

5th Digital Geographies Research Group Annual Symposium

14th July 2021

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Welcome everyone to the fifth Annual Symposium of the Digital Geographies Research Group of the Royal Geographical Society.

The group was set up to critically examine how digital technologies are reshaping our society, economy, environment and culture. Established by Dorothea Kleine and Gillian Rose as an RGS Working Group in 2016, we became a full Research Group in 2018. DGRG sits alongside Germany's Digitale Geographie Netzwerk, the IGU's Commission on Information, Innovation and Technology and the AAG's Digital Geographies Speciality Group among others in driving research in this area internationally.

The number of publications examining the digital within the discipline of geography and beyond has expanded rapidly over the last decade. Despite the increasing interest in the digital, however, there remains a risk that digital geographies is both all-encompassing and lacking in specificity. Indeed, there is a bigger question given the ubiquity of the digital in our lives, as to whether digital geographies is simply becoming... *geography*!

Of course, we would argue that there is much work to be done in examining how the digital continues to reshape our world. The tech sector is built upon a constant churn of innovation, with the rapid emergence of new challenges that invite scholarly attention. This year's DGRG Annual Symposium has been designed as an opportunity to reflect on the emerging agendas for those working in digital geographies. The event is also associated with a new book project commissioned by Edward Elgar for publication in 2023, intended to capture and crystalise some of the ideas being discussed at the Symposium.

We are very excited by the diverse range of ideas and perspectives being presented by the speakers at this event and we hope that our participants enjoy a stimulating and thought-provoking day of discussions. As Chair of the Digital Geographies Research Group, I'd like to thank all of the speakers for taking part as well as the Symposium organising committee for their fantastic work in putting the event together: Tess Osborne, Daisy Curtis, Godwin Yeboah, Harrison Smith and Maxwell Mutanda.

Dr. Phil Jones

Chair of the Digital Geographies Research Group

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Conference 'netiquette'

At the DGRG, we believe it is the obligation to provide an inclusive and equitable environment. This ethos underpins the everyday running of the research group, as well as our events. With this is mind, we encourage all attendees to practice the following online etiquette/netiquette:

- Please be polite to all presenters and attendees and respect their beliefs and opinions.
- There is no obligation to turn your video camera on, but please mute your microphone when you are not speaking or presenting.
- We do encourage you, if they have their camera off, to provide a picture or emoji so that presenters aren't looking at rows of black boxes.
 You can do this by:
- Launch the Zoom application, click on the icon with your initials and click Change My Picture.
- 2. Log into the Zoom web portal and view your Profile.
- 3. Click Change under the user image.
- Click Upload then navigate to your desired image. Adjust the image position if needed and click Save.
- Please do not take any screen shots/recordings of the presentations or presenters. Recordings will be made available after the conference where the presenter has agreed.
- We ask everyone not to post in the chat during the presentations because this
 can be distracting to the presenters. But you are welcome to ask questions
 there during the Q&A portion of the sessions.
- If you would like to ask a question orally following a presentation, please raise your virtual hand before turning on your microphone.
- We invite everyone, if you feel comfortable, to add your preferred pronouns to your Zoom profile. This can be done through the follow steps:
 - 1. Select your profile icon in the top right hand corner of Zoom and select "settings" from the drop down menu.
- 2. This will open a new window select "profile" and then "edit my profile".
- 3. Your profile will appear under the "profile" tab, select "edit" next to your name.
- 4. To add your pronouns, simply add them to the end of your last name.
- Zoom's live transcription service will be enabled for all live discussions but
 we understand that these captions are not always 100% accurate. However,
 the recordings of the event will be uploaded to the DGRG YouTube with
 accurate captioning after the event.
- The DGRG will be live-tweeting the event from the @digital_RGS account, and you are welcome to join the conversation with the #DGRGSymp hashtag.
- Should you have any questions or issues during the day, the organisation sub-committee will be happy to help you: Tess Osborne, Daisy Curtis, Godwin Yeboah, Harrison Smith, Phil Jones or Maxwell Mutanda.

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Schedule

Welcome

BST (UK Time)

9:30-9:40:

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9:40-10:20: Provocations 1 Tracking and tracing: Mapping new contours of the location

economyPeta Mitchell

Public Art in Digital Space: Queering Boundaries.

Martin Zebracki

Researching the entanglements of socio-material-technological

spaces

Tabea Bork-Hüffer

10:20-11:40: Paper Session 1 Robotic liveliness, COVID-19 and care

Shanti Sumartojo

Doing Digital Children's Geographies, Imperfectly:

 $\label{lem:methodological} \mbox{ Methodological Reflections on a Child-led Guided Tour via Video}$

Call in a Slum Neighborhood in the Philippines

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Aireen Grace Andal

Can your data be trusted: exploring what it means for LGBTQ+

people to trust in digital data.

Carl Bonner-Thompson

Epistemic Consequences of Following Data from the Global

South.

Azabeh Akbari

11:40-13:00: Digital Shorts Collaging digital geographies.

Robert Lundberg

The Digital Geographies of Ecotherapy.

Rosie Knowles

Theorising self-tracking and the geographies of surveillance

in the lives of young people.

Olivia Fletcher

Al: Anthropomorphism and Dehumanisation.

Marie Oldfield

The invisible infrastructure: management and perceptions of

the electromagnetic spectrum.

Daisy Curtis

Telecommuting amidst Covid-19: The Governmobility of

Working-from-home Employees in Hong Kong.

Grace Hiu-Ling Yeung

Working during the pandemic: how holistic training and computer-based work helped vulnerable populations to cope.

Sammia Poveda

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Digital Shorts

"Sharenting" amidst a Pandemic: Making Sense of Parents Sharing their Children's Photos Online during Quarantine and

Implications in a Post-lockdown world.

Aireen Grace Andal

Young people, violence and the 'everyday' co-production of geopolitics in Player Unknown's Battlegrounds.

Thomas William Shrimplin

Influence of mobile media on digital placemaking practices - preliminary research results.

Maciej Główczyński

Beyond the empathy machine: how social advocates use the affordances of digital realities for disruptive spacemaking.

Rosie Wright

(Re-)Imagining subjectivities of refugees/asylum seekers in the

digital realm.

Seerat Kaur

13:00: Lunch

13:30-14:00: Provocations 2 Mapping Back to the State: The Case of Torn Apart/Separados

Roopika Risam

Beyond Bias: Algorithmic Unfairness, Infrastructure, and Genealogies of Data.

Alex Hanna

14:00-15:40: Paper Session 2 Towards A Research Agenda for Digital Ecologies.

Jonathon Turnbull & Adam Searle

From Netflix to MUBI: Exploring the Digital Geographies of

Film and Cinema.

Alex Hastie

A critical geography agenda for bringing back space and

spatialities in digital social innovation research.

Chiara Certomà

Digital Media as Infrastructure.

Julia Wagner

(Digital) Neo-colonialism in the Smart City.

Ryan Burns & Morgan Mouton

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15:40-15:55: Coffee Break

15:55-16:35: Panel Discussion Andrew Dwyer, Lizzie Richardson,

Harrison Smith & Godwin Yeboah.

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16:35-16:40: Close

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KEYNOTE PROVOCATIONS:

Dr. Peta Michell

Tracking and tracing: Mapping new contours of the location economy.

Dr. Martin Zebracki

Public Art in Digital Space: Queering Boundaries.

Dr. Tabea Bork-Hüffer

Researching the entanglements of socio-material-technological spaces.

Dr. Roopika Risam

Mapping Back to the State: The Case of Torn Apart/Separados.

Dr. Alex Hanna

Beyond Bias: Algorithmic Unfairness, Infrastructure, and Genealogies.

KEYNOTES



Dr. Peta Mitchell

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Peta Mitchell is an Associate Professor in the Digital Media Research Centre and School of Communication at Queensland University of Technology (QUT), where she leads the Australian Research Council-funded Geoprivacy Project. Peta's research focuses on digital geographies, location awareness and mobile media, algorithmic culture, and network contagion.

Tracking and tracing: Mapping new contours of the location economy

In responding to the question "Where next for digital geographies?," this provocation draws focus to the growing commodification of personal location data within the digital and data economy. Our everyday digitally mediated spatial practices are now intimately tied to a robust and growing location economy, whose contours are nevertheless not clearly defined and whose existence may not even be apparent to those whose data it trades in. Drawing on interviews conducted with location-based platforms, location intelligence companies, and privacy regulators and advocates, I sketch out some of the current and emerging drivers within this location economy as it responds to growing public awareness of geoprivacy and geosurveillance as well as increased regulation. Over the past 18 months, COVID-19 contact-tracing apps have drawn global attention to location as a particularly sensitive surveillant modality situated at the nexus between state and surveillance capitalism. As concerns over tracking and tracing grow, I suggest trajectories that offer potential to ameliorate the more negative consequences of the location economy.

KEYNOTES



Dr. Martin Zebracki

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Dr Martin Zebracki is an Associate Professor of Critical Human Geography at the University of Leeds. His research straddles the areas of public art, sexuality, digital culture, and social inclusivity. Zebracki is Principal Investigator of the AHRC-funded project Queer Memorials and related ESRC LSSI Impact Acceleration Award project Pride in the Field: Promoting Inclusive Fieldwork for LGBTQ+ Researchers, and he is the Chair of the RGS-IBG Space, Sexualities and Queer Research Group (SSQRG).

Public Art in Digital Space: Queering Boundaries

'To queer, or not to queer' public art in digital space. That is the question this keynote provokes. First, I discuss the wider relevance of undertaking queer approaches to examining the representation and performance of socially marginalised identities as mediated through digital spaces (in particular today's hostile social media environments and their governing identitybased normativities and conventions). Second, I highlight the specific relevance of studying public art engagements for 'queering' regulative yet fluid boundaries of identity expression that navigate between social norms and digital forms. Drawing on key examples of LGBTQ+ monuments, such as the Homomonument in Amsterdam and the Gay Liberation Monument in New York, I show how different practices and renderings that emerge around the same material monument co-exist and conflict while being mapped onto digital spaces. This not only prompts the imperative for challenging the interplay between materiality, digitality, and identity - or, the digital mutation and contestation of public artwork (far) beyond its original location, material context, and social meaning. But, ultimately, I want to ask: how can the boundaries of safe spaces be pushed for the digital expression of marginalised sexual and gender identities through the lens of public art?



Dr. Tabea Bork-Hüffer

- Institut für Geographie, Universität Innsbruck

Tabea Bork-Hüffer is Professor for Human Geography at the Department of Geography, University of Innsbruck, and head of the interdisciplinary research group Transient Spaces & Societies. Her research centers around the intersections of digitisation, (im) mobilities, and urbanization, with a regional focus on Southeast Asia, China, and Austria.

Researching the entanglements of socio-material-technological spaces.

Following calls for more-than-representational as well as mobile methodologies an increasing methodical repertoire has been developed and used over the last twenty years to venture into the entanglements and intra-actions mostly of socio-material but increasingly also of socio-material-technological spaces. The keynote sketches a trajectory starting from some key achievements of exemplary approaches employed, to debating some of the frictions these approaches still face in capturing the complexities of such spaces, to reflecting upon what this means for future research in digital geographies. Indeed, the challenges ahead are manifold and span from tackling asynchronicities, doing justice to multiple historicities, achieving deeper integration of complex and variegated data sets, to fostering reflections on research and data ethics in the field.

KEYNOTES



Dr. Roopika Risam

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Roopika Risam is Chair of Secondary and Higher Education and Associate Professor of Education and English at Salem State University. She also serves as the Faculty Fellow for Digital Library Initiatives, Coordinator of the Graduate Certificate in Digital Studies, and Coordinator of the Combined B.A./M.Ed. in English Education. Her research interests lie at the intersections of postcolonial and African diaspora studies, humanities knowledge infrastructures, and digital humanities.

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Mapping Back to the State: The Case of Torn Apart/Separados

Data visualizations often tell stories of migration through data sets from organizations like the UN that surveil and manage migrant populations. The visualizations that result produce data narratives told through the gaze of the state. How might we, in turn, use data visualization to turn the gaze back onto the state to complicate narratives of migration? This talk takes up this question through the project Torn Apart/Separados, a rapid response data visualization that responds to the U.S. government's 2018 policy of family separation of migrants and offers an example of mapping back against statist narratives of migration.



Dr. Alex Hanna

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Alex Hanna is a sociologist and senior research scientist working on the Ethical AI team at Google. Before that, she was an Assistant Professor at the Institute of Communication, Culture, Information and Technology at the University of Toronto. Her research centers on origins of the training data which form the informational infrastructure of AI and algorithmic fairness frameworks, and the way these datasets exacerbate racial, gender, and class inequality.

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Beyond Bias: Algorithmic Unfairness, Infrastructure, and Genealogies.

Problems of algorithmic bias are often framed in terms of lack of representative data or formal fairness optimization constraints to be applied to automated decision-making systems. However, these discussions sidestep deeper issues with data used in AI, including problematic categorizations and the extractive logics of crowdwork and data mining. In this talk, I make two interventions: first by reframing of data as a form of infrastructure, and as such, implicating politics and power in the construction of datasets; and secondly discussing the development of a research program around the genealogy of datasets used in machine learning and AI systems. These genealogies should be attentive to the constellation of organizations and stakeholders involved in their creation, the intent, values, and assumptions of their authors and curators, and the adoption of datasets by subsequent researchers.

PANELLISTS



Dr. Andrew Dwyer

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Dr Andrew Dwyer (he/him) is an Addison Wheeler research fellow in the Department of Geography at Durham University, UK. His current research concerns critical reflections on the role and relationships we have with computation and security – ranging from malware and algorithms, to the impact of videoconferencing during a pandemic, and post- and de- colonial approaches to study and practice. He completed his DPhil (PhD) at the University of Oxford in 2019 on 'Malware Ecologies', which used an autoethnography of malware analysis and detection to explore and enable new perspectives to more-than-human approaches on the (geo)politics of cyber security.



Dr. Lizzie Richardson

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Lizzie studied Geography at the University of Cambridge and Durham University. Since 2020, she is a Junior Professor of Digital Geography in the Department of Human Geography in Frankfurt. She has previously held research and teaching positions at the University of Sheffield, Durham University and the University of Cambridge. Much of her research focuses on the socio-spatial dimensions of economy, with a particular interest in work cultures and technologies. Her current research examines the emergence and implications of platform technologies and platformization for the spatial definition of economic activity.



Dr. Harrison Smith

♀ University of Sheffield▶ harrison.smith@sheffield.ac.uk

Dr Harrison Smith is a Lecturer in Digital Media & Society at the University of Sheffield within the Department of Sociological Studies. His research is broadly interested in the political economies of commercial data brokerage, and has published in various journals on the implications of location based marketing and location analytics. He has recently also published articles on emerging technologies of decentralization and their impacts on social theories of sovereignty and justice.



Dr. Godwin Yeboah

Warwick University

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Dr Godwin Yeboah is a senior research fellow at the Institute for Global Sustainable Development based at the University of Warwick in the UK. His research is situated within an interdisciplinary/transdisciplinary problem space that intersects social sciences (particularly geography), citizen science, computer science, geomatics, data science, and the development/application of innovative research methods related to transport, health, energy, human-environment interaction, as well as the thematic strands of the sustainable development goals. He is a fellow of the Royal Geographical Society and an active member of various research groups including DGRG.

PAPER ABSTRACTS

10:20-11:40: Paper Session 1

Robotic liveliness, COVID-19 and care.

Shanti Sumartojo

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In this article we discuss recent work on the idea of robotic 'liveliness' in the context of their increased use during the COVID-19 pandemic. Building on new materialism, and situated in the emerging area of robot geographies, we use the idea of liveliness to consider robots' agential capacities in three different ways: as apparently autonomous technologies; as inorganic and mechanical bodies; and as perpetually unfinished and contingent things.

We examine a range of examples of their deployment during the pandemic to speculate on the potential for robots to emerge as 'caring subjects' via this notion of liveliness, and argue that it offers an approach that can contribute to critiques about their use in 'caring' roles, an application which is rapidly developing in the area of social robotics. We contend that as robots become more commonplace, we need critical but productive frameworks to understand their use in a range of applications, including those implicated in care, and to help shape their use and development.

Doing Digital Children's Geographies, Imperfectly: Methodological Reflections on a Child-led Guided Tour via Video Call in a Slum Neighborhood in the Philippines.

Aireen Grace Andal

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In this work, I reflect on children's participation in my remote fieldwork as these children helped me navigate their spaces through online video calls. Being stuck in Russia, I conducted a remote interaction with Filipino children (9-12 years old) who became not only my participants but also my guide to explore the spaces of their slum neighborhood in the Philippines. I narrate how children served as mediators of spaces as I remotely navigate their living spaces through a child-led online guided tour. This remote fieldwork revealed the role of children in augmenting the reality of the researcher, with a significant impact on the researcher's perception, cognition and emotion concerning the field site. Moreover, these children interrogated the very methods of my digital fieldwork.

Two main discussions transpire from such observations. First, a child-led online guided tour reveals that children can be strong allies of critical scholarship in geographical qualitative research when their voices are taken seriously. Second, children not only negotiate with the researcher but they also criticize the research they participate in. This opens a promising research agenda toward "children as co-researchers", which overlaps with a broader theoretical impulse to question and diversify our sources of 'expertise' to best understand children's geographies. Attentive to how this experience resonates with scholars of children's geographies, I pass on the task of thickening the data on digital children's geographies through more sustained engagements in unpacking the hidden potentials of children to contribute to research using digital geographies.

Can your data be trusted: exploring what it means for LGBTQ+ people to trust in digital data.

Carl Bonner-Thompson

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Public trust in digital data, algorithms and devices is under scrutiny, with academics arguing that digital data might provide new forms of surveillance, inequality and violence. This is especially pertinent for LGBTQ+ people whose, often private and sensitive, identities and practices might be at risk of exposure through the sharing, leaking and selling of data. Digital geographic work on the consequences of digital data and algorithms is emerging, yet there remains little research that explores how this impacts the everyday lives of specific people who are most vulnerable to new forms of violence through digital technologies. This paper will explore some preliminary findings of a research project that examines what it means for LGBTQ+ people to trust in the digital data that are produced through digital technologies (smart phones, watches, laptops, technologies), used across everyday urban spaces. The paper will explore the ways gender and sexual identities are folded into experiences of digital data, complicating ideas of 'trust'.

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Epistemic Consequences of Following Data from the Global South.

Azadeh Akbari

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By following a video that failed to be published during the 2009 uprising in Iran, this paper follows data in a trajectory different from Western users' everyday experience. It aims to critically debate the grand narratives of data capitalism that are mainly based on how data functions in Western societies. The research scrutinises the existing theoretical accounts on following things to examine their applicability to data as a thing. Following the traces of an unpublished video reveals an intricate assemblage of organisations, policies, laws, code, software, people, and platforms that could be shunned as a nuance, an example of undemocratic governance of the internet. However, this uncirculated thing narrates by no means an exceptional life for the data produced in the global South. The paper demonstrates how the politics involved in/instigated by moving things produce epistemologies that call for new conceptualisations of political digital geography. Consequently, disruptions in moving is not considered a failure in tracing, but rather a window to "imagine or develop alternative data assemblages" (Carter 2018:2). Although grand theories of data capitalism give us political tools to combat the growing profit-oriented attainment of data from users, failing to understand the dynamics of data's journey will produce a naturalised homogenised universal image that leaves many realities of data out.

14:00-15:40: Paper Session 2

Towards A Research Agenda for Digital Ecologies

Jonathon Turnbull & Adam Searle

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In the so-called Digital Anthropocene, human-nonhuman encounters are increasingly digitised for research, entertainment, and surveillance. Unique geographies are 'produced through, by, and of the digital' (Ash, Kitchin, and Leszczynski, 2016). Here, we offer a research agenda here for how the sub-discipline of more-than-human geographies might most effectively navigate the digital turn. To do this, we outline three core future concerns for the emerging field of 'Digital Ecologies' (see www.digicologies.com): encounters; methods; and governance. Drawing upon fieldwork with wild and domestic animals across rural and urban settings, we explore divergent ways nonhumans are digitised - by whom and for what purposes - and the ways in which the digital itself may be ecologised or understood as part of a wider field of material-ecological relations.

We begin by surveying the ways geographers have conceptualised and empirically investigated digital human-nature relations - media ecologies, Nature 2.0, digital conservation, digital Anthropocene - to offer a future-oriented research agenda that builds on these extant research interests. We sketch out a working definition of Digital Ecologies to advance existing work. Next, through attention to digital materiality and technological agency, we develop a vocabulary for conceptualising digital ecologies as ontologically distinct entities, generative of affective moments worthy of greater empirical scrutiny. Here we draw on fieldwork involving a range of livestreamed animal encounters.

Having outlined a typology of digital human-nonhuman encounters, we turn to the digital methods used for studying ecological relations, asking how such technologies transform geographical and ecological field research, and enquire into the epistemological consequences of such knowledge production strategies. Here, we draw on fieldwork with researchers using GPS-tracking collars and livestreamed Peregrine falcon 'nestcams'.

Finally, we turn to the tensions inaugurated when nature 'becomes digital'. Digital technologies have afforded broader, yet exclusive, publics the ability to encounter nonhuman animals in real time. These relations afford novel forms of biopolitical control and management, surveillance, and commodification, but also entertainment, research, and care amongst different social groups. Thus, what are the more-than-human benefits and costs of the digitalisation of nonhuman life, and how are the benefits distributed? How might digital encounters be harnessed to foster convivial and democratic human-nonhuman relations? Here, we enquire into the various forms of governance and commodification of nonhuman life made possible by digital technologies. We conceptualise digital encounter value in relation to digitised human-nature encounters, specifically those involving animals homed at care sanctuaries in the US and the UK.

From Netflix to MUBI: Exploring the Digital Geographies of Film and Cinema

Alex Hastie

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This paper calls for renewed interest in the geographies of film and cinema using the lens of the digital. Online streaming platforms such as Amazon Prime Video, Disney+, and Netflix play an increasingly important role in the distribution of film globally and this has been accelerated by the COVID-19 pandemic. Their growing power in the industry has yet to be fully appreciated by geographers and can be a catalyst for new geographical insights into film. Drawing on surveys and interviews, this paper explores both the opportunities and challenges created by streaming platforms big and small, from Netflix to MUBI, for audiences. In doing so, it considers the different material and virtual spaces of online film to conceptualise film audiences in relation to issues of access, choice, and taste, all of which are regulated by the digital: the devices used to watch films (e.g. mobile phones, smart TVs, laptops, tablets), the software for curation and recommendation (e.g., algorithms), and the growing range of online film platforms available to watch films. This paper, then, draws upon and contributes to emerging work in digital geographies by interrogating the uneven geographies of digital film and the ways in which they shape what Ash, Kitchin, and Leszczynski (2018) refer to as 'spatial understandings, embodied knowledge, political awareness and social relationships'.

A critical geography agenda for bringing back space and spatialities in digital social innovation research

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Chiara Certomà

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Digital social innovation (DSI) refers to social innovation initiatives that leverage digital technologies potentiality to co-create solutions to a wide range of social needs. These initiatives generally take place in urban contexts. However, in the existing literature, scarce attention is devoted to the spatial dimensions and the social, cultural or political space-related effects of DSI practices. I suggest that a critical geography perspective can address these gaps and propose a research agenda for a critical geography of DSI. This articulates along three research lines, including the (re)production of DSI processes and socio-cultural urban space, the representations of DSI practices and the power relationships these mobilise.

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Digital Media as Infrastructure

Julia Wagner

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This conceptual paper is a call to think with digital media infrastructurally by identifying how it is used. To think infrastructurally is to conceptualize how digital media matter and make matter and to explore the ways that digital technologies, far from an apolitical backdrop, serve as material motivators and mediators of everyday life. This approach denies any one essential quality to digital media and rather brings up the multivalent material and semiotic relational entanglements and practices that digital media engender. I argue that an infrastructural approach to digital media allows digital geographies to interface with three important agendas: first, to follow the mobilities of data, people, and money circulated by digital technologies; second, to attend to the spaces and temporalities of the socionatural ecologies produced by digital technologies; and finally, to repoliticize the "user" through strategies to re-appropriate technologies through mis-use, re-use and, following Sara Ahmed (2019), "queer use".

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(Digital) Neo-colonialism in the Smart City

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The critical research agenda on smart cities has become increasingly interested in the politicaleconomic relations between digital technologies and everyday urban life. It is now clear that in the smart city, quotidian activities have become valorized as data, and are produced, extracted, and circulated with little, if any, remuneration to those individuals from whom they have been abstracted. Smart city scholars often call this process "digital colonialism" to highlight the uneven relations of power that enable processes of dispossession and profit generation. In this article, we argue that greater conceptual clarity is needed around digital colonialism. Specifically, what is called digital colonialism often entails processes more characteristic of neo-colonialism. By teasing out the differences between digital colonialism and digital neo-colonialism, different relations and processes are illuminated, allowing us to theorize the smart city with greater nuance. Here, we focus on the epistemological claims, practices of legibility, and repercussions that emerge when focusing attention on the latter. We show that digital neo-colonialism also requires different political strategies of resistance than its colonial counterpart, and we grapple with the multiple ways in which digital technology research has formulated resistance strategies. We advocate for a collective, structural shift in how data and digital technologies are deployed and circulated within the smart city. To substantiate these claims, we draw on a long-term, ongoing database ethnography in Calgary, Alberta (Canada).

DIGITAL SHORTS ABSTRACTS

Collaging digital geographies.

Robert Lundberg

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The COVID-19 related lockdowns that characterised urban life during 2020 forced researchers interested in urban public space to adopt novel methods. Collage is one such method that was adopted as part of Monash University's investigation of Robots in Public Space. This digital short will explore how the strengths of collage as a technique for exploring embodied experience - by using the visual as a way into the felt - were used to break out of the bounded space of a zoom interview and make possible an affectively and sensorially rich exploration of future digital spatialities in which robots are part of the urban fabric. It will look at what was learnt from this experience and how that can be applied to other research that is interested in how the digital and the spatial are inculcated in the configuration of urban geographies. And will draw on the prototyping of methods done as part of my doctoral research to demonstrate how collage can connect with mundane, as well as novel, digital configurations. As a research method collage is undertheorised, and this digital short seeks to provoke discussion about its merits, and the possibility for its use.

The Digital Geographies of Ecotherapy.

Rosie Knowles

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Recently there has been an expansion in digital technologies offering access to ecotherapeutic spaces. The pandemic has encouraged people to turn to alternative solutions for their mental wellbeing. Lockdown has resulted in many being unable to access 'untouched wilderness', or what is often deemed suitable as an ecotherapeutic landscape. This has given rise to digitalised ecotherapy experiences, seeking to offer immersion within the home. Forest Bathing (Shinrin-Yoku), is an ecotherapeutic practice originating from Japan, promoting healing within forests. It has recently risen in popularity and circulated globally and is now prescribed by the Japanese government's national health programme, promoted by UK National Trusts, used as a tool for wellness gurus, and experienced within the home through sonic/visual immersive apps and wellness tools (including forest sprays). Scientific studies have quantified the benefits of forest bathing experiences (e.g. hormone levels, heart rate). However, Cultural Geographies and Health Geographies lack research into this ecotherapy and its digital implications. I seek to explore this through a virtual creative ethnography, inviting participants to share their experiences. This research is situated within Cultural Geographies of nature and the environment, questioning modern western binaries of nature/culture, human and non-human, in this attempt to commodify and digitalise nature. I will draw upon feminist and creative geography perspectives and methods to explore this practice at the scale of the body/home. This responds to calls from health geographers to challenge abstraction and universalised embodied accounts of health, using participatory creative methods to enable the articulation of sensory and affective experiences.

Theorising self-tracking and the geographies of surveillance in the lives of young people.

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There has been a growing use of self-tracking technologies to track 'health' in everyday life, which has resulted in growing concerns over young people's obsessive monitoring practices and negative selfimage. As Goodyear et al (2019) identify, previous research often views technology as a solution or as a deterministic technology of surveillance. Following this, this research looks at the complexities of this usage, offering a more nuanced approach to this in the context of young people's everyday voluntary use of technologies outside of institutions. Thus, examining how 'health' and the 'healthy' self are being reformulated through the data from these devices and their associated surveillance. This digital short will highlight the multiple theories – feminist new materialism, Foucauldian theory and social capital theory - synthesised in this research, used to better understand how humans come together with digital technologies in everyday lives. Through combining these theories, this research examines the body as a site of power intervention, aiming to better understand how the surveillant gaze relates to self-regulation of the 'healthy', ideal, neoliberal gendered subject. In applying social capital theory, this research analyses how certain performances of health may be reified over others in these digital spaces, leading to the transfer and development of social capital. In synthesising these theories, this research will offer insights into how to better understand and negotiate what 'health' is and how it is practiced in digital spaces.

Al: Anthropomorphism and Dehumanisation.

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The use of Artificial Intelligence is becoming widespread and as we continue to ask 'can we implement this' we neglect to ask 'should we implement this'. When AI is implemented as a model there are various frameworks and conceptual journeys one should take to ensure a robust model; context is one of the vital parts of this. AI is now expected to make decisions in a wide range of situations, from deciding who gets a credit card to Cancer diagnosis. These decisions affect most, if not all, of society. Even if we do not get a credit card, sharing of our information to multiple systems could result in discrimination in other systems. Therefore, if we do not understand, or use, fundamental modelling principles then we can cause serious effects to society. Recently more serious effects of AI have been observed. We are aware of discrimination within credit card allocation due to gender and race and we have seen benefits allocation incorrectly implemented by unaccountable algorithms, however, the most recent observable issue is dehumanisation. Dehumanisation is the human reaction to overused anthropomorphism and lack of social contact caused by excessive interaction with technology. This can lead humans to devalue technology, but also then to begin to devalue other humans. This is a contradiction of the use of 'social robots' and 'chatbots', indicating that the negative effects would certainly outweigh any perceived positive effects of the use of this technology. It is clear to see that, due to lack of testing and modelling forethought, we are entering unchartered territory that holds a vast array of consequences, some that we are yet to observe.

The invisible infrastructure: management and perceptions of the electromagnetic spectrum.

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In the case of telecommunications, the electromagnetic spectrum forms part of the infrastructure which is the foundation on which numerous devices depend. The spectrum underpins much of everyday life, and as Shepard (2009: 210) highlights, it is 'embedded in manifold ways'. The dependency upon the spectrum means that it is highly valued and considered by some as a basic necessity akin to water. However, it is also an entity which is easily forgotten as it functions beyond the human senses (Dunne, 2005). Even though on an everyday level the presence of, and dependence upon, the spectrum may not be obvious, by using the example of 5G technology, there are two key ways it is drawn into focus: management and perceptions. The development of 5G technology is broadly based on an expansion into 'new' areas of the electromagnetic spectrum not previously used by the mobile network operators. There is a whole range of policy decisions, licensing processes, and international cooperation involved in order to ensure the spectrum is being used effectively and efficiently. Alongside this, the spectrum and the frequencies involved in 5G have become entangled in Stop 5G protests revolving around the safety of the electromagnetic frequencies. Situating the discussion in relation to 5G technology this digital short will explore some of the main tensions and challenges entangled in this invisible infrastructure which forms the basis of everyday life.

Telecommuting amidst Covid-19: The Governmobility of Working-from-home Employees in Hong Kong.

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Covid-19 is rayaging the world. In order to cut off the chain of virus transmission between people, various types of mobility restrictions have been initiated around the world. Under this circumstance, working is also restricted to maintain social distancing. In the blink of an eye, the world has become a 'work from home laboratory'. Through the rapid circulations of information on the Internet, teleworking effectively eliminates daily commuting and allows people to work remotely from home. Considering Dorow, Roseman and Cresswell's (2017) call for 're-working mobilities', the author finds that extant literature lacks a thorough investigation into the politics of mobility embedded in teleworking. In particular, how the ever-changing power relations of teleworking produces or shapes various forms of (im)mobilities, and what opportunities and constraints virtual mobility brings to spatial mobility (or conversely). From the perspective of the politics of mobility, teleworking can be considered as a new form of society-making involving sociality, sociation and network capital intertwined with (im)mobility. Teleworking enables the ruling of information flows and circulations work through (self-)governed workers and their complex relational networks. Compared with before Covid-19, workers are subject to self-governance and governance-at-a distance. Hence, this research adopts the notion of governmobility proposed by Bærenholdt (2013) as a theoretical main axis, and supplemented by Cresswell's (2010) interpretation of mobility (i.e. the physical movement, representation of (im)mobility and experienced practices of (im)mobility) to investigate how teleworking arrangements influences the (im)mobile experiences and practices of workers.

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Working during the pandemic: how holistic training and computer-based work helped vulnerable populations to cope.

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This project explores the impacts of COVID social distancing restrictions on employees of a Business Process Outsourcing (BPO) social enterprise which focuses on the reintegration of survivors of trafficking and other vulnerable populations. Using Participatory Digital Storytelling, 12 employees shared their experiences during lockdown in Cebu, The Philippines, as well as working in the office keeping social distancing regulations. Findings show both positive and negative impacts of working from home and the new office set-up. Also, it shows the different ways employees used to cope to the impacts of the pandemic, most of which link to the holistic approach the company has to employees' training (which focuses both on their skills, physical and mental health, and social and soft skills), as well as their ability to work remotely (thanks to working with computer-based work).

"Sharenting" amidst a Pandemic: Making Sense of Parents Sharing their Children's Photos Online during Quarantine and Implications in a Postlockdown world.

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This think-piece explores the act of parents sharing their children's everyday spaces online during the pandemic quarantine. During the coronavirus pandemic, information on children's quarantine lives was heavily shared online. Of particular interest is the concept of sharenting or "the habitual use of social media to share news, images, etc. of one's children" (Sharenting, 2016). Through the use of social media, a space has opened for parents to share experiences, form groups and support each other around the theme of parenting (Brosch, 2016). Two important questions: 'How do we make sense of sharing children's spaces online?' and 'What are the implications of sharenting to a post-lockdown world?'

A short response to this is positioning theory's notion that individuals "position" themselves and others via "images, metaphors, story lines, and concepts" (Davies & Harré, 1990: 46). This lens explains how the online mode of communications created new constellations of shared experiences, meanings and memories of the lockdown. Parents who engage in sharenting position themselves and their children into digital frames. Comments, suggestions, and other opinions co-create the meaning of what was posted about children's spaces. Those who take part in such communities, both as critic or supporter, position themselves in the construction of the representations of children and their spaces. The next agenda for digital geographies research is to unpack what frames the experience and meaning of children's spaces in a quarantine and the ways in which sharing a space can be depicted, negotiated and even resisted at the interface of mediated communications.

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Young people, violence and the 'everyday' co-production of geopolitics in PlayerUnknown's Battlegrounds.

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This research will focus on young people who play PlayerUnknown's Battlegrounds (PUBG) and other military-themed Battle Royale videogames, to understand how geopolitics emerges through co-productive, 'everyday' practices in ludic assemblages, and also to explore the effects of this on young people. Advancing emerging scholarship within the sub-discipline of popular geopolitics, this research will argue that processes of globalisation, such as technological improvements in online communications, have enabled the young people who play videogames, to 'co-produce' geopolitical assemblages. It will do this by recognising and engaging with young people as active 'geopolitical agents' to understand the ways in which they are involved in the co-production of ludic assemblages, through 'everyday', 'violent' and creative practices of videogaming. It will also attend to the social effects of engaging in these practices of geopolitical co-production that young people must then negotiate in their everyday lives. This work will be done via a participatory mixed methods approach towards assemblage, using hybrid ethnography and semi-structured interviews to investigate how the young people who play military-themed Battle Royale videogames, co-produce and live geopolitics (Dittmer and Gray 2010). In doing so this research project will move away from the abstract, 'textual' focus of prior scholarship on how popular geopolitical discourse shapes the everyday, by instead focusing on the ways in which young people are co-constitutive of the geopolitical assemblages that emerge in their everyday lives.

Influence of mobile media on digital placemaking practices - preliminary research results.

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Nowadays, dynamic development of information and communication technologies including mobile media is treated by geographers as an essential factor of production of space. Mobile media changes the ways in which people finding, experiencing and interacting with places. Virtual space is filled with digital content about places created, among other things, by text, images, rankings, ratings or labels assigned to a given location. We are not only a recipient reacting to this information but also its co-creators. Therefore, contemporary places could be treated as an amalgam of digital content, physical objects, locations and people, while spatiality could be considered in the context of mediation by mobile media. This raises the question of what attributes of places are most commonly shared in virtual space and which places do they refer? Who are their creators? Finally, how does mobile media limit or expand perception of space and experience of being in a place? The aim of the study is to determine the influence of mobile media on digital placemaking. This process is understood as practices related to the potential for development and access to dynamic aspects of location through digital technologies that influence mobility patterns and decisions about travel destinations, as well as practices that combine and augment material world experiences and imaginations about a place. During the presentation the author will share the preliminary pilot study results which contains findings from in-depth interviews combined with quasi-experiment and questionnaire interviews.

Beyond the empathy machine: how social advocates use the affordances of digital realities for disruptive spacemaking.

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Whilst digital realities such as VR and AR are increasingly being heralded as conduits for social change, much of the research concerning these forms focuses upon their ability to generate empathy for others, through the affordance of immersion and embodiment. Accordingly, advocates for social causes are predominantly using digital realities to (re)construct existing and historical spaces, with the intention of creating altruistic emotional connections. Yet critics observe that these attempts can be limiting or even counterproductive, in part due to the way immersive spaces undermine the human 'imagination gap'. I therefore argue that developing a more comprehensive understanding of digital realities is essential to allow greater recognition of how these mediums can create non-linear, disruptive spaces and so offer alternative possibilities for advocates. Consequently, I am conducting an integrated artefact analysis of recent AR and VR resources produced by UK environmental charities and advocacy groups, seeking both examples and trends of different spacemaking approaches. This research forms the basis of a typology which aligns affordances, space construction, and social change drivers to reveal a wide range of uses beyond empathy generation. In particular, I demonstrate how digital realities are well-suited to building deterritorialized and utopian spaces, through their additional key affordances of agency, transcendence, and destabilization, enabling advocates to better challenge power structures and build movements. In doing so I aim to support future reappraisal and further investigation of digital realities by both advocacy groups and digital geographers.

(Re-)Imagining subjectivities of refugees/asylum seekers in the digital realm.

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UK's asylum regime, as embodied in various laws and legislations, has become increasingly hostile towards asylum seekers and refugees. This 'hostile environment' has given rise to hostile ways of seeing and visualising refugees/asylum seekers which is further solidified by the national mainstream media. While dominant narratives (and visualities) on asylum are primarily framed at the national level (by the Home Office and national media) I aim to explore the digital as a site where nationstate-centric accounts of asylum may reconfigured and potentially unsettled. The digital domain (e.g. websites, social-media, online campaigns) is being increasingly used by advocacy/humanitarian actors to register dissent against hostile immigration policies and to (re-)present refugees/asylum seekers in a new light. For example, a representational strategy used by certain humanitarian actors on their digital spaces is to depict refugees/asylum seekers engaging in everyday mundane activities (e.g. cooking, gardening etc) in the host society which unsettles national imaginaries. In this context, I ask the question: How do digital-visual artefacts (e.g. images, photographs, illustrations, video/ film) on the digital spaces of advocacy/humanitarian organisations construct the subjectivities of refugees and asylum seekers in the context of the UKs hostile environment? On a methodological level I suggest that being more attentive to the 'visual' and other modes in these digital spaces besides the textual and discursive aspects will add a rich dimension to the analysis thereby enhancing it. This line of enquiry is in keeping with the recent 'visual' and 'digital-visual' turn in geography (Rose, 2015; Leszczynski, 2019).

Royal Geographical Society with IBG The symposium is organised by the Advancing geography Digital Geographies Working Group (DGRG). and geographical learning The DGRG is a research group of the Rotal Geographical Society with the Institute of British Geographers.