

WHITE PAPER

#ECIS2020

Framing Creative Futures



Report of the
10th European
Creative Industries Summit
from Sept. 24th to Oct. 28th 2020,
Berlin & Online



#ECIS
European Creative Industries Summit

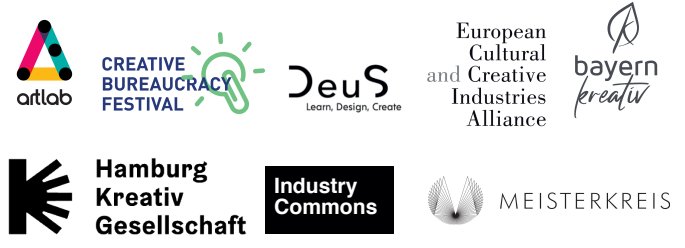
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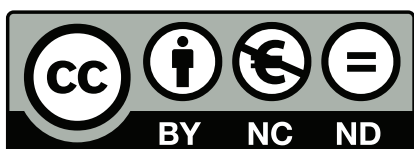
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Welcome

What a year! Even today we are unable to comprehend fully what the pandemic 2020 left us with: The pandemic hits everyone, either on a personal, economic or global level, we are all affected. The fact we know so far is a drop in sales for the creative industries by a third or even 50% in some sectors. The event industry was the first to close and the last to reopen, and a steep personal learning curve for the means of digital communication. These are only few of the things that no one had foreseen at the beginning of 2020.

But creatives all over the world have used their innovation potential and found many ways to combat or at least weaken the effects of the pandemic. - **Together in Distance** - is not just a hollow phrase but was made tangible through creative solutions for many people. Free means of crisis communication, posters or graffiti in lock down to cheer people up, but also innovative new interactive formats have been developed during the pandemic with the goal to bring us closer together in these difficult times.

It was during this strangest of times that the ECBN organised its 10th European Creative Industries Summit, the #ECIS2020. This annual #ECIS was organised under the auspices of the German EU Presidency and was aimed at **Framing Creative Futures**. In this first total digital conference, a Green Paper was prepared in advance and discussed in five different Breakout Sessions (#BoS). These five #BoS covered a wide range of topics which all are most relevant to the European Creative Economy. With over 1.700 participants this online conference was the most successful summit in the history of the ECBNetwork. Over social media the ECIS2020 had a total reach of more than 50.000 users. One third of the participants were between 25 and 34 years old and the gender balance of 60% has been shifted in favour of female participants. Over the course of one month these papers were discussed and finally presented on the 28th of October to the EU Commissioner Mariya Gabriel and Economic Minister of Germany Peter Altmaier.

Experts and philosophers today speak of a new reality, this **New Normal** in which we all find ourselves together with constant crises become our new companions. In this VUCA world (volatility, uncertainty, complexity and ambiguity) we need creative potential and innovative solutions in order to be able to fight them effectively and to find new ways out of these crises. The creative economy showed its resilience in recent crises like the New Economy (2000) and bank crisis (2008) or the European Sovereign Debt Crisis in 2010. Resilience is part of the creative DNA and enables new answers to be found again and again and problems to be solved through new creative applications. The pandemic or the climate crisis need our ideas and solutions, but also the Social Development Goals (UN SDGs), which all UN member states identified as the greatest global problems in the UN General Assembly in 2015, need creative potential in order to be solved.

We, the creative industry have the task of participating in the **European Green Deal** and the construction of the new **European Bauhaus**, as proposed by Commission President Van der Leyen.

We, the creative industries are the creative potential to think new solutions and to develop new possibilities that lead out of this and coming crises.

We, the creative industries have the means to transform the entire economy sustainably and to shape it ecologically.

If not now; when?

If not here; where?

If not us, who?

We in the ECBNetwork are firmly convinced that the creative economy has the power to break new grounds and we in the ECBN will help that creative ideas emerge and new innovative solutions are developed for the coming societal problems.

For the ECBNetwork
Bernd Fesel & Gerin Trautenberger

Foreword to the ECBN White Paper for the ECIS2020

This compiled White paper is the result of a broad consultation organised by ECBN. Over 200 individuals, moderators, hosts and experts took part in its process and discussed various topics in five different breakout sessions (#BoS). The first #BoS argued for **Solidarity over Charity** for culture in the midst of the COVID-19 pandemic where creatives around the globe are most hit by the impact of the different lock down measurements. All participants agreed that we need other tools and measures to mitigate the effects of the total standstill of all social life and that **culture is a valuable contribution to our social fabric**.

The second #BoS was held together with the creative bureaucracy festival which discussed the **cross-over between public administration and creative economy**. As good cases, five different examples of creative bureaucracy were presented and showcased to a wider audience. BoS3 reflected the impact of the crisis and the solutions creatives can provide. The discussion propelled around **CCI innovations lead beyond the crisis** and that the crisis serves as a **testbed for digital transition** and a centre for cross-domain innovations. The fourth #BoS : **Creative Sustainability Solutions**, presented the analysis and idea of **CCIs as agents for sustainability and innovation catalysts** to create frameworks and networks of collaboration and change. In the fifth and last #BoS all participants discussed the Innovation needed in the field of **education and creative skill acquisitions** with the conclusion that the **existing vocational and educational system (VET) has been broken** and new and innovative formats and content must be conveyed. The aim is to avoid traditional hierarchical systems and to establish an open innovation system also for the education sector, with the goal that the community is the curriculum

The results of these breakout sessions was presented at the final conference day, 28th of October to a wider audience and the participation and comment by the EU Commissioner Mariya Gabriel and Economic Minister of Germany Peter Altmaier. Finally, all these reports, additional comments and also recommendations by the ECBN were compiled and bound to this final version of the White Paper Report by the #ECIS2020. Finally, the ECBN board and its director Bernd Fesel as well as board member Gerin Trautenberger would like to thank all the many tireless contributors to this remarkable white paper and the helpers for the organisation of # ECIS2020.

This paper and the content of the ECIS2020 conference were created as a true European-wide project. This white paper not only represents a large geographical range but also tries to cover a broad thematic and theoretical spectrum of today's creative industries in Europe. To name just a few: from southern Europe in Matera (Italy) to the far north of Europe in Luleå (Sweden), from the Far East in Kosice (Slovakia) to western Europe in Bristol (Great Britain), more than 200 Experts, Moderators and participants contributed to this extensive report.

The ECBN team would also like to thank everyone who was involved in organising the first ECBN full online conference and live sessions and who were responsible for making # ECIS2020 a remarkable and unforgettable experience.

#BoS1: Solidarity over charity: Europe for Culture for Europe

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Abstract

The Covid-19 pandemic challenges the principles of European democracy, amongst which we find solidarity. It raises questions about the very foundations and limits of solidarity within Europe as its member states are battling to navigate through what has become a global health and economic crisis. The concept is elusive and yet one may understand solidarity in its simplest terms as a form of mutual attachment, empathetic understanding and, even more, an obligation to act on the basis of shared values and beliefs. In this brief paper we argue that solidarity constitutes a critical practice in the development of a more stable, responsible and, ultimately, more powerful European Union, and that such practice requires continuous elaboration within the fields of culture, economics and politics. Given their collective creativity, skill and talent, the cultural and creative sectors (CCS) ought to play a critical role in confronting the normalities of the present and enacting a more integrated European Union. To this end we propose the harnessing of what we describe as the three powers of the CCS: exploratory power, integrative power and innovative power.

What is at stake [and why]

The global systemic shock caused by Covid-19 was felt almost everywhere by everyone in the world. Meanwhile, the intertwined economic, social and cultural dynamics, accentuated by this pandemic, have turned out to be particularly difficult to tackle. The cultural and creative sectors are a case in point, given their general precarity and pressing liquidity issues resulting from the wholesale suspension of cultural productions in the physical realm. The lockdown measures exacerbated the structural fragility of the sector¹: a highly fragmented market, made up of mostly small and medium sized organisations with low incomes, few savings, difficult access to funding and investment, high rates of self-employed and intermittent workers and a notable variety of sustainability-driven business models.

Despite this structural fragility, in the course of the ongoing pandemic the CCS gave a glimpse at their potential to answer the challenges of today and tomorrow, offering creative answers to societal needs well beyond the mundane: providing the resources for shared experiences, collective sense making, future shaping and, above all, the embracing of uncertainty. The CCS have proven to be a key asset for shaping something of a non-obvious future centred around inclusiveness, sustainability and, indeed, European solidarity. Perhaps not surprisingly, the main emphasis of initiatives and projects launched by the CCS was placed on contributions to (mental) health and wellbeing: reducing loneliness, depression and anxiety, making available content and collections (books, music, films, artworks, documents etc.) creating a sense of belonging and collective identity, helping people to broaden their social networks, opening up spaces for shared (cultural) experiences, devising campaigns to coordinate donations and logistics of medical supplies, offering free consultation to communities of entrepreneurs (also) in the area of wellbeing, developing online infrastructures for homeschooling etc.

A broad concept of solidarity

Solidarity as a concept of shared and moral commitment to a specific course, is frequently and readily used within the context of everyday European politics. And yet it is fragile as criticism of the EU for its early handling of the pandemic, lacking solidarity and concerted action, would suggest.² Certainly, the concept needs further elaboration both within the field of politics and civil society. Solidarity not only requires a sense of community and obligation to act, but a willingness to innovate and transform established practices in pursuit of common goals. The CCS ought to play a critical role in this process, brought to bear by means of tailor made programmes and actions able to unleash the unifying power of the CCS.

If the general aim is to hold the European citizens together on the basis of shared interests, values and living standards, European solidarity needs to be articulated and practiced on both a factual and a normative level, i.e. “on actual common ground” but also “as and when it should be necessary [to act and aid one another]”.³ Covid-19 reemphasized the importance of acknowledging these two levels of solidarity and furthering debate around the latter, i.e.

¹ European Commission (2020). European Cultural and Creative Cities in Covid-19 times: Jobs at risk and the policy response. JRC Science for Policy Report, viewed on 3rd September 2020, <https://publications.jrc.ec.europa.eu/repository/bitstream/JRC120876/kjna30249enn_1.pdf>

² Deutsche Welle (2020). Coronavirus and the EU: The nation versus the Union?, viewed 3rd September 2020, <<https://www.dw.com/en/coronavirus-and-the-eu-the-nation-versus-the-union/a-52848640>>

³ Kurt Bayertz (1999). *Solidarity*. Dordrecht/Boston/London: Kluwer Academic Publishers.

specifying when and how it ought to be applied. This pandemic has brought to people's attention the need for solidarity as an expansive, fundamentally human rather than exclusively economic practice.

Indeed the very practice and reality of a lot of citizens, private and public actors across Europe, taking action in the first semester of 2020, brought to life the notion of Pan European solidarity. The **European solidarity tracker**⁴ gives a sense of the width and depth of European responses to this crisis; programmes such as the **ECF Culture of Solidarity Fund**⁵, the Allianz Kulturstiftung initiative **The art of bringing Europe together**⁶ or the House of European History **Documenting solidarity**⁷ paved the way for overcoming the idea of charity - helping others as an act of generosity towards those in need- and embracing the idea of solidarity instead - by acknowledging that others' needs are inextricably linked to ours.

To frame the future of Europe, policies should be inspired by this lesson. First, by assuming that Europe is not an algebraic sum of countries and sectors but a lively and interconnected system, thus demanding for systemic responses to grant systemic change. Second, by acknowledging that exploiting the potential of the CCS both needs and fosters solidarity: if the purpose and essence of European solidarity is to further its integration, then cooperation between and across sectors and their key stakeholders is crucial, and the CCS by virtue of their connective capacity are the needed glue. Solidarity over charity thus means to ensure a framework for collaboration among the public, the private and the philanthropic as well as among the different policy areas (Economy, Culture, Research, Health and Wellbeing, Education, Environment), with culture, creativity and education being placed at its heart.

Harnessing the powers of the CCS

The perplexities of this crisis have prompted reflection and debate and called into question the presumed certainties of the past (see e.g. UNESCO's "Next Normal"). It is the disruption of the existing order in people's relationship with their environment that challenges established views and temporarily arrests the flow of action. The indeterminacy of the situation provokes new thinking and inquiry into possible solutions that will help to organise the fractured elements of the problematic situation into a unified whole, i.e. the next normal. Such new equilibrium, however, does not necessarily manifest in an advanced state of the usual but may also bring back some revised version of the familiar past. The unique potential of the CCS therefore lies in their capacity to enable and champion transformative action towards a desirable, and arguably more solidary, future. Today's challenges, as faced by the European Union and political actors elsewhere, are multifaceted and often require holistic thinking and intense cooperation. Amongst such challenges we find climate change, a fierce global competition, technological disruptions, the digital divide, the erosion and / or blending of traditional fields of knowledge, youth unemployment, ageing populations, migration, the neglect of rural areas, and indeed the latent threat of further pandemics. Continuously challenged are also the very principles of democracy, demanding an enthusiastic and concerted response from the advocates of a free and equal society. Given their grounding in the values of openness, inclusion and collaborative practice, the CCS are particularly well suited to address these challenges and bring their individual as much as collective creativity, skill and talent to fruition. In particular, three distinct qualities or powers that characterise the CCS ought to be moved into the centre of attention and activated within future European funding programmes both within and beyond these sectors: their exploratory power, their integrative power as well as their innovative power.

The exploratory power of the cultural and creative sectors

The CCS confront the complexities and indeterminacies of the present through artistic / creative means. Their practices of developing knowledge and understanding by challenging fixed mindsets, over centuries, have been geared towards a course of nature that is deemed formable rather than fixed and complete.⁸ Emphasis is placed on the mind / world relationship as a "moving whole of [indefinite] interacting parts."⁹ Coming to know means being actively involved in and giving direction to on-moving world. To address a particular issue, in turn, means to appreciate its inherent complexities, which in the context of design methodology, for instance, translates into the "wicked problems" approach. Such problems are found to be generally confusing and ill-defined and laden with conflicting interests.¹⁰ Their resolution demands a fundamental openness to different funds of experience and sets of knowledge.

⁴ European Council on Foreign Relations (2020). European Solidarity Tracker, viewed 3rd September 2020, <<https://www.ecfr.eu/solidaritytracker>>

⁵ European Cultural Foundation (2020). Culture of solidarity fund, viewed 3rd September 2020, <<https://www.culturalfoundation.eu/culture-of-solidarity>>

⁶ Allianz Kulturstiftung for Europe (2020). The art of bringing Europe together, viewed 3rd September 2020 <https://kulturstiftung.allianz.de/en_EN/funding-and-projects/call-for-projects.html>

⁷ House of European History (2020). Documenting solidarity at the House of European History, viewed 3rd September 2020, <<https://historia-europa.eu/en/focus/documenting-solidarity-house-european-history>>

⁸ Cf. Dewey, J. (2008). The Quest for Certainty. In: *The Later Works: 1925-53, 12:1938*, ed. by J.A. Boydston. Carbondale: Southern Illinois University Press, p. 232.

⁹ Ibid.

¹⁰ Cf. Rittel, H. W.J. and Webber, M. M. (1973). "Dilemmas in a General Theory of Planning." *Policy Sciences*. 4 (2): 155-169

The integrative power of the cultural and creative sectors

Cultural and creative production requires collaboration.¹¹ In bringing together different actors, viewpoints and resources, the process of (co-)production not only allows for the alignment of different methods of exploration but also works as a “boundary object” through which the intersecting social worlds of the participating actors are connected. The cultural and creative sectors may therefore be understood as integrative, boundary-spanning disciplines of understanding and action¹², as ideational sources and translation devices in the pursuit of shared goals – even though we still experience silo thinking and practice also in the CCS.

The innovative power of the cultural and creative sectors

The innovative power of the CCS does not exhaust itself in refining the present but plays out more specifically in the context of envisioning and giving shape to the unfamiliar. Working across boundaries (geographically, intellectually, functionally, systemically etc.) and dissolving dominant divides (such as between art and technology, art and science, art and commerce etc.), the CCS are particularly well suited to take a prominent role in the execution of some of the major European initiatives such as the European Green Deal.¹³

Pathways towards a European future

Ever since the publication of the first European study of the economy of culture in 2006¹⁴, the arguments in support of the CCS have been developed and entertained in various fields of political activity from cultural policy (Creative Europe and CCS Guarantee Facility) to structural policy (EFRE funds) to innovation policy (Horizon Europe). As spelled out in the legal basis of the Creative Europe programme, the CCS are “key for Europe’s future”¹⁵, contributing to its cultural, social and economic welfare. The establishment of the Culture, Creativity and Inclusive Society Cluster within the context of Horizon Europe has been yet another important step forward in terms of recognising the sectors’ productive capacity, transformational role and collective impact. The programme will allow the CCS to build new alliances both within and beyond their fields of practice, enter new areas of intervention, contribute to an ever-expanding body of knowledge around issues of societal importance and develop the necessary (research) infrastructure for the sectors to thrive. The establishment of a new EIT Knowledge and Innovation Community (KIC) dedicated to the cultural and creative industries as part of Horizon Europe will further help to realise the sectors’ innovative potential and underlines its heightened relevance within the context of European policy making.¹⁶ It is therefore critical that this programme in terms of its scale and scope will be implemented as planned despite or precisely because of the pressures imposed on the CCS by the ongoing pandemic.

Some enabling conditions

Some enabling conditions are required to build upon the existing policies and tools indicated above, and to create an infrastructure for the tangible and intangible cultural resources able to contribute to a more solidary, inclusive and ultimately stronger Europe. We offer here below a non-exhaustive set of pathways, which are meant to be a starting point for further discussion, review and integration.

1. Developing an overall vision of solidarity, shared by key public, private and philanthropic stakeholders, fostering more integrated, empathetic and transformative action in the fields of policy-making, culture, science and business across Europe.
2. Strengthening the position of the CCS as a unifying and transformative force in key policy areas including education, labour, health, wellbeing, mobility and sustainability.
3. Providing adequate resources to transnational collaborative learning and production environments, encouraging the exchange of knowledge and skills, shared inquiry and experimentation and the translation of ideas into meaningful

¹¹ Becker, H. S. (1999). *Art Worlds*. Berkeley: University of California Press.

¹² Star, Susan and Griesemer, James (1989). “Institutional Ecology, ‘Translations’ and Boundary Objects: Amateurs and Professionals in Berkeley’s Museum of Vertebrate Zoology, 1907-39”. *Social Studies of Science*. 19 (3): 387–420.

¹³ European Commission (2020). *A European Green Deal: Striving to be the First Climate-Neutral Continent*, viewed 27th August 2020, <https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en>

¹⁴ European Commission (2006). *The Economy of Culture in Europe*. Brussels, viewed 3rd September 2020, <https://ec.europa.eu/assets/eac/culture/library/studies/cultural-economy_en.pdf>

¹⁵ European Commission (2018). *Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the Creative Europe programme (2021 to 2027) and repealing Regulation (EU) No 1295/2013*. COM(2018) 366 final.

¹⁶ European Commission (2019). *Annex to the Proposal for a Decision of the European Parliament and of Council on the Strategic Innovation Agenda of the European Institute of Innovation and Technology (EIT) 2021-2027: Boosting the Innovation Talent and Capacity of Europe*. Brussels, 11.7.2019. COM(2019) 330 final.

goods (products, services, processes, systems etc.) and/or experiences, sensitive to the medium and long term vision of European solidarity.

4. Facilitating value creating networks of people, institutions and resources, that take the form of a dynamic field of aesthetic production, centred around the realisation of ideas rather than formal, and potentially excluding, boundaries (granting space for the exploratory power of the CCS both within and beyond their immediate fields of production)
5. Developing digital infrastructures to reduce/overcome the barriers to accessing the means of production, distribution and consumption of cultural / creative goods.
6. Ensuring low-threshold, easy access to funding and finance, acknowledging the specificities of the sector (structure, capital needs, patterns of work etc.); this requires first and foremost the adaptation and simplification of future funding application procedures.
7. Deepening knowledge and understanding of the CCS by complementing existing statistics with the capacities for thick descriptions and rich accounts of social phenomena associated with qualitative research.
8. Building on research to devise policies (from employment and social affairs to justice) more specific to the needs of the CCS and reframe the valuative systems by which the sectors' output and wider impact is measured.

Conclusion

This paper has addressed the criticality of European solidarity to the Union's economic success, social prosperity and authority as a community of shared values and beliefs. It has further underlined the need for the continues advancement, elaboration and re-imagination of solidary (read mutually supportive and integrative) action in order to stabilise and foster European integrity. Accentuating the powers of the CCS, notably their exploratory, integrative and innovative power, this paper sought to frame their practices and artefacts as an indispensable resource in the shared process of social and economic transformation built around European ideals. As the CCS have gradually entered the European political agenda and been incorporated in different areas of policy making (from structural to regional to innovation policy), the idea of culture driven innovation gained momentum. The ongoing pandemic, however, poses an existential threat to large fractions of the CCS, which not only require dedicated financial support but a fundamentally different regime of worth, acknowledging the sectors' original output and wider economic and social impact.

#BoS2: Good, Better, Bureaucracy

Now is the time for culture and more creative bureaucracy

Author Charles Landry

Preface

Crises - and the pandemic is an extraordinary one - shook us all. The first truly viscerally felt, collective experience of our lifetime happening to all eight billion of us on the planet. A first for our humanity. It has triggered a dramatic reordering of priorities as well as deep reflection and rethinking. We see that our civilisation is a 'thin film of order we build around the chaos of events'. We see our fragilities and our brittle systems and our vulnerability is exposing our lack of preparedness. So, the Zeitgeist becomes one of rising anxiety and uncertainty exacerbated by a world turning to its darker face.

The pandemic wake-up call reminded us that our economic order is materially expansive, socially divisive and environmentally hostile. All major global institutions agree we are in the midst of a systemic crisis and that a business as usual approach will not work.

That necessary transformation is a cultural project as it is about values and some say: **The paradigm is the problem – stupid**. What then is 'my role as a cultural institution or a creative economy actor' and 'what can I contribute' and 'how can my skills, my storytelling capacities, my design thinking knowledge, my ability to gamify solutions help create a more resilient future'. And finally, 'how can our public administrations become more creative bureaucracies'.

It suggests a **reframing of the argument for culture** in the new conditions with a new language to match – one that touches peoples' inner yearnings and needs. Here the virus and the attention it demanded has created both **clarity and confusion**. It has let us glimpse possible futures and not only related to the digital.

In the crisis there was a hidden opportunity – a silver lining. We saw, briefly, possibilities as the pandemic turned out to be the biggest experiment ever in climate change emissions as the lockdown created a slowdown. We could breathe clean air, hear birds sing and were able to reassess how we live and governments in guaranteeing debt for many companies could establish obligations for them to operate more sustainably. The opportunity for a big reset remains, perhaps a vanishing one.

The creative bureaucracy

Here **our public administrations come strongly into play** and we use the phrase 'creative bureaucracy' – for some perhaps an oxymoron - with intent. We want to signal to our civil servants that they often represent a hidden and untapped reservoir of talent that we want to help unleash; there is a vast number of unsung heroes who make places work. The public sector bureaucracy is not everything, but without one not much can work. Administration is both about routine, but also about being responsive to changing circumstances and needs. This requires an ethos that is **strategically principled and tactically flexible** as the classic predict and provide approach is not longer effective on its own when we need to plan also for the unknown. The principles guide us and provide a trajectory of travel and the most important ones need to be non-negotiable, such as striving for sustainable solutions or involving those in the decisions we make that affect their lives. They provide the criteria by which everything should be judged. Being tactically flexible, by contrast, reminds us that how we get to where we want to be means being open to the new opportunities that might help us along the way to a more resilient future. And in this we are always guided by our principles.

To meet our global challenges we then need an imaginative, adaptive, agile, accountable and trustworthy public administration. This can provide the backbone to address the effects of the global pandemic, climate change and to shape the digitizing world so that it works for citizens.

The idea aims is to help bureaucracies feel more competent and confident to address the big cultural, social, economic, environmental and political problems of our time. We are guided by the following three questions - the core pillars.

- What then is the incentives and regulations regime to achieve that?
- How can we enrich the inner life of the bureaucracy and empower people and the organization to give of their best given that so often internal systems are too rigid?
- How can bureaucracies rethink and refresh their relationship to the civic and business worlds?

To do this well public servants need to work within a culture and a structure that is open-minded to tap into their potential and to explore the best solutions. It involves **moving from a 'no, because' to a 'yes, if' culture**

There are many creative bureaucrats who are supporting change in our public bodies and making them much more effective. They are found at every level of the organization. We want to strengthen them and bring them together with others of like mind. We aim at building a movement with international partners across the globe and this is beginning to

happen. Its highlight is the Creative Bureaucracy Festival based in Berlin. It is now in its third iteration after its first launch in 2018 where over 1200 people gathered from 20 countries. In 2020, the remote version involves even more people from over 40 countries and there have been sister events in many cities too. This ongoing initiative is the platform for promoting the best of what bureaucracies represent namely their concern with the common interest and public good. Yet, crucially, encouraging them to operate in such a way that they attract the young by showing they are modern and switched on. The hope too is that others with diverse experiences, whether coming from the private or civic sectors find ways to connect to, work in or be inspired by working for the common good.

Culture and the creative economy

Now back to cultural potential and whilst our **hybris has been humbled**, there is a once in a lifetime opportunity to reassess how we think, plan and act as cultural institutions and creative economy people. Many, though, will still hanker to go back to the former normal seeking a route back to their yesterday - the exotic destination they want to reach, a safe haven. **Everyone is improvising** as the tried and tested comes under deep stress and cultural institutions or the creative economy sector everywhere is learning to move fast, be agile and shift to digital platforms or to reinvent how social gathering might work and what the new products and services they might offer.

In the **eye of the storm** it is difficult to see 'what is next' in a positive light when the cultural sector has suffered more than most and let alone how to get to a more stable situation.

Nevertheless, the pandemic helped shift us back towards the big challenges many had been asking cultural life help solve in the pre-pandemic age. 'Do not let a crisis go to waste' say many as the sharpness of the shock created an alertness of being that concentrated the mind. Reflecting on this big horizon for the moment we cannot avoid looking at those.

Now we know that **in times of crisis we turn to culture**, witness their enhanced role in creating a sense of togetherness or social cohesion and stabilizing mental health. So, the crisis has opened up a gateway from one world to a possible next one, although there is no blueprint to tell us how to progress. Yet cultural institutions and creatives at their best can help provide a **compass to guide through current complexities** and as agents of dialogue to mediate and understand difference to ease up our echo chamber world and the splintering of narratives.

The crisis can be an opportunity for rethinking and restating settled assumptions, attitudes and beliefs about culture's role. This was already happening world-wide and as an instance how more people are seeing the creative sectors and their associated institutions as the 4th pillar of sustainability¹ and providers of resilience. Take as an instance ICOM's desire to restate the definition and purpose of museums. This reset allows us to ask big questions about audiences and visitor profiles, contents and programming, collections and representation, physical setting, design and buildings, outreach and engagement. These issues shift through time as now the acknowledged canon should be reassessed to address the priorities of the pandemic age.

In trying to encapsulate the best values, potential and drive of creative economy activities, from design, to music making or performance or of cultural institutions like museums or art galleries we can see some big overarching themes that are deeply meaningful to people and especially now in the pandemic era:

Anchorage and distinctiveness: Creatives through their storytelling can tell us who we are, where we came from and where this might be heading to. They can show us by being culturally sensitive and alert what is unique and special about a place. This can invigorate and spur peoples' imagination and interests. Museums, by contrast, mostly slow things down. Vital in a speeding world the museum can be a haven of calm, a refuge, a place for reflection. You feel safe.

Connection and communication: A central *raison d'être* of creative economy activities and products is to get messages cross, to help make sense or to generate meaning, to foster dialogue or simply entertain. Equally this is what heritage or museums can do especially when interpretation draws on digital capacities and imagination and when it helps you to experience worlds via virtual reality or games you could not have foreseen.

There is another issue - the flickering mind constantly feeds on a few clicks of novelty, yet there is a yearning for depth and impacts that galleries/museums or heritage might offer. This is the world we are in and where everyone needs to navigate the attention economy, the desire for visceral feel, touch and immersion. It is too a world that requires civility as the quality of our dialogue is deteriorating in a world of echo chambers and unwillingness to find common ground. That lack of empathy and respect all contribute to a breakdown of communication and community. Our cultural institutions and even the creative economy at their best can help be stewards of debate.

Possibility and potential: A major feature of the creative economy for the most part is its exploratory urge. Add to this the increasing shift from consumers becoming prosumers as well as technologies that are lowering the threshold to become a creator and to be able to distribute that work. The co-design and co-creation dynamic is increasingly becoming real in spite of the dominance of major media corporations and their narratives. This is where public institutions like galleries or museums have a significant public interest role in ensuring counter-narratives that might be uncomfortable.

Learning and ambition: The digital turn accelerated by the pandemic opens vast opportunities for invention especially for distance learning and education as it seeks to go beyond the capacities of Zoom or Whereby. In attempting

¹ See John Hawkes <https://www.amazon.com/Fourth-Pillar-Sustainability-Cultures-Essential/dp/1863350500>

to generate enriched virtual learning environments, where issues like emotion and immersiveness come into play it is the creative economy sectors that are likely to find the answers. Equally there are the spheres of long distance medicine or using digitally driven tools to reach structures to repair that are in difficult or dangerous sites. As traditional schooling or university settings are increasingly being re-assessed there are even stronger roles for museums that can blend research, education and entertainment.

Imagination and inspiration: The visionary dimension of arts, culture and the creative economy across activities, services and products needs to come into focus as we seek imagine the kinds of futures we want. Part of that is also their capacity to lift us into another realm beyond the day to day reality. Historically these spiritual experiences were provided by religion and especially their collective gatherings in temples, churches or mosques.

Creating both ritual and places of rituals in a more secular age becomes more significant, which is why galleries and museums have at times been called 'cathedrals of the post-industrial age'.

Rarely do all these attributes come together in one single event, one service, one product or one exhibition or one institution. Yet seen collectively with an eagle eye view the potential power of with cultural and creative sectors comes through. In essence, what is being created are zones of encounter and they are often a bridge between the solo experience and a collective one.

Much of what is being proposed is already happening, but given the pandemic possibilities it is a priority to create reset since conditions have become unimaginably different than before. A reset requires a few things, including most importantly: being honest and truthful about what is happening, what works and does not and what could be improved.

The reframing argument blends the three overarching themes. A restatement of cultural value in its intrinsic, instrumental and institutional forms²; grounding and wrapping cultural institutions into a narrative of the civic commons – a commons that belongs to us all within which we have both rights and responsibilities. These civic assets, gestures of generosity, serve as the backbone of urban life when they are open to all and are used by all. Lastly highlighting that culture and its institutions as well as the creative economy sectors represent the 4th pillar of sustainable development given the value added they provide for health, wellbeing, social cohesion, a sense of belonging and identity, economic development and more. This framework validates what the creative economy can offer and as well we can detect the unique combined value of cultural institutions, especially if they 'walk the talk' of building a stronger ethos of being open minded, collaborative and partnership driven. Only then will potential be maximized.

Why is it so important to reassemble things afresh? The new circumstances, and especially the looming economic crisis and increase in inequities demands that culture has strong arguments for its roles in helping solve problems and creating opportunities. Since stark choices will need to be made - more resources for social housing or to support infrastructures and increased funding for the creative economy or for museums/galleries; more for health facilities or for blockbuster exhibitions or a new cultural facility or culturally focused digital experimentation platforms.

So, we return to the creative bureaucracy and within that also its political context. Public administrations need to navigate well the four strands of culture in the landscape -- the avant-garde, the popular, and that concerned with social development -- together with the continuing idea of the traditional culture of refinement. They are in tumultuous interplay.³ All, in different ways, confront the entertainment world, with its emphasis on amusement or consumption that even though it can be enriching mostly uses the market response as the arbiter of what is important even if what is provided are pre-chewed, pre-digested brand experiences. Many and especially youth culture cares little about these distinctions and is more relaxed about how 'high' and 'low' culture connect. Much will happen without public funding institutions involved, but when they are they need to work out who, why and what they support.

Summary of the presented projects

As the Covid-19 crisis has demonstrated, it is high time to strengthen the public sector. When all parts of the society suffer as a consequence of lock-downs and the public-health crisis, the importance of a well-functioning public administration is more obvious than ever. Together with the Creative Bureaucracy Festival 2020, the #ECIS2020 organized this breakout session to investigate the relations between creativity and modern public administration, in our belief that good public administrations have a substantial role to play to make places and modern society work in times of transition.

In this breakout session, the challenges that creatives face with bureaucracy were discussed. In doing so, during this Break out Session, good cases of creative bureaucracy and modern administration were presented, as a showcase for a new and better bureaucracy. Afterwards, participants discussed about creative bureaucracy and how creatives can help find solutions for modern administration.

The three main projects presented are the following:

² See John Holden <https://www.demos.co.uk/files/Culturalvalueweb.pdf>

³ <https://www.ghil.ac.uk/?id=890>

KREATIVVITTI

Mark Schlick, Project manager, Head official City of Pirmasens, Office for Economic Development

The event KREATIVVITTI has turned the Western Palatinate city into a true hotspot for the cultural and creative industries in Rhineland-Palatinate and beyond. Its second edition “KREATIVVITTI 2.0: A win-win-situation” was a very successful one. Kreativvitti 2.0 has become a colourful, lively and high-quality trade fair of innovations and creative minds, which has generated a great deal of enthusiasm across generations and has once again developed radiance beyond regional borders. Kreativvitti 2.0 convinces in every respect as an innovative platform for the creative and cultural industries in the region. In times of advancing digitalisation, this sector, which has always been driven by innovation, has an absolutely key position as a source of impulses, especially in Pirmasens, where the creative industry is a focal point in business development and where we like to tread new and also unconventional paths.

CROSS INNOVATION HUB

Theo Hausteiner, Cooperation and Program Manager

The Cross Innovation Hub believes that the examination of the creative industry, with its solution-oriented and flexible working cultures, can open up new perspectives. It brings together companies, solo entrepreneurs and people interested in founding a company from different branches of industry, in order to jointly change perspectives, develop visions and create innovations. This approach is used to promote innovation at an early stage. With a constant stream of new offers, The Cross Innovation Hub encourages the exchange, networking and cooperation of companies, self-employed people and students from the creative industries and other sectors and disciplines. In addition to practical support, the hub also addresses its role and opportunities as a public “bridge builder” of cross-sector partnerships in various formats such as think tanks, lectures and conferences.

WIENBOT

Sindre Wimberger, City of Vienna

WienBot answers questions about the city’s most popular services and provides relevant information quickly and directly, tailored to the situation in which they are needed. Chatbots, such as the WienBot, are one of the big trends in the current tech scene. Particularly request service processes can be enormously simplified and accelerated through this technology. A chatbot is a text-based computer program that simulates the communication between two people. The special feature: this chatbot is not a human, but an application based on artificial intelligence. The focus of WienBot is on the direct use of information. Users who want to find certain information on the go need other information than those looking for details from home. Hence, the WienBot is aimed at an audience that wants to consume information quickly, smart and on-the-go, but that does not want to forego the personal component.

#BoS3: Coping with crisis through creativity

CCI Innovation to Lead Beyond the Pandemic

Author Michela Magas

“No one can imagine a smart city of the future without cultural and creative sector, without the talent, without the value and without the richness of what you bring to us.” Mariya Gabriel¹

Abstract

The transition of Culture and the Creative Industries towards a more distributed, asynchronous, agile, geographically-independent, rapid creation model enabled by digital technologies, has accelerated exponentially during the Covid pandemic. The transformation of the sector had been gaining momentum before the current crisis and had been progressively speeding up ever since the advent of Napster on the 1st of June 1999², when the hacking subculture was the first to exploit affordances of Peer-to-Peer digital asset sharing to establish communities at a grand scale, and simultaneously precipitated the music sector into an overnight digital transition³. Since then models implemented by the CCI in response to early challenges, which utilised emerging technological affordances, have become a universal template for digital transformations across other industries. The CCI approach to knowledge acquisition and methodologies for experimentation have proven to be the key ingredient of the processes required to manage complexities emerging from frontier technologies. With increased demand for collaboration to solve grand societal challenges highlighted by the recent crisis, a new anchoring of the CCI as central facilitator of the data-driven cross-domain economy is emerging with a horizontal function that bridges all domains. Within this paper we list the priorities for the repositioning of the CCI at the centre of cross-domain industry innovation.

A testbed for digital transition

The advent of Napster forced the music industry to migrate overnight from tangible product to the digital format, adopt the cloud as a warehouse, turn to the data spreadsheet as the album crate, and use music metadata to replace attractive album covers as means of identification. The entire sector was suddenly in urgent need of reinvention, taking account of the spiralling losses, and the risk of sector collapse. The state of emergency required the adoption of fast learning methods to discover and exploit novel affordances of big data management, machine learning, application programming interfaces (APIs), intellectual property tracking, and streaming services, in hope that solutions may allow the sector to re-emerge with renewed market agility. Entire communities have sprung up to join forces in the attempt to address the challenges presented by this overwhelming shift in the way we create, record, communicate, exchange, and conduct business⁴. It is perhaps no surprise that members of those communities have most recently acquired Napster, having accumulated 20 years of new knowledge and hindsight about possible data-and-communities-powered business models and creative communication affordances of technological drivers⁵.

During the past decade, creativity has been powering the greatest volume of communication traffic. The rise and dominance of content creators⁶ and creative platforms which speed up communications and allow more agile ways to exchange information, have influenced even the more traditionally community-driven physical bookstores to consider new ways to deliver narratives. During the pandemic, when a trip to the local bookstore became a risk, digital communities of book lovers sprung up even from those physical places of personal exchanges of ideas, and survived thanks to novel modes of communication⁷, following a trajectory that the music industry went through 15-20 years earlier.

¹ Opening speech in The role of the Culture and Creative Industries post-Covid in preparation for the EIT CCI KIC, in CITIES, DESIGN AND INNOVATION, Umeå, 2 September 2020.

² Shih Ray Ku, R. The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology, The University of Chicago Law Review Vol. 69, No. 1 (Winter, 2002).

³ The Wikipedia Timeline of file sharing places formats for the sharing of music content immediately after the emergence of the World Wide Web, with the advent of Fraunhofer's MPEG-1 Audio Layer 3 (MP3) becoming a standard. Available at: https://en.wikipedia.org/wiki/Timeline_of_file_sharing.

⁴ The Music Tech Fest global community of over 7500 innovators is one example of a transdisciplinary community which was born stimulated by this transition. Available at: <https://musictechfest.net/>

⁵ Napster's New Bosses Want To Make A New Kind of Music-Streaming Giant, Rolling Stone, 25 August 2020. Available at: <https://www.rollingstone.com/pro/news/melodyvr-buys-napster-streaming-service-1049716/>.

⁶ Magas M., Supporting Creative SME Content Creators, ECFI, Brussels 3 April 2014. Available at: https://www.youtube.com/watch?v=FU_IVCeyXt4.

⁷ BBC Culture, As more countries go into lockdown, bookshops around the world are having to think of creative ways to serve their customers and communities, writes Clare Thorp. Available at: <https://www.bbc.com/culture/article/20200323-covid-19-how-bookshops-around-the-world-are-responding>.

The rise of digital content creation and innovative ways to deliver narratives has gradually affected the design of systems and processes. Novel technological affordances have enabled new modes of expression; novel languages of expression have evolved into new community (sub)cultures; with new (sub)cultures new values have arisen that drive emerging markets for both cultures and economies, requiring a rethink of their supporting systems and regulatory aspects. Cultural transformation was not only evident across Culture and the Creative Sector, but progressively across other industries and particularly service sectors, influenced by the same communication technology drivers.

Financial services quickly migrated to a more agile model using what became the central nervous system of the data-driven economy – the APIs⁸ – to establish robust horizontal mechanisms for data exchange. In Sweden, what happened to the music industry around the year 2000, happened to the financial services around 2015 – paper money disappeared as the most common means of exchange. Stock markets and banks moved finances as data long before then, but the cross-domain horizontal model required novel API-driven financial services to be linked to fully digitalized government UIDs⁹ and the taxation system for traceability and accountability, and ostensibly secure connection to IoT Tangible User Interfaces (in this case personal mobile phones) to be enabled as wallets. The same portable data device model as the iPod for the music industry, which was result of creative invention back in 2001, is now, with ubiquitous connectivity, the basis for faster and more secure financial exchanges, considerably speeding up the service economy.

Few believed that the transformation of the CCI would provide a model for all other industries. Mining or chemical production remained firmly anchored in real world processing of raw materials, and considered data-driven processes only as part of its supporting supply chain. It was not until SAP, in April 2019, published a whitepaper outlining their ability to manage the entire production process for the chemical industry - from start to finish - through data-driven systems¹⁰, that the established CCI model finally resonated with the chemical sector, resulting in the hypothetical question: “Wait, are we now just ‘content’”?

Before Covid-19, but even more so during the recent pandemic, digital content has been accumulating exponentially, led by the need for active participation and creative expression. While the public discourse has been preoccupied with the means of distribution – screens and videoconferences – content is the digital value category which has kept us actively engaged with society during the era of quarantine. It is also the digital category which carries within it all of the transformational affordances on offer by digital communications to generate new meaning – from appropriating traditional cultural narratives to automatising generative outputs of big data frontier technologies. While this provides emancipatory social and cultural potential that may or may not be supported by the technological platforms, it also in turn carries all of the threats associated with narrative spin, bias, manipulation, unethical use of technology and irresponsible use of data.

The ambition of extracting meaning or value from big data has led to research and experiments across knowledge domains in deep learning with neural networks, and uncovered challenges of real-time classification – or algorithm-driven ‘meaning making’ - impeded by the sheer volume and speed of outputs resulting in unknown unknowns. The challenges of **unknown unknowns** are being reported across knowledge domains, though perhaps significantly in physiology and cyber-physical systems where the human is in-the-loop, and where solutions are particularly relevant for the current pandemic¹¹. In creative experimentation where innovative use cases utilise machine learning and artificial intelligence for interaction with humans, or utilise complex systems with the human-in-the-loop, the results have shown to be highly unpredictable¹². To date, no deductive or inductive scientific method, building on prior art or statistical probability, has offered a reliable solution for dealing with such surprising outcomes. In this context creative elicitation approaches¹³ and methods of meaning-making in complex conditions, become a fundamental ingredient of the digital shift.

Compared to the scientific method of deduction and induction leading to a conclusion, which appears highly rational, the creative practitioners’ brain training has always been perceived as far less linear and rather chaotic, opening up too many possibilities, or somewhat irrational and perhaps too reliant upon some kind of instinct. Recognition of the rigour of the creative practitioner, trained to observe and evaluate cultural phenomena on a 24/7 basis, and practice problem-solving by illuminating subject matter from as many perspectives as possible, is now a requirement for the creation of new knowledge in a highly complex, rapidly changing data-driven landscape, full of challenging outcomes.

⁸ How APIs open the door to new aggregated services. Technative, 6 March 2017. Available at: <https://www.technative.io/apis-open-the-door-to-innovative-new-aggregated-services-global-study-reveals/>

⁹ Swedish User Identifiers are standardised across services utilising the Swedish National Personal Number.

¹⁰ Empower the Intelligent Chemical Enterprise with SAP and its Ecosystem, SAP, 24 April 2019. Available at: <https://www.chemanager-online.com/en/whitepaper/empower-intelligent-chemical-enterprise-sap-and-its-ecosystem>.

¹¹ Bogdan P. (2019). Taming the unknown unknowns in complex systems: challenges and opportunities for modeling, analysis and control of complex (Biological) collectives. *Front. Physiol.* 10:1452. 10.3389/fphys.2019.01452

¹² See the MTF use case of the blind singer, for example, in “7 ingredients for the Industry Commons”, published on 21 February 2018, and available on <https://michelamagas.com/7-ingredients-industry-commons/>

¹³ Sutcliffe, A. and Sawyer, P. (2013). Requirements elicitation: Towards the unknown unknowns. Requirements Engineering Conference (RE), 2013 21st IEEE International, IEEE.

The current pandemic is one of a series of **black swan events**¹⁴ regularly occurring to humanity, and acquisition of knowledge has proven to be the key concept for managing the associated risk¹⁵. Methodologies and solutions for the current pandemic must be based on a long-term view of recurring scenarios which are unpredictable and hence non-computable in terms of statistical probability, or result in negative impact for society when combined with methods which are risk-averse and ill-equipped to face uncertainty, particularly those that lack agency. Creative experimentation offers agency in joining knowledge from across cultural and industry domains, inclusive of radically different views and ethical considerations. The creative practitioner's rigorous methods of questioning the subject matter from various perspectives which result in the ability to make meaningful connections between seemingly unconnected phenomena are proving to be essential tools for generating new knowledge from unknown unknowns and mediating the systemic change required to manage complexity.

Positioning the CCI at the centre of cross-domain innovation

Intensified cross-domain collaboration and a new approach to the acquisition of knowledge is a requirement of the current multiple simultaneous humanitarian crises. Within this context, the CCI possess qualities which can spearhead the systemic change required for the reordering of knowledge, skills, supporting systems and future tools. The repositioning of the CCI as an essential driver and shaper of the new cross-domain data-driven landscape highlights a series of new roles for the sector:

The CCI as the engine of cross-domain industrial R&D

Recent cross-domain industry consultations have revealed requests from industry stakeholders for experimentation which would help them test unexpected outcomes of novel use cases which are emerging when implementing data-driven, and particularly AI-driven systems in e.g. manufacturing processes¹⁶. The CCI are seen as the leading sector in experimental prototyping methodologies which translate thought into practice in order to uncover unforeseen scenarios in a safe environment, before technologies are fully deployed (e.g. design of brain-computer interfaces for interacting with machinery in order to increase safety at work). These environments for experimentation are typically goal-oriented, driven by societal challenges, and informed by best practice from the long experience of CCI sectors in digital transition. They include testing supporting systems of attribution and tracking of intellectual property in value networks, novel business and collaboration models, and methods which have been successful at motivating moonshots and have led to breakthrough innovation. This in turn provides the framework for testing more agile legislation and/or policy in order to reduce negative incentives and improve the evidence available for decision making, thus feeding policy recommendations directly from the grass roots or from working practice.

The CCI as key to innovation in the new cross-domain economy

The innovation of the new integrated data economy extracts value from the intersection of cross-domain assets – with hybrid applications, novel use cases, imaginary scenarios, creative simulations, emerging market explorations and solutions to societal challenges. One example is transfer of gesture and data-driven IoT for music playlisting into breakthrough innovation for communication and control systems in heavy duty vehicles for the primary industry¹⁷. This results in “a new category of innovation, driven by cross-sectorial, cross-domain and cross-societal solutions”¹⁸. The CCI are ideally placed as early adopters of new technologies, by operating close to emerging markets and uniquely positioned to actively connect industrial and knowledge domains into value ecosystems.

The CCI as provider of key skills for radical shifts in society, markets and economies

Skills such as human-centric design, system design, content design and curation, innovative applications of industrial tools and services, and creative innovation methodologies, based on best practice from a long tradition of design and innovation in the CCI, have evolved with the latest technologies to become essential ingredients of the data-driven economy.

¹⁴ Taleb, NN (2007). *The black swan: the impact of the highly improbable*. Penguin, London

¹⁵ Flage R., Aven T. (2015). Emerging risk – conceptual definition and a relation to black swan types of events. *Reliability Engineering and System Safety*, 144 (2015), pp. 61-67

¹⁶ Workshop report on “Common European Data Spaces in Smart Manufacturing”, European Commission, 16 September 2019

¹⁷ See the MTF use case of transfer from CCI experimentation to a patent for primary industry, in “7 Ingredients to build a successful innovation ecosystem”, published on 28 March 2016, and available on <https://michelamagas.com/7-ingredients-to-build-a-successful-innovation-ecosystem/>

¹⁸ Bernd Fesl at The role of the Culture and Creative Industries post-Covid in preparation for the EIT CCI KIC, in CITIES, DESIGN AND INNOVATION, Umeå, 2 September 2020.

The CCI powering agile data exchanges through the design of interfaces

Digital interfaces are the most agile enabler of industrial data marketplaces. As well as the traditional CCI domain of the design of graphic user interfaces which are essential drivers of software platforms, the CCI approach has proven very successful at addressing the functionality and applicability of APIs to novel use cases. More recently the CCI have proven to be best placed to exploit the huge potential of tangible user interfaces (TUIs ¹⁹) which interact with ubiquitous IoT data in smart cities and regions. An example of what could be considered a tangible user interface is the design of data-driven bike-sharing facilities.

The CCI contributing to digital narratives which amplify and stimulate the digital economy

As well as leading on audio-visual digital content creation, the CCI sector narrative potential now extends to continuously tracked IoT embedded in all physical spaces, and all objects, artifacts and products, with renewed potential for building culture and meaning in public spaces. In this sense, for example, the data-driven bike-sharing scheme mentioned above becomes the narrative interface between politicians and the civil society.

The CCI enabling rapid upskilling and lifelong learning

Collaborative and experimental CCI environments have proven to be conducive to rapid knowledge transfer between diverse participants from a variety of social, cultural and professional backgrounds. CCI supporting mechanisms for learning have demonstrated the potential to empower people of all ages and abilities, and unlock new talents and capabilities. Regular considerations of inclusivity, gender equity and accessibility, enable all talent to contribute to innovation for the economy. Some sectors of the CCI have demonstrated the ability to attract high percentages of female participants in technology prototyping, through goal-oriented, creativity-driven, socially-responsible activities, which address major societal challenges and UN Goals ²⁰.

The CCI safeguarding the social and ethical dimension of human-centric technology

CCI lead on experiments with humans-in-the-loop, where the technological impact of frontier technologies on human beings – such as AI, deep learning and brain-computer interfaces – can be tested in safe environments, and challenges addressed before technologies are deployed at scale. These experiments test the extent to which the technology enables or obstructs human agency, decision making processes and accountability. This dimension is directly linked to safeguarding health and wellbeing, including new data-and-media-driven issues of privacy, bias and discrimination, physical distancing and isolation, and social media impact on mental health. The resulting technological innovation must be “value bound to human dignity of the individual”, and “socially bound to resilience” ²¹.

These observations and recommendations also raise important questions about the policy and industrial infrastructures that could best make use of the opportunities and affordances of the CCI as central to cross-industry innovation:

- What economic and policy mechanisms can more equitably reflect the respective value contributions of creative production and content distribution?
- How can industries participate in and maximise the new cross-domain knowledge and innovation led by the CCI?
- How can creative experimentation that builds new ideas on top of intellectual property from different domains safeguard, attribute and exploit that IP in a controlled and fair manner?
- How can knowledge from the emerging markets explored by the CCI feed back to other industry sectors?
- How can the CCI contribute to the design of a cross-domain ontology ecosystem and facilitate communication across industry sectors?
- How can we ensure sufficiently agile supporting infrastructures to enable the CCI to successfully deliver on the new role and responsibilities at the centre of cross-domain industry innovation?

Closing remarks

Thank you to all of the presenters and contributors for your valuable feedback. As representatives of CCI policy we have been working relentlessly throughout the pandemic on establishing this sector as central to the discourse on how to navigate this transition, and how to establish new, more robust societal structures for the future. This series started with a conference in the City of Umea with an opening speech by Mariya Gabriel and contributions from all over Europe and

¹⁹ Hiroshi Ishii. 2008. The tangible user interface and its evolution. *Commun. ACM* 51, 6 (2008), 32--36.

²⁰ See the MTF statistic of 53% female participants in an 800+ technology prototyping event driven by those principles, in the keynote to INNOVEIT 2019: <https://www.youtube.com/watch?v=9nYCMbkn4Ro>

²¹ *Ibid.*

the World, and these Breakout sessions are very much building on the topics raised, to lead us towards the Conference in Berlin which will also be opened by Commissioner Gabriel.

What we have seen from today's discussions are a series of opportunities as well as major challenges. There is a danger of dropping the CCI in the centre among all other industrial domains as a Trojan Horse and leaving it there in hope that it will close all gaps, repair all fissures, and inject the space with societal values. The sector requires the level of support which will allow it to make meaningful and effective contributions to the new societal challenges which are being highlighted here. The first is digital literacy. As highlighted so eloquently by Anette Novak, this challenge affects us all at a fundamental level. It affects our children, as much as it affects the well seasoned industrialist. The second is dealing with complexity. The CCI has not only the tools and the training to address complex challenges, but, as Pier Luigi Sacco has so beautifully put it, it addresses the architecture of human relationships in a complex society. This includes smart solutions that are vital for the current pandemic - for mental health, social cohesion and innovation processes. And it also includes, as Björn Bremmer put it, innovation in tools which are making society sustainable during this time of crisis - digital streaming and communication platforms. However, as Eberhart Schrempf warns, the social crisis cannot be solved only through cultural commitment and creative intelligence by just one sector - the CCI - on its own. In fact we could say that co-creation is a tool for inclusion, not only of minorities, but of all brilliant minds that work across different domains, and essential for reaching new standards for all of us as society to come to a space of common understanding.

Recommendations

1. Rendering the invisible value creation more visible - with language and definitions - e.g. lifelong learning, opening up education to new needs of literacy and cross-sectoral innovation (and clowns in the classroom!)
2. Building an ecology of trust in the media scape is a big issue which the CCI has not been able to address
3. We need different narratives facilitated by the CCI to help people reshape their behavioural patterns towards transition to the Green Deal, but also towards a new media landscape.
4. It is necessary to rewire the economy to be able to bounce back with a social grammar developed by the CCI to provide resilience strategies - for cross-sectoral innovation
5. A change of language is necessary to communicate effectively the role of the CCI in a cross-sectoral environment
6. We need to embrace new technologies, with full awareness of technological bias, and learn to communicate in the digital world, to talk about e.g. Black Lives Matter, to talk about the bias inherent in these technologies, to talk about education, which takes us a full circle back to digital literacy.

In summary it is about coming to a space of common understanding and CCI tools for innovation addressing all aspects, including governmental, structural and economical, are essential for solving this grand societal challenge.

#BoS4: Cross Innovation leading sustainability

Authors: Raffaella Seitz, Lea Jordan (Hamburg Kreativ Gesellschaft, Innovation Hub)

Abstract

The Agenda 2030, resolved by all UN member states, encompasses 17 Sustainable Development Goals (SDGs) which altogether envision future economic progress that goes hand in hand with social justice as well as the active acknowledgement of planetary limits and appreciation of the earth system we all live in. However, it is only ten years to achieve these ambitious goals in time and hence, meet the urgent societal challenges. The COVID-19 crisis may be regarded as a burning lens on current wrongs in this regard and optimistically, a chance for an overdue systemic change which the SDGs in all of their complexity and interdependencies proclaim and reflect.

Facing the VUCA (volatility, uncertainty, complexity, ambiguity) world which may also be described by vulnerability considering the current pandemic and need for sustainability, agents of the CCI are predestined to play key roles in finding appropriate (business and overall societal) solutions. It is, among many other qualities, their creativity and ability for visionary imagination and aspiration - much needed in the current times - which makes them pivotal collaborators. Open Innovation with the CCIs, i.e. Cross Innovation by our definition, is an important instrument in order to meet challenges of the future.

Aims of this paper are to firstly share an understanding of the problems and challenges we are facing within the short time corridor until 2030. In the analysis part, we will then point out and elaborate on the strengths of creatives which allow for new perspectives and creative solutions, and highlight the relevance of Open Innovation, particularly with the CCIs: Cross Innovation. We will then dive deeper into the role of public intermediaries within this context and briefly illustrate it with our project Cross Innovation Hub (CIH), a co-financed learning project supported by the European Regional Development Fund (ERDF). Thereafter, we will share our practical approach to tackle a selection of SDGs by referencing the extended appendix. Eventually, we will point out solutions and share recommendations to promote the strengths and ecosystem/s of CCIs, support Cross Innovation financially and collaboratively by e.g. bringing an Open Innovation platform into being, strengthen the CCI narrative and raise the chances to develop suitable (economic) stimulus programs, taking into account SDGs and the full potential of working with CCIs towards an open, inclusive and sustainable Europe/EU.

Key Words:

SDGs, sustainability, CCIs, Cross Innovation, Open Innovation, collaboration, Quadruple Helix, interdisciplinarity, transdisciplinarity, multi-stakeholder approach, transformation, systemic change, mobilisation, COVID-19, momentum, crisis, chance

1. Problem Definition

In 2015, the international community decided on 17 SDGs with its 169 targets as part of the Agenda 2030. After three years, the heads of state at UN headquarters found consensus on and resolved the document “Transforming Our World: The 2030 Agenda for Sustainable Development” with its goal to face the multiple urgent international societal - economic, political, social, and environmental - challenges in favor of an inclusive and sustainable world. The paper points out the urgent need for transformation in a world in which social cohesion and our environmental basis are (increasingly) at risk.

The 17 SDGs mirror a vision which premises the involvement of everyone and divergent swarms of intelligence and creativity respectively. It calls for systemic understanding and future-proof change in the direction of politics, economy (thus, including CCIs), science and every agent of civic society. This systemic aspiration beyond an anthropocentric state of view presupposes deep understanding and active empathy with the many and not the few and within the limits of our earth system. It banks on the capacities to commonly envision and the courage to commit to and to actively shape societal future carefully - thus, in accordance with the SDGs.

This social contract of the Agenda 2030 can only be accomplished by a diversity of strengths in respect to knowledge, competencies, skills, and experience. To meet the SDGs it needs network-like organisation and collaboration (Open Innovation) which involves interdisciplinary and transdisciplinary perspectives, exchange, and actions to mobilise all stakeholders in the international community, may it be locally, regionally and/or globally. As the United Nations Global Compact and Accenture (2018) stress, “85% of UN leaders see cross-sector partnerships as critical to enabling business to help achieve the SDGs” (p.6). Future development and progress must sincerely be seen in close relation to the climate crisis and the planetary limits. However, the depth of change/s we are facing and the very limited time corridor we act within seems to be broadly underestimated. Just in the face of the climate crisis, it is only two degrees of warming which may cause irreversible tipping points in our all earth system (wpm2030 - Wissenschaftsplattform Nachhaltigkeit 2030,

2019, p.4). From a positive point of view, COVID-19 may be a momentum of global sensitization to pause, consciously consider and reflect the system/s we live within and actively position against how we cannot proceed in future. The COVID-19 pandemic may be a crisis which, from an optimistic perspective, strengthens solidarity and resilience as major catalysts to commonly face the urgent challenges of the presence.

Mega trends, e.g. digitization or connectivity, globalization, neo-ecology, and urbanization, and challenges as low-carbon business premises and green economy must be encountered in ways that work for an internationally viable but at the same time socially and environmentally compatible economy. Growth and prosperity are to build upon, however it needs critical discourses around approaches to a “new economic system” since the last years were based on growth to avoid downward spirals, yet far reaching collateral damages have become obvious.

Doubtlessly, innovation cycles shorten, and markets become more complex - boundary conditions of business are changing. New solutions through multiple perspectives are asked for and needed in this sustainability context. New solutions are also needed for companies to survive in the ongoing global competition, being and staying able to compete. Implementation of SDGs-compatible measures have to do with (business) innovation, innovation ecosystems, innovative approaches and the impulses that go along with it. In this respect, it is inevitable to gain clarity on what we understand and define as “innovation” and “desirable/meaningful innovation” respectively, being aware that the quality of any innovation should not counteract but support the SDGs. According to the OECD (2018) innovation is defined as “a new or improved product or process (or combination thereof) that differs significantly from the unit’s previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process)”. We all need to become clear about which innovations have not been and are not serving the SDGs. It is a key question of how to encourage meaningful innovation and discourage the opposite. Clearly, transformation goes hand in hand with non-linear processes in an increasingly complex environment of interdependencies (between the SDGs and beyond) and this makes it a big challenge to economically address. More and more, we all have to think in value networks instead of value chains, embracing complexity to its systemic best. (Zukunftsinstitut 2020, p.10; Trautenberger & Fesel, 2020, p.7)

Furthermore, “[we] are moving too slowly to keep pace with growing societal needs and are in danger of coming up woefully short of those targets” (Woods & Young, 2019) - the SDGs. As Woods and Young assume, “innovation can significantly shift the economics of potential solutions and the timeline for delivering them” (ibid.). It is new technologies and methods they highlight in this regard. Nonetheless, it seems important to not only assess technology’s positive disruptive potential but also its potential risks, especially with respect to Internet of Things, Artificial Intelligence, Big Data, and Cyber Security (WGBU, p. 69). This may also include the carbon footprint of data-driven societies.

2. Analysis

2.1 Agents of the CCI as Innovation Catalysts

The transition from industrial society to information society and towards an increasingly volatile, uncertain, complex, ambiguous (VUCA) world requires new skills in order to successfully develop and implement innovation. Whereas economic success used to be strongly linked to what is called convergent thinking, marked by linear, strictly rational-logical decision-making, the VUCA world calls for new, divergent modes of thinking in order to solve today’s societal and business challenges. It requires open, flexible and unconventional approaches which “focus on co-creative and collaborative learning outside the boundaries of the organization” (Cousins, 2018, p.2). The increasing speed with which companies have to reinvent themselves and find solutions to complex problems adds to this development.

The heterogenous CCIs have been identified as innovation catalysts (Florida, 2002; Lange, Knetsch, & Riesenberger, 2016; Potts, 2007), equipped with skills needed to tackle contemporary and future challenges that companies face in a new, complex economy. Per definition, the CCIs’ core business is the development and implementation of new ideas, products or services (Prognos AG & Fraunhofer, 2012). Rarely standardized, these novel products or services are often made upon demand in close collaboration with clients and require external resources. Hence, in order to meet market/customer/client demands, the CCIs are working in short innovation cycles and Open Innovation processes involving diverse stakeholders. The CCIs’ innovation capability largely stems from their natural use of technology, their comprehension and awareness of trends as well as their generalist approach which enables creatives to blend knowledge and experience from different fields of expertise (Müller, Rammer & Trüby, 2009). Creatives are constantly adapting to rapidly changing circumstances and environments which makes them flexible and resilient cooperation partners with a high risk disposition. As such, “creative enterprises turn out to be significantly more innovative than enterprises from other knowledge intensive sectors” (Müller, Rammer & Trüby, 2009, p.15).

Because of their close collaboration with clients, users and other stakeholders, creatives generally show strong capabilities to empathize with different groups of people but also to experiment with processes in order to achieve their objectives. Due to their readiness to disrupt, their skill to navigate complexity and their acceptance of uncertainty, creatives can be regarded as innovative problem-solvers in fast-paced environments (Lange et al., 2016). Under pressure to reach the SDGs by 2030, we need creative skills in order to develop new solutions in the areas of digitization and

sustainability now more than ever. The CCIs perform an important role at the intersection of different sectors: They connect, interact and challenge existing (economic or social) activities. Special submarkets of the CCIs, such as design and software, have the expertise to create new digital solutions. Design, for example, has been discussed to be pioneering in both innovation and sustainability. Human-centered and earth-centered design are two examples of the holistic approach the CCIs take in the development of products, services and processes. Away from a product-, customer- and user-centric focus, design approaches evolved towards focusing on systemic changes “in which sustainability is understood as a socio-technical challenge” (Ceschin and Gaziulusoy, 2016, p.149). The need to further marry sustainability and digitization in order to meet future societal, economic, environmental and technological demands demonstrates the need for visionary pioneers, capable of applying interdisciplinary approaches to problem-solving and innovation. It is, among other qualities, their creativity, ability for visionary imagination and aspiration combined with specific professional strengths in the distinct CCI markets which make them much needed in the sustainability context. Hence, CCI agents can be catalysts for sustainable innovation and are predestined to be protagonists in the race to accomplish the SDGs.

2.2 Cross and Open Innovation Allowing for a Profound Multi-Stakeholder Approach

As explicitly stated before, innovation today cannot be seen in the narrow context of one single company any longer. In contrast, “successful innovation most often requires the combination of a firm’s own innovative resources with external inputs”, argue Müller, Rammer and Trüby (2009, p.5). In the context of the SDGs, cross-sectoral collaboration is critical from two points of view: One, the public sector needs to collaborate with the social and the private sector in order to mobilize new sources of investment capital whilst working towards the realization of the SDGs, and two, cross-sectoral innovation is the only way to accelerate the speed with which solutions are developed and implemented (Woods and Young, 2019). Hence, innovation is no longer connected to one company or sector alone but has to be seen in a wider context of a Quadruple Helix structure, “where industries, entrepreneurs, citizens, governments and centres of knowledge interact alongside the lines of complexity, cooperation, competence, competition and communication to achieve solutions” (High Level Group, 2014, pp.19-20) - both on EU/European as well as on national and regional level. “On a macro-level, the SDGs can provide a roadmap for organisations and entire industries to undertake the system-wide changes that will help prepare our society for the future” (PricewaterhouseCoopers, 2019, p.4). Multi-stakeholder approaches and Cross Innovation as a specific form of Open Innovation with the CCIs can enable change with creativity and all the strengths that make up the full potential of the CCI agents (Rauter, Globocnik, Perl-Vorbach, and Baumgartner, 2019, pp. 227, 232; Institut für Innovation und Technik, 2014, p.5; Trautenberger & Fesel, 2020, pp. pp.7, 12). Cross Innovation between the CCIs and other economic sectors “take[s] place in open innovation setups, whereby insights are generated through the combination of different perspectives involving multiple partners” (European Commission, 2019, p.20). In Cross Innovation processes, creatives are co-creating ideas and solutions in the early phases of an innovation process and specifically not as service providers who give a product or service the finishing touch before it is introduced to a market. Quite the opposite, creatives as creators of intellectual property, and due to their aforementioned skills, are particularly attractive to be involved in Cross Innovation processes (Müller et al., 2019). The integration of creatives into innovation processes leads not only to transformative but meaningful outcomes, as creatives take into account multiple perspectives and place products and processes in wider contexts of society and the environment (European Commission, 2019). Cross Innovation can therefore be considered a valuable approach to venture into the realization of the SDGs in a meaningful, collaborative and fast way, “taking into account ethical, environmental, social and well-being related concerns to respond to societal challenges in a sustainable and inclusive way” (European Commission, 2019, p.15). Enterprises which participate in Cross Innovation approaches benefit from a mindset sensitization, external inputs from diverse stakeholders, and exchange with experts from different fields, unexpected as well as faster results based on holistic approaches.

2.3 The Role of Public Intermediaries in Cross Innovation Processes: An Example from Hamburg

The implementation of Open and Cross Innovation processes usually requires careful planning. They are most likely to happen in “open, dynamic ecosystems and networks” (European Commission, 2019, p.28). Once partnerships or collaborations between different firms or organizations come into being, transparency in terms of timeline and resources, awareness of constraints and building of trust are the most important factors for Cross Innovation processes to be successful. As Cross Innovation methods are not widely known nor practised, companies often have difficulties grasping the effectiveness and use of Cross Innovation processes. However, Cross Innovation can be regarded as an effective approach for fast development and realization of new ideas, for valuable generation of external input as well as knowledge transfer. Creatives as innovation catalysts, naturally acting in network-like collaborative environments, easily synthesize divergent and convergent thinking and information, which lead towards valuable re-combinations of existing knowledge and profound solutions. Public institutions can play a central role in the strategic promotion of Cross Innovation by fostering innovation ecosystems where different stakeholders can collaborate on eye level.

Hamburg Kreativ Gesellschaft, a public agency owned by the Free and Hanseatic City of Hamburg, fosters Hamburg's CCI through access to space and finance as well as capacity building and innovation programs. Since 2016, the Cross Innovation Hub, as part of Hamburg Kreativ Gesellschaft, pioneers in the field of cross-sector collaboration with the CCI. As a public intermediary between the CCI and other economic sectors, it is the CIH's role to connect companies and individuals from seemingly unrelated sectors in order to identify and leverage innovation opportunities. The diverse programs, ranging from one-day workshops to think tanks and long-term collaborations, are aimed at inspiring a change of perspective, innovative business practices, new processes, products or business models between different stakeholders, such as scientists, corporates, citizens and creatives. Learning from the visionary creatives in the CCI, highlighting their innovation capability and making collaboration processes effective is their key mission. All of the programs set a focus on cross-sectoral challenges and interdisciplinary practice in Open and Cross Innovation processes. Driven by critical optimism, the CIH facilitates processes through a range of methods and theories that enable participants to develop a collaborative mindset - mutually learning from each other - and engage in a constructive change of perspective. The iterative processes are designed to alternate between divergent and convergent modes of thinking, similar to the Double Diamond structure proposed by the British Design Council: Increasing complexity through multiperspectivity and reducing complexity in order to find and develop concrete solutions. Next to the (meanwhile) established methods and approaches that originate from the CCI, the CIH has developed new creative methods which are derived from the processes observed in the CCI and from in-depth conversations with creatives.

The CIH has recognized the role of creatives in corporate transformation processes, sustainable development being one of them. As Trautenberger (2020) points out in a work-in-progress paper, "all 17 SDGs are to some extent relevant for the Cultural and Creative Industries" (p.4). In an analysis he differentiates among European CCI between "I. CCI are directly influenced by SDGs" (SDGs 5, 7, 10, and 15), "II. CCI are indirectly influenced by SDGs" (SDGs 1, 2, 3, 13, and 14), "III. CCI directly affecting SDGs" (SDGs 4, 8, 9, 11, 12), and "IV. CCI indirectly affecting SDGs" (SDGs 3, 16, and 17) (ibid.). As a public institution promoting the CCI and Cross Innovation the CIH now consciously sets a focus on sustainability. In accordance with this decision, public money is spent under the premise of serving sustainability goals. As agenda setters the CIH is willing to act responsibly. The CIH focuses on the following seven SDGs: SDG 3 (Good Health and Well-Being) SDG 4 (Quality Education), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action). The CIH believes that it is the sum of steps in the right (i.e. SDGs-compatible) direction on a micro- and meso-level that lead to the much needed SDGs-compatible transformation on a macro-level.

In the appendix, more details about the CIH's fields of action and exemplary formats serving the SDGs in focus are shared. Three formats described here (Emergency Lab - SDG 8; Cross Innovation Class - SDG 11; Cross Innovation Lab - SDG 12, 13) follow a similar structure: Creative professionals or students from diverse disciplines collaborate with non-creative businesses to develop (innovative or hands-on) solutions to business challenges. During this process, diverse stakeholders' perspectives, such as scientists', employees' and users', inform the exploration, problem definition and formulation of challenges, ideation and realization/prototyping. The CIH ensures collaboration on eye-level, incl. e.g. legal arrangements and an atmosphere of trustful, creative, and effective collaboration. Another format (Pop-up Office - SDG 9) explores and is concerned with skills and mindsets around (cross) collaboration, a mutual learning mindset, and decision-making based on an iterative learning mode.

Conclusion

This paper has examined the urgency to create new innovation approaches that speed up transformation and demonstrated how Cross Innovation can help build ecosystems that produce meaningful innovation directed towards meeting the SDGs in time. Particularly relevant in this regard seems to be the sourcing of and collaboration with external inputs and diverse stakeholders outside the boundaries of one firm or organisation. Additionally, creative skills promise inspiring new ways of thinking and have the potential to unite multiple disciplines and interests under the shared vision of the SDGs.

However, Cross Innovation - Open Innovation with the CCI - is barely practiced, as companies lack access to the CCI, do not have experience with creatives, and because internal approaches are often easier to argue for as well as to facilitate. In a highly competitive performance society, in which people are used to rationalization, efficiency and quantifiability, companies often fear outcome uncertainty which is naturally inherent and essential for a Cross Innovation process to effectively work.

Sustainability is too often seen in the narrow context of one organisation rather than a systemic change which involves multiple actors. In order to create frameworks and networks for collaboration and Cross Innovation, to communicate between different sectors and identify innovation potential, and to set the agenda for sustainable innovation, it urgently needs public intermediaries who can coordinate, cross-sectorally translate and further develop Cross Innovation processes. This crisis presents a chance for an overdue systemic shift towards sustainability (subsumed in the SDGs with their targets to achieve), which public institutions should leverage and act upon. For this we may need

Open Innovation platforms - among the distinct fields of the CCIs and for Cross Innovation in particular - that may help to (globally) create solutions at the intersection between technological, social, institutional and cultural innovation, capable of addressing the systemic changes we are experiencing. These Open Innovation platforms should follow an (extended) understanding of the Quadruple Helix approach with involvement of policy, science, industry, and society, naturally including the CCIs. Intermediaries on these platforms (and beyond) may engage as bridge builders (between the CCIs and other sectors), value brokers for the CCIs and Cross Innovation as well as pain relievers for creatives (in Cross Innovation processes), as Christer Windeløv-Lidzélius remarked during the European Creative Industries Summit 2020.

Features of an Open Innovation platform could comprise among others: An unlocking infrastructure for creatives in regards to financing resources and EU/international funding programs (intermediaries as pain relievers); the sharing of best and worst cases/practices so to mutually learn from each other (intermediaries as bridge builders within and beyond the CCIs); spaces for dialogues between the CCIs and other sectors in which the potential of Cross Innovation can be addressed in order to overcome translational cross-sector hurdles (intermediaries as value brokers). In addition, it is also crucial to better connect intermediaries so that they can share knowledge and experience with each other and push Cross Innovation.

It needs more public initiatives - large and small, on a local, regional, national and European level - which facilitate and promote sustainable business development through networked innovation with the CCIs and help realize concrete measures to achieve the SDGs. The legitimacy of public institutions to spend public money on innovation should largely depend on the prosperity that will result from their work - for both the planet and people. Prosperity or success may not be measured in financial terms only. Now is the time to set the agenda for sustainable development and social impact with the CCIs. Potential economic stimulus packages should be directed towards the re-imagining of a common future and a green economy through new innovation approaches. We urge to recognize and leverage the potential of Cross Innovation in future public funding opportunities, both on regional, national and European level, and call for more open, collaborative governance systems that are better suited to navigate complexity.

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Bibliography

- Ceschin, F. & Gaziulusoy, I. (2016). Evolution of design for sustainability: From product design to design for system innovations and transitions. *Design studies*, 47, 118-163. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0142694X16300631>
- Cousins, B. (2018). Design thinking: Organizational learning in VUCA environments. *Academy of Strategic Management Journal*, 17(2), 1-18.
- European Commission (2019). Impulse paper on the role of cultural and creative sectors in innovating European industry. Luxembourg: Publications Office of the European Union, 2019 Retrieved from http://www.keanet.eu/wp-content/uploads/Impulse-paper-on-the-role-of-CCIs-in-innovating-European-industry_integrated.pdf
- Florida, R. (2002). *The rise of the creative class*. New York: Basic Books.
- High Level Group (2014). Inspiring and Completing European Innovation Ecosystems. Brussels: High Level Group Secretariat. Retrieved from https://ec.europa.eu/futurium/en/system/files/ged/47-_hlg_report-inspiringcompletingeuinnoecosystem-2014_toconnected.pdf
- Institut für Innovation und Technik (2014). Creative Industries: Policy recommendations - promotion of cross-innovation from creative industries. Retrieved from http://www.cross-innovation.eu/wp-content/uploads/2014/04/Report_cross-innovation-creative-industries_final_140315.pdf
- Lange, B., Knetsch, F. & Riesenberger, D. (2016). *Kollaborationen zwischen Kreativwirtschaft und Mittelstand: Erfolgsfaktoren, Methoden und Instrumente*. Springer Gabler.
- Müller, K., Rammer, C., & Trüby, J. (2009). The role of creative industries in industrial innovation. *Innovation*, 11(2), 148-168. <https://madoc.bib.uni-mannheim.de/2186/1/dp08109.pdf>
- PricewaterhouseCoopers (2019). Creating a strategy for a better world: How the Sustainable Development Goals can provide the framework for business to deliver progress on our global challenges. Retrieved from <https://www.pwc.com/gx/en/sustainability/SDG/sdg-2019.pdf>
- Organisation for Economic Co-operation and Development (2020). OECD Webinar: COVID-19 and cultural and creative sectors. Impact, policy responses and opportunities [video]. Retrieved from <https://www.youtube.com/watch?v=nlmafdlZ7Tc>
- OECD Publishing (2018). *Oslo Manual 2018: Guidelines for collecting, reporting and using data on innovation*. Organisation for Economic Co-operation and Development OECD.
- Prognos AG & Fraunhofer ISI (2012). *Die Kultur- und Kreativwirtschaft in der gesamtwirtschaftlichen Wertschöpfungskette: Wirkungsketten, Innovationskraft, Potenziale*. Berlin: Bundesministerium für Wirtschaft und Technologie

- Rauter, R., Globocnik, D., Perl-Vorbach, E., & Baumgartner, R. J. (2019). Open innovation and its effects on economic and sustainability innovation performance. *Journal of Innovation & Knowledge*, 4(4), 226-233. Retrieved from <https://www.sciencedirect.com/science/article/pii/S2444569X18300325>
- Trautenberger, G. (2020 WIP): SDGs and Creative Industries.
- Trautenberger, G. & Fesel, B. (2020). Breaking out of the COVID-19 Crisis - Restarting the Cultural Creative Industries is at the centre of an open and sustainable Europe. Retrieved from https://ecbnetwork.eu/wp-content/uploads/2020/04/ECBN_White_Paper_CCI-@Covd19_20200409.pdf
- United Nations (n.d). SDG Poster and Individual Goals for Web and Print [image]. Retrieved from <https://www.un.org/sustainabledevelopment/news/communications-material/>
- United Nations (n.d). Goal 3: Ensure healthy lives and promote well-being for all at all ages. Retrieved from <https://www.un.org/sustainabledevelopment/health/>
- United Nations (n.d). Goal 4: Quality Education. Retrieved from <https://www.un.org/sustainabledevelopment/education/>
- United Nations (n.d). Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all. Retrieved from <https://www.un.org/sustainabledevelopment/economic-growth/>
- United Nations (n.d). Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation. Retrieved from <https://www.un.org/sustainabledevelopment/infrastructure-industrialization/>
- United Nations (n.d). Goal 11: Make cities inclusive, safe, resilient and sustainable. Retrieved from <https://www.un.org/sustainabledevelopment/cities/>
- United Nations (n.d). Goal 12: Ensure sustainable consumption and production patterns. Retrieved from <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>
- United Nations (n.d). Goal 13: Take urgent action to combat climate change and its impacts. Retrieved from <https://www.un.org/sustainabledevelopment/climate-change/>
- United Nations Global Compact and Accenture (2018). The UN Global Compact–Accenture Strategy CEO Study: Transforming Partnerships for the SDGs. Retrieved from https://www.accenture.com/_acnmedia/PDF-74/Accenture-Transforming-Partnerships-for-the-SDGs-UNGC-Accenture-Strategy.pdf
- WGBU - Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen (2019). Unsere gemeinsame digitale Zukunft. Berlin: WGBU. Retrieved from <https://www.wbgu.de/de/publikationen/publikation/unsere-gemeinsame-digitale-zukunft#sektion-1>
- Wissenschaftsplattform Nachhaltigkeit 2030 (2020). Nachhaltig aus der Corona Krise: Impulse aus der Arbeit der Wissenschaftsplattform Nachhaltigkeit 2030 zur Stärkung deutscher Nachhaltigkeitspolitik. Retrieved from <https://www.wpn2030.de/wp-content/uploads/2020/08/Nachhaltig-aus-der-Coronakrise-1.pdf>
- Wpn2030 - Wissenschaftsplattform Nachhaltigkeit 2030 (2019). Bitte Wenden! Wissen(schaft) für eine nachhaltige Entwicklung Deutschlands. Eine kritische Reflexion der Wissenschaftsplattform Nachhaltigkeit 2030 anlässlich der Fortschreibung der Deutschen Nachhaltigkeitsstrategie.
- Woods, W. & Young, D. (2019, May 2). Innovation Is the Only Way to Win the SDG Race. Retrieved from <https://www.bcg.com/publications/2019/innovation-win-sdg-race>
- Zukunftsinstitut (2020). Die Wirtschaft nach Corona: Wochen der Weichenstellung. Retrieved from https://www.zukunftsinstitut.de/fileadmin/user_upload/Whitepaper-Die_Wirtschaft_nach_Corona.pdf

#BoS5: Education to ensure smart skills

Cultural and creative industry: innovations needed in the field of education and skills acquisition

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Abstract

The Cultural and Creative Industries' (CCI) multiplex character evokes new forms of engagement, coordination and value creation as manifest in the emergence of so-called business eco-systems. These eco-systems are made up of a dynamic network of mutually influencing actors that organise around a common cause (such as the delivery of a specific product or service). They constitute an intense interactional environment expanding from the physical to the non-physical (digital) realm, providing valuable opportunities for collaboration, knowledge creation and learning. This paper focuses on the changing conditions of learning within the CCIs and seeks to lay out new ways of developing insight, knowledge and skills. The availability of new technologies has turned yesterday's methods of learning and teaching on their heads. In order to meet the demands of an increasingly interconnected, internet-enabled society, a more inclusive, bottom-up approach to learning seems necessary. Already in 1980, the philosophers Deleuze and Guattari (1987) described the concept of rhizomatic learning and thinking. As a continuously growing underground root system, a rhizome has no clear centre but multiple entry and exit points and adventitious roots. Rhizomatic learning thus refers to a type of intellectual engagement that does not run a predetermined course but is driven by the interests and needs of the students themselves ("the community is the curriculum"), giving rise to an ever-expanding learning environment with no clear beginnings or ends. It is proposed that it is this kind of self-enacting learning network that ought to inspire and inform future approaches to learning and professional skills development within the CCIs. In this paper, a set of five conditions is considered more closely for such learning network to take shape. Amongst those conditions we find net-enabled education and training, knowledge transfer in an open society, peer to peer (P2P) learning experiences, open design methods and, finally, creativity-based forms of personal skills development.

Keywords

Critical pedagogic, open design, rhizomatic learning, vocational education and training, lifelong learning

Learning and Skills for an Open Society

Lifelong learning (LLL) in general, and more specifically within the specific context of the CCIs, is not a hollow phrase but an acknowledgement of the fact that "the world has moved beyond the stable state" (Argyris and Schön 1996, p. xviii). The dynamics and complexities of a globalised world translate into a learning imperative that now diffuses through people's entire life. Their ability to cope with the challenges of modern society depends more and more on their command of synchronised knowledge and a diverse set of skills. It is also understood that such intellectual resources are to be developed and refined within the course of social interaction and processes of shared inquiry rather than the mental spaces of the individual. Knowledge and skills, also within the context of professional education and training, is further and increasingly impacted by the rapid development of ICTs and its networking effects. These changing envioning conditions are aptly addressed by the concept of rhizomatic thinking and learning (Deleuze and Guattari 1987), which opposes the idea of arborescent and hierarchical - tree-like - knowledge creation and learning.

Skills play an important role at every level of a person's life, whether at a personal or professional level. Despite the notion that education has to adapt constantly, as globalisation and technological progress are bringing changes, there is no doubt that education, broadly defined, has to contribute to improving social outcomes by helping individuals develop skills. Today's vocational education and training programs (VET) adjust their curriculums. However, these efforts often come too little and too late and do not meet today's individual needs and requirements. VET programmes should also prepare for the transition towards sustainable societies and economies - as specified in the fourth Social Development Goal (SDG 4) proposed by the UN General Assembly in 2015 (UN 2020) which refers to quality education and LLL.

Education can help provide a variety of skills that empower individuals to better meet the challenges of daily life. Cognitive skills such as reading, numeracy and scientific literacy allow people to better understand information, to make decisions and to solve problems. Social and emotional skills such as perseverance, emotional stability and sociability also matter in achieving positive outcomes. These skills allow people to better translate intentions into actions; establish positive relationships with family, friends and their community. Social and emotional skills are as important as cognitive skills in shaping intended outcomes (Heckman, Stixrud and Urzua 2006; Kautz et al. 2014).

As many of us experienced during lockdown, imposed to stop the spread of the new coronavirus, online conferencing and remote learning are weak substitutes for real presence teaching. As stated in the European Forum of Technical and Vocational Education and Training (CEDEFOP 2020), online teaching and learning have their problems and advantages. Issues such as access to platforms, the handling of new technologies, staying in command of work-based learning but also financial and technical assessments and, especially, data protection need to be taken into account for successful online teaching.

It should be acknowledged that today's VET system has shifted from fairly specific trainings for particular jobs in the 90s to a very wide concept of LLL, including formal and non-formal education (Markowitsch 2019). LLL and the lifelong acquisition of skills, accompanied by a top-down and hierarchical order, are the strong points of today's VET system. This paper, however, advocates a different approach to skills acquisition and learning, one that is based on reflexivity and interaction and best described by the concept of rhizomatic learning.

Net-enabled Education

By acknowledging the different conditions evoked by the latest developments of ICT and social media, modern critical education incorporates a variety of pedagogical practices. One of these practices is informed by the work of Gilles Deleuze and Félix Guattari: rhizomatic learning (Deleuze and Guattari 1987), which has been identified as a methodology of net-enabled education (Kirgard and Soerensen 2014). On the one hand, the rhizomatic learning approach follows the post-structuralist educational school and can be seen as standing in stark contrast to traditional, goal-oriented and hierarchical learning theories. The concept of "Community is the curriculum" (Cormier 2008) is subverting the idea of traditional institutional processes. Traditional systems are based on a hierarchical design in which goals, curricula and structures are pre-determined and beyond student participation (Major et al. 2015). This modern pedagogic school methodology celebrates the next evolution of the human sapiens as the Homo Conexus (Kirgard and Soerensen 2014). As a non-hierarchical approach, rhizomatic theory enables a multitude of entry and exit points in the representation and interpretation of any body of knowledge.

In other words, today's LLL approaches for SMEs and micro entrepreneurs lack this flexibility and non-hierarchical approaches required by a networked society and a mediated reality. Because today's VET systems are hierarchically organised and follow traditional canons of education they cannot reflect today's demands of society and individuals. Against this background, new methods and institutions must be established that are based on networked education and in which communities themselves define their needs.

Knowledge transfer as a guiding principle for an open society and lifelong learning

As stated by The Independent Expert Group Report on Open Innovation and Knowledge Transfer, published by the DG Research of the European Commission in 2014, "Knowledge transfer can be seen as major tool for open innovation" (Debackere et al. 2014), and it also pledges for new generation of Open Innovation (OI). This OI 2.0 "moves from bilateral transactions and collaborations towards networked, multi-collaborative innovation ecosystems" (Debackere et al. 2014, p. 7). For the authors, this means that innovations are not the product of a singular mind but intense social interaction. The authors describe Knowledge Transfer (KT) as a concept defining the flow of knowledge between research organisations and enterprises with the "objective of creating socio-economic impact through promoting better use of the (public) research base" (Debackere et al. 2014, p. 25). This focus on solely research and business exchange seems to be too limited and a broader approach to KT ought to be applied. Open public research databases and open ledgers of knowledge should not be limited but open to a broader public.

KT is not limited to accessing and overcoming thresholds to knowledge pools but also includes the transfer of individual skills and learning experiences into the community. LLL covers all aspects of learning, the formal, informal and non-formal learning experiences. It includes skills, knowledge and behaviours people acquire as part of their everyday experience (Dunn 2003). This paper calls for an open and inclusive approach of KT to create real open innovations for open societies.

Large companies or conglomerates have come to understand these demands for internal KT and started internal open innovation processes to prepare their staff for companywide cross-innovations. In contrast to internal OI processes, SMEs and especially CCIs are lacking resources to create large KT projects and facilitate the sharing of experience. On the internet there exist isolated approaches or singular solutions but not so many bottom-up approaches to skills sharing and acquisition. As we can see especially with the CCIs, due to their fragmentation, there is a lack of skills and institutions that offer bespoke vocational education and training techniques.

Design as an integrative discipline of understanding

It is widely accepted that confronting many of today's challenges requires intense cooperation and the collective advancement of knowledge (the current pandemic being a case in point). Departing from the Cartesian model of the independently thinking self ("I think therefore I am") we have gradually come to see the creation of knowledge as a joint, interpersonal exercise (see e.g. Peirce, 1955, see also Dewey, 2008). Claims to knowledge are no longer the product of individual consciousness but established within social structures that form around particular subjects of inquiry or problem situations. Cooperation between individual inquirers, however, is not a straightforward matter but requires the acceptance of some shared method of exploration (warranting the results), some rules of engagement / guidelines as well as an appreciation of the "problem of common representation" (Star and Griesemer, 1989, p. 388), which is to say that things have different meanings for different people. Reconciling those meanings therefore constitutes a critical task within the process of collaborative inquiry.

It is argued here that such reconciliation and cooperation around the production of knowledge and learning is supported, distinctly, by the practice of design. In its pursuit of finding new ideas and giving form to our lived experiences, design works as an "integrative discipline of understanding, communication and action" (Buchanan, 1992, p. 6), fusing otherwise fragmented (and often narrowly defined) bodies of knowledge and sets of experience / information. This is affected through a process of collaborative work and a diverse set of rules, methods, tools and practices which allow for different actors (colleagues, business partners, service providers, clients, users, etc.) coming from different social worlds (business, academia, culture, etc.) to connect, relate to each other, establish a shared *modus operandi* (read: research mode) and pursue what might be called an explorative attitude of mind. Design, in so far, fulfills a brokering function that helps to align different ways and positions of knowing and achieve a more complex understanding of the human experience and the issues at hand. In manipulating the environments we interact with (by addressing the aforementioned issues) and continuously creating new realities, design provokes new ways of seeing, thinking and acting (Berthold et al. 2018, p. 278). To the extent that it offers opportunities for sharing experiences, knowledge and ideas along the often-convoluted path from problem finding to problem solving, recalibrating the human/environment relationship, it further provides for rich transactional learning experiences.

Future education and skills development programmes ought to create spaces (both physical and virtual) for those encounters and exploratory, co-creational practices to occur, placing emphasis on the advancement rather than transmission of existing knowledge. Learning as well as the development of skills (be they sacred or mundane) then come about as actors take part in action. Moving beyond the sphere of design, its methodologies may serve as useful template for enacting such transactional learning environments.

Open Design Methodology for CCI Innovations

The concept of Open Design has many different origins. One origin dates back to 2009, when the designer Ronen Kadushin (Wired 2009) used it as a collaborative tool for designers and makers. The term has evolved over time. The start with Open Design as a new business model for designers (van Abel et al. 2011) was followed by the "ABC of Openness" (2015) where the concepts of openness and open source were brought together. This idea shed light on the aspects of open societies and open collaborations between creatives and the public. OIs and open KT are the next iteration of openness and Open Design, where a larger picture of cross-industrial and collaboration between companies are highlighted (Debackere et al. 2014). Even today, the Open Design Methodology is still in development and changes with new fashions and trends. The present iteration was developed by the Open Design School as part of the UNESCO Capital of Culture 2019 programme in Matera, Italy. The Open Design School aims to be a "formalised institution based on the principles of open culture" as described by the Open Design School (Grima 2019:6). The goals of the projects are the following:

- local economic regeneration through an emphasis on learning and innovation
- to use knowledge and experience with traditional crafts in combination with new processes and methodologies made possible by new technologies
- the strengthening of international networks and cultural and professional exchanges
- to plant into the city's culture - at any age - an awareness of design's potential and importance for improving the quality of community life.

The Open Design School sees itself as an enabling device for towns, cities and communities to respond to their needs and build social networks and aims to create a new platform based on informal exchange and collaboration. The idea behind the Open Design School methodology is to bring people with rich experience and diverse backgrounds, from other organisations or industries, together to share experiences, skills and competences.

This approach allows for learning opportunities in design and innovation, critical thinking and entrepreneurship and finding creative and cost-effective ways to connect within and across regional territories. Cooperation and education provide opportunities to access skills, competences and research infrastructures. Players are all involved in feedback-

loops allowing creative innovators to be more responsive and attractive. They can iterate, learn, and share insights with others, feeding innovation. Furthermore, all parties involved are allowed to assess social needs at local level and iteratively evaluate and improve their solutions by a trial-and-error approach that encourages the sharing of lessons learned and best practices.

Because Open Design evolved from a specific collaborative approach used exclusively by designers, Open Design today describes a variety of open approaches to collaboration and sharing expertise. However, we see the need for a new iteration of Open Design as a guiding method not only for industry but also for politics and society. This new approach should make easier the transfer of information but also support a natural exchange of competencies and skills for everyone.

Competences and Individual Skills

As it is pointed out in the European Qualifications Framework (EQF), there is a narrow difference in the conceptualisation of “competences” and “skills”, although both of them may be used in the same context due to the heterogeneity of the CCIs’ market. According to ESCOpedia, “competences”, can be referred to as responsibility and autonomy, and “means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development” (ESCOpedia, n.d.). Skills, on the other hand, denote “the ability to apply knowledge and use know-how to complete tasks and solve problems and can be described as cognitive (...) or practical (...)” (ESCOpedia, n.d.).

Regarding competences in the cultural and creative sectors, the main output of diverse studies carried out is that there is a gap between the level of specific competences that companies need and the degree to which the competences are taught in formal colleges and universities, as presented in the portfolio for professionals in the creative industries (Mietzner and Kamprath, 2013: 280). As for skills, there is relatively wide consensus in the literature that skills needed by cultural and creative professionals are diverse and include a mix of both technical and professional skills, combined with equally important soft and transferable ones. As indicated in the recent study commissioned by the European Parliament: “CCS’ professionals increasingly require a blend of creative, digital, managerial and entrepreneurial competences, coupled with soft skills to stimulate innovation” (KEA & PPMI, 2019: 7).

Among those skills most often cited in the literature as “key” for the CCS, the following ones stand out: e-competences, sector-based knowledge and multi and cross-media understanding; business administration; legislation/law/IP and copyrights; entrepreneurial thinking; innovation management; sector-crossing competence, and relation/network management (Mietzner & Kamprath, 2013; see also Boldrini et al. 2015). Equally or more important than technical and sector-specific skills are so called soft and transferable skills. Among the latter, a report published in 2018 on creativity and the future of skills pointed out that “creativity is consistently identified as the most critical success factors for a company between now and 2030. Other transferable skills include communication skills, team building, and successfully meeting deadlines” (Easton & Djumalieva, 2018).

Due to the rapid transformation of work environments and the adjustments required from individuals to cope with this transformation, one cannot rely solely on the services of large VET providers. Because of the rapidly evolving needs, creatives are themselves the best experts in developing and teaching new skills. Finally, it can be stated that due to the constant need to adapt to changing realities, new curricula can best be designed by the creative community itself.

Conclusions

This paper sought to address the changing conditions of an increasingly interconnected, new media enabled learning environment, specifically with regards to the CCIs. Accentuated in the subsequent discussion prompted by this paper was the role of business eco-systems in fostering creative skills acquisition and learning. These systems of interaction, knowledge exchange and experiential learning manifest in both the physical and non-physical / digital realm. They take the form of creative digital platforms as well as physical spaces, allowing an eclectic group of creative professionals (expanding from the CCS to academia to industry) to engage with each other and form communities of inquiry around shared matters of investigation, learning and value creation. In bridging critical areas of expertise and combining otherwise disparate resources, they provide an important piece of infrastructure to support practices of research, development and innovation. They also constitute a unique environment for a more collectivistic, less formalized, organic approach to learning, where this takes place in action and through participation in such communities of inquiry and practice. It is argued here that new approaches to learning and skills development, and more especially vocational education and training, ought to support and build on such relational, community-driven forms of research and knowledge creation for the reason that they help to cross rigid boundaries (be they intellectual, functional, structural, geographic or otherwise). The DeuS Workshop arrived at two main conclusions. Firstly, that future efforts for advancing vocational education programs or schemes should follow the guiding principle of “Community is the Curriculum”, subverting the idea of a centralized, institutional approach to learning. The latter tends to follow a more hierarchical design in which goals, curricula and structures are typically set and beyond students’ scope of intervention. Modern

pedagogies, on the other hand, are increasingly led by a student-centred, community-based approach to learning and skills development, allowing for more vibrant forms of interaction, knowledge exchange and production. Secondly, in a reflexive system in which students have greater agency in defining the curriculum and context for learning, educators, in turn, are called upon to engage more actively in conversations with their students about their intellectual as well as professional aspirations, interests and needs. Such open systems arguably bear greater resemblance with the exploratory approaches practiced within the creative economy rather than the manifestations of the more rigid, one-directional educational traditions, where the experiences of the individual are subordinated to the curriculum.

Recommendations and closing remarks

The demands of today's work and organizational environment render creative professionals and many others being heavily dependent on open vocational training platforms that adapt quickly to changing enviroing conditions and evolving needs. In order not to fall behind in global competition, European creative companies have to keep expanding and exploiting its intellectual resources, which requires broad access to knowledge and innovation ecosystems. Recognised is the need for a learning environment and culture that supports the open exchange of knowledge, experiences and ideas in pursuit of a more synchronised body of (operational) knowledge. That is, a body of knowledge that transcends existing divides (be they cultural, educational, functional, geographical or otherwise). The goal, ultimately, ought to be to subordinate the curriculum to (the needs of) the workforce rather than the workforce to the curriculum.

- Therefore, # ECIS2020 calls for a uniform development of educational standards and open curricula with the involvement of creative communities.
- In addition, the participants of # ECIS2020 call for greater commitment from the EU institutions to the provision of resources for building capacities in the area of practice-driven vocational education and training across Europe and setting up infrastructures (platforms) that allow for more intense collaboration and learning / skills acquisition within the context of everyday work practice.

Whilst creative ecosystems are characterized by strong peer-to-peer learning efforts, these are barely reflected in the more orthodox vocational education and training systems. When it comes to reforming such systems, emphasis should be placed not only on the advancement of new but increasingly the sensible integration of existing knowledge. Equally important is a more nuanced understanding of what it is that we need to know and how we can provide for such learning to happen. It was found that our educational systems are geared too much towards addressing complicated issues with clear cause and effect relationships to the neglect of complex issues where such clarity is missing. What is needed are spaces for experimentation or rather trial and error learning, allowing for people to inquire into the unknown, collaboratively, and follow what one may call an exploratory attitude of mind.

It is for the same reasons that the participants of ECIS' fifth breakout session greatly appreciate the New European Bauhaus initiative introduced by the President of the EU Commission, Ursula von der Leyen, to support the realisation of the European Green Deal and bring about the kind of systemic change that is needed to ensure future economic and socio-ecological prosperity. It is precisely this new form heightened engagement across such fields as science, technology, arts and culture that is advocated in this paper and which ought to define future quests for knowledge and understanding.

Bibliography

- Argyris, C. and Schön, D.A. 1996. *Organizational Learning II: Theory, Method, and Practice*. Reading, MA: Addison-Wesley.
- Berthold, H., Chillias, S. and Townley, B. 2016. In *Design We Trust: Dealing with the Innovation Imperative*. In: DeFillippi, R., Rieple, A. and Wikström, P. (eds), *International Perspectives on Business Innovation and Disruption in Design*. Cheltenham: Edward Elgar, p. 276-297.
- Buchanan, R., 1992. "Wicked Problems in Design Thinking". *Design Issues*, 17(4), 3-23.
- CEDEFOP, 2020. Cedefop [WWW Document]. Cedefop. URL <https://www.cedefop.europa.eu/de> (accessed 8.31.20).
- Debackere, K., Andersen, B., Dvorak, I., Enkel, E., Krüger, P., Malmqvist, H., Plečkaitis, A., Secall, S., Stevens, W., Vermeulen, E., Wellen, D., 2014. *Boosting Open Innovation and Knowledge Transfer in the European Union: Independent Expert Group Report on Open Innovation and Knowledge Transfer*. European Commission. <https://doi.org/10.2777/65606>
- Deleuze, G., Guattari, F., 1987. *A thousand plateaus: capitalism and schizophrenia*. University of Minnesota Press, Minneapolis.
- Dewey, J. 2008. *Logic: The theory of inquiry*. In: *The Later Works: 1925-1953, 12:1938*, ed. by J.A. Boydston: Southern Illinois University Press.
- Dunn, Scottish Executive, 2003. *Life through learning through life: the lifelong learning strategy for Scotland: summary*. Scottish Executive, Edinburgh.
- Easton, E., Djumaliev, J., 2018. *Creativity and the future of skills* [WWW Document]. nesta. URL <https://www.nesta.org.uk/report/creativity-and-future-skills/> (accessed 8.31.20).

- ESCOpedia, 2020. ESCO - ESCOpedia - Europäische Kommission [WWW Document]. URL https://ec.europa.eu/esco/portal/escopedia/Main_Page (accessed 8.31.20).
- Grima, J., 2019. Open Design School Methodology [WWW Document]. URL <https://www.matera-basilicata2019.it/en/press/press-releases/institutional-press-releases/2614-matera-2019-the-open-design-school-methodology-at-the-center-of-the-european-project-deus-for-the-development-of-cultural-and-creative-enterprises.html> (accessed 8.31.20).
- Heckman, J.J., Stixrud, J., Urzua, S., 2006. The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior. *Journal of Labor Economics* 24, 411–482. <https://doi.org/10.1086/504455>
- KEA, PPMI, 2019. Research for CULT Committee - Culture and creative sectors in the European Union – Key future developments, challenges and opportunities - Think Tank [WWW Document]. URL [https://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_STU\(2019\)629203](https://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_STU(2019)629203) (accessed 8.31.20).
- Kjærgaard, T., Sorensen, E.K., 2014. Rhizomatic, digital habitat - A study of connected learning and technology application. Presented at the Proceedings of the International Conference on e-Learning, ICEL.
- Major, C.H., 2015. Teaching online: a guide to theory, research, and practice, Tech.edu: a Hopkins series on education and technology. Johns Hopkins University Press, Baltimore.
- Markowitsch, J., Hefler, G., 2019. Future developments in Vocational Education and Training in Europe [WWW Document]. EU Science Hub - European Commission. URL <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/future-developments-vocational-education-and-training-europe> (accessed 8.2.20).
- Mietzner, D., Kamprath, M., 2013. A Competence Portfolio for Professionals in the Creative Industries. *Creativity and Innovation Management* 22, 280–294. <https://doi.org/10.1111/caim.12026>
- Pierce, C.S., 1955. *The Philosophical Writings of Peirce*. Ed. by J. Buchler. New York: Dover.
- Star, S., Griesemer, J., 1989. "Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39". *Social Studies of Science*. 19 (3): 387–420.
- Teasdale, A., European Parliament, European Parliamentary Research Service, European Value Added Unit, 2019. Europe's two trillion euro dividend: mapping the cost of non-Europe, 2019-24: study.
- UN, 2020. About the Sustainable Development Goals. United Nations Sustainable Development. URL <https://www.un.org/sustainabledevelopment/sustainable-development-goals/> (accessed 8.31.20).
- van Abel, B., 2011. Open Design Now | Why design cannot remain exclusive.
- Wired, 2009. Mod That Table: High-End Furniture Goes Open Source | WIRED [WWW Document]. URL <https://www.wired.com/2009/03/pl-create-2/> (accessed 8.31.20).

Policy Forum and Statements

Speech by Peter Altmaier, Federal Minister for Economic Affairs in Germany

What a year this has been?!

We wanted to use our German EU-Presidency to take with you about Creative Industries in person, we wanted to talk with you about innovation and then Covid-19 changed every thing.

In recent weeks you have used online formats to talk about new prospects on handling the crisis and what new things we can do. Now there are many different perspectives on this - perhaps more than in other economies. The creative sector is a very important sector of the economy with roughly some 1,7 Mio. employees. For some people creative industries is a soft power strategy, for some it is a question of cultural identity, but: creative people are primarily entrepreneurs.

With cultural and commercial you have a dual role - and some times you have to think your role in national or European terms. I want to ask for more acceptance for this double role - we should see it as a strength !

And for this reason it is rather symbolic that today you have the EU Commissioner for Culture and the German Minister for Economic Affairs: we are united by the firm belief that Europe is becoming more important. In hardly any other area of social and economic life is the idea of a united Europe as manifest as in the creative sector. This comes as no surprise - in no other sector social and commercial comes so close together with culture life. We know that you are passionate entrepreneurs - we know that you are also passionate Europeans.

This passion has an impact. Because there is hardly any part of the economy today, which without input from the creative sectors can actually successful in the market. One example is the value and understanding of design. Design is no longer about an external form, it is about strategy of product and market design. That also means that creative people are delivering essential added value.

Now if we look on this through the eyes of the Pandemic we recognise some central findings:

First of all creative entrepreneurs need better access to funding and the policy debate. And we from policy need to emphasize this sector more. While the creative industries has of course always been included in our funding programs, but has not always clearly enough been addressed. So this year the Federal ministry of economics included for the first time non-technological innovations as worthy of funding.

In the Corona-Crisis we learned that the creative industries require completely new instruments and there we have adapted our national support programs, especially for small companies and free lance workers. Some developments are at EU - level, for example the REACT Fund! Thanks to the EU Commissioner for that. Also the plan for a Knowledge and Innovation Community for the Creative Industries I attach great expectations to. This will give the sector greater public awareness and more weight.

Another finding is that creative people need to organize themselves better - perhaps you don 't like to hear that but I am not telling something completely new. Many small associations have less weight than one large association. It is easier to get your sector heard, if your sector speaks with one voice. That is not any easy thing, but it is a useful process.

Because governments and politics have a lot of interest and creative industries are very quick, some times playful, some times a little bit anarchic. If you organize yourself, you need mutual understanding. We are at your side - because: you are needed to foster economic and social life throughout Europe. I regard todays conference as a step on the development of these new perspectives.

(Transcript / Spoken words)

Börsenverein Gruppe

Author: Simone Lippold

To 1. Developing an overall vision of solidarity:

- concrete list of all areas of the CCI affected by the crisis should be added to this point
- Culture must play a stronger role at EU level, a bigger role in cultural policies
- Fund a European media & CCS, concentrating on an European public to foster a better understanding between us all
- Recovery fund: most in CCI do not profit from the recovery fund because most micro self – employed creatives do not have access to the recovery fund. Sustainability and digitisation should be anchored in the recovery fund.

To 3. transnational collaborative learning:

- peer learning also outside the academic field should be funded/fostered – between companies and sectors (funding of events, platforms, virtual spaces for exchange and development of new formats of knowledge exchange)

To 4. Value creating networks of people, institutions and resources

- lobbying for the creative sector is most of the time a pro bono job.
- Most creatives are struggling to survive and can't find the time/money to ad-vocate for their needs and ideas
- Policy and advocacy should be mentioned in this topic when we talk about networks and value creation on all levels

To 5. Developing digital infrastructure

- A decentralized but common and standardized digital infrastructure could make the CCS also more attractive for innovative tech entrepreneurs
- Facilitating interoperability
- Cross-industry standards
- Uptake of innovation in the market
- Adaptation of new technologies

To 6. Devising fine-tuned, tailor-made policies

- Enabling a structured dialogue with all stakeholders

The European Cultural Creative Industries Alliance (ECCIA)

Author: Clemens Pflanz, MEISTERKREIS

Introduction

The European Cultural and Creative Industries Alliance is composed of six European cultural and creative industries organisations - Altagamma (Italy), Circulo Fortuny (Spain), Comité Colbert (France), Gustaf III Kommitté (Sweden), Meisterkreis (Germany) and Walpole (UK) - who between them represent over 600 brands and cultural institutions. Based on art, culture and creativity, ECCIA members underpinned by continuous innovation, a relentless focus on quality, highly skilled employment and strong exports abroad.

ECCIA members reach from Berliner Philharmoniker to Museo Nacional Reina Sofia, from BBC World News to STYLE, from Leica Camera to Steinways & Sons and from Artemide to Hermés.

The presidency of ECCIA is organised on a rotating basis. Starting 2020 the MEISTERKREIS, the German association based in Berlin, is heading ECCIA for the next two years.

Facts & Figures: the economic power of the High-end industries:

In January ECCIA presented a study from Bain & Company that shows that the European high-end sector continues to significantly boost sustainable economic growth and prosperity:

- The sector contributes nearly €800 billion in revenue annually to the European economy and now accounts for 4% of European GDP.
- It has grown at rate of 32% in four years between 2014 and 2018.
- The sector employs over 2 million people in Europe and created 300,000 jobs in Europe between 2014 and 2018.
- Exports in the sector represent 10% of Europe's total exports in 2018.

High-end cultural and creative industries' companies enable the development of upstream production clusters and centres of excellence across Europe and are key players in leading the agenda on sustainability. Moreover, they play a vital role in supporting skills and craftsmanship, and help exporting European cultural values throughout the world.

Framing Creative Futures

1. The Covid-19 Crisis in 2020

The outbreak of the COVID-19 is a multidimensional crisis that affects us all. Despite the economic health of our sector and the consistent growth we have enjoyed over the last years, the COVID-19 pandemic has significantly impacted our ability to produce and to distribute our products both across Europe and our key export markets. The crisis also affected - and continues to do so - an entire ecosystem of economic sectors which benefit from our industry and which our industry supports, such as the tourism and cultural sectors. As COVID-19 virus hit the European continent, ECCIA companies were among the first to turn around their production facilities in order to contribute to the fight against COVID-19 by addressing shortages of equipment of our frontline workers. In addition to helping national governments fight this unprecedented health crisis, cultural and creative industries also demonstrated solidarity towards their entire supply chain, in particular towards the vast network of SMEs with whom they have worked over the past decades.

Our sector's ability to recover as well as the speed at which it will recover from the crisis will depend on the following factors:

- How main market drivers adjust to the post-COVID world and changing consumer behaviours;
- The efficiency of European and national policies, both through direct or indirect financial support to European companies and through the adapting of the European legislative landscape;
- The speed and efficiency with which the ecosystem surrounding our activities will be able to recover from the crisis. This includes the tourism and cultural sectors, as well as the indirect - yet vital - components of our supply chains (such as for example the craftspeople involved in the manufacturing of our products).

With this in mind, ECCIA would like to put forward to European and national decision makers the following policy recommendations, which consist of a series of measures such as:

- Providing emergency financial support for companies, with a particular focus on SMEs to guarantee quick and easy access to adequate financial support mechanisms.
- Safeguarding employment in the cultural and creative sectors
- Ensuring support to the tourism and cultural sectors
- Creating the appropriate European legislative framework

Beyond the immediate and mid-term actions the European Cultural Creative Industries Alliance (ECCIA) calls to focus in the longer term on innovating the frameworks and regulations of education & skills, innovation and digital services.

2. Innovating the frameworks and regulations of education & skills

Skills and vocational training – preserving European savoir-faire and raising awareness about career opportunities. High-end CCIs' ability to continue to produce in Europe will depend on the availability of a highly skilled and trained workforce. European and national authorities have a key role to play in this process by raising awareness about career opportunities and revalorising manual craft. Furthermore, there is a need to adapt skills to new technologies – “European Paradox”. European Excellence clusters exist in many regions. European lead in scientific research is not translated into jobs and innovation. High-end cultural and creative industries represent a source of hope for the younger generations. They rely on a highly skilled and creative workforce, which constitutes one of the key pillars of their business model. However, there is a need to address the gap between industry needs and the availability of highly skilled workforce at EU level. European policymakers have already identified this problem. There is therefore a need to work hand in hand with EU and national stakeholders to:

- Re-valorise a highly skilled workforce to attract and create talent European Master of Art:
- Based on the model of the French Maître d'Art distinction.
- Raising awareness and promoting craftsmanship and promoting excellence and networking among European Universities.
- Develop Erasmus for Young Entrepreneurs further, create an own strand for Entrepreneur Exchange in Creative Economy and Excellence in Creative Talents.

ECCIA calls for innovating current public frameworks for Making Talents possible that are key drivers for Europe.

3. Innovating the frameworks and regulations of innovation

It is not new that whole structures of economies are in change - in the last 10 years we experienced the digital transformation of markets, among others the platform economy created digital value chains and services across sectors. Today the digital service economy is one of the most successful globally, outperforming automotive, and creating the world's most valuable companies - though these products and innovations are hardly visible, „just“ apps in our mobiles?!

But now with Covid-19 we all - from industry to policy - face a world of uncertainty: we can hardly predict the frameworks our business will work in. We face sudden changes of these frameworks, it is hard to foresee future market developments, more difficult to calculate future turnover - and thus miss the traditional framework and setting for investments in innovations.

Here is the biggest danger of Covid-19 - that the creative industry can not keep up its innovations and creativity. BUT if the future markets are not created and invented NOW, despite Covid-19, jobs and income will not only be less today, but also in the future.

To give you an idea of the dimension: The CCIs in Germany invest around 4,8 Mrd. Euro in innovations, according to the monitoring reports of the Ministry of Economics Affairs and Energy in Germany.

The central questions for framing industries are thus now.

*How can this volume of investments in our future not only be sustained,
but be increased because of Covid-19?
And what is it focusing on?*

Learning from the success of the digital economy and its value creation across sectors we call on the German Government to increase its support for cross-sectorial innovations and to mainstream at large what it has started with the IPG - Innovationsprogramm für Geschäftsmodelle und Pionierlösungen this year successfully.

We call to make this program one of its major pillars in the post-Covid-policy for creative industries and to earmark 500 Mio. Euro in the next funding period til 2027. This would only be 10% of the private investments in innovations the creative sector is running itself.

We call on the German Minister Altmaier to set up an own Funding Agency for Creative Cross-Innovations managing these funds. Yes - we need such kind of governmental innovations too creating new policy structures to deal with these new market structures.

ECCIA is at the heart of cross-sectorial economy and innovations - stand ready to support and implement new policies for cross-innovations of industrial impact.

4. Innovating Digital Service Regulations

The European High-end Industries are major digital players. They are the most likes and shared brands on social networks and the quality of their online services has boosted consumers' confidence in e-commerce. What is needed is a safe digital environment for EU consumers and for businesses which invest massively to create these networks.

What is illegal offline should be illegal online and the Digital Services Act Package is a key instrument to address the challenge of the sale of fake and other illegal products online.

We have to react now

For more information read the ECCIA Position Paper on the Digital Service Act [here](#)¹.

5. Conclusions

High-end cultural and creative companies play a crucial role for the preservation and further development of Europe's creativity and savoir-faire. This is key to ensure both, our competitiveness and the promotion of our values and cultural heritage throughout the world.

Our industries want to play an active role in the implementation of the new agenda for creative industries.

ECCIA will do its best to ensuring full implementation of the Future Horizon Europe programme and would like to suggest a regular and public stakeholder dialogue 2021 to 2027 to support continuously the work plan development.

¹ <https://www.eccia.eu/%23activities>

Goethe-Institut

Author: Johannes Ebert,

Distinguished Participants of the European Creative Industries Summit.

I am honored to speak to you today. My name is Johannes Ebert, Secretary General of the Goethe-Institut. I'm excited to be part of this event.

Framing Creative Futures – the topic of this summit – is very much in line with our own approach and work. We all know, how much the cultural and creative industries contribute to frame our present and future. Be it through products and services or contributions to discourses on sustainable and social entrepreneurship, new technologies, social cohesion and fair international cultural relations.

Talking about our approach to framing creative futures, I particularly want to stress three aspects: We believe that we need to take a holistic view on the CCI ecosystem as a whole and that we have to develop approaches that respond to the local needs. We furthermore believe that innovation needs new angles of how to look at things and that mutual learning triggers innovation. This is why we promote translocal connections and collaborations.

Let me give you some concrete examples: The Goethe-Institut supports the development of strong framework conditions for artists, creatives and their networks.

The European project Creative FLIP, for example, aims to increase the sectors' resilience, by improving access to finance, by offering peer-2-peer as well as cross-sectoral exchanges. In South Africa, Indonesia and Greece, we have established creative entrepreneurship hubs that have become powerhouses of the regional and international creative industry scenes. In five West African countries the Goethe-Institut has set up an incubation and acceleration program, the Ayada Lab, connecting outstanding creative start-ups and entrepreneurs regionally but also with their counterparts in Europe.

We do not only support further professionalization of CCI actors. We also see a huge potential in the CCI to improve the perspectives of young people and proactively combat youth unemployment. We use this potential in our collaboration with South African townships. Here we jointly and successfully develop and design formats for the development of young peoples' career prospects in the creative sector. In Lebanon, we pursue this approach with the program FANTASMEEEM. It fosters creative entrepreneurship and encourages collaborations and knowledge sharing through residencies, capacity building offers, networking and research. In a country that is highly fragmented, this program connects creatives with different backgrounds and thus has its share for social cohesion.

I particularly underline our activities and cooperations outside Europe, because, for the Goethe-Institut, it is very important to acknowledge that Europe and its cultural and creative sectors are part of a globally interlinked world. To support such global connections between the scenes in Europe and outside is of vital importance for thriving and innovative European cultural and creative industries.

Thank you very much for your attention.