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***Algorithms we live by. Art and aesthetic
experience in the age of the digital***

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SHORT ABSTRACT. Today, a consistent part of our everyday interaction with art and aesthetic artefacts happens through digital media and platforms. Moreover, it is well known that our preferences and choices are systematically tracked and analyzed by algorithms according to processes that are far from transparent. In fact, we are mostly unaware of the fact that our choices and habits are constantly documented and that these actions are fed back through tailored information, contents and experiences we are exposed to.

We are therefore witnessing the emergence of a complex interrelation between our aesthetic choices, their digital elaboration and transformation, and also the production of content and the dynamic of creative process. All are involved in a process of mutual influences, and are partially determined by the invisible guiding hand of algorithms.

Concerning this issue, in this contribution I will try to point out two main aspects: firstly, *how* algorithms are shaping us; that is, to what extent they have an effect on our taste formation and guide our aesthetic experience. Secondly, in which way this has also an impact on the contemporary dynamic of cultural production.

Long abstract

Introduction: externalization and automatization

In recent years, the impact of digital technologies on human thinking and culture has become an increasingly central topic. In this contribution, my general purpose is to point out the relevance of this issue for aesthetics, both from the point of view of appreciation and production. As renowned art critic Boris Groys recently stated with respect to our understanding of the arts and aesthetic experience (2016: 147): “Today we practice our dialogue with the world primarily via the Internet”. All aesthetic domains (from everyday aesthetic and design, to popular culture, and to cutting-edge exploration in contemporary art) are experiencing the influx of the new technologies.

As a starting point, two main aspects of the diffusion of algorithms should be stressed out: externalization and automatization. The first aspect concerns the outsourcing of human thinking and cultural processes and the development of an increasingly complex and integrated “external mind”, in which the process of exploration and information finding (both by the spectator looking for specific content and by the artist in his research process) is handed over to mechanisms outside our minds. We are used to the notion of external memories, but we could also hypothesize that also preferences and taste formation happen more and more “out there”. The second aspect is the fact that those processes follow automated mechanism that are both responsible for the standardization of aesthetic phenomena (for instance, through the quick and worldwide diffusion of styles, trend and aesthetic standard; see Manovich 2017 about “Instagram aesthetics”), and at the same time for an increasingly specific customization of user preferences.

Aesthetic customization and individual preferences

In his classic “Categories of Art”, Kendall Walton (1970: 343) argues that we appreciate works of art in *categories* and that how we categorize artworks alters the features we assume those works have. How categories are built has profound implications on our evaluative standard and judgments. Now: what

happens when the process of categorization becomes an implicit feature of the algorithmic analysis of a person's consumption and of the following feedback and filtering of content? Today customization consists in a more and more detailed categorization of what we appreciate by means of data analysis, allowing for the development of a "predictive personalization", based on the assumption that similar people want similar things.

This happens in any search engines, but also on specific platforms of aesthetic consumption, like Spotify or YouTube for music or video, or Netflix for movies, visual art archives like "Google cultural institute", or in online bookshops like Amazon. Those platforms run complex algorithms that are able to associate our choices with specific categories of content, recognizing what kind of aesthetic experience we are drawn to. As an example, Netflix identifies movie genres largely on the basis of the user's choices, giving him a very detailed picture of his personal taste that might not otherwise be accessible to him. From this point of view, digital platforms are a tool of introspection: the task of "understanding what we like" is outsourced to the system by offering information about our behavior as users. At the same time, those systems help us understand and refine our taste. Using Foucault's terminology, they could be seen as "technologies of the self", namely apparatuses that "permit individuals to effect...a certain number of operations on their own ..., so as to transform themselves' (1988: 225).

However, these systems rarely mirror human preferences passively, but are based on pre-determined classification and categorization systems (like Netflix's so-called "altgenres"), as well as on suggestion mechanisms in which the viewer is directed towards content based on criteria that are not at all clear and are rather aiming at increasing content consumption and not necessarily true introspection.

As a consequence, two problems arise here. The first one is the tendency to confirmation bias: the feedback loop reinforces the choices and the preferences of the subject, favoring phenomena in which aesthetic consumption follow an algorithmic self-confirming mechanism. The second problem is the fact that pre-determined categories are forced from above on the individual choices in a schematic description of his allegedly "true preferences". Categories that are imposed to our individual choices begins to function as an explanation for our aesthetic experience and appreciation. There is moreover the unsettling possibility that recommendations, feedback and filtering of contents become self-actuating - that is, they could instill in the user just those preferences that they presume he should have.

According to Nathan Jurgenson (2015): "Individual choice is partly a

result of how the algorithm teaches us, and the algorithm itself is dynamic code that reacts to and changes with individual choice. Neither the algorithm or individual choice can be understood without the other.” Algorithms could therefore help us in expanding our self-knowledge concerning aesthetic taste, but also manipulate us in subtle ways: aesthetic autonomy is a complex dialectic based on different degrees of externalized control.

The interrelationship between subject and algorithm

This will lead us to the main argument of this paper: algorithms shape us, they have a crucial role in our taste formation and in the directions we take in our aesthetic experiences. Algorithmic feedback loops do not simply mirror the person’s inferred preferences and interests; on the contrary, our aesthetic choices and experiences are also “cultivated” by the algorithm through a complex and not always transparent process of filtering and attentional direction of information. Moreover, our preferences and taste are associated with contents that are pertinent to a specific group identity, leading to the creation of cultural and aesthetical “filter bubbles”. Rather than appealing to a kind of aesthetic *sensus communis*, this reinforcing circle of cultural interest are comparable to Bourdieu’s process of habit formation and social constitution of culturally closed taste and aesthetic experience.

Even more importantly, this has also an effect on the contemporary dynamic of cultural production and art practices. In fact, a further point that will be made in this paper is that also contemporary art practices are influenced by the dynamics of the information flux we are exposed to. All subjects of the “artworld” (artists, critics, researchers, theorists) are heavily dependent on the very same digital flows. On this point, Boris Groys (2016), states that art is increasingly involved in a process of “self-documentation”, as the recent interest in performance art shows, and this is also a consequence of the preeminence of the digital: “Here action is simultaneous with its documentation, its inscription. And the inscription simultaneously becomes information that is spread through the internet and instantly accessible by everybody. This means that contemporary art work can produce no product—yet it still remains productive. But again: if the internet takes over the role of the museum as the place of memory—because the internet records and documents the activities of the artist even before his or her work is brought into the museum”. And therefore: “the traditional boundary between art

production and art display begins to be erased.”¹

In the context of the present paper, Groys’ words highlight internet’s contextualizing nature. When we search for an artist, his artwork or for a specific trend, the Web returns us a set of sites, critical texts, images of the artist’s works, links to galleries, as well as videos and news articles. This not only creates a change in the way we view, access and experience art (both on or offline), but also in the way how the artworld itself (artists, researchers curators, critics) think about the process of art-making. And in all this, quoting Manovich, “software is the invisible glue that ties it all together” (2013, p. 8).

As a concluding note, the most challenging questions is if algorithms should be seen as agents of a “soft power” controlling the person by inducing desires and constantly transforming him, or as tools that allow experimenting with new ways of aesthetic experience, taste formation and self-cultivation. In investigating the factors that guide our aesthetic experience, today we also need to ask “what algorithms want” (Finn 2017). Aesthetics as a discipline occupies a central role in trying to answers this question.

References

- Foucault, M. (1988), *Technologies of the Self: A Seminar with Michel Foucault*, University of Massachusetts Press.
- Finn, E. (2017), *What algorithms want: Imagination in the age of computing*, MIT Press.
- Groys, B. (2016), *In the Flow*, Verso.
- Jurgenson, N. (2015), “Facebook: Fair and Balanced”, *Cyborgology* <http://thesocietypages.org/cyborgology/2015/05/07/facebook-fair-and-balanced/>.
- Manovich, L. (2013), *Software takes command*, Bloomsbury.
- Manovich, L. (2017), *Instagram and contemporary image*, <http://manovich.net/index.php/projects/instagram-and-contemporary-image>.
- Walton, K. L. (1970), “Categories of Art”, *The Philosophical Review*, 79: 334-67.

¹ <http://www.e-flux.com/journal/50/59974/entering-the-flow-museum-between-archive-and-gesamtkunstwerk/>