

TECHNO-AESTHETICS

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It.: *Tecnoestetica*; Fr.: *Techno-esthétique*; Germ.: *Techno-Ästhetik*; Span: *Tecno-estética*.

Techno-aesthetics is a concept outlined by Gilbert Simondon. Its axiomatics are based on the premise of an ontological entanglement between the aesthetic and the technical. Techno-aesthetics denotes 1) a phenomenological reality or mode of actualised phenomena, 2) a normative order with inherent ideals, and 3) an epistemic field of interdisciplinary research. Beyond subject-centred approaches like aesthetics of reception or production, techno-aesthetics considers genetic as well as agentic forces of materiality and milieus.

THE CONCEPT OF TECHNO-AESTHETICS ACCORDING TO SIMONDON

French philosopher Gilbert Simondon coined the term techno-aesthetics in a manuscript written in 1982. The original text was intended as a response to a circular letter from Jacques Derrida about the planned foundation of the Collège International de Philosophie (CIPh) in Paris. Simondon never finished or sent the letter. It reemerged after his death and has since been published in multiple editions and translations (Simondon 1992, 2012, 2014; Bolwin *et al.* 2025, 48-65).

Simondon's meditation on techno-aesthetics originates from his "aim [...] to revitalize contemporary philosophy" (Simondon 2012, 1). He unfurls his reflections along multiple ostensive examples from the realms of architecture, industrial design and production, nature and natural phenomena, craftsmanship and fine arts. From this sceptical and fragmentary undertaking, three main characteristics can be deducted.

1) The concept of techno-aesthetics encompasses a mode of actualising phenomena. This idea is in line with Simondon's neo-Aristotelian philosophy of ontogenesis as sketched out in his early monographs on the concept of individuation and on technicity as a discrete mode of existence. In addition, the entanglement of technics and aesthetics takes up on the antique idea of τέχνη [*technê*] that encompasses the poetic practices of fine arts as well as craftsmanship.

Techno-aesthetics enunciates itself in objects as well as in processes. The crucial point is a reciprocal relationality between technical and aesthetic aspects, whereupon the aesthetic notably entails the primal sense of *αἴσθησις* [*aisthesis*]. With its roots in (neo-)Aristotelian philosophy of nature, Simondon's aesthetics is closer to Baumgarten than to Kant. Techno-aesthetics' sensuality is especially apparent in the operative interplay of material forces that facilitates becoming and genesis:

"It's in usage, in action, that [techno-aesthetics] becomes something orgasmic, a tactile means and motor of stimulation. When a nut that is stuck becomes unstuck, one experiences a motoric pleasure, a certain instrumentalized joy, a communication – mediated by the tool – with the thing on which the tool is working. [...] In the same way, the dynamic regime of the axe or the adze gives a very particular pleasure of sensation. It's a type of intuition that's perceptive-motoric and sensorial. The body of the operator gives and receives. Even a machine like the lathe or the milling machine produces this particular sensation" (Simondon 2012, 3).

Other privileged domains of techno-aesthetics according to Simondon are artefacts involved in technical processes as well as artefacts generated by technical means like industrially produced food or architectural structures that interact with the natural surroundings or landscape. Their degree of technicity may vary alongside their aesthetic affordances and qualities; their interrelationship constitutes the techno-aesthetic, which is not only an aesthetics of production and reception but a material, non-human or post-anthropocentric one.

2) Techno-aesthetics inheres in normative dimensions. The techno-aesthetic ideal is suspended between integration and exhibition. The integrative aspect is showcased by a harmonious fusion of technical and aesthetic aspects, whereby one complements the other. Simondon's examples of this kind of successful yet permanently dynamic "intercategorical fusion" (Simondon 2012, 2) are the Garabit viaduct over the Truyère, constructed by Gustave Eiffel, or several buildings by Le Corbusier. Furthermore, Simondon assigns techno-aesthetics with the capacity to re-integrate the late modern alienation between culture and its technical reality – a disaccord he analysed in the introduction to *On the Mode of Existence of Technical Objects* (Simondon 2017, 15-21), his main work on the philosophy of technology. Whereas technical objects – besides their sensual qualities – invite aesthetic contemplation that furthers epistemic growth in knowledge and awareness, the relational embedding of complex technical ensembles into a natural environment or another kind of milieu has the potential to materialise the integration on an aesthetic or rather an aisthetic level. This reparative potential is in line with insights into the enigmatic third part of *Mode of Existence* (Simondon 2017, 164-207; originally published in French in 1958), where Simondon develops a gestalt theoretical model of phases (e.g. magical, religious, technical, or ethical) that dominate and differentiate reality.

Another techno-aesthetic ideal is the exposition or revelation of technicity. Although seemingly contradictory, it is consistent with the cultural need for reconciliation. The revelatory norm demands that the technicity of an object or ensemble not be covered by decorative or assimilating elements. The latter only leads to an inauthentic aestheticism that would aggravate the estrangement between culture and

technics. On the contrary, techno-aesthetical normativity requires the technicity of objects, materials, processes and forces to be laid bare. Simondon calls this attitude or practice “phanérotechnique” (Simondon 2014, 381).

3) Techno-aesthetics is a domain of philosophical inquiry and reflection. It is substantiated by the ontology of technics and aesthetics – separately as well as in their intertwinement. A favoured research method is the phenomenal analysis of objects and their milieus with special regard to genetic relations. Similar to Simondon, other French scholars of technology like André Leroi-Gourhan or Bruno Latour have proven this method of contemplating the sensual appearance of technical objects, ensembles and structures to be fruitful. Their observations and descriptions bring the minor or ordinary into focus while countering technology’s tendency to obfuscation and mystification. Even though fine arts are not the main site of research, Simondon hints at the possibility of a technicity inherent in all works of art and their respective techno-aesthetic evaluation.

MAIN ORIENTATIONS IN THE DEBATE

Techno-aesthetic insights can be applied to processes of invention and design of technical objects. In total, furthering knowledge on techno-aesthetics can help reconcile modern society’s being-in-the-world as one of techno-cultural entanglement, as is the aim of Simondon’s implicated pedagogy (Bontems 2018, 43-45). Therefore, techno-aesthetics can be understood as opposition or even more so as an answer to pessimistic views of the role of technology vis-à-vis nature and society (Višić 2018; Bolwin *et al.* 2025, 30-46).

Whereas Simondon suggested initial thoughts on a possible conceptualisation, further reflection on the notion as well as research in this field of study has since been conducted (e.g. anthology by Ruf and Grabbe 2022). Besides philosophy, techno-aesthetics is of interest for design studies, engineering, the theory of technology, as well as cultural studies and media studies. Its most prolific discussions reference recent phenomena like bio- and nanotechnology (e.g. Guchet 2018 and Loeve 2018), nuclear power (Masco 2004) or the digital (Weibel 1991). With the emergence of a technology-based digital culture, considering the nexus of technics and aesthetics, e.g. in the form of practices, artefacts, styles, or infrastructures, is vital to understanding society’s current condition.

Beyond the ordinary lifeworld, a main site of techno-aesthetic discourse is contemporary media art. Working in and with technical means, this oftentimes installation-based art form reflects on the prerequisites of appearance and perception. Media art showcases the reciprocity of genetic relations between technics and aesthetics and opens modern dichotomies like nature-culture or material-immaterial up for a critical inquiry. Techno-aesthetics resonate well with posthuman theories, considering a more-than-human aisthesis and expressivity.

In this regard, Olga Moskatova (2019) discusses the techno-aesthetics specific to experimental film without camera. She expands the analytical toolbox by differentiating phases of becoming of the filmic

artefacts as well as their imagery and shows how the metastable relations between medium and mediated, figures and grounds are established by ontological operations.

Beyond the explicit usage of the term, techno-aesthetics has been of interest to many scholars of culture, technology and aesthetic topics. Well-known thinkers that elaborate on techno-aesthetical questions are Walter Benjamin (1968) with his work on aesthetics in the age of mechanical reproduction, Roland Barthes (1972, 1981) and Vilém Flusser (1984, 2011) with their respective reflections on photography and other cultural techniques or Deleuze and Guattari (1987) with their theory of machinic assemblages (see also Sauvagnargue 2016). Furthermore, cyberfeminist approaches like Donna Haraway's (1991) cyborg theory or Legacy Russell's (2020) glitch feminism can be construed to pursue a critical agenda of techno-aesthetics by pointing towards its hegemonic structures and operations of structuring.

BIBLIOGRAPHY

R. Barthes, *Mythologies*, New York, Hill and Wang, 1972.

– *Camera Lucida*, New York, Hill and Wang, 1981.

W. Benjamin, *The Work of Art in the Age of Mechanical Reproduction*, in H. Arendt (ed.), *Walter Benjamin: Illuminations*, New York, Schocken Books, 1968: 217-253.

C. Bolwin et al., *Operativität und Sinnlichkeit: Über Gilbert Simondon's Konzept der Techno-Ästhetik*, Berlin, August Verlag, 2025.

V. Bontems, *On the Current Uses of Simondon's Philosophy of Technology*, in S. Loeve et al. (eds.), *French Philosophy of Technology*, Cham, Springer, 2018: 37-49.

G. Deleuze, F. Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, Minneapolis, University of Minnesota Press, 1987.

V. Flusser, *Towards A Philosophy of Photography*, Göttingen, European Photography, 1984.

– *Into the Universe of Technical Images*, Minneapolis, University of Minnesota Press, 2011.

X. Guchet, *Toward an Object-Oriented Philosophy of Technology*, in S. Loeve et al. (eds.), *French Philosophy of Technology*, Cham, Springer, 2018: 237-256.

D.J. Haraway, *A Cyborg Manifesto: Science, Technology, and Socialist Feminism in the Late Twentieth Century*, in D.J. Haraway, *Simians, Cyborgs and Women: The Reinvention of Nature*, New York, Routledge, 1991: 149-182.

S. Loeve, *Design and Aesthetics in Nanotechnology*, in S. Loeve et al. (eds.), *French Philosophy of Technology*, Cham, Springer, 2018: 361-384.

J. Masco, *Nuclear Technoesthetics: Sensory Politics from Trinity to the Virtual Bomb in Los Alamos*, "American Ethnologist", 31, 3 (2004): 1-25.

- O. Moskatova, *Male am Zelluloid. Zum relationalen Materialismus im kamerlosen Film*, Bielefeld, Transcript, 2019.
- O. Ruf, L. Grabbe, *Technik-Ästhetik: Zur Theorie techno-ästhetischer Realität*, Bielefeld, Transcript, 2022.
- L. Russell, *Glitch Feminism: A Manifesto*, London-New York, Verso, 2020.
- A. Sauvagnargues, *Artmachines: Deleuze, Guattari, Simondon*, Edinburgh, Edinburgh University Press, 2016.
- G. Simondon, *Du Mode d'existence des objets techniques*, Paris, Aubier, 1958.
- *Sur la techno-esthétique et Réflexions préalables à une refonte de l'enseignement*, "Les Papiers du College International de Philosophie", 12 (1992): n.p.
- *On Techno-Aesthetics*, "Parrhesia", 14 (2012): 1-8.
- *Réflexions sur la techno-esthétique*, in G. Simondon, *Sur la technique (1953–1983)*, Paris, Presses Universitaires de France, 2014: 379-396.
- *On the Mode of Existence of Technical Objects*, Minneapolis, Univocal Publishing, 2017.
- M. Višić, *Technoaesthetics: Some Remarks on the Convergence of Aesthetics and Technology*, "Philosophy, Sociology, Psychology and History", 17, 1 (2018): 71-88.
- P. Weibel, *Transformationen der Techno-Ästhetik*, in F. Rötzer (ed.), *Digitaler Schein: Ästhetik digitaler Medien*, Frankfurt a.M., Suhrkamp, 1991: 205-246.

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