



“Re-placed” - Reconsidering relationships with place and lessons from a pandemic

Patrick Devine-Wright^{a,*}, Laís Pinto de Carvalho^b, Andrés Di Masso^c, Maria Lewicka^d, Lynne Manzo^e, Daniel R. Williams^f

^a University of Exeter, Exeter, UK

^b Universidad de Valparaíso, Valparaíso, Chile

^c Grup de Recerca en Interacció i Canvi Social (GRICS) - Universitat de Barcelona, Barcelona, Spain

^d Nicolaus Copernicus University, Toruń, Poland

^e University of Washington, Seattle, USA

^f USDA Forest Service, Rocky Mountain Research Station, Fort Collins, Colorado, USA

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ABSTRACT

The Covid-19 pandemic has prompted a reconsideration, perhaps even a fundamental shift in our relationships with place. As people worldwide have experienced ‘lockdown,’ we find ourselves emplaced in new and complex ways. In this Commentary, we draw attention to the re-working of people-place relations that the pandemic has catalysed thus far. We offer insights and suggestions for future interdisciplinary research, informed by our diverse positionalities as researchers based in different continents employing diverse approaches to people-place research. The article is structured in two sections. First, we consider theoretical aspects of our current relationships to place by proposing a framework of three interdependent axes: emplacement-displacement, inside-outside, and fixity-flow. Second, we identify six implications of these dialectics: for un-making and re-making ‘home’; precarity, exclusion and non-normative experiences of place; a new politics of public space; health, wellbeing and access to ‘outside’ recreational spaces; re-sensing place, virtual escapes and fluid places, and methodological and ethical considerations. Across these topics, we identify 15 key questions to guide future research. We conclude by asserting that learning lessons from the global pandemic is necessarily tentative, requiring careful observation of altered life circumstances, and will be deficient without taking relationships with place into account.

1. Introduction

The Covid-19 pandemic has heightened awareness of our relationships with place in numerous ways. While many are anchored at home, some have had to “shelter in place” far from where they call home, while others who are unhoused have few protections at all (Lima et al., 2020). Many people are, at once, more fixed in place, yet more mobile digitally. As residences have become workplaces and schools, the tensions and complexities around home are revealed (Prime, Wade, & Browne, 2020). At the same time, we are alienated from the places of our daily rounds in some way, and the nature of our future relationships to place are uncertain. These circumstances challenge us to rethink our conceptualizations of people-place relationships to reflect these tensions and nuances in place experience.

We begin this Commentary by considering three theoretical dialectics around our current relationship to place: (1) emplacement–displacement; (2) inside–outside; and (3) fixity–flow. While foregrounded by the pandemic, these dialectics are not exclusive to it. Rather, they are an inherent part of people-place relationships that our current circumstances demand we reconsider as a path toward recognising the liberative potential of place. We follow this emphasis on theory by identifying six implications of the dialectics for people-place research. For each of these implications, we propose research questions in order to guide future research, while recognising that such recommendations should not be overtly prescriptive, given the need for careful observation of altered life circumstances that takes matters of place into account.

* Corresponding author.

E-mail address: p.g.devine-wright@exeter.ac.uk (P. Devine-Wright).

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2. Theory

2.1. Emplacement – displacement

Scholars have long argued that place is an ontological structure (Heidegger, 1962). That is, as embodied beings, we are always embedded in place. Yet the pandemic has elevated the power of place in our consciousness, reminding us that we live an emplaced existence. Now we are emplaced anew as “shelter-in-place” directives worldwide have anchored us to place in unprecedented ways. But emplacement is not just about being pinned to place. It is an awareness of the tensions and nuances within these relationships, and their impact on our ontological security. Prominent among these tensions is that of emplacement-displacement, which exist in dialectical tension and both require continued negotiation, now more than ever.

The experience of emplacement during a pandemic can be stabilizing, entrapping, and often a bit of both. Presciently, an article on enclosures, enclaves and entrapment written a decade ago noted that a global pandemic would underscore the need for an immobility regime (Turner, 2010). As the coronavirus pandemic unfolds, we are emplaced in some locations, and displaced from others. Displacement in this context reflects myriad forms of alienation from the everyday places that have meaning and meet our material and psychological needs. Many are alienated from workplaces (Bick, Blandin, & Mertens, 2020; Rubin, Nikolaeva, Nello-Deakin, & te Brömmelstroet, 2020), from loved ones and their homes, from the communally shared places that enhance the quality of our lives and connect us to one another (Honey-Roses et al., 2020; Low & Smart, 2020), and from homelands Pham and Shi (2020). Such displacement ruptures our ties to place and has significant consequences for well-being (Ayeb-Karlsson, 2020; Fullilove, 2004; Scannell & Gifford, 2017), from loneliness and depression (Holmes et al., 2020; Krendl & Perry, 2020) to a sense of crowding and entrapment (Jones & Grigsby-Toussaint, 2020).

Further, the emplacement-displacement dialectic highlights the political dimension of our relationships to place in the uneven distribution of power over access to and exclusion from place. For example, statistics worldwide show the disproportionate impact of the virus economically, spatially and socially on the poor (United Nations, 2020). Many of those with privilege have continued their employment but shifted the location of their work to home, thus only being temporarily displaced from their workplace. In a study of the US workforce, highly educated, high-income and white workers were more likely to shift to working from home and maintain employment following the pandemic (Bick, Blandin, Mertens, & July, 2020). Others have been more fundamentally displaced and have lost their livelihood entirely (e.g. small business owners) deepening their socio-spatial precarity (Bartik et al., 2020). Another study notes that minority populations in the US disproportionately make up “essential workers” such as retail and grocery workers, custodial staff, public transit and health care workers, who are unable to stay at home and whose work puts them at greater risk (van Dorn, Cooney, & Sabin, 2020). By catalysing displacement unevenly, the Covid-19 pandemic amplifies existing inequities and introduces new ones (Cholera, Olanrewaju, Falusi, & Linton, 2020).

2.2. Inside – outside

According to classic theories (e.g., Alexander, Silverstein, Angel, Ishikawa, & Abrams, 1977) place as a meaningful location should be understood not as a bounded and isolated entity but as a connection between the inside and the outside (Kunstler, 1993), the inward and the outward (Seamon, 2013). The inside and the outside of a place are intricately interwoven in a dialectic meaning-creating relationship. Inside can be appreciated mostly because of a comparison with, and access to, what exists outside, and the outside is inviting because of the promised security of the inside (Morgan, 2010). Hence, meaningful places are those that provide a smooth transition between inside and

outside, between zones that are private and public (Alexander et al., 1977; Gehl, 2010; Newman, 1972).

The lockdowns that were introduced to prevent the spread of the virus have disrupted the inside-outside balance in several ways. The outside has invaded the inside of our homes, which used to be, for many, places of refuge and privacy. Now they have become proxies for schools, offices, pubs and fitness clubs. Interactions with the outside have been blocked on the behavioural (stay at home), psychological (fear of the dangerous and uncontrollable virus), and community (social distancing) levels. As a consequence of the blocked psychological access to the outside, there has been an observed increase in domestic violence against intimate partners, children and the elderly, in some countries the figures rising by 40–50 percent (Bradbury-Jones & Isham, 2020; WHO, 2020a). On the societal level, fear of the virus “out there” has led to the growth of socially conservative attitudes. For example, Rosenfeld and Tomiyama (2020), in a longitudinal survey in the US, demonstrated an increased support for traditional family roles as an effect of Covid-19. Karwowski et al. (2020) found in two large international samples, Polish and American, that thinking about coronavirus elevated anxiety, leading to support for right-wing candidates in presidential elections. Anxiety associated with the uncontrollable unknown may also lead to xenophobia (Jetten, Reicher, Haslam, & Cruwys, 2020) and to racist attitudes, for example against the Chinese, blamed for spreading the virus (Devakumar, Shannon, Bhopal, & Abubakar, 2020), and to aggressive scapegoating and use of violence driven by conspiracy theories of the virus’ origin (Jolley & Paterson, 2020).

Perception of the “outside” as dangerous may increase support for anti-globalist ideologies such as bioregionalism (Sale, 2000) and may increase preferences for familiar places. Statistics on summer 2020 vacation travel collected in Poland not only show a profound drop in tourist travel generally but also that trips are shorter distance; in 2020 people preferred to spend their summer vacations within a closer distance to home in comparison to 2019 (GUS, 2020 - see also section 3.4). Nevertheless, the inside-outside imbalance cannot last long. One way of restoring it is through appropriate rearranging of one’s residence place. The Polish real estate market has indicated a growing demand for larger apartments with terraces, balconies and gardens on the ground floors, and for allotment gardens located not far from the residence place - safe substitutes for the inaccessible “outside”. It should, however, be borne in mind that economic hardships due to the pandemic may thwart such rebalancing plans.

For place researchers, the disruption of the inside-outside relation in places of residency offers a unique opportunity to study its impact on place attachment (see also Reese et al., 2020). Place, understood as a meaningful location, is not an isolated island floating on an ocean of non-places (Augé, 1995) but is a living structure open to the outside world (Massey, 2005). If, as the theory goes, the possibility to explore a (safe) outside is a precondition of the sense of emotional security offered by an inside and thus of place attachment (Morgan, 2010), then the pandemic, the imposed regulations, and their social and psychological consequences described above should lead to a decrease in healthy place attachment. This would happen despite more time spent in the place - a factor known to be a consistent predictor of place attachment. Any research program dealing with the impact of the pandemic on place attachment should therefore probe deeper into the nature of inside-outside dialectics (e.g., home vs. neighbourhood, local vs. global, us vs. them). This may also enlarge our understanding of the nature of place.

2.3. Fixity – flow

A third dialectic shaping and regulating people-place relationships captures a productive tension between the static and the mobile, the anchored and the “unmoored” (Hannam, Sheller, & Urry, 2006), the fixed and the changing, the stable and the unstable aspects of people’s subjective experiences of place. This “fixity-flow” dialectic (see Di Masso

et al., 2019) assumes that people-place bonds are always dynamically re-configured as a person navigates across social contexts and life-events characterized by varying forms, intensities and opportunities for corporeal and virtual mobility. In these navigations, the spatially static, temporally stable and topologically centered facets of place-experience (i.e., fixities) interweave with spatially shifting, temporally changing and topologically centerless aspects (i.e., flows). Far from disrupting each other, place and mobility are actively co-constituted as people choose, or are forced, to move or stay, dream about traveling, long for staying in one place or distribute their lives between many different places. Rather than negating place, mobilities re-signify fixities and vice versa: being fixed in a place (e.g., being confined at home, or in an elderly care home, or stuck in another country) re-signifies, re-values, and is psychologically coextensive with mobility (e.g., to visit relatives, to go for a walk, to return home or to move in the streets for survival) as a constitutive dimension of place.

The process of flow re-signifying fixities is (literally) taking place, for instance, as international mobility restrictions change citizens' touristic place-preferences when choosing destinations, as noted in the previous section. Relatedly, imposed fixities such as home confinements seem to be altering the meaning, purpose and spatial distribution of flow dynamics, reconfiguring, in turn, people-place bonds in public spaces. As shown in a recent Google report (<https://www.google.com/covid19/mobility/>; September 19, 2020) on local mobility in Catalunya, Spain, there has been a significant increase in mobility trends to parks, open squares and other public areas, but also in residential mobility, and a general decrease in use of workplaces, public transport stations and leisure facilities. Furthermore, this re-accommodation of fixities and flows during the Covid-19 pandemic has heightened social and racial residential segregation. While the socio-economically advantaged choose moving to less populated areas, with more chances of keeping physical distance and enjoying open and/or green spaces, people living in densely populated areas with concentrated poverty risk becoming more stigmatized, isolated and their areas suffering even less investment (Jones & Grigsby-Toussaint, 2020). In this way, the new connotations and spatial re-directing of residential flows, as well as the geographical 'stuckness' (Cresswell, 2012) of fixities, follow class-based and racialised patterns. All in all, the global mobility of a pathogen leading to home confinement and mobility restrictions in open spaces, has implied a "re-worlding" – a reconsideration of the experience of our life-spaces and socio-spatial trajectories in a new (un)balance and a mutual definition between fixity and flow.

3. Implications of the Covid-19 crisis for applied research on relationships with place

The dynamic interplay amongst the three conceptual dialectics described in the previous section offers a framework for understanding the inherent contradictions and active (re)negotiation of place experience in which people must now engage. Social distancing and related mitigation efforts have disrupted our relationships to place as balanced between emplacement-displacement, inside-outside, and fixity-flow. The pandemic has laid bare the deep disparities in empowerment to navigate these dialectics. Below we describe some notable implications of our perspective on the pandemic in key areas of application in environmental psychology and cognate disciplines including human geography, urban planning and sociology. We do not aim to be comprehensive, instead outlining some possible next steps for research.

3.1. Home-making and un-making

The pandemic is redefining the meanings, values and functions of our everyday life-spaces, reorganizing the relationships of interdependence between them (Springer, 2020). Regarding private space, there is much to be learnt about the ways that people (who have a home to retreat to) have responded to enforced 'fixity', not least the disappearance of

spatial segregation between home and workplaces. Confinement may involve a re-narration of home (Byrne, 2020); that is, a re-assessment of the subjective meanings, psychosocial roles, normative practices and political underpinnings of private space in light of mobility restrictions from the 'inside' to the 'outside'. Common stories circulating across the globe frame home-experiences in numerous and contradictory ways: as a locus of security and health, as peace and calm, as a primary site to affectively re-encounter with the family, as a place for work and exercise, as imprisonment, as isolation and loneliness, as threat and oppression, as a stressful environment, as a site of digital surveillance and state-orchestrated political control. For example, in Chile (CUIDAR, 2020) the pandemic has meant that the home is reconfigured for women as a space with a greater burden of care work (cooking, cleaning, disinfection tasks, maintaining a harmonious space, generating space to share and contain telework, distance education of children, pet care, etc.), and they have had to adapt to fulfill new roles in different spaces and times. This is particularly accentuated for women who support families with children under 12 years of age, with the home being narrated from the physical and emotional fatigue of caring, and the unequal distribution of tasks according to gender roles. Also in Chile, in relation to domestic expectations in the context of the COVID-19, people think that conflict in their home will increase and that they will face a lack of space in the home (Duarte & Jimenez-Molina, 2020).

While this confirms prior understandings of home as a process that can be made and un-made (Baxter & Brickell, 2014), the pandemic context further challenges normative cultures of home that fix its meaning as a primary locus of care, safety, privacy and protection. Processes of home making and unmaking are traversed by political-economic and ideological structures, which become especially visible in periods of crisis like the pandemic (Alcántara-Ayala et al., 2020). Past research suggests that recovery policies after experiences of disasters in South Asia, the United States, Haiti and Japan tend to be shaped in a discriminatory and heteronormative way, prioritizing nuclear and heterosexual families, unmaking home for the LGBTQ+ community, and leading to concern about security, privacy and discrimination (Gorman-Murray & Dominey-Howes, 2014). In Chile, research into four recent disasters identified that neoliberal policies, which are based on beneficence and welfare logics, in stabilizing the social and economic order, generate experiences of loss of place attachment, place identity, residential satisfaction, sense of community and participation (Berroeta & Pinto de Carvalho, 2020). Although crisis processes can negatively affect the home experience, Morrow and Parker (2020) point out that transformations catalysed by the COVID-19 crisis can be an opening space to create alternative, complex imaginations of home, for example about care, commoning, and collectivity; diverse gendered lives; and multiple and geographically diverse stories and subject positions. This in turn can de-center the patriarchal, capitalist, colonial imaginaries of home, women, and domesticity. From these observations and reflections, research questions that can guide future research include:

- RQ1: How has the pandemic altered our relationships to home? In what new ways do people make and unmake homes in the pandemic?
 RQ2: What alternative narratives, discourses and imaginations of the home emerge in the context of the pandemic? How do these alternatives impact the ways in which we live and make home?

3.2. Oppressive "homing", exclusion and socio-spatial precarity

The pandemic problematizes the assumption of home as haven (Manzo, 2003) and renders visible less placid conceptions of domestic space. Some people do not have a home to be confined in or cannot stay at home due to fear of loss of employment (i.e., 'fixity' as privilege). For others, home is an excessively small place with precarious living conditions (e.g., overcrowding, lack of ventilation or natural light). It involves an exhausting juxtaposition of roles in a single time-space (e.g.,

care-giving, work, education etc.) or it triggers insecurity linked to gender violence. Home confinement makes visible the everyday politics of home, connecting the private sphere with social conflicts and socio-economic structures. Relatedly, hegemonic imaginaries of home (e.g., illustrated in “how to” guidelines to reorganize domestic spaces to ensure self-care and wellbeing), however well intentioned, tend to mask home-related exacerbation of rights violations. Examples of this include the increase in violence and alienation in the domestic space, especially for women (WHO, 2020a) and LGBTQ+ people (UNHR, 2020).

In the US, police calls for domestic violence increased 7.5% during the period March–May 2020, with effects concentrated during the weeks after social distancing began (Leslie & Wilson, 2020). Violation of housing rights, residential segregation, processes of stigma, oppression and discrimination are intensifying in the context of the pandemic, worsening socio-territorial inequalities and configuring contexts of spatial injustice (Harvey, 1973/2009; Soja, 2010). This requires urgent research to ascertain how social distancing measures are impacting homeless people, families or workers living in crowded accommodation, or those without access to safe water and sanitation (Cholera, Falusi, & Linton, 2020; CIPER, 2020; Mendes, 2020). Lack of access to health systems implies, in many cases, dying at home (Borja & Cañadas, 2020; Ribeiro, Mendes, & Alves, 2020), manifesting the class-related implications of Covid-19 ‘necropolitics’ (Mbembe, 2003); the unveiling of “normal” inequality and exclusion in cities (Borja & Cañadas, 2020), as well as the effects of residential segregation for racial and ethnic minority and low-income groups (Jones & Grigsby-Toussaint, & 2020). In Brazil, socio-spatial precarity is related to issues of mobility. In the Amazon, most people move around by boat, and mobilizing to seek health care in urban centers can take too long. In cities like São Paulo, Rio de Janeiro or Fortaleza, the poor, mostly brown and black people, live in shantytowns with no street or health services, or in suburbs with precarious homes and crowded public transportation, which facilitates transmission (Ribeiro et al., 2020). Hence, future research on domestic space in the context of the pandemic would benefit from compensating privileged discourses around the home (see Ahrentzen, 1992; Blunt & Dowling, 2006) by critically examining ambivalent, non-normative, oppressive and exclusionary home-experiences. Research questions stemming from these issues include the following:

RQ3: How might the pandemic be intensifying forms of inequality, socio-spatial precarity and residential segregation? In what ways has it reinforced and/or contested existing geographies of privilege?

RQ4: How can ambivalent, non-normative, oppressive and exclusionary home experiences in the pandemic problematise and reconfigure the “normal” inequality and exclusion in cities?

RQ 5: In what ways has the pandemic displaced people from their homes and other meaningful places, both physically and psychologically, and who is more vulnerable to such displacement?

3.3. A new politics of public space? Rethinking the right to the city

In the context of a pandemic, views and uses of urban public spaces mirror the ambivalence we see emerging in relation to the nature of home. If the “outside” may present itself, for some, as a space of freedom, social (re)-encounter and relief from the burdens, stress, isolation, overcrowding, sedentarism and gender violence that might be experienced in home confinement, for others it can also represent a “wild territory” of contagion, formal control, discrimination and social isolation, reinforcing home as a place of safety, warm family relations and a fixed center of meaning. One of the key values of public space - the chance encounter with others - is based on the very unpredictability that can be anxiety-provoking now. While social distancing protocols are the new norm in public space, they risk being recruited for purposes other than disease control, instead feeding into class and race anxieties in a “medicalized” form (Low & Smart, 2020). We see this in the politicization of mask wearing in public, and in debates on the rights to

assembly whether it be to protest mask wearing or Black Lives Matter protests. Prohibition of gatherings in the public arena undermines the basic political and civic right to assemble, making the use of public space even more complicated in a pandemic. A study of Black Lives Matter protests in 315 of the largest U.S. cities revealed no evidence that urban protests increased cases of Covid-19 or related deaths by reducing social distance more than five weeks following the onset of protests, and notably, the imposition of city curfews did not account for this result (Dave, Friedson, Matsuzawa, Sabia, & Safford, 2020).

Social distancing¹ protocols have also motivated new urban planning strategies that redefine the meanings, norms and functions of public space, which in turn evidence the contested nature of place (Honey--Roses et al., 2020). For example, pressing controversies in Spain recently revolved around how to adapt urban space to allow physical distance, which is triggering a dispute between pedestrian-led strategies and the re-occupation of open areas by bars and restaurants to compensate for economic losses (Rodríguez, 2020). A reconfiguration of streets to accommodate cyclists and pedestrians has also begun in the US (Boston, New York, Portland, Seattle) and Canadian cities (Vancouver) (Honey--Roses et al., 2020). More critically, the normative redefinition of how public space is used directly affects the “right to the city” (Mitchell, 2003) of those who use public space to live and/or work (e.g., homeless, undocumented migrants, sex workers). Prohibition or restriction of gatherings in the public arena undermine the basic political and civic right to assemble and protest. As Salama (2020) points out, usual forms of “active engagement” in public spaces, involving social interaction, assembly and simultaneity (i.e., “doing” place), may tend to be replaced by “passive” forms of engagement such as passing by or watching. Thus, the pandemic has restructured how people use, occupy and claim urban space and has activated solidarities at various scales, mobilizing new forms of political resistance (Fernández, Waldmuller, & Vega, 2020) that could be an opportunity to build more equal public and domestic spaces. Derived from this re-arrangement of public place meanings, norms and dynamics, the following research questions emerge:

RQ6: How has the pandemic changed the design and planning of urban public spaces and what are the impacts of these design and policy changes for place experience?

RQ7: How is the normative re-definition of the meanings (moral, political, legal), uses, and functions of public space re-shaping socio-spatial behaviours in public, and to what extent will these behaviours stabilise?

RQ8: How is this re-definition of public space interacting with the right to the city and fuelling the construction of a renewed conception of “the good citizen”?

3.4. Health, wellbeing and access to ‘outside’ recreational spaces

The World Health Organization has warned that confinement and mobility restrictions might negatively impact physical health and psychological wellbeing due to a lack of outdoor exercise, social interaction and established routines (WHO, 2020b). Mental health professionals have advised people to go for a walk or to sit in a garden (where available), as a way to tolerate being confined at home, with particular concern for children’s development and wellbeing arising from school closures (El País, 2020). Findings from a 70,000 person panel survey of UK adults, with data collected weekly since March 2020, indicated that those who are younger, living alone, living in urban areas and with lower incomes showed higher levels of depression and anxiety. The study also indicated that, despite government guidance to leave home

¹ Although we are mindful that organisations such as the World Health Organization refer to ‘physical distance’, we prefer to use the term ‘social distance’ due to its predominance in public discourse and clear meaning in terms of spatial distance between self and other.

daily for exercise, voluntary home confinement averaged four days per week during lockdown (April–May 2020), and in September 2020, post lockdown, remains at one day per week on average, and is greater in low income groups (Fancourt, Bu, Wan Mak, & Steptoe, 2020). Evidence of where people are dying in the UK indicates that people have avoided hospital and care home environments, leading to an increase in deaths at home (Office for National Statistics, 2020). These findings provide empirical grounds for concluding that the pandemic has re-balanced inside/outside and fixity/flow dialectics and research is needed to investigate the short and long term consequences of these shifts for our sense of emplacement/displacement, health and wellbeing.

There is a need to better understand the implications of the pandemic for patterns of recreation and residency, including second home ownership. Mobility restrictions prevent access to favourite recreation places outside of the residence. Past research suggests that loss of access to such places disrupts place attachments (Brown & Perkins, 1992), evokes feelings of grief and loss (Fried, 2000) and restricts emotional self-regulation through contact with restorative environments (Korpela & Hartig, 1996). To the extent that people do not have their own outdoor space, voluntarily confine themselves out of anxiety or fear of contagion, or are not allowed outside at all, they cannot avail themselves of this reprieve, again foregrounding a socially uneven landscape of place-related health impacts of the pandemic. Evidence from countries such as Poland, Spain and the UK indicate that holiday preferences have changed since the pandemic began, for example in the UK there has been fewer overseas or urban visits and more UK rural and seaside visits during 2020 by comparison to 2019, with clear preferences against indoor environments such as museums and cathedrals in favour of outdoor areas and activities (Visit Britain, 2020).

The pandemic has accelerated pre-existing shifts towards new norms of tele-working (Bick et al., 2020; Rubin et al., 2020), and further emphasised discourses of urban/rural living including the potential for “disaster gentrification” involving an exodus from urban areas by those with the means to do so (Malatzky, Gillespie, Couch, & Cosgrave, 2020). Data from UK property searches indicate that high income households have sought to purchase larger homes to enable home working, and to escape to rural villages and towns from London (Rightmove, 2020). At the same time, such flight has sometimes been met with ‘place-protective’ actions (Devine-Wright, 2009) by rural residents and policy makers seeking to defend their settlements from an influx of urban dwellers, through policies of refusal, acts of resistance, and formal entreaties (Malatzky et al., 2020). This deserves further scrutiny, investigating how the tensions involved in balancing the economic benefit of visitors with an increased risk of infection are negotiated and resolved. Taken together, changing patterns of recreation may have positive environmental outcomes, reducing carbon emissions associated with plane and car travel, with the potential to shift norms towards “slow travel” by bike and walking (Barr, 2018). Relating these issues of health, wellbeing and access to recreation spaces, the following research questions are suggested:

RQ9: What are the consequences of extended periods of home confinement, which disturb inside/outside and fixity/flow dialectics of place experience, on health and wellbeing, particularly for children and vulnerable adults?

RQ10: How has the pandemic, and associated lockdowns, altered discourse and behaviour in relation to recreation and residency, specifically between urban and rural areas and new norms of tele-working? Could this lead to new norms that positively respond to the climate emergency?

3.5. Environmental perception revisited: re-sensing place, virtual escapes and fluid places

The inside-outside dialectic interpreted through the lens of the pandemic also applies to sensory environmental experiences and

“virtual and imaginative travel” (Di Masso et al., 2019) using digital devices. For instance, citizens in many countries (e.g., Chile, Poland, Spain, US) are obliged to wear masks in most public places. From the perspective of the embodied mind (Varela, Thompson, & Rosch, 1991), this should have significant consequences for the sensual experience of place. Seasonal changes cannot fully be appreciated when nose and mouth are covered, so the barrier between self and the world outside is even stronger. Paradoxically, in these circumstances home becomes the only place where one can (literally) breathe freely. Regarding communication technologies, the massive use of digital devices allows virtual trespass of the physical thresholds of confinement, thereby breaking the spatial and social boundaries imposed by fixity, and mitigating negative feelings of displacement associated with confinement at home. Virtual and imaginative travel makes possible, even vital, different forms of social relation and identification: to tele-work, to educate, to have updated practical information about how to act to prevent infection, to socialize, to organize political activism and community support networks, yet opening up new possibilities for home surveillance and the creation of commercial value (Klein, 2020).

In turn, these multi-localised or delocalised forms of social interaction may re-specify the very nature of place. For example, Bryson, Andres, and Davis (2020) argue the lockdown in the UK has changed the nature of religious spaces such as churches, mosques and synagogues. Online religious services like pastoral care by telephone, social media religious platforms, livestream worship and virtual congregations, have created a new “intersacred space” connecting the home of the minister and the congregants’ homes, thereby “blurring the lines between sacred and secular spaces” (p.360). New virtually embedded, *trans*-local and fluid-like forms of space have also been conceptualised such as encrypted virtual graves. Zhao and Huang (2020) investigate a “crypto place” that was set up to memorialise a doctor who was one of the whistleblowers of the coronavirus outbreak in China. This crypto-place is a new form of digital place that makes political control, surveillance and censorship more difficult given their virtual and multi-nodal character. In other words, crypto places are virtually accessible from everywhere, their access nevertheless demands a hard-drive disc and the locating block and their senses of place are continuously re-created as impressions, value-attributions and concerns are expressed by its “visitors”. Taken together, these new senses of place and virtual modalities of re-location derived from the pandemic deserve further investigation, for example:

RQ11: How is the global rise of virtual and multilocal modes of social encounter (i.e., flow) re-shaping the nature, meanings and social-psychological functions of physical places and people-place bonds?

RQ12: How does the blocking of sensory input during the pandemic due to a lockdown, forced immobility, and virtual social encounters affect our experience of place and the meanings assigned to places?

3.6. Methodological orientations and ethical considerations

Much could be learnt by collecting and analysing a diverse set of “replacing” experiences and stories to reveal coping strategies and impacts of the pandemic. A variety of innovative methods are already being used to examine the impacts and responses to Covid-19 spatial restrictions including experience sampling (Stieger, Lewetz, & Swamiet, 2020) and diary methods (Lades, Laffan, Daly, & Delaney, 2020) to describe daily practices of place to people, families and communities; music videos (Wang, Xue, Wang, & Wu, 2020); perceptions of “safe spaces” (Cabrera-Barona & Carrión, 2020); and event and media analyses (Dave et al., 2020; Malatzky et al., 2020). In addition, one could explore photo-elicitation, situated narrative and discursive constructions, GPS and mobility data via mobile phones and different forms of experiential mapping. Some of these data likely over-represent the digitally connected, so other primary data such as diaries and interviews would also be important. Investigators could, of course, apply various analytical

lenses to these data depending on theoretical interest.

Going forward, there is a need for diverse research strategies to investigate the myriad ways a global pandemic reconfigures people-place relationships. For example, a grounded or inductive approach could be taken to examine how people are actively navigating these changes to identify new or modified people-place meanings and behaviours. Such an approach can also indicate new hypotheses and theories to be tested. In addition, the pandemic provides investigators new opportunities to apply and test existing theoretical concepts and frameworks (including one or more of our three dialectics) or other concepts in the place literature from phenomenology (e.g., [Seamon's notion of place ballet, 1980](#)) to assemblage theory ([Di Masso & Dixon, 2015](#)). Big data, media and social media constitute valuable sources of data to explore and quantify place as a meaningful location in the pandemic and that catalogue all the ways people have tried to re-mobilize and reconnect their lives to places and people, and examine these responses over time and across national and cultural boundaries. Regarding ethical considerations, investigating the pandemic should be configured as a sensitive topic ([Chaitin, 2003](#)), so we suggest developing reflective and careful strategies to minimize the potential negative impact on the people participating in the research and the researchers themselves. Likewise, caution is suggested in the use and reporting of spatialised data, since referencing at the household level may violate people's privacy and generate stigma in vulnerable territories. Taking this into account, we feel that the following methodological issues should be considered by future research:

RQ13: What methodological approaches are best suited to fully describe the consequences of the pandemic for people's experiences of place?

RQ14: What new or revised theoretical propositions are suggested by the restructuring of people-place relationships in the pandemic?

RQ15: Which differences in geography, culture, economy and politics are the most important issues or moderators of people-place relationships as responses to the pandemic?

4. Conclusions

The global lockdowns and related socio-spatial restrictions triggered by the Covid-19 pandemic has abruptly raised awareness of the constitutive role of places in our lives, yet in ways that are, as yet, poorly understood. We suggest that future studies examine experiences of the pandemic informed by the dynamics among the dialects of emplacement-displacement, inside-outside and fixity-flow described here. In so doing, future research can better understand how the pandemic has altered the ways that we are emplaced, how our relationships to home have changed, and how the pandemic has accelerated the displacement of vulnerable populations. While refuting any false idealisation of notions of place or 'home', there is, nevertheless, an emancipatory and liberative potential in the ways that places are being reconstructed, rather than necessarily leading to anxiety, stress, loneliness and xenophobia. Our suggestions for research are necessarily tentative and provisional, due to the extreme and abrupt changes that have taken place in diverse contexts globally. However, by adopting diverse methodological orientations that allow participants to give voice to their experiences of change, research can deepen our understanding of how the pandemic has already altered, and continues to alter, relationships with place, as well as provide important insights to inform policies of collective response.

Author contributions

Professor Patrick Devine-Wright.
Conceptualization.
Investigation.
Project administration.

Validation;
Roles/Writing - original draft;
Writing - review & editing.
Dr. Luis Pinto di Carvalho.
Conceptualization.
Investigation.
Validation;
Roles/Writing - original draft;
Writing - review & editing.
Professor Andres di Masso.
Conceptualization.
Investigation.
Validation;
Roles/Writing - original draft;
Writing - review & editing.
Professor Maria Lewicka.
Conceptualization.
Investigation.
Validation;
Roles/Writing - original draft;
Writing - review & editing.
Professor Lynne Manzo.
Conceptualization.
Investigation.
Validation;
Roles/Writing - original draft;
Writing - review & editing.
Dr. Daniel Williams.
Conceptualization.
Investigation.
Validation;
Roles/Writing - original draft;
Writing - review & editing.

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References

- Ahrentzen, S. (1992). Home as a workplace in the lives of women. In I. Alman, & S. Low (Eds.), *Place attachment* (pp. 113–138). London: Plenum Press.
- Alcántara-Ayala, I., Burton, I., Lavell, A., Mansilla, E., Marskrey, A., Oliver-Smith, A., et al. (2020). Root causes and policy dilemmas of the COVID-19 pandemic global disaster. *International Journal of Disaster Risk Reduction*. <https://doi.org/10.1016/j.ijdrr.2020.101892>
- Alexander, C., Silverstein, M., Angel, S., Ishikawa, S., & Abrams, D. (1977). *A pattern language*. Oxford: Oxford University Press.
- Augé, M. (1995). *Non-Places: Introduction to an anthropology of supermodernity*. London: Verso.
- Ayeb-Karlsson, S. (2020). When we were children we had dreams, then we came to Dhaka to survive": Urban stories connecting loss of wellbeing, displacement and (im) mobility. *Climate & Development*, 1–12. <https://doi.org/10.1080/17565529.2020.1777078>. 2020.
- Barr, S. (2018). Personal mobility and climate change. *WIREs Climate Change*, 9(5), e542.
- Bartik, A. W., Bertrand, M., Cullen, Z., Glaeser, E. L., Luca, M., & Stanton, C. (2020). The impact of COVID-19 on small business outcomes and expectations. *Proceedings of the National Academy of Sciences*, 117(30), 17656–17666.
- Baxter, R., & Brickell, K. (2014). For home unmaking. *Home Cultures*, 11, 133–144. <https://doi.org/10.2752/175174214X13891916944553>
- Berroeta, H., & Pinto de Carvalho, L. (2020). La psicología ambiental-comunitaria en los desastres socio-naturales: La importancia de los vínculos socioespaciales en la afectación de las comunidades. *Psykhé*, 29(1), 1–16. <https://doi.org/10.7764/psykhe.29.1.1579>
- Bick, A., Blandin, A., Mertens, K., & July. (2020). Work from home after the COVID-19 outbreak. CEPR Discussion Paper No. DP15000. Available from: SSRN <https://ssrn.com/abstract=3650114>.
- Blunt, A., & Dowling, R. (2006). *Home*. New York: Taylor & Francis.
- Borja, D., & Cañadas, V. (2020). Sí, la normalidad es el problema: Inequidad, exclusión y fuerza estatal en la crisis de la Covid-19 en guayaquil. *Journal of Latin American Geography*, 19(3), 224–233. <https://doi.org/10.1353/lag.2020.0082>

- Bradbury-Jones, C., & Isham, L. (2020). The pandemic paradox: The consequences of COVID-19 on domestic violence. *Journal of Clinical Nursing*, 29, 2047–2049. <https://doi.org/10.1111/jocn.15296>.
- Brown, B., & Perkins, D. (1992). Disruptions in place attachment. In I. Alman, & S. Low (Eds.), *Place attachment* (pp. 279–304). London: Plenum Press.
- Bryson, J., Andres, L., & Davis, A. (2020). Covid-19, virtual church services and a new temporary geography of home. *Tijdschrift voor Economische en Sociale Geografie*, 111(3), 360–372. <https://doi.org/10.1111/tesg.12436>
- Byrne, M. (2020). Stay home: Reflections on the meaning of home and the Covid-19 pandemic. *Irish Journal of Sociology*, 1–5. <https://doi.org/10.1177/0791603520941423>
- Cabrera-Barona, P., & Carrión, A. (2020). Voiding public spaces, enclosing domestic places: Place attachment at the onset of the pandemic in Quito. *Journal of Latin American Geography*, 19(3), 234–239. <https://doi.org/10.1353/lag.2020.0083>
- Chaitin, J. (2003). I Wish he hadn't told me that: Methodological and ethical issues in social trauma and conflict research. *Qualitative Health Research*, 13(8), 1145–1154. <https://doi.org/10.1177/1049732303255997>
- Cholera, R., Olanrewaju, O., Falusi, O., & Linton, J. (2020). Sheltering in place in a xenophobic climate: COVID-19 and children of immigrant families. *Pediatric Perspectives*, 146(1), 1–6. <https://doi.org/10.1542/peds.2020-1094>
- CIPER. (2020). Viviendas hacinadas y campamentos: Dos rostros de la desigualdad frente al Covid-19 Accessed 13 May 2020 from <https://ciperchile.cl/2020/03/26/vivienda-s-hacinadas-y-campamentos-dos-rostros-de-la-desigualdad-frente-al-covid-19/>.
- Cresswell, T. (2012). Mobilities II: Still. *Progress in Human Geography*, 36(5), 645–653.
- CUIDAR. (2020). Estudio sobre tiempos, formas y espacios de cuidado en casa durante la pandemia Accessed 2 October 2020 from <https://doi.org/10.13140/RG.2.2.25083.54568>.
- Dave, D. M., Friedson, A. I., Matsuzawa, K., Sabia, J. J., & Safford, S. (2020). *Black Lives Matter protests, social distancing, and COVID-19* (No. w27408). National Bureau of Economic Research.
- Devakumar, D., Shannon, G., Bhopal, S. S., & Abubakar, I. (2020). Racism and discrimination in COVID-19 responses. *Lancet*, 395, 10231–11194. [https://doi.org/10.1016/S0140-6736\(20\)30792-3](https://doi.org/10.1016/S0140-6736(20)30792-3).
- Devine-Wright, P. (2009). Rethinking nimbys: The role of place attachment and place identity in explaining place protective action. *Journal of Community & Applied Social Psychology*, 19(6), 426–441.
- Di Masso, A., & Dixon, J. (2015). More than words: Place, discourse and struggle over public space in Barcelona. *Qualitative Research in Psychology*, 12(1), 45–60.
- Di Masso, A., Williams, D. R., Raymond, C. M., Buchecker, M., Degenhardt, B., Devine-Wright, P., et al. (2019). Between fixities and flows: Navigating place attachments in an increasingly mobile world. *Journal of Environmental Psychology*, 61, 125–133.
- Duarte, F., & Jimenez-Molina, A. (2020). Psychological distress during the COVID-19 epidemic in Chile: The role of economic uncertainty. *MedRxiv*. <https://doi.org/10.1101/2020.09.27.20202648>
- El País. (2020). Ocho falsas creencias sobre los niños y el confinamiento Accessed 4 April 2020 from https://elpais.com/elpais/2020/04/03/mamas_papas/1585897899_412281.html.
- Fancourt, D., Bu, F., Wan Mak, H., & Steptoe, A. (2020). UCL Covid-19 social study Accessed 21 September 2020 from https://b6bdc03-332c-4ff9-8b9d-28f9c957493a.filesusr.com/ugd/3d9db5_3e6767dd9f8a4987940e7e99678c3b83.pdf.
- Fernández, A., Waldmuller, J., & Vega, C. (2020). Comunidad, vulnerabilidad y reproducción en condiciones de desastre. *Abordajes desde América Latina y el Caribe. Íconos*, 66, 7–29. <https://doi.org/10.17141/iconos.66.2020.4156>
- Fried, M. (2000). Continuities and discontinuities of place. *Journal of Environmental Psychology*, 20, 193–205.
- Fullilove, M. T. (2004). *Root shock: How tearing up city neighborhoods hurts America, and what we can do about it*. New Village Press.
- Gehl, J. (2010). *Cities for people*. Washington: Island Press.
- Gorman-Murray, A. M., & Dominey-Howes, D. (2014). Queer homicide: LGBT displacement and home loss in natural disaster impact, response and recovery. *Home Cultures*, 11(2), 237–262. <https://doi.org/10.2752/175174214X13891916944751>
- GUS (Główny Urząd Statystyczny/Statistics Poland). (September, 2020). *Wykorzystanie turystycznej bazy noclegowej w Polsce w czerwcu i lipcu 2020 r. (Use of the tourist accommodation base in Poland in June and July 2020)* (Research report).
- Hannam, K., Sheller, M., & Urry, J. (2006). Editorial: Mobilities, immobilities and moorings. *Mobilities*, 1(1), 1–22.
- Harvey, D. (1973/2009). *Social justice and the city*. Athens: University of Georgia Press.
- Heidegger, M. (1962). An ontological consideration of place. In *The question of being*. New York: Twayne Publishers.
- Holmes, E. A., O'Connor, R. C., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., et al. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: A call for action for mental health science. *The Lancet Psychiatry*, 7(6), 547–560.
- Honey-Roses, J., Anguelovski, I., Bohigas, J., Chireh, V. K., Daher, C., Konijnendijk, C., et al. (2020). The impact of COVID-19 on public space: A review of the emerging questions. *Cities and Health*. <https://doi.org/10.31219/osf.io/rf7xa>
- Jetten, J., Reicher, S., Haslam, S. A., & Cruwys, T. (2020). *Together apart. The psychology of COVID-19*. London: Sage.
- Jolley, D., & Paterson, J. L. (2020). Pylons ablaze: Examining the role of 5G COVID-19 conspiracy beliefs and support for violence. *British Journal of Social Psychology*, 59, 628–640.
- Jones, A., & Grigsby-Toussaint, D. (2020). *Housing stability and the residential context of the COVID-19 pandemic*. Cities & Health. <https://doi.org/10.1080/23748834.2020.1785164>
- Karwowski, M., Kowal, M., Groyecka, A., Bialek, M., Lebada, I., Sorokowska, A., et al. (2020). When in danger, turn right: Does Covid-19 threat promote social conservatism and right-wing presidential candidates? *Human Ethology*, 35, 37–48. <https://doi.org/10.22330/he/35/037-048>
- Klein, N. (2020). How big tech plans to profit from the pandemic Accessed 15 May 2020 from <https://www.theguardian.com/news/2020/may/13/naomi-klein-how-big-tech-plans-to-profit-from-coronavirus-pandemic>.
- Korpela, K., & Hartig, T. (1996). Restorative qualities of favorite places. *Journal of Environmental Psychology*, 16, 221–233.
- Krendl, A. C., & Perry, B. L. (2020). The impact of sheltering in place during the COVID-19 pandemic on older adults' social and mental well-being. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*.
- Kunstler, J. H. (1993). *The geography of nowhere. The rise and decline of America's man-made landscape*. New York: Simon & Schuster.
- Lades, L. K., Laffan, K., Daly, M., & Delaney, L. (2020). Daily emotional well-being during the COVID-19 pandemic. *British Journal of Health Psychology*. <https://doi.org/10.1111/bjhp.12450>
- Leslie, E., & Wilson, R. (2020). Sheltering in place and domestic violence: Evidence from calls for service during COVID-19. *Journal of Public Economics*, 189, 1–7. <https://doi.org/10.1016/j.jpubeco.2020.104241>
- Lima, N. N. R., de Souza, R. L., Feitosa, P. W. G., de Sousa Moreira, J. L., da Silva, C. G. L., & Neto, M. L. R. (2020). People experiencing homelessness: Their potential exposure to COVID-19. *Psychiatry Research*, 288, 112945.
- Low, S., & Smart, A. (2020). Thoughts about public space during Covid-19 pandemic. *City and Society*, 32(1).
- Malatzky, D. C., Gillespie, J., Couch, D. D. L., & Cosgrave, D. C. (2020). Why place matters: A rurally-orientated analysis of COVID-19's differential impacts. *Social Sciences & Humanities Open*. <https://doi.org/10.1016/j.ssho.2020.100063>
- Manzo, L. (2003). Beyond house and haven: Toward a revisioning of emotional relationship with places. *Journal of Environmental Psychology*, 23(1), 47–61.
- Massey, D. (2005). *For space*. London: Sage.
- Mbembe, A. (2003). *Necropolitics. Public Culture*, 15(1), 11–40.
- Mendes, L. (2020). How can we quarantine without a home? Responses of activism and urban social movements in times of COVID-19 pandemic crisis in Lisbon. *Journal of Economic and Social Geography*, 111(3), 318–332. <https://doi.org/10.1111/tesg.12450>
- Mitchell, D. (2003). *The right to the city: Social justice and the fight for public space*. Guildford Press.
- Morgan, P. (2010). Towards a developmental theory of place attachment. *Journal of Environmental Psychology*, 30, 11–22.
- Morrow, O., & Parker, B. (2020). *Care, commoning and collectivity: From grand domestic revolution to urban transformation*. Urban Geography. <https://doi.org/10.1080/02723638.2020.1785258>
- Newman, O. (1972). *Defensible space, Crime prevention through urban design*. New York: Macmillan.
- Office for National Statistics. (2020). Deaths registered weekly in England and Wales, provisional: Week ending 4 September 2020 Accessed 21 September 2020 from <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsregisteredweeklyinenglandandwalesprovisional/latest>.
- Pham, N. C., & Shi, J. R. (2020). A qualitative study on mental distress of Vietnamese students in the USA in the COVID 19 era. *Asia Pacific Journal of Health Management*, 15(3), 45–57.
- Prime, H., Wade, M., & Browne, D. (2020). Risk and resilience in family well-being during the COVID-19 pandemic. *American Psychologist*, 75(5), 631–645.
- Reese, G., Hamann, K. R. S., Heidebreder, L. M., Loy, L. S., Menzel, C., Neubert, S., et al. (2020). SARS-Cov-2 and environmental protection: A collective psychology agenda for environmental psychology research. *Journal of Environmental Psychology*, 70, 101444.
- Ribeiro, H., Mendes, V., & Alves, E. (2020). In the COVID-19 pandemic in Brazil, do brown lives matter? *The Lancet*, 8, 976–977. [https://doi.org/10.1016/S2214-109X\(20\)30314-4](https://doi.org/10.1016/S2214-109X(20)30314-4)
- Rightmove. (2020). Rightmove house price index - 21st September 2020 Accessed 22 September 2020 from <https://www.rightmove.co.uk/news/content/uploads/2020/09/Rightmove-House-Price-Index-21-etSeptember-2020-FINAL.pdf>.
- Rodríguez, P. (2020). *Miquel Martí, urbanista: "Hay que ganar espacio para el uso de peatones y bici durante la desescalada"*. *Eldiario.es*. 28 April Accessed 8 May 2020 from https://www.eldiario.es/catalunya/conos-pintura-puede-espacio-tiempo_0_1021548224.html.
- Rosenfeld, D. L., & Tomiyama, A. J. (2020). *Can a pandemic make people more socially conservative? Longitudinal evidence from COVID-19*. Unpublished preprint from *PsyArXiv.com*. Downloaded 29 September 2020.
- Rubin, O., Nikolaeva, A., Nello-Deakin, S., & te Brömmelstroet, M. (2020). *What can we learn from the COVID-19 pandemic about how people experience working from home and commuting? Centre for urban studies*. University of Amsterdam.
- Salama, A. (2020). Coronavirus questions that will not go away: Interrogating urban and socio-spatial implications of Covid-19 measures. *Emerald Open Research*, 2(14), 1–12. <https://doi.org/10.35241/emeraldopenres.13561.1>
- Sale, K. (2000). *Dwellers in the land. The bioregional vision*. Athens & London: The University of Georgia Press.
- Scannell, L., & Gifford, R. (2017). The experienced psychological benefits of place attachment. *Journal of Environmental Psychology*, 51, 256–269.
- Seamon, D. (1980). Body-subject, time-space routines, and place-ballets. In A. Buttner, & D. Seamon (Eds.), *The human experience of space and place* (pp. 148–165). New York: St. Martin's Press.
- Seamon, D. (2013). Place attachment and phenomenology: The synergistic dynamism of place. In L. C. Manzo, & P. Devine-Wright (Eds.), *Place attachment. Advances in theory, methods and applications* (pp. 11–22). New York: Routledge.
- Soja, E. (2010). *Seeking spatial justice*. Minneapolis: University of Minnesota Press.

- Springer, S. (2020). Caring geographies: The COVID-19 interregnum and a return to mutual aid. *Dialogues in Human Geography*, 10(2), 112–115. <https://doi.org/10.1177/2043820620931277>
- Stieger, S., Lewetz, D., & Swami, V. (2020). *Psychological well-being under conditions of lockdown: An experience sampling study in Austria during the COVID-19 pandemic*. Unpublished preprint from PsyArXiv.com. Downloaded 2 September 2020.
- Turner, B. S. (2010). Enclosures, enclaves, and entrapment. *Sociological Inquiry*, 80(2), 241–260.
- UNHR. (2020). COVID-19 and the human rights of LGBTI people Accessed 13 May 2020 from <https://www.ohchr.org/Documents/Issues/LGBT/LGBTIpeople.pdf>.
- van Dorn, A., Cooney, R., & Sabin, M. (2020). COVID-19 exacerbating inequalities in the US. *Lancet*, 395(10232), 1243–1244. [https://doi.org/10.1016/S0140-6736\(20\)30893-X](https://doi.org/10.1016/S0140-6736(20)30893-X).
- Varela, F. J., Thompson, E., & Rosch, E. (1991). *The embodied mind: Cognitive science and human experience*. Cambridge, MA: MIT Press.
- Visit Britain. (2020). COVID-19 consumer tracker wave 14 Accessed 21 September 2020 from https://www.visitbritain.org/sites/default/files/vb-corporate/covid-19_consumer_weekly_tracker_wave_14_final.pdf.
- Wang, F., Xue, T., Wang, T., & Wu, B. (2020). The mechanism of tourism risk perception in severe epidemic—the antecedent effect of place image depicted in anti-epidemic music videos and the moderating effect of visiting history. *Sustainability*, 12, 5454. <http://doi.org/10.3390/su12135454>.
- WHO. (2020a). COVID-19 and violence against women Accessed 13 May 2020 from <https://www.who.int/reproductivehealth/publications/vaw-covid-19/en/>.
- WHO. (2020b). #Healthy at home Accessed 13 May 2020 from <https://www.who.int/news-room/campaigns/connecting-the-world-to-combat-coronavirus/healthyathome>.
- Zhao, B., & Huang, X. (2020). Encrypted monument: The birth of crypto place on the blockchain. *Geoforum*, 116, 149–152. <https://doi.org/10.1016/j.geoforum.2020.08.011>