

REGIONAL STARTS CENTERS

Harnessing the power of European regions through STARTS



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ATLAS by Deval & Loseau at STARTS exhibition VISIBLE SENSIBLE, © Quentin Chevrier



The regional STARTS Centers rooted in the Bauhaus?

Paul Dujardin
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Imagining a different and better future for Europe is possible and necessary - now more than ever. The current health crisis, and the consequent socio-economic crisis, has opened new fractures, tearing the pre-existing ones. It has impacted billions of lives, and has left no organization or economy untouched. It has shown how systemic risks can have exponential repercussions — on health systems, sudden unemployment, supply chains, and the global economic outlook. The COVID-19 pandemic is testing our resilience. The immense scale and diversity of the challenges sound very familiar to those who have long championed urgent action to avert catastrophic climate change and rapid nature loss.

The Regional S+T+ARTS Centers that are being established all over Europe are giving an answer to these challenges. They provide funding for cultural institutions, innovative companies, foundations, universities and research institutions that co-develop digital based projects for a more sustainable future. This via different S+T+ARTS pillars such as; S+T+ARTS residencies that encourage artists to work within the creative ecosystems of companies, S+T+ ARTS academy projects that stimulate the digital skills of citizens, students and youngsters and a S+T+ARTS prize for innovative collaborations or for artworks that inspire and challenge the digital industry. The Regional

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S+T+ARTS Centers are based on the belief that the creativity of artists stimulates innovation in the digital industry and sustainable progress in our society at large. Linking the fast evolving digital evolutions with the Green Deal challenges and the ambition to become a CO2 neutral continent in 2050.

A link between the S+T+ARTS philosophy and the announced plans for future Bauhaus projects in Europe is easily made, although not uncontroversial. In her 2020 State of the Union, the European Commission president, Ursula von der Leyen, said the climate transition needs “its own distinctive aesthetic” and vowed to set up a new European Bauhaus. A co-creation space where architects, artists, students, engineers, designers work together to ‘match style with sustainability’. A place where we can rethink the present and reflect upon the complexity of today’s world that is increasingly driven by populism. Many links can be made between the Bauhaus and the Regional S+T+ARTS Centers and it’s interesting to reflect upon the history of the Bauhaus to better understand the 21st century context of the Regional S+T+ARTS Centers.

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Historically, the Bauhaus was an “educational” institution, founded in 1919 by the architect Walter Gropius, that brought together artists, artisans, architects, painters and sculptors to reflect upon ‘the art of building’. Hereby the Bauhaus can’t be seen apart from the fast changes in the ‘Lebensraum’¹ at the beginning of the twentieth century. Cities were growing fast, electricity, transport and communication means spread and

1Clarification that the writers are aware that the term Lebensraum is not uncontroversial. Ref: <https://encyclopedia.ushmm.org/content/en/article/Lebensraum> : “The concept of Lebensraum—or “living space”—served as a critical component in the Nazi worldview that drove both its military conquests and racial policy.”

Ref: <https://en.wikipedia.org/wiki/Lebensraum> : “The German concept of Lebensraum (German pronunciation: [ˈleːbnʁaʊm] („living space“)) comprises policies and practices of settler colonialism which proliferated in Germany from the 1890s to the 1940s. First popularized around 1901, Lebensraum became a geopolitical goal of Imperial Germany in World War I (1914–1918) originally, as the core element of the Septemberprogramm of territorial expansion. The most extreme form of this ideology was supported by the Nazi Party (NSDAP) and Nazi Germany until the end of World War II.”

numerous new products conquered the market. All this was a result of the industrial revolution and the beginning of a consumer society. Findelli (1987) argues that these developments lead to poignant questions related to their influence on the life of individuals, such as “What is the ultimate sense of life?” or “What significance should be attributed to the newly built environments, their aesthetic qualities and the people living in them?”.

Today it's not in the first place the rapid technological and urban evolutions that challenge our society as a whole, but rather the urgency to resolve the impact they have on our planetary ecosystem. We have to find solutions for the natural changes caused by the industrial revolution, globalism and a fast growing population. Alternatives for the old fashioned modernist thinking that considers 'nature' as something as 'outside', as a resource to be exploited or as a force that has to be tamed through new scientific and technological advances are needed to realize a systemic change. Taking this into consideration, it's obvious that the conceptual considerations underlying the former Bauhaus model aren't the right starting point to define and organize contemporary institutions. The goals and outcomes that inspire the S+T+ARTS initiative are more related to the challenges our contemporary world is facing. Nevertheless, the S+T+ARTS project is deeply rooted in the

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ideas that were put forward by the Bauhaus. The Bauhaus marked a strong development in collaborative relationships with artists because of different reasons. The school had a major impact upon how society perceived the artist and his or her role in society. Thanks to the Bauhaus, the nineteenth century image of the artist as an alienated or estranged figure was ultimately challenged. The artist was no longer perceived as a person copying classical plaster statues in the corridors of the traditional academies, but as an individual fully aware of his/her creative potential and of the latest technological developments in society. This heavily inspired the S+T+ARTS thinking that looks at the artist as a creative catalyst, capable of const-

ructively working together with researchers and industrialists and concerned about the world as a whole.

Being an educational institution, the Bauhaus was driven by a specific goal that guided all interdisciplinary intentions: 'the art of building'. A manifesto from Walter Gropius in 1919 states: "The ornamentation of the building was once the main purpose of the visual arts, and they were considered indispensable parts of the great building. Today, they exist in complacent isolation, from which they can only be salvaged by the purposeful and cooperative endeavours of all artisans, architects, painters and sculptors" (Bauhaus online, 1919). The Bauhaus style reflected the spirit of the time and served the greater Bauhaus plan. This vision is echoed in the words of the EU president stating that the climate transition needs its own distinctive style. One cannot reduce the goal of the arts world to such a formal question, but it's clear that the Regional S+T+ARTS Centers engaged many artists and researchers in the production of artworks that make people more aware about climate change or in the creation of artistic & speculative prototypes that offer concrete and unexpected solutions for ecological problems. Another important influence of the Bauhaus was that it accentuated the role and impact of technology in the world. The Bauhaus students, and by consequence the teachers, at the Bauhaus had to acquire different technical, social and artistic competences that made them 'fit' for the modern world. As Dickerman (2009) notes, Walter Gropius, the Bauhaus founder, was convinced that artists should relate to the new modern culture of technological media and machine production. Therefore, following Gropius, future artists had to develop creative and practical skills that could be used for the industries. The Regional S+T+ARTS Centers focus on digital technologies in our time as an important driver for innovation and progress. As the Bauhaus students had to learn to work with machines, the S+T+ARTS participants are stimulated to learn how the computer works or to collaborate with digitally skilled experts. If we want to take control over the world, in this age of manipulative capitalism, we have to understand what happens 'on the other side of the screen'.

The accent on the artist as a team player and the link between the arts and the industry is often considered as troublesome

by the cultural as well as industrial world. Gropius strongly supported the idea of developing close connections between the school and the industries. More spiritual minded people such as Johannes Itten, an artist and teacher at Bauhaus, had difficulties with this development and had to leave the school in the end. His subversive ideas and his interest in Oswald Spengler's book *The Decline of the West* (1918/1922), which denounced Western rationalism and technology, led to a final break up with Gropius (Dickerman, 2009). Gropius wanted to force connections between industry, technology, architecture and applied arts. The Regional S+T+ARTS Centers encounter similar criticisms and are forced to play an intermediary (not the same as diplomatic) role between the world of culture and industry. A task that is not always easy and fulfilling, but of great importance in the search for "intersectorial" solutions.

In October 2020 the Van Eyck Academy in Amsterdam publicized an open letter questioning the Eurocentric tone of the presidential Bauhaus declaration. "The Bauhaus is not only the epitome of Modernism, but also of colonial extractivism. If the Cultural European Green Deal is to become a prosperous and sustainable project, criticality and multiple histories should be part of the overarching narrative. Furthermore, the transnational character of climate change challenges the idea of borders and national sovereignty, showing us that the only way forward is in thinking of the world as a whole." Although Bauhaus artists such as Klee & Kandinsky have always shown interest in ethnic cultures, they were 'most probably' less concerned and aware about the third world problems as 21st century citizens do. The Regional S+T+ARTS Centers have been trying to develop projects that always incorporate other continents. The S+T+ARTS prize for example has rewarded many artists outside Europe. Also in the future, via a S+T+ARTS diplomacy program, the Regional S+T+ARTS Centers might be able to focus on the inclusion of non-European projects, challenges and narratives. Moreover, many of the projects realized by S+T+ARTS have been openly critical towards colonial practices, not in the least the exploitation of child labor to produce the technological devices our society depends upon.

Collaborations between arts and industry are not evident, therefore it's always interesting to take a look at the business

models behind the Bauhaus as well as the Regional S+T+ARTS Centers. In 1923 Gropius introduced a new business unit, run by a business manager in charge of ensuring the school's financial viability through partnerships with outside retailers and manufacturers. He stated that industry and science were predominant over design and described the workshops as laboratories for manufacturing models for industry. In 1926 he founded the company Bauhaus Ltd. for commercial marketing of the products. But, unfortunately, the school's relationship to industrial production was in the end ambiguous, characterised by paradoxes and mostly depending on 'grants' from the government. It's funny that the most successful and lucrative product that came onto the market from the Bauhaus, was the Bauhaus wallpaper. (Bauhaus online, 2015).

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The Regional S+T+ARTS Centers encounter similar challenges today, how can we make them financially sustainable and how can we convince the industry to collaborate with them? Showing industrialists, policymakers, researchers and citizens how 'Arts Thinking' and 'Artistic Prototyping' can lead to innovation is crucial. The creation of a travelling S+T+ARTS collection presenting best practices that sensitize third partners to co-invest could be a great idea.

Let's end with the reflection on how deeply the S+T+ARTS project is rooted in its Bauhaus predecessor. The story of the Bauhaus ended in Berlin in 1933 after its closure by the Nazi regime. Many famous teachers associated with the Bauhaus moved to the USA and took up important new positions in cultural or educational institutions that would support collaborations between people from different disciplines or had a strong interest in new technologies such as; the Black Mountain College, the Harvard Graduate School of Design, the Illinois Institute of Technology, the New Bauhaus in Chicago and the Center for Arts and Visual Studies at MIT, founded by the

Hungarian engineer György Kepes. These institutions paved the way for the revolutionary Experiments in Arts and Technology programme (E.A.T.) that made a crucial link between the interdisciplinary thinking of the Bauhaus and the latest developments in the field of computing in the sixties in the States.

E.A.T. attracted the attention of many cultural organizations, artists and governments all over the world. In Europe it led to different new institutions such as; Ars Electronica, ZKM Karlsruhe, Ircam Paris or Waag Society Amsterdam focusing on the crossing borders of art, science, digital technology and society. Not at least inspired by a certain fear that these new digital technologies developed in the States would lead to gigantic jobs losses or horrible inventions for the war industry. These new institutions were founded in the last quarter of the 20th century by visionary artists willing to warn society for the dangers technology can bring but also offering opportunities for citizens and artists to use technology for a better world. Of course it is no coincidence that it were these avant-garde institutions that helped to inspire, organize and co-fund the 21st century S+T+ARTS programme that was launched in 2014 by DG Connect of the European Commission. And this in turn paves the way for many different European Regional Starts centers all over Europe, defending the spirit of liberty, technological progress, humanity and sustainability.

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Art Thinking: A catalyst for human-centered innovation

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In 2020 we have found ourselves in the midst of great systemic upheaval. Developments such as the COVID-19 pandemic, humanitarian crises and ruptures in our democratic systems are seriously affecting our political and socio-economic frameworks. These challenges are not new, but rather the culmination of society's appropriation of the planet's natural environments. As we face the current crises, we rely on the technologies and tools we've created, now more than ever before, and to find the urgent solutions to these large-scale and global challenges, our focus must be directed towards a human-centered approach to innovation.

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Ever since the wide-spread adoption of computational technologies in the 1970s, a growing, transdisciplinary community of artists, scientists, researchers and creative practitioners emerged to not only explore them as artistic and creative media, but to highlight the need for critical reflection on their application and adoption in our everyday lives - from our immediate surroundings and homes to companies, factory floors, educational institutions, scientific institutions or laboratories. More often than not, the stories told through their creative outputs raise awareness for the necessity of focusing on the rights of the human itself. The necessity and potential of bringing this community together with industry representatives, policy makers and government representatives on a national and European level has long since been widely recognized by bodies such as the European Commission, who have been fostering STARTS and STARTS-like approaches for at least the past 15 years.

Initiatives linking artists researchers with the hot-spots of innovation are greatly aided by the fact that a large number of cultural institutions across the European Union recognized ear-

ly on the need for facilitating these kinds of disruptive encounters. This understanding is a crucial link between the partners involved in Regional STARTS Centers, with each sharing a number of central interests in developing a regional agenda for human-centered innovation: how can artists be included in innovation processes, and how can they be recognized in key roles in this context together with policy makers, industry partners and governing bodies? How can we implement these ideas, which are already quite familiar to an international audience, within a local community of artists, research institutions, SME's, startups, local policy makers and municipalities?

Zooming into the perspective of Ars Electronica, one of our major driving forces has always been to promote the role of artists in highlighting issues and challenges of larger societal concern. Raising awareness for this requires a toolbox of strategies, one of which is 'Art Thinking', a methodology which draws questions relevant to innovation from artistic outputs, and links these questions with the creation of future scenarios and concrete prototypes. Art Thinking is built on the core idea that art can have a major role in creating a better future for society.

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Today, the Art Thinking approach is prevalent within the entire Ars Electronica ecosystem: The Ars Electronica Center, the "Museum of the Future" has become an exhibition space and informal learning environment built on the conviction that education focusing on cross-disciplinary strategies to tackle societal challenges should start at a very young age. The Ars Electronica Festival highlights the most outstanding and convincing collaborations between artists, scientists, companies and technology partners and facilitates encounters of these parties. The Future Thinking School, one of our newest additions, focuses on capacity building for SME's, municipalities

and companies. Lastly, the Ars Electronica Futurelab, a “Laboratory for Future Innovations”, routinely brings its industry partners and clients together with artists, scientists and creative technologists in their ideation and prototyping processes.

We are moving through a seismic change at the moment, as our technological frameworks are changing from automation to autonomisation, as we are moving on from working with automated systems to implementing systems that act, up to a certain degree, autonomously. We’re having to face such massive challenges as climate change, pandemics and upheavals to political systems, and many of these technologies will be pivotal in developing solutions, and thus undergo accelerated development. All the more this means that critical reflection needs to be an immanent part of the innovation process. What we find is that the hybrid, artistic community is already working in parallel, making visible points where we have to dive deeper into ethical concerns and implications, developing open source technologies, building communities and bringing up crucial points of concern relevant to industry and policy makers. While the potential for inspiration within art is undisputed, innovation also requires an overarching mission linked with a concrete plan of action. Art Thinking goes beyond inspiration, and follows up with envisioning scenarios and prototype modeling in artistic projects that comment on specific issues in tangible ways. It applies the inspirational quality that is inherent to art to develop the questions we should be asking ourselves as we further develop these technologies. This process of inquiry leads to future sketches – concepts of the future we are working towards – and culminates in concrete prototype development.

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Through posing critical questions, art can trigger thought processes that lead to concrete solutions. It can also be a bridge builder when bringing together diverse groups such as citizens and the general public, policymakers, companies and indust-

ries in workshops focusing on shared challenges - a task which is a major concern for projects like Regional STARTS Centers. Methodologies like Art Thinking can act in a way as a translation tool: when sharing the potential of art to influence innovation - especially when reaching out to industry, SMEs and CCI new to the idea - it is helpful to work with frameworks and structures that are discussion based, focused on identifying the most pressing questions to ask, and that lead towards concrete actions that need to be taken.

In international contexts, at European level and within a significant number of high-level companies the potential of art as an innovation catalyst is well established.

Evidently, the development of sustainable chains of innovation is not only relevant on a national or international stage, with more and more initiatives such as STARTS identifying regions that show an openness towards their dynamics. Projects like Regional STARTS Centers provide a great opportunity to direct a focused effort towards awareness building in regional contexts, as they harness the potential for innovation in local industries and CCI communities and lay the groundwork for anchoring STARTS in local networks in a sustainable and long-term way.

Working with methodologies like Art Thinking is especially relevant when implementing STARTS and its core ideas at a local level, and to many potential regional partners, local industry and policymakers this might be new terrain. Building a strong toolbox based on methodologies such as Art Thinking or one of the many other successful strategies employed by partners within Regional STARTS Centers can be of aid in cultivating a new culture of human-centered innovation.

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Harnessing the power of European regions through STARTS

For the European Commission, identifying and creating opportunities to connect artists, scientists, researchers and industry partners is by no means new territory.

The ICT&Art Connect pilot programmes launched in 2012 and 2013 focused on creating interlinkages between ICT industries and artists. These programmes took the first step in highlighting the immense potential of creative and artistic use of ICT as a catalyst for innovation processes. They also shone a light on an ever expanding international community of researchers, artists and creative technologists who implement ICT in their creative and artistic practice with great impact.

These pilot projects led to the creation of S+T+ARTS = STARTS – Innovation at the Nexus of Science, Technology, and the Arts. Built on the foundations of ICT&ART Connect, STARTS is an initiative to foster alliances of technology and artistic practice that effectively nurture European innovation while also benefiting the art world. The focus is on people and projects that contribute to mastering the social, ecological and economic challenges faced by the European continent. Since 2015, the STARTS initiative has evolved into an international community and growing network, featuring the STARTS Prize, a yearly prize competition, an educational programme for youngsters in the form of STARTS Academies, as well as STARTS Lighthouse Pilots that tackle concrete societal challenges such as the development of human centered technologies, best practices for wearable technologies and sustainable fashion design or new modes of spatial and architectural design. The STARTS initiative also implemented one of the largest residency networks in Europe bringing together artists, research institutes and technology partners for the development of innovative prototypes.

Regional STARTS Centers diverges from the international perspective of STARTS, and tackles a new challenge: how can the core values and ideas of the initiative be implemented in regional and national policy making? Which cornerstones does a regional STARTS agenda have to be built on? How can the potential and unique characteristics of various European regions be harnessed to build a strong, locally focused network consisting of artists, CCI, SME's, industry partners and startups?

Within this first edition of Regional STARTS Centers launched in 2019, seven institutions based in the regions of Lombardia (IT), Brussels-Capital (BE), Upper Austria (AT), Brandenburg (GER), Grand Provence (FR) and Central Macedonia (GR) became a testing ground for developing and implementing concrete strategies taking on these challenges. MEET Digital Culture Center in Milano, Ars Electronica in Linz, the Centre for Fine Arts (BOZAR) and GLUON in Brussels, Film University Babelsberg KONRAD WOLFF in Potsdam, French Tech Grande Provence in Avignon and MADE Group in Thessaloniki share a number of characteristics positioning them ideally as ambassadors for STARTS on a regional scale: they are cultural institutions with a central focus on society's relationship with technology and a long-standing practice of operating between art, science and tech. They build their activities tackling these topics on diverse programmes such as exhibitions, workshops, consulting, residencies, incubators and knowledge transfer. They recognized early on the potential of bringing together artists working with ICT and industry partners as enrichment for both artistic practice and innovation processes and they are aware of the importance of raising awareness among the general public for these topics through capacity building and developing solid educational frameworks.

Over the past one and a half year, they worked on the implementation of local STARTS networks based on an understanding of a number of shared guidelines: the value of training activities involving diverse target groups from children, youth and students in higher education to local SME's, CCI and policy makers when introducing STARTS approaches, the importance of sharing the value of creating spillover between art, science, technology and industry with SME's, industry partners, startups and CCI and enlarging this particular group of stakeholders, as well as building on the STARTS initiative's prior outputs and findings in developing and growing new regional communities.

Taking this collective strategy and understanding for the framework of a regional STARTS center as a starting point, it nevertheless proved imperative to consider the specifications and particularities of their individual regions, and to create tailor-made programmes that focused strongly on the circumstances and requirements of their local artistic, scientific and research communities, SME's, CCI and potential industry part-

ners. Built on a strong, locally focused strategy, the regional STARTS centers hosted both online and physical exhibitions, conferences, workshops and capacity building programs. The activities were very much influenced by the spread of COVID-19 in 2020, as a large number of planned programmes had to be adapted to digital formats and iterations due to travel restrictions being implemented and physical events becoming exceedingly difficult to host.

The resulting publication aims to show how the Centre for Fine Arts (BOZAR), MEET Digital Culture Center, GLUON, Ars Electronica, French Tech Grande Provence, Film University Babelsberg KONRAD WOLF and MADE Group developed individual approaches to their regional STARTS Centers, introduces policy recommendations outlining ideas on how STARTS strategies can be anchored on regional, national and European level and singles out 14 best practice examples organised and hosted by the seven partners in the areas of professionalisation, presentation and knowledge transfer as well as innovative residencies and pilot projects.

Based on a review of Regional STARTS Centers programming across all institutions, these three approaches were identified as being particularly conducive in reaching out to new regional stakeholders and sharing the core ideas of STARTS.

Professionalisation

Activities with a focus on professionalisation pivoted towards in-depth capacity building through participative and interactive formats in fields such as citizen involvement and sustainability in urban planning, marine pollution, artificial intelligence or digital innovation and energy efficiency. They brought together members of the general public, policy makers, industry partners, startups, artists and researchers as well as students and aimed to highlight the potential of STARTS approaches through developing shared concepts and ideas to tackle these challenges.

Presentation & Knowledge Transfer

The area of presentation and knowledge transfer includes formats dedicated to spreading and showcasing the core values of STARTS through online and physical exhibitions, presentations

and conferences. Many of these activities link the presentations with workshop programmes incorporating the artworks, projects and contents discussed. They are built on showcasing impactful examples from artists, creatives and researchers already active and immersed in the STARTS field and using these to introduce new stakeholders to the potential of creating spillover between art, science, technology and industry.

Innovative Residencies & Pilot Projects

Innovative residencies and pilot projects bring together artists, technology, research and industry partners for the creation of new prototypes, and thus highlight the potential of art as a connector and catalyst for innovation. Innovative residencies and pilot projects focused on targeted matchmaking between artists, startups, companies and research partners with the aim of co-creating prototypes built both on the strength of the artistic inputs and know-how of the other partners. The outcomes clearly highlight the potential of creating connections between artists and industry partners, and can serve as use cases to highlight the potential of art/sci/industry collaborations in introducing new SME's, CCI and companies to local STARTS networks.

In summary, these three strands of activities have proven to be useful tools in embedding STARTS in local communities with a particular focus on reaching out to different stakeholders: professionalisation programmes showcase the potential of STARTS strategies for tackling concrete challenges through bringing together collaborators from diverse fields. Presentation and knowledge transfer utilises the initiative's extensive and evocative outputs to communicate the core ideas of STARTS to new communities and stakeholders, and innovative residencies and pilot projects are especially successful in introducing local SME's, CCI, startups and industry partners to STARTS and including them in regional communities.



THE REGIONAL STARTS CENTERS

1

Since 1979, Ars Electronica (AT) has been concerned with shaping the future and the impact of new technologies on our lives. In doing so, attention is always focused on the role of the human being, the cultural and social challenges and the resulting opportunities for shaping the future. Ars Electronica has developed an internationally successful platform from the trend-setting exchange and interplay between art, technology and society.

Formulated in 1979 for the first Ars Electronica Festival, the “Art, Technology and Society” approach has lost nothing of its programmatic focus. Within four decades, Ars Electronica has created an ecosystem for innovation that encompasses a wide variety of activities.

2

BOZAR LAB (BE) is a platform of the Centre for Fine Arts (BOZAR) in Brussels promoting multidisciplinary encounters between artists, creative entrepreneurs and scientists. We encourage experimental collaborations between artists and scientists with spill-over effects in the framework of the different artistic departments of BOZAR. We raise awareness towards politicians at local, Belgian and EU level on various topics: smart cities, artificial intelligence, sustainability or post-humanism via the means of exhibitions, conferences, festivals or residencies.

3

GLUON, a Brussels (BE) based non-profit organization, realizes collaborations at the intersection of contemporary art, research and industry. It is supported by an extensive network of national and international research institutes, museums, public authorities, businesses and artists. It aims to raise awareness on global challenges and has developed a platform to maximize collaborations, confrontations and collisions between artists, researchers, industrial partners and active citizens to that end. The outcome of various artist residencies is used to reinforce GLUONs engagement for educational STEAM programmes.



4 French Tech Grande Provence (FR) is a regional hub based in Avignon, South of France, bringing together all the players in the innovation ecosystem in the field of cultural and creative industries. Its ambition is to create favourable conditions for the emergence, development and perpetuation of startups deploying innovative solutions around artistic, cultural, tourism and mobility applications.

5 MADE GROUP (GR) is a non-profit policy advisory, strategy design and cultural consultancy for social innovation initiatives and projects, collaborating with public and private partners. MADE aims at creating sustainable futures, promoting cross-disciplinary synergies and cultivating digital culture with a social impact. Its core mission is to bridge the digital divide based on the potential for growth, innovation and social inclusion that emerging technologies and the EU Digital Single Market Strategy can bring.
Memberships: Digital Skills and Jobs Alliance, Group of Shared Knowledge Platforms for Sustainability and Social Innovation-CAPSSI, supported by the EU Commission.

6 MEET (IT) is the first Italian international centre for digital culture – based in Milan - supported by Fondazione Cariplo. MEET is first and foremost a social enterprise whose mission is helping bridge the digital in the country, being convinced that innovation is primarily a cultural matter, before being about technology and that the dissemination of the digital culture fosters economic growth while increasing opportunity and well-being for the benefit of all citizens. MEET is committed to disseminating digital creativity with a permanent focus on art, science and technology.

7 Film University Babelsberg KONRAD WOLF ranks among Germany's largest and most modern film schools and, in 2014, became the first German film school to achieve university status. Film University follows an interdisciplinary approach to artistic, technological and academic teaching and research on the topic of film in its historical, current and future dimensions.

5 Located next to the 100-year-old Studio Babelsberg, Film University forms an integral part of 'Babelsberg Media City'. As a member of Media Tech Hub Potsdam, a hub of future-oriented media industries, Film University is well connected in the region of Berlin-Brandenburg.



Ethereal Fleeting by Lukas Truniger, Itamar Bergfreund, Bruce Yoder at Ars Electronica Festival 2020, © Florian Voggeneder



Ars Electronica (AE) is a cultural institution, an educational facility and an R&D lab based in Linz, Austria. Like no other institution, Ars Electronica represents a comprehensive approach in the confrontation with techno-cultural phenomena and has recognized worldwide reputation for excellence. Over the past 40 years, Ars Electronica has created an ecosystem for innovation that not only supports and enables a wide range of artistic developments and achievements, it also allows for pioneering technological developments, replicating the artistic thinking process from inspiration to experiments through to creation, involving a wide range of disciplines and skills. This ecosystem revolves around the nexus of Art, Technology and Society that was coined for the first Ars Electronica Festival in 1979, and has since developed to encompass a whole spectrum of activities.

It comprises four divisions: the Ars Electronica Festival, the Prix Ars Electronica, the Ars Electronica Center and the Ars Electronica Futurelab. These four divisions mutually inspire one another, constituting a circuit of creativity: The FESTIVAL as test environment and the PRIX as competition of the best and brightest—both of them international, artistic, experimental and focused on the leading edge; the CENTER as year-round presentation & interaction platform—local, educational and entertaining; and the FUTURELAB as R&D facility—innovative, creative, endowed with strong technical competence and implementation skills, linked up to a global network of universities & research facilities. With its experience in 40 years of trans-disciplinary working, Ars Electronica has a strong expertise in terms of the creative use of new technologies through artistic practices on the nexus of science, technology and the arts.

Statement

Ars Electronica placed its emphasis in developing the activities for Regional STARTS Centers on several axes, from reaching out to new potential STARTS stakeholders within Ars Electronica's large scale network of local collaborators, to strengthening relationships with regional CCI and industry partners as well as tackling the area of capacity building. Looking back on over twenty years of experience in the fields of education, mediation and capacity building, Ars Electronica Center equips everyone from kindergarteners, school children, youngsters, companies and their workforce through to senior executives with the tools to utilize, reflect and critically question the digital technologies permeating every aspect of our everyday lives.

With a set of micro-residencies, Ars Electronica brought new artistic perspectives from the engineering, biotech and robotics fields to the Ars Electronica Center's Bio Lab, Machine Learning Studio and Open Soundstudio. In collaboration with the Ars Electronica Center's mediators and scientific advisors Moritz Simon Geist, Youyang Song and Hansi Raber developed new artworks and prototypes which were implemented as exhibits in these hands-on lab areas, as well as providing a framework for workshops co-developed with the artists.

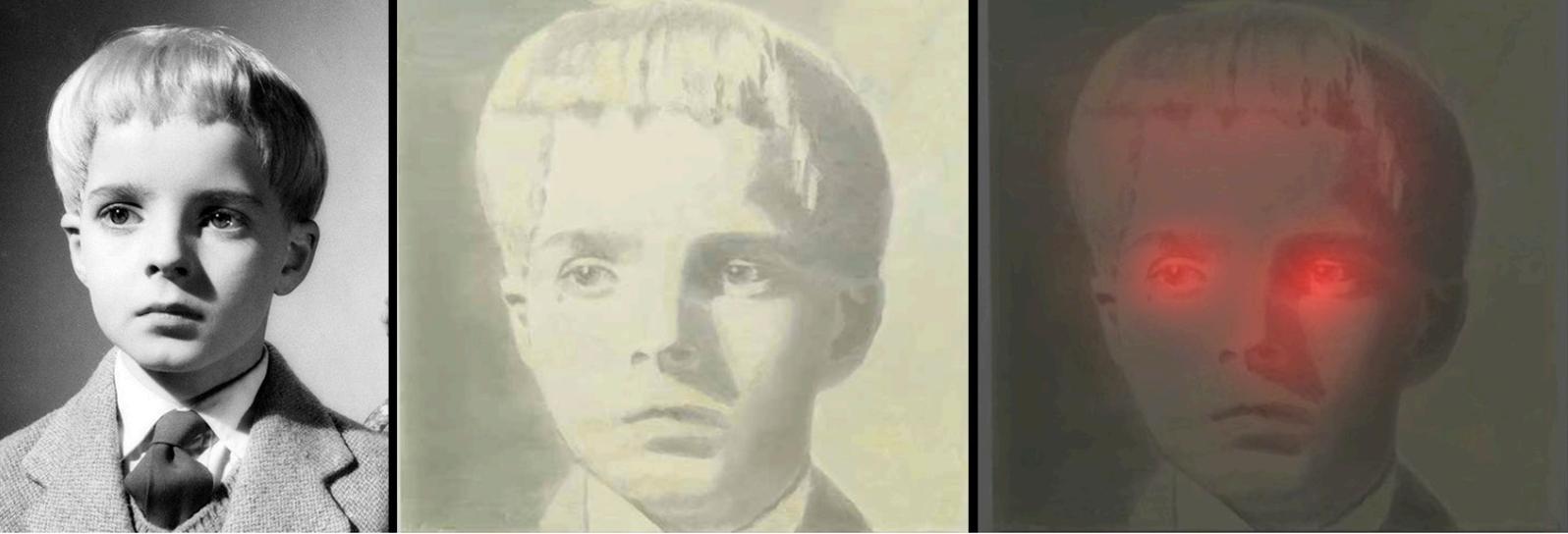
Another programme focused on co-developing a workshop toolkit for Ars Electronica's new educational unit, the Future

Thinking School, focusing on demystifying artificial intelligence with expert advisors: together with philosopher Janina Loh, interactive design studio OmaI and artist duos Shinseungback Kimyonghun and Avner Peled and Shirin Anlen the workshops explore the inner workings of facial recognition, dataset creation, the ethical implications of integrating autonomous systems in our environments and provide insights into the training processes of neural networks.

This year's Ars Electronica Festival also hosted a number of Regional STARTS activities : 12 artists, researchers and creative producers with a strong STARTS approach and a central focus on ICT innovation in their work were commissioned to provide an insight view into their practice in video format. Presented for the first time at the Ars Electronica Festival 2020, these films can now be used to introduce the STARTS Agenda to local and national government representatives, decision and policy makers. Two matchmaking sessions focused on art and science practice and open source platforms connected new local and national STARTS stakeholders with long-term international STARTS collaborators, and this year's STARTS Day brought in a new local community of STARTS stakeholders from the Johannes Kepler University in addition to more international perspectives.

Moritz Simon Geist performing with his interface TOC ONE at Ars Electronica Festival 2020, © Florian Voggeneder





© Luc Tuymans, The Valley, 2012, serigraphy, 71 x 73 cm, reworked by Björn Wahle

BO ZAR

The Centre for Fine Arts (BOZAR) is a multidisciplinary art hub offering activities in a wide range of fields of artistic practices. Located in a 1920 Art deco building, it hosts exhibitions, concerts, performing arts, cinema, literature and debates. With 12 cultural events organised per day it attracts over 1 million visitors a year.

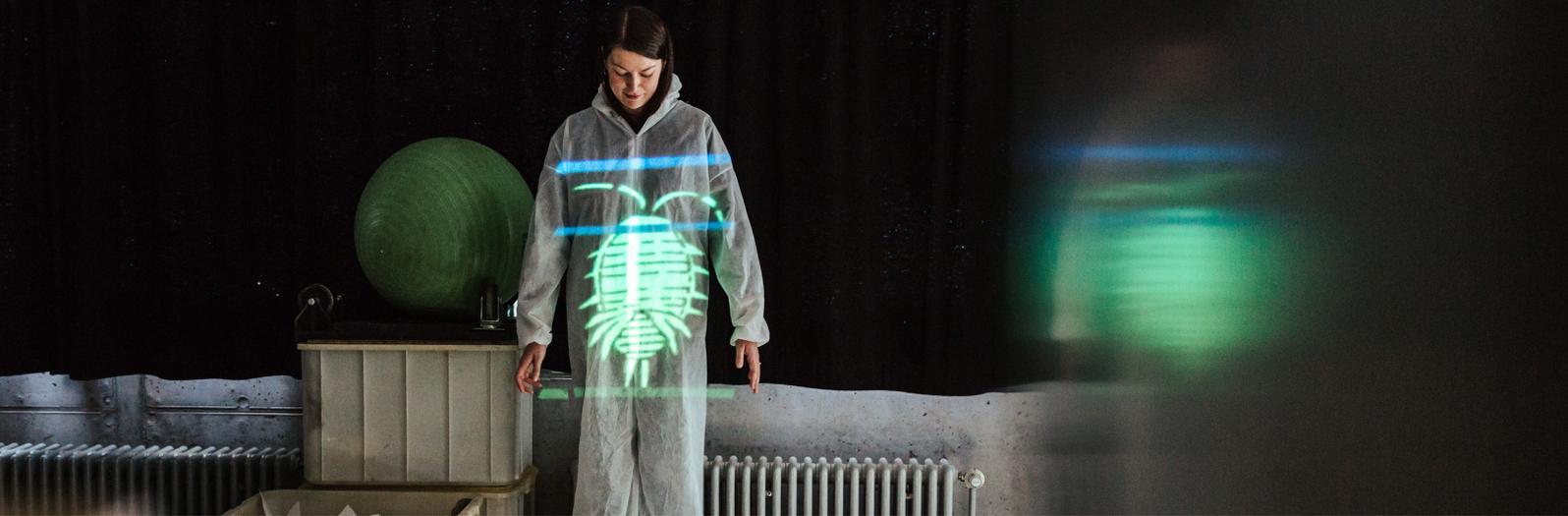
BOZAR LAB is a platform of the Centre for Fine Arts (BOZAR) promoting specifically multidisciplinary encounters between artists, creative entrepreneurs and scientists. BOZAR LAB aims to play a role in catalysing cultural and creative industries by offering a space for the development of architecture, urbanism, cinematographic industries, photography, book industries, design, and the digital culture. We encourage experimental collaborations between artists and scientists with spill-over effects in the framework of the different artistic departments of BOZAR. We raise awareness towards politicians at local, Belgian and EU level on various topics: smart cities, artificial intelligence, sustainability or post-humanism via the means of exhibitions, conferences, festivals or residencies.

Statement

In the framework of Regional STARTS Centers, the Centre for Fine Arts (BOZAR) organised a series of relevant events in 2019 and 2020 with important partners of its network and region around the topic of S+T+ARTS. The events were opportunities to gather citizens and representatives of various fields (art, design, technology, industry, university) and invite them to reflect on different topics. One of the main topics developed through BOZAR's RSC activities was the sustainable development of the city of Brussels and larger European cities, and the transformation of our societies in the light of technological innovation. In parallel, BOZAR also supported projects that were more closely linked to art and its relation to new technologies. The two main activities were "Hacktivate the City" (where youngsters were sensitised to wearable technology) and "FLOW: A residency between Luc Steels and Luc Tuymans". Both projects proposed speculations and prototypes on the possible links between the art world and the technological one.

BOZAR's key entry into the Regional STARTS Centers programme was thus to propose a reflection on art and technology, in society. Be it through a residency, an exhibition showing the results of wearable tech labs by young people, as well as conferences, and a workshop hackathon, the different activities were organised with researchers from renowned regional institutions: the EHB University (Erasmus Hogeschool Brussels University of Applied Sciences and Arts), the VUB (Vrije Universiteit Brussels), or the ULB (Université Libre de Bruxelles), as well as Brussels City policy-makers and international partners. The different events organised with partners gathered participants that could confront their ideas and involvement in sustainability challenges. The success of the activities proved that citizens, as well as artists, start-up representatives and policymakers, are able to reflect together on these topics through the tackling of science, technology, and the arts, when facilitated by regional STARTS centers such as BOZAR.





Summer School Transmedia Storytelling - Camilla Plastic Ocean Plan (CPOP), © Manuela Clemens



FILMUNIVERSITÄT
BABELSBERG
KONRAD WOLF

Film University Babelsberg KONRAD WOLF ranks among Germany's largest and most modern film schools and, in 2014, became the first German film school to achieve university status. Film University follows an interdisciplinary approach to artistic, technological and academic teaching and research on the topic of film in its historical, current and future dimensions.

The interlinking of science, technology and the arts, in the sense of the STARTS initiative, is the guiding principle of Film University. Innovative research in knowledge and film, audiovisual cultural heritage as well as into questions of education and social innovation is intertwined with technological expertise in storytelling, image, sound, animation and virtual environments.

Located next to the 100-year-old Studio Babelsberg, Film University forms an integral part of 'Babelsberg Media City', which is home to 16 film studios. In 2018, for example, the Volucap Studio was established as the first commercial studio for volumetric recordings in Continental Europe.

As a member of Media Tech Hub Potsdam, a hub of future-oriented media industries, Film University is well connected with a variety of partners in the region of Berlin-Brandenburg. This hub of companies, start-ups and universities promotes core industries of media technology, film, virtual reality and digital engineering.

Statement

Film University's approach of developing a regional STARTS Center was based on three elements:

- 1) Setting-up the Regional STARTS Centers project as a driver to build up new collaborations to the regional industry and cultural organizations
- 2) Acting as a credible multiplier for the idea of dissolving the separation between science, technology and the arts by realizing network events and communicating the project within Film University's networks (e.g. UNESCO Creative Cities Network)
- 3) Creating synergies between successful and highly visible projects of artistic research at Film University to anchor the STARTS idea in the region

In order to establish themselves as Regional STARTS Center, Film University focused on seed activities and spreading the idea of bridging technologies and the arts at networking activities.

As seed activities, Film University hosted Summer Schools targeting students, young filmmakers and professionals, researchers and artists in the region and beyond. Film University

has been successful in attracting speakers and experts from its regional and European networks alike: researchers, artists from various disciplines (e.g. VR, animation and visual arts) as well as stakeholders from all stages of film production.

Film University's networking activities focused on connecting (media) scholars and creatives with the regional industry. Bringing in these different mindsets Film University approached crucial topics: Why are creatives often hesitating to use innovative technologies? How can an art school teach students to think outside their discipline?

The Regional STARTS Centers impact on the regional industry in Potsdam is twofold: Firstly, it built awareness of the value and chances of integrating creativity in technological production processes. Secondly, the project revealed the capacity industry partners have in bringing into application new technologies by considering artistic (and artist's) ideas.

The results of Film University's seed activities will be merged into online platforms aiming at inspiring their users to S+T+ARTS learning and initiating projects and collaborations at the nexus of science, technology and the arts (see e.g.: www.camillaplasticoceanplan.com).





ATLAS by Deval & Loseau at STARTS exhibition VISIBLE SENSIBLE, © Quentin Chevrier



Under the French Ministry for the Economy's initiative, La French Tech is a global movement highlighting french innovation, entrepreneurship and start-ups.

French Tech Grande Provence is a regional hub based in Avignon, South of France, bringing together all the players in the innovation ecosystem in the field of cultural and creative industries. The hub's ambition is to create favourable conditions for the emergence, development and perpetuation of start-ups deploying innovative solutions around artistic, cultural, tourism and mobility applications in Avignon city and Provence region.

The territory of French Tech Grande Provence gathers 1260 digital and tech companies, 4 competitive clusters and benefits from a surrounding "living lab" in the cultural and creative sector, with 9 international festivals, gathering more than 1,9M spectators and 5 sites classified by UNESCO.

In addition, French Tech Provence acts as a hub for culture and technology crossovers at the national level. At the national scale, as a major actor for the creation of sustainable conditions for entrepreneurship and economic development in the creative industries sector, with a strong experience in ecosystem animation outside capitals and major cities.

Statement

French Tech Grande Provence built its Regional STARTS Centers activities around its experience and local network, as well as the involvement of local foundations active in the field of art and tech collaborations.

FTGP worked together with two specific industry partners in developing their programmes:

- In the Provence region, they teamed up with EDIS, the first endowment fund dedicated to new media art, based in Avignon.
- In the Grand Paris region, FTGP set up a strong partnership with Fondation FIMINCO, a foundation of the real-estate company FIMINCO.

The collaboration with these two partners strongly influenced the definition, production and funding of FTGP's Regional STARTS Centers programme. With one of FTGP's main functions being that of a hub supporting the regional start-up ecosystem, both of them prove to be natural targets for Regional STARTS Centers activities such as facilitating professional encounters or hosting talks about transdisciplinary innovation.

With regards to the two regions in focus, FTGP chose to focus on Avignon and Grand Paris due to their shared particularities. Both of them are highly visible on the national as well as the in-

ternational scale: one for economic development, Grand Paris being an ambitious project focused on the sustainable development of the region's economy and employment; and Avignon on the other hand being renowned for its cultural and artistic international dynamic, with the region hosting many major international art festivals. On the other hand, both regions also have to deal with very specific challenges concerning social context, integration of populations and communities, and bridging the gap between their position as very attractive international regions in a specific context, and the concrete benefits and opportunities for inhabitants of these areas. Bringing Regional STARTS Centers to these regions was a very conscious effort on part of FTGP based on the conviction that developing education, training and the setting up of pilot art & tech actions will help to re-invent the relationship of the territory and its citizens, in an innovative context.

From the very beginning of the Regional STARTS Centers project on, FTGP was focused on developing programmes with long-term impact, such as the collaboration with Sony CSL Paris as part of the STARTS exhibition at Fondation Fimincoco, which was the successful start of a deeper collaboration. As a result of the successful first joint event, Sony CSL Paris and Fondation Fimincoco, supported by French Tech Grande Provence, are now setting up a STARTS Residency.

Big Torrent exhibition, © Bipolar





Snowhoop by Pieterjan Gincjels, © AF Fotografie

GLUON

Since its inception, GLUON has been raising awareness about global challenges. After all, a thriving society builds on a balanced interaction between the human and exact sciences, between people, their technological achievements, and the natural environment on which they depend. GLUON finds interactions between researchers, artists, entrepreneurs, young people and citizens indispensable in a joint search for solutions to the dangers and challenges that affect this system.

To this end, GLUON is developing a platform that maximizes collaborations and confrontations between these different actors. Our most important mission is to stimulate partnerships between artists, science and technology. The Art&Research operation of GLUON facilitates and supports artists' residences in the R&D departments of companies and research institutions on the one hand, and scientists' residences in artists' studios on the other. These interactions provide artistic and philosophical results, but also innovative ideas, services and products in non-artistic sectors. The educational programme or "GLUON Education" is the other important pillar of GLUON. The educational activities aimed at (Brussels) young people aged 14 to 18 support them through the arts in the development of digital skills, critical thinking, creativity and entrepreneurship. Our headquarters are located in the center of Brussels (Belgium) and consist of offices and an exhibition space. GLUON realizes its programme in collaboration with a growing number of national, European and international partners.

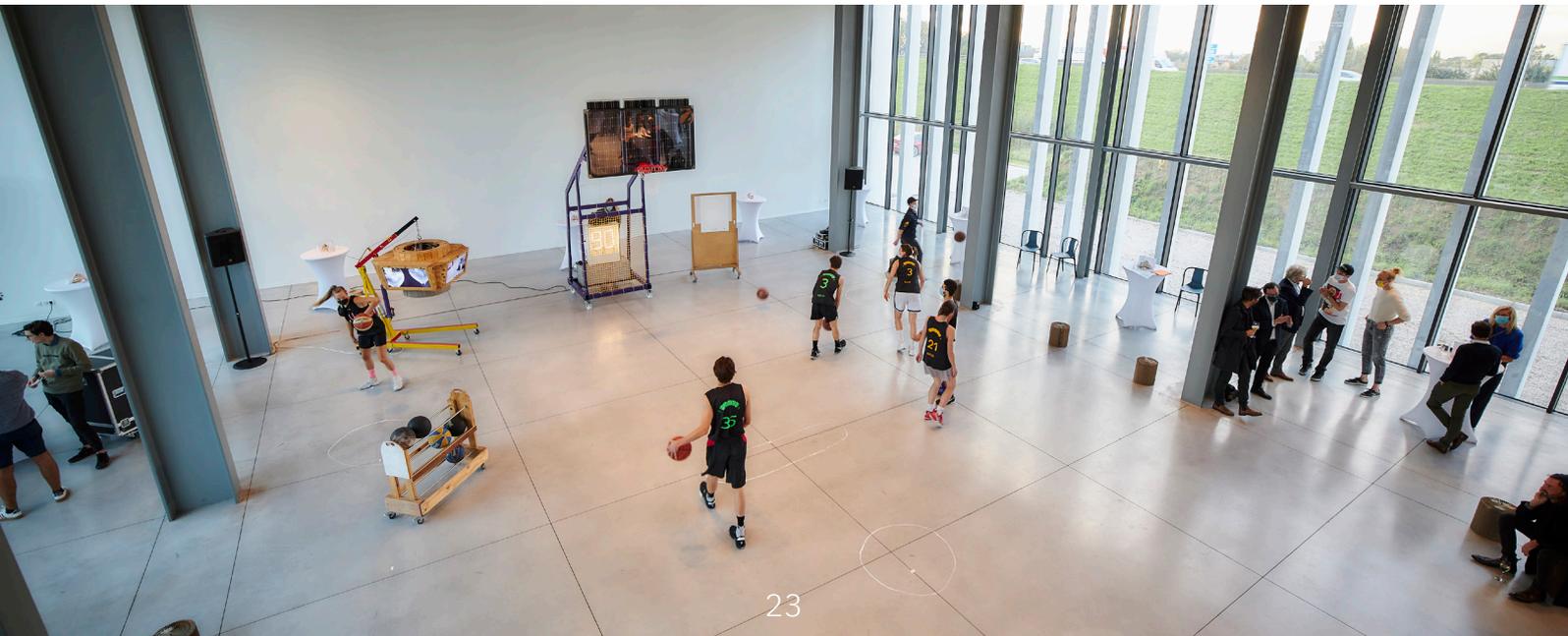
Statement

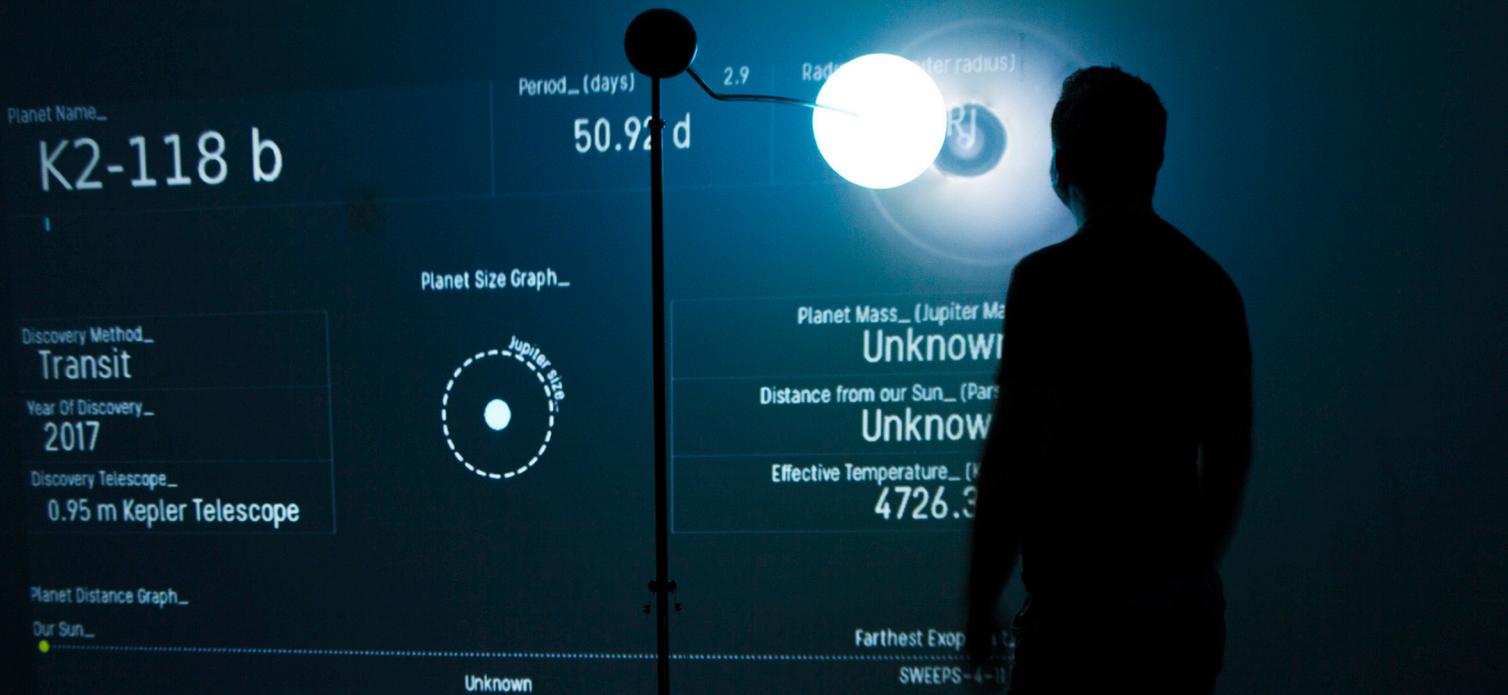
GLUON joined forces with a new state-of-the-art Cleantech hub Snowball as a Regional STARTS Center. The hub hosts a wide variety of Cleantech companies, each combining science and technology for the development of innovative solutions for a greener and cleaner planet. The Cleantech hub also provides an Accelerator to support and help grow Cleantech businesses.

By teaming up with the private sector (Snowball) GLUON aimed at promoting the STARTS programme and creating new alliances with regional industries and the private sector on national and regional level. Snowball acted as an ambassador by actively engaging their network (industry partners, regional innovation agencies, SME's, research institutions, policy makers) in participating in all the activities. The focus of GLUON and Snowball as a Regional STARTS Center was UN SDG 7 "Affordable & Clean Energy", UN SDG 11 "Sustainable Cities & Communities" en UN SDG 13 "Climate Action". To this end GLUON organised two public networking events exploring how the arts engaging with advanced science and technology can support the European Green Deal. Besides public capacity building events around these themes, GLUON also organized

2 artist residencies in partnership with the company Smappee located at the premises of Snowball. One residency invited belgian based Pieterjan Ginckels to make a reflection on UN SDG 11, „Sustainable Cities & Communities“, or how cities and communities can become safe, inclusive, resilient and sustainable. The artwork „SNOWHOOP“, an interactive sculptural installation permanently installed at the premises of Snowball is the answer. The second artist residency invited renowned artist Manthia Diawara to reflect on the impact of A.I. in the African continent and vice versa. Both artists collaborated with the A.I. experts of the company Smappee for the development of the artworks. On the basis of the pilot programme, Snowball decided to continue its collaboration on a long term basis together with GLUON and has participated in two new European calls for projects issued by the European STARTS programme under Horizon 2020 together with GLUON. Furthermore, GLUON was able to establish a collaboration with „De Tijd“, Belgium's leading financial newspaper, for the co-production of a series of capacity building events due to be in 2021 targeted at the industries and entrepreneurial community.

Snowhoop by Pieterjan Ginckels, © AF Fotografie





Pharos by Yannis Kranidiotis



MADE GROUP is a non-profit policy advisory, strategy design and cultural consultancy for social innovation initiatives and projects, collaborating with public and private partners. MADE aims at creating sustainable futures, promoting cross-disciplinary synergies and cultivating digital culture with a social impact. Its core mission is to bridge the digital divide based on the potential for growth, innovation and social inclusion that emerging technologies and the EU Digital Single Market Strategy can bring.

Memberships: Digital Skills and Jobs Alliance, Group of Shared Knowledge Platforms for Sustainability and Social Innovation-CAPSSI, supported by the EU Commission.

Statement

MADE's vision is to 'decentralise' the concept of the Regional STARTS Center geographically; by creating a vibrant social innovation ecosystem comprising more than 15 municipalities nationally, cultural organisations, universities, industrial partners, networks, artists, scientists, technologists and citizens. MADE integrated the mission of the Regional STARTS Centers programme with various markets, taking into account the national socio-technical structures and multiplying the positive outcomes vertically and horizontally by meeting the employability objectives of the DSM Agenda of the European Commission and the UN Sustainability Goals.

MADE's goal was to set the STARTS Agenda foundations in a transdisciplinary context; and to provide a supportive network that facilitates co-creation initiatives through matchmaking and mentorship. This encompassed collaborations in the field of art and technology but also expanding their activities to: 1) increase interdisciplinary awareness among artists, technologists

and scientists 2) re-think a digital future for cultural heritage and art/craft practices and 3) connect the local private sector & regional industrial developmental production with the creative industries; by embedding new technologies, digital tools and opportunities for digitalization; supported by a network of technologists, researchers, investors and entrepreneurs.

In this framework, MADE produced a programme aimed at raising awareness through educational activities, generating content through a series of virtual talks and a symposium, acceleration events through mentoring and reaching out diverse communities of practice to further disseminate the STARTS agenda and map the terrain for sustainable synergies. The Regional STARTS Center's approach is to serve as an inclusive cross-disciplinary platform that empowers and enables partnerships, collaborations and projects between individuals, organizations, industries, networks, universities and municipalities across the country.

Random Rhetoric © Ioannis Melanitis

YES



NO



ELSE





Challenging the City Walls, Workshop, © Elena Galimberti Bassa

MEET (IT) is an Italian organization that supports digital culture and creative technology. MEET was born out of Meet the Media Guru with the fundamental support of Fondazione Cariplo, one of the world's main philanthropic organizations. MEET runs the new Italian Digital Culture Center: 1200 square meters in the heart of Milan, a „sensitive“ and digital-ly advanced space including an immersive room, an audiovisual/intermedia lab studio, an auditorium, spaces for exhibitions as well as rooms for education and training activities.

MEET delivers a massive plan of live – online and on site – activities that bring people to experience and embrace digital technology as a part of their daily life and a resource for their creativity. MEET aims to reduce the Italian digital cultural divide. Other key factors are exchange, discussion and building of new projects together with several international partners, first and foremost the Toronto George Brown College, namely the Institute Without Boundaries specialised in multi-disciplinary and shared planning.

Designed as a socially-oriented institution, MEET collects, promotes and shares creative ideas and innovative projects to reduce the digital cultural divide and guarantee an increasingly more active participation with an approach centred on meeting and inclusion.

Statement

In its function as a Regional STARTS Center, MEET is a reference hub in Italy for the promotion of networks and projects for contamination between stakeholders, resources and visions of techno-scientific and humanistic knowledge to explore and imagine possible futures, with the aim of promoting more creative, inclusive and sustainable innovation.

As part of its role as a Regional STARTS Center, MEET promoted partnerships and collaborations with professionals and organizations in the Lombardy region with the aim of activating mutual learning processes and triggering innovation and creativity, in the interest of the community.

To this end, MEET implemented the following actions:

The CROSS FERTILIZATION LAB, in partnership with Assolombarda, included a Call for Digital Creators and various activities aimed at bringing creatives and artists into industries, to explore possible ways of innovation and contamination;

The CO-CREATION FORUM, an interdisciplinary co-design charrette on new forms of cultural participation, in partnership with the City of Milan, with the aim to explore and develop

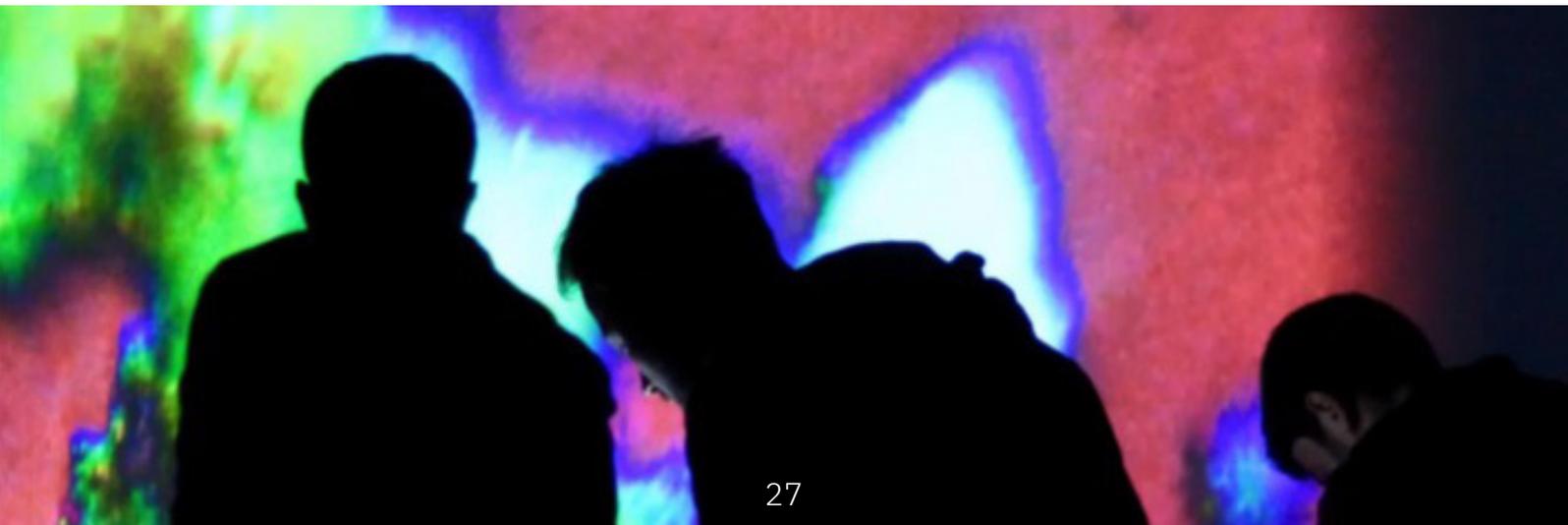
creative models technology-based that are able to outsource, extend, and connect the central areas of the city of Milan with the most peripheral areas of the city;

MEET THE MEDIA GURU for STARTS, an event to explore the synergies between Nature, Technology and Arts with William Myers, the author of two widely-acclaimed books about the intersections of nature, design and science in Biodesign and BioArt;

The STARTS SYMPOSIUM, an international summit to investigate synergies between art and technology and the impact on the industrial ecosystem, exploring the issues of digital creativity as a crossroads for the culture, economy and societies of our time.

As Regional STARTS Center, MEET activated synergies among its community, networks and stakeholders (public institutions, universities and research centers, business associations, urban and civic associations) to boost innovative ideas and strategies that merge science, technology and the arts for social, economic and cultural innovation.

Electro Organic Orchestra, presented at MEET's Cross Fertilization Lab



Policy Considerations

The spirit of the new ‘European Bauhaus’ recently proposed by the European Commission will need to be nurtured by pluri-disciplinary practices driven by art, industry, business and research stakeholders. Creative spillovers generated through such encounters do not only produce meaningful impacts by bringing ‘style’ to challenges related to sustainable development or any other field. These arts driven pluri-disciplinary collaborations also impact processes, practices, values, and symbols that are urgently needed by our societies today. The impact of an artist working together with a business or a scientist around climate change, artificial intelligence or neurosciences can go beyond the development of a ‘solution’ to a problem. It can infuse long-term and sustainable mindset changes allowing the shaping of new radical perspectives.

It is with such a spirit that collaborative practices between the fields of art, industry, business, and research must continue.

For years, the European Union has dared to support this approach through numerous transnational projects addressing these questions. From ECCE Innovation supported by Interreg in 2007-2012, to Kiics (Knowledge Incubation in Innovation and Creation for Science) or the STARTS-driven projects launched in the last few years by DG CONNECT, the EU and other pioneer regions and cities have been champions of these pluri-disciplinary approaches going beyond borders and silos. In the last decade, they have launched numerous policy orientations and projects to bring the arts closer to science and other sectors.

In its last European Agenda for Culture, the European Commission proposed for instance a series of commitments that echo the main suggestions raised by STARTS partners during this project:²

- Support partnerships between creative professionals and industries and European incubation networks for creativity-driven innovation integrating creativity, art and design with cutting-edge technology and science

- Explore a European Institute on Innovation and Technology Knowledge and Innovation Community on cultural heritage and creative industries
- Organise a regular dialogue with cultural and creative sectors in the context of the renewed Industrial Policy Strategy, to identify policy needs and underpin a comprehensive policy framework at EU level.

Later on, the Council of the EU issued its Work Plan for Culture 2019-2022³ which also recognizes the effect of cross-sectoral cooperation between culture and other areas such as science, healthcare, technology, etc, on cohesion and well-being. The impact of cultural and creative industries on innovation is also highlighted. Yet, the Work Plan does not suggest concrete options on how to support interactions between these sectors and other fields, from scientific actors to specific industries.

In spite of this, numerous isolated support measures have seen the light either for pan-European networks or for individual artists or institutions in most EU member states.⁴ The arts and their spillover effects on society have been gaining credibility thanks to various studies.⁵ In 2015, the “ICT ART Connect” study suggested recognising “artistic research as a valid practice in the production of knowledge, i.e. on the same level as recognised scientific and engineering practices.”⁶ The same year, the report “Cultural and Creative Spillovers in Europe” (2015) showed how three sorts of creative spillovers (knowledge, industry and network) could lead to new ideas, innovations and processes in an organisation, an industry or a territory.⁷

Today, the current COVID and climate change contexts as well as the likely economic and social crisis that will follow will probably make pluri-disciplinary spillovers (i.e the results and influences of arts-driven pluri-disciplinary collaborations on our societies) even more important. The seven partners within Regional STARTS Centers have therefore decided to come up with various suggestions of policy measures to further support

²Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: a New European Agenda for Culture, COM(2018) 267 final, Brussels, 22.5.2018

³Council Conclusions on the Work Plan for Culture 2019-2022, 13886/18 CULT, 132, Brussels.

⁴It is worth noting how specific EU funding strands such as the European Regional Development Funds have supported various initiatives in the field, notably through the Interreg programme. E.g: <http://ecce-network.eu/innovation-ecce/>

⁵See for instance the European Commission study on the Impact of Culture on Creativity, Brussels, 2009.

arts, industry, business and research collaborations in the coming years. A small survey was organized in 2020 to collect partners' views on these questions. The following sections try to summarize and capture the main recommendations that were raised.

Which typologies?

Designing appropriate support schemes for any sector often depends on a series of typologies that need to be taken into account. One could cite the level of decision-making (ie. local, regional, national or EU) that is the most relevant to implement certain support schemes. For instance, tax incentives are more likely to be adopted at national level. Another parameter could be the type of target beneficiary that should benefit from a support scheme. Shall it be the artist? A scientific body? A business hosting an artist? The audience? Various complementary measures could be jointly articulated and indeed considered in the light of the beneficiary's need, the reality of a territory, but also of other parameters such as the societal challenges that would need to be addressed or the 'production' stage reached by an idea.

Measures and recommendations raised by the partners of Regional STARTS Centers during the project cover the whole 'value chain' related to the interactions between artists and other stakeholders, from the incubation of an idea to its development through networking, dialogue with other sectors, joint production processes, offering spaces to develop an idea – including in companies or public administrations - or also the importance of showing the results to a wider audience. Direct support (e.g. grants for companies, seed money for artists, etc.) or fiscal schemes for creative workers or institutions are often cited although other forms of programmes (for instance giving access to work spaces) are also suggested. An overall consideration raised by some partners is also that better working conditions for artists and creative workers are needed, in particular

through medium or long-term employment schemes instead of funding short-term individual projects. Policies addressing those needs should allow arts/science/tech collaborations to generate unexpected results or even...fail.

Research

Identifying local and societal challenges such as economy, democracy, social cohesion or sustainable development (especially in relation to the goals outlined in the European Green Deal), is a first essential step for STARTS partners to understand what is at stake and to enlarge the scope of art & science or art & industry projects. Researching the needs of specific communities, from a business or industry to a local authority, migrant community or educational facility is seen as crucial by partners in order to see how artists can be involved through multidisciplinary approaches and propose meaningful solutions and/or creations.

Intersectoral or transversal expert groups could help better identify these challenges.

Research also includes knowledge transfer and the communication of existing support measures for the sector. Let us highlight here the "ICT ART Connect" study's suggestion that the STARTS-like communities need to be better informed about EU support measures available for their fields.⁸ But it goes without saying that better information channels on support measures existing at local, regional or national levels would be equally important for the sector.

Training & Advice

The majority of the participating partners in the Regional STARTS project also agree that 'training' actions should target various communities.

⁴ICT ART Connect – Activities linking ICT and Art: Past Experience – Future Activities, study prepared for the European Commission, DG Communications Networks, Content and Technology, 2015.

⁷Source: https://www.artscouncil.org.uk/sites/default/files/download-file/Cultural_creative_spillovers_in_Europe_full_report.pdf

⁸ICT ART Connect – Activities linking ICT and Art: Past Experience – Future Activities, study prepared for the European Commission, DG Communications Networks, Content and Technology, 2015.

Young people should receive specific attention. At the local level, one would need to increase transdisciplinary learning opportunities such as these anchored in the STARTS programme in the context of both traditional primary and secondary education as well as in informal learning environments and learning outside the classroom (including with specific communities). Examples of activities developed by the S+T+ARTS Academy (workshops, hackathons, etc.) can provide useful inspirations in this respect.

Some partners proposed to establish a human-centered approach to digital skills and competencies in curricula for Higher Education and actively involve CCI industries for research and curriculum development.

Interdisciplinary profiles should also be trained with a view to boost co-creation hot-spots in urban and peripheral areas and stimulate social and cultural innovation. Educating new generations of individuals or institutions through cross-disciplinary actions addressing local or more global challenges is seen as an essential pillar that requires public support. ‘Residencies’ or traineeships can help address that need. This includes the facilitation of stays for young artists in companies or even public administrations which could be given through local, national or even EU-funded direct schemes such as ‘creative’ vouchers, grants, or also through national tax incentives. Tax incentives could be allowed for technological equipment, co-working spaces, artistic production or creative activities.

Furthermore, more work needs to be done to better finetune methodologies used for residencies, including the crucial role of intermediary organisations.⁹ Artists, scientists and entrepreneurs speak different languages, approach things differently and have diverging attitudes. The role of ‘innovative catalysts’ that intermediate the process is important. Training programmes for ‘teachers’, ‘mentors’, ‘coordinators’ working within these intermediaries would therefore be useful.¹⁰

Network, Match & Spaces

The Regional STARTS Centers network reaches various conclusions as to the importance of connecting disciplines and establishing sustainable exchange formats for knowledge transfer between science, technology and the arts.

The challenge is the creation of regional ecosystems between research, industry, public authorities at local or regional level, artists, designers, ‘technologists’ but also more traditional craft professionals. To strengthen these connections, digital tools and platforms could here provide useful solutions.

Furthermore, partners recommend the creation of a pan-European programme supporting international match-making processes between emerging artists and EU industries through cross-fertilization activities. Business intermediary organisations (e.g. Chambers of commerce or BusinessEurope) should also have a role to play in this respect as well as the creation of online national and European B2B platforms.

Support for specific working spaces supporting these hybrid forms of collaborations between artists, scientists and other technologists is also a request raised for decision-makers. Through direct support or tax schemes, this could include individual or collective workstations, acquisition of modern equipment, and access for local businesses, schools, universities or local community-based organisations that can accelerate speculative exchanges with other creative stakeholders. ‘Creativity’ quotas to connect artists with large tech-companies are also proposed.

Inform & Promote

Arts, science and tech collaborations often suffer from a lack of visibility, understanding and also engagement from audiences. Proposed narratives are often disconnected from audience

⁹Also see the 2020 STARTS Toolkit: <https://www.starts.eu/media/uploads/startstoolkit-13july2020.pdf>

¹⁰See inspirations for such a programme at the Kersnikova Institute: <https://kersnikova.org/>

expectations in spite of a clear potential to engage with them in creative ways.

The promotion of success stories, examples of cross-disciplinary projects, need to receive more attention, according to partners. Likewise, Regional STARTS partners agree it would be necessary to launch information and awareness campaigns targeting industries (e.g. through presentations to CEO's, etc.) and which would show the spillover and innovation impact of creativity and the arts.

STARTS

Last but not least, the importance of ensuring the sustainability of STARTS-driven initiatives across the EU but also beyond is of paramount importance for the partners of this project. This could take place through future EU programmes for research and science, Creative Europe, Erasmus+, support from local public bodies (e.g. innovation agencies, etc.) or even through increased collaborations with other regions of the world.

Among one of the main proposals raised in this respect is the need to encourage regional public and private bodies to support European STARTS-like programmes at a regional scale to foster collaborations between artists, universities, regional industry, regional SMEs and regional CCI industries. Likewise, regional authorities could also provide co-funding to help finance S+T+ARTS programmes on a European scale.

Partners also stress the importance of increasing funding opportunities with cascade and third-party financing on European level to strengthen STARTS Residency and Lighthouse projects.

Finally, one should also establish a system to trace and assess the impact of STARTS collaboration results, including its ethical implications across the EU and beyond.

Conclusion

The road to a 'European Bauhaus' is paved with good intention. Yet, it will only be a success if it manages to be a participatory bottom-up process through which local organisations, artists, scientists, businesses, students and other citizens are brought together and receive adequate supportive environments from public authorities, such as those proposed by the STARTS partners. For that, our societies, businesses, or communities will need to disrupt established silos and be ready to open up their minds to creative and critical approaches. Against that context, STARTS-driven initiatives can act as champions for such a cause only if they receive support from the EU as well as national and regional decision-makers.

“From painting to sculpture, from sculpture to construction, from construction to technology and invention - this is my chosen path, and will surely be the ultimate goal of every revolutionary artist.”

Latvian constructivist artist, Karlis Johansons (1922)

F. Meseeuw, Brussels, November 2020.



Professionalisation
Presentation & Knowledge Transfer
Innovative Residencies & Pilot Projects

14 best practices by the regional STARTS centers

BOZAR

Sustainable Transformations Seminar Day - Exploring the Arts and Creativity in Stimulating Innovation and Technologies with a Human Touch. Conference, Workshop and Networking activity Brussels, 17/10/2019

BOZAR organised the event “Sustainable Transformation Seminar Day” in view of the challenges faced by the models of our modern urban planning. The different activities and keynotes of the day reflected on how cities around the globe are facing the urgency to respond to current environmental and societal issues (such as global warming, migrations, waste production, mass consumption, unequal distribution of wealth), with a specific focus on the development of digital technologies, and how they can help cities to function better, improve public services, and enrich the quality of living, as both one of the root causes and a potential savior in the sustainability challenge.

The first part of the day was opened to the public and featured several keynotes by different personalities: Pia Fricker (Aalto University, Professor for Computational Methodologies in Landscape Architecture and Urbanism), Koray Tahiroglu (Aalto University, Sound and Physical Interaction – SOPI research group), Laura Beloff (Aalto University, Associate Professor in Visual Culture and Contemporary Art), Béatrice de Gelder (Professor at Maastricht University in The Netherlands and director of the Brain and Emotion Lab).

The second part of the day consisted of a workshop by artist Claire Williams and a panel discussion around wearable technologies and sustainable fashion and was only open to a limited public, selected through a call for participants to encourage relevant matches in the audience.

The workshop led by Claire Williams was a great success due to its relevance for today’s reflections on how art, science and

technology can change our future ways of seeing the intertwinement between urban contexts, societal issues, economy-driven decisions, and the citizen’s place. The variety of profiles invited to the workshop and conference responded to what the Regional STARTS Centers project embodies: a dialogue between art, research, technology and business, focused on local challenges.



Sustainable Transformations Seminar Day at BOZAR, © Laurianne Bixhain

Collaborators, participants & target groups

Target group: Policy makers, researchers and research institutions, artists

Event co-produced with Aalto University.

Invited speakers:

- Paolo Cesarini, Head of Unit, DG Connect, Media Convergence and Social Media
- Paul Dujardin, CEO and Artistic Director Centre for Fine Arts (BOZAR), Brussels
- Pia Fricker, Professor of Computational Methodologies in Landscape Architecture and Urbanism, Aalto University
- Koray Tahiroglu, Sound and Physical Interaction – SOPI research group, Aalto University
- Laura Beloff, Associate Professor in Visual Culture and Contemporary Art, Aalto University
- Beatrice de Gelder, Professor at Maastricht University, Director of the Brain and Emotion Lab
- Claire Williams, artist in wearable technology
- Eva Durall, Postdoctoral Researcher, Learning Environment Research Group, Aalto University
- Ann Peeters, SEAD – A Network of Space Ecologies Art and Design

Participants:

- Emmi Pouta, Textile designer, E-textile specialist
- Eva Durall, Postdoctoral Researcher, Learning Environment Research Group, Aalto University
- Marjo Kauppinen, Professor of Practice in Software Engineering, Department of Computer Science, Aalto University
- Matthew C. Wilson, Visual artist
- Aldo Sollazzo, Technologist, Expert in robotics, manufacturing and computational design
- Anne Huybrecht, Member of the Advisory Commission for Digital and Technological Arts at Wallonie-Brussels Federation
- Ann Claes, Senior project manager in Fashion at Flanders DC
- Berite Greinke, Junior professor in Wearable Computing, Berlin University of the Arts and Einstein Center Digital Future

MEET Digital Culture Center

Challenging the City Walls: Harnessing Digital Media to Disseminate Culture throughout Milan's Quartieri

Workshop

Milan, 05/12/2019 & 06/12/2019

With the goal of making Milan's cultural milieu more permeable and interconnected, and promoting the widespread use of the city's rich cultural heritage, Meet hosted a multidisciplinary team to devise innovative digital models and technologies for connected creativity. The aim of the initiative was to explore and develop innovative models that are able to, through new digital technologies, outsource, extend, and connect the central areas of the city of Milan with the most peripheral areas of the city.

Cities in the midst of the digital revolution are faced with the problem of the accessibility of information and the dissemination of culture. While historical centres have traditionally been culturally rich, peripheral areas often lack the cultural initiatives and infrastructure capable of creating new experiences and greater social cohesion.

Digital technology is arguably the most powerful tool available for promoting the dissemination of cultural content and for activating new ways of enjoying the cultural offerings of a city.

Through intensive brainstorming and guided discussions, a multidisciplinary team of 54 participants from scientific, technologic and artistic backgrounds, generated innovative solutions.



Challenging the City Walls workshop at MEET, © Elena Galimberti Bassa

Collaborators, participants & target groups

Target group: general public, citizens of Milan

Keynote speakers:

- Luigi Ferrarra, Dean of the Centre for Arts Design & Information Technology George Brown College Toronto, Director of Institute without Boundaries (IwB)

Partner: City of Milan

Selected participants:

- Marco Edoardo Maria Minoja, Head of Cultural Direction, City of Milan
- Professor Elena Mussinelli, Letizia Caruzzo, Fiorella Mattio, University Politecnico
- Professor Marco Negroni, University Accademia Brera
- Professor Rossana Actis, University Bicocca

Company/Industry:

- Dataninja, Bepart, Itinerari Paralleli, Slow City, Amploom, Digital Strategist, Fondazione Il Lazzaretto, Cascina Triulza, Studio Azzurro, Circolo dei Lettori, Fondazione Cariplo, Fondazione Nazionale di Danza Arteballetto, Centro Itard, Casa Museo Boschi Di Stefano, Sineglossa

Startup incubator: Milano Makers

GLUON

The New Green Deal Networking Activity Brussels, 02/02/2020

The New Green Deal was a one day Regional STARTS Centers event at the premises of Snowball featuring a programme of lectures, a STARTS exhibition and workshops. The event focused on how collaborations between art, science, technology and industry can support the European Green Deal. More specifically, at the center lay the question of how digital innovations and cutting edge science contribute to energy efficiency. GLUON's aim was to reach start-ups and large companies who have their offices at Snowball and the larger community of Cleantech hub Snowball.

Because of their expertise in digital business strategy and innovation GLUON invited the Belgian company In The Pocket to give a workshop on how to build your own cleantech business with artificial intelligence. Each group of the workshop brought together artists, technologists, researchers and entrepreneurs. In addition, designer and artist Fara Peluso was invited to host a workshop on biodesign, building on her expertise in speculative design and design thinking. Under the title 'Algature' she invited participants to design future Cleantech scenarios via DIY biology and Speculative Design practices.

The event also included a conference programme with a main keynote by Pattie Maes, professor at the MIT Media Lab (one of the world's leading research and academic organizations) and head of the Lab's Fluid Interfaces research group. Her keynote reflected on the role of A.I. in reducing carbon dioxide emissions through a series of best practices developed by the interdisciplinary research groups at the MIT Media Lab.

The event was accompanied by an art exhibition. The exhibition aimed to inspire the participants by showing a selection of STARTS projects reflecting upon the disruptive role of artists engaging with the topic of energy; such as the project "Anatomy of An AI" by Vladan Joler and Kate Crawford (Honorary Mention, STARTS prize 2019) and "L'Origine Du Monde" by Annemarie Maes (STARTS Residencies 2019-2020). The exhibition also included projects by artists Teresa Van Dongen, Maarten Vanden Eynde, Lise Autogena and Joshua Portway and Su Hui Yu.

Collaborators, participants & target groups

Target group:

Industry partners, researchers, artists

Collaborators:

- Research: MIT, Pattie Maes, Head of Fluid Interfaces Group, MIT Media Lab
- Research: Vladan Joler, Founder, SHARE Lab
- Company: In The Pocket
- Company: Smappee , Stefan Grosjean, Founder and CEO
- Accelerator / start-up hub: Snowball, Alexandra Vanhuyse, Co-founder and Managing Director
- Culture / artists : Lise Autogena and Joshua Portway, Fara Peluso, Annemarie Maes, Su Hui Yu, Maarten Vanden Eynde
- Innovation agencies of the Flemish Government: Flux 50, Frederik Loeckx, Director

Attendees

Research:

- Luc Steels, AI Expert, Founder VUB AI Lab and Sony AI LAB
- Lode De Geyter, Dean, HOWEST
- Frederik Loeckx, Managing Director, Flux 50
- Ann Brusseel, Director, Erasmus Hogeschool Brussel

Company:

- Paul Ameloot, CEO, Deltalight
- Dominique Valcke, CEO, Stadsbader
- Tanguy Van Quickenborne, CEO, Vandeweghe
- Eline Brugman, Risk Advisory department, Director of Climate & Energy, Deloitte
- David Vanbiervliet, CEO, FIVANCO
- Joost Bruneel, Co-Founder, Amplifino
- Hans Witdouck, Managing Director, Eurofiber

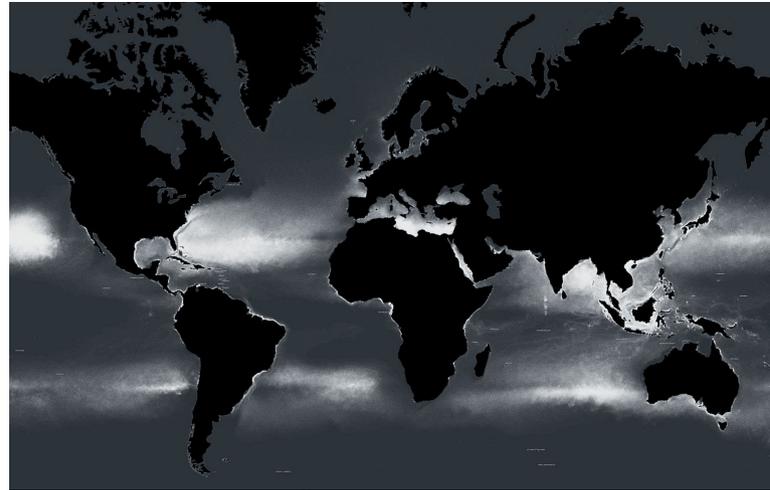
Private Foundations:

- NA Foundation
- Griet Dupont, Founder and Managing Director, de 11 lijnen

MADE Group

Entangled
STARTS Talk Series, Academies &
Interactive Guest Labs
Online Event Series, June 2020

MADE hosted a series of online academies & guest labs in collaboration with i-DAT (Innovation Lab, University of Plymouth, UK) and Athens Tech College (GR). “Entangled”, by Ch. Kazakou, explored the intersections of STARTS, aimed at raising consciousness through presentations of innovative practices, creative methods, theoretical context and interactive guest labs that have the potential to generate insights and a new ‘co-culture’ that can advance society. The Academies 1. Hybrid organisations: mapping the terrain, 2. Creative disruption: emerging practices, 3. Mediated spaces in art, science and technology, 4. Designing the future: social design & collective intelligence, were followed by interactive labs with guests who shared their practices into a dialectic space of discourse. Our digital programme also featured the Talks series, with leading guest representatives of STARTS, who explored layers of transdisciplinarity and the impact of digitalisation on art, fashion, gender, design-thinking, sustainability, entrepreneurship and CCI.



Map Debris by guest lab host Yannis Kranidiotis

Collaborators, participants & target groups

Target groups:

- Academics & Students, Creatives: Artists, Scientists, Designers, Technologists & wider audiences

Curated by:

Christiana Kazakou, MADE Curator & Transdisciplinary Researcher at i-Dat.org; School of Art, Design and Architecture, Faculty of Arts and Humanities, University of Plymouth in collaboration with Athens Tech College

Guest Labs by:

- Ilias Chatzichristodoulou, Founder of the Athens Digital Arts Festival
- Dr Manos Rovithis, Composer, researcher and lecturer, Audiovisual Signal Processing Lab, Ionian University
- Yiannis Kranidiotis, New Media Artist, Physicist and Programmer
- Alexandros Kontogeorgakopoulos, Transdisciplinary Researcher & Senior Lecturer in Sound and Media Art at Cardiff Metropolitan University

Talk Series:

- Michela Magas, Innovation Catalyst, Founder of Music Tech Fest, Chair of the Industry Commons Foundation
- Gurvinder Ahluwalia, CEO, Digital Twin Labs
- Melissanthi Mahut, Sustainability and Cultural Consultant, Actress, Nominee BAFTA Games Award
- Iphigenia Taxopoulou, Gen. Secretary, mitos21-European Theatre Network, Associate Partner of Julie's Bicycle, London
- Irini Papadimitriou, Creative Director, FutureEverything, formerly Digital Programmes Manager, V&A Museum Start Up ARTWORKS
- Anestis Anestis, Creative Coder and Interactive Installations Artist

Film University Babelsberg KONRAD WOLF

Summer School 'Transmedia Storytelling:
Camilla Plastic Ocean Plan (CPOP)'
Artistic Research Master Class & exhibition
Potsdam, 09/09/2020 - 19/09/2020

Can the expertise of storytelling in movies be used to design pictures of a desirable world? From this initial question, the Summer School reflected on marine pollution and the interaction between humans and nature to demonstrate the capacity of arts to resolve future issues. Against this background, this seed activity created awareness that complex societal challenges call for new dialogues between the arts, sciences and tech development. Aiming at elaborating new approaches and solutions for plastic waste in the oceans, the Summer School invited master and PhD students in the disciplines of screenwriting/dramaturgy, installation art, model design, VR and drawing.

A cooperation with Alfred Wegener Institute - Helmholtz Centre for Polar and Marine Research (AWI) made possible to merge scientific findings about marine pollution with the artistic research project "CPOP" telling the story of little Camilla, living on an iceberg. The cooperation with AWI created important synergies for bringing together the knowledge of ecologist, natural scientist, social scientist, VR experts and filmmakers. In this way, the seed activity opened space for interdisciplinary learning. The participants came from different European Universities (of Art), e.g. ENSAD Paris, SOAS University of London and Netherlands Film Academy Amsterdam.



Collaborators, participants & target groups

Target group:

- Researchers & research institutions, students, artists, industry

Collaborators and facilitators:

- Alfred Wegener Institute - Helmholtz Center for Polar and Marine Research
- Nicole Loeser, Director Art and Transformation, Institute for Art & Innovation
- Juan Diaz Bohorquez, Director, World Building Institute Europe

Participating universities:

- ENSAD, SOAS University of London, Netherlands Film Academy Amsterdam

Ars Electronica

Towards a human-centered approach to AI:
A workshop toolkit
Workshops, Capacity Building Activities
March 2020 - November 2020

Our digital infrastructure is moving on from automated to autonomous systems, which has led many companies, SME's, CCI communities and municipalities based in the Linz and Upper Austria area to identify a need for capacity building within their staff and communities in this very particular digital skillset.

The technologies in question are complex, their inner workings far from easy to grasp. This means that there is a need for a methodology of translation which aids people in developing an understanding of the impact AI technologies will have on our daily lives. Artists, researchers and scientists are on the forefront of developing reflections and commentary on AI that foster critical thinking and most importantly circle back to its influence on society at large as well as on individuals. For the development of this workshop toolkit, which will become part of Ars Electronica's new educational unit, the Future Thinking School, Ars Electronica teamed up with two local and two international collaborators with diverse backgrounds to co-create a set of four workshops. A discussion-based format developed with philosopher Janina Loh, based at the University of Vienna, dives into the implications of autonomous cars for urban areas and cities, and reflects on this through building future scenarios and developing critical questions. Korean artist duo Shinseunback Kimyonghun base their workshop on their work

“Nonfacial Portrait”. While participants draw a portrait that an AI model is unable to identify as a human face but would be easily recognised as such by a human, they explore the implications of computer vision through a creative approach. Filmmaker Shirin Anlen and AI researcher Avner Peled have been exploring the topic of glitches and failures in machine learning as part of a long-term research project, and draw parallels to the very human topic of mental illness. They developed a set of tools for a workshop process which allows the participants to dive into the concept of latent space in a hands-on way. The fourth workshop, developed in collaboration with Vienna based interaction design studio OmaI, focuses on how the concept of learning and training is represented in AI models within the framework of an interactive presentation format that helps to make this complex topic more visually engaging and digestible.

The workshops were developed in close collaboration with the Ars Electronica team. They function as a tie-in for the exhibition “Understanding Artificial Intelligence” at the Ars Electronica Center, build on the themes covered there and convey a low-threshold educational approach for an interested public.

Collaborators, participants & target groups

Target groups:

- Municipalities, companies, SME's, CCI communities interested in capacity building

Workshop Co-developers:

- Janina Loh is a PostDoc in the field of philosophy of technology and media at the University of Vienna. Their closer research interests include trans- and posthumanism, robot ethics, feminist philosophy of technology, theories of responsibility, Hannah Arendt, theories of judgment and ethics in the sciences and humanities.
- Vienna based digital arts collective OMAi specializes in interactive light projections as an experiential and transformational medium. Their work comprises interventions in public space, as well as stage performances and art installations.
- Shinseungback Kimyonghun is a Seoul based artistic duo consisting of computer engineer Shin Seung Back and artist Kim Yong Hun. Their collaborative practice explores technology and humanity.
- Shirin Anlen is an Israeli artist and creative technologist based in New York. Her artistic practice involves creative coding, interaction design, drawings, and data research that form the basis for real-life storytelling in emerging technologies — such as AR, VR, web platforms, and machine learning.
- Avner Peled is a creative technologist, a doctoral candidate at Aalto University, a consultant for the New York Times, and a media artist with a background in computer, human, and natural sciences. As a collaborator in the Marrow project, Avner is creating situated speculative experiences around AI.

French Tech Grande Provence

Big Torrent

Exhibition & Workshops

Avignon, 04/07/2019 - 17/07/2019

The BigTorrent exhibition was presented in Avignon, from July 4 to 17, 2019, on the site of the Barthelasse Island, designed by Bipolar in partnership with EDIS, French Tech Grande Provence and the Festival d'Avignon, in the framework of Regional STARTS Centers programme. Both an artistic project and an action to raise awareness of flood risk, BigTorrent is based on a sensitive approach to the river, to be lived through plastic installations and immersive VR experiences.

Guided tours of the exhibition and workshops for a young audience (9-12 years old) run by the association Patrimômes (providing educational activities for kids, families and specific audiences, at the crossover of culture and digital fields). The main objective was to engage the kids in the understanding and appropriation of topics at the nexus of art, technology and science.



Big Torrent exhibition, © Bipolar

Collaborators, participants & target groups

Target group:

- general public
- youngsters

Partner:

EDIS Endowment Fund

Co-developed with:

BIPOLAR

Presentation & Knowledge Transfer

French Tech Grande Provence

**VISIBLE SENSIBLE: Observe, Imagine,
Build the City of the Future**
Exhibition & Workshops
Romainville, 18/09/2020 - 04/10/2020

The exhibition VISIBLE SENSIBLE on view in September and October 2020 invited its visitors to question, imagine, build future living spaces, intimate or shared, real and virtual. Against the background of climate change and environmental emergency, the concept of smart city, the ultra-technological and connected city, has given way to the concept of a resilient and sustainable city.

Undoubtedly, this urban ideal implies changing the rules of the game, reinventing our living spaces, private or public, questioning our way of thinking and living in the city. What place should be given to technology in this transition process? How can they be seized upon to create new imaginations, collective and participatory systems, spaces for reflection and criticism?

Around three interactive installations resulting from collaborations between artists, designers and researchers, the public was invited to become an active participant in a creative, poetic and sustainable urban and technological innovation. Connected objects, virtual reality, artificial intelligence are all technologies that were explored in these sensitive and participatory experiences. Within the framework of the exhibition, FGTP organised guided tours and workshops for children and teenagers with local organisations.

Collaborators, participants & target groups

Target groups:

- general audience
- local audience
- youngsters
- policy makers (Grand Paris region)

Featured artworks:

- Chatroom of IoT, by So Kanno (JP)
- ATLAS, by Yann Deval and Marie-Ghislaine Losseau (FR)
- Kreyon City by Sony CSL Paris (FR)

Partners:

- Fondation FIMINCO
- Sony CSL Paris



ATLAS by Deval & Losseau at STARTS exhibition VISIBLE SENSIBLE, © Quentin Chevrier

Presentation & Knowledge Transfer

MADE Group

STARTS Athens Symposium: Policy & Practice Conference Athens, 09/10/2020

A STARTS symposium was held in Athens at the beginning of October 2020 in partnership with the Onassis Cultural Centre, in the context of our digital programme and discourse on innovation, digital governance, creativity, inclusivity and sustainability. We invited Deputy Minister for Digital Strategy Gregory Zafeiropoulos & Eva Kaili MEP Head of the STOA Committee to address digital policy for STARTS within the national ecosystem. The panel was chaired by Christos Carras, Executive Director at the OCC. Prodromos Tsiavos, Head of Digital Creation at the OCC, moderated the second panel with guest speakers Natalia Manola, EOSC Managing Director & Researcher; Maria Varela, Media Artist & Curator Daphne Dragona who drew on their research, artistic and curatorial practice.



Eva Kaili speaking at STARTS Athens Symposium: Policy & Practice Conference

Collaborators, participants & target groups

Target groups:

- Policy Makers, Municipalities, Foundations, Industrialists, Start Ups, Professional Practitioners

Speakers:

- Deputy Minister for Digital Strategy, Gregory Zafeiropoulos
- Eva Kaili, MEP Head, STOA Committee
- Christos Carras, Executive Director at Onassis Cultural Centre - Athens
- Natalia Manola, Managing Director & Researcher, EOSC Secretariat
- Maria Varela, Media Artist
- Daphne Dragona, Curator
- Prodromos Tsiavos, Head of Digital Policy & Development - Onassis Cultural Centre

Film University Babelsberg KONRAD WOLF

Media Tech Hub Conference Potsdam 2019
Panel Discussion and Workshops
Potsdam, 19/11/2019 & 20/11/2019

By participating at Media Tech Hub Conference, Film University intended to convey the STARTS mindset to media businesses and regional companies in the fields of MR, AI and entertainment. Located in Potsdam (Germany), this annual international conference is a platform for stakeholders to discuss potentials, challenges and future application possibilities of media technologies in the context of business and entertainment. The event was hosted by Media Tech Hub Potsdam which is an open community of regional industries, universities and local media institutions.

Creativity in film businesses through new media technologies – Researchers of FUBB and representatives of UFA, Germany's largest production house were discussing this topic. This panel discussion on bridging the gap between creativity and technology disclosed the challenges of bringing the mindsets of arts and technology together: production processes, practices to express views and (scientific) progress, the translation of terminology etc.

The Hands-on workshops on AI and Machine Learning organised as part of this event took on the challenge of implementing AI in businesses with a focus on ethics, technological and infrastructural issues and were targeted at representatives of regional (media) industries as well as start-ups and public media institutions.

The message of both formats turned out to be: It is imperative to think outside the frames of 'arts' and 'technology'.

Collaborators, participants & target groups

Target group:

- Industry partners, startups, creative producers, technologists

Media Tech Hub Potsdam
Frank Goavere, Head of VFX, UFA
Weerada Sucharitkul, CEO and Co-Founder, FilmDoo
Malte Kosub, Co-Founder, Future of Voice



Workshop at Media Tech Hub Conference, © Beate Wätzel

Ars Electronica

STARTS Journeys

Digital Showcase of STARTS in practice

Online exhibition at Ars Electronica Festival 2020

Launch: 09/09/2020

The STARTS Journeys are part of an entirely new Ars Electronica format which evolved in the midst of rethinking programming strategies in the wake of COVID-19, as it became increasingly clear that the hosting of physical events would become a challenge in 2020 and beyond. Taking into account that a majority of programmes would be happening online for the foreseeable future, the idea was to create a sustainable, digital content strategy with the aim of providing insights into STARTS in practice from a variety of perspectives. The produced contents could be applied to present core ideas of STARTS in both online and physical event settings.

The online programme developed within Regional STARTS Centers focuses on innovation and collaborative practices. Artists, researchers and creative producers were invited to develop video journeys: interactive guided tours without the need for an audience's physical presence. The guides have the opportunity to invite the viewers into their "world" by not just offering exclusive insight into their fields of expertise and artistic practice, but sharing surroundings relevant to their work – be it their labs, inspiring public places, or their favorite walking routes to mull over ideas.

Collaborators, participants & target groups

Featured artists:

- Lining Yao, Lab Director, Morphing Matter Lab, Carnegie Mellon University
- Refik Anadol, Refik Anadol Studio
- Kenric McDowell, Lead of Artist & Machine Intelligence Program, Google Arts and Culture
- Charlotte Jarvis, Artist & Lecturer working at the intersection of art and science
- Agnes Aistleitner, Activist & Social Entrepreneur
- BeAnotherLab, Interdisciplinary Team focused on embodied VR
- Karen Palmer, Multidisciplinary Immersive Filmmaker & Storyteller from the Future
- Robertina Šebjanič & Gjino Sutic, Artists
- Giulia Tomasello, Interaction Designer
- Pei Ying Lin, Designer & Artist
- Ai Hasegawa, Artist
- M Eifler, Artist



Adriatic Garden, STARTS Journey by Robertina Šebjanič & Gjino Sutic

BOZAR

FLOW: A Residency between Luc Steels and Luc Tuymans
Residency
Brussels, 01/06/2019 - 30/11/2020

FLOW is a collaboration between A.I expert from the Flemish University of Brussels, Luc Steels, and the world renown Belgian painter Luc Tuymans. The goal of the residency is to develop a 'Personal Neural Network' that inspires the artist for the realisation of new works or new directions in the development of his oeuvre. Luc Steels researches on an A.I. system that would deliver new stylistic and substantive ideas for the artist's productions. The old masters have always used technological (i.e optical) devices to research their works - Vermeer almost certainly used the camera obscura, Canaletto used lenses and Ingres carried a camera lucida with him. The artist Luc Tuymans is thus interested in exploring the possibilities of an A.I. system as a new device for the painter in the 21st century. The project aims at developing a tool that would be available for the entire international artistic community as well as AI developers interested in the extension of AI in the field of the arts. The residency itself consists of encounters and discussions between the AI researcher and the painter, exchanging their points of view on the question of the use of AI in art and its relevance today. Results of the AI experiments on Luc Tuymans work show the diversity of AI developments - they will be on show at BOZAR, Brussels, in March 2021.

Collaborators, participants & target groups

Target group:

artists, research partners

Luc Steels collaborated with AI researcher Björn Wahle, Rachel Rapp (AI developer in Berlin) and Sinem Aslam (AI developer in Venice).

The residency of Luc Steels involved the following collaborators:

- Artificial Intelligence Research Group of Vrije University Brussels
- Université Libre de Bruxelles
- Institut de Biologia Evolutiva, Universitat Pompeu Fabra and CSIC, Barcelona
- BNAIC : Benelux Conference on Artificial Intelligence
- Studio Luc Tuymans, Antwerp
- European ARTificial Intelligence Lab



Luc Tuymans and Luc Steels, in Tuymans Studio, Antwerp, February 2020, © BOZAR

Innovative Residencies & Pilot Projects

MEET Digital Culture Center

Cross Fertilization Lab
Open Call & Innovative Residencies
Milan, December 2019 to October 2020

MEET, in collaboration with Assolombarda, promoted the Cross Fertilization Lab, a series of meeting and experimentation initiatives aimed at digital creative workers and industries. Its purpose is reciprocal fertilization through the exchange of practices, languages and processes between apparently distant contexts with the objective of generating innovation. The Cross Fertilization Lab consisted of several activities:

- Call for Digital Creators
- Training days focused on the relationship between creativity-technology-industry
- Meet up: pitch for presenting the creative project to the industries
- Artistic residences in companies.

40 young artists under 35 participated in the call. After the selection and self-selection process, 30 attended the two-days webinar and 21 participated in the Meetup. 5 finalists have been awarded with a grant of 2.000,00 and 2-months residency at five industry partners: Artemide, My Chic Jungle, SAPIO Group, Sky and Tarpini Production. The group of participants consisted of artists, creatives and industry partners to create new synergies for the involved.

Collaborators, participants & target groups

Target group:

Artistic community, industry partners

Partner:

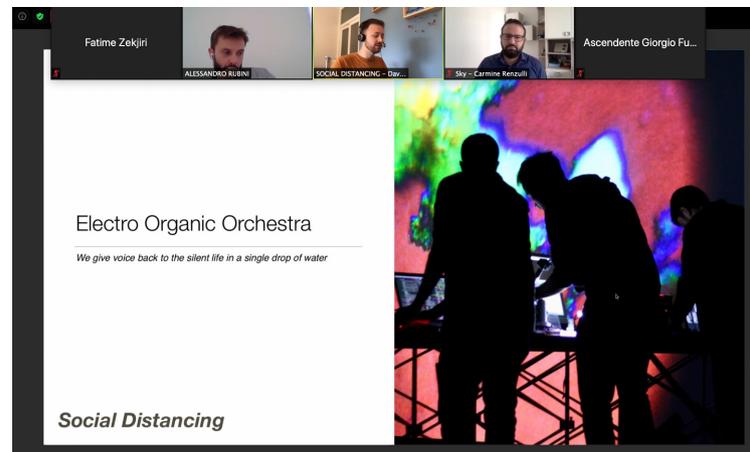
Assolombarda

Paolo Guazzotti, Director Area Industry & Innovation, Assolombarda

Company/Industry Partners: Artemide, My Chic Jungle, SAPIO Group, Sky, Tarpini Production Giorgio Ciron, Entrepreneurship and Start-up, Start Up Incubator Assolombarda Area

Events:

Meet the Media Guru with
Keynote Speaker William Myers



Online meeting in the framework of MEET's Cross Fertilization Lab

Innovative Residencies & Pilot Projects

GLUON

SNOWHOOP

Art & Industry Residency

Brussels, Launch: 15/10/2020

As part of Regional STARTS Centers, we invited Belgian artist Pieterjan Ginckels for an Art-Industry residency at Snowball and in collaboration with the energy experts of the company Smappee. The collaboration process was mediated by the intermediary experts of GLUON. Upon discussion with the artist, Snowball and the experts of Smappee, the interdisciplinary research group decided to make a reflection on UN SDG 11, „Sustainable Cities & Communities“, or how cities and communities can become safe, inclusive, resilient and sustainable. The artwork „SNOWHOOP“, an interactive sculptural installation is the result. The installation explores the relation between gameplay, energy and climate action and is installed permanently at the premises of Snowball. For the technological development of the artwork, the artist worked in close collaboration with the energy experts of the company Smappee. Smappee was founded in 2012 by Stefan Grosjean and has rapidly become an international Cleantech company, active in more than 92 countries. Stefan's adage, „measuring is knowing“, was the starting point for Smappee as a smart energy monitoring tool. In real time the Smappee device measures up to 4,000 energy signals per second. Via the award-winning Smappee app all this is visualized for the consumer. In this way, energy awareness is created and sustainable energy behavior is stimulated thanks to gamification techniques. Together with the energy experts of Smappee, the artist reflected on the use of monitoring technologies to measure activity and the processing of data via artificial intelligence. The artwork was officially inaugurated during the event ENTROPIES on 15 October 2020 by Bart De Vos, a representative of the Minister President of Flanders Jan Jambon responsible for cultural affairs.

Collaborators, participants & target groups

Target group:

Artists, industry partners, researchers & research institutions, policy makers

Residency

Incubator:

Alexandra Vanhuyse, Co-founder and Managing Director, Snowball

Industry partner:

Stefan Grosjean, CEO, Smappee

Cultural partner:

Pieterjan Ginckels, Artist
Ramona Van Gansbeke, Intermediary expert, Gluon



Snowhoop by Pieterjan Ginckels at Entropies event, © AF Fotografie

Attendees at launch event ENTROPIES

Policy:

- Bart De Vos, Advisor Cultural Affairs at the cabinet of Minister President of the Flemish Government
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Harnessing the power of European regions through STARTS

Regional STARTS Centers Consortium

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