

Z

hdk

Zürcher Hochschule der Künste

Innovation in the Arts

Foreword

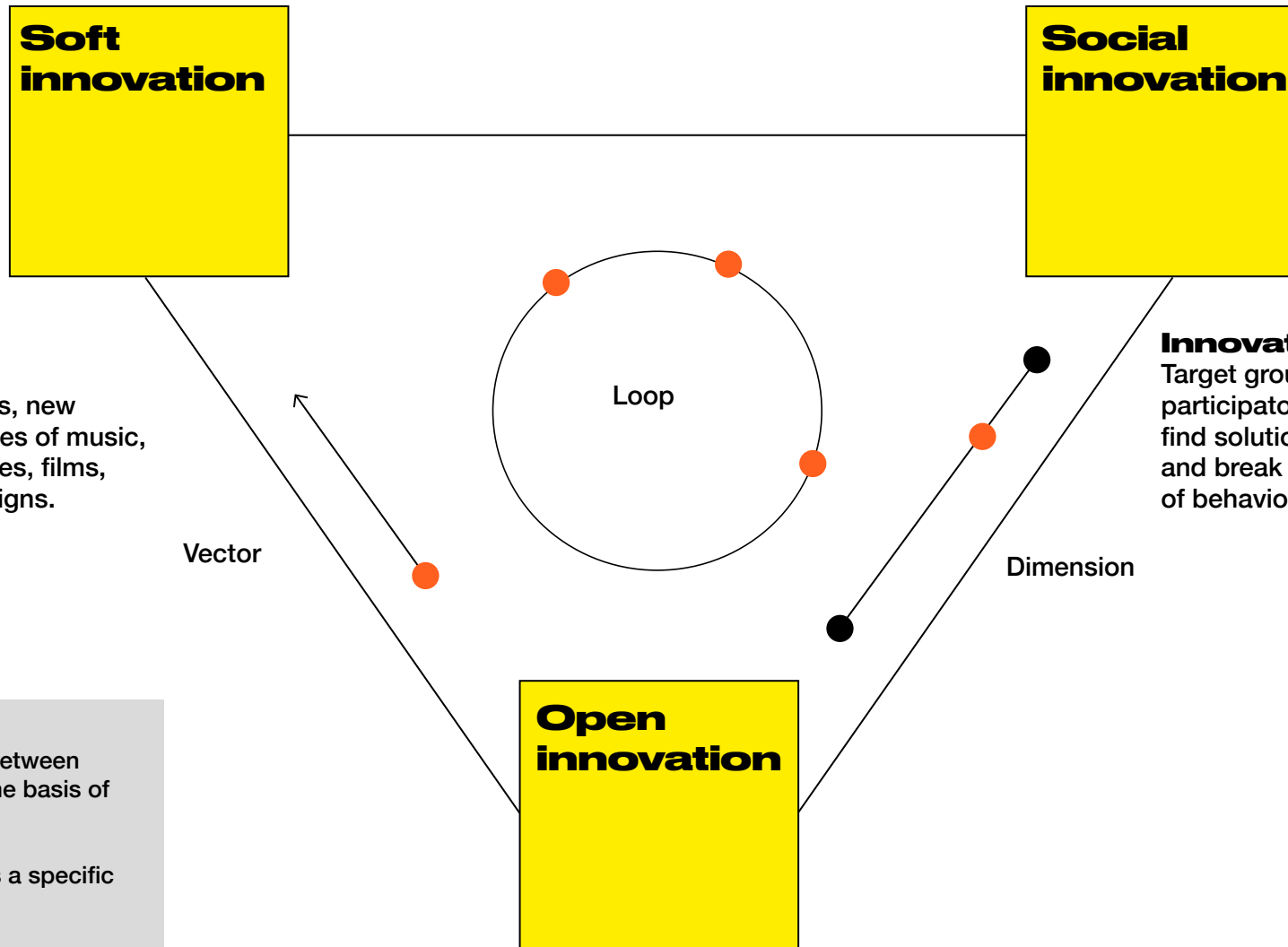
Research project “The Ice Age Cam”



As a university of the arts, ZHdK operates in an international environment and simultaneously is an important part of Zurich university landscape. Current developments in the funding landscape are facilitating efforts to give a sustainable framework for ZHdK practices related to research, art, design, and education. These are occurring at the international level through the EU, at the national level through, among other things, calls for proposals by Innosuisse, and at the cantonal level as part of the innovation programme of the Digital Initiative of the Zurich Universities' (DIZH). As a result, the topic of innovation is also becoming increasingly important for ZHdK. There are numerous opinions on how to define innovation and how it works. At ZHdK, however, traditional definitions of innovation involving technological advances and associated market success are not sufficient. But what does it mean in specific terms to be “innovative” at ZHdK?

The following text contains ideas for reflection on existing practices in order to lay the foundations for more extensive discourse and to encourage a future focus on innovation both at and from within ZHdK.

Definitions of innovation at ZHdK



Products of innovation

Conferences, readings, new books, artworks, pieces of music, theatrical performances, films, video games and designs.

Innovation discourses

Target groups are actively involved in participatory interventions in order to find solutions, change our mindsets and break down established patterns of behaviour.

Projects can be located between the innovation poles on the basis of different principles:

Vector – Directed towards a specific type of innovation

Dimension – Positioned on a spectrum between two innovation poles

Loop – Dynamic orientation towards one of the innovation poles, depending on the project phase

Innovation partnerships

Involvement of external partners: Externalization of knowledge through creative products and the generation of spin-offs, patents/licensing and interdisciplinary labs.

social

Social innovation contributes to changing social behaviour and offers potential new solutions to complex social challenges. Target groups are actively involved in the process of finding solutions, changing mindsets, and breaking down established pattern of behaviours. Practices from the world of art and design can be employed in interdisciplinary projects to raise awareness, clarify, inform, educate and engage in participatory process design.

Examples of areas in which social innovation plays a role are community, diversity, inclusion, sustainability and interculturality.



Research project "The Answering Machine"

soft

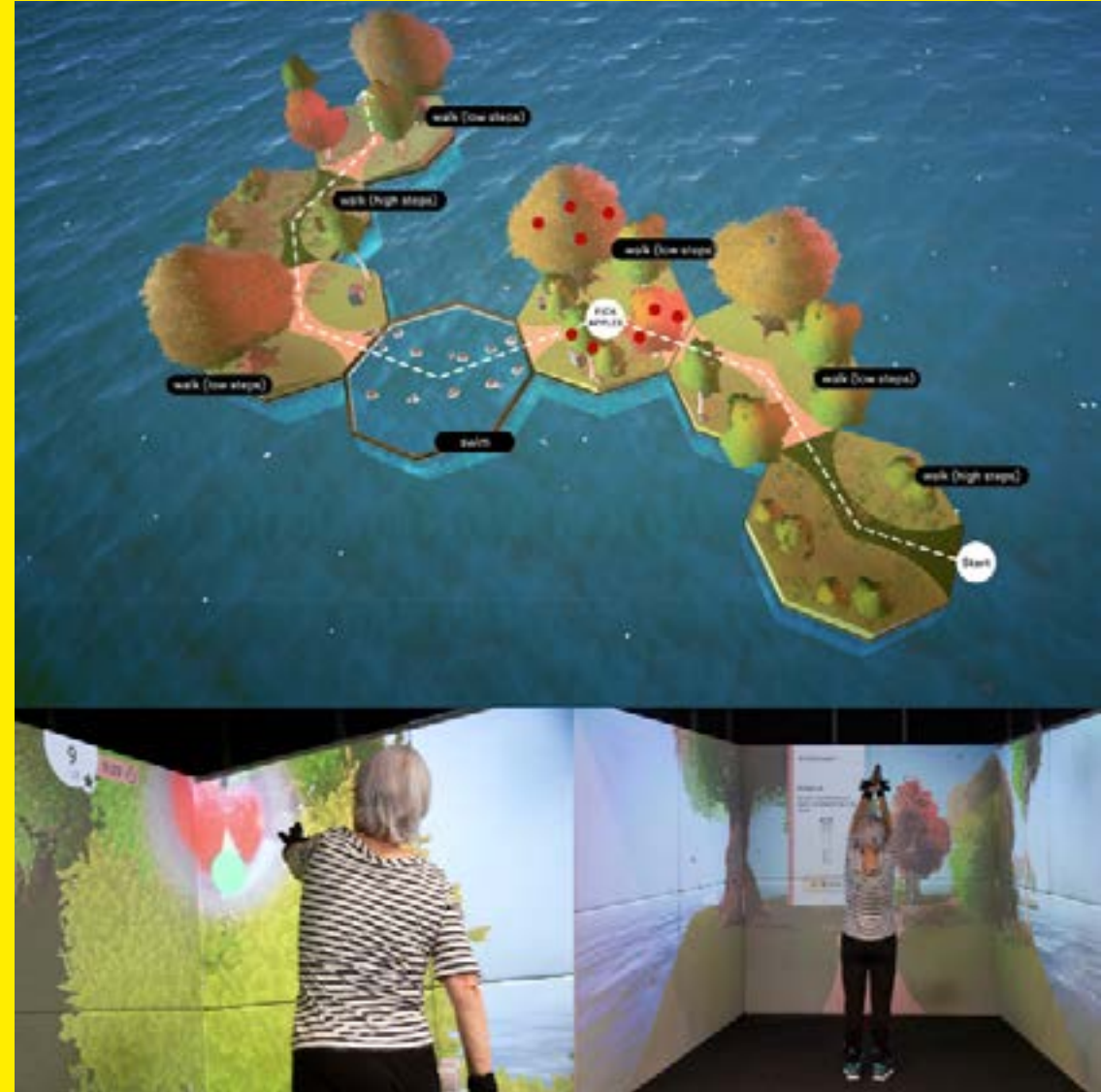
The results of soft innovation focus on artistic, production-aesthetic and intellectual effects – in other words, on its impact. There must be an application or market launch – and, associated with this, an artistic, social, cultural or economic usability. In this process, artistic and intellectual impact as well as attractiveness are prioritized over functional and economic performance and commercialization.

This includes the design, development, production and dissemination of output for peers, such as (public) interventions, conferences, readings and new publications, artworks, pieces of music, theatrical performances, films, video games, designs and educational formats.

open

At ZHdK, the term “open innovation” is understood as an extension of innovation processes beyond and across institutional boundaries with the involvement of both external partners and a wide range of different disciplines and practices. In this regard, a distinction is drawn between the “inside-out” and the “outside-in” perspectives. The inside-out perspective refers to the externalization or outsourcing of knowledge through creative products and services as well as to the development, formation or foundation of spin-offs, patents, and licences. The opposite of this is the outside-in perspective, in which new knowledge is created by external partners through cooperation agreements, collaborative development formats and public dialogue. Open innovation is particularly important for ZHdK because it involves collaborative methods, interactive processes, and the inclusion of target groups.

Examples include publications, conferences, interdisciplinary labs, research and development cooperation agreements with external partners, collaborative formats for knowledge generation and transfer, and spin-offs.



Research project “ExerG”

Dimensions of impact

A key contribution of innovation in art and design is in contextualizing, raising awareness of and reflecting on ethical, societal, historical, artistic and cultural discourses. These methods go beyond the scientific practice of measuring and examining innovation in terms of application-oriented requirements.

In this regard, contextualization is used to tap into complex social processes of transformation that are a prerequisite for, an accompanying feature or a consequence of innovation.

Research project "Contemporary Art, Popular Culture, and Peacebuilding in Eastern Europe"



The development of new areas of application and target groups in the context of participation is an important driver of social change. Innovative forms and approaches to education are created in order to reach new and different target groups. In combination with social innovations, these approaches lead to new societal reference points and forms of interaction. This gives rise to creative output with an innovative impact. Examples include the creative use or reappropriation of technologies for broadening the audience experience, the active involvement of users and reversed role interpretations, the creation of interactive forms of education through the use of immersive technologies, the experience of performances independent of time and place, and the integration of “gamification” and “citizen science”.

The approaches of performance enhancement and market orientation fall into the category of open innovation. What “inside-out” and “outside-in” have in common is that the place in which knowledge is gained is not necessarily have to be the place in which innovation is created or used. This perspective is also characterized by the fact that the added value in the innovation process is generated by a conscious synthesis of internal and external knowledge and implementation partners.

Research project “Right for We”

Recht
auf

Wir



Wie geht

das?

Abbildung:
Ariane Andereggen

Innovation at ZHdK

THE ZHDK AIMS TO DEVELOP AND PROMOTE INNOVATION IN THE ARTS, EDUCATION, AND DESIGN.

The departments take corresponding measures to enable innovative projects to be carried out. They promote exploratory and open-ended research as well as innovative teaching and continuing education content. The ZHdK's specific culture of innovation is emphasized and respected.

FOCUS ON SPECIFIC TARGET GROUPS, PARTICIPATION OF EXTERNAL PARTIES

The people responsible for innovation projects in all disciplines of ZHdK and their target groups as well as specialist colleagues are defined explicitly. ZHdK incorporates the various communication formats from the areas of research, teaching and services into the process of developing innovation projects. It adopts a transversal mindset towards networking within innovation projects. Critical friends, challenging partners and stakeholders can come from other disciplines, especially from areas of society outside the university setting.

PROMOTING EXPLORATORY RESEARCH AND TEACHING PROJECTS

The ZHdK departments develop small grants and seed money formats in order to enable exploratory and open-ended research and teaching content.

STRENGTHENING COOPERATION PROJECTS

Innovation projects are established in consultation with specialist colleagues and external interest groups and designed as cooperative research projects. ZHdK takes care to ensure that the open-ended nature of innovation projects and the progress of the research process can be communicated.

ZHDK AS A RESERVOIR OF INNOVATION

Storing and communicating the process for and provisional findings of innovation projects is of central importance for ZHdK. This multimedia "reservoir of innovation" takes into account both already existing university-wide instruments and those that are still in development.

VISIBILITY OF INNOVATION ARISING FROM THE ARTS

The departments of ZHdK maintain debates concerning innovation in the arts and make existing activities and people visible, bringing in individuals with strong art and design credentials.

Highlight your project on the chart

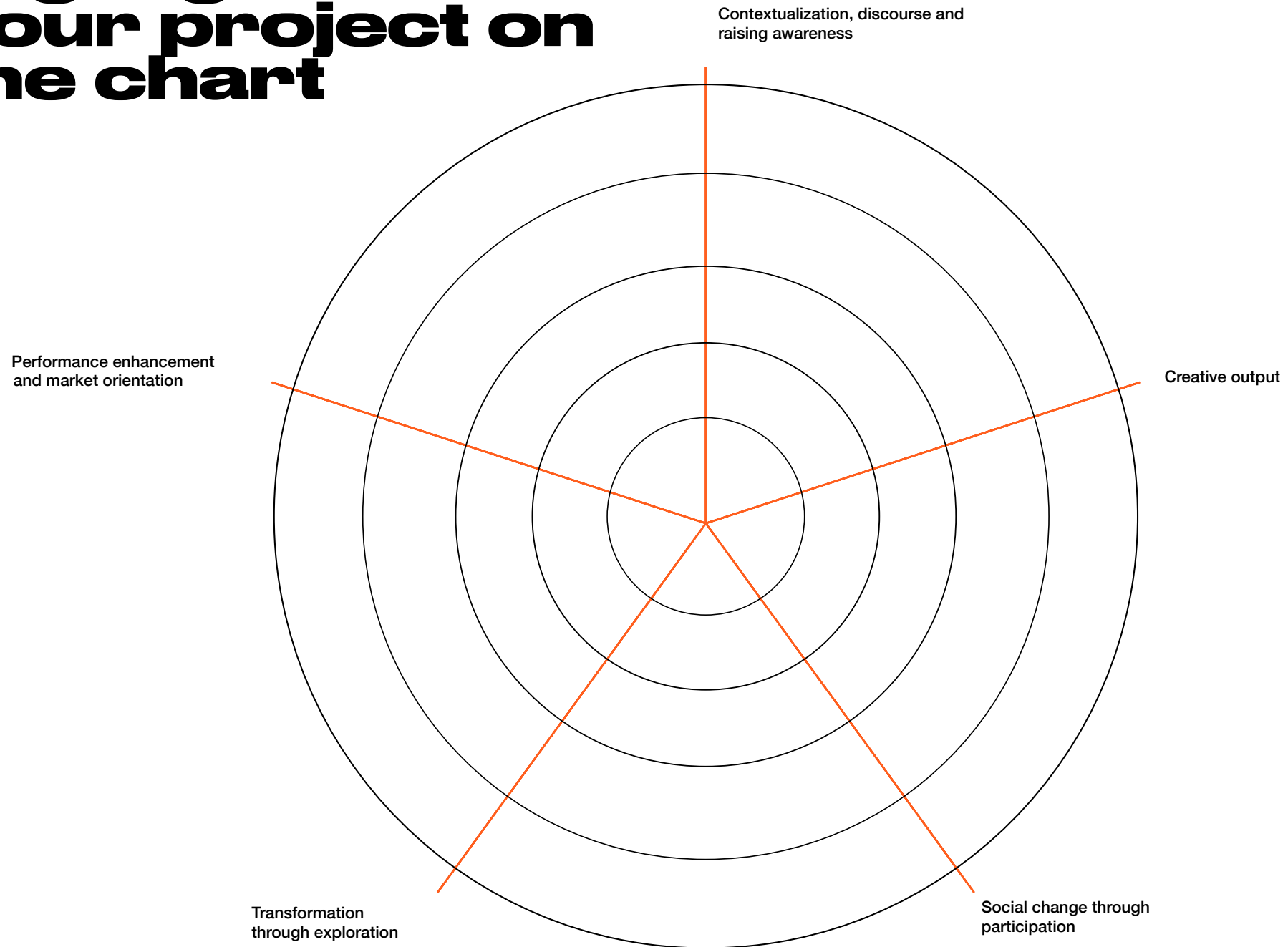


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Contemporary Art, Popular Culture, and Peacebuilding in Eastern Europe

The research project “Contemporary Art, Popular Culture, and Peacebuilding in Eastern Europe” investigates the role of art and popular culture in promoting peace in Eastern Europe. In three sub-projects, it explores the responses of art and popular culture to different types of conflict in Poland, the Republic of Moldova and Armenia. The project uses various context-specific research methods to investigate both positive and negative effects of art and popular culture on conflict transformation. The results will be reflected on in three monographs, presented in an exhibition and summarized in a handbook by the project partner Artas Foundation. This project falls into the category of social innovation in the sense that it focuses on unconventional civil society forms of peacebuilding.

ExerG

ExerG is an interdisciplinary research and development project that focuses on improving the physical and cognitive functions of geriatric patients through exergame training. It uses target-group-specific, motion-based video games (known as “exergames”) in order to train multitasking in a safe environment to prevent falls (e.g. simultaneous walking, balance and cognitive exercises) and to add variety to exercise rehabilitation. Funded by the international Active and Assisted Living (AAL) programme, the project is being carried out in collaboration with an interdisciplinary team consisting of the Game Design and Industrial Design subject areas at ZHdK, industrial partner Sphery (a ZHdK spin-off and Leading House), the clinical partners Reha Rheinfelden (Switzerland) and Reha Münster (Germany), VASCage (Austria) and the HCI Gaming Group of the University of Waterloo (Canada). ExerG can be viewed as social innovation as it improves the quality of life of the geriatric population. It promotes open innovation through the collaboration of various disciplines and the exchange of knowledge and experience.

Synthetic Strokes

The Synthetic Strokes project aims to enable new forms of human-robot collaboration in the area of artistic creation. A robotic arm demonstrates the implementation of learning processes in real time. These are perceived by means of a dynamic vision sensor in the loop for visual feedback and a neuromorphic chip for sensory processing and pattern recognition. The Synthetic Strokes project is a collaboration between the Immersive Arts Space of ZHdK, the ETH AI Center, the Collegium Helveticum with support from the Institute of Neuroinformatics (UZH), and the Institute of Technology in Architecture (ETH). The project primarily falls into the category of soft innovation, as it concentrates on the creative use of technology and machine-assisted processes. Paradigms of creativity in the area of machine-assisted processes are formulated and the discussion on methods of human expression in the age of mass communication of generated images is expanded.

Right for We

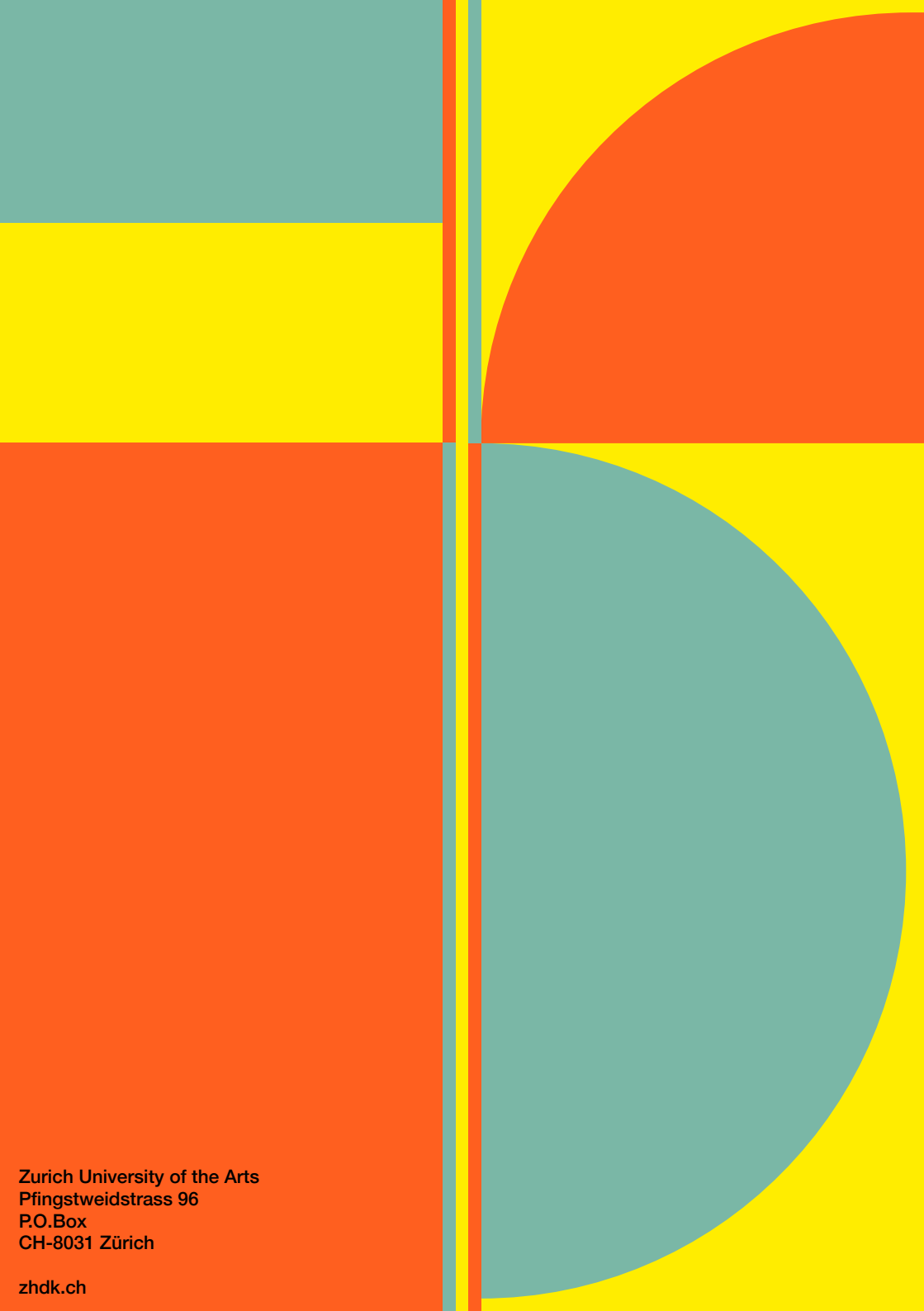
Right for We is a practical and research initiative that focuses on social inclusion and exclusion in the arts, culture, education, and public spaces. It is run as a collaboration between teachers, researchers, and students. The goal is to target a diversity-sensitive interpretation of “We” identities and to raise awareness among local population groups of a new interpretation of a comprehensive societal “We”. The project uses interdisciplinary approaches to expand the understanding of cultural participation as an anti-discriminatory practice and develops innovative methods of questioning and shaping hierarchies and power relations. Based on interventions in the public space and in the classroom a digital workbook is being developed that will impart both theoretical knowledge and practical inspiration and is aimed at both practising professionals and interested members of the public. The project can be viewed as a social innovation as it promotes social change, encourages collaboration, and seeks solutions to social challenges.

The Answering Machine

The Answering Machine is an interdisciplinary project that explores how humans and machines might interact with one another in the future. Over a period of four years, actors will interact with “social bots” in order to research behavioural patterns and emotional responses. The goal is to better understand the development of human-machine dialogue, to define terms, and specifically to test the use of large-scale language models in an artistic/experimental way. The stage will be used as a testing ground for the experiments. The sub-project Theatre Research at ZHdK specifically addresses the question of which new artistic strategies are inspired by the emergence of these new digital agents and which old strategies it challenges. To this end, human-machine dialogue systems are being developed, trained and tested on stage. Theatre improvisation plays a key role. The Answering Machine contains aspects of both soft innovation and social innovation. It will help to develop new concepts and findings in order to improve the social interaction between humans and machines while simultaneously addressing societal challenges and changes. The project is funded by the Volkswagen Foundation.

The Ice Age Cam

The Ice Age Cam is an interactive research and communication project that reconstructs past ice ages in the Alpine region and draws links between them and today’s human-induced climate change. Publicly accessible Ice Age Cameras are installed at two popular viewpoints, enabling the public to interactively understand the changes in the landscape brought about by past ice ages with the help of state-of-the-art climate and glacier models and new, AI-based visualizations. In the process, the severity of humans’ impact on the climate and its enormous consequences become clear. The project aims to reach a broad audience, inspire discussion, and strengthen awareness of climate change. The research and communication project is a cooperation between ZHdK, Knowledge Visualization and the Universities of Zurich and Lausanne and is funded by the SNSF/Agora. It falls into the category of social innovation as it promotes dialogue between science and society through direct experience.



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