

Workshop Organizers: Martin Butler (University of Oldenburg) Sina Farzin (Bundeswehr University Munich) Michael Fuchs (University of Oldenburg) Julia Gatermann (University of Bremen)

## Science and its Applications: Negotiating Human Enhancement across Media FMS Digital Workshop, January 28-29<sup>th</sup> 2021

The conceptual boundary between "pure" science and its applications and technologies is still prevalent in science discourse. While some consider this boundary a helpful and productive distinction, others argue that "science" always already implies interaction with nature and society. The latter perspective productively opens the view to a wider context in which, especially in contemporary society, science and technology do not exist as separate fields, as the boundaries between them have blurred or even dissolved.

One of the key sites of these intersections between science, technology, and their sociocultural contexts is the field of human enhancement and augmentation. Here, the promise of a 'better life,' on the one hand, and breakthroughs in areas such as medicine, biology and engineering, on the other, create a mutually reinforcing dynamic that contributes to an everincreasing entanglement between research, technological developments and societal discourse. Challenging the very nature of what we conceive of as "nature" or "human", developments in this field have also regularly fueled (and been fueled by) the technoscientific imaginary articulated in different medial formats, ranging from literary renderings of bodily enhancement to virtual augmentation of reality.

The complex connections and contradictions between science and its applications are particularly visible in the field of human enhancement and augmentation. The field both informs and is informed by a variety of collective imaginaries in which it is the nodal point for discourses on scientific and technological progress as well as on the social responsibility that comes with it. Research in the field responds to the impulses and demands from society at the same time that it provokes our fears and anxieties in a most dynamic and sometimes volatile way, confronting us with the question of how we (have come to) conceive of ourselves as humans: Some consider recent scientific explorations of bodily modifications that seem to transcend the limitations of human embodiment promising contributions to the ongoing optimization of society, others observe these developments with skepticism. In Western culture in particular, there is a prevailing dialectic that perceives the body as simultaneously dispensable and in need of improvement. As Sherryl Vint notes, a return to a notion of embodied subjectivity is essential to the articulation of the ethical implications of these technologies (*Bodies of Tomorrow* 8).

The field of human enhancement thus requires exploration not only from the perspectives of the sciences and engineering, but also from those of social, cultural, and literary studies. In this workshop we will explore cultural forms of negotiating human enhancement--including the roles of science and technology--and their projections of "the human" into the future.

We hope the workshop will serve to identify potential thematic overlaps between the participants' research interests that might be further explored in joint follow-up activities in this field of research. We are interested in contributions that focus on various narrative forms and media effects on imaginaries of enhancement in recent and historic cultural artifacts such as films, novels, TV-series or journalistic or popular science writings. Through these 'case studies' from different fields, we hope to be able to shed more light on the intricate relationship between science, technology, and society as mediated through forms of cultural expression. Potential research areas may include, but are by no means limited to:

- the posthumanist and transhumanist discourses that these representations and/or practices pick up on and contribute to;
- Artificial Intelligence and its intersections with / transformation of "the human"
- digital assistants, wearable technology, body modification, and cognitive enhancement
- the quantified self; self-improvement, monitoring, and surveillance
- genetic engineering; gene editing/splicing; human cloning; eugenics
- embodied vs. disembodied consciousness; personality upload, virtual afterlife, and digital immortality
- cultural normativity vs. (post-)disability; cultural construction of dis/ability; discursive resignification
- prosthetic augmentation; Extreme Bionics, military applications (rehabilitation/redeployment); Paralympics

Our workshop will take place in a virtual space. All presentations will be made available two weeks prior to the workshop to give all participants ample time to watch/read through







the content and prepare for our discussion periods before we meet for our workshop via Zoom. This structure will allow us to schedule the discussions back-to-back, making our virtual get-together a lot more interactive by providing more time for discussions to take place.

We invite presentation in two different formats:

- video presentation (all formats welcome: "talking head" video, slides-and-video hybrid, slides with voice recording, etc.); 12 minutes max.
- text presentation with illustrations; 1.500 words max.

All presentations will be published on an FMS-affiliated website. The presentations will first only be accessible to workshop participants. After the workshop, we will make the presentations accessible to the public.

Please send your **abstract of 200-300 words** and a short biographical note to **julia.gatermann@uni-bremen.d**e by **November 1<sup>st</sup> 2020**, indicating which form of presentation you will be handing in. **Final presentations** will be due by **January 3<sup>rd</sup> 2021**.





