

Philosophical Studies Series

María Antonia González Valerio
Polona Tratnik

Through the Scope of Life

Art and (Bio)Technologies
Philosophically Revisited



Springer

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Preface

This book is the outcome of a productive partnership and enduring friendship that started when Polona Tratnik visited Mexico for the first time in 2008. During her visit, she delivered a talk at the National Autonomous University of Mexico (UNAM) on the end of art, Arthur Danto and Georg Wilhelm Friedrich Hegel - which was the subject of her doctoral thesis. Two days later, she also spoke about BioArt at Centro Nacional de las Artes in Mexico City.

Afterward, the authors of this book worked on many projects together, meeting in different parts of the world. María Antonia González Valerio founded the work-group and research project Arte+Ciencia based at the Faculty of Philosophy and Literature at UNAM, with which Polona Tratnik has collaborated for all these years. Arte+Ciencia has been a pioneer group within UNAM, producing the first exhibition of biotech and transgenic art in Mexico, several festivals, artworks, academic meetings, workshops, books, courses, experiments, excursions, etc.

From their experience in fields of art and science and their multiple encounters, they came up with the idea to co-author a book that could reunite their insights from a continental philosophical perspective. This book is a critical philosophy applied to the contemporary discourse on art and science, where the authors philosophically address the actual collaboration between art and science, focusing on the issue of life.

By choosing a particular philosophical perspective supported by inter-disciplinary approaches, the book analyzes the production of different epistemes that interact in the contemporary discourse on art and science. It includes well-documented case studies that demonstrate the adoption of certain narratives and practices that change ideas about science and technologies.

González Valerio and Tratnik, being philosophers who draw concepts from artistic processes, make frequent references to multiple artworks in each chapter.

This book has not been written together; it stems from a shared journey of more than a decade where the authors have influenced and learned from each other. The book is the result of combined experiences; it is the product of collective thinking.

The writings are situated in classical ontology and continental aesthetics, yet they deliver fresh posthumanist perspectives on the topics discussed. From a broad

knowledge of the history of philosophy, the volume presents an interpretation of the concept of life that, unlike many of the texts that already exist on this subject, is constructed from a critical and ontological philosophy that emphasizes practical knowledge of the matter and first-hand experience. Its authors have worked experimentally in molecular biology laboratories and specialized laboratories for tissue engineering. They have produced works of art that focus on the intersection of life and biotechnology. The understanding that they have gained from these experiences of the concept of life as an interdisciplinary construct is unique, resulting from the fusion of philosophical abstraction and artistic and scientific experimentation.

The chapters can be read separately as each one debates a different topic, brings forth arguments, and goes into profound discussion of various topics. Even if each chapter can stand alone, the reader is encouraged to engage in this volume as a whole book, even though it is not exactly a monograph. The book presents a discussion that wanders from different points of view and does not constitute a single argument but provides a wide scope with which to think about the concept of life through the various scenarios in which it can be considered from the fields of art and science.

González Valerio and Tratnik share a common philosophical ground and belong to the same tradition as continental philosophy; as such, they include a set of authors who come and go throughout their pages, for example, Aristotle, Martin Heidegger, G.W.F. Hegel, Friedrich Nietzsche, Michel Foucault, Giorgio Agamben, Jacques Derrida, Hannah Arendt, Gilles Deleuze, etc. They also include North American authors known for their arguments, such as Donna Haraway and Evelyn Fox Keller. The nineteenth-century ethology scientist Jakob von Uexküll, whose theory has been incorporated into the philosophical discourse on nature, is also a constant reference of both authors. His famous narrative about the *Umwelt* of a tick appears here and there. Tratnik and González Valerio reflect upon the same set of artists and artworks, mainly those who have worked with biomedicine in the last decades such as Robertina Šebjanič, Marta de Menezes, Adam Zaretsky, Guy Ben-Ary, Eduardo Kac, SymbioticA, Maja Smrekar, Stelarc, Andy Gracie, Bios ex Machina, etc.

González Valerio also draws from the rich Spanish, Mexican, and Latin American philosophical traditions, which bring about different concepts and perspectives to think about life, producing a complex narrative that attempts to bring a less Eurocentric and Nordic standpoint on matters which are urgently in need of reflection in our times, not only nature and life but also climate change, coexistence with other species, the ecological care of spaces, and how we inhabit and produce the city as an ontological device. Tratnik also introduces non-anthropocentric perspectives that challenge the traditional concepts of life, the human, the animal, the established differences between the species as well as the traditional ignorance towards the surrounding milieu, the *Umwelt*, in which the living entity lives and functions and which is to be considered of essential relevance for the consideration of the particular living organism and its mode of living.

There are central concepts that take fundamentally different approaches from the authors. They both make the issue of life their primary concern, and both understand that it must be considered from a broad perspective that includes diverse disciplines

and practices that go from the life sciences to the biotechnologies; at the same time, they profoundly differ in the way in which the issue of life is included in artistic practices. They sustain and argue in favor of a different ontological conception of representation. For Tratnik, the arts have experienced a performative turn that sets aside the representation form, presenting the actual life processes, experimentations, and biological matter in the art scene. Because it is crucial to establish performative situations when working with living entities in biotechnological art, performativity is considered a crucial dimension of art which is entering the field of biotechnology and working with biotechnology. For González Valerio, the question is still about representation and mediation, understanding how something comes to be as the production of reality. They do not refute each other but present arguments based on philosophical aesthetics, art history, ontology, and contemporary art practices that demonstrate how the issue of life must be examined in its multiple cultural and ontological configurations.

The book is composed of three parts. In the first part, the authors take an ontological stance on the question of life. With the intervention of biotechnology, the question of life is reopened. The authors address the related questions, such as mediality, limits, and performativity of life considered at the microscopic scale. The second part presents a step forward in addressing biotechnological intervention into the scope of life. It is devoted to the politics of life. The authors focus on particular cases from the sphere of art, which relate to topics such as the biopower of biotechnology and human politics with regard to animals. The third part explicitly refers to the question of animality. The chapters generally focus on different aspect of the block themes, yet they are also thematically intertwined as the authors address the same topics from different perspectives or upgrade the discussion by focusing on new issues.

The Chap. 1 provides a theoretical framework with which to consider artworks produced in the intertwining of science and biotechnology. From a deeply rooted perspective in classical ontology and continental aesthetics, it enhances the years-long debate which fails to encompass the problem of art that works with bio-media. What is at stake with art, bio, and new media is not the change in representations or means, but how reality appears due to countless mediations and different temporalities. The central question is not the means, but the ontological effect investigated mainly with the category of mediation, which is of a Hegelian basis. By considering some contemporary artworks that have pioneered art which manipulates living entities, this chapter provides an aesthetical discussion about the meaning of the intersection of art and life. What is of paramount importance is how life, nature, and the living are incorporated into the artistic discourse to reflect upon the ontological status of life in the era of biotechnology. Finally, the poetic potency of art is pondered beyond technological abilities because the ontological mediations that operate within the artwork do not depend on the specific technologies that it can use at a certain point but on a complex network of meanings that go farther than the immediate use of biotechnologies in art.

The concept of limit that traverses all the chapters written by González Valerio is central to her arguments. She argues against ontologies that present single entities,

objects of perception, substances, or any other stance that can be posed as something that can be comprehended and apprehended as closed and determined. Instead, she reads “limit” in the Aristotelian tradition as *péras*, that from which something comes to be what it is. Heidegger later recovers this idea of limit to account for entities not as fixed and static but as something that comes to be. Following Hegelian philosophy, entities are not the result of themselves but of that which transcends them, and that is what is here called “limit.” It is a question of inquiring what makes the entity possible. Not based on eternal categories, like the Aristotelian ones, or transcendental ones, like those of Kant, but based on mobile categories where mobility is not identified by historical becoming. The limits are from which something becomes what it is; they are neither objectifiable nor quantifiable; they cannot be the object of mathematization. They are, rather, what allows the entity to arrive at presence. There are historical considerations here, no doubt, but language also plays a fundamental role in its ontological constitution. The limits are plural and change according to perspectives, points of view, motivations, ideologies, epistemes, and materials. Thinking about entities from the point of view of their limits requires accounting for many specificities and nuances; it requires a subtle philosophy that does not trace broad strokes, narrative or historical, that does not consider entities as definitive, closed, or finished, and that does not operate by definitions and solutions. Instead, it is a way of doing philosophy that accompanies *what there is* through its various possibilities.

Art plays a fundamental role because it enables and opens up limits and makes them transparent from certain points of view. Art continues to present the entity as a possibility, as open, and not as a measurable and determinable object. Understood in these terms, the concepts fashioned in González Valerio’s chapters do not provide a direct interpretation of artworks but depart from them to think about the production of the sensible real.

There are two particular conditions on which González Valerio’s reflection has focused fundamentally, the city and animality. Not to define what each one is in each case, but to subtly accompany how they appear through historical transformations, different epochs, and most importantly, through various circumstances, spatialities and limits. The city, particularly Mexico City, is thought of as a limit that participates in the occurrence of something, for example, the animal. The animal, in turn, is the result of mobile limits that go beyond biological and political characterizations. Throughout the text, the idea of animality is constructed together with the category of limit and becomes visible in particular artworks. Before being a biological entity that one should classify and study, animality is a limit, an opening, or an intersection in the spatiality that could be circumstantially comprehended. It is, then, an ontological strategy.

The Chap. 2 starts with the classical point of view that technique is part of the human condition, as argued by José Ortega y Gasset and Martin Heidegger. Still, it continues, stressing that the city should now be considered an ontological device of the human condition. It presents an argument of how to understand technique in an ontological manner, considering how language was conceptualized in the linguistic turn and positioned as an ontological device. Since art was a central concept within

the linguistic turn to understand how language operates in the configuration and production of the sensitive world, art is also positioned as an ontological device to understand how techniques and technologies shape the contemporary world even as it faces climate change. This chapter explores the relationship between arts and techniques. It concludes that the kind of arts generated currently face the ontological problem of technique as a device that produces spaces and subjectivities.

In the Chap. 3, Polona Tratnik addresses the issue of performativity as the central characteristic of biotechnological art. She locates biotechnological art in the biotech era, in which art addresses the issues of life and brings biological life into the artistic context. Biotechnological art cannot avoid using biotechnology as the technology that facilitates interventions into living matter. Art not only intervenes in living matter in laboratories, but aims to show and cultivate tissues and various living cultures in the gallery space. Galleries have turned from spaces for showing artifacts into event spaces, performances, and workshops. In this context, the idea of growing living entities within the artistic milieu testifies to a performative turn, a shift from representational to performative modes of art. Due to the imperative to perform, art which addresses biotechnology requires the presence of living tissues and other living substances in gallery spaces or spaces meant to show art to the public. Tratnik speaks of microperformativity as a specific sort of performativity, ontologically significant for the biotechnological art working with living microorganisms. Tratnik identifies three kinds of microperformativity carried out by biotechnological art in the sense of managing life at the micro level. The most original of these and specific to art which works with living organisms involves the real-time action of living microorganisms or bioengineered tissues within the artistic context in full view of the public. For this sort of performativity, the artist induces microorganisms or engineered tissues to *perform by themselves* for the audience. Tratnik carefully examines the *CellF* project of Guy Ben Ary as an example of such microperformativity.

In the Chap. 4, Tratnik again addresses art in the context of the biotech era. This time she focuses on its biopolitical aspects and examines the performative art of Adam Zaretsky, who stages provocative hands-on workshops in the public space and shares lab skills with the untrained. In doing so, he succeeds in demystifying the biotechnological procedures dealing with genetics which usually take place in scientific laboratories. The products used in the laboratory milieu are in this case replaced with kitchen and household products, blood, excrement, and executed animals. This way Zaretsky viscerally confronts participants with the actual questions arising from experiencing transgenic technology in a non-utilitarian manner. In his lectures, Zaretsky uses sexually connoted metaphors such as “penetration” and “injection,” in order to address biopolitical issues on the microscopic scale in a very complex manner.

Two chapters follow which both originally refer to the artistic project *Lygophilia* by Robertina Šebjanič, yet the authors have different takes and develop their analyses in diverse directions. In the Chap. 5, Tratnik does not analyze Šebjanič’s project as a case study, but indirectly reflects on issues opened by this project, such as the human culturalization of the animal. She addresses three species, the axolotl, *Proteus anguinus*, and *Vampyroteuthis infernalis*, their living environments, and the

relationships of man to these animals whose habitats are much different from that of humans, but who at the same time inhabit the same planet where we coexist in mutual dependence. In her analysis, she examines human approaches to these animals, which range from exhibiting fear of the unknown, of the “power of Nature,” and theoretical admiration, to exercises of human dominance, be it in the form of hero tales or biopower with regenerative medicine. All of these attitudes have very much been current in the modern age and many still are today. Tratnik reflects upon the question of how to conceptualize relations between entities in non-anthropocentric terms. She questions the eventual posthumanist perspective which leads to the comprehension of functional living and non-living systems as connected machines.

González Valerio’s Chap. 6 is a case study of the artwork *Lygophilia* presented in Mexico City in 2018. The artwork is about the axolotl and how it has almost lost its original habitat in Mexico City to become a research animal found in laboratories worldwide. This chapter investigates how an animal like the axolotl is ontologically linked to its medium, to its environment. It presents a historical survey of the transformations of the axolotl’s habitat: Mexico City’s lakes. It also discusses how and when it became an epistemic artifact that helped develop the idea of laboratories for animal studies.

In the third part, the authors philosophically examine animality. Polona Tratnik’s Chap. 7 is entirely focused on artist Maja Smrekar’s work with dogs. Tratnik’s precise analysis allows for a deep dive into the concept of becoming-animal as biopolitical resistance. In the art series *K-9_topology*, Smrekar challenges anthropocentrism by linking biology and culture, in particular addressing the interaction between human and animal species. Within the project *Hybrid Family* from the *K-9_topology* series, she nursed a puppy. Polona Tratnik analyzes the process of becoming a mother in relation to the process of becoming animal and furthermore the process of becoming (m)Other is particularly examined in reference to the unity between mother and child, as regards the notions of *die Umwelt* and Otherness. The process of becoming (m)Other is finally examined as a biopolitical statement or intervention with the investment of the artist’s body with the purpose of re-gaining the position of power, i.e., as an act of resistance to bio-power—the exercise of power over and through bodies.

The Chaps. 8, 9, and 10 contributed by González Valerio can be read as an essay that enquires into the category of animality from an ontological stance. The question concerning animality has emerged with remarkable urgency in recent years, and contemporary thought has devoted a great deal of effort to theorizing about it, as well as to setting politics and economies in motion to shape the place that ought to be occupied by this *other* which is (not) us. The specificity of *humanitas* has been sought far *beyond* animality. It follows, then, to ask what this presumed alterity is—an alterity that has brought us into being. From a different standpoint, animality is not merely *an*-other but *our* other. And owing to its centrality, this perspective has been questioned because, by placing the spotlight on animality, we gloss over how the anthropogenic machine has operated with and from other parcels of the living. Attempts have been made to craft a realm of independence for animality to be considered in and of itself, rather than as a mere horizon for the anthropogenic machine.

But how does animality come forth beyond the meaning ascribed to it by our own quest for identity? How can it be granted autonomy?

The chapters present an interpretation of the category of the animal far beyond biology and animalistic perspectives. Rather, they insert the category in an ontological framework that also ponders space, specifically, the city, as a condition of possibility for the animal, as its environment. It is stated that the animal cannot be understood without the space where it comes to be, whether the city, the factory, the park, the laboratory, etc. The main argument sustained is that the category of the animal cannot be abstracted from the circumstances of its coming into being, from the limits.

The prominence of animality in contemporary discourses has also altered the practices in which it is inscribed. From politics to economy, animality is dislocated because the space of its (dis)appearance is itself dislocated. These chapters dismount the construct of animality as a paradigm of what we have (not) been and as the dreadful boundary of our quest for domination.

The whole argument is an effort to seek modalities of animality, particularly in as much as there is no animal essence to either unveil or grasp. Animality is here regarded as a historical, epistemic, and discursive circumstance rather than a biological entity, one which is intersected by manifold analytic pointers and worldviews.

Mexico City, Mexico
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María Antonia González Valerio
Polona Tratnik

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We have been fortunate enough to have had many occasions to meet and work with fascinating people, artists, curators, philosophers, and scientists, all of whom have significantly contributed to our understanding of art, of bio-media, performativity, and various topics we address in this book. We are thankful to all of them. We are particularly grateful to the artists whose work we study in this book, who we have personally met, and with whom we have had many lively, enjoyable discussions: Maja Smrekar, Robertina Šebjanič, Dragan Živadinov, Adam Zaretsky, Guy Ben-Ary, Marta de Menezes, Victoria Vesna, Laura Beloff, Kira O'Reilly, Lena Ortega (aka Leena Lee), and Andy Gracie.

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