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Digitalization in Cultural, Aesthetic, and Arts Education

"Digitalization" is a term for a diverse ensemble of loosely interrelated phenomena and effects caused by the ongoing development and implementation of digital technologies – such as infrastructures, devices, algorithms, and databases. From daily life up to the level of societal systems such as economy or politics, it permeates all aspects of modern societies. As a transformative force interacting with all other current changes and challenges, it is an essential element of a renewed reflection upon education for the present and the future (UNESCO, 2021). Moreover, from an anthropological perspective, digitalization contributes to an ongoing reshaping of the material, energetic, and infrastructural, but also the sensorial, communicational, social, and cultural conditions on a planetary scale (Cubitt, 2016; Gabrys, 2016; Wulf, 2021). Digitalization appears in many forms and places, some seemingly more visible (like the mobile devices we all have come to use in our daily lives), others less visible (like the algorithms driving automated decision-making processes in administration, business, and economy). It challenges education in two main perspectives: The *external* perspective is articulated in form of demands and requirements that a society will place on its educational systems and its actors, mostly by means of changes in policies, but also through participatory processes within educational institutions as well as through competitive selection processes (such as choice of school or educational facility), while the *internal perspective* refers to the perception of those demands as well as to changes in conditions, processes, and outcomes on the organizational and professional level. Seen from the latter perspective of "doing education", digitalization is transforming education on each of the following levels:

a) conditions and contexts of education:
   - *transformations of access to education*, widening possible audiences (e.g., internationalization), but also imposing requirements and capabilities to make proper use of digital learning opportunities and tools (resulting in "digital inequalities"; Hargittai, 2021),
   - *transformations of educational motivation*, due to cultural shifts (such as the "influencer"-phenomenon now being stated as a career goal by young people), but

also due to widely available informational archives in different media forms (e.g., podcasts, videos, software) as well as public staging of learning processes on social networking platforms (Lin et al., 2015; Rat für Kulturelle Bildung, 2019),
- *transformation of educational modes*, such as shifting learning practices from *formal* to *non-formal* or *informal* self-set learning activities (e.g., online academies, use of web-based information and tutorials) (Drotner et al., 2009);

b) educational processes:
- *transformations of teaching/learning environments and agents*, such as online or hybrid classes, digitalized and virtual collaborative learning environments, and artificial intelligence applications (Tuomi, 2019; Weyel & Lehmann-Wermser, 2020),
- *transformations of media, methods, and didactics*, where the intertwinement of material things, analog, and digital media enables (but also demands) new teaching methods, leading on a deeper level to transformations of their didactical bases (Otto et al., 2022),
- *transformations of learning fields and subjects*, in particular due to the general digitalization causing many fields of knowledge as well as practice now to include digital elements, and additionally, the dedicated knowledge about new digital technologies, their manifestations, use, and understandings as phenomena in their own right (Pangrazio & Selwyn, 2021; UNESCO, 2021);

c) educational institutions and organizations:
- *transformations of educational management and administration*, ranging from simple (but often challenging) changes like moving from a paper-based to a digital, web-based administration all the way to more rigorous transformations, such as the inclusion of complex technologies like artificial intelligence based educational information (e.g., scoring-technologies) (Dörner & Rundel, 2021; Jarke & Macgilchrist, 2021; Porayska-Pomsta, 2016),
- *transformations of professional requirements and mindsets*, where digitalization on all the levels mentioned demands not only resources for professional development, but also the willingness of educators to deal with new educational subjects and phenomena, new methods and didactics, and new organizational ways (Mannila et al., 2018; Mishra et al., 2015), leading finally to
- *transformations of working conditions in education*, where it is often not an easy question to tell the positives from the negatives of, for example, home office-based team meetings, the practice of distance-education, and the insecurities that come with changing educational economies caused by global digitalization (Jonker et al., 2018).

All these transformations affect the different fields of cultural, aesthetic, and arts education in multiple and complex ways: For example, *contexts and conditions* of creative practice have been vastly transformed by the introduction of the social web, which nowadays has been transformed into platform economies that make heavy profits from its users' creative inputs (Srnicek, 2016), while at the same time (pure) online-academies in arts education are getting bigger and stronger, beginning to form

a competition to local providers. The COVID crisis has been a catalyst for change in *educational processes*, especially transforming distance learning in arts education from a barely ever to a temporally heavy used tool. But as mentioned, changes in the arts themselves, for example digital shifts such as new practices of electronic musicking (Bell, 2018; Partti, 2014) or post internet art (Ackermann et al., 2020; Meyer, 2019; Zahn, 2019) provoke very concrete changes in the practices of arts education, down to techniques and the use of media, materials, instruments, and tools. Finally, working conditions have begun to change (partly due to the pressure of the COVID situation) irreversibly, introducing new demands and posing new challenges to the administrative and institutional foundation of arts education, for example, with regard to the question of *quality* of a post-digital arts education and its professional requirements.

Unlike all former media-technological changes in cultural history, digitalization is primarily an *infrastructural* phenomenon that is by far not restricted to the realms of communication. From everyday culture to the arts, digitalization is a profoundly cultural process that should be shaped according to cultural needs and values. It deeply restructures the way we perceive, express, and articulate ourselves by introducing highly efficient and fast developing technological actors. It also shifts the order of the local vs. global, profoundly affecting the regulation and recognition of cultural boundaries and defining – at least in part – global common spaces of encounter and exchange (Poster, 2006). In order to assess the effects of digitalization on a cultural level, it is necessary to understand the inherent diversity of the constitutive hidden processes that finally emerge as perceivable digital phenomena on the surfaces of our deeply technologized everyday lives, in particular with regard to reconfigurations of aesthetic perception and practice (as a primary means of sense-making).

These changes are not only partly a burden, but partly the introduction of merely practical new tools for education in general and arts and cultural education in particular. They are an opportunity to be (or to become) a part of a much-needed commitment to *digital cultivation*, a commitment that civil society must embrace in order to shape our digital future in a beneficial and responsible way toward collective digital sovereignty and not leave the biggest media-technological transformation since the invention of letterpress printing to profit-oriented players and governmental agencies.

Since arts and cultural education works at the intersection of aesthetic, artistic, and pedagogical processes, it should make its contribution based on the unique approaches and opportunities that arise from these perspectives with regard to digitalization and digitality. Research on digitalization in arts and cultural education is already beginning to clarify the issues and questions related to this new endeavor, to develop new methodological approaches, and to identify thematic hot spots for practice (e.g., Jörissen et al., 2023; Möller et al., 2021). This journal shall strive to give this change a platform and a voice.

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