Post-phenomenological Space: a geography of comprehension, form and power

1. Introduction

Geographers are explicitly developing what has come to be termed a post-phenomenological approach for investigating a range of phenomena. As Roberts (2018, p. 4) suggests, this post-phenomenology is not a "a clearly defined school or tradition", but instead draws upon a range of different influences from post-structural philosophy and science and technology studies (Lea, 2009). Recognising this diversity of influence, at least three forms of post-phenomenology can be identified. First is the philosophy of Don Ihde (2008), and those working in his wake (e.g. Wellner, 2015), who draw upon ideas from science and technology studies to investigate the "relations between human beings and technological artefacts" through "analyses of actual technologies" (Rosenberger and Verbeek, 2015, p. 9). This work continues to influence debates in science and technology studies (e.g. Verbeek, 2012) but has not been widely developed in geography (although see Revill, 2014). Second, within geography there is a range of work that has developed a "post-phenomenology" of landscape (Rose and Wylie, 2006), which seeks to complicate notions of presence and subjectivity that are associated with traditional phenomenology through an engagement with terms such as haunting and spectrality (Rose and Wylie, 2006 ; Macpherson, 2009; Coddington, 2011 ; Hill, 2013). Third, there is a range of post-phenomenological work within geography that has engaged with ideas from speculative realism (Harman, 2018) to think through definitions of post-phenomenology (Ash and Simpson, 2016), post-phenomenological methods (Ash and Simpson, 2018 ; Ash et al, 2018 ; Rossetto, 2019) and concepts such as world (McCormack, 2017).

Developing the third speculative realist strand of post-phenomenology, the paper outlines a post-phenomenological theory of space. Here, post-phenomenology can be defined as a mode of investigation that attempts to understand non-human entities "without

reducing…[them]…to how they appear to human beings" (Ash and Simpson, 2016, p. 60). Developing this definition into a post-phenomenological theory of space, the paper works with geographer's shifting accounts of space that have emerged through engagements with humanist and existential phenomenology and theories of relationality. Rather than just focusing on space as given through the relation between human and world (as in phenomenology) or suggesting that relations necessarily precede and constitute the possibility of spatial appearance (as in the relational turn), a post-phenomenological approach focuses on how space appears to all entities (whether human or non-human) as entities. To do this, the paper draws upon the work of Tristan Garcia (2014) to develop a vocabulary of comprehension (the way entities can relate to one another) and form (that which separates entities). In turn, space comes to be defined as a dual process of differentiation and distantiation that produces different modes of nearness and farness that are specific to the inter-comprehension of particular entities.

Through this definition, the paper expands work on phenomenology and power in geography. Existing work in geography has developed phenomenology in order to understand how "the phenomenal body is ridden with power", where "the body…[is]…both vehicle and victim of power" (Simonsen, 2012, p. 18). From this position, power is understood as a matter of how practices become sedimented into bodies and routines through a range of humans and non-humans to produce particular forms of orientation, classification and discrimination (Rose, 1993; Ahmed, 2006; Ortega, 2016; Davidson, 2017). A post-phenomenological approach expands this account by developing a vocabulary to further understand how power operates between non-human entities, where power is not just a matter of inscription in or on a human body alone. Here, power is also understood as the way entities are organised to generate different modes of spatial distantiation between non-human things that alter what those entities can do, as well as potentially altering the bodies that engage with those entities. This approach enables an analysis of power as fundamentally spatial because every space is understood to be

involved in a power relation due to the inherent inequality of comprehensions between entities. Understanding how power operates thus becomes a matter of charting the inequality of comprehensions of entities and how such inequalities arise and endure.

To demonstrate the importance and utility of this approach to space and power, the paper works with the example of the global plastic food packaging industry. While food packaging might appear to be a mundane or even unimportant object to examine, it is a multi-billion dollar business that is due to be worth $375 billion globally by 2020 (Embree, 2016). As well as an important political economy, this industry produces an enormous number of plastic items each year. For instance, over one million plastic bottles alone are sold each minute around the world, with less than half of these items being recycled (Laville & Taylor, 2017). In turn, much plastic food and drink packaging is used to store and contain items that are high in sugar, salt and saturated fat, such as carbonated drinks, sweets and chips. As such, the spatiality and materiality of food packaging is centrally implicated in range of environmental and social problems surrounding, among other things, obesity (T. et al., 2001), poor nutrition (Nestle, 2013) and waste pollution (Derraik, 2002 ; Kenneth & Betty, 2007). Beginning with the packaging as an entity, a post-phenomenological approach analyses the space of the packaging as various forms of symmetrical and asymmetrical comprehensions to understand how the packaging encourages various forms of engagement and use.

To make these arguments, the rest of the paper forms four parts. Section two discusses changing phenomenological accounts of space in geography and the turn to relational thinking that emerged in the wake of these changes. Section three develops and defines a post-phenomenological theory of space by drawing upon and modifying the work of Tristan Garcia. Section four uses the example of food packaging to demonstrate how a post-phenomenological

account of space provides a different way of thinking about the problems associated with the spatiality of packaging. To conclude I provide some further reflection on how an account of post-phenomenological space can inform debates in human geography around relationality and power.

2. Phenomenology, Relationality, Objects and Space

Humanist phenomenological geographies were important in calling into question purely metrical ways of thinking and measuring space (Buttimer, 1976 ; Entrikin, 1976 ; Pickles, 1985 ; Relph, 1985). To do this, they focused on the way space appears in terms of distance, linked to human practices with particular objects (Buttimer, 1976 ; Buttimer, 1999). In Tuan's words:

"we can say little more than…space possesses structure and orientation by virtue of the presence of the human body. Body implicates space; space co-exists with the sentient body…space is orientated by each centre of consciousness and primitive consciousness is more a question of 'I can' than 'I think'. 'Near' means 'at hand'. 'High' means 'too far to reach'" (Tuan, 1979, p. 389).

From a strict humanist phenomenological perspective, to speak of space 'as such' is meaningless, because it is always relative to some form of human perception, awareness or consciousness of an intentional object. As Tuan puts it: "the natural world is not geometrical, since it cannot be clearly and explicitly known. It can be known only as resistances to each human space, including the geometric, that is imposed thereon" (Tuan, 1979, p. 389).

Recently, engagements with phenomenology in geography have been more existential in nature, working through phenomenologists including Merleau-Ponty (1962) and Heidegger

(1962) and post-structuralist thinkers who directly engaged with and critiqued phenomenology, such as Derrida (2006) and Deleuze (1988). These positions have often revolved around the key issue of landscape. Here, space is figured variously as dwelling (Cloke and Jones, 2001), folding (Wylie, 2006) and haunting (Wylie, 2007, 2009 ; Coddington, 2011 ; Hill, 2013), amongst other terms. From a so-called dwelling perspective (Ingold, 1993), space is a product of a 'taskscape' that emerges through human activity. Here, it is the situatedness of human beings "which create spaces, times, places, and landscapes…where the habitual practices of humans form familiar patterns which can become landscapes or places (Cloke and Jones, 2001, p. 652).

In partial distinction from this approach, Wylie considers space in relation to landscape as more fundamentally relational. Rather than human practices generating a sense of space as part of a taskscape, spaces and humans emerge through processes that are not reducible to either term alone. Here, space is fundamentally an enfolded experience of landscape, which

"is not a way of seeing the world. Nor is it 'something seen', an external, inert surface. Rather, landscape names the materialities and sensibilities with and according to which we see. Neither an empirical content nor a cultural construct, landscape belongs to neither object nor subject; in fact, it adheres within processes that subtend and afford these terms" (Wylie, 2006, p. 520).

Further complicating and questioning the notion that space is predicated on a pre-given subject, spectral geographies have considered how spaces are haunted. As Hill (2013, p. 381) suggests "our experience of the world is haunted by a space-time in which past and future co-exist, and interact, in uncertain and unpredictable ways". In Wylie's (2007, p. 172) words, such a focus on haunting acts "as a riposte to phenomenologies of being-in-the-world". Rather than "'I am'

announced in the placing of being-in-the-world" there is "always and necessarily, 'I am haunted'. Equally, place, or placing, the taking-place of place, is constituted not so much by dwelling as by haunting" (ibid, p. 172). As in Wylie's earlier work, this haunting results in an inherently relational account of space, which is "in-between visibility and invisibility, and between observer and observed" (ibid, p. 172).

While there are some important differences between these humanist and existential positions, they are actually closer than they appear, inasmuch as they tend to focus on how space appears to human beings, rather than how space appears as such. In the humanist work of Tuan and others, such a position is explicit, but this notion of spatial appearance for humans (as places) is also present within accounts of dwelling. As Cloke and Jones (2001, p. 652) put it, "any act of building, living, or even thinking, is formed in the context of already being-in-the-world which, in turn, affects that forming". Even in spectral geographies of landscape, which attempt to call notions of being-in-the-world as a form of autonomous presence into question, such being is still there, albeit as a secondary effect of a "a pre-subjective affective ecology from which a seeing subject and a distant landscape…arise" (Rose, 2012, p. 759). In other words, the question of space comes to be understood in terms of how space appears for a human subject, even when it is argued that this subject emerges with and through non-human processes that enable a subject's sense perception of space.

Emerging alongside these phenomenological geographies, a different range of perspectives attempt to think space in ways that do not revolve around a human subject. Such relational theories of space currently dominate geographical thinking (Whatmore, 2006 ; Massey, 2004 ; Massey, 2005 ; Yeung, 2005 ; Bathelt & Glückler, 2003 ; Amin, 2004). Here spaces are defined using a variety of terms, such as network (Bingham, 1996 ; Bosco, 2006 ; Graham, 1998 ; Murdoch, 1998), assemblage (Anderson et al. 2012 ; Anderson & McFarlane, 2011 ;

DeLanda, 2016 ; Roberts, 2012) or topology (Allen, 2011 ; Lash, 2012 ; Malpas, 2012).

While these approaches theorise what relationality is in different ways, they tend to share the

basic tenet that spaces are ultimately "made up of precarious socio-material relations" (Müller

& Schurr, 2016, p. 217) and that "the relations among the elements, rather than the nature of

the elements themselves, are the important aspects of a…space" (Martin & Secor, 2013, p.

423). Indeed, the ubiquity of such relational approaches results in a situation in which "it

is…hard to imagine a world without relationality as a defining characteristic of social and

material interaction" (Allen, 2012, p. 190).

However, while tending to avoid a perspectival or subject centred account of space associated

with phenomenology, such relational approaches can move rather far in the other direction.

When understood as "a swirl of flows, networks, and trajectories, as a chaotic ordering that

locates and dislocates" (Malpas, 2012, p. 228), space can become somewhat formless, where

the specific textures of spatial distantiation tend to be downplayed and instead replaced with

an account of space as a flattened network or assemblage. This is problematic, as Martin and

Schurr (2016, p. 220) argue, because it "risk[s] providing a veneer of theoretical sophistication

to otherwise descriptive accounts that…becom[e]…a simple joining-up exercise".

Recognising these points, a post-phenomenological account of space is concerned with

building on both phenomenological and relational geographies. Specifically, it seeks to define

space in such a way that retains an ability to account for the texture and form of spaces that

relational geographies can downplay, while also not reducing these forms and textures of space

to the product of a subject or being's embodied positionality or cognition, as can be the case in

phenomenological geographies. To do this, I argue for a shift from thinking in terms of objects

and relations to what could be understood as the form, being and comprehension of entities.

3. Post-phenomenological space

The work of French Philosopher Tristan Garcia (1981- Present) offers a starting point for thinking through a post-phenomenological account of space in terms of how space appears for, to and through entities. According to Harman (2013, p.27), Garcia's thinking emerges from an "analytic-dialectical standpoint", based upon an engagement with both Anglo-American analytical philosophy and the work of philosophers such as Hegel (1976) and Wittgenstein (2007). His main text is *Form and Object*, originally published in French in 2010 and translated into English in 2014.

Harman (2015) suggests that Garcia's work can be understood as emerging alongside, but also distinct from, the object-oriented ontology branch of speculative realism. Object-oriented strands of speculative realism, as in the work of Harman (2010) and Morton (2013), tend to define entities as withdrawn objects. In Harman's (2015, viii) words, "object-oriented philosophy…speaks of a gaping chasm between real objects and their sensual counterparts", where "objects…recede into the monastic solitude of private vacuums" (Harman, 2010, p. 160). This results in a position in which "all objects…[are]…in some sense irreducibly withdrawn" (Morton, 2013, p. 11). However, Garcia takes a very different approach. For Garcia there is no such withdrawn thing. As Garcia (2013, p. 19) usefully highlights, for Harman "the real object always withdraws, inaccessible and in-itself… In my model, a thing is always outside-itself, and is either in something other than a thing, or in another thing…A thing-in-itself is meaningless".

More specifically, for Garcia, an entity is not a substance, process or relation. Rather an entity is always double, being both a thing and an object at the same time. For Garcia the thingly part of an entity is defined in relation to its form. Here, form does not refer to an entity's shape, size, composition or material substance. Rather, form refers to the negative of a thing, which is to say everything that the entity is not. As Garcia (2014, p. 115) puts it: "listen to a sound, the noise of a stone falling on the ground. This noise has a form; it begins, endures and ends. Everything that is not this noise, before, during, after, and after it, forms this noise". At the same time, an entity is also an object in the sense that it can connect and relate to other things. As an object an entity is defined as the difference or tension between what Garcia terms its being and comprehension. In Garcia's (2014, p. 107) words: "comprehending is having something inside itself…Being is belonging to something". An entity is thus always both comprehending and being together. "A thing always marks the difference between the two senses or directions of being: that which enters into and that which goes out…The direction from the entering to the entered, we call 'being'. The direction from the entered to the entering, we call comprehension" (Garcia, 2014, p. 107).

To make sense of entities as both things and objects, think of an apple sitting on a desk. The apple as a thing would be defined in terms of its form, or where its qualities begin or end. Such qualities might include its greenness, fleshiness, roundness or weight etc. The form of the apple would thus operate to differentiate the apple from everything it is not (the desk, the air surrounding the apple, the floor on which the desk sits). At the same time as an object, the apple would be defined as the difference between what comprehends that apple and how the apple radiates its being through the way it belongs to the desk. The desk comprehends the apple in the sense it enables the apple to sit on the desk in the way it does. At the same time, the apple belongs to the desk in the sense that the apple becomes what it is through its specific

engagement with the desk. For instance, perhaps the qualities of the desk, such as its colour or material casts the apple in a particular light, affecting its colour, shade and tone as it sits on the desk (and which in turn might affect the desk's being as well). From this position, if the apple was to be moved from the desk, then it would enter in a different tension with something else and generate different qualities, which would alter the apple's form, because its qualities now begin and end in a different way. This alteration of form means that the apple would thus be a different apple to the apple placed on the desk.

To be clear, focusing on form is not an attempt to return to a notion of entities as having a Platonic essence, which so much relational work in geography tries to get away from (Malpas, 2012). In my reading of Garcia, entities are distinct, but this distinctness is not based upon an abstract or universal essence that is fixed or unchanging. Rather, the distinctness of an entity is defined by that which the entity isn't (its form), which can change depending on how it comprehends and is comprehended by other entities [1]. In other words, a post-phenomenological definition of space recognises entities are relational, but not absolutely relational because any entity is always defined in relation to what it is not.

With this background in mind, it is important to note that Garcia offers no coherent theory of space in his current published work. However, utilising a dual understanding of entities as things and objects, a post-phenomenological definition of space can be developed, where space is understood as intimately tied to two interlinked concurrent operations of entities. The first operation is the way entities are differentiated from one another as things in terms of their form. The second operation is how this differentiation enables different modes of distantiation,

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[1] It is important to point out that there seems to be some ambiguity in Garcia's account of whether or how the form of things relates to the being and comprehension of objects (e.g. Garcia 2014 p147 compared to p150). In what follows, I develop the beginnings of a post-phenomenological account of space by suggesting there is a link between form and object, while recognising this issue can be further explored in future.

understood as relations of near and far, through the way entities inter-comprehend one another as objects. To make sense of this definition of space as a dual operation of differentiation and distantiation, we can expand upon the example discussed above of an apple sitting on a desk. The apple sits on a desk and the desk is in a room, perhaps an office. The office has four walls, a door, a window, book shelves, a computer, a telephone, a filing cabinet, sheets of paper pinned and blu-tacked to the wall, amongst many other entities. Here, the apple, the desk, the walls, the door, the window etc all have a form (where their qualities begin and end), which is informed by the way that entity is comprehended by something else. The wall's qualities include its rigidity, the colour of the paint applied to it, its tensile strength, its sound reflecting and absorption qualities and so on, which end differently depending on where other entities begin. The form of entities (everything they are not), thus acts to differentiate the walls from the floor, the floor from the carpet, the computer from the desk and so on.

As entities are differentiated according to their form as things, they inter-comprehend one another as objects. Inter-comprehension simply refers to the fact that multiple entities comprehend one another at the same time. As Garcia (2014, p. 106) suggests, entities are never alone. In his words: "to be something…[an entity]…must be in something-other-than-itself; this is its only condition". It is the dynamic interplay of the form of entities as things and the inter-comprehension of entities as objects that enables distantiation. From a phenomenological perspective, distantiation is a process through which space appears to human beings in terms of relations of near and far. Simandan (2016) defines distantiation through the notion of a self. Here,

"the reference point of distance for any given individual is their self in the here and now. The farther any given item (real or imagined) is removed from the self in the here and now, the

bigger its perceived subjective distance is. It is important to highlight at this point that various items can be distanced from one's self either in surrounding reality (a person moving away from me), or in one's 'mind eye'" (Simandan, 2016, p. 250).

For Simandan distantiation is not reducible to a process of metrical or quantitative distance that measures the gap between things. Rather, it is a qualitative sense of what is near to hand or far at hand, or the perceived distance of things in relation to a capacity to reach or imagine them. Taking the idea that entities are both things and objects seriously alters this notion of distantiation. Like phenomenology, a post-phenomenology recognises that distantiation is a matter of near and far relative to a particular entity and cannot be reduced to a metrical distance. Unlike phenomenology, a post-phenomenological position suggests distantiation is linked to how entities comprehend one another, rather than being predicated upon a cognitive human self. As such, distantiation can be defined as the inequality of comprehension of entities, whereby some entities comprehend multiple entities that do not comprehend one another, which enables entities to appear differentially spatially separated.

Although Garcia does not provide an explicit account of space in his current published work, he does briefly discuss the inequality of comprehension of entities involved in the spatiality of a room, which can be used to develop a post-phenomenological definition of distantition. He suggests:

"Being in a room is being in a spatial relation with a thing (the room) that has a relation to us. This thing (the room) also maintains a relation with other things, though we do not ourselves have this relation. What does it mean for the room to comprehend us or to be greater than us, other than there are things in the room which are not in us?...The spatial relation between the

room and me is such that the room extends beyond me, for this room has the same relation to me (capacity) as to some things that I do not relate to (I do not contain them, therefore the room is greater than me)" (Garcia, 2014, p. 111).

In the above, very simple example, the room (understood as the walls, ceiling, door and window) comprehends the human occupant as well as non-human entities in the room, such as a desk or chair (and so contains them), but the chair and desk do not necessarily comprehend each other (so they do not contain each other). Through this inequality of comprehension it could be said that not only is the chair, desk, walls and occupant discrete from one another inasmuch as they each have a different form, but that the walls and ceiling are in a spatial relation with these other entities, inasmuch as they are a 'bigger' entity that contains these other entities, because they comprehend these entities, while not being comprehended by them.

However, spatial relations are not as simple as a matter of containment. To think about more complex spatialities, a post-phenomenological narrative of spatial distantiation expands Garcia's account of the inequality of inter-comprehension of entities by differentiating between what can be termed more or less symmetrical and a-symmetrical forms of inter-comprehension. From this position, nearness, or symmetrical comprehension, refers to a situation in which the qualities of multiple objects are altered in a more reciprocal manner by an inter-comprehension (e.g. the qualities of two entities are altered as one comprehends the other, which potentially changes the form of both entities). Farness, or a-symmetrical comprehension, refers to a situation in which the qualities of objects are altered less reciprocally by the inter-comprehension between different entities (e.g. one entity comprehends another and alters that entity's qualities and/or form, but whose qualities and form are not neccesarily altered by that comprehension). In making this claim, a post-phenomenological account suggests space is

central to what an entity is, because how entities are distantiated from one another generates different qualities that furnish entities with their particular being and form, and in turn, their capacity to do things.

Returning to the example of the office room again, it is possible to think of the entities there as involved in a series of symmetrical and a-symmetrical comprehensions, which generate spatialities of near and far that exceed a notion of simple containment. For instance, we could imagine daffodils standing in a tall, narrow, clear glass vase of water on the desk in the room. In terms of distantiation, we might say that the daffodils and water are close to one another, while the vase is further from the daffodils and water, even though the vase would seem to contain these entities. This is because the inter-comprehension of the water, daffodils and vase results in the qualities and form of the flowers and water changing, whereas the qualities of the vase changes, but not its form.

The water and daffodils could be said to be near to one another in the sense that their inter-comprehensions have a degree of reciprocity: the vase comprehends the water and daffodils, and the daffodils are comprehended by the vase and water in a way that alters the qualities of the daffodils, water and vase. In comprehending the water, the glass vase gives the water is particular qualities, such as its temperature (which would differ if the vase was made from granite or plastic for example). At the same time, the way the vase comprehends the water alters the form of the water. For example, the tall and narrow glass vase gives the water a form of depth, whereas the same 'quantity' of water poured into a wide flat tray would give the water a form of shallowness. In turn, the way the jug comprehends the water alters how the water comprehends the daffodils, directly changing their qualities. The tall glass vase guarantees the stems of the daffodils are deeply submerged in the water, ensuring the flowers are fed and the

daffodil's petals are bright yellow, rather than green or brown. Concurrently, the daffodils and water alter the qualities of the vase itself. Filled with water and daffodils, the clear vase might take on a greenish hue for instance. Put in another way, the inter-comprehensions of these entities are more symmetrical than asymmetrical because they effect the being of all of these entities to some degree.

Meanwhile, it could be argued that the desk is further from the daffodils and water than the jug is because the desk comprehends the flowers more a-symmetrically than the water and jug do. As described above, the daffodils, water and jug inter-comprehend one another, altering their qualities and/or form. At the same time, the table comprehends the jug, daffodils and water also altering their qualities and/or form. For instance, the table's form, where its qualities end, alter where the vase can begin as it allows the vase to sit flatly on the table and so give the vase its quality of standing upright, which in turn gives the vase its quality of depth it needs to hold the water and daffodils. Despite these inter-comprehensions, the table's qualities are not altered by the vase, daffodils and water and in turn, the form of the table does not change. The table is still the table whether the vase is on the table and its qualities continue to begin and end in the same way regardless of the vase's presence. In other words, the vase is further from the desk than the daffodils and water are from the vase, even though all three entities are 'touching' and metrically the same distance from one another. Again, to reiterate, here 'farness' is not reducible to metric distance and instead revolves around the way the inter-comprehension of entities affect some entities' being more than others.

Of course, symmetrical and a-symmetrical comprehensions should not be understood in binary terms. Absolute symmetry (where multiple entities' qualities and/or form are altered entirely equally) or absolute asymmetry (where only one entity's qualities and/or form are altered

entirely exclusively) would be uncommon. Instead it is more useful to state that there are degrees of symmetry or asymmetry in the way entities comprehend other entities. Indeed, if we take the idea that entities are multiple seriously, then different aspects, parts of components of a single entity inter-comprehend many other entities at any one moment, some of which may be more symmetrical and others which may be more a-symmetrical. As such, space itself, understood as distantiation, is multiple, appearing as a specific mode of near and far depending on the entity that is being comprehended as an object and how that comprehension alters that entity's form as a thing.

To clarify and reiterate then, the difference between conceptualising space in terms of the form and inter-comprehension of entities, instead of through relational terms such as assemblage or network is that a language of comprehension focuses on how entities are included within, or belong amongst other entities, while relational thinking understands entities in terms of the way they are connected or disconnected from other entities. Relational thinking tends to flatten relations as a series of connections on an equal plane (Anderson et al., 2012), whereas the notion of inter-comprehension emphasises that entities are unequally nested and delimited alongside one another. However, unlike geometric or scalar understandings of space, these nestings are not hierarchical because entities can comprehend one another in multiple ways that cannot be exhausted by these comprehensions. As such, how entities comprehend one another cannot be added up to form a total or absolute space that can be traversed from the smallest space to the largest space that contains those entities. Focusing on the inter-comprehension of entities provides a good starting point for the development of a post-phenomenological account of space in terms of the differentiation of entities and the production of relations between near and far. The next section develops this definition by suggesting that how entities are distantiated from one another produces power and demonstrates how a post-

phenomenological approach allows geographers to track, analyse and alter the power of entities.

4. Power, space and post-phenomenology

A post-phenomenological approach suggests that power is inherent to almost every space, because any comprehension between entities (which generates spatial differentiation and distantiation) is almost guaranteed to be unequal. From this position, power is present regardless of whether an entity is 'natural' or 'artificial' or whether an entity might come into contact with humans or not. For instance, in the example developed in the last section, the table could be said to have power over the vase and the vase have power over the daffodils, through the way the (a)symmetry of comprehensions between these entities enable them to exist as they do.

Developing this point, a post-phenomenology of space would define power as how the inequality of comprehensions of entities are actively designed to generate spaces that provoke, guide and otherwise influence the action or capacities of other entities. Like relational geographies of power, this approach questions the association between the extensity of space and the intensity of power (Massey, 2005). As Allen (2016, p. 2) writes: "the extensiveness of power and its intensity are usually assumed to be conversely related; increase one and the other diminishes or lessens". Here it is often thought that the further something away is, the harder it is to exert influence over it, or the less intense this exertion becomes. For Allen, spatial power is not simply about drawing things into physical proximity, but by bringing them into reach. As Allen (2016, p. 2) puts it: "reach, when grasped is more about presence than distance; where power composes the spaces of which it is part by stretching, folding or distorting relationships to place certain outcomes within or beyond reach". A post-phenomenological account suggests

that power is not only about trying to bring entities close as a form of grabbing or holding, but is also about the production of multiple forms of near and far, which allows entities to appear in a manner that encourages particular forms of engagement.

To understand how entities are designed to produce multiple forms of near and far and the potential impacts of this design, we can turn to the example of plastic food packaging. In relation to plastic food packaging, a post-phenomenological geographer might be interested in studying a snack food such as corn chips or crisps, the way they are displayed in supermarkets and how these factors might influence decision-making processes about purchasing said food. Perhaps the post-phenomenologist is concerned with the effects of the spatiality of junk food packaging on public health and is attempting to change how the packaging of large 'sharing bags' of chips is designed and marketed to encourage people to be more aware of portion size. In the case of a packet of corn chips, each entity that makes up the product could be said to have a space that is dependent on a series of more or less symmetrical and a-symmetrical comprehensions, which shapes how they appear to people and influence how many are eaten as a given portion. For instance, many corn chip bags are made of a plastic film and internally coated with a very thin layer of aluminium. The aluminium is designed to stop moisture from entering the bag and altering the texture or crunch of the chips when eaten. Corn chip bags are also regulary filled with nitrogen gas, which is designed to extend the life of the chips as well as improve the flavour (Paik et al., 1994). A metrical measurement of the bag would suggest that the bag, aluminium lining and nitrogen are very close together, only a few millimetres apart. However, a post-phenomenological analysis would suggest that there are various spatialities involved with each entity that make up the corn chips as a product, which confound the notion of a single metric. As I will demonstrate, the specificity of this organisation of

multiple relations of near and far is what partly gives corn chips their power (to be alluring things that people want to buy and eat).

The multiple spatialities of the corn chip packaging include the interior aluminium lining of the bag and the nitrogen, which could be said to be near or close to one another. This is because the aluminium lining and nitrogen are designed to symmetrically comprehend one another in the sense that the bag comprehends the nitrogen, and maintains its being by containing it, while the nitrogen comprehends the aluminium lining, which acts to separate it from the outside atmosphere. At the same time, the exterior of the bag is 'far' from the nitrogen because they a-symmetrically comprehend one another. Here the exterior of the bag comprehends the aluminium lining, which gives that lining its structure and capacity to minimise moisture entering the bag, but it is not comprehended by the nitrogen itself because it does not enter into contact with the outside of the bag as it is shielded by the aluminium lining.

Complicating these spatial relations further, we could argue that the supermarket shelf on which the bag sits also has a spatiality that is predicated upon, while also remaining distant from, the multiple relation of near and far that make up the bag. For example, as a flat surface, the shelf works to allow the bag to stand at full height, with minimal crushing or bending. This means that the product is clearly visible for the consumer and reduces the chance of the package tearing or popping open. Here the shelf and bag could be said to a-symmetrically comprehend one another because the shelf allows the bag to maintain its shape and structure, while the shelf's form is not altered by the bag. In turn, these multiple relations of near and far influence how the bag as a whole appears to people as a spatial thing.

For the person approaching the shelf the nitrogen inside the bag is a-symmetrically comprehended. This is because the person cannot comprehend the nitrogen while the bag is closed. Indeed, even when the bag is opened the gas immediately dissipates, meaning it always maintains a distance from the person. But, despite this distance, the nitrogen is key to how the bag is comprehended by the shelf and in turn the person because the nitrogen helps hold the bag upright and provides the person a better view of the label as the bag sits on the shelf. From this position, it would not be a contradiction to state that the bag is close to the shelf, while the nitrogen is very far from the shelf, even though it is contained by the bag.

These multiple spatialities of near and far are not simply incidental, but are key to, and directly effect, how corn chips are experienced by people. Indeed, notice that the inequality of comprehensions between these entities are intentionally constructed and designed to produce a particular effect. For example, the nitrogen in the bag and the aluminium coating enable the maintenance of the chip's, taste, which has been carefully tested and designed to create what food scientists term a bliss point. This bliss point is produced to avoid what is known as sensory-specific satiety or "the tendency for big distinct flavors to overwhelm the brain, which responds by depressing….desire" (Moss, 2015, p. 131). In Moss's words, "the biggest hits- be they Coca-Cola or Doritos – owe their success to complex formulas that pique the taste buds enough to be alluring but don't have a distinct, overriding single flavour that tells the brain to stop eating" (ibid, 131). As a result, "every second, untold trillions of neurons are fired by that irresistible combination of salt, fat and flavour, while the people attached to those fingers experience the irresistible desire to put their hand back in the bag for more" (Schatzker, 2016, p. 13). From this perspective, the post-phenomenologist recognises that the inequality of comprehensions between the bag, nitrogen, chip and aluminium is key to the allure of corn chips as a product. To maintain the existence of the bliss point for the consumer (a crunchy

chip, with the correct level of moisture) requires that the chips remain very close to the nitrogen for as long as possible, while the nitrogen maintains an absolute distance from the exterior bag.

Recognising and understanding how this power relation has been intentionally constructed between the bag, chip, nitrogen and customer by a whole host of food scientists, marketers and manufacturers could in turn influence the kinds of intervention the post-phenomenologist might recommend to address issues around consuming such forms of packaged chips. Working in the UK, the post-phenomenologist recognises that all food packaging in the UK has to include a traffic light system on the front of the product displaying the amount of energy, fat, saturates, sugars and salt per suggested serving. But, focusing on the spatiality of the chips and bag, it becomes reasonable to the post-phenomenologist that this traffic light system will not be that effective in helping buyers control their portion sizes. This is because the traffic light graphic only forms a small part of the bag and so doesn't dictate the inter-comprehension between person, chips and bag. Furthermore, there is no way of knowing how much 30g of chips are (the recommended size of a single serving) without people weighing the chips out using a scale.

Focusing on the inequality of comprehensions between bag, nitrogen and chip would offer a different intervention. Rather than the addition of discursive sign posting, the post-phenomenologist might suggest that the key technique to change practices around portion sizes is to alter the spatiality of the bag. This is because the bag acts as an object that inter-comprehends multiple other objects (the nitrogen, the aluminium lining, the chips themselves) and thus acts to contain them. From a post-phenomenological perspective, changing the bag as an object would involve altering the (a)symmetries that generate the relations between near

and far, which in turn, would alter how the bag, aluminium, nitrogen and chips comprehend one another and thus alter how the chips as a product are comprehended by people.

One way to change how large sharing bags of chips are comprehended would be to introduce multiple horizontal separating partitions, which would contain 30g of chips each. This would involve adding new objects to the bag, namely additional heat seals. By adding additional seals, the bag would comprehend the chips in the same way (symmetrically comprehended by the aluminium and nitrogen, a-symmetrically comprehended by the exterior of the bag), but alter the spatial relations between specific numbers of chips. Each 30g portion of chips and the necessary nitrogen to keep them fresh would take on a distance from one another that was lacking in the original packaging. For the consumer, the nitrogen remains far from them as they cannot access it when the bag is closed and the nitrogen dissipates upon opening. But partitioned into separate areas by the heat seals, the nitrogen is comprehended differently by the bag itself, altering the appearance of the spatial relations of the bag for the consumer. For instance, as a series of inflated sections, the bag might look larger and more appealing to the consumer. Or, the physical force required to open the heat seals that separate the bag into sections might make the bag feel as if it contains more product. At the same time, using the heat seal to alter how the bag appears to people might allow them to measure a portion of chips more easily. In other words, by altering the way the various objects that make up corn chips comprehend each other, the spatial appearance of the bag can change and in turn the power relations between bag and consumer.

Alternatively, the post-phenomenologist might be dismayed at the power and reach these seemingly minute spatialities can have on consumption behaviour and attempt to completely alter the inequality of comprehensions between bag, nitrogen and chip. They may do this by

arguing that bags of chips should not be allowed to contain nitrogen, thus altering the chip's qualities and reducing their potential to create bliss and compulsive eating. In any case, by examining the minute spatialities of the bag in terms of how it inter-comprehends other entities, the power relations of these entities come starkly to light, and with them ways of altering such power relations.

In closing this section, it is important to reflect on what I have not had the space to discuss. This would include the multiple spatialities that corn chip bags are linked to and productive of, such as the spaces of design, production and shipping that got them to the supermarket or how and where they are disposed of, such as a landfill. These spaces are potentially as important as when the corn chips sit on the shelf in the supermarket, but, given the space available, only one site of inter-comprehension could be discussed. Indeed, what is key to a post-phenomenological account of space as inter-comprehension is the detail of the account itself. It is simply not possible to take a post-phenomenological approach to space seriously and describe an entity in a sentence or so and then skip to another entity and make claims about its spatiality. Suffice to say, it would also be possible to consider corn chip bags in terms of their power relations (understood as the inequality of their inter-comprehensions) with other entities as well. These entities might include waste management bags, landfills and human stomachs among many others, which in turn might relate to a whole set of issues surrounding environmental waste and sustainability, public health, family relationships and so on.

5. Conclusion

This paper has proposed the beginnings of what could be termed a post-phenomenological account of space. Instead of only defined through human activity or processes of relation alone, spaces can be understood via the way entities comprehend one another and how these inter-

comprehensions produce different modes of distantiation. In doing so power is understood as inherently spatial, because power is defined as the inequality of comprehensions of entities, which generate relations of near and far that work to organise the actions and capacities of humans and other non-humans. To conclude, I want to draw out some wider points as to how this account contributes to debates around relationality and power in geography.

First, the post-phenomenological account of space developed here has suggested caution when only emphasising the relational nature of space and entities. In strongly relational geographies, the difference between entities and spaces becomes mostly erased. As Jones (2009, p. 941) suggests, from this position: "space is objects and objects are space", which results in the "connection problem" (Dainton, 2001), whereby "it becomes impossible to distinguish between necessary and contingent spatial relations, such that all objects are necessarily spatially related" (Jones 2009, p. 495). As Jones points out, when everything is understood as existing in relation, it becomes very difficult to identify or differentiate between spaces or entities at all. By differentiating between the form of an entity as thing and the comprehension of an entity as object, it is possible to understand how entities are productive of space, without reducing them to the product of this space. From this position, space is relational, but tied to entities, which are ultimately differentiated according to everything they are not (their form). A post-phenomenological account of space is thus relational in one sense (it is the inter-comprehension of entities as objects that enables spatial distantiation), while recognising that distantiation is only possible because every entity has a form which is not, and cannot be, related to anything else.

Developing a vocabulary of symmetrical and a-symmetrical comprehension based upon the distinction between an entity as thing and object allows a fine-grained analysis of spatial

relations between entities that can be lost when objects and spaces are defined as both produced by, and productive of, relations. Focusing on the a-symmetry as well as symmetry of entities offers an account of space that has some depth, texture and relief that arguably becomes downplayed when entities are said to relate on a flattened plane. Such texture, depth and relief enables an understanding of space as multiple, with any one entity producing multiple spaces depending on how it inter-comprehends other entities, without this account becoming purely abstract, because it remains focused on the qualities and form of entities as they appear in a given situation.

Second, this paper has offered a vocabulary that encourages an attention to the minute, seemingly inconsequential, spatiality of banal everyday entities. In doing so, it has sought to demonstrate that these minute spatialities are important as they can be the locus of all sorts of significant power relations. While Massey (1999, p. 283) asks that space be understood as "the product of the intricacies and the complexities, the interlockings and non-interlockings, of relations from the unimaginably cosmic to the intimately tiny", geographers' work on space and power tends to focus on bigger types of thing, such as multinational corporations (Allen, 2016) or cleansing depots (Tooke, 2000). It is tempting to think that 'big' spaces or entities such as a border crossing, political protest or architectural monument matter more than 'smaller' spaces such as packets of corn chips. At the same time, it seems logical to suggest that dealing with a social, political or economic issue requires that smaller spaces or sets of entities should be understood together as one thing, or an assemblage of things. However, a post-phenomenological approach to space would suggest otherwise. Rather than operating through a logic of addition, a post-phenomenological notion of space argues spaces and entities cannot be understood as a total or complete thing that can be added together to form a coherent

whole. Rather, different relations of near and far appear depending on how an entity is comprehended and what it is comprehended by.

A post-phenomenological approach suggests that to alter spatial power relations requires strategic forms of political intervention that are specific to particular entities. While outside of the scope of this paper, such a politics might have an affinity with a pragmatist form of issue-based politics, where politics is a matter of "attend[ing]…to a broad range of events in which issues are articulated as objects of potentially widespread concern" (Marres, 2007, p. 776). For instance, a geographer might work to make the seemingly inconsequential spatiality of food packaging into a public health issue, while also offering concrete suggestions as to how this packaging could be changed. Regardless of which politics might be pursued using this vocabulary, such an approach would be cautious about any form of spatial politics that would seek to 'zoom out' from specific entities or connect them together too quickly. It would also be hesitant to locate the source of power in one overarching process that operates from the top down, instead preferring to trace how entities generate specific complexes of space and power that produce or enable particular problems.

To conclude, a post-phenomenological account of space is not about focusing on non-human entities at the expense of humans or downplaying human perception or experience of space. Rather it is about working to generate new sensitivities and intelligibilities in order to expand and multiply the spaces of geographical analysis to include all manner of entities (minor, seemingly inconsequential or otherwise).

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