Comics and Zines for Creative Research Impact: Ethics, Politics and Praxis in Geographical Research

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Abstract

We contribute to critical debates about the ethics, politics and praxis of research impact by drawing on our experiences of translating research into a comic and a zine. We demonstrate how comics and zines construct ethical and nuanced depictions of socio-politically marginalised groups, moving away from 'damage centred' research frameworks. Comics and zines enable readers to access places and moments that other mediums are less able to, and they gesture toward a participatory, slowed-down practice of research engagement. Finally, we suggest that current indicators of impact ought to consider the methods and praxis of impact, rather than focus on measurements related to outputs, as a way to creatively encourage research to meaningfully engage with participants and publics.



Keywords

Comics, zines, creative, ethics, geography, impact

Introduction

With this paper we contribute to ongoing debates in critical human geography about the ethics, politics and praxis of research impact, using examples where the authors translated their research into a comic and zine. Research impact, knowledge exchange and public engagement have become rapidly institutionalised within academia. Impact now accounts for a higher proportion of institutional grading systems, and has become normalised within the academy as part of success as a scholar (Turner 2014). Engaging with communities, sharing findings in meaningful ways, involving participants in study design and fieldwork, and so on, are all ways in which human geographers have (amongst others) been producing research with 'real-world' application (see Pain et al. 2011, Fuller 2008). Indeed, how impact has been understood, approached, engaged with or resisted by geographers has been widely discussed and critiqued. Examples include a special issue here in ACME on the impact agenda in human geography (Rogers et al 2014) and a collection on intersectionality and impact (Hall and Hiteva 2020).

Our position is informed by these burgeoning debates, and a resistance to write off an impact agenda all together. We argue for the need to provide critical account of the process of doing impact, by moving away from prescribed ideas of measurement and outcomes and instead towards an acknowledgement of the ethics, politics and praxis of these processes. We are also mindful that impact is a nebulous concept with socially and culturally contingent meanings (see Cook et al. 2014, Pain 2014) and that claims of impact need to always be socially and spatially mediated; impact on what, for whom and to what ends? We urge for a reconsideration of impact as an outcome and end point (see Holdsworth and Hall 2022). In this, we also seek to bring forward critical discussions about impact as innovative, accessible and meaningful, and as such creative impact can be a force for destabilising norms of 'productivity' within academia (see The Autonomous Geographies Collective 2010). This is not so much about 'slow impact' per se, rather about acknowledging the political potential of impact to contribute to creative cultures and support artistic practices, collectivising of resources, resisting neoliberal agendas, and promoting collaboration over competition (Bagelman and Bagelman 2016, Mountz et al. 2015, Rogers et al. 2014). In doing so, we engage with and contribute to growing bodies of critical geographies at the intersection of impact, visual culture and creativity (DeLeeuw and Hawkins 2017, McLean 2014, McLean 2022, Mountz et al. 2015, Tolia-Kelly 2011).

Within the impact agenda, academics are increasingly expected to be better visual storytellers, which has seen a recent and rapid uptake of mediums such as documentary films (Dyson et al 2019), animation (Hine and Edwards 2021), participatory art (McLean 2022), and

photography (Arnall and Kothari 2021) to translate and engage the wider public in geographical research. Yet in this paper, we want to discuss the possibilities and versatilities of translating geographical research into comics and zines. We draw upon our experiences of developing a comic (After Maria) and a zine (Everyday Austerity), which involved the translation of ethnographic research with communities facing everyday hardship and marginalisation into an illustrative format. These examples provide insights on developing comics and zines with creative professionals across disparate research contexts (Europe and Latin America), formats (comics and zines) and audiences (educational, policy and public). Our aim is to use our experiences as a means of developing and encouraging critical discussions about creative research impact.

We first discuss the institutional and social context for developing creative research impact, leading to the examples of comics and zines, including the role of visual and creative geographies. We then provide further details on our empirical examples and the underpinning research projects. From here, we explore the participatory processes of creating comics and zines and the everyday politics of their imagery and creation.

Crafting Creative Impact: Comics and Zines

Despite initial resistance and skepticism, research impact has since been established as a new performance norm for universities (Cook et al. 2014, Pain 2014). A common theme within definitions of impact is the demonstration and communication of how research has led to tangible (ergo quantifiable) benefits to society, whether through uptake into policy, shaping public understandings, or industry practices (Gunn and Mintrom 2018). Here, impact is defined as raising awareness, informing, influencing or challenging the understanding, behaviour, views or values of non-experts (e.g. the general public, schools, community and interest groups). This drive for impact and public engagement is positioned as crucial to both helping inspire the next generation of scientists, and highlighting the impact and role science has in public life. It also has a role in peer-to-peer communication and wider dissemination of ideas throughout the community.

Nonetheless, human geographers especially have called for researchers to retain a sense of creativity, curiosity and critique (see Macpherson et al.2014, Phillips 2014). Public engagement as impact in particular lends itself well to creative research outputs that make research more accessible and understandable for those who are unlikely to be familiar with a specific research area (Arevalo et al 2020). In particular, attention to visual storytelling and data visualization is growing in geography communication to reach policymakers (Herring et al. 2017), the public (Cairo 2013) and students (Cope et al. 2018), and other academics (Jones and Evans 2011, Katz 2013).

A preoccupation with visual theories, methods and praxis is by no means a new area of geographical interest. As Tolia-Kelly (2011) describes, Geography has a complex relationship with the visual, which comprises an interest in visual culture and (increasingly, in light of impact agendas) the visual as a vehicle for research communication. To this, we would also add the

visual as method. These contributions, and many others, have provided critical insight into how and by whom the visual is created, curated, seen, felt, absorbed, interpreted and so on (Rose 1993). This also speaks to critical debates about the production of knowledge, including how the world is engaged with through the senses. It is here where critical geographies of impact, visual culture and creativity meet.

More recently, and with a growing of sensorial curiosity within the discipline, geographers have become increasingly engaged in creative geographies as a subject and object of research practice. As McLean (2014, p.673) illustrates, creative geograpies are as much about creative practices, economies and relations as they are 'race, class, and gender inequalities reproduced through regimes of regulatory power and discipline' (De Leeuw and Hawkins 2017). This includes a growth of interest in methods spanning materials and memories, senses and emotions, mobilities and motions (Holmes and Hall 2020). While there have been critiques about a somewhat over-reliance on visual and observational methods (Crang 2009), we note that rarely is a method simply visual. Examples such as sketching (Heath and Chapman 2020), dressmaking (Slater) and surfing (Stoodley 2020) all evoke various sensory insights, as well as being creative in how and with whom they are conducted; their design, doing, analysis and/or engagement. They can also simultaneously operate as examples of understanding visual culture, using visual techniques, and communicating in visual ways; the differences between these modes need not be so stark (Tolia-Kelly 2011). As such, when discussing comics and zines as examples of visual and creative praxis, in this we also include their material, emotional, sensory and participatory qualities; as well as their political and ethical capacities to 'speak back' to neoliberal imaginations of academia (Bagelman and Bagelman 2016, McLean 2014, McLean 2022).

The move towards visual, creative and material forms of research outputs (Tolia-Kelly 2011) has also seen a recent and rapid uptake of comics and zines as mediums to translate and engage the wider public in academia. Although there remains criticism within academia (and beyond) that comics and zines do not represent 'serious' academic work, these critiques are increasingly drowned out by the realisation that such mediums can both be powerful and enlightening ways to communicate research. Moreover, as Hawkins (2013) notes in discussion of art-geography, an expanded basis of geographical inquiry (e.g. to include visual, creative and material forms) can allow for an incorporation and reworking of representational politics. Otherwise, interest in comics and zines in human geography and the wider social sciences has, however, largely concentrated on these materials and associated cultures as empirical examples of conceptual debates (e,g, Holland and Dahlman 2017, Peterle 2017) or as teaching tools (e.g. Bagelman and Bagelman 2016, Piepmeier 2008), rather than developing these materials as a way of sharing findings or for public engagement.

A comic is generally an illustration that employs metaphor and/or storytelling to clearly communicate an idea to a broad audience (McCloud 1994). Within the North American and anglophone context, comics that centre on and tackle political, social and economic issues are known as "serious" comics. These developed in the 1960s and '70s, largely in New York and

San Francisco and were independently created and produced. They have origins in underground and politically left movements that sought to challenge mainstream ideas and understanding of social and political issues (Chute 2017). 'Serious' comics, shifted away from the notion that comics had to be silly or even slightly inclined toward children. Rather, serious comics produce complex storylines that are avant-garde, political; and taboo-shattering.

Inspired by the notion that comics can deal with 'serious' issues, an increasing number of academics have communicated their research in comic form. In public health research, comics have long been recognized as an effective tool for reaching lots of different populations for education on subjects like cancer (Krakow 2017), fitness (Tarver et al 2016), and diabetes (McNicol 2014) for example. Other examples of comics created by/with academics include Positive-Negatives (Positive Negatives n.d. positivenegatives.org), A Vision for Emberá Tourism (Theodossopoulos 2019), Lissa (Hamdy and Nye 2017), Gringo Love (Carrier-Moisan 2020), Mentawai! (Pendanx and Juguin 2019) Love in a Time of Precarity (Taylor 2019), and Little Miss Homeless (Earle-Brown 2020).

Zines have different, albeit sometimes parallel, cultural histories. Zines are self-produced (usually handcrafted and photocopied onto paper) and self-distributed, mostly for free or for a small fee to cover costs – they are not designed for profit. Piepmeier (2008, p.214) describes zines as 'quirky, individualized booklets filled with diatribes, reworkings of pop culture iconography, and all variety of personal and political narratives'. Typically associated with alternative music and other subcultures, zines are part of a broader D-I-Y movement for political resistance and activism (Dunn and Farnsworth 2012, Harris 2003), a tool for grassroots communication and empowerment of often marginalised groups. As such, they are commonly aligned with feminist, anti-racist, working class, disabled people and LGBTQ+ movements for change. Their very production is considered to be a resistance of digitalised, globalised, consumer cultures (see Duncombe 1997): often, a limited number of zines made and distributed at any one time, and sometimes zines might be digitalised.

Regarding content, zines can be about anything, although most are either personal, fictional or deal with socio-political issues. Perhaps as a result of their underground nature, zines have not been as widely adopted by academics as comics. Furthermore, by virtue of their grassroots distribution and tangibility, tracing and tracking academic zines - whether made by academics, about academic research, or used in academic teaching – is difficult. In many ways they have retained their sub-cultural essence, although one response to this is that academia is not a sector that is representative of the general population, nor of the marginalised communities for whom this type of practice and platforming is vital.

In what follows we explore further our motivations for developing comics and zines as a tool for academic praxis. Both authors worked collaboratively with artists to translate their research in creative forms.

After Maria Comic and Everyday Austerity Zine

The idea of a comic and zine appealed to the authors for a number of reasons. Shari ng a comic or zine containing stories of disaster recovery and everyday austerity could be seen as a form of resistance, of going beyond hefty reports, florid academic language, closed-door conferences and steep paywalls. The idea of having something tangible, colourful and pithy, that could cut across experience and knowledge, age and background, was the aim. So was the opportunity to communicate research findings in a form that was informative, enlightening and empowering- but not patronising. It was also a way for the authors to get in touch with the data, finding ways to create meaningful narratives around their projects and engage a wider readership to understand the lived impacts of austerity.

In collaboration with illustrator, John Cei Douglas, Gemma produced the twenty-page comic After Maria: Every Recovery from Disaster (Sou and Cei Douglas 2019). The comic is based on her one-year ethnographic research project, which explored the recovery of low-income Puerto Rican families that were affected by Hurricane Maria in 2017 (see Sou 2022, Sou and Webber 2019, 2021 Sou et al 2021). Data were collected through five visits, where she conducted interviews with each household head. She also interviewed local and national government officials, as well as Non-Government Organisations (NGOs). Extensive observation and visual methods (i.e. photography and videos) were also conducted, and she consulted pertinent disaster recovery policies and data, as well as census data.

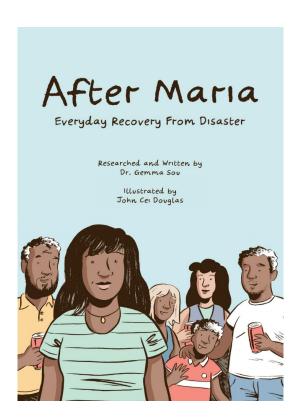


Figure 1. Comic, After Maria: Everyday Recovery from Disaster

For many years Gemma has read 'serious comics'. Therefore, she was sensitive to the storytelling power of comics and their ability to synthesise and communicate complex social narratives into understandable, engaging and beautiful stories (Chute 2017). To find a graphic artist. Gemma pitched her comic on a Facebook page for UK based graphic artists and was met with many inquiries. She asked two of her favourite artists to sketch a scene that she had scripted, and from there she decided to work with John Cei Douglas¹. In consultation with research participants, Gemma would write the script, (dialogue, narration, what is happening in the scene, characters' emotions, mood/ambience), which all helped John to create the visual story.

The comic tells the story of a fictional family, with the story, dialogue and experiences of the characters based entirely on data collected. As such, *After Maria* ties together the main findings and experiences of all of the Puerto Rican families that Gemma spoke to. *After Maria* was made freely available online (in English and Spanish) in May 2019 and has featured in the Guardian UK newspaper, numerous blogs, and online and physical exhibitions. Over 2000 physical copies were sent to educators and academics across the world as well as the families in Puerto Rico. Educators working at high school, undergraduate and postgraduate level in over twenty countries have used it as a teaching resource: disciplines include geography, anthropology, development studies, gender studies, media studies, environmental science and English literature. Individuals working in NGOs have also used it as a resource to facilitate participatory workshops with communities affected by disasters.

Critical geographers have extensively engaged with comics, particularly those who have been arguing for heightened attention to the material and representational elements of texts (e.g. Ogborn 2002). This work has been a corrective to literary geography's over-focus on text-based materials and visual culture's emphasis on photography, cinema and other forms. We view the After Maria comic as a response to calls within geographer from Dittmer (2010) and Fall (2021). Dittmer suggests that geographers should start thinking about comics as a visual medium that can provide the language for comprehending and communicating complex, nonlinear forms of causation across the discipline. This speaks to critical debates about the politics of (non)representation, and the importance of alternative means by which knowledge is shared and the space of everyday life becomes 'filled' (Smith 1997: 510; Hawkins 2013). In Fall's (2021: 17) innovative paper, for instance, she combines a text-based literature with images from two Italian comics to demonstrate that a "dialogue of images and words results in a call for an empathic geography, connecting bodies and experiences visually, suitable for depicting a fragmented world built upon making sense of a diversity of viewpoints.

Our second example, the *Everyday Austerity* zine² was a collaboration between Sarah and Claire Stringer, of the More-than-Minutes collective³. Sarah first become aware of zine

¹ For more of John's work, see https://www.johnceidouglas.com/

² The zine can be found here: www.everydayausterity.wordpress.com

³ See https://www.morethanminutes.co.uk/

culture as a regular at punk and indie music gigs in Northern England in mid-teens, though became more familiar when some friends started making them. This introduced her to a world of zine fairs, libraries and workshops, though she had never thought to make one her own. It was following a two-year ethnography with six families in Greater Manchester from 2013-2015, exploring lived experiences of austerity, that the idea started to crystallise. The research was carried out during a period of intense public cutbacks in the UK, of systematic welfare, social care and local government retrenchment (Pearson and Elson 2015), and the project gave prominence to the experiences those living with the fall out (Hall 2019). Over two years, strong rapport and attachment can develop with participants, and feelings of injustice but also guilt (in the inability to transform their situations) can weigh heavily (Stacey 1988). The impacts of austerity were felt in her own life, with family and friends deeply affected. For these reasons, Sarah had a strong urge to communicate the findings and stories of participants to a wider audience. This was met with a desire to ensure the findings would be more accessible, both in cost (given the subject matter) and comprehension.

While unconfident in her artistic abilities (see Bagelman and Bagelman 2016), Sarah had a crafting streak that she was excited to flex. A simple zine design consists of one folded sheet of A3 paper which, when carefully cut at the centre fold, makes a small booklet of six pages with a front and back cover, and a poster in the middle (Akbari and Bhatt n.d.). This fitted her ideas well – six pages, one each for a vignette about the families' everyday lives in austerity. The back page was used to provide details on the project, and a centralised image filled the fold-out. From owning some zines, made only of paper, she knew they become ragged quite easily. The *Everyday Austerity* zine therefore included a card cover encasing the paper zine, held together with an elastic band (see Figure 2).



Figure 2. Copies of the Everyday Austerity zine

The idea of having written vignettes accompanied by illustrations came from the aim for the zine to be readable, informative and eye-catching. Sarah had seen Claire's work as an illustrator within the More-than-Minutes collective, and liked both the ethos of the collective and the style. The minutes they illustrate are designed to be a fast paced record of discussion, together creating a larger picture. Following their design, the zines were photocopied and distributed by Sarah. Over 300 hard copies were made, posted out to people for free after a social media call and word-of-mouth, as well as to organisation in the area where the research took place. Copies are held in some zine libraries around the UK and further, and have made their way onto teaching curriculums, policy-makers' desks, academic's bookshelves, and personal collections. After hard copy distribution, the zine was digitalised and made available online (see footnote 4).

Our reflections on developing and sharing the After Maria comic and Everyday Austerity zine are intended to be critical, self-aware and candid. We want to share what we learned from the experience, for what it says about the process, ethics and politics of creative impact (in a diffuse sense – see Cook et al. 2014) and more broadly about contemporary critical geographical praxis. Our aim is to explore the possibilities and versatilities of creative outputs and provide meaningful insights for others considering these approaches. To do this, the following sections explore the participatory processes and politics of creative research impact, using the comic and zine as our empirical fabric.

Towards a Participatory Process of Creative Research Impact?

Here, we discuss how comics and zines bring about a more participatory process in three particular ways. First, via intimate collaboration with artists; second, how their production creates spaces for research participants to shape how their stories are told; and third, how visual storytelling can increase the accessibility accessibility of complex research findings in engaging ways.

Producing a comic requires a set of skills that not all academics possess. Both authors chose to collaborate with illustrators to produce a script/storyboard, directly informed by collected data. These collaborations allowed us to work more creatively ourselves - a welcome break from sharing data and findings via traditional written forms. The key objective was to ensure the integrity of our research and the stories of our participants. We engaged in a process of "meaning making" to ensure that the accuracy and potency of our research findings was not lost through their translation into a visual story (Public Anthropologists 2020). We also aimed for an ethical portrayal of our research participants, through nuanced depictions of their experiences and personalities but which also retained their right to anonymity (see Hall et al 2021). Working with these principles, collaboration with the artists stimulated a creative dialogue between us as researchers who collate and analyse data, and the illustrators whose role it is to distil and communicate these complex ideas in aesthetically accessible ways. Reconciling these two approaches was challenging and exciting in equal measure.

Initially there was a lot of back and forth between the artists and researchers concerning the content, made-up of text (what is read: dialogue, captions, thought and sound), and visuals (what is seen: action of the story, artwork, layout, ambience, emotion of characters). Yet, our first attempts at scripts/storyboarding depended heavily on dialogue and captions to drive the narrative. This is not surprising because as academics, we are accustomed to words and text as the primary way to communicate ideas. Collaboration with illustrators forced us to make shrewd decisions about which findings we wanted the public to engage with and understand.

In the case of the *Everyday Austerity* zine, Sarah's desire to fit into a simple zine layout of eight panels plus a central art piece meant that she was heavily restricted in what content made the final cut. Claire was provided with a story from each of the six families from the ethnography, with multiple facets that could be illustrated. After Claire mocked up some draft illustrations, it was decided with Sarah that the central illustration, a poster, would contain a related image from each story (see Figure 3). This This ensured best use of Claire's work.

Furthermore, comics and zines have their own vocabulary: gutters, panels, tiers, balloons, bubbles, bleeds, splashes, perspectives, shading, folds, pleats and so forth. These are all elements that carry meaning and which exist meaningfully in relation to one another in the space on the page. Contemporary comics and zines ask us to reconsider several dominant commonplaces about images, including that visuality stands for a second-tier literacy. Notwithstanding, comics and zines involve a substantial degree of reader participation to decode narrative meaning and sometimes subtle imagery. And the visual content of comics and zines that once signaled a "lesser-than" literacy is now an integralpart of contemporary daily lives. Primary media intake, especially online, combines the verbal and the visual and often with complexity people learn to navigate quickly (Hattwig et al 2013).



Figure 3. The central image of the Everyday Austerity zine, when folded out

In each of our experiences, the artists' expertise in graphical storytelling was invaluable as it ensured that the visuals and spatial organisation of information (rather than text) drove the story. For example, a person's emotion, whether anger, fear, shock or delight can be depicted through facial expression, body language, shading, or even the angle and perspective of the image: rather than explicitly stating this in dialogue or captions. For instance, in Figure 4, the family in After Maria have just discovered the extent of damage caused by Hurricane Maria. The characters' feelings of vulnerability and despair do not need to be didactically expounded for the reader. Instead the image conveys this through the body language and facial expressions of characters. The wide birds eye view perspective also makes the characters appear small in the panel, which signifies the family's initial sense of helplessness in relation to the enormity of the problem they face.

Similarly, in *Everyday Austerity*, the story of Sharon and Bill offers an insight into everyday ways of getting by during hardship and personal crises. The example in Figure 5 below illustrates how their Saturday morning routines help them to keep going, made up of simple pleasures-making a cooked breakfast, going to local shops, petting dogs and feeding horses, having a walk, a tipple of beer, and doing the crossword-that they look forward to. Accompanied by a short excerpt or vignette – as a means of rich yet specific story-telling – the imagery of the two participants displays a physical sense of ease and togetherness. This is portrayed by their close corporeality, relaxed posture and eyes both on the crossword puzzle as a shared, enjoyable activity. Furthermore, the choice of typeface is an important one, again selected in dialogue with Claire. Given that the excerpts were often taken from field diaries, sometimes verbatim, and that the zine tells very personal stories of living with austerity, it was agreed that the typeface needed to convey this. Claire suggested using one that she had designed from her own handwriting, to give a sense of a handwritten note or diary entry.



Figure 4. After Maria comic

Visual storytelling also allows researchers to be economical with text in a way that maintains the complexity of findings (Aiello and Parry 2019). A researcher may need 500 words to communicate an idea that can be communicated in a few images, with limited dialogue (Public Anthropologists 2020). Therefore, it is critical to collaborate with an experienced artist who is sensitive to the research findings and also has the skill and intuition to distil ideas into images. Artists require sufficient freedom so they can effectively communicate the ideas presented, meaning researchers must forego some control over the outputs if they are to fully embrace the visual narrative form of comics and zines.



Figure 5. 'It's the simple things', from the Everyday Austerity zine

Alongside balancing researcher-artist relations, researcher-participant relations should be considered when thinking about participatory processes for creative research impact. We find that comics and zines make research more accessible to those involved, and offer a more participatory opportunity for research participants to influence and understand the work of academics. Gemma's research in Puerto Rico took place as repeated visits, and she would write a script for approximately four pages of the comic, after each visit. John would roughly sketch these four pages (see image 6), and Gemma would show this to research participants on her subsequent field visit. This allowed her to gather feedback from those who were directly affected by Hurricane Maria, and amend the comic accordingly. As such, the comic is a fictionalized sequence of words and images that tell of experiences directly siphoned from the material gathered during ethnographic research. Dix et al (2019: 32) refer to this as the 'truth-fiction' spectrum or "graphic truths", where it is not the intention to represent "reality" in an objective sense. On the one hand, the illustrated story is based on the filtering of events and experiences through individual testimonials and the creative license deployed in working in

the graphic medium (See Sou and Hall 2021). On the other, it enables participants and readers to "see the truth" in the schematized and fictionalized representations (see Smith 1997).

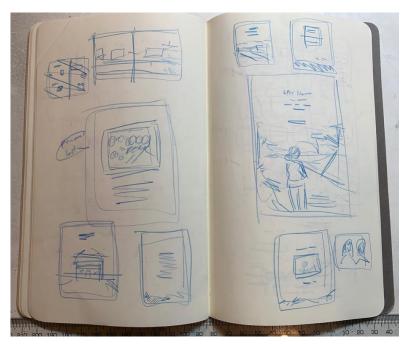


Figure 6. Rough sketches of the After Maria comic

Research participants felt more comfortable directing, critiquing and suggesting ideas for an output that visually conveys environments, events, dialogue, experiences and people they are familiar with. In contrast, academic jargon and theoretical obfuscation often found in journal articles and books can quickly marginalise research participants from engaging in meaningful feedback (Detweiler 2014). As such, producing comics and zines can subvert the traditional and asymmetrical researcher-"researched" relations, as research participants become active collaborators in the process of knowledge production and communication.

We suggest that when people (participants and audience alike) can "see" themselves in a creative work they are more likely to become engaged and invested. This is not necessarily a case of familiarity, or of the creative work mirroring people's realities, because 'relationships can also be built on bodily difference' (Hall 2022, p.310). Instead, it is about recognising the diversity of lived experiences, and being able to relate and connect to the most mundane of activities, emotions and expressions. This is a means by which comics and zines can offer a differently, micro-scaled yet incredibly meaningful type of impact. It can also be an ethical endeavour, which ensures "people get to see their stories" (Public Anthropologists 2020). The physicality of a printed comic or zine also ensures research findings can be presented to participants easily.

Furthermore, people typically prefer reading print rather than digital (Loh and Sun 2019), and psychology research suggests people often value the physical version of a book more than the digital version (Atasoy and Morewedge 2018). Relatedly, the visuality of comics

and zines is one of the main reasons why they can be so engaging and accessible to 'non-experts'. This is significant because academic writing is often criticised for being overly complicated and impenetrable to anyone outside of a small circle of scholars (Kamler and Thompson 2014). Yet, the visual narrative in comics and zines can illuminate obscure concepts, to create a metaphor that can be much more memorable than a straightforward text-based description of the concept itself.

Currently, the impact of research communication is largely measured (quantifiably) by its ability to shape policy and industry practices, by the number of people reached and to what extent it changes and influences the views of 'non experts' (REF 2019, page 74). Missing from these measurements is how research is communicated, and how it is communicated to participants and wider publics. We are mindful of the realities of current insititutional structures and their likely longevity, and so short of calling for the abolition of the impact agendas, we have suggestions on how to account for impact in more nuanced, even creative ways.

We suggest that impact evaluation should acknowledge the practices that make it possible for participants, in particular, to accessibly understand research findings e.g. to access, hold and read a physical comic or zine. Our experience with comics and zines shows how comprehension of research by participants is a significant element of critical geographical research that seeks to expand the boundaries of 'impact', by considering how and for whom impact is made meaningful. Therefore, we argue for widening the definition of impactful activity, and what counts as 'evidence', to give precedence to the praxis of accessible research communication and particularly for feeding back to participants. This is irrespective of whether a research project has six or 600 participants, because a praxis-led approach would prioritise and evaluate how (rather than 'how many') findings are made accessible and meaningful.

Despite the ability of comics and zines to distil complex ideas, we recognise that their reliance on the visual comics and zines means they are often not accessible for visually impaired people (Rayar et al 2020). Braille characters and dots can be used with various embossing levels to differentiate texts from frames and symbols; thicker embossing for frames and thinner embossing for texts (Yunjung Lee et al 2021). Other comic creators have developed audio(comic)books with visually impaired people in mind, in which dialogue as well as various sound effects and background music can be heard. GraphicAudio (n.d.), produces audiobooks of comics with the description of the full cast of actors, narrations, sound effects and cinematic music.

Politics of Creative Research Impact

In this section, we discuss the politics of creative research impact in making and sharing comics and zines. We posit that they are powerful and enlightening mediums with which to share research findings, particularly in their elaboration of research participants' identities and a focus on narratives often overlooked in popular culture and research. Illustration allows the reader to "go" places that other visual mediums such as film or photography typically do not allow (Public Anthropologists 2020). This includes visually depicting the inner thoughts of

research participants or places, moments and experiences that are inaccessible with or without audio-visual equipment. For instance, in the *After Maria* comic readers can view many experiences of disaster-affected families that are difficult for researchers to capture in photography or film. This includes inside people's homes on the evening Hurricane Maria passed through the neighbourhood (see page 4 of After Maria), or intimate moments such as, Joe and Susanna refraining from having sex whilst temporarily living in their extended family's home (see figure 7). In this way, researchers are able to take readers to places, times and experiences that are not possible in other mediums, such is the versatility of graphic illustration.



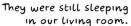




Figure 7. After Maria comic

Comics and zines also provide opportunity to challenge essentialist representations of margialised groups that often circulate in popular culture and academic research (Lewis et al 2014, Tuck 2009). Within popular culture, there is argued to be an over-reliance, a fetishizing perhaps, on documenting the suffering of people, which decontextualizes and uncomplicates why certain groups of people are disproportionately affected by social, economic and environmental change – disasters and austerity being a case in point – and how these can be addressed. With this, there is also a tendency to homogenise whole groups of people, obscuring the unique personalities, voices, experiences and histories of socio-politically marginalized groups (Chouliaraki 2013).

Speaking to this, Tuck (2009) argues that scholarly research on marginalized groups often narrowly focuses on documenting the agony and troubled lives of crisis affected people, or what she calls "damage centred research". Tuck calls on communities, researchers, and educators to reconsider the long-term impact of "damage-centred" research, which inscribes a one-dimensional notion of people as depleted, ruined, and hopeless (2009: 409). She makes the case for "desire-based" research frameworks, concerned with understanding and valuing complexity, contradiction, and the self-determination of lived lives. Within this discussion, she urges researchers to reimagine how findings might be translated so that researchers not only

document the painful elements of social realities but also the wisdom, hope and personalities of participants; a fuller spectrum of research participants and their experiences. Such an axiology is intent on depathologizing the experiences of disenfranchised communities and upending commonly held assumptions of paralysis within dispossessed communities (Scott 2014).

Coming back to our focus on visually depicting lived experiences of everyday hardship and marginalisation, the technological form and subversive culture of comics and zines is particularly well placed to construct embodied, situated and desire-centred narratives. In particular, comics and zines enable researchers to bring through the voices, identities, personalities, and hidden everyday personal experiences of research participants because they focus on character-driven narratives and the creation of three-dimensional characters who express their emotions and unique personalities, which lead the narrative without being too intrusive (Chute 2017). Our comic and zine aimed to portray desire-based images of our research participants by foregrounding their complexity as human beings, who have pasts, presents and imagined futures; as dignified in work clothes, as members of families and communities, as simultaneously serious, humorous and energetic.

Nonetheless, there are obstacles to note in terms of the depiction of social difference, particularly regarding race, class and disability to ensure that trite and inappropriate stereotypes are avoided (Pauwels 2010). In the case of the *Everyday Austerity* zine, the need to ensure the accurate racial identity of participants within the illustrations, such as Selma, was deemed a priority. Selma's experiences of everyday austerity were significantly shaped by microaggressive, racially discriminatory encounters with people and state alike (see Hall 2019, Hall 2022). However, there were concerns about the ability to retain her anonymity whilst also holding true to her likeness in the zine imagery, as a woman of colour in a predominantly white town.

For this reason, and taking from the advice of Muir and Mason (2012), Sarah worked closely with artist Claire to ensure the shading and skin tones used, and physical features such as hair style, colour and texture, loosely fitted with Selma's appearance (see the top left-hand illustration in Figure 3, and Figure 8 below), whilst making small changes to biographical elements. Making small changes to details, or avoiding the use of specific details of a person's biography (alongside photographs or other likenesses) gives space for the essence of personal experiences to be shared, but for anonymity to be extended (Muir and Mason 2012).

Taking deep consideration of research participants' identities and personalities within the comic and zine also allowed us to highlight the intersectional experiences of low-income families, and their ability to navigate adverse contexts. In fact, the culture of comics and zines insists on narratives that place the stories of individual characters at the centre, as well as foregrounding their agency and capacity (Public Anthropologists 2020). With this, the reductive idea that low-income families are passive victims of disasters and austerity can be challenged. As such, comics and zines provide space for denser depictions of research participants and their contexts than in text alone (Sousanis 2018).



Figure 8. Depicting race: Selma in the Everyday Austerity zine

However, we were careful not to romanticise families' 'resilience', and place too much emphasis on capacities at the household level. Overly focusing on the capabilities of families as the analytical explanation for impacts and recovery from societal hazards moves responsibility for risk towards affected populations, whilst the broader political, economic, social, and environmental structures that shape family resilience are obscured and left unexplored. One of the ways we did this was to ensure that any details about the research and findings are kept slimmed down, placing the focus instead on the stories as placed together, rather than our own academic interpretations. In the *Everyday Austerity* zine the inside sleeve of the card cover contained a very short introduction and similarly in *After Maria* there was a very brief introduction, plus 6 pages with information about 'Disasters around the world'.

In summary, we insist that creative research impact should steer far away from fetishizing damage and homogenising suffering but, rather, celebrate heterogeneity, uniqueness, hope and ingenuity (Brayboy, 2008; Grande, 2004; Vizenor & Lee, 1999). More importantly, damage, passivity and victimhood cannot be the only way, or even the main way, that researchers engage publics in their work. And we propose that comics and zines are powerful mediums to steer academic and public discourse away from essentialist and damage-focused narratives of people living through adversity.

Closing Thoughts

Academic research outputs do not typically consist of creative mediums such as comics and zines. Yet, our discussion highlighted how the respective crafts of illustrator and researcher can complement the translation of research as a comic or zine. As researchers, we are used to unearthing, interpreting, and analysing stories, then communicating these via mediums that are principally text based. Comics and zines provide a new and intriguing register to translate and share research findings. This includes the opportunity for researchers to depict research findings (places, moments and experiences) that other mediums such as photography or film are less able. They allow us to engage in our creative sides, while also requiring deep consideration of what research findings we think the general public should be aware of. This

can be a revelatory process that forces researchers to consider the ethics, politics and praxis of their research, and to make research communication participatory, via engagement with artists, research participants and modes of sharing alike.

Our discussion also higlights how impact should not solely be 'measured' according to indicators laid out in the the impact agendas of higher education systems across the world. Rather, we argue that a key measurement of impact should also encompass i) how research is communicated (i.e. mechanisms and forms of praxis), and ii) to what extent participants can access and understand the findings of academic research in which they participated. This may not bring about the transformation of social policy or behavioural change, which impact agendas seek. Nonetheless, we suggest research comics and zines go beyond traditional forms of research translation and dissemination, to enable more meaningful, sustained and personal engagements between participants, publics and research outputs.

In closing this paper we also want to highlight new pedagogical avenues that can contribute to and support traditional teaching from academic texts (also see Bagelman and Bagelman 2016). Combining the power of ethnographic research, with the unique aesthetic elements of comics and zines, allows researchers to tell stories in meaningful ways. Comics and zines require visual literacy to stitch together meaning where the reader fills in the blank between pictured moments, or where they flit between storied imagery, participating imaginatively in the creation of the story (Kneece 2015). For a reader navigating the space of the page, reading comics and zines can feel less directive and linear than reading most prose narratives. This way of reading stimulates both analytic and creative activity, a process that has been shown to enhance understanding (Mayer and Sims 1994). As such, they are excellent for developing critical analysis, because readers can use their wider understanding of theories, concepts and ideas they have learnt in class, or elsewhere, to unpack the stories' images, text, dialogue, and narratives. By critically reading visual texts, readers become more careful observers, a phenomenon that has been demonstrated in other contexts as well (Naghshineh et al. 2008). As such, comics and zines gesture toward a participatory, even slowed-down practice of engagement that allows readers to access complex ideas via a highly learnable form. Not only can this process potentially augment learning, but it can also facilitate empathy between author and reader by offering a portal into the individual's experience (Williams 2011).

Communicating research via comics and zines can be a political, ethical and praxis-led endeavour, placing participants at the heart of the research process, and ensuring their experiences shape how their story is told. We argue that it is important for academics to learn ways of communicating findings from research which are appropriate and enjoyable for their participants, and that comics and zines are two such avenues.

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References

- Aiello, G., & Parry, K. (2019). Visual communication. SAGE Publications Limited.
- Akbari and Bhatt (n.d.) How to make a zine, *The Creative Independent*, https://thecreativeindependent.com/guides/how-to-make-a-zine/
- Arevalo, V. J. C., Verbrugge, L. N., Sools, A., Brugnach, M., Wolterink, R., van Denderen, R. P., ... & Hulscher, S. J. (2020). Storylines for practice. *Sustainability Science*, 1-20.
- Arnall, A., and Kothari, U. (2021). The harbour transforming an island. Physical exhibition at Dhiffushi Island, Kaafu Atoll, Maldives.https://research.reading.ac.uk/global-development/photography-exhibition-launched-the-harbour-transforming-an-island/-accessed 17 July 2022.
- Atasoy, O., & Morewedge, C. K. (2018). Digital goods are valued less than physical goods. *Journal of consumer research*, 44(6), 1343-1357.
- Baetens, J. (2008). Graphic novels. English Language Notes, 46(2), 77-88.
- Bagelman, J. J., & Bagelman, C. (2016). Zines. ACME: An International Journal for Critical Geographies, 15(2), 365-392.
- Brayboy, B. M. J. (2008). "Yakkity yak" and "talking back". In M. Villegas, S. R. Neugebauer, & K. R. Venegas (Eds.), Indigenous knowledge and education (pp. 339–346). Cambridge, MA: Harvard Education Press.
- Cairo A (2013) The functional art an introduction to information graphics and isualization. New Riders, Berkeley
- Carrier-Moisan, M. E. (2020). Gringo Love. University of Toronto Press.
- Chouliaraki, L. The Ironic Spectator. London: John & Sons, 2013.
- Chute, H. (2017). Comics. In The Oxford Handbook of Law and Humanities.
- Cook, I. et al. (2014). Organic public geographies and REF impact. ACME: An International Journal for Critical Geographies, 13(1), 47-51.
- Cope MP, Mikhailova EA, Post CJ, Schlautman MA, Carbajales-Dale P (2018) Developing and evaluating an ESRI story map as an educational tool. Nat Sci Educ 47:180008.

- Crang, M. (2009) 'Visual methods and methodologies.', in *The SAGE handbook of qualitative geography*. London: Sage, pp. 208-225.
- Culpin, I., Dermott, E., Ives, J., & MacLeavy, J. (2021). Tangible co-production? Engaging and creating with fathers. *Area*, *53*(1), 30-37.
- De Leeuw, S., & Hawkins, H. (2017). Critical geographies and geography's creative re/turn. *Gender, Place & Culture*, *24*(3), 303-324.
- Detweiler, E. (2014). Why Inaccessibility?. Impact of Social Sciences Blog.
- Dittmer, J. (2010). Comic book visualities. *Transactions of the Institute of British Geographers*, 35(2), 222-236.
- Dix, B., Kaur, R., & with illustrations by Lindsay Pollock. (2019). Drawing-Writing Culture. Visual Anthropology Review, 35(1), 76-111.
- Duncombe, S. (1997). Notes from underground. Verso.
- Dunn, K., & Farnsworth, M. S. (2012). "We ARE the Revolution". Women's Studies, 41(2), 136-157.
- Dyson, J., Harrison, R., and O'Brien, N. (2019) Spirit Documentary. https://www.spiritdocumentary.com/ - accessed 17 July 2022
- Earle-Brown, H. (2020). Little Miss Homeless. https://issuu.com/harriet_eb/docs/little_miss_homeless_book_template_2
- Evans, R. (2016) 'Achieving and evidencing research "impact"?, Area, 48(2): 213-221.
- Fall, J. J. (2021). Worlds of Vision. ACME: An International E-Journal for Critical Geographies, 20(1).
- Fuller, D. (2008) 'Public geographies, Progress in Human Geography, 32: 834-844.
- Felli, R., & Castree, N. (2012). Neoliberalising adaptation to environmentalchange. *Environment and Planning A*, 44(1), 1-4.
- Glasgow, J. N. (1994). Teaching visual literacy for the 21st century. *Journal of reading*, 494-500.
- Grande, S. (2004). Red pedagogy. Lanham, MD: Rowman and Littlefield.
- Graphic Audio (n.d.). https://www.graphicaudiointernational.net/ Accessed 8 October 2021
- Graphic Medicine (n.d.). https://www.graphicmedicine.org/ Accessed 17 September 2020
- Gunn, A., & Mintrom, M. (2018). Measuring research impact in Australia. *Australian Universities Review*, 60(1), 9-15.
- Hall, S.M. (2022) For feminist geographies of austerity. *Progress in Human Geography*, 46(2): 299-318.
- Hall, S. M. (2019). Everyday life in austerity. London: Palgrave Macmillan

- Hall, S. M., Sou, G., & Pottinger, L. (2021). Ethical considerations in creative esearch: Design, delivery and dissemination. *Creative methods for human geographers*, 49.
- Hall, S. M., & Hiteva, R. (2020). Engaging with policy, practice and publics. *ENGAGING WITH POLICY, PRACTICE AND PUBLICS*, 1.
- Hamdy, S., & Nye, C. (2017). Lissa. University of Toronto Press.
- Harris, A. (2003). gURL scenes and grrrl zines. Feminist review, 75(1), 38-56.
- Hattwig, D., Bussert, K., Medaille, A., & Burgess, J. (2013). Visual literacy standards in higher education. *portal: Libraries and the Academy*, 13(1), 61-89.
- Hawkins, H. (2013). Geography and art. An expanding field: Site, the body and practice. *Progress in human geography*, 37(1), 52-71.
- Heath, S., & Chapman, L. (2020). The art of the ordinary. In Holmes, H. and Hall, S.M Eds *Mundane Methods* (pp. 103-120). Manchester University Press.
- Herring J, van Dyke MS, Cummins RG, Melton F (2017) Communicating local climate risks online through an interactive data visualization. Environ Commun 11:90–105.
- Hine, A., and Edwards, W (2021). Death Metal [photomontage animation]. Not available online.
- Holdsworth, C. and Hall, S.M. (2022). A grammar for non-teleological geographies: differentiating the divergence of intention and outcomes in the everyday. *Progress in Human Geography*, 46(4): 1047-1064.
- Holland, E. C., & Dahlman, C. T. (2017). Graphic Geopolitics. Geopolitics, 22(1), 204-214.
- Holmes, H., & Hall, S. M. (Eds.). (2020). Mundane Methods. Manchester University Press.
- hooks, b. (1990). Yearning. Boston: South End Press.
- Jones, P. J., & Evans, J. (2011). Creativity and project management. *ACME: An International Journal for Critical Geographies*, 10(3), 585-632.
- Kamler, B., & Thomson, P. (2014). Helping doctoral students write. Routledge.
- Katz, C. (2013). Playing with fieldwork. Social & Cultural Geography, 14(7), 762-772.
- Kneece, M. (2015). The Art of Comic Book Writing. Watson-Guptill.
- Krakow M., Graphic Narratives and Cancer Prevention. Health Commun, 2017. 32(5): p. 525–528.
- Kyle, R. G., Atherton, I. M., Kesby, M., Sothern, M., & Andrews, G. (2016). Transfusing our lifeblood. *Social Science & Medicine*, 168, 257-264.
- Lee, Y., Joh, H., Yoo, S., & Oh, U. (2021, April). AccessComics. In *Proceedings of the 18th International Web for All Conference* (pp. 1-11).

- Lewis, D., D. Rodgers, and M. Woolcock. Popular Representations of Development. London: Routledge, 2014.
- Loh, C. E., & Sun, B. (2019). "I'd Still Prefer to Read the Hard Copy". Journal of Adolescent & Adult Literacy, 62(6), 663-672.
- Macpherson, H., Hart, A., & Heaver, B. (2014). Impacts between academic researchers and community partners. ACME: An International Journal for Critical Geographies, 13(1), 27-32
- Mayer, Richard E., and Valerie K. Sims. 1994. For Whom is a Picture Worth a Thousand Words? Journal of Educational Psychology 86 (3): 389–401.
- McCloud, Scott. 1994. Understanding Comics. New York: HarperPerennial.
- McDermott, J. E., Partridge, M., & Bromberg, Y. (2018). Ten simple rules for drawing scientific comics. *PLoS computational biology*, *14*(1).
- McLean, H. (2014). Digging into the creative city. Antipode, 46(3), 669-690.
- McLean, H. (2022). Creative arts-based geographies: Some cautionary and hopeful reflections. *ACME*, 22(3): 311-326.
- McNicol S., Humanising illness. Med Humanit, 2014. 40(1): p. 49–55.
- Merkel, J. (2019). 'Freelance isn't free'. Urban Studies, 56(3), 526-547.
- Mountz, A., Bonds, A., Mansfield, B., Loyd, J., Hyndman, J., Walton-Roberts, M., ... & Curran, W. (2015). For slow scholarship. *ACME: An International Journal for Critical Geographies*, 14(4), 1235-1259.
- Muir S, Mason J, 2012, "Capturing Christmas" Sociological Research Online17(1) 5
- Naghshineh, Sheila, Janet P. Hafler, Alexa R. Miller, Maria A. Blanco, Stuart R. Lipsitz, Rachel P. Dubroff, Shahram Khoshbin, and Joel T. Katz. 2008. "Formal Art Observation Training Improves Medical Students' Visual Diagnostic Skills. Journal of General Internal Medicine 23 (7): 991–997.
- Ogborn M 2002 Writing travels. Transactions of the Institute of British Geographers 27 155-71
- Pain, R. (2014). Impact. ACME: an international e-journal for critical geographies., 13(1), 19-23.
- Pain, R., Kesby. M. and Askins, K. (2011) 'Geographies of impact'. Area, 43(2): 183-188.
- Pauwels, L. (2010). Visual sociology reframed. *Sociological Methods & Research*, 38(4), 545-581.
- Pearson, R., & Elson, D. (2015). Transcending the impact of the financial crisis in the United Kingdom. *Feminist review*, 109(1), 8-30.

- Pendanx, J.D. and Juguin, T (2019) Mentawai! Futuropolis. Paris.
- Peterle, G. (2017). Comic book cartographies. cultural geographies, 24(1), 43-68.
- Phillips, R. (2014). Curiosity and the Politics of Impact. ACME: An International Journal for Critical Geographies, 13(1), 39-42
- Piepmeier, A. (2008). Why zines matter. American Periodicals, 18(2), 213-238.
- Positive Negatives (n.d.), https://positivenegatives.org/comics-animations/ (accessed June 16 2020).
- Power, M. (2018). Creativity, risk and the research impact agenda in the United Kingdom. *European Review*, 26(S1), S25-S34.
- Public Anthropologists. (2020). Illustrating anthropology. The Being Human Podcast. https://anchor.fm/public-anthropologists/episodes/Illustrating-Anthropology-emj9lh (accessed November 17 2020).
- Rayar, F., Oriola, B., & Jouffrais, C. (2020, March). ALCOVE. In *Proceedings of the 25th International Conference on Intelligent User Interfaces* (pp. 410-418).
- REF (2019) Research Excellence Framework. Available at https://www.ref.ac.uk/media/1092/ref-2019_01-guidance-on-submissions.pdf (accessed June 30 2020)
- Rogers, A., Bear, C., Hunt, M., Mills, S., & Sandover, R. (2014). Intervention. *ACME: An International Journal for Critical Geographies*, 13(1), 1-9.
- Rohde M, Toselli M, and A. B. Sketchnote Army. Available from: http://sketchnotearmy.com/
- Rose, G. (1993). Feminism & geography: The limits of geographical knowledge. U of Minnesota Press.
- Scott, M. Media and Development. London: Zed Books, 2014.
- Slater, A. (2020). Listening to dress. In Holmes, H. and Hall, S.M Eds *Mundane Methods* (pp. 103-120). Manchester University Press.
- Smith, K. E., Bandola-Gill, J., Meer, N., Stewart, E., & Watermeyer, R. (2020). *The impact agenda: Controversies, consequences and challenges*. Policy Press.
- Smith, S. J. (1997). Beyond geography's visible worlds: a cultural politics of music. *Progress in human geography*, 21(4), 502-529.
- Sou, G. (2022). Reframing resilience as resistance: Situating disaster recovery within colonialism. *The Geographical Journal*, 188(1), 14-27.
- Sou, G., & Webber, R. (2021). Un/making the 'sensory home': tastes, smells and sounds during disasters. *Social & Cultural Geography*, 1-19.

- Sou, G., Shaw, D., & Aponte-Gonzalez, F. (2021). A multidimensional framework for disaster recovery: Longitudinal qualitative evidence from Puerto Rican households. *World Development*, 144, 105489.
- Sou, G., & Hall, S. M. (2021). Communicating crisis research with comics: representation, process, and pedagogy. *Qualitative and Digital Research in Times of Crisis: Methods, Reflexivity, and Ethics*, 93.
- Sou, G., & Webber, R. (2019). Disruption and recovery of intangible resources during environmental crises: Longitudinal research on 'home'in post-disaster Puerto Rico. *Geoforum*, 106, 182-192.
- Sou, G., & Douglas, J. C. (2019). After María: Everyday recovery from disaster. After Maria: Everyday recovery from disaster. University of Manchester. https://gemmasou.com/creative-research/ accessed September 2 2022
- Sousanis, N. (2019). Articulating Ideas and Meaning Through the Use of Comics. *LEARNing Landscapes*, *12*(1), 33-38.
- Stacey, J. (1988, January). Can there be a feminist ethnography?. In Women's studies international forum (Vol. 11, No. 1, pp. 21-27). Pergamon.
- Stoodley, L. (2020). Water-based methods. In Holmes, H. and Hall, S.M Eds *Mundane Methods* (pp. 103-120). Manchester University Press.
- Tarver T., et al., A Novel tool for Health Literacy. J Hosp Librariansh, 2016. 16(2): p. 152–159.
- Taylor, F. (2019). Love in the Time of Precarity. https://loveinthetimeofprecarity.wordpress.com/
- Thébaud O., et al., Managing marine socio-ecological systems. ICES J Mar Sci, 2017.
- The Autonomous Geographies Collective (2010). Beyond Scholar Activism. Acme: An international e-journal for critical geographies, 9(2).
- Theodossopoulos, D. (2019). A vision for Emberá tourism. *Entanglements: Experiments in Multimodal Ethnography*.
- Tolia-Kelly, D. P. (2012). The geographies of cultural geography II. *Progress in Human Geography*, 36(1), 135-142.
- Tuck, E. (2009). Suspending damage. Harvard Educational Review, 79(3), 409-428.
- Turner, J. (2014). Impact for Postgraduates. ACME: An International E-Journal for Critical Geographies, 13(1), 52-55.
- Universities UK (2016). University funding explained. *Universities UK*. https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2016/university-funding-explained.pdf *Accessed June*, 30 2020

- Vizenor, G., & Lee, A. R. (1999). Postindian conversations. Lincoln: University of Nebraska Press.
- Williams, Ian. 2011. "Autography as Auto-therapy. Journal of Medical Humanities 32 (4): 353–366