the field, including international scholars such as Claudia Kozak (Argentina), Carolina Gainza (Chile), Thea Pitman (UK), Claire Taylor (UK), Jorge Luiz Antonio (Brazil). Scholars in the United States with substantial research in this field include Elika Ortega, Alex Saum-Pascual, Luis Correa Diaz, Hilda Chacón, Scott Weintraub, Eduardo Ledesma, Osvaldo Cleger, and Anahí Alejandra Ré, to name a few. Additionally, the following scholars have either edited volumes on Latin American digital culture or contributed with chapters in anthologies: Sara Castro-Klarén, J. Andrew Brown, Rebecca E. Biron, Edmundo Paz Soldán, and Ignacio López-Calvo.
2. The following are good resources on the teaching of electronic literature: Scott Rettberg's book, *Electronic Literature* (2018); Alex Saum-Pascual's article, "Teaching Electronic Literature as Digital Humanities: A Proposal" (2017); Jessica Pressman's article "Navigating Electronic Literature" (2008); Laura Borràs Castanyer's article "E-Learning and Literary Studies: Towards a New Culture of Teaching" (2008); Roberto Simanowski et al., *Reading Moving Letters: Digital Literature in Research and Teaching: A Handbook* (2010); and Adam Hammond's *Literature in the Digital Age: An Introduction* (2016).
3. See her chapter in *New Age in Latin America: Popular Variations and Ethnic Appropriations* (2016).
4. Richard Kyle, "The Political Ideas of the New Age Movement" (1995), p. 831.

References

Antonio, Jorge Luiz. 2008. *Poesia eletrônica: negociações com os processos digitais.* Obras em dobras. Belo Horizonte: Veradas & Cenários.

Antonio, Jorge Luiz. 2010. *Poesia digital: teoria, história, antologias = Digital Poetry: Theory, History, Anthologies.* São Paulo: Navegar, FAPESP.

Borràs Castanyer, Laura. 2007. "E-Learning and Literary Studies: Towards a New Culture of Teaching." In *The Aesthetics of Net Literature: Writing, Reading and Playing in Programmable Media*, edited by Peter Gendolla and Jörgen Schäfer, 333–354. New Brunswick: Verlag.

Brown, J. Andrew. 2010. *Cyborgs in Latin America*. New York: Palgrave Macmillan.

Bush, Matthew, and Tania Gentic, eds. 2016. *Technology, Literature, and Digital Culture in Latin America: Mediatized Sensibilities in a Globalized Era*. Routledge Interdisciplinary Perspectives on Literature, 28. New York: Routledge, Taylor & Francis Group.

Chacón, Hilda. 2019. *Online Activism in Latin America*. Routledge Studies in New Media and Cyberculture, 38. New York: Routledge.

Chopra, Deepak, and Minas C. Kafatos. 2017. *You Are the Universe: Discovering Your Cosmic Self and Why It Matters*. New York: Harmony Books.

Cleger, Osvaldo. 2010. *Narrar en la era de las blogoficciones: literatura, cultura y sociedad de las redes en el siglo XXI*. Lewiston, NY: Edwin Mellen Press.

Cleger, Osvaldo, and José M. de Amo. 2015. *Formación literaria, hipertextos y web 2.0 en el marco educativo*. Almería: Editorial Universidad de Almería.

Correa-Díaz, Luis, and Scott Weintraub. 2016. *Poesía y poéticas digitales / electrónicas / tecnos / new-media en América Latina: definiciones y exploraciones*. 1st ed. Bogotá, D.C., Colombia: Ediciones Universidad Central.

Dussel, Enrique. 2013. *Ethics of Liberation: In the Age of Globalization and Exclusion*. Durham and London: Duke University Press.

Gainza, Carolina C. 2016. "Poéticas digitales y prácticas politico-culturales en *Esferas* y *Bacterias argentinas* de Santiago Ortiz." In *Poesía y poéticas digitales / electrónicas / tecnos / new-media en América Latina: definiciones y exploraciones*, edited by Luis Correa-Díaz and Scott Weintraub, 1st ed. Bogotá, D.C., Colombia: Ediciones Universidad Central.

———. 2017. "Networks of Collaboration and Creation in Latin American Digital Literature." *CLCWeb: Comparative Literature and Culture* 19 (1). http://dx.doi.org/10.7771/1481–4374.2918. Accessed June 18, 2019.

———. 2018. *Narrativas y poéticas digitales en América Latina: producción literaria en el capitalismo informacional*. 1st ed. Ensayo/literature. Santiago de Chile: Centro de Cultura Digital.

Gramsci, Antonio. 2014. *Antonio Gramsci: Selections from Cultural Writings*. 2nd ed. Edited by Geoffrey Nowell-Smith and David Forgacs. Translated by William Boelhower. Baltimore, MD: Project Muse. https://muse.jhu.edu/book/34779/. Accessed 5 November 5, 2019.

Hammond, Adam. 2016. *Literature in the Digital Age: An Introduction*. Cambridge Introductions to Literature. New York: Cambridge University Press.

Kozak, Claudia. 2006. *Deslindes: ensayos sobre la literatura y sus límites en el siglo XX*. 1st ed. Tesis/Ensayo, 52. Rosario, Argentina: Beatriz Viterbo Editora.

———, ed. 2012. *Tecnopoéticas argentinas: archivo blando de arte y tecnología. Synesthesia 2*. Buenos Aires: Caja Negra Editora.

———. 2014. *Poéticas/políticas tecnológicas en Argentina (1910–2010)*. Colección proyectos de investigación. Paraná, Provincia de Entre Ríos, República Argentina: Editorial Fundación La Hendija.

Kyle, Richard. 1995. "The Political Ideas of the New Age Movement." *Journal of the Church and State* 37 (4) (Autumn): 831–848.

Ledesma, Eduardo. 2016. *Radical Poetry: Aesthetics, Politics, Technology, and the Ibero-American Avant-Gardes, 1900–2015*. SUNY Series in Latin American and Iberian Thought and Culture. Albany, NY: State University of New York Press.

Llanos, Fernando. 2001–2010. *Videointervenciones*. http://www.fllanos.com/vi_video/videos.html. Accessed August 23, 2015.

López Monroy, Iván. 2004. *dfm.ep*. http://textzi.net/dfm. Accessed March 6, 2018.

Mackern, Brian, Gabriel Galli, and Oscar Canario Sánchez. 2008. Recorded live performance. *Temporal de Santa Rosa*. https://vimeo.com/2256192. 15 minutes. Accessed October 23, 2017.

Nelson, Adrian David. 2015. *Origins of Consciousness: How the Search to Understand the Nature of Consciousness Is Leading to a New View of Reality*. Nottingham, UK: Metarising Books.

Ortega, Elika. 2018. "Archives, Libraries, Collections, and Databases: A First Look at Digital Literary Studies in Mexico." *Hispanic Review* 86 (2): 229–247.

Pitman, Thea, and Claire Taylor. 2013. *Latin American Identity in Online Cultural Production*. New York: Routledge.

Pressman, Jessica. 2008. "Navigating Electronic Literature." In *Electronic Literature: New Horizons for the Literate*. http://newhorizons.eliterature.org/essay.php@id=14.html. Accessed March 14, 2019.

Ré, Anahí Alejandra. 2018. "Una excursión a las poéticas digitales latinoamericanas." *Artelogie*. https://journals.openedition.org/artelogie/1607. Accessed March 14, 2019.

Rettberg, Scott. 2019. *Electronic Literature*. Cambridge, UK: Polity Press.

Saum-Pascual, Alex. 2017. "Teaching Electronic Literature as Digital Humanities: A Proposal." *Digital Humanities Quarterly* 11 (3). http://www.digitalhumanities.org/dhq/vol/11/3/000314/000314.html. Accessed March 14, 2019.

Simanowski, Roberto, Jörgen Schäfer, and Peter Gendolla, eds. 2010. *Reading Moving Letters: Digital Literature in Research and Teaching: A Handbook*. New Brunswick: Verlag.

Taylor, Claire, and Thea Pitman. 2007. *Latin American Cyberculture and Cyberliterature*. Liverpool, UK: Liverpool University Press.

Tisselli, Eugenio. 2012. "Nuevas reflexiones sobre por qué he dejado de crear E-literatura." *Carácteres: Estudios culturales y críticos de la esfera digital* 1 (1): 33–40. https://dialnet.unirioja.es/servlet/articulo?codigo=4228552. Accessed March 14, 2019.

———. 2013. “The 27th. El 27.” Electronic Literature Collection, Volume 3, http://collection.eliterature.org/3/work.html?work=the-27th. Accessed March 11, 2019.

———. 2016–2017. “Los monstruos de la máquina,” Laboral Centro de Arte y Creación, Asturias, Spain. http://www.laboralcentrodearte.org/es/exposiciones/los-monstruos-de-la-maquina. Accessed March 10, 2019.

Torre, René de la, Gutiérrez Zúñiga Cristina, and Juárez Huet Nhayeilli, eds. 2016. *New Age in Latin America: Popular Variations and Ethnic Appropriations*. Translated by Nicholas Barrett. Religion in the Americas Series. Vol. 16. Leiden: Brill.

Weintraub, Scott. 2018. *Latin American Technopoetics: Scientific Explorations in New Media*. New Hispanisms: Cultural and Literary Studies. New York: Routledge.

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