

# ARTS AND GAMING, CONVERGENT FEMINISM AND SPECULATIVE FUTURES

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## ABSTRACT

For this Journal of Science and Technology of the Arts special edition, we called for research papers that reflected the theme of *Arts and Games, Convergent Feminism and Speculative Futures*. We were interested in exploring and experimenting with the intricate relationships and coalitions between the arts, convergent feminism and digital and analog technologies, bringing together codes and algorithms, creativity and community involvement. This invitation sparked the interest of some authors with diverse points of view and diverse arts-based research. This special edition presents articles that are likely to pick the interest of a wide audience which questions the role of artificial intelligence in the arts and seeks examples of art-based research that takes advantage of transmedia ecologies and gaming to generate sustainable futures.

Keywords: Transmedia; Gaming; Convergent feminism; Arts-based research; Future ecologies.

The digital revolution of the 1990s was a moment in which a few privileged artists were able to experiment with a set of emerging technologies. At that time artists engaged in discourses which merged simultaneously the technological and scientific with the magic and the speculative. Information and communication technologies and the dissemination of cyberculture at the end of the millennium mixed and integrated the pretended scientific culture of modernity, which emphasized metonymy and its associative powers, with another one that focus on metaphor and post-modernity remix of alternative realities and sensibilities. Even today, in a digital plenitude era (Bolter, 2019), we still live immersed in the disputes between scientific discourses and creative mythologies (Barthes, 2001 [1957]). Digital environments reinvented oral transmission which favors, according to Hans Blumenberg (1990), the vitality of what is transmitted, the arrangement of materials for deformation, for improvisation. Greek tragedy adapts to its audience, for whom these variations were a sequence that were always predisposed to develop a new excitement element. “The public was faced with, at each performance, renewed performances instead of yet another imitation” (Blumenberg, 1990, p. 149). The virtual world is thus “open to the updating of a different narrative path each time the audience log to the system” (Ryan, 2001, pp. 63-64). New combinations and hybridisms have emerged since that time.

Information and communication networks began to disseminate systemic combinations of a transcendental nature that mixed cyber hippies, a group of people who combined flower power ideas from the sixties with techno culture from the nineties, and cyber punks, who combined technological knowledge with an underground culture typical of the eighties. We now know how privileged access to digital technologies and the internet was for people at that time. Those who could control or only have access to the newborn digital tools were also those who were able to legitimize future discourses, knowledge systems and aesthetics. Technological spaces were full of those nostalgic critiques where some people called for a return to romanticism and rural environments and others embrace the chaotic and urban. Thus, anarchic movements found space to express themselves in computer networks and were characterized by an aesthetic that was based on rituals in an attempt to reintegrate science, the logical and the so-called modern objective knowledge, with religion and magic. According to Tabita Rezaire,

by engaging with African and indigenous ancestral technologies of information and communication, we dare to reconcile the worlds of organic matter, energy, and electronics to nurture a mystic-techno-consciousness. So, we decolonize and heal our technologies. (Rezaire, 2022, p. 152)

For the purpose of decoloniality, meaning the effort of thinking beyond the domination of Western hegemony and ideology, it is important to highlight a knowledge conception which is an integrated apparatus, a mix of

empirical and rational feelings, perceptions and conceptions, rather than a set of ideological static entities without embodiment.

Bewitched by the electronic digital transcendental force, jumping from connection to connection, in a hypertextual way, identity became fluid and liquid, dematerialized into the cable mega planetary infrastructure. With the rise of the digital revolution a convergence process took place. This process combined neopaganism and new age cultures inserting them into digital networks with information technology. So, the industrial ego citizen gives way to the eco citizen of the world, a planetary macro-organism based on a hybrid that is simultaneously biological, mechanical and electronic, and that includes humans and machines, networks and societies. Joel de Rosnay's symbiotic human being (1995) places the emphasis on community and regulated adaptive development at a planetary scale. In the same way, Rosi Braidotti's convergent feminism (2022) advocates that we can bring together all the various feminisms, eco, techno and else, in a joint struggle to occupy the technological space with renewed narratives that allow us to live with dignity in a more inclusive way. As McKenzie Wark (2020) states, "the future is a better guide to the present than the past" and if "the internet is no longer a space of possibility" then we must reinvent our future with "rigor, relevance and relationships" (Wark, 2020, pp. 25-66) to avoid the trap of seeing autonomy where only exists authority and to "show the power of a more collaborative approach to knowledge, in which a low theory of psychogeophysics wanders between fields or burrows under them, rather than flying like Icarus above them" (Wark, 2020, p. 66).

The ongoing dematerialized and decentralized global society of networks gave rise in the nineties, according to Scott Lash (see Beck, Giddens & Lash, 1994), to the replacement of a middle class, which was seen in an industrial society as the service class, for a class that is served, and which is based on the accumulation of capital in the form of information. People who dominate technologies are then those who dominate discourses and hold power, while those who are not geographically located in strategic centers or who do not have access to available technologies are excluded. Social asymmetries increased and intersectional theories reemerge to draw attention to ongoing problems at the dawn of a new millennium. For instance, in her analysis of fieldwork in Costa Rica and a transnational feminist digital organization, Firuzeh Shokooh Valle (2023) argues that the narrative of an "ideal Third World technological woman" who combines technological dexterity and keen entrepreneurial instinct with qualities of care and altruism reinforces the stereotype of the idealized female economic figure. According to Firuzeh Valle, the emphasis on the "equalizing" potential of digital technologies ignores the barriers and circumstances that women in the Global South have faced. Also, the book *African women in digital spaces: redefining social movements on the continent and in the diaspora* (Clark & Mohammed, 2023) brings together authors from diverse backgrounds to explore the intersectional experiences of African women and how African

women and activists use social media platforms to build communities and mobilize to interrogate injustices (Odoi, 2023, p. 175).

The planetary network has no borders and for that reason it is a space where women could dream of escaping the oppression of their confined domestic spaces and project themselves beyond the power of men, nation states and religions. As Cornelia Sollfrank (2015, online) considered, the nineties brought to a generation of artists the possibility of experimenting with technologies that revolutionize the world in unprecedented ways and those who understood what was about to happen found themselves in strange and unknown territories that could challenge the complicity between men and technology.

Nowadays, we should question the implications of the ubiquity of digital technologies and of techno-solutionist discourses and policies for solving the complex problems inflicted on historically oppressed communities (Valle, 2023). We should also interrogate the way the Internet disseminates hate and prejudice, but we cannot forget that each medium is simultaneously a manipulative and emancipatory tool. As Tabita Rezaire states,

all technologies are tools that can be used to uplift or damage, depending on their user and usage. It is our responsibility to understand the complexity of the eco-political-spiritual systems that support them, in order to identify their potential to hurt or heal. (Rezaire, 2022, p. 165)

As Rezaire suggests, the digital revolution, has its roots in African divination systems such as the *Ifa* system of the Yoruba people of West Africa. An oracle that uses a binary system.

Arts and interaction design merged with Internet studies can contribute to live with dignity in a planetary scale. If we consider that all technologies are applications of theoretical-practical scientific knowledge with the aim of improving the world, we then must question what technologies are these that only give a voice to a part of the world's population? What technologies are these that are based on algorithms that coerce us into thinking unique thoughts and immutable truths? What technologies are these that shape a world where women, neurodivergent people and other marginalized groups, regardless of their race, religion, sexual orientation, or political affiliation, have no place to express their sensitivity?

Artworks often explore new ways in technological usage immersing the past into the present to speculate about other possibilities, reimagining history, and questioning old knowledge systems. "If knowledge has lost its religion" and is now, as McKenzie Wark (2020, p. 3) suggests "a habit without gods", then we must create pedagogical alternatives to avoid mystification. Symbiosis between organisms and networked biological forms merged with artificial interactive relationships can open possibilities that could contribute to reconstruct environments. Networked lifeforms and

artificial responsive systems can cultivate and compose a new collective subject (Braidotti, 2022).

According to Margaret Rhee:

while poetry and science fiction have been tools for feminist writers and readers to reimagine, and the intersection of the two - science fiction poetry - is a potent means of transformative vision, emerging technologies can offer a tangible means for this magical of speculative encounter. In doing so, opportunities for freedom, imagination, and rebuilding the world into one where we want to be can emerge (...). (2022, p. 205)

Coalitions between people, suggests scientific fiction writer Cixin Liu, are important “in an ever-changing world where the only constant is the passage of time” (Liu, 2022, p. 199). In a hypothetical future “governments of all nations decided to halt space projects and focus on improving the citizens' lives” (Liu, 2022, p. 382) considering that “the best survival guarantee is development” as authoritarian systems represent the greatest obstacle to human progress” (Liu, 2022, p. 459).

Arts and gaming can be activist environments where coalitions of weird connections can occur. Artistical practices and pedagogical knowledge can show us the way forward, avoiding mystifications and mobilizing communities to help find solutions for the current problems. Merging various research methodologies and processes, arts and gaming research methodologies can dismantle power systems and help us speculate about future possibilities. Arts and gaming can also challenge technologies centred on white and male privilege and subvert the serious, rule-oriented research inherited from scientific positivism. Therefore, including playful and artistic approaches in research that questions gender power relations and the growing complexity of ongoing ecological, sociocultural and political-economic changes is a possible horizon to be achieved.

For this Journal of Science and Technology of the Arts special edition, we called for research papers that reflect under the theme of *Arts and Gaming, Convergent Feminism and Speculative Futures*. The diversity of submissions we received show, first and foremost, how this theme can be approached from different perspectives. We tried to make justice to this diversity by selecting papers that are based on different world views: ranging from constructivist to transformative; use different research designs: community-based, practice-led, practice-based, among others; and present diverse methodologies: some closer to social sciences, others closer to artistic research. Some of the works herein presented are grounded in real-world practices and reflections, as they describe either community practices such as workshops or participatory art; or are supported by authentic storytelling or even confessional writing. Others are speculative or abstract as they approach AI's desirable

characteristics for artistic purposes or the subjective gaze in post-digital photography or countering the male gaze in digital games.

Terhi Marttila in *These Gray Hairs Really Scream Out At Me* exposes a practitioner reflection on the transmedia artwork Gray hairs. Her paper contextualizes the artwork in the realm of digital writing, emphasizing how a mix between confessional writing and autofiction may or may not sit with notions of feminist writing. *Gray hairs* operates in the intersection of sexism and ageism, since it deals with the dilemma of dyeing or not our silver hair. Marttila points out that the use of confessional writing often raises questions of discomfort on the reader or even the feeling of being a voyeur. To deconstruct this idea the author discusses the fact that although confessional, the writing itself is nevertheless quite mediated and narrated with intention of capturing the audience, meaning that any fears of voyeurism or intrusion are hardly grounded. The fact that the narrative is mediated creates a distance and safe place for the reader. Besides, as Jo Gill would put it: “where the gaze is invited, there is neither privacy nor invasion” (2001, p. 83).

Our gaze is invited into and mediated by the artworks of the collective *Digitálias*, herein presented by Teresa Furtado in *Digitálias: A Women Art Collective in The Fight Against Gender Violence Through Co-Creative Net Art*. Her exploratory research aims to analyze how the community artistic practice can play a social role to foster empowerment and self-esteem. The method is to organize transmedia and net art co-creative workshops with women victims of domestic violence. The artistic practices developed in these workshops are considered activism, since they seek “social transformation anchored in the emancipation of women, and in ethical and aesthetic points of view and attitudes allied to intersectional feminist movements challenging neoliberal policies that take away women's rights.” The difficult acceptance of participatory art in the art world, which relies on notions of authorship, quality, originality and style to create value, is exacerbated in the case of this collective, since most women in this group are made invisible and subalternised in the art world.

Carla Sousa also deals with gender violence although, differently from *Digitália* collective, she uses a micro scale. In *Exploring Empathy and Intersectionality in Gaming: a Case Study of Sweetheart* (Small, 2019), Sousa conducted a study aimed at examining the ability of the game *SweetXHeart* by Catt Small to promote empathy and consciousness of microaggressions among participants. She chose a white male dominated sample of participants, which largely differed from the characteristics of the main character: an African American woman. In the game, the player assumes the role of this character who is “navigating the intricacies of life, employment, interpersonal connections and personal growth”. The text-based interface allows the user to make mundane decisions about the everyday life of this woman and to appreciate the consequences of those choices. The game’s narrative proposal is committed to realism and this authentic storytelling method resembles the mix of confessional and autofiction writing proposed by Marttila’s *Gray hair*. After playing the

game, each participant was surveyed with the purpose of measuring the promotion of empathy and consciousness towards the microaggressions the character sustained. This is not an easy task, Sousa relied on participant's self-reported data to analyze if the game proved to have the potential to promote the identification of microaggressions.

As in the case of Teresa Furtado's study, workshops were also the starting point for the iterative development of *Futuroscopio*, as described by Diego Alatorre Guzmán in *Instructions and Reflections on How to Play with Time*. *Futuroscopio* evolved from workshops to a tabletop roleplay game aimed at fostering the players agency to transform their present and foresee their future. Whilst in the workshops the participants could count on the facilitation of a moderator, in the game model there is no need for external supervision. Players can facilitate their own experience turning the didactic exercise into a more attractive and playful artifact, where random people are able to explore their future. In this research paper Guzmán also described the process of evaluating the results of this game. Just as in the case of Sousa's evaluation, the players were surveyed after they played the game. In this case, however, the study aimed to evaluate the degree by which *Futuroscopio* supports players' creativity, using a validated creativity scale. Some of the limitations reported on Sousa's paper can certainly be applied to this evaluation too, since - just like empathy - creativity is difficult to define, let alone measure. Still, this evaluation must be done, even if imperfectly since it is an important research and political influential tool.

Just as with the case of creativity and empathy, the *fluidity and potentially deceptive conceptual nature* reported by Gordan Kreković, Antonio Pošćić, Dejan Grba of some terms, is also a problem for outlining key principles that could constitute a framework for artistically desirable AI. In the case of *Towards an Artistic Centered AI*, the difficulty seems to reside in the concepts of art, creativity, and intelligence, whose definition is everchanging, is not clear nor consensual. Moreover, AI technological developments are fast and can potentially change the assumptions of the previous processes. The authors embrace both the socio-technical and the terminology dynamics of AI and aim at this moving target, vigilantly and cautiously so to anticipate "the artistic potentials, trade-offs, issues, or dangers of the emergent AI and AI-related techniques and instruments". Considering the challenges and requirements of contemporary artmaking, the authors present a set of artistically desirable values of AI: Unexpectedness, Diversification, Affordance and Evolvability.

Diana Carvalho asks if AI can really be intelligent, if it can artificially manage to act and respond with emotion, creativity and novelty. In her study entitled *The Human-World relation mediated by images*, this problematization is important as she is dealing with the differences of subjective (inherent to humans) and objective (inherent to machines) points of view for image creation. The author speculates on the possibility of creative activities being carried out by machines, and the ways in which these affect how we humans subjectively see images and learn from them. Carvalho explores through her own photographic practice "a

subjective gaze over a territory,” creating images that are more complex than descriptions, since they give us knowledge about experiencing a place.

The gaze is subjective in Carvalho’s photography, is invited in Marttila’s confessional writing and is scrutinized in Ema Lavrador’s *Video Games Against the Male Gaze*. By choosing a group of games for a mass audience as case studies, the author wants to show how the realistic, diverse, and in-depth portrayals of their main characters counter the male gaze. These female characters have non-normative bodies and behaviours, and their representations creates new narratives and possibilities for the players. Moreover, they can impact and increase diversity of representations in mass media.

This special edition of *Journal of Science and Technology of the Arts*, presents articles that are likely to pick the interest of a wide audience which questions the role of artificial intelligence in the arts and seeks examples of art-based research that takes advantage of transmedia ecologies and gaming to generate sustainable futures.

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