

SocialAR for art education.

Getting there? Towards a framework for SocialAR as cocreative interfaces.

Augmented Reality's hybrid, interactive and situated nature is offering vast opportunities for spatial creativity, with SocialAR just about to be emerging as collective interface. As creative SocialAR, there are new visual, deictic and situated forms of participation and creativity arising. Not only surfaces and surroundings, it is individual bodies, involved as actors and projection surfaces both alike are at the pivot of creative SocialAR. Imagine future ad hoc- cocreations of SocialAR as playground for communication with floating color and as communicative layer. New venues for cocreation may be conceivable as anchored on site or articulating and receiving vis à vis – as most hygienic form of communication in the face of the pandemic. Beyond such playful creative forms of creative SocialAR, negotiating concepts of city architecture or pushing green city visions become possible, fostering citizen participation in new ways.

In SocialAR, intimate spaces situated in individuals' surroundings and sharing will become mass media practise. Riding the line of private and public, corporate interest and intimate spaces, several conflicts arise. Accordingly, several ethical concerns may become crucial, from exclusion of individuals to forms of mobbing, now with a quasi-real public feel as discriminatory content. Realignment of power relations is a vital aspect also with respect to art education. With increasing student autonomy and web-based peer-to-peer tutorials of creating, coding and sharing educators' roles are transforming. Also, negotiating values of (media) art and institutions in the process of cultural heritage digitization is evident thinking of SocialAR for art history mediation.

The focus within this workshop is to reimagine future versions as participatory cocreative spaces with AR in the context of art education, from classroom settings to mobile cocreations to cocreative citizen participation. Yet, users and creators, adolescents and teachers are actors within a complex ecosystem of SocialAR, with ethical dimensions concerning corporate providers of apps and services respectively. Which ethical concerns are arising in this respect and are neglected so far, building upon current findings? How can art educational expertise and app-design go hand in hand fostering creativity and safety both alike?

Also, results of our recent study with twenty art educators and their estimations of chances and challenges of current AR-based applications with respect to art educational implementation will be discussed. Media cultural dimensions turned out vital aspects of technology acceptance. Eventually, a vast variety of art educational concepts and considerations while implementation were suggested by practitioners, building upon considerations of quality criteria of AR/VR in art education. [1]

Both ethical concerns of SocialAR as put forth for AR so far [2] as well as literacies for a creative and safe usage are vital to tackle before widespread implementation. Indeed, notions of literacies, creative and responsible usage and design of SocialAR-applications are a pioneering field. Existing frameworks need to be specified with respect to SocialAR, from digital literacies at educational level [3] as well as visual literacies by ENViL / STEAM-related art educational positions [4]. The post digital art movement invites to reflect on human-technology relations via the arts[5,6], with AR/VR so far a rather pioneering medium. Eventually, media art positions at university level are vital as inspiration for art educational implementation of (Social)AR, bridging media art and didactics in AR art education. [7]

Next to corporate collection and analysis of data in viewers' surroundings, incidents of harassment via AR interfaces are likely to be intensified via SocialAR, as they are now perceived in a fusion of public and private spheres. Such incidents are stretching from discriminatory content as harassing AR-overlays haunting individuals' homes or bodies to DIY-tracking opportunities via AR-technology. Also, negative body perceptions may be accelerated via SocialAR, with psychological vulnerability certainly depending on individual factors.[8]

How may these issues be solved by ethics by design, e.g. as AI-based mobbing prevention as evolving in VR-contexts [9]. Also, questions of participation and accessibility need to be tackled, when SocialAR means empowering few in unprecedented ways for cocreation, while others may be excluded, e.g. when mobile devices are not meeting AR-standards or disabilities from visual to corporeal/verbal barriers to SocialAR.

Pioneering artist collectives were *ManifestAR*, from Tamiko Thiels participatory AR-project on historical water wheels and cocreative visions of renewable energies *Transformation: Lehel* (2012) [10] or collective AR-drawing concepts by Pappenheimer /Brady: *Drawing Constellation* [11]. Emerging AR-related art communities are tied to providers of AR-platforms for creation (Artivive/ARize). Yet, it is corporate Social Media which is encouraging AR-creations on a large scale with practices of intimate sharing. Augmenting surroundings and bodies in hybridity of space is realized in large scale with intersections of private and corporate interests, from creations to share via *SparkAR-studio* (Instagram) to collaborative *Lense Studio* by *Snapchat* for point-cloud driven AR (c.f. Fig. 2). A vast community supporting DIY AR-filtermaking is evolving here as participatory culture for creation [12]

Artistic practise via AR is fusing spaces, individuals in collective creation and meaning-making new ways. In artist interviews we selected artists with art educational experience, often inviting for critical reflection on human-technology interaction. So does Jess Herrington invite to reflect on the digital persona in her work *Internet Dream* [13] (c.f. Fig. 3). Litto is engaging in forms of AR-based community artwork, drawing on citizens' visions on green city and future technology in her work [14]. Her recent work *Living Sculpture* is an installation reflecting on public spaces during lockdown in Vienna [15] (c.f. Fig. 4). Noland Chaliha is combining machine learning and AR-filters in visually highly diverse reconfigurations. [16,17] (c.f. Fig.1). These positions are appropriating and redefining AR-visuals by reflecting on digital phenomena via the arts as relatable to post digital art education.

Now, drawing on our recent study with twenty art teachers (grounded theory/webinar-based study), what are practitioners' perspectives on AR/VR with respect to art educational implementation? After exploring a variety of AR/VR-based applications, vast possible art educational concepts were suggested, from video art projects to mask/performance and architectural projects - overall stressing the potential of creating and experiencing spaces via AR/VR in new ways. Yet, teachers' pedagogical notions (participatory/instructional), their proximity to or readiness to shift of perspectives to students' media culture was differing strongly. By contrast to moderate and layed back reflection, it was tendencies to enthusiasm or scepticism influencing readiness to implement and innovate art education respectively.

Strikingly, notions of participatory cultures of learning were barely present with a high burden to meet what some perceived as quite overpowering demands of 'digital transformation'. Impulses for critical reflection and media cultural mediation seems vital when implementing AR for art education, looking at a literacy as well as a cultural divide. It is essential to negotiate pedagogical, societal and aesthetics and values of the traditional arts canon and culture clash-like alienation when these are mediated via AR. Addressing such cultural alienation seems also important for an inclusive concept of SocialAR, not only with respect to art education but overall intercultural design [18] besides the literacy gap and power relations as ethical dimensions of SocialAR as mentioned before.



Fig. 1 Noland Chaliha, PHOSPHESES 2020, <https://lenslist.co/phosphenes/>
Fig.2 Snapchat Lense Studio 2020 <https://lensstudio.snapchat.com/>

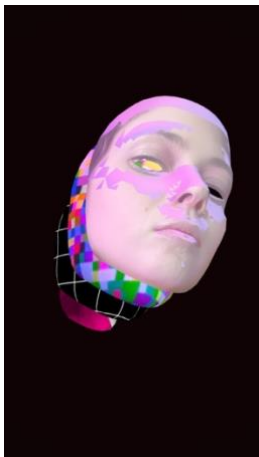


Fig. 3 Jess Herrington: Internet Dream, 2020 **Fig.4** Litto: Living Sculpture 2020

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