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HORIZON FUTURES WATCH

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Foresight
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Dear reader,

Welcome to the fourth issue of Horizon Futures Watch! In this edition, we explore two pivotal yet distinct themes: the future of civic resilience and the future of intellectual property. Civic resilience refers to the ability of communities to adapt and thrive amidst challenges and changes, a crucial aspect in today's rapidly evolving global landscape. On the other hand, the future of IP delves into evolving dynamics crucial for fostering innovation and for protecting the interests of creators in an increasingly digital world. While these themes stand independently, together they underscore the importance of adaptability and creativity in shaping the future.

An overview of the latest selection of news about foresight projects and topics opens the issue.

The Foresight in the Field section features an overview of the most salient initiatives covering the future of IPR.

In the Future of Innovation & IP Regulation section, featured articles include:

Prompting the Future of IP Regulation & Innovation Management – The coordinators of the EIPIN-Innovation Society project share their 'expert-generated' responses to prompts concerning the outlook of intellectual property regulation.

Copyright Harmony to Unite in Diversity – ReCreating Europe re-thinks copyright codes and the management of creativity in the digital era by looking at the interplay between copyright, access to culture, and fair representation of creators and users.

From Sewing Machines to Fashion NFTs: Time Traveling through IPR in Creative Industries – CREATIVE IPR traces the history of intellectual property rights in Europe to investigate how past battles and future challenges in IPR management for creative industries impact creators, businesses and consumers.

Turning towards the Future of Civic Resilience section, you will find:

How to be good in a crisis: future labs that turn research into resilience – Project FUTURESILIENCE highlights how to strengthen European economic and social resilience through an enhanced ability to adapt and respond quickly to future crises.

Reclaiming spatial justice in the quest for a resilient future – In a world where the future often seems uncertain, how do local communities navigate the complexities of European policies to build a more resilient and equitable tomorrow? This is the intriguing question at the heart of Project RELOCAL.

On a quest for a better informed society in the age of misinformation – Project CO-INFORM applied co-creation methods to develop verification tools with and for stakeholders such as journalists, policymakers and citizens, to better prepare for the situation in which the distinction between fact and fiction is not always evident.

In From the Futures4Europe Platform: Selected Content you will find some excerpts and their links to more recently published content on Futures4Europe.

And finally, don't miss out on interesting futures oriented events in the Upcoming Events page!

Sincerely,

The Editorial Team of Foresight on Demand (Hywel Jones, Laura Galante, Emma Coroler, Alexandre Lotito, Giovanna Giuffré, Loredana Marmora, Valentina Malcotti)

NEWS BULLETIN

Title: UN 2.0: Secretary-General Unveils Vision for a Forward-Thinking UN System
Date: 24 October 2023

Looking ahead to the Summit of the Future in 2024, the UN Secretary-General launched eleven policy briefs between March and September 2023, offering "concrete ideas" on how to advance the United Nations Common Agenda. This Policy Brief outlines a vision for a United Nations that embraces a forward-thinking organisational culture. Grounded in expertise across data, digital, innovation, behavioral science, and foresight, the brief is complemented by a dedicated website spotlighting 500 UN 2.0 initiatives in 130 countries.

Title: R&I Foresight in Government: A Handbook for Policymakers
Date: 23rd October 2023

The final report of this Policy Support Facility (PSF) Mutual Learning Exercise (MLE) takes stock of the current landscape of institutionalised Research and Innovation (R&I) foresight and charts a course for its expansion and reinforcement within government structures. Offering insights from exemplary R&I foresight practices at EU and country levels, the report proposes a path forward, suggesting a handbook with tailored tools for applying foresight in contemporary policy realms. The report advocates for coordinated efforts between EU Member States, emphasising investments in futures literacy and related foresight studies as key enablers for bolstering R&I foresight within government frameworks.

Title: Technology Foresight for Public Funding of Innovation: Methods and Best Practices
Date: 29 September 2023

A new report sheds light on six anticipatory and technology foresight methods, including the Delphi survey and technology road mapping, offering a strategic edge in public funding for innovation. The key takeaway: a blend of these methods enhances proactive approaches, aiding bodies like the European Innovation Council in supporting groundbreaking technologies.

Title: **Scanning deep tech horizons: participatory collection and assessment of signals and trends**
Date: 29 September 2023

In a collaborative effort, the Joint Research Centre (JRC) and the European Innovation Council (EIC) conducted Horizon Scanning exercises across diverse sectors, including Space Systems, Quantum Technologies, Agriculture, Solar Fuels, Responsible Electronics, and Architecture. Revealing 'signals' from emerging research and technologies, the findings emphasise investment opportunities for breakthrough innovations, aligning with EU competitiveness and long-term policy goals. The exercise also identified key drivers, enablers, and barriers, paving the way for future foresight initiatives and policy actions. You can find the report here.

Title: **Supporting decision making with strategic foresight – An emerging framework for proactive and prospective governments**
Date: 11 September 2023

The paper explores case studies, international benchmarks, and best practices, providing methodological recommendations to encourage the adoption of strategic foresight in government. Organised into four key sections, the document focuses on critical actions for improving decision-making through strategic foresight: framing, building fundamental components, fine-tuning interventions to specific contexts, and undertaking concrete activities to address policy challenges. You can find the report here.

FORESIGHT IN THE FIELD

Initiatives covering the Future of IPR

By Emma Coroler

In the lead-up to the 2019 meetings of the World Intellectual Property Organization (WIPO) Assemblies, WIPO Director General Francis Gurry reflected in an article on the implications of big data for intellectual property rights (IPR) policy. His views highlight the convergence of big data and IPR, pointing to the need to reflect on the adaptations required in IPR within a landscape shaped by extensive data sources, questioning the effectiveness of the traditional IP system in addressing the numerous issues arising from prevalent data-driven technologies in the digital economy. Many discussions revolve around the limitations of data usage within AI-based algorithms, such as whether training AI for deep-learning purposes violates copyright law. Today, in a world of rapid technological advancements, these considerations become even more significant, calling for initiatives that effectively address the future of IPR. The following provides a comprehensive look at past, current, and upcoming efforts addressing the future of Intellectual Property Rights (IPR).

In 2007, the European Patent Office (EPO) developed "Scenarios for the Future," investigating the following two inquiries: How could IP regimes transform by 2025? To what extent might these regimes gain global credibility? The aim was to ensure that the system continues to effectively support innovation, competitiveness, and economic growth for the benefit of European citizens. These future scenarios for intellectual property envisioned diverse landscapes:

- **Market Rules**, where business dominance prevails, empowering multinational corporations to wield substantial influence, shape patent landscapes, and navigate an increasingly litigious environment
- **Whose Game?** a realm influenced by geopolitics, witnessing shifts in power dynamics among established and emerging players, while many developing nations operate within a communal knowledge paradigm, intensifying global competition.
- **Trees of Knowledge** reflects a world shaped by societal influences where diminishing trust and mounting criticism gradually erode the IP system, prompting collaborative challenges to established norms by civil society movements and concerned stakeholders.
- **Blue Skies** envisions a future where technology takes precedence, leading to a split in the patent system due to systemic risks, with technocrats and policymakers emphasising the role of complex, innovative technologies in addressing global crises like climate change and the importance of technology diffusion.

More recent initiatives, such as the Swiss Federal Institute of IP's exploration of future scenarios, sheds light on current developments pertinent to intellectual property. Emerging trends and technologies continually pose challenges regarding IP. Today, areas like the internet of things (IoT) and blockchain command the attention of IP experts. Other areas such as Robotics and artificial intelligence (AI), Big Data, Internet of Things, Augmented Reality, Virtual Reality, and Blockchain are also subjects highly relevant to IP discussions. These areas are integral to various reports, notably stemming from events like the Artificial Intelligence & Intellectual Property Workshop (AI&IP Workshop) and the report emerging from the AI&IP conference held in Zurich from June 9th to 11th, 2022. This report showcases insights into how the intellectual property (PI) system could evolve and respond to the challenges presented by AI and delves into various aspects such as the role of IP in the context of AI for businesses, Patent law, and Copyright law.

More recently, the WIPO is currently developing an area dedicated to the Future of Intellectual Property within the Global Challenges and Partnerships Sector. The tasks will include conducting forward-looking and anticipatory studies, brainstorming and ideating, as well as orchestrating in-house interdisciplinary dialogues on cutting-edge matters concerning the future development of Intellectual Property. Its aim will be to offer guidance, leadership, and policy alternatives on emerging global challenges, significant societal concerns, and cutting-edge IP developments. Further details about this department's launch are anticipated in 2024.

FUTURE OF INNOVATION & IP REGULATION

Prompting the Future of IP Regulation & Innovation Management
by Giovanna Giuffrè & Valentina Malcotti

Anselm Kamperman Sanders and Anke Moerland, Professors of Intellectual Property Law at Maastricht University, share their 'expert-generated' responses to prompts concerning the outlook of intellectual property regulation. The two coordinators of the Horizon 2020 European IP Institutes Network Innovation Society project ([EIPIN-Innovation Society](#)), completed in 2021, point to global trends and highlight how emerging challenges for IP regulation and innovation management are already on the table.

The educated guess on AI-generated innovation
The EU's wish to lead AI regulation is explicit. "The AI Act under discussion aims to broadly regulate text and data mining initiatives, addressing societal concerns such as security, trust, and privacy", Kamperman Sanders observes. Legitimising the complex regulatory landscape could foster a favorable business environment for AI innovation development.

Conversely, an overregulation scenario could lead Europe to miss out on AI benefits by not allowing sufficient exceptions for its ongoing development. For Moerland, the questions might be: "How far will we allow the use of training data for AI-machine learning which may provide solutions to technical problems?" This opens a procedural dilemma: is IP the right tool to handle and manage AI-generated inventions?

The persistence of legal uncertainty in the field of AI may threaten future knowledge disclosure tied to innovations. Moerland notes how, IP-wise, AI

This image was generated with the help of GPT-4.

developers are potentially resorting to the use of trade secrets to regulate their technologies. The proprietary operational mode of many AI applications and their lack of transparency contribute to the 'black box' effect.

Undoubtedly, the employment of AI and the challenge to classify its outcomes are shaking the essence of intellectual property, questioning the notions of human creativity and artistic expression that have defined it until now. The ethical value attributed to human involvement in this field will be significant in developing a system able to incentivise and reward producers of AI-generated outputs (and create a market for these contents/products) without losing sight of human developments.

The potential of AI to be an enabler for further human inventiveness and creativity is a valid argument, but Kamperman Sanders wonders: "Can a human being still compete with machines that only need electricity and a prompt to produce images in the style of famous painters?".

The multiple threats of power concentration
Kamperman Sanders feels the UN's WESS[1] report from 2018 is still an interesting read in terms of the risks it flagged on possible future inequalities and power concentrations in the digital domain.
In this respect, the building of portfolios of IP concentration by platform economy giants must be closely monitored. Major platform-owning companies are registering patents for AI-related services and products (i.e., from drone delivery to automated driving systems; from AI home assistants to the digitalisation of agriculture). "Allowing platforms to accumulate such an enormous amount of market power is one of the shortcomings of IP policy (and Competition Law) in the past 10/20 years".

Their collection of IP assets, paired with access to a wide range of data retrieved through platforms' daily operations, positions big tech companies at the top of the digital chain. A concentration of power that translates into a geopolitical dominance of USA-based industries harvesting and processing information: "With most server farms crunching data located on the US and Chinese soils, powered by local energy supplies, it becomes 'physically' challenging for the European hub to play a leading role in this new digital economy".

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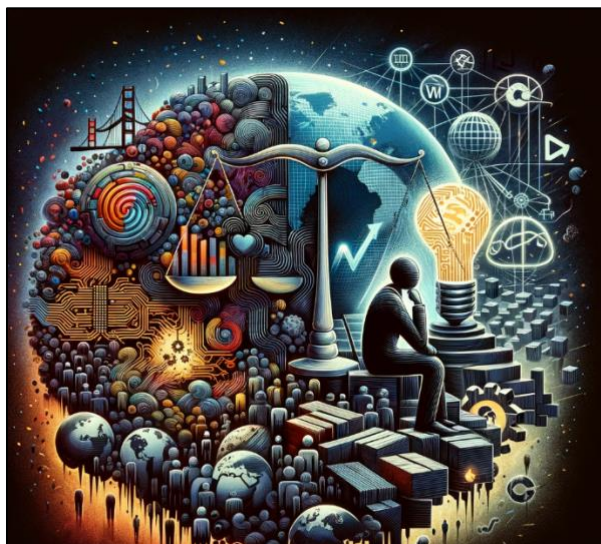
1 [World Economic and Social Survey 2018: Frontier Technologies For Sustainable Development](#), United Nations, 2018.

Not addressing power imbalances, including through IP regulation, and relying on post-facto fixes with Competition Law might lead to a bifurcated, less globalized world. Recent focus in IP has been on unilateral measures and export restrictions, especially in high-tech and sensitive production areas like semiconductor chips. This approach may hinder the import and export of technology essential for tackling climate change and hamper broad access to the benefits of the fourth industrial revolution, as highlighted by Kamperman Sanders. Consequently, the WTO's goal of technology transfer to developing nations and lower global trade tariffs remains largely unachieved.

The demise of the WTO and the future of dispute settlements
The waning power of the WTO as a rule-based forum for trade is a concern for both Kamperman Sanders and Moerland. The presence of an entitled body supervising dispute settlements is critical for the future. "The whole dispute resolution system overseen by the WTO is frozen due to the fact that the USA blocks the appointment of judges", Kamperman Sanders considers. "The sidelining of the WTO has led to ad-hoc, shady solutions for dispute settlement resolutions which are often not in the interest of IP and innovation regulation, both from a state and a public society perspective", Moerland underlines.

The 'right' to circularity
There is no looking at the future without an eye for sustainability and the circular economy. "There is a very broad spectrum of tools on IP law that could be used for the benefit of circular economy goals and this is a priority area for the European Commission to work on", comments Moerland. "Pillars of the circular economy such as the right to repair and the eco-design approach are blind spots in IP regulation" - Kamperman Sanders declares – "We only see sector-specific regulation in relation to eco-design and the circular economy". Promoting the patenting of ecological manufacturing processes through policy awareness and support mechanisms for the diffusion of this technology is where IP law can make a concrete contribution to the circular economy.

Europe has the potential to take a leading role in setting eco-design standards for product development, similar to its past role in ICT (e.g., GSM technologies), also by creating standard essential technologies that can be licensed to companies to promote circular product design and energy-efficient production, including repairability options for users and consumers.

IP in service of society
Attention to consumers, end users and society leads back to the ultimate purpose of intellectual property.
Historically, IP rights have evolved largely through rights holders' lobbying for exclusive entitlements to protect their works or inventions. Kamperman Sanders cautions on the use of this 'privilege': "achievements in innovation must always serve the interest of society and societal interests must always prevail over those of the individual right holder".

Concretely, IP law works towards the public interest by recognising limitations and exceptions to individual rights over inventions and technologies able to safeguard and improve social well-being. This includes ensuring that stakeholders, like governments, who contribute capital to developing technical solutions, can fully benefit from them, particularly when the technology's widespread use is crucial for human survival, such as climate mitigation tools and drug development.

Copyright Harmony to Unite in Diversity

By Giovanna Giuffrè & Valentina Malcotti

ReCreating Europe re-thinks copyright codes and the management of creativity in the digital era by looking at the interplay between copyright, access to culture, and fair representation of creators and users.

In the realm of intellectual property (IP), where patents protect inventions, trademarks guard brand identities, and copyrights secure original works, copyrights are especially challenged by digital advancements and generative AI applications.

According to Caterina Sganga, Comparative Private Law professor at Scuola Superiore Sant'Anna (Pisa) and coordinator of the reCreating Europe project, finding a happy fit between AI regulation and intellectual property rights is one of the greatest challenges ahead in innovation management. Sganga observes how AI is quite tricky to regulate because it requires a deep re-elaboration of the notion of creativity based on human expression. To foster innovation, a review of the current copyright regulation must not only consider AI-generated content but also strike a balance between recognising authorship in human-originated creativity and incentivising AI producers in advancing machine-based generative potentials. The latter also entails an assessment of the impact of text and data mining copyright exceptions on Europe's AI industry competitiveness.

This image was generated with the help of GPT-4.

The reCreating Europe project sought to rethink copyright law through the removal of regulatory uncertainty, paving the way to a culturally diverse, accessible, and creative Europe. The project's three-year research has shown how AI is not the only undetermined area in copyright legislation. European countries face legal uncertainty regarding the use of derived creativity (online and offline), cross-border content use, and cultural heritage preservation. This is the legacy of a 'territorial' approach to copyright that linked its regulation to national branding and domestic protectionism. In a digitally connected world, copyright laws should be modernised from a Pan-European perspective.

"Overcoming the current patchwork of norms and developing a fully harmonised copyright law across the EU, is paramount for Europe to be united in diversity", Sganga considers. Although some aspects have already been harmonised through the introduction of mandatory rules to be implemented by all member states, Sganga believes copyright must be further raised to the European level: "This might expose copyright to higher lobbying pressures but will ultimately enjoy the benefits of cross-institutional balancing mechanisms and attention to freedom of expression". The EC's direct input, through the issuing of guidelines about the interpretation and handling of IP, would also be an asset to reach regulatory harmony.

Harmonisation must not translate into one-size-fits-all approaches. A blanket solution for IP regulation can be detrimental to the creative industry. Sganga recommends a two-level intervention, developing both a general IP code and sector-specific regulations, taking into account the diverse needs in copyright protection for sectors like literature and music. As positively exemplified by the co-regulatory approach shaping the AI Act, Sganga advocates for interdepartmental co-regulation and the involvement of all copyright stakeholders in the development of a unitary title for copyright, currently the only major IP right lacking uniformity across the EU.

Among reCreating Europe's final outputs is a set of 'digestible' policy recommendations tailored to the multiple stakeholders concerned with copyright regulation, such as users/consumers, authors/performers, creative industries, GLAMs, and intermediaries.

Sganga suggests aligning copyright regulation with EU cultural policies and Open Science policies to account for their interplays in a holistic fashion. Compatibility with cultural policies implies adapting copyright law and

its balancing tools to enable everyone to participate in their community's cultural life. This includes fostering cultural diversity by supporting niche cultural and creative expressions. From an Open Science perspective, copyright alignment would entail balancing exclusivity and access to scientific publications via, for example, the introduction of secondary publishing rights for authors and broader research exceptions.

Flexibility in copyright law is crucial for innovation, particularly in secondary creativity products not covered by existing exceptions which do not compete with original works and are often used freely in the US. Sganga highlights the importance of managing transformative uses of creative content to support democratic access to culture and participation in cultural life within an everyday digital environment.

Furthermore, broadening our understanding of diversity and inclusivity, especially for people with disabilities, is necessary to offer equal cultural access. Sganga notes recent improvements in copyright exceptions for disabilities but points out gaps, especially for cognitive and learning impairments.

Market power in the creative industry, and the dominance of platform-based distribution models, threaten content diversity. Increased centalisation on the distribution side, following profit markets and converging towards mainstream repertoires and forms of expression may disadvantage smaller creators through recommendation algorithms, limiting the variety of cultural and creative products. This reduction can negatively impact public debate, education and societal evolution through critical thinking. "Public discourse is based on cultural and creative products and how we critically engage with them", warns Sganga. "A reduced selection of cultural products disempowers societies to evolve through critical thinking".

To counter intellectual poverty, collective copyright management must fairly represent creators, ensuring fair compensation and rights negotiation. Part of this empowerment includes the provision of tools allowing individual artists and small producers to be the main beneficiaries of the value of their creations.

Additionally, Sganga emphasises the environmental impact of production innovation and consumption patterns, advocating for a flexible approach to copyright law that discourages multiplication by promoting transformative use, reuse, and re-creation of original works for environmental sustainability.

True to its name, ReCreating Europe advocates a multi-stakeholder re-negotiation of legislative frameworks to bring Europe under a unitary copyright title sufficiently flexible to safeguard content diversity and recognise sectorial specificity, yet rigid enough to make creative innovation accountable for sustainability.

# From Sewing Machines to Fashion NFTs: Time Traveling through IPR in Creative Industries

By Giovanna Giuffrè & Valentina Malcotti

CREATIVE IPR traces the history of intellectual property rights in Europe to investigate how past battles and future challenges in IPR management for creative industries impact creators, businesses and consumers.

The special chemistry between hindsight and foresight can spark insightful observation, reflective interpretation, and informed vision-making across different temporal dimensions.

The EU-funded Horizon project CREATIVE IPR time travels through intellectual property rights in creative industries to understand the backdrop in which IPR emerged and the regulatory challenges faced by those who are "at the edge of art and commerce[2]". Led by Véronique Pouillard, Professor of Modern International History at the University of Oslo, CREATIVE IPR's historical perspective runs through multiple strands of research in intellectual property rights. Legal, business, economic and technological history will inform the project's analysis of empirical data coming from unpublished archives' materials and printed sources.

This ERC Grant will carry on until February 2025, exploring comparative and connected histories of European intellectual property rights in the fields of fashion, music, performing arts and luxury design. Each domain is investigated through the cross-cutting themes of authorship, branding, transnational institutional frameworks, and collective organisations involved in IPR management.
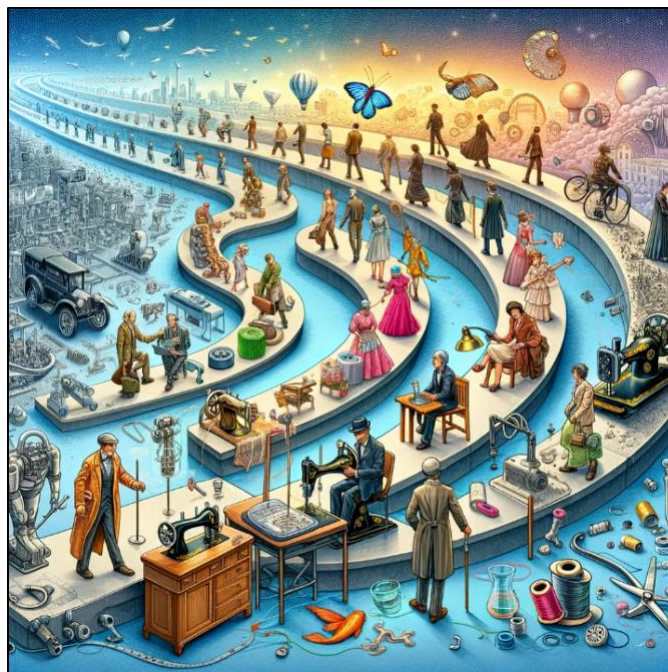
This image was generated with the help of GPT-4.

The collective dimension is particularly significant in shaping the evolution of IP rights from the 19th century onwards. The history of IPR in creative industries is one of negotiations and resilience in contested spaces of authorship. Behind lobbying, at different moments in time, are often professional associations and collective management societies in which authors/creators cooperate to protect their creations.

Drawing from her expertise in the history of fashion and luxury design, Pouillard explains how the very first battle for a patent was spurred by a timeless innovation such as the sewing machine. In 1856, key inventors of sewing machine technology chose to overcome patent disputes among themselves by agreeing to cross-license their patents, creating the first patent pool and making a significant step in cooperative patent licensing.

Even today, the cooperative potential of IPR can be a powerful tool to counter the 'arms race' to intellectual property. According to Pouillard, the desirable way forward for IPR is to "keep copyright and patent negotiations outside courts, promoting bi-lateral conversations, and equip authors, individually and collectively, with tools to help finetune negotiations and build adaptive cooperation arenas."

This approach is fundamental to avoid big players spoiling the balance of representation with litigation scares that push smaller actors away. In the music industry, platformisation has changed listening patterns and a new ecosystem based on agglomeration threatens the visibility of individual artists/performers.

Pouillard underlines how, although an enlightened use of IPR can support the safeguarding of labour rights, these qualify as fundamental human rights: "IPR can integrate and emphasise creators' rights but it cannot (and should not) substitute for workforce protection *tout court*".

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2 Dreyfuss, Rochelle Cooper, and Jane C. Ginsburg, eds. *Intellectual Property at the Edge: The Contested Contours of IP*. Vol. 22. Cambridge University Press, 2014.

Given its soft spot for marginalised creators, Creative IPR has looked at their struggles and investments in IPR through two main research threads: authorship regimes in French colonial and postcolonial Algeria and the role of female performers in negotiating spaces of performing rights from the late 19th century to the 1960s.

The project witnessed first-hand resilience's generative power led by cooperative responses to dire times. "Especially during COVID-19 when music artists, unable to perform live, teamed up with designers on merchandise, creating new and less vulnerable profit avenues", notes Pouillard. Post-Covid, luxury brands, following Chanel's example, quickly bounced back by partnering with artists from other domains for shared artistic ventures".

As a historian, Pouillard stresses how a future outlook on innovation must be aware of time and place. Regulations ought to be up to speed with the mutated production and consumption landscape of creative products. The Berne Convention (1886), although updated several times, remains a foundational international agreement for copyright protection. Legislative times need to pick up speed to allow IP regulation to quickly adapt and respond to rapid technological progress and changes in consumption.

Our re-elaboration of IPR must account for virtual spaces and integrate traditional copyright and trademark rights within the expanding metaverse context. The legal dispute over an iconic Hermès handbag released in the metaverse by an individual artist as a set of NFTs establishes a precedent for how intellectual property rights may be regulated and enforced in this new digital domain. "How do we deal with the immaterial dimension where virtual representations and elaborations of physical products come to life?", Pouillard wonders. Who do we 'protect' and how?

Time is also a crucial factor in the debate over shortening copyright terms. Disney's lobbying to extend rights over Mickey Mouse highlights the conflict between corporate interests and the public good, including future creators.

While some aspects of innovation management and IP regulation need to be fast paced, the concept of innovation should be decoupled from high speed. "Innovation can go slower and still be robust and long-lasting" - Pouillard explains - "We have seen it with crucial inventions such as the sewing machine, the radio, the bicycle: these have all been updated and improved but have been around for a long time".

Slower growth in the creative industries is tied to sustainable innovation. "We can innovate by prolonging the life of certain creations without overloading the planet". IP regulation should focus on capturing value not just through re-production but also through re-creation. In fashion, this involves caution towards fast fashion models that encourage excessive production of 'copies'.

Pouillard emphasizes the importance of place and location in guiding creative industry innovation, advocating for Europe and the Global South to foster creative alliances. Fashion is off to a happy start. "The joint campaign between high street fashion giant H&M and Rich Mnisi, a young South African designer of Tsonga heritage, is a good example of the creation of branded value through spotlighting a geographically marginalized artist", Pouillard acknowledges. A similar partnership is that of European luxury Maison Dior and Uniwax, a leading manufacturer of wax print fabrics in West Africa, which brought traditional manufacturing expertise to the attention of luxury fashion[3].

By highlighting the complex interplay of national, collective, and individual agency which marked the contingent evolution of intellectual property rights, CREATIVE IPR helps craft time-responsive policies that balance creators' needs with sustainable innovation demands.

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3 More on this topic is available in Open Access in Pouillard, V., & Dubé-Senécal, V. (Eds.). (2023). *The Routledge History of Fashion and Dress, 1800 to the Present* (1st ed.). Routledge. https://doi.org/10.4324/9780429295607%20

THE FUTURE OF CIVIC RESILIENCE

How to be good in a crisis: future labs that turn research into resilience

By Hywel Jones and Laura Galante

The [FUTURESILIENCE](#) project has set out to strengthen European economic and social resilience through an enhanced ability to adapt and respond quickly to future crises. To reach this goal, the project sees Research and Innovation (R&I) playing a key role in building the capacity to anticipate, better prepare and be more flexible in crisis periods.

"They're good in a crisis" is generally considered a compliment. And it's a characteristic that Europe is likely to need more of in the near future. 'Crisis' can mean a time of peril or a moment of decision. Europe has faced multiple crises in recent years, and factors such as climate change mean that they are likely to continue or even increase in frequency in the future. The challenge is not only to respond well to such crises but also to be prepared.
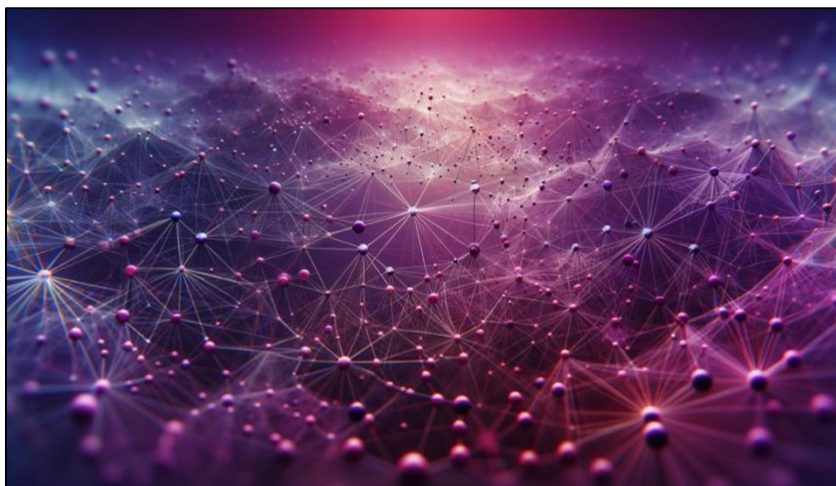
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The FUTURESILIENCE project is running 10 'Future Resilience Labs', bringing stakeholders together to apply Foresight and participative methodologies. The aim is to develop evidence-based strategies that speed up the use of R&I findings in building economic and social resilience.

Horizon Futures Watch spoke to the FUTURESILIENCE project manager, Matias Barberis of the European Future Innovation System (EFIS) Centre in Brussels, Belgium.

What do you want to achieve with the FUTURESILIENCE project?
We would like to contribute strengthening social and economic resilience in Europe, mobilising local communities and policymakers and highlighting the importance of valorising knowledge for putting resilience into practice. Recently, there has been a lot of public interest in the concept of resilience, even while academics were talking about it for quite some time.

How does strategic Foresight fit into the work of the FUTURESILIENCE project?
We focus on the vulnerabilities that are common to multiple types of crises to understand how they may evolve in the future. We aim to understand what the typically impacted areas of a society or the economy are when a crisis hits. By using scenario development, the project aims to test evidence-based policy options that will strengthen the societal fabric in different situations. We plan to develop scenarios by using different foresight tools such as weak signals or wild cards, assessing different factors that potentiate or mitigate impacts of crises in diverse areas like education, economy, finances, biodiversity or welfare.

How do different kinds of crises contribute to social inequalities and what types of crises are you looking at?
Societal resilience is a context-dependent concept. Crises may take place instantly or they could develop very slowly, such as an economic or political crisis. If a crisis takes place and the societal fabric is not well prepared, it will highlight all the vulnerabilities of this society. For example, inflation can have impacts on salary structures and the capacity of vulnerable groups to deal with everyday life expenses. A blackout can impact operations in a supply chain or affect transport system operations. Therefore, the idea of working in an anticipatory manner is understanding how to reduce vulnerabilities and strengthen the capacity for societies to be better prepared. We don't pretend to tackle *every* crisis in each pilot, but to focus on concrete societal challenges at local level (e.g. labour market, urban heat islands, health systems, housing, agriculture, etc.) and how they interact with diverse crises. The way crises are experienced and impact societies are different in each context. Moreover, we want to reduce the tendency of working in silos, as well as looking at the interdependence of crises and underlying factors.

To what extent could foresight help mitigate future crises (or how does it fall short)?

If you work with scenarios you can prepare for something you don't know. Foresight can help deal with uncertainty in a more efficient way because you can be prepared for different types of options. Such an approach helps to strengthen community resilience in two ways. We can use the context scenarios to test the robustness of policies against different possible future situations. At the same time, going through the scenario process together sharpens participants' ability to observe the present more carefully, to notice emerging signs of crisis earlier and most importantly to mobilise collective intelligence from a wide range of perspectives to make sense of the change.

But foresight has a limit. If you don't engage with the right groups of people and don't try to anticipate their needs, then it won't work. Generally, participative processes need to be feasible and inclusive. The project's specific process is adapted for small- to medium-sized cities and there is still room for implementing at larger scale. However, this may pose some challenges to effective participation.

Which actors do you aim to support for building societal resilience and how are you going to do this?
Each pilot will start by mapping stakeholders, particularly at local level. Societal resilience as a concept is about the communities affected, not just the problem. If you work with resilience more broadly, you may need to consider communities and physical assets/infrastructures. Our project aims to focus on the societal side of resilience, with particular focus on citizen engagement and policymakers. Policy and decision makers should understand how people deal with complexities in everyday life, as well as which kinds of future people want to live in. Citizens can help framing the problems and actively participate in designing and implementing policy solutions. This increases legitimacy to build what is called community resilience.

What are the main achievements and milestones that the project has reached so far? What are the next steps?
In the first year of the project we will set the foundations of what we call "the experimentation phase", in which 10 pilots will implement the project approach. The final 10 pilot cases will be announced mid-December 2023.

We are also developing a toolbox that includes process and policy tools: stakeholder analysis, foresight methods for developing scenarios and testing policies. The toolbox also includes a suite of thematic tools, each tailored to address specific or interrelated challenges and crises across various sectors, such as health, agriculture, finance, climate change, and disaster management.

The second product is a knowledge base compiling EU-funded research results and policy recommendations from international organizations. It aims to bolster local resilience and capacity, adding value to existing knowledge and supporting the science-to-policy process

Both the toolbox and the knowledge base will be openly available in 2025.

In an ideal world, how would you expect the future of resilience to develop in the next 20 years? What is your vision?
There should be more awareness on the need to work on resilience and facilitate the uptake of existing science-based solutions for increasing preparedness in a complex and uncertain world. The topic should permeate all levels of society and there should be more engagement in understanding what resilience means in different contexts.

Reclaiming spatial justice in the quest for a resilient future
By Laura Galante

In a world where the future often seems uncertain, how do local communities navigate the complexities of European policies to build a more resilient and equitable tomorrow? This is the intriguing question at the heart of RELOCAL*, an EU-funded Horizon 2020 research project that ran between 2016 - 2021.*

In efforts to preserve the wellbeing of local communities, anticipating, preparing for, and adapting to economic, social, and environmental challenges and changes is key for civic resilience. In this context, Project RELOCAL wanted to explore the intricate relationship between local needs and European frameworks, aiming to enhance civic resilience through better accessibility and articulation of local demands. Imagine a tapestry of diverse cities and regions, each weaving their unique patterns of spatial justice. RELOCAL wanted to understand the trajectories these communities follow to transform European opportunities into local successes, how future trends could impact these trajectories, and where there could be areas of improvement.

"First, we were interested in exploring the concept of spacial justice," says Petri Kahila, former project coordinator and Institute Director of the University of Eastern Finland. "Secondly, its relationship with cohesion as a key goal of the EU to target disparities across levels of development of various cities and regions."

This image was generated with the help of GPT-4.

The consortium was also motivated by the need to concentrate on the challenges and opportunities that local areas face in the context of the globalisation, migration, and climate change. "Spatial justice should lead to fair and equitable distribution of resources and opportunities across different European spaces. We were keen to examine how these two concepts are interconnected and how they can be achieved."

Civic resilience serves a dual role in the context of spatial justice: it not only identifies opportunities for transformative change, but also reveals aspects susceptible to resistance. On one hand, it acts as a response to spatial injustices, with communities mobilising their resources and capabilities to overcome challenges and enhance their living conditions. On the other hand, as communities adopt strategies to bolster their resilience, they may unintentionally reinforce existing power dynamics and inequalities, thus contributing to the very disparities they seek to overcome.

"Let's take the case of the Stockholm Commission," says Kahila. "It was established to promote sustainable urban development and to decrease social segregation in the city of Stockholm. But some critics stipulated that it had been dominated by elite interests and did not take into account the voices of the marginalised." It was thus taken as a case study to analyse its effectiveness and areas for further development to overcome these limitations.

Through a place-based approach, RELOCAL examined 33 case studies across European regions and cities with specific challenges to be tackled, such as improving governance processes, counteracting isolation and remoteness, and renewing structures, to name a few. Through imagining different futures, and actions they might lead to achieve spatial justice, it further identified plausible changes in spatial justice across various locations for the medium term (2030). This was done through a combination of theory-of-change elements and scenario elaboration, whereby contextual conditions for every case study were identified and scenarios were defined according to different nexuses of change with varying degrees of uncertainty.

For example, one of the nexuses identified was 'demographic changes', which encompassed two opposing trends related to population dynamics (shrinkage-growth) and population distribution (urban vs. rural). Each nexus then generated four 'states', or combinations, which stakeholders were invited to use as a framework to define scenarios for each case study. The megatrend of demographic ageing, for example, has socio-economic implications such as reduced levels of economic activity and an increase in social exclusion, and the necessity to implement necessary policy responses.

"The purpose of these scenarios was to explore the complex ways in which spatial justice is influencing and can be influenced by different factors and contexts in various regions. It was also to provide a creative tool for the stakeholders to reflect their current situation and future aspirations," says Kahila.

The project has produced recommendations on improving spatial justice and community wellbeing through place-based initiatives. For effective decision-making in specific regions, Kahila stresses the need for a comprehensive understanding of spatial justice at all levels of governance, not just locally. This requires a robust approach that emphasises participation and collaboration. Establishing various platforms for dialogue is crucial to facilitate this involvement. Some of these initiatives may take up to 10 years to fully realise, underscoring the commitment needed for long-term, sustainable change. Kahila wishes to see a stronger participatory and collaborative approach, not only with the public authorities, but also with civil society organisations, the private sector, academia, and most of all, residents and citizens.

On a quest for a better informed society in the age of misinformation

By Laura Galante

How can individuals practice critical thinking and effectively evaluate the credibility of sources in an age where information abounds but is not always accurate or truthful? Project CO-INFORM applied co-creation methods to develop verification tools with and for stakeholders such as journalists, policymakers, and citizens, to better prepare for situations in which the distinction between fact and fiction is not always evident.

Misinformation poses a significant threat to social cohesion and the stability of communities, undermining the essential foundations of trust and informed decision-making that are crucial for a healthy, functioning democracy. When false or misleading information spreads, either voluntarily or not, it distorts public perception and skews the understanding of critical issues, leading to misinformed opinions and choices. This can have far-reaching consequences, from eroding public trust in institutions and media to inciting social unrest and polarizing communities. The spread of misinformation can also impede effective public health responses, as seen in the case of vaccine misinformation, and can influence political processes, potentially swaying elections based on falsehoods.

CO-INFORM, active between 2018 and 2021, took place at an opportune time to address the issue of mis (and dis) information, a time in which false facts were being spread about happenings such as the political aftermath of the Syrian refugee crisis of 2015, and as social media became the bread and butter of people's communication and

This image was generated with the help of GPT-4.

information habits. "Countries like Greece, Austria, Germany, and Sweden had a kind of first wave of migration-related misinformation, which was an inspiration for finding new ways of dealing with it in a cross-societal way," says Mattias Svahn, former coordinator of Project CO-INFORM. Previously working at Stockholm University while carrying out the project, he is currently working at the Swedish Defense Research Agency. "When CO-INFORM started, we were researching misinformation related to the refugee crisis, but of course that developed into misinformation related to the pandemic."

Such a development further pushed the project team, composed of social scientists, software developers, journalists, and fact checkers from 6 different countries, to find solutions by involving stakeholders from all facets of society in a far-reaching and integrated way. "This collaborative approach is pivotal in creating an ecosystem where information is not just consumed, but scrutinised and understood, fostering a society that is not only informed but resilient to the waves of misinformation," says Svahn.

This was an innovative approach when the project started, as until then, misinformation had been approached as a somewhat separate research field from the rest of other cross-cutting challenges related to security, social services, and commercialisation. "The project was well anchored for its time as a bridge between the early research in misinformation as something specific, into an issue for all of society."

The project sought to predict the **credibility** of sources by modelling the signals that suggest whether a particular claim is accurate or not. As opposed to **accuracy**, which requires human fact checkers to assess that a claim is true or not using sufficient evidence and knowledge, credibility can be modelled through automated systems that summarise various criteria for fact-checking. For example, the Washington Post uses labels such as "One Pinocchio" or "Four Pinocchios". CO-INFORM chose to assign a so-called "credibility value" between -1.0 and 1.0 to specific claims, where -1.0 is not credible at all, 0 is neutral, and +1.0 is as credible as possible. A **credibility confidence dimension** was also incorporated in the model to address the probability that this label assessed the claim correctly, depending on the strength of the signals available. This depends on factors such as whether similar claims were posted in the past, whether the style of a tweet is similar to credible tweets, etc.

Throughout the design process, co-creation workshops were crucial. "The purpose of having a series of co-creation workshops was to have a continuous sounding board at intermittent points of the project to give input

on these misinformation tools," says Svahn. "Key moments in a design process gave influence. The co-creation workshops helped us understand how to make design choices for the best fulfilment of a design goal." The two main products consisted in a browser plugin to raise citizens' awareness of misinforming content and a dashboard for fact-checking journalists showing what kinds of misinformation is detected and how it will spread in the near future. Svahn adds, "In the beginning, the tools available were largely confined to the technological realm, primarily utilized by software engineers. Nowadays, these tools have become more mainstream, opening the door to wider adoption and integration into various aspects of daily life."

The project was not without its challenges, however; while tools can be developed to predict and detect the credibility of a claim, how misinformation can spread in the near and far future remains a greater question mark. "How do you know when or where a particular group is going to begin spreading misinformation?" Svahn asks. He mentions the concept of "pre-bunking", or metaphorically, "**inoculation"**, of people against misinformation, as a potential solution. This analogy draws from the medical practice of vaccination, where a weakened or inactive form of a virus is introduced to stimulate the immune system to fight the disease. Similarly, in the context of misinformation, vaccination involves exposing people to misinformation that may come in the near future to help them recognize and resist false or misleading information when it is there. However, experimental setups are far from a realistic simulation of reality. "It's easier to talk about pre-bunking or inoculation but it is harder to deal with in actual practice.

For instance, there have been false claims about social security services abducting children in Sweden. To address this, Swedish authorities have engaged with various groups and stakeholders across Sweden, helping them see first-hand how these narratives are completely unfounded and disconnected from reality.

Svahn envisions a future where every segment of society recognizes the significance of misinformation and collaborates effectively with key local stakeholders to address this challenge. This involves schools, public organisations and commercial companies. He also hopes that big social media platforms can be incentivised to tackle the spread of misinformation first-hand. "Facebook algorithms are geared towards stimulating interaction, and an angry one at that, which is equally financially viable as a positive interaction," he notes. He makes a reference to EU laws such as the Digital Services Act. "These new laws are a step in the right direction to incentivise social media companies, without whose participation the containment of misinformation cannot go forward."

On the other hand, he cautions a worst-case scenario: "When narratives get a life of their own, they become disconnected from the topic that they originally started with. Misinformation is a corrosive influence in society, and combating it is not only a way to create a more resilient society, but also a safer society."

FROM THE FUTURES4EUROPE PLATFORM: SELECTED CONTENT

These blog posts were originally published on the Futures4Europe platform. You can find these and other posts here.

Risks and Merits of Decolonising futures

By Jonas Drechsel

Part of "decolonising" is to question one's own assumptions and asking questions to the ones in power. The term has a historical background that is broader than its metaphorical use. Futures Studies has been dealing with this topic in one form or another for over 50 years.

This blog post examines the concept of decolonization, emphasising the importance of questioning assumptions and challenging power structures. It sheds light on the historical background of the term and explores how Futures Studies has engaged with decolonisation for over 50 years. It offers a comprehensive overview of thought-provoking approaches and stimulating methods, providing readers with insights into the evolving discourse on decolonisation and its implications for shaping future perspectives.

Read more here.

Futures of Science for Policy in Europe: Scenarios and Policy Implications

By Leena Sarvaranta

In the recently published brief 'Futures of Science for Policy in Europe: Scenarios and Policy Implications', we explore practices and processes by which information should be exchanged between knowledge actors and policy-makers with the intention to produce scientifically informed policies in Europe. We can see an increasing prominence of science in many public debates and the increasing willingness of governments to mobilize scientific and other advice mechanisms in the context of public debate.

Read more here.

UPCOMING EVENTS

Future Selves and Extending Human Perception in 2050

Date: Thursday, 7 December 2023; 14:00 - 16:30 CET
Location: Online
Arrangement type: Zoom workshop
Language: English

The project Futures Garden invites you to engage with two fictional artifacts that showcase thought provoking future scenarios regarding "Dealing with future selves" and "Extending human perception to new scales". Join us for an immersive and interactive experience!

Registration link: https://futures-garden-human-perception-identity.eventbrite.de

The Artifacts:

INWARDS
The film *Inwards* invites us to explore new practices and technologies that enhance self-reflection and sharing of emotions, thus helping shape our choices in life and nurture a renewed sense of togetherness.
Watch the teaser for this movie: https://vimeo.com/887304151

SYMBIOTIC
The film *Symbiotic* invites us to explore new ways of inhabiting the perception of other intelligent beings, to embody their experience, their sensory world, their "umwelt" – what they "feel" and how they "think".
Watch the teaser for this movie: https://vimeo.com/887303461
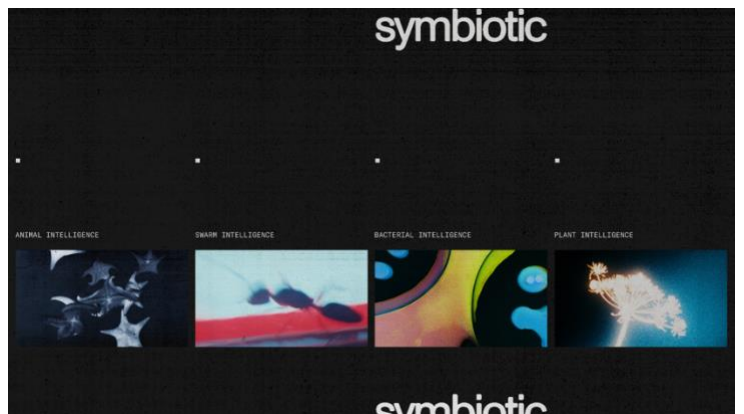
Celebration of World Futures Day 2023

Date: 4 December 2023 - 2:00 pm - 4 December 2023 - 6:30 pm
Location: UNESCO Headquarters, Paris, France
Arrangement type: In-Person
Language(s): French, English

World Futures Day emphasizes the critical role of futures and foresight in building peaceful and inclusive societies. It will take place at UNESCO in Paris on 4 December 2023. World Futures Day 2023 will aim to bridge the gap between theory and practice, offering opportunities for knowledge exchange, peer-learning and experiential interactions. In times of polycrisis, conflicts and wars it is crucial to unite and to use-the-future to imagine and build peaceful, inclusive and resilient societies. Register here.

Future of Democracy Conference In Iceland

Date: 21 – 23 February 2024
Location: Commercial College of Iceland, Ofanleiti 1, 103 Reykjavík
Arrangement type: in-person

How can we inspire the rest of the world to renew democracy for the 21st century? The objetive is to co-create concrete measures to ensure that democratic values are used to tackle our wicked global challenges. The conference will propose discussions, workshops, do-shops and talks to develop specific concrete solutions and ideas to speed up processes for citizen participation, e nthusiastic youth engagement and group-action.

Using future thinking and methods we will look into possible ways to develop what we propose to call "Democracy+" as a tool to explore what is needed for a 21st century societal contract 2.0, which clearly links democracy to civil society and the need for social innovation and sees resilient democracy as a force for peace.

Focusing on 2040, positive action and concrete movement, you will be part of an action-oriented and challenge-driven 3-day camp to reframe tomorrow's democracy.

Join us in Reykjavík on 21-23 February 2024 so we can co-create together.

For more information, visit: https://framtidarsetur.is/futures-of-democracy-reykjavik-2024/

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