



On- / Offline Interferences

Digitalisation and Socio-Spatial Transformations

International Web-Conference
15-16 November 2021

Conference Concept

During the past three decades we have witnessed nothing less than a digital revolution. Digitalisation refers to a long-term process in the course of which more and more parts of social and economic life are being captured by digital technologies and the digitisation of human action. Digitalisation can thus be seen as the most disruptive part of the history of the mediatization of societies. Concepts of mediatization assume that the increasing everyday use of ever new analog and digital media leads to changes in human actions - and that the changed modes of action in turn bring about changes in the organization of social and also physical worlds (Hepp, Hjarvard and Lundby 2015). In the face of very extensive digitalisation, Hepp (2020) even speaks of a "deep mediatization," for which it is typical that all elements of our social world are closely connected to digital technologies and their underlying infrastructures. Even objects that are not traditionally considered digital media, such as a car, are turned into media because of their digital connectivity (Hepp 2020, 5 f.). The influence of digital technology has become so pervasive that the concrete and the virtual, the immediate and the mediated have become inseparable. Online and offline, in other words, are no longer understood as different spheres, but amalgamate to a synthetic on-/offline experience. At the same time, and despite all technological progress, on-/offline is not (and will probably never be) a seamless experience, but one that is ripe with technical frictions, social conflicts as well as sensual and emotional irritation. Not to mention the fact that digital technologies are typically software-based and thus controlled by algorithms. This means not only that human actors are guided by algorithms because of digital technologies, but in the sense of Latour's actor-network theory, that algorithms "too have agency" (Latour 2005).

There is increasing evidence that mediatized and especially digitalised action may result in different experiences, forms of knowledge, ways of acting, social processes, and possibly also in different perceptions and arrangements of spaces. The fact that social actors can be (virtually) present in several places simultaneously and that, depending on the media they use, they are able to act in various forms of translocality, illustrates this argument. Spatial constructs may be arranged in entirely new ways. In this context, Knoblauch and Löw (2020) and Christmann, Knoblauch and Löw (2022, in press) see indications that since the 1960s - gradually - a major refiguration of spaces has taken place. They state that the territorially based, centralized, and hierarchically structured figuration of spaces typical of modernism have not yet disappeared entirely, but in the meantime have increasingly been reshaped considerably by other ordering principles, such as deterritorialized, decentralized, and level structures.

There is, thus, a need both for theoretical concepts and empirical analyses in order to better understand the relationship between digitalisation in human action and socio-spatial transformations - or even of the refiguration of spaces. The conference takes this as its starting point. It intends, to explore and critically discuss the multiple forms of "interferences" between digitalisation and socio-spatial transformation. This project encompasses the broad spectrum of intersecting and interacting online/offline practices and spaces in selected social domains such as online platforms (Session 1), smart city solutions (Session 2), digital work (Session 3) as well as smart rural regions (Session 4).

Session 1

Embedding the Platform – Embracing the Users

Online platforms play an essential role as organizers, intermediaries, multisided markets, and algorithm-based curators of social interactions. While a growing number of empirical studies on single platforms or types of platforms provide deep insights into the complexities and social dynamics characterizing platforms' individual functions, this session focuses the practices and the various ways in which users or user groups utilize the diversity of online platforms to combine selected affordances and constraints according to their individual preferences. At the same time, it examines how socio-spatial arrangements change within the framework of these practices. Setting the user centre stage expands perspectives on online platforms by carving out the interrelations between several platforms (Kenney and Zysman 2016; Langley and Leyshon 2017; van Dijck 2013). A user-centred perspective accentuates the application of different platforms as an integral part of everyday life while emphasizing user practices and interactions (van Dijck, Poell and de Waal 2018). In addition, we seek to highlight the complexities of online-offline overlaps and propose a perspective that does not only integrate several platforms but also dwells on the complex spatial entanglements the user-centred platform application inherits (Kitchen and Dodge 2011; Brydges and Sjöholm 2019).

Against this background this session brings together conceptual and empirical contributions around

- / new spatialities of on-/offline practices,
- / interrelation of several platforms in everyday practises,
- / on-/offline entanglements,
- / refigurations of social practices and processes through platform applications.

Session 2

Smart City Solutions – Digitalisation of Urban Infrastructures

In the face of disruptive events, such as extreme weather events, and crises, political and societal actors are under increasing pressure to navigate complexity and uncertainty. Cities, in particular, are vulnerable hotspots for this type of disruption due to their high density of people, infrastructure, economic and cultural assets. Smart solutions promise the potential to deal with such current and future challenges. Especially latest technologies and advancements in the field of digitalisation of infrastructures are increasingly seen as a way to address urban challenges (Evans et al. 2019; Serrano 2018). In the smart city concept digitalisation plays a dominant role. However, the smart city concept is not only seen as a potential solution. Critics see the approach more as a pure marketing label (Hollands 2008; Krivý 2018; Vanolo 2014). In addition to smart city approaches, competing or overlapping concepts such as those of the resilient or sustainable city also rely on digitalisation as a tool to improve infrastructural systems. Ultimately, however, the digitalisation of urban infrastructures appears to be a complex and uncertain undertaking: It can be seen both as an instrument for systemic change and as potentially increasing system vulnerability, e.g. in IT security, with possible cascading effects (Häring, Gelhausen and Stolz 2016). Diverse actors influence the functions of digitalised infrastructures with their preferences and perceptions. Infrastructures are relational to organized practices and have a spatial and temporal component – they are socially and materially embedded in their respective urban

contexts. Coordination and co-design seem necessary between actors inside and outside the municipality, but are often a neglected form of interaction in practice (Monstadt and Schmidt 2019).

In this context, the session brings together theoretical and empirical contributions around smart city solutions, in particular infrastructure digitalisation, and socio-spatial transformations regarding

- / the role of guiding ideas for planning and implementation,
- / dealing with the embeddedness into the social context and material spatiality,
- / influence and intricacies of coordination and co-design,
- / dynamics, challenges and effects between optimization and potential threat.

Session 3 Digital Work Practices

The world of work has changed drastically in the course of digitalisation. More and more new digital technologies and applications are being used in all working spheres and functions and have enabled novel working practices and routines. Some work processes are even fully automated. Work no longer takes place only at the interface between human and machine or machine and machine, but between human beings and artificial intelligence, which is capable of learning and reprogramming itself independently. Probably most striking for social-science based spatial research are the changes in the division of labor and the increase in translocal or spatially distributed work. In many areas of work (such as in planning offices - to name just one example), team members no longer work in shared offices, but are distributed across various working locations around the world (and thus - remarkably in the example of urban planning - plan urban locations in other parts of the world that most team members know only through their geodatabases; Pinto 2014; Wilson 2017). They are connected only by a common server structure, common digital software tools, data bases and the necessary information and communication technologies (Schinagl and Christmann 2021). Digital platforms have also changed and created new labor markets and labor incentives and motivations. For instance, crowdwork platforms have increased the social and spatial reach of demand and supply of labor and have raised new questions of social justice and labor regulation (Wood, Graham, Lehdornvirta and Hjort 2019). Wages, for instance, are often calculated by algorithms that determine the price for labor specific to the delivered service (van Doorn 2020). Participating on the digital gig economy requires to invest unspecified hours of unpaid work readiness (Cooper 2012). Wages thus have become more dynamic, uncertain and speculative. Such digitally induced changes have far reaching consequences on work identities, forms of inclusion or exclusion from work opportunities, on the boundaries between employment, self-employment or on the incentives that motivate workers.

This session encompasses theoretical and empirical contributions on novel digital work practices, in particular

- / work identities in spatially distributed on/offline work settings,
- / new opportunities and challenges for inclusion in labor markets,
- / the blurring of boundaries between work and leisure, monetary incentives and playful engagement.

Session 4 Smart Rural Regions and Residents

Digitalisation has also gained momentum in rural regions worldwide in recent years, although the strategies and speeds of digitalisation differ from country to country (Malecki 2003; Saleminck 2017). What the countries have in common is that the digitalisation process involves, on the one hand, the development or expansion of broadband Internet. Mobile working from the countryside is thus becoming increasingly possible. For some, this seems to make rural life more attractive, at least in the context of multi-local (urban and rural) living. On the other hand, rural digitization is also about providing specific applications (specific village apps, for example) that enable novel and smart solutions to various rural challenges, especially in peripheral rural regions – be it in areas such as local supply, mobility, goods delivery, health care or village communication, to name just a few (Corr, Couper, Beningfield and Mars 2000; Qiang, Kuek, Dymond and Esselar 2012). Increasingly, rural residents are acting through digital technologies and become smart villagers in their daily lives as well as work (Lin, Xie and Lv 2016; Lulu 2019). In the hope of advancing creative community development (e.g., through digitally-enabled tourism development), even entire villages and municipalities are embracing digitalisation. So far, the rather scarce studies in this research field are strongly application-oriented and ask for appropriate digitization strategies and opportunities for rural development (Townsend, Wallace and Fairhurst 2015; Visvizi, Lytras and Mudri 2019). In the session we also want to consider, among other things, how the online and offline actions of rural residents can be described, especially how it affects life in the countryside and how perceptions of rurality change through the possibilities of national and even global connectivity (Bürgin and Mayer 2020; Zerrer and Sept 2020).

In Session 4, we will therefore discuss conceptual and empirical contributions to the digitalisation of rural areas and socio-spatial transformations in the specific context of

- / digitised actions, cyber-physical realities and possibly changed lifestyles of smart villagers in the countryside,
- / novel solutions and new residents for rural areas,
- / changing perceptions of rurality,
- / opportunities and limitations of rural development.

Organizers

Professor Dr. Gabriela Christmann (gabriela.christmann@leibniz-irs.de)

Professor Dr. Oliver Ibert (oliver.ibert@leibniz-irs.de)

Dr. Elisa Kochskämper (elisa.kochskaemper@leibniz-irs.de)

Professor Dr. Suntje Schmidt (suntje.schmidt@leibniz-irs.de)

Leibniz Institute for Research on Society and Space (IRS)
Flakenstraße 29-31, 15537 Erkner (near Berlin), Germany
Phone: +49 3362 793 299

Conference Programme

15 November 2021

/ 10:00 am Welcome

Oliver Ibert, Director of the IRS, Germany

Welcome and Introduction to the Conference

/ 10:15 am Session 1: Embedding the Platform – Embracing the Users

Chair: Gabriela Christmann, IRS

/ 10:15 am *Andrew Leyshon, University of Nottingham, UK and Allan Watson, Loughborough University*
Music in the Cloud, Money from the Crowd: Platform Reintermediation and Live Music in the Time of COVID-19

/ 10:45 am *Gernot Grabher, HafenCity University Hamburg, Germany*
Online Spillovers: The Proliferation of Strategic Networking through Social Media Platforms

/ 11:15 am *Attila Márton, Copenhagen Business School, Denmark*
A Digital Ecology of Platforms – Runaway, Erosion and Resilience

/ 11:45 am *Suntje Schmidt and Oliver Ibert, IRS, Germany*
Platform Ecology: A User-Centric and Relational Conceptualisation of Online Platforms

/ 12:15 pm Concluding Discussion of Session 1

/ 12:45 pm Lunch Break

/ 2:00 pm Session 2: Smart City Solutions – Digitalisation of Urban Infrastructures

Chair: Suntje Schmidt, IRS

/ 2:00 pm *Marikken Wulf-Wathne, KTH Royal Institute of Technology, Stockholm, Sweden and Norwegian Institute for Urban and Regional Research, Oslo Metropolitan University, Norway*
Planning the smart city

/ 2:30 pm *Andrew Karvonen, Lund University, Sweden*
Expanding the New Urban Science: Interdisciplinary and Transdisciplinary Approaches to Digitalising Cities

/ 3:00 pm *Andrés Luque-Ayala, Durham University, UK and Jonathan Rutherford, University of Sheffield, UK*
Emerging Techno-Ecologies of the City: Revisiting the Urban Ecological Flow Through Algorithmic Assemblages

/ 3:30 pm *Felicitas Klemp, Elisa Kochskämper and Wolfgang Haupt, IRS, Germany:*
Digitalisation Between the Promise of Effectiveness and the Threat of Vulnerability: Which Perceptions and Actors Shape Digitalised Urban Infrastructures?

/ 4:00 pm Concluding Discussion of Session 2

Conference Programme

16 November 2021

/ 10:00 am Session 3: Digital Work Practices

Chair: Elisa Kochskämper, IRS

- / 10:00 am *Elke Schübler, Johannes Kepler Universität Linz, Austria*
Fair Digital Work Practices: Avenues towards Crowdworker Voice
- / 10:30 am *Jeni Paay, Swinburne University of Technology, Australia*
Design of Spaces with People-Centred Interactive Technologies
- / 11:00 am *Niels van Doorn, University of Amsterdam, The Netherlands*
Gig Work as Migrant Work: The Platformization of Migration
- / 11:30 am *Anna Oechslen and Alica Repenning, IRS, Germany*
Creative Digipreneurs and Socio-Technical Niches: Work Practices of Entrepreneurship in a Platform Mediated Environment
- / 12:00 pm Concluding Discussion of Session 3
- / 12:30 pm Lunch Break

/ 2:00 pm Session 4: Smart Rural Regions and Residents

Chair: Oliver Ibert, IRS

- / 2:00 pm *Brian Whitacre, Oklahoma State University, Oklahoma, USA*
Economic and Social Benefits of Rural Broadband in the United States: A Summary of the Literature
- / 2:30 pm *Heike Mayer, University of Bern, Switzerland*
Digitalisation and Slow Innovation in Rural Regions
- / 3:00 pm *Yibo Qiao, Utrecht University, The Netherlands*
New Countryside in the Internet Age: The Development and Planning of Taobao Villages in China
- / 3:30 pm *Gabriela Christmann, Ariane Sept and Nicole Zerrer, IRS, Germany*
Smart Villagers in Germany
- / 4:00 pm Concluding Discussion of Session 4
- / 4:30 pm Farewell

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