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The Position of Contemporary Hybrid Art Practices in Shaping Ethical Response to AI Vladan Joler and Kate Crawford – Case Study

Abstract: The thesis of this paper rests on the premise that the role of contemporary hybrid art practices, employing technology as a means of expression, has extended to active engagement in the complexities of societal conflicts and shaping philosophical dialogue, which is evident in its subversive endeavors, that have become the points of intersection between power dynamics, technology, and ethics. Namely, the position of art has become the pragmatic and utilitarian one, and art aims at confronting society with the antagonisms of the mechanisms of power and the consequences of high technology development. With a view to support the thesis of this essay, I will analyze Vladan Joler's and Kate Crawford's art project "Anatomy of an AI System". The aim of this essay is to show that the role of hybrid art is reflected in its contribution to the society, by helping it to anticipate and develop policies and systems of rules with a view to regulate behavior in borderline situations of advanced technology and ethics. Research methods applied in this paper are analysis, synthesis, observation, generalization, and comparative text analysis.

Keywords: ethics; artificial intelligence; hybrid art; "Anatomy of an AI System"; Vladan Joler and Kate Crawford.

Introduction

Various sections of society have been significantly affected by current tendencies in contemporary hybrid art practices, including transdisciplinary approaches to artistic production, which gained its impetus in scientific research and technology advancement. Instead of participating and engaging in conventional artistic practices, such as creating metaphors and imitating reality, contemporary artists are seeking to transcend their traditional roles, by means of criticizing, shaping and creating the world itself. Contemporary artists aspire to adopt transdisciplinary methodologies, encompassing not only the subversive application and utilization of technology, AI, and robotics, but also raising ethical questions. While some artists challenge and provoke the institutional role of science, others experiment on living organisms and critique the potential hazards of scientific exploration and application of technology.

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There have been multiple attempts to name recent contemporary art practices that include interdisciplinary approaches, where artists work at the intersection of art, science and technology. Some of these terms include information art, artscience and hybrid art. In the essay, the term *hybrid art* refers to artistic practices that emerge at the crossroads of science, technology, and art.

By *contemporary art,* I refer to artistic practices that are unfolding in the present moment. Contemporary art is the term used to denote current art, that is, the art happening at the moment it is being discussed and written about.[1] By the phrase *the role of art* I consider and refer to the status, function and position of contemporary hybrid art practices and also, various ways in which they are understood, organized and experienced, depending on the historical, social, political and ethical context. In this text, the term *artificial intelligence* will be used following Kate Crawford's perspective who is trying to "escape the notion that artificial intelligence is a purely technical domain".[2] As per Crawford:

> Artificial intelligence, then, is an idea, an infrastructure, an industry, a form of exercising power, and a way of seeing; it's also a manifestation of highly organized capital backed by vast systems of extraction and logistics, with supply chains that wrap around the entire planet. All these things are part of what artificial intelligence is – a two-word phrase onto which is mapped a complex set of expectations, ideologies, desires, and fears.[3]

To support the thesis of this essay, it is essential to provide a comprehensive analysis of the impact of hybrid art on diverse sectors of society, as along with its contributions. First, hybrid art has reverted its objective to fulfilling pragmatic and utilitarian function and contributes to society by invoking dialogues. The dialogues invoked by hybrid art can be both intentional and unintentional outcomes of specific artistic practices. Rather than being defunctionalized, hybrid art retains a political character, avoiding a focus on aestheticization and visuality as its primary concerns.

Art that deals with societal issues has long been criticized for lacking pragmatic character and for its idealistic aspirations, that have no effect in real life. Hybrid art reverted its aim to confronting ethical ambiguities and serving a pragmatic and utilitarian purpose, while simultaneously, enriching ethical debates, that arise as intended and unintended consequences of art production. It is through the facilitation of meaningful debates, that art is serving its functional and practical aim. To fulfil its function, hybrid art needs to critically examine the ethical implications of robotics and AI deployment. The text will focus on the relation between AI ethics and hybrid art. The case study in this essay is the art project "Anatomy of an AI System", by Vladan Joler and Kate Crawford.

[1] Miodrag Šuvaković, *Pojmovnik suvremene umjetnosti* (Zagreb: Horetzky, 2005), 604.

[2] Kate Crawford, *Atlas of AI, Power, Politics, and the Planetary Costs of Artificial Intelligence* (New Haven and London: Yale University Press, 2021), 8.

[3] Ibid., 18–19.

The essay will additionally delve into the subject matter of AI and art as a framework for ethical reflection. Within the scope of political implications of technology, the essay examines AI impact on social control and analyzes the concepts from political philosophy such as freedom, equality, and power in the era of rapid technological advancement. The essay further discusses hybrid art, demonstrating the pragmatic role of art as it exposes the society to antagonisms, arising from power dynamics and the consequences of advanced development of technology.

"Anatomy of an AI System", Vladan Joler and Kate Crawford

"Anatomy of an AI System" is artistic research project by Vladan Joler, artist and founder of the Share Foundation, in collaboration with Kate Crawford, an AI researcher at New York University's AI Now Institute. The project includes both an infographic and an essay. This project highlights the infrastructure required to support the outcomes generated by users' interactions with smart devices. In other words, this project is uncovering the exploitative side of technology production in form of a map. The project investigates human labor, data, exploitation of resources and hardware infrastructure behind the Amazon Echo unit, a smart speaker that communicates with its users. Amazon Echo devices come equipped with a virtual assistant called Alexa. Alexa is cloud-based technology, meaning its computing processes take place on Amazon Web Services, rather than being executed locally, on the device. As Joler and Crawford put it: "Alexa is a disembodied voice that represents the human-AI interaction interface for an extraordinarily complex set of information processing layers.[4]"

The project is uncovering the exploitative side of technology production in form of a map, aiming at the recognition of the extent of the crisis we participate in, by making the hidden aspects of AI technology production, usage and distribution accessible to lay people.

"Anatomy of an AI System" is a work of art that consists of an essay and a map. The map is divided into three sections, which are production, usage and recycling. The production section has the Periodic Table of Elements, indicating rare Earth elements and other used elements for producing the Amazon Echo components and infrastructure. The diagram above the Periodic Table of Elements is concentrated on the exploitation of resources, the human labor, and the profit behind it, pointing at the issues and hazards of mines, smelters and rafiners, component manufacturers, assemblers, and distributors. This part also illustrates economic disparity among the participants in the process of production of an Amazon Echo dot, starting from users, miners, logistics workers, web developers and the CEO. The middle section of the map is dealing with the usage of the Amazon echo unit. This part makes the audience familiar with how Amazon Echo device is connected to Amazon Internet infrastructure, as its processing tasks are executed on Amazon services. In order to work properly, Alexa needs web servers and Internet, which implies the need for 900 000 km

[4] Vladan Joler and Kate Crawford, "Anatomy of an AI System," https://anatomyof.ai/, acc. on September 3, 2024.

of submarine Internet cables. And lastly, the third part is centered on recycling and shows the process of reusing the components of the abandoned devices. The materials and chemicals used for recycling the abandoned devices pose a risk to human health as well as environmental hazards.

Joler's transdisciplinary approach is reflected in the fusion of various disciplines, neither aiming at creating the singularity, nor exploring distinct areas of knowledge in isolation. In other words, his artistic practice operates at the convergence of more disciplinary pieces of information. This media-nomadic convergence is directed towards the criticism of exploitative dynamics of techno-capitalism. Moravec explains that Joler: "[...] does away with critical theory and instead gathers existing scientific knowledge about AI's political economy and ecology, groups it coherently together, and thereby produces his own working aesthetics.[5]" Joler's and Crawford's work compels the audience to confront cognitive limitations, discursive antagonisms and political disparity associated with technology ethics.

Technology ethics and hybrid art. Political implications of AI

Artificial Intelligence (AI) is currently being implemented across multiple sectors, including corporation automation processes, education, medicine, finance, retail, security and defense, surveillance, and government services, etc. Speaking from a pragmatic standpoint, the debate pertaining to political aspects of AI and robotics, covers broad considerations, including algorithmic bias, autonomy, and freedom, as well as the impact on work. Artificial intelligence (AI) and other digital technologies evoke inquiries into concepts such as freedom, liberty, equality, justice, and democracy, which have been central to philosophical debates for centuries. It has become imperative to scrutinize ethical considerations, pertaining to the deployment of AI and robotics in political context.

Freedom is the concept that has had a very long history in Western philosophy. Positive and negative freedom are two distinct conceptualizations of the Western European notion of freedom, within the realm of political philosophy. As Robert Audi, the American philosopher, explains: "one is free in the positive sense to the extent that one has control over one's life, or rules oneself."[6] He also provides the following definition of the latter:

> One is free in the negative sense if one is not prevented from doing something by another person. One is prevented from doing something if another person makes it impossible for one to do something or uses coercion to prevent one from doing something."[7]

[5] Lisa Moravec, "Training Humans Not Machines: Artificial Intelligence and the Performance Culture of Its Critique," *TDR: The Drama Review* 68, 1 (2024): 51–69.

[6] Robert Audi, *The Cambridge Dictionary of Philosophy, Second Edition* (Cambridge: Cambridge University Press, 1999), 723.

[7] Ibid., 723.

In terms of positive freedom, advancements in AI technology offer access to vast amount of information. This enables users to make more informed decisions that align with their preferences and values. In terms of negative freedom, advancements in AI affect privacy and civil liberties by enabling monitoring of the individuals without their consent. Croatian philosopher Vladimir Filipović, defines equality as follows:

> the social ideal of the equality of all people in duties and rights; that ideal, in particular, often stands out as the negation of class and class privilege and is therefore, contained in the French password revolutions: "Liberté, égalité, fraternité!"[8]

When it comes to the discussions regarding the interplay between the philosophical notion of dignity and artificial intelligence, the prevailing inquiries that arise chiefly focus on the respect for user autonomy, privacy, and labor. A key question is how the Digital Technological Mix, a hybridi of human and nonhuman emerging from AI and related technologies, can promote human dignity.[9] Persons are typically thought to have (1) "human dignity" (an intrinsic moral worth, a basic moral status, or both); and (2) a "sense of dignity" (an awareness of one's dignity inclining toward the expression of one's dignity and the avoidance of humiliation).[10]

In summary, the correlation between AI and human dignity is determined by the way these technologies are developed, deployed and regulated.

In a variety of approaches, artists represent, recontextualize, and sometimes deconstruct and critique the technological and sociopolitical aspects of AI.[11] The realms of contemporary hybrid art are inextricably entwined with AI research and its deployment in various sectors of human life. As a result, contemporary artistic production is profoundly influenced by discursive inconsistencies and ethical dilemmas present in the field of AI.

In the era of rapid advancement of technology, AI is becoming more and more integrated into diverse aspects of society, encompassing politics and governance. As new advancement in technology give rise to innovative theoretical questions, transdisciplinary topics are becoming inspirational fields of research for artists. The fusion of disciplines has become fertile ground for important questions, that that cannot be addressed within discipline-oriented approaches.

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[8] Vladimir Filipović, *Filozofijski riječnik* (Zagreb: Nakladni zavod Matice hrvatske, 1989), 161 (translated by the author).

[9] Joachim von Braun et al., "AI, Robotics, and Humanity: Opportunities, Risks, and Implications for Ethics and Policy," in *Robotics, AI, and Humanity Science, Ethics, and Policy*, ed. Joachim von Braun, Margaret S. Archer, Gregory M. Reichberg, Marcelo Sánchez Sorondo (Cham: Springer, 2021), 10.

[10] Audi, *The Cambridge Dictionary of Philosophy, Second Edition*, 234–35.

[11] Dejan Grba, "The transparency of reason: ethical issues of AI art," in *Handbook of Crtitical Studies of Artificial Intelligence*, ed. Simon Lindgren (Cheltenham: Edward Elgar Publishing, 2023), 507.

Some of the domains where AI is applied include social robotics, machine learning, healthcare, military and defense, education, workplace automation, environmental robotics, etc.

The importance of ethical questions in AI deployment lies in its potential to initiate implementation of strategies that would certify that the advancements in these fields are developed responsibly. Criteria affecting successful deployment of these strategies concern the following areas:

1. the requirement that technology should contribute to human wellbeing, promote equity and respect of human rights,
2. the requirement that technology should contribute to environment wellbeing
3. the requirement that the technology should contribute to animal and all other non-human beings
4. safety and security,
5. respect for privacy,
6. adequate regulation

Apart from evaluating the functionality and regulation criteria, ethical questions extend to broader apprehensions about technology. In their book *An Introduction to Ethics in Robotics and AI*, Christoph Bartneck, et al. claim that:

> Much more importantly, ethical questions underpin the design of AI and robotic systems from defining the application to the details of their implementation. Ethics in AI is therefore much broader and concerns very basic design choices and considerations about which society we would like to live in.[12]

Ethical dilemmas and challenges stemming from AI deployment encompass different topics, such as political implications, anthropocentrism, policy and regulations, people`s attitude towards technology, etc. The discourse on anthropocentrism within academic discussions is further elaborated to include questions of environment, non-human agency, and the diminishment of human agency. One more challenge arising from the advancement in artificial intelligence is related to people`s attitude towards technology, delineating into discussions regarding narratives around AI and fear of autonomous machines being capable of making decisions on their own.

[12] Christoph Bartneck, et al., *An Introduction to Ethics in Robotics and AI* (Cham: Springer, 2021), 103.

Hybrid art as a lens for ethical reflection: In what way does hybrid art extend its scope to active participation in ethical affairs?

The function of contemporary hybrid art, that involves advanced technology, has expanded its scope to active engagement into social matters, simultaneously affecting philosophical discourse. Innovative expressions of high technology art, serving as a critical reflection on societal matters, represent an approach in contemporary art practice that addresses technology ethics. Some of the points reinforcing this claim, are stemming from the interactivity and immersion of hybrid art that concerns advanced technology, from the tolerance towards artists experiments and excessive behavior, justified on the grounds of artistic freedom and freedom of expression, excessive and transgressive hybrid art practices raising awareness of potential risks and repercussions and initiating discussions about ethical standards and regulations, etc. Although it remains bound by the constraints of pragmatism, hybrid art is not defunctionalized, rather it is instrumentalized. An instance supporting this claim is the art project "Anatomy of an AI System", carried out by Vladan Joler and Kate Crawford. The data visualization presents Amazon Echo unit anatomical chart, consisting of production, usage, and recycling sections. This artwork in the form of an infographic, provides insight into the exploitative side of Amazon Echo production, including human labor, environmental implications, and consequences of exploiting planetary resources.

The way that technology is designed, deployed, and distributed is a significant factor in the manner that hybrid art is becoming capable of shaping the society. Interactivity, accessibility, and technical specifications are making it possible for hybrid art to considerably influence the discourses about and around the matters of immense importance, especially the emerging ones. French sociologist Jean Baudrillard pointed out that contemporary society is characterized by simulations that make the boundaries between reality and illusion unclear and blurred. Alienation resulting from 'separation from nature' leads to the creation of artificial nature through media culture. Baudrillard highlights the concepts of 'simulation' and 'simulacrums'.[13] By creating immersive experiences, hybrid art practices that incorporate advanced technology contribute to uncovering ethical ambiguities. In this context, issues on ethical implications engaging with simulated realities and traditional topics, such as representation are becoming the center of the debates in the field of hybrid and performative art practices. Crawford and Joler expose the infrastructure of an AI that end users are not familiar with. Their project is highlighting the disparities and antagonisms between the user-friendly gadgets and the exploitative side of hardware production. In other words, "Anatomy of an AI System" demonstrates the power of hybrid art to expose and problematize the illusion of human-friendly interfaces and the configuration of AI that creates immersive experience.

[13] Miško Šuvaković, *Diskurzivna analiza, Prestupi i/ili pristupi 'diskurzivne analize' filozofiji, poetici, estetici, teoriji i studijama umetnosti i kulture* (Beograd: Univerzitet umetnosti u Beogradu, 2006), 491 (translated by the author).

Given that artistic experimentation and excessive behavior is in some scenarios legally tolerated, which is usually justified on the grounds of artistic freedom and freedom of expression, excessive and transgressive hybrid art practices are expanding their own boundaries in various fields, such as artificial intelligence, robotics, molecular biology, etc. Due to their unclearly defined boundaries, hybrid art practices acquire the potential to extend initial academic debates to real-world experience, by raising awareness of potential risks and repercussions and initiating discussions about ethical standards and regulations. This way, art is becoming a social practice which interweaves various interpretations, maps, and identifies the problems which are not easily discernible within disciplinary-focused research. In this respect, the project that Crawford and Joler have carried out, offers transdisciplinary and unconventional perspectives, demonstrating how art transcends to visual and textual narratives and along with AI, can be viewed as a form of social practice.

The role of art is pragmatic, exposing the society to antagonisms, arising from power dynamics and the consequences of advanced technological development. As such, art plays an active role in shaping society on both theoretical and practical levels. On the practical level, the implications of high-tech subversive art focus on achieving practical societal goals, such as anticipating and establishing policies and regulations at the intersection of technology and ethics. Theoretically, high-tech art production requires new theoretical reflections and appropriate terminology, sparking debates and the development of new terminology.

For the sake of its capacity to expand boundaries, reimagine agency, and engage critically with technological determinism, hybrid art can be interpreted as inherently emancipatory. When discussing emancipatory potential of art, the theoretical questions that emerge include its eventual capability of telling the truth, art as participatory practice, democratization of art and art as "material formalization of the possible"[14]. In his book *A Handbook of the Inaesthetics*, French philosopher Alain Badiou speaks of art as a generic truth procedure and explains that art truths belong only to the art register[15]: "[...] art, as a singular regime of thought is irreducible to philosophy. Immanence: Art is rigorously coextensive with the truths that it generates. Singularity: These truths are given nowhere else than in art".[16]

As defined by Claire Bishop, participatory art includes practices that engage the audience in the creation of artworks. In the spheres of new media and hybrid art, the democratization of art pertains to increasing accessibility and encouraging participation in artistic production. Digital tools and platforms are facilitating the participation and interaction, blurring the boundaries between traditional roles in the art world. Finally, in words by Giraud and Soulard, "material formalization of the

[14] Fabien Giraud and Ida Soulard, "The Marfa Stratum: Contribution to a Theory of Sites," in *Art in the Anthropocene, Encounters Among Aesthetics, Politics, Environments and Epistemologies*, eds. Heather Davis and Etienne Turpin (London: Open Humanities Press, 2015), 179.

[15] I am pointing out at Badiou in this paragraph because I want to refer to the micro impact of contemporary art.

[16] Alain Badiou, *Handbook of Inaesthetics* (Stanford: Stanford University Press, 2005), 9.

possible" refers to what art should aspire to: "Art is not merely a conservation of what we were or a reaction to what we are, but a proper commitment to what we could be; it is the material formalization of the possible."[17] "Anatomy of an AI System" is an artwork that includes a map which depicts production, usage, and recycling processes of Amazon Echo by means of data visualization and an essay that offers investigation into resource extraction, exploitation of people and nature and data. By using visualization as an expressive tool, Crawford and Joler challenge both online audiences and gallery visitors to consider the underlying structures that sustain power mechanisms, thereby making a small but meaningful impact in addressing social injustice and damage inflicted on the planet.

Conclusion

In the essay, I aimed to demonstrate how hybrid art has evolved into an active initiator for transforming philosophical paradigms by highlighting ethical issues.

The first part of the essay is a brief introduction into the subject matter and its goals are announcing the topic and making readers familiar with the terminology used in the text. The following section is a brief description of the art project "Anatomy of an AI System", by Vladan Joler and Kate Crawford. The third section focuses on how artificial intelligence (AI) and other digital technologies raise questions about concepts such as freedom, liberty, equality, justice, and democracy, in a world where technology and art serve as fields for subversion and important frameworks for ethical contemplation. The final part seeks to address the question of how hybrid art extends its scope to active participation in ethical affairs.

The hypothesis rests on the premise that contemporary hybrid art practices play pragmatic role in navigating complex societal concerns by influencing philosophical discourse. As such, art is articulating the discourse beyond anthropocentrism. In the era of rapid technological development, hierarchical societal organization, and violence of human supremacy, it is the responsibility of art to identify and shed light on problematic societal phenomena. Not only does the task of hybrid art imply the type of criticism, restricted within institutional academic circles, but it can also broaden its horizons to initiating the anticipation and formulation of regulatory policies in ethically problematic situations.

[17] Ibid.

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