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Document Version

Final published version

[Link to publication record in Manchester Research Explorer](#)

Citation for published version (APA):

Hind, S. (2017). Cartographic Care, or, Caretographies. *Living Maps Review*, 3, 1-14.

Published in:

Living Maps Review

Citing this paper

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Cartographic Care, or, Caretographies

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Every political theory, explicitly or implicitly, contains an account of care.¹

The promising scenario of a politics of care...requires that we think about care in its broadest possible public framework.²

This article looks to a digital mapping platform – now defunct – that, as I argue, provided a blueprint for an otherwise latent cartographic politics. From 2010-2012 ‘Sukey’ was used by protesters in London to avoid police containments at protest events. It became known as the ‘anti-kettling’ app. For this brief period its capacities confounded the police, and excited the media. It was to be a new wave of democratic politics. The years since have seen a revanchism of sorts – as police forces throughout the western world equip themselves with advanced crowd control technologies. Many of these have taken a cartographic form – with software now capable of tracking the movements (and allegedly inferring the intent) of interested peoples. But with a re-doubling of neoliberal politics at a national level, and the further entrenchment of austerity policy throughout local, regional and national levels, opportunities for counter-strategy remain both possible and necessary.

As a profitable way in, then, I propose to turn to classic feminist texts on ‘care’.³ I do so in order to render legible cartography’s latent caring desires. In its navigational form, mapping involves caring for the lost, the disorientated or the dislocated. Maps entail a formalization of spatial relations in order to aid in this navigational care. It is an assistive device, rendered in material form. Articulating this caring practice in more explicit and expressive care-ful terms allows this relationship to be codified and, as a possible counter-mapping strategy, deployed. It builds on, and intensifies, work ongoing in feminist Geographical Information Science (GIS) that has considered how mapping projects routinely leave spaces of care ‘off the map’.⁴ The attempt in this paper is to consider how this concern for ‘care-ful representation’ may be further mobilized as ‘care-ful practice’ – through digital navigation

itself. It does so using the Sukey platform as a tentative blueprint for the future. I refer to such possible projects as ‘caretographies’.

Theories of Care

Berenice Fisher and Joan Tronto offer the most concrete, and comprehensive definition of care. ‘On the most general level’, they suggest

...that caring be viewed as a species activity that includes everything that we do to maintain, continue, and repair our “world” so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web.⁵

In this, care is cast not as a formal relationship between professional care-giver and receiver, nor as a strictly family relationship between parent and child, but as a more general set of possible relationships throughout the world. This caring sensibility, in Fisher and Tronto’s broad definition, is inherent to all. However, this is not to say that all caring relationships function the same; nor, that care even stands for the same thing. As Tronto suggests, care has many meanings:

...when we say ‘cares and woes’, ‘care’ denotes a burden; when we say ‘I care for you’, we express love. Care always expresses an action or a disposition, a reaching out to something. When we use it to refer to ourselves, as in ‘I take good care of myself,’ we are in that instant thinking of ourselves as both the doer and that toward which we are reaching out. Care expresses relationships. It is used to express our deepest convictions, as when we say, ‘I care about dolphins’; it is used by advertisers in banal ways to make us like a company and perhaps continue to buy its produces, as when we hear advertisers say, ‘McDonalds cares.’⁶

Thus, ‘caring’ entails many things – equally standing for a personal burden, a form of love, or spun as a branding exercise. As Victoria Lawson⁷ suggests, ‘a feminist ethic of care begins from the centrality of care work and care relations to our lives and societies’. Yet, it is ‘[u]nder neoliberal principles’ that ‘care is a private affair, occurring in homes and families’,⁸ with provision supplied by either the traditional family unit, or by the market. This common split between care-as-familial and care-as-market-relation denies Fisher and Tronto’s more comprehensive definition of care. As Lawson continues, it is in ‘the privatization of care [that] we construct certain sorts of people as in need of care – the infirm, the young/elderly, the dependent, the flawed – ignoring the fact that *we, all of us, give and need care*’.⁹

Thus, it is suggested that theories of care should incorporate a significantly broader conception of its operational nature beyond the home, family, and market, to include all aspects of daily and spectacular life. As Joan Tronto¹⁰ has long argued, care should be the 'basis for radical political judgements'. Further, that rather than an ethical stance:

*Care is perhaps best thought of as a practice. The notion of a practice is complex; it is an alternative to conceiving of care as a principle or as an emotion. To call care a practice implies that it involves both thought and action, that thought and action are interrelated, and that they are directed toward some end.*¹¹

Maria Puig de la Bellacasa, extends this framework even further to argue that 'the idea of care...goes beyond moral disposition or a well-intentioned attitude',¹² as well as a form of 'ethically and politically charged practice',¹³ to necessarily include the need to 'take care of things'.¹⁴ If we are to understand the world – and our activity in it – as constituted in, through and with material objects then our understanding of care, and the frameworks necessary to administer care in the world, must include such objects. In other words, de la Bellacasa argues for a thoroughly-materialist engagement with care; conceiving it as an ethico-political-material practice.

As part of de la Bellacasa's work, she looks to Bruno Latour's¹⁵ work on 'matters of concern'. Here she finds that Latour, whilst attentive to the precarious nature of scientific 'facts' and technological 'certainties', does not sufficiently stress the affective nature of matters. Whilst being concerned 'denotes worry and thoughtfulness about an issue',¹⁶ concern itself does not render a great degree of action – ethical or otherwise. Concern, then, is a weak correlate of care. Whilst the act of 'being concerned' might lead to a higher consciousness, it does not connate action or commitment to a future action. To address this, de la Bellacasa supposes that Latour's term be adapted to stress 'matters of care', demonstrating 'a strong sense of attachment and commitment to something'.¹⁷

In this more comprehensive conceptualization, Joan Tronto identifies what she calls 'four phases of care'.¹⁸ The first of these is *attentiveness*, or 'caring about'.¹⁹ As she suggests, 'until we care about something, the care process cannot begin. Thus, a constant impulse to return to the details of care processes and structures in life is the starting point of care as a theoretical perspective'.²⁰ 'To be attentive' as she continues 'requires actual attention to be paid to those who are engaged in the care process'.²¹

Aryn Martin et al. build on Tronto's work, by suggesting that care is a 'selective mode of attention: it circumscribes and cherishes some things, lives, or phenomena as its objects'.²² Invariably, therefore, 'it excludes others'²³ in the process. Assuming the position of different

actors in care relations is critical, therefore, to understanding how this attentiveness operates. Thus, whilst comprehensive, Fisher and Tronto's definition of care is not flattened and absolute. Care is necessarily selective. As Tronto lays out

The public housing debate looks quite different to someone living in substandard housing who has to cope with that situation (which affects all other aspects of life: how to keep and prepare food, how to protect property, how to arrive safely home from school, etc.) than to an economist who focuses solely on 'market forces.' Thus, a shift occurs in what counts as 'knowledge' in making philosophical and political judgements.²⁴

Equally, in public protests, these care relations also start to look radically different; depending on which actors are brought into focus.

The second of these is *responsibility*, or the act of 'taking care of'.²⁵ 'Care requires that humans...take responsibility for one another',²⁶ and 'involves the recognition that one can act to address...unmet needs'.²⁷ As Joan Tronto writes in a recent book, '[d]emocratic politics should centre upon assigning responsibilities of care, and for ensuring that democratic citizens are as capable as possible of participating in this assignment of responsibilities'.²⁸ As she continues;

While in the past the assignment of caring responsibilities may have seemed to be beyond the proper reach and scope of politics...given the changing nature of caring, nothing short of this reconceptualization of politics can address the political problems for democratic life that arise from our present accounts of care.²⁹

In other words, that the act of assigning responsibilities to people is the foundation of both (a) life and (b) politics. Over the last 30 years, these responsibilities have demonstrably shifted. In the West this has invariably involved the shrinking of state responsibilities for forms of social care, and the expansion of market responsibilities to carry out these same functions.

The third is *competence*. This 'requires that the actual care-giving work be done',³⁰ as well as being able to evaluate the degree to which care can be given appropriately and sensitively. This demands taking into account the nature of the care-work, or care relation, as well as the intended recipients of the care-work or relations:

For example, the practice of caring for someone else's children requires some different competencies than caring for one's own children. If a nanny sees her own child's first steps, she will be delighted. But if she sees her charge's first steps, she may not reveal it to the

parents, who would be saddened to have missed this event. Knowing how to negotiate such issues is part of the caring practice of being a good nanny, which is different from the practice of being a good mother.³¹

In essence, '[i]t involves physical work, and almost always requires that care-givers come in contact with the objects of care'.³² As Tronto points out, however, the gifting of money rarely constitutes an act of care-giving itself:

*[A]s feminist economists have long noted, there is a great deal of work that goes into converting a pay check, or other kind of money, into the satisfying of human needs. That we quickly equate...the provision of money with the satisfaction of needs points to the undervaluing of care-giving in our society.*³³

The final phase of care is *responsiveness*, or 'care-receiving'.³⁴ Care, therefore, is not afforded and exercised without acknowledgements or understanding of how the care recipient responds or reacts to the care process. This does not necessarily take a linear form, however, with responsiveness considered only after attention, responsibility and competence. As Martin et al. argue, 'prior to securing a thing to care for, a person [or thing] must have the capacity or willingness to respond, to be called into action, to be hailed by that object or phenomenon'.³⁵ Recognizing, and securing, this 'capacity to respond' is the responsibility of all involved in the care relationship formed; those on all sides must be 'willing' to engage.

As Tronto suggests;

*It is important to include care-receiving as an element of the caring process because it provides the only way to know that caring needs have actually been met...But perceptions of needs can be wrong. Even if the perception of a need is correct, how the care-givers choose to meet the need can cause new problems.*³⁶

This is perhaps the most appropriate moment at which to bring care directly into conversation with maps, mapping and navigation. Think, for a second, that you are lost; either driving to a relative's house, hiking alone, or cycling home from a night out in a new city. On each occasion – for the purposes of this argument – you find yourself without a typical navigational device that would usually ensure your safe arrival. You decide to find the nearest person who might be able to assist. With a flurry of confident hand gestures, reassuring head nods and concise instructions from an affable passer-by, you head on to your presumed destination.

But in each of these hypothetical cases the otherwise willing, and seemingly more knowledgeable individual, mishears your destination. With your misplaced confidence you bound on, replaying the hand gestures, impersonating the head nods and repeating the instructions. Now further away from your intended destination, lost in a labyrinthine suburb, on a barren moorland, or along a never-ending city street, you realize that despite their best intentions your navigational assistant has failed to properly ‘perceive your needs’ (navigate to point B), ‘causing new problems’ (you are now even more hopelessly lost!) along the way.

In the next section I look to how maps, mapping and care have been conceptualized in critical cartography thus far.

Careful Representation

The concept and practice of care is already well-explored throughout critical cartography, most notably through gender politics. Agnieszka Leszczynski and Sarah Elwood³⁷ suggest that gender matters ‘because the introduction and pervasiveness of emergent spatial information technologies, and the things we do with them, have material consequences’. These ‘emergent spatial information technologies’, as they call them, include new mobile mapping platforms with the potential to geolocate users. Two, now defunct, apps – WhereTheLadies.at and Girls Around Me – mined Foursquare for ‘check-ins from users with female-sounding first names’ with the latter going one step further ‘by linking those check-ins with the women’s Facebook profiles’.³⁸ As Leszczynski and Elwood iterate; ‘[m]asculinist values can be encoded into technologies in explicit ways, particularly in instances where male privilege drives the very design and conceptualization of the end product’.³⁹ Far from rudimentary dating apps, each of these platforms ‘promote[d] and enable[d] potentially predatory behaviour and encourage[d] unsolicited advances to women’ with the possibility of ‘reaching the level of sexual harassment’.⁴⁰ It is these material consequences that Leszczynski and Elwood acutely identify as effects of spatial media design and programming.

Further, they identify that gender ‘is a significant axis along which difference is (re)produced through the design of new spatial media themselves, the ways in which they encode space, and the ways in which they presuppose and reify normative gendered and sexual subjectivities’.⁴¹ Monica Stephens also examines evidence of the gendered nature of OpenStreetMap (OSM), through an ‘examination of the amenities that have been proposed and approved as features on the map’.⁴² As Stephens⁴³ explains, ‘amenities are features that provide a service or facility for map users’ such as a convenience store or a local hospital. As OSM is a ‘wiki-style’ platform created, edited and organized by an active community, users can ‘propose features and vote to approve what will appear as “map

features”...that will be rendered on the basemap’.⁴⁴ But as Stephens⁴⁵ explains, whilst ‘OSM users approved features to delineate between a restaurant, pub, bar, biergarten, nightclub, stripclub, swingerclub and brothel’, proposals for similar distinctions between spaces of care, such as ‘childcare’ were voted down by OSM contributors for fear of ambiguity.

In essence, users believed that the amenity was sufficiently similar to already-existing features such as ‘kindergarten’, such that ‘spaces of care and nurture that are associated with feminized skills garner less attention than the facilities where women are commodified (strip clubs, brothels, etc...) and therefore do not obtain the votes necessary to become features’⁴⁶. The result is that the ‘lack of childcare features on the map adversely affects mothers as women are still primarily responsible for childcare and the lack of these services on the map can reduce their access to urban opportunities’.⁴⁷

The power of the OSM platform resides in its ability to prescribe a particular world. It is inscribed in the lines, labels and amenity hierarchies that govern its design, and is wielded by OSM editors acting as gatekeepers of ‘reasonable’, ‘necessary’, and ‘functional’ cartographic knowledge, rendering a mapping interface devoid of amenities and spaces typically required for, used by, and of value to, care-givers. If these ‘emergent spatial information technologies’ as Leszczynski and Elwood remind us, have ‘material consequences’ then the outcome of such as state of affairs is an absence of all four phases of Tronto’s care: a lack of attentiveness (to varying forms, and spaces of childcare), responsibility (of a mapping platform to provide cartographic information on such), competence (in the delivery, and sensitivity of care-giving), and responsiveness (to the needs of children). In each phase, from Stephens’ analysis, the platform fails to deliver a care-ful solution.

Risky Situations

The taking of risks ordinarily implies the abandoning of care, attention and responsibility. Yet, I argue that in disruptive activities such as protest events, risk-taking is necessary in order to exercise care relations. As such, risk evacuates its position as an antonym of care, and instead becomes a simultaneous, and complimentary force. In navigational terms, this risk-taking involves ensuring the mobility of fellow activists. It is this mobility that, in turn, ensures the safety of the protest participants. It is through the provision of ‘navigational knowledge’ of immediate and future, as well as actual and possible threats, that this safety is secured.

Although risk has been variously theorized, here I look to the work of Louise Amoore,⁴⁸ Ben Anderson⁴⁹ and Rob Shields,⁵⁰ who have contributed to conceptualizing risk as the calculation of possible futures. In this form, risk becomes an orientation towards the not-yet-happened. It is at once a technology, a quality and a calculation through which particular forms of value are assigned to a future event. Yet this future event cannot be known entirely, or perhaps, not even identified in the first place. It is elusive. This uncertainty – of what possibly lies ahead – is the essence of this conceptualization of risk.

Yet there are different modes of risk, and Amoore suggests one of these is replacing another as the more dominant force in contemporary life. As she explains:

...the mode of risk that is flourishing across the horizons of contemporary economy and security operates according to a possibilistic logic. It does not deploy statistical probabilistic calculation in order to avert future risks but rather flourishes in conditions of declared constant emergency because decisions are taken on the basis of future possibilities, however improbable or unlikely.⁵¹

This possibilistic logic is different from a probabilistic one, Amoore suggests, because rather than seeking to avoid future risky events it actively works across its terrain to simulate, model and manage it. Through this possibilistic logic

...it acts not strictly to prevent the playing out of a particular course of events on the basis of past data tracked forward into probable futures but to preempt an unfolding and emergent event in relation to an array of possible projected futures.⁵²

The logic of possibility strikes up a peculiar and particular relationship between the past, present and the future – working across the terrain of all three at once. It does so through the development and deployment of yet-more novel technologies throughout the ‘diverse worlds of risk management consulting, computer science, commercial logistics, and data visualization’⁵³ as well as, of course, global security – whether in state or private forms. Indeed, it is within these non-governmental worlds – as much as within state research departments themselves – that we have seen the growth of such technologies and strategies. As Nathaniel O’Grady⁵⁴ suggests, ‘[e]ngendering anticipatory forms of governance requires new temporal arrangements to coordinate the calculative practices by which...risk is made sense of’. Rob Shields’ *The Virtual*⁵⁵ provides a conceptual guide to the relations drawn between the past, present and the future in this possibilistic mode of risk. In it he suggests that ‘risk is always more than concrete danger and calculations of probability

because of the importance of perception and understanding as ingredients in risk assessment⁵⁶. As such, calculating risk (in the possibilistic sense invoked by Amoore) involves taking into account both future actions and other less concrete elements.

Appropriately, with this shift from a probabilistic to a possibilistic logic, we see the emergence of a new quality of care. Whilst Fisher and Tronto's four phases still apply, they do not consider the presence of risk as a threat to care itself. More precisely, they consider risk as a manageable state *inherent to* care. In other words, care must necessarily entail an orientation towards risk and risky situations. In the next section I will explore how this relationship manifested itself through the use of the Sukey platform.

Acting Caretographically

Monica Stephens' case of OSM demonstrates a considerable lack at the heart of digital, spatial media: the ability to provide care. In this final section I detail a counter-example, the likes of which can, I suggest, provide a blueprint for thinking and acting 'caretographically' in an increasingly careless digital age.

Sukey was a digital platform designed to help protesters navigate during student and anti-austerity demonstrations. It was launched in December 2010 as a Google Maps 'mash-up', was re-launched as a web application in January 2011, re-designed as a more comprehensive platform in October 2012, before being retired not long after. During the early years of the austerity era in the UK (2010-2015), and the first term of a new Conservative-Liberal Democrat coalition, numerous mobile, volatile and unpredictable protest events were organized in London and other cities around the country.

Many of these demonstrations were hosted by student groups to protest against the rise in higher education tuition fees. Although typically 'A-to-B' demonstrations, these events often culminated in far less routed and spatio-temporally predictable circumstances. As a way of preventing widespread disruption the police began to implement containments. Colloquially, these became known as 'kettles'.⁵⁷ Once contained, protesters were often held for hours, without access to food, water or the use of a bathroom.⁵⁸ On release their details would be taken, despite no public order crimes having been committed. The speed to which the police resorted to such tactics was unprecedented; defining the physical brutality of these early austerity years.

The Sukey platform was launched as an 'anti-kettling' platform designed to ensure protesters could avoid such containments – not necessarily as a point of principle, but as a necessary,

practical fix to a self-evident problem. The kettle is an indiscriminate manoeuvre. Unlike other tactics carried out by riot police during protest events the containment is neither (a) defensive, (b) passive, nor (c) selective. It is not performed to defend a particular location (a building, square, statue), nor does it involve the facilitative form of general policing duties during an A-to-B demonstration (i.e. lining a route), or, entail the careful selection of individuals judged to have committed a crime (i.e. assault, damage to private property). Instead, the containment is (a) offensive, (b) active, and (c) collective. That is to say, it involves the forward, choreographed, mobile movement of a mass of riot officers, entails deliberate and intended corralling of individuals into a designated, impermeable space, and is aimed at preventing the movement of proximal activists, en masse.

The aim of the platform was to provide 'real-time', navigational updates on police containments. Messages were routinely provided by users of the platform and participants in the demonstration, providing Sukey with up-to-date information on the whereabouts of police officers, riot vans, and mounted police. Once verified, these messages were either distributed back to users via a Sukey twitter account, or, more radically, rendered cartographically on a 'live' digital map of the protest environment. Junctions blocked by riot police would be represented by red lines, with those freely accessible mapped in green. These cartographic signs became the navigational lifeblood of many protesters on the ground, ensuring they stayed clear from potential police containments; free to continue protesting.

What was unique about the platform, was its ability to provide navigational updates to protesters, whilst they were on the move. As such, it became responsible, re-active and sometimes even pre-emptive of otherwise dangerous situations. Although maps have long been used in demonstrations: as navigational tools, in information leaflets, and as planning and organizational documents, their use as on-the-fly navigational prompts, responsive to, and cognizant of, possible threats was unheard of until the Sukey platform. It became a kind of 'anticipatory technology' – able to assist users in pre-empting future situations.

Although this period in British political life is over, and the Sukey platform unequivocally dead, it still provides a radical and necessary blueprint for a latent form of cartographic politics rooted in a mobilization of care. This is especially so with the surge of a new kind of political populism – a now right-wing response to the political-economic crisis of 2007-08. Perhaps now, more than ever, there is a need to understand how care might be exercised and embedded through digital life. As such I outline here how the Sukey platform engendered a form of care, working through Fisher and Tronto's four phases.

First, it ensured participants were *attentive* to the collective needs of other protesters beyond that of immediate friends or comrades. Sukey, considered care-tographically, entailed the construction of a broad, connective network demonstrating Bennett and Segerberg's logic of 'connective action'.⁵⁹ Such networks, as Bennett and Segerberg suggest 'operate importantly through the organizational processes of social media', eschewing 'strong organizational control or the symbolic construction of a united "we"'.⁶⁰ This attention, conditional of this connective capacity, was cast far beyond organizational affiliation, not only augmenting, but entirely replacing other mechanisms designed to ensure the safety of protesters during demonstrations (i.e. buddy systems or blocs). This is patently not care-as-familial, nor care-as-market-relation, but care-as-connective-practice.

Secondly, it routed a form of care *responsibilities* through both a digital device (smartphone) and a digital platform. In so doing, these responsibilities were rendered visually, textually and cartographically, and the 'unmet needs' of protesters, materialized. Without a routing of these responsibilities through a platform capable of processing 'on the fly' needs, these responsibilities remained unassigned. The needs of fellow protesters, furthermore, remained pre-determined, fixed and assured *before* the protest event, rather than dynamically addressed *during* it. The platform allowed new risks to be verified and mapped – such as the formation of a police line across a particular junction. Here is why risk is not the antonym of care: it openly worked across the terrain of the former, in order to instantiate the latter.

Thirdly, it was able to evaluate the *competence* of care-giving by virtue of whether protesters had been contained or not. As Sukey was primarily an 'anti-kettling' platform it served a singular, obvious purpose: to prevent the containment of protesters. Its on-the-ground success, therefore, was measured by the degree to which activists remained 'un-kettled' and free to move through the city streets. In other words, to continue protesting. This competency, therefore, was judged not through a singular, bi-directional care-giver > care-receiver > care-giver relationship, but through a multi-directional, plural formation; a 'many-to-many' caretopography.

Then, finally, it became possible to engender, foster, and actualize a *perceptive capacity* in demonstration participants – i.e. 'care-receivers' – that police containments represented the most dangerous, possible threat to their continued right to protest. It enabled possible protesters to engage with, and understand, what became to be the most significant threat to bodily safety during demonstrations at that time: police containments. Much of this involved communicating 'how to spot a containment', 'how to avoid a containment' and, if necessary, 'how to survive a containment'. The platform therefore enabled care-receivers to be (a) open themselves to being understood as such and (b) also, simultaneously, act as care-givers.

The platform, needless to say, was not without its problems. As with any blueprint the reality was somewhat messier. In many ways, the version of events presented above is an idealized view of the platform. In reality, only some participants were attentive towards fellow protesters in a way the platform demanded. Further, that these care needs were not always met, dependent as they were on a successful circulation through the Sukey network, and reliant upon qualification and verification of risk reports sent to the team. In addition, that due to the uneven relationship between protesters and attendant police forces – with all the latter's labour, equipment, legal recourse and organizational resource – this desire to remain free, mobile and disruptive was unrealized. Lastly, the capacity to perceive threats was, and continues to be, dependent on the successful translation of activist pedagogies into concrete navigational knowledges. Nonetheless, the platform provided a glimpse of what a care-tographic project might look like.

Conclusion

This paper has sought to explore a 'caretographic' landscape, rendered from, and through, the remains of a fleeting digital navigation platform. It does in order to re-cast the possibility of a digital, cartographic politics forged through a new mobilization of the feminist concept of care. It does so by expanding on the representational consideration of 'spaces of care' within critical cartography and GIS to consider the navigational properties of a 'care-ful practice'. Following Fisher and Tronto,⁶¹ I consider this care not as an emotional force, or moral principle, but as a pragmatically-oriented interrelation between thought and action.

But this interweaving of a careful thought and action in cartographic politics is nothing new. Maps, mapping and navigation have always involved a care-ful sensibility: to aid in way-finding. Nonetheless, it has been a latent dynamic, waiting to be surfaced. Fisher and Tronto's⁶² four phases of care – attention, responsibility, competence, and capacity – provide a productive infrastructure to thinking both abstractly *and* concretely about how caretographic projects may play out in the future. Indeed, also, how unknown caretographic projects may have *already played out*. In a sense, this article is an attempt to 're-animate' a careful logic that underlies all counter-mapping projects: a desire to care for the disorientated, dislocated and disrupted. Rendering this logic legible is but the first step.

ENDNOTES

- ¹ Joan C. Tronto, *Caring Democracy: Markets, Equality, and Justice* (New York: New York University Press, 2013), p. 25.
- ² Joan C. Tronto, *Moral Boundaries: A Political Argument for an Ethic of Care* (New York: Routledge, 1993), p. 172.
- ³ Berenice Fisher and Joan C. Tronto, 'Toward a Feminist Theory of Caring', in *Circles of Care: Work and Identity in Women's Lives*, ed. by Emily Abel and Margaret Nelson (Albany: University of New York Press, 1991), pp. 35–62; Joan C. Tronto, *Moral Boundaries*.
- ⁴ Monica Stephens, 'Gender and the GeoWeb: Divisions in the Production of User-Generated Cartographic Information', *GeoJournal*, 78.6 (2013), 981–96; Agnieszka Leszczynski and Sarah Elwood, 'Feminist Geographies of New Spatial Media: Feminist Geographies of New Spatial Media', *The Canadian Geographer*, 59.1 (2015), 12–28.
- ⁵ Fisher and Tronto, p. 40.
- ⁶ Joan C. Tronto, *Caring Democracy*, p. x.
- ⁷ Victoria Lawson, 'Geographies of Care and Responsibility', *Annals of the Association of American Geographers*, 97.1 (2007), 1–11 (p. 3).
- ⁸ Lawson, p. 3.
- ⁹ Lawson, p. 3.
- ¹⁰ Joan C. Tronto, 'Care as a Basis for Radical Political Judgements', *Hypatia*, 10.2 (1995), 141–49 (p. 141).
- ¹¹ Joan C. Tronto, *Moral Boundaries*, p. 108.
- ¹² Maria Puig de la Bellacasa, 'Matters of Care in Technoscience: Assembling Neglected Things', *Social Studies of Science*, 41.1 (2011), 85–106 (p. 86).
- ¹³ de la Bellacasa, p. 90.
- ¹⁴ de la Bellacasa, p. 90.
- ¹⁵ Bruno Latour, 'Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern', *Critical Inquiry*, 30.2 (2004), 225–248 (p. 200).
- ¹⁶ de la Bellacasa, p. 89.
- ¹⁷ de la Bellacasa, pp. 89–90.
- ¹⁸ Joan C. Tronto, p. 144.
- ¹⁹ Joan C. Tronto, *Moral Boundaries*, p. 106.
- ²⁰ Joan C. Tronto, p. 145.
- ²¹ Joan C. Tronto, p. 145.
- ²² Ayrn Martin, Natasha Myers and Ana Viseu, 'The Politics of Care in Technoscience', *Social Studies of Science*, 45.5 (2015), 625–41 (p. 627).
- ²³ Martin, Myers and Viseu, p. 627.
- ²⁴ Joan C. Tronto, p. 145.
- ²⁵ Joan C. Tronto, *Moral Boundaries*, p. 106.
- ²⁶ Joan C. Tronto, p. 145.
- ²⁷ Joan C. Tronto, *Moral Boundaries*, p. 106.
- ²⁸ Joan C. Tronto, *Caring Democracy*, p. 7.
- ²⁹ Joan C. Tronto, *Caring Democracy*, p. 7.
- ³⁰ Joan C. Tronto, *Caring Democracy*, p. 22.
- ³¹ Joan C. Tronto, *Caring Democracy*, p. 23.
- ³² Joan C. Tronto, *Moral Boundaries*, p. 107.
- ³³ Joan C. Tronto, *Moral Boundaries*, p. 107.
- ³⁴ Joan C. Tronto, *Moral Boundaries*, p. 107.
- ³⁵ Martin, Myers and Viseu, p. 635.
- ³⁶ Joan C. Tronto, *Moral Boundaries*, p. 108.
- ³⁷ , p. 13.
- ³⁸ Leszczynski and Elwood, p. 7.
- ³⁹ Leszczynski and Elwood, p. 7.
- ⁴⁰ Leszczynski and Elwood, p. 8.
- ⁴¹ Leszczynski and Elwood, p. 13.
- ⁴² Stephens, p. 989.
- ⁴³ Stephens, p. 989.

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- ⁴⁴ Stephens, p. 989.
- ⁴⁵ Stephens, p. 990.
- ⁴⁶ Stephens, p. 991.
- ⁴⁷ Stephens, p. 991.
- ⁴⁸ Louise Amoore, 'Data Derivatives: On the Emergence of a Security Risk Calculus for Our Times', *Theory, Culture & Society*, 28.6 (2011), 24–43; Louise Amoore, *The Politics of Possibility: Risk and Security Beyond Probability* (London: Duke University Press, 2013).
- ⁴⁹ Ben Anderson, 'Preemption, Precaution, Preparedness: Anticipatory Action and Future Geographies', *Progress in Human Geography*, 34.6 (2010), 777–98.
- ⁵⁰ Rob Shields, *The Virtual* (London: Routledge, 2003).
- ⁵¹ Louise Amoore, p. 12.
- ⁵² Louise Amoore, p. 9.
- ⁵³ Louise Amoore, p. n.p.
- ⁵⁴ Nathaniel O'Grady, 'A Politics of Redeployment: Malleable Technologies and the Localisation of Anticipatory Calculation', in *Algorithmic Life: Calculative Devices in the Age of Big Data* (London: Routledge, 2016), pp. 72–86 (p. 81).
- ⁵⁵ Shields.
- ⁵⁶ Shields, p. 185.
- ⁵⁷ Scott Sørli, 'A Short History of Kettling', *Scapegoat*, 2012, 1–44.
- ⁵⁸ Dan Hancox, *Kettled Youth: Summer of Unrest* (London: Vintage Digital, 2011).
- ⁵⁹ W. Lance Bennett and Alexandra Segerberg, 'The Logic of Connective Action: Digital Media and the Personalization of Contentious Politics', *Information, Communication & Society*, 15.5 (2012), 739–68.
- ⁶⁰ Bennett and Segerberg, p. 748.
- ⁶¹ Fisher and Tronto.
- ⁶² Fisher and Tronto.