

Rock, water, air, and fire: foregrounding the elements in the Gibraltar-Spain dispute

Abstract

Through the case study of the contested British Overseas Territory of Gibraltar, this paper contributes to discussions on 'territorial volumes' by exploring the role of the 'elemental' in the protracted sovereignty dispute between Spain and Gibraltar. Drawing on scholarship by Elden, Adey, McCormack and others in political and cultural geography, the paper highlights the value of foregrounding the elements of rock, water, air, and fire (in the form of the sun) in attempts to understand the tensions between Gibraltar and Spain whilst also demonstrating the significant intersections between the elemental and the human body. Whilst avoiding the snares of environmental determinism, the paper makes the case for an elemental ontology that functions through and with the proclivities and molecular specificities of the elements in order to better understand the construct of the territorial volume, the relationship between elemental and bodily volumes, and the site specific geopolitical realities, fractures, and possibilities that are laid bare as the elements are unearthed.

Keywords: Elements, Volume, Geopolitics, Sovereignty

Introduction

Measuring just 2.3 square miles, the British Overseas Territory (OT) of Gibraltar has been at the centre of a protracted sovereignty dispute since 1704 when Britain seized the territory

from Spain. Despite being connected to Spain by a small isthmus, Gibraltar's British Sovereignty was cemented at the time under the terms of the Treaty of Utrecht - Article X of which stated:

The Catholic King does hereby for himself, his heirs and successors yield to the Crown of Great Britain the full and entire propriety of the town and castle of Gibraltar together with the port, fortifications, and forts thereunto belonging...to be held and enjoyed absolutely with all manner of right forever without any exception or impediment whatsoever.¹

Despite containing a number of clauses that are wholly outdated and numerous conditions that have been broken², Britain hold to the Treaty as a legal basis for sovereignty, and more recently to the right of Gibraltarians to determine their own future as the basis for the maintenance of the OT. Meanwhile, Spain refute British sovereignty on the basis of an outdated Treaty and on the premise that Gibraltar is fundamental to their own territorial integrity (see UN resolution 1514 XV). As documented by scholars such as Gold (2004, 2009, 2010) the tensions between Spain, Britain and Gibraltar have waxed and waned in recent years. Generally speaking, the Spanish Socialist Party (last in office from 2004-2011) are more open to compromise with the Gibraltarian government whilst the more right-wing Partido Popular (PP), who currently hold office, traditionally take a much harder line against the presence of British Gibraltarians at the edge of their territory. Indeed, in 2013, the PP's Foreign Minister, Jose Garcia-Margello, asserted that 'the party is over' with regards to Gibraltar and suggested a number of policies that could be implemented by Spain to

¹ It is important to note here that the waters surrounding Gibraltar were not ceded to Britain, nor was the Isthmus connecting the two territories. Both spaces are thus hotly contested.

² For example, the border with Spain is supposed to be closed and no "Jews or Moors" are supposed to "reside or have their dwellings" in Gibraltar'(Reynolds 2004)

inconvenience the OT such as imposing fines on border crossers and closing airspace to flights headed to and from the territory (Hickey 2013). This signalled a significant step change from the previous Spanish Government who had brought forward a number of measures working *with* Gibraltar and it is in this geopolitical juncture that this paper is situated.

During the summer of 2014 interviews³ with ministers in the Gibraltar Government, civil servants and politicians, senior police officers in the Royal Gibraltar Police, and people with experiences of crossing the border between Gibraltar and Spain were conducted to build a picture of the dispute from a British Gibraltar perspective⁴. Media reports from British, Gibraltar, and Spanish sources were also analysed and a number of significant spaces within the British OT inhabited. These included spending time with Police Officers on British Gibraltar Waters (BGTW), the contested airport terminal (see Figures 2 and 3), sections of the tunnels in the Rock, and the official boundary between Spain and Gibraltar. Building on the rich set of information gathered during this process, the paper begins by situating the research within the relevant geographical literature in order to identify a number of lacunae within existing scholarship on ‘territory’, ‘volume’, and ‘elementalism’. Using a series of vignettes and small case studies, it then addresses the role of the elemental in the contest, highlighting the need to engage with sovereignty disputes at the elemental level as rock, earth, water, air and fire all play their role in both assertions and contestations of Gibraltar’s sovereignty as they interact with other elements and bodies. This is made manifest first in the towering Rock of Gibraltar where geology and molecular

³ These were semi-structured interviews in Gibraltar, usually held in the place of work of the official being interviewed.

⁴ Needless to say there is another paper that could be written here that investigates and articulates the Spanish perspective. This was beyond the pragmatic, linguistic, and financial constraints of my research but is nonetheless an important avenue of inquiry.

understandings of the Rocks' structure have proved pivotal in crafting a Gibraltarian geopolitics. The following empirical sections address the intersection of the earthly elements and the body at sites such as the border and the territorial waters to elucidate the intricate relationships between bodily volumes and elemental volumes. Enrolling the work of John Protevi it seeks to establish a framework through which these interactions can be better explored. The fourth section deals with the site specific qualities of the elements and how their (in)visibility can in itself unearth geopolitical fractures, realities and possibilities. Finally, the paper concludes by making the case for an elemental ontology that is able to incorporate matter such as earth, rock, water, air and fire to better interrogate the construction of territory, territorial contests, and the relationship between bodily and elemental volumes.

Elemental Geopolitics

Contrary to early assertions from O'Tuathail and Dalby (1998:4) that critical geopolitics is characterised by boundary drawing practices '*across* the landscapes of the state', recent geographical scholarship has re-cast territory as a three dimensional volume; as a construct wherein boundary making practices occur with both height and depth rather than simply '*across*' the surface of a landscape. Weizman (2002) for example, persuasively demonstrates the value of moving beyond the area, or plane, when engaging with territory in his work on Israel and the West Bank. Weizman's experiences of this contested space simply did not conform to two dimensional cartographic representations. As an example, the Palestinian Authority was granted control over isolated territorial '*islands*' but Israel retained control over their airspace and the sub-terrain beneath, spaces that cannot be represented or

interrogated within a traditional, two dimensional geopolitical framework. Indeed, within his 'politics of verticality' Weizman's analysis moves from the hills and valleys of the West Bank, to the politics of water and sewage, to subterranean infrastructure and archaeology beneath the ground, to the control over airspace. As it does so, the two dimensional territorial construct is unravelled, engulfed by three dimensional volume, and layered with 'strategic, religious, and political strata'.

As Steinberg and Peters (2015:5) highlight, however, 'Weizman's stress on the vertical projection and production of power fails to capture the complex ways in which power is exercised through and in space.' His analysis is, according to Steinberg and Peters 'locked to a lateral vision' – something Elden (2013:45) seeks to address by refocusing on 'reach, instability, force, incline, depth, and matter', alongside the simply vertical. With particular reference to the subterranean tunnel infrastructure in Israel and the West Bank, Elden explores how territorial sovereignty and security extend along the horizontal and vertical axes, concluding that we need to think about volume and through volume, rather than simply through the vertical to grapple with the complexities of territory, power and security.

It is, in part, through this conceptual framework that this paper approaches the Spain-Gibraltar dispute. It seeks to explore Gibraltar's territorial volume and the role its heights and depths have played over the centuries but in doing so, it contributes to understandings of territorial contestation by addressing two key lacunae within this volumizing discourse. The first follows Adey (2013) who, in response to Elden, called for a deeper engagement with the things that 'fill' the volume per se. This provocation is taken up in this paper by engaging, not with materials and objects, but with the elements that literally fill and underpin space.

Alongside the recent attention paid to the notion of territorial volumes, there is a renewed focus on the material and elemental within geography with understandings of the earth as a passive foundation on which geography takes place fervently challenged. There is, however, some way to go in foregrounding the elemental, particularly in political geography which seems bound by the legacies of its past partialities for ‘environmental determinisms’ in the 19th and early 20th centuries—‘an investment that has come to be seen as deeply implicated in Western imperialist projects’ (Clark 2013a:2828). Indeed, Clark asserts that human geography reacted viscerally against this deterministic outlook, leaving classical geopolitics to interpret the geographical features of the earth as relatively stable, ‘the stage as it were, for geopolitical dramas to unfold’ (Dalby 2007:105). As Lehman (2013b:485) asserts, ‘while natural elements have long been considered factors in social and political realities, they remain inert, as backdrops, constraints, or resources’. Mindful of regressing into counterproductive environmental determinism, scholars including Dalby (2007), Elden (2014), and Adey (2015) have called instead for the ‘geo’ in geopolitics to once again be taken seriously and the vital elements of *geopolitical* questions examined and interrogated rather than interpreted as a pre-condition of geographical scholarship.

There remains, however much to be done in this field of inquiry. As Clark (2013b:48) writes, ‘Simon Dalby’s call for a geopolitics that takes earth systems and their dynamics seriously ‘a practice properly deserving of the term geopolitics’, still comes across as a provocation, a challenge, an urgent summons’ (Clark 2013b:48). If it is only when the accepted pre-existence or ‘givenness’ of something becomes unsettling that it is opened to political questioning – it is hardly surprising that ‘phenomena on the scale of the geologic have proved recalcitrant’ (Clark 2013:2828). The challenge, then, lies in exploring and bridging the ‘juncture between that which is potentially political and that which exceeds the grasp of

politics, between the narrow province of the polity and the vast dominions of the inhuman' (Clark 2013a:2831).

Whilst Clark (2013a:2828) illustrates that the intellectual traction gained through engaging with the non-human or more-than-human has 'rarely been extended to the geophysical realms' in human geography, Peters (2012:1243) demonstrates that this is beginning to change with 'work taking seriously more-than-human geographies of soils, earth and air.' Indeed, the material and elemental registers are 'ever more central to how geographers discipline their discipline by navigating text into territory and back again' (Jackson and Fannin 2011:435). Andrew Barry (2013:13), for example demonstrates the value of 're-materialising our understandings of (geo)politics' in his analysis of disputes along an oil pipeline. As he does so, he elucidated the 'critical part that materials play in political life' and argues that we can no longer 'think of material artefacts and physical systems such as...water and earth' as passive and stable foundations (Barry 2013:1). On the contrary, these substances interact intricately with the political and 'other material and immaterial entities' to form parts of assemblages but also proving agential in their own right as they enter into relationships with the social and political (Barry 2013:34).

More recently, Adey (2015) has sought to grapple with the element of air, beginning, as Jackson and Fannin (2011:438) suggest, 'not with geography, but with the stuff itself', the 'stuff' that is 'so present and enabling as to be forgotten', and from which geographical thought emerges. Not only does Adey seek to challenge a traditional geographical 'metaphysics which enframes the geo as a crust from which we raise our constructions' (Irigaray, 1999 in Jackson and Fannin 2011:436), he also seeks to offer an interpretation of volume that is 'qualitatively different' to the recent legal, techno-strategic, volumetric

accounts of territory and verticality, engaging instead with 'volumes as they are immersive and inhabited' (Adey 2015:57). Hinting at a 'thicker materiality' that is released from measurement and calculation (Adey 2015:71), Adey seeks to draw attention to the 'seemingly unspaced, to the negative spaces of air...that coalesce into certain conditions or possibilities', highlighting as he does so the monstrous enormity of the elements that geographers are attempting to grasp. As McCormack (2015:86) highlights however, the elements remain in the background in Adey's argument and the sense of the elemental 'that treats elements in the way that a chemist or physicist might: as classes of matter, which, by virtue of their atomic character, have particular capacities and properties' is passed over too quickly. McCormack (2015:86) also asserts that the force of the elemental need 'not be to remind us of the monstrous, exorbitant qualities...of elementality... but of its fragile, minute, world-specific localisation', challenging the scale of enquiry outlined by Adey but also by Clark (2013) and climate change discourse.

In response to Elden (2013), Adey (2013) also calls for a more nuanced interrogation into the relationship between territorial volumes and bodily volumes. How might we consider, for example, the manner in which spatial volumes are experienced, inhabited, 'and made present to the lives that live them'? (Adey 2013:35). How do bodies affect the elements and vice versa? Geopolitical scholarship, writes Megoran (2006), habitually creates landscapes that are devoid of people, consequently stripping the spaces in question of senses, emotion, and affect. In 're-peopling' the discipline as Megoran (2006:625) suggests, the processes and meanings that underpin 'socio-spatial life', 'place bound action' and lived, embodied experiences can begin to be uncovered (Herbert 2000:550). Moreover, a focus on the body can help elucidate the ways in which power is exerted over elements as a performative strategy – perhaps prompted by an 'impulse to clarify sovereignty' (Weber 1998:83)

whereby certain geopolitical imaginaries (such as perceived hostility from Spain in Gibraltar) 'creates political and spatial realities' (Bialasiewicz et al 2007:406). Equally McCormack (2015:87) suggests that this relationship between three-dimensional territory and the body is further complicated by the elements, writing that 'it might be that bodies are not simply immersed in an elemental field that exceeds them, but that bodies are themselves also elemental... and it might be that we need to devise a range of new ways of thinking about the relations between these bodies'.

This paper seeks to attend to these questions of elements, scale, and the body by focusing on a number of specific examples 'unearthed' during fieldwork in which the elements are at play in the contest over the 2.3sq miles of British Gibraltar territory. It aims to open up elemental geopolitical entanglements and in doing so identify the meeting point between the territorial dispute and the elemental (see Clark 2013), bringing the elements to the foreground to demonstrate that they are not merely background substances in the contested territorial volume but, at least in some instances are agential in both challenges to and assertions of Gibraltar sovereignty.

Elemental agencies in Gibraltar

The Rock

Rising some 400m from the terrestrial plane, the Rock of Gibraltar is a towering 'mass of lower Jurassic, dolomitic limestone' (Rose 2001:95). As Lambert (2005:209) has noted, the Rock has gained significant symbolic value as representing a fortress, a territory which embodies the mantra as 'solid as a rock', and one that is impervious to capture. Whilst these

tropes are not without some foundation, the Rock is more than a symbolic feature and functions as a lively actor, an immersive geopolitical volume that has played a pivotal role in Gibraltar's conflicted past and present. Far from being 'solid as rock', this geological formation has been engineered, crafted, and made inhabitable. Indeed, Rose (2001:95) suggests that it has a 'longer record of human occupancy than the American continents' dating back to the Neanderthals who made use of the caves permeating the rocky structure. Repeatedly under siege, British forces throughout three centuries of occupation have sought to maximise their use of natural resources, namely water, land, and stone - activities which have been 'determined largely by the geology of the rock' itself (Rose 2000:240). As an example, the Rock has been engineered to host a vast network of manmade tunnels dating back to the Great Siege (1779-83)⁵. During Spain's prolonged attempt to recapture the territory, the then Governor, General Eliott, is said to have offered a reward to anyone who could work out how to get guns on to a projection from the northern face of the Rock (Visit Gibraltar 2014). This prompted extensive tunnelling activity and whilst there was initially no intention of mounting arms in the galleries, the value of doing so was soon realised when a ventilation hole was made, revealing not only air but a perfect embrasure for a cannon. Fast forward to another moment of historical rupture and the Rock was prepared for another siege during the Second World War amidst fears that Italy would join forces with Germany and in doing so, draw Spain into the axis. Safe from air attack, 33 miles of tunnels were added to the pre-existing infrastructure by the Royal Engineers and a 'veritable city' was created within the Rock itself including facilities such as a hospital, a

⁵ The Great Siege was a prolonged and unsuccessful attempt by Spain to recapture Gibraltar. Ideas of being 'under Siege' loom large in Gibraltarian political and popular discourse today.

bakery, and office for General Eisenhower (Rose 2000:266) ⁶. These were not simply tunnels to move from A-B, but tunnels in which to live, to plan, and to strategize. Military geologists were enrolled to facilitate this process, to map the rock and its different geological layers (Rose 2001), transforming it into an inhabitable volume and challenging 'solid' imaginaries of this space.

As one Government official asserted during an interview, tunnelling operations continued well into the Cold War era and the Rock's matter continues to be mapped and surveyed to ensure the stability of the tunnels, to create storage areas for weapons, water (see Figure 1), and most recently, wine. The constant assessing of, and interaction with the rock reveals some interesting dynamics between people and the elements. Whilst the Rock itself exercises agency, this is not a unidirectional relationship and humans push back against the rock's elementality just as the rock pushes against human inscription. These dynamics are revealed not only in the digging and engineering of the tunnel infrastructure but in the precarity of the rock and attempts to overcome the risks it presents. In 2002 for example, a man was tragically killed in the Dudley Ward Tunnel by rock fall. The tunnel was closed and only reopened eight years later after extensive work to install new stabilisation measures (Lightbody 2010). Similarly, other sections of the tunnels remain closed to the public. This is partly for safety reasons but also because some of the historical infrastructure is sensitive to disturbance and could be damaged by the bodies moving through it and interacting with it.

These areas of closure also exist because a significant amount of tunnel infrastructure remains under control of the British Ministry of Defence (Interview with a Gibraltarian

⁶ Information here is also drawn from a tour of a section of the tunnels whereby images of the bakery and other installations line the walls.

Official). The hidden, vertical yet subterranean, infrastructure is used as a training ground for operations in Afghanistan, tunnel warfare, and close quarter combat – it has acted therefore as a testing ground and proxy space for British military operations elsewhere (see Forces TV 2014). The matter and geophysics of the rock create a distinct operating environment in which this can take place; radio communications do not work, footsteps and voices echo, there is a lack of light – ‘it brings soldiers out of their comfort zones’.



Figure 1 Internal water Reservoirs within the Rock of Gibraltar, Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Water_reservoirs_inside_the_Rock_of_Gibraltar.jpg)

Whilst Woodward (2004:76) very successfully illustrates the impact of military activities on the natural environment and the ways in which landscapes are modified to meet military objectives, it is possible to deepen analysis of military environments by engaging with the molecular, three dimensional nature of the ‘landscapes’ in question. Moreover, moving away from ‘landscape’ enables questions of volume and elementality to be more thoroughly examined as they are released from the two dimensional plane implicit in the term (see O’Tuathail and Dalby 1998:4). In releasing and deepening analyses in this way, we see that

the molecular geological formation of the Rock facilitates the aforementioned geopolitical engagements. Each molecule of the rock contributes to an intrinsically strong structure that has remained relatively stable (with a few noteworthy exceptions as outlined above) both during and after construction; each molecule plays its role in the formation of the '600m thick sequence of massively bedded, lithologically homogenous, well cemented carbonates' (Rose 2000:249). It is the 'thick bedding and extensive cementation, plus dolomisation' that gives 'Gibraltar Limestone its strength as an engineering material' (Rose 2001:100); any areas of weakness are associated with zones of weak rock, caused by faulting fragmentation of the Limestone, or 'by penetration into the shale formations which overlie and underlie it'. Informed understandings of the differences between the rock formations and types were thus crucial in understanding and enabling the Rock's geopolitical potential. The Great Sieges and Second World War were fought by the bodies of engineers, geologists, and military personnel in Gibraltar not merely through the inhabitable volumes of tunnels, but through the matter, chemical, and geophysical structure of the towering volume of Limestone itself. These important specificities are easy to overlook when engaging with space through a traditional military landscape approach.

As demonstrated, the elementality of the Limestone structure continues to enter into geopolitical entanglements as military bodies train within it as part of their preparation for combat in other geological-geopolitical spaces such as the mountains of Afghanistan. The imposing rock surrounding the tunnels and those within creates its own sense of immersion. Any sound made by the soldiers is bounced back toward their ears in the form of an echo, it insulates from outside radio communication. Again, it is the geophysicality of the Rock that is agential and active in creating certain conditions that that can be inhabited for strategic advantage. As the rock is inhabited, we also see that the 'distinct...enclosing materiality'

ascribed to the space of the sea by Steinberg and Peters (2015) is present here too – albeit with a different elemental substance creating a site-specific, micro-immersive environment for the training of troops. As Woodward (2014:43) highlights, spaces ‘constituted by military objectives and power’ are ‘experienced at...personal scales’ yet again, we might explore how certain elements and materials facilitate this process and the minute bodily structures that are affected. The interaction of limestone with the body in the training exercises, for example, is significant. The qualities of sound and hearing are shaped and altered by the rocky structure within which they are enclosed. Perhaps then, an elemental ontology that can better encompass spaces such as tunnels, caves, and inhabited rock in addition to the sea and air might be pertinent not only to better grasp the spaces in which territorial contests are outplayed, but to subject the bodies that move through these spaces to greater scrutiny. Moreover, this example demonstrates that there are cross-overs between the physical and human geographies of this contest. If human geography and geopolitics are to take seriously the ‘geo’, these intersections (both here and elsewhere) need to be further explored and inter-disciplinary relationships that can assist this process established.

Reclaiming from water

Whilst much of the focus in the previous section was on the elemental agency of the Rock of Gibraltar itself, the following vignettes illustrate the significance of human agency in interaction with elements – in this instance, the element of water. The sea, as Peters (2011:1241) highlights, is a ‘hydro’ state (that is, motion-full, deep, and dynamic)’. This motion can be powerful (Lehman 2013a) and it can confound (such as in the search for the missing MH70 flight, see Bremner 2014), but it can also be appropriated for political gain. We can see this understudied dynamic at play in an incidence wherein a Gibraltarian

Government official blamed the Spanish Government for damage caused to Gibraltar's northern harbour. Wave energy was being directed and reflected at Spain's land reclamations at Algeciras Port in such a way that the effectiveness of Gibraltar's harbour protections was limited (Bonfiglio et al 2013:10). The official stated that during a storm, the water 'basically destroyed the area... it took off all parts of our land reclamation'. They continued by suggesting that Spain had not properly assessed the environmental risks of reclaiming land at the port and as a result, had set the sea to play against Gibraltar's own reclamations.

Whilst I am not suggesting that this was a deliberate ploy to manipulate the seas motion by Spain, there was a sense in the interview with the Official that, from his perspective, the lively and unpredictable nature of the sea had become embroiled in the dispute – that the lack of assessment had rendered the geophysical sea geopolitical as it began 'destroying' Gibraltar's infrastructure. As Gordillo (2014:210) describes, this element folds, arches, shifts, twists; 'always in motion, always displacing its volume' across space as parcels of water are turbulently 'exchanged between one part of the moving fluid and another' (Brown et al 2004,40). From the perspective of the Gibraltarian Official, human intervention at Algeciras port had altered the energy, motion, and movement of the sea with highly geopolitical consequences. It emerges from this case study as an actor, a politically vital element and one of increasing significance as human interaction with sea space becomes increasingly dense, intense, and complex (see Lehman 2013b, Steinberg 2013, Peters 2011). Removing the geopolitical lens through with the official was viewing the incident, this case study perhaps also demonstrates that the seas mobility, its dynamism, its power are not beyond human inscription. This was not simply an example of boundaries or lines being drawn across to sea to border it or exercise control over it - it was a discursive, strategic and

political appropriation of the seas motion by the Gibraltarian Official. The official was directly engaging (albeit discursively) with the properties of the sea that, according to Peters (2012) and Connery (2006) render it relatively uncontrollable, to make a geopolitical statement. Much like the Rock, it is only when the geophysical specificities of this highly mobile and powerful element are grasped that the tensions over the port damage can be unearthed and the geopolitics implicit in 'rock solid' imaginaries of Gibraltar as an impermeable fortress undermined and literally washed away.

It also demonstrates, as Lehman (2013b) has done, that the sea is not a mere background material but a lively geographical actor. The earth's systems and natural elements can hold geopolitical agency not just at a 'whole earth' scale as in climate change discourses (see Clark 2013 and Dalby 2007) but in relatively small, nuanced ways that have shaped attitudes and realities in the dispute over the territory of Gibraltar. The issue of scale here is important. Elements have remained backgrounded within geography and, more specifically political geography because they are inherently difficult to grasp ontologically, materially, and discursively. Honing in on their specificities presents challenges, yet, in taking seriously local moments of disruption like that described above, the elements can be held accountable and interrogated on a much smaller scale revealing important narratives in the process.

Whilst humans 'are relatively ineffectual' at expressing 'power back onto the sea' (Peters 2012:1243), there are two examples that demonstrate that the element of the sea can be negotiated. Land reclamation offers an interesting case study through which to examine this

relationship. In creating new land by quite literally filling a designated section of the sea with sand, rocks, and other materials, Gibraltar's habitable land mass has increased by over 1/6th (Archer 2006). Given that there was no concept of 'territorial waters' at the time of writing the Treaty of Utrecht, Spain assert that the water being reclaimed by Gibraltar is rightfully theirs. Britain on the other hand claim that the 12nm granted to states under the United Nations Convention on the Law of the Sea automatically provides sovereignty over the space. In 2013, during a high point in tensions between Spain and Gibraltar, Spain set about contesting one of Gibraltar's land reclamations and they did through elemental substances. In addition to complaining to the European Union, Spain imposed an embargo of exports to Gibraltar of 'nationally sourced' sand and rocks, leaving Gibraltar to import them from Portugal at much greater cost (Interview with an MEP, see also Romaguera 2013). The supply chain of these substances became politicised and volatile and the boundary a point where they could move no further (Edensor 2012). Their mobility was halted by the role they could play at their destination, by their ability to fill a pre-designated volume of water and their vitality in processes of territorial expansion. Rocks underpin and constitute this state of becoming, they compose and fill, and in doing so become the foundation of tensions as well as land mass. Via human intervention and the dumping of vast quantities of rock, stone, and sand the sea is pushed back, or, in the words of one Gibraltarian journalist, obliterated (Olivero 2014).

We might also turn to the water running through Gibraltarian taps to see the expression of human power on the sea. As a Government Minister in Gibraltar explained during an interview, Gibraltar does not share any critical infrastructure with Spain. Wary of being cut off during periods of high tension, all energy and water are generated on the Gibraltarian land mass. The water consumed by all Gibraltarians thus comes from their territorial waters.

Political imperatives combined with the need to provide hydration and sanitation see the sea stripped of the salt that partly gives it its distinct identity as sea water. Whilst it retains its volume, reverse osmosis plants use a semi-permeable membrane to remove the dissolved salt content of saline water and in doing so, allow Gibraltar's water company to produce 6,300 cubed meters of potable water per day (AquaGib 2012).

The molecular structure of the water is changed during this process. It is no longer sea, but drinkable water that can nourish rather than poison the human body. Far from lurking in the background as in Adey's (2015) paper, an elemental geopolitics comes to the foreground here (McCormack 2015). It flows instantaneously as taps are turned on in everyday lives, and as the body's cells become hydrated. This process also ensures that Gibraltar's water infrastructure is under sovereign control. This state led imperative combined with the everyday embodied actions of drinking and washing with water from BGTW demonstrate the ways in which the elemental can permeate geopolitical discourse and lived experience at multiple scales. Far from lurking softly and gently in the background (McCormack 2015 on Adey 2015), this elementality seeps into both the fundamental life sustaining act of drinking water and the sovereign act of establishing national infrastructure within a delineated territorial land mass. In doing so, it demonstrates, that in analyses of the Gibraltar-Spain dispute (and perhaps territorial disputes more broadly), the elemental and human interaction with the elements should also be allowed to seep into the foreground of academic discourse.

The boundary between Spain and Gibraltar has long been a site of contestation. Indeed, as I was informed on numerous occasions, the name of the space is contested. Spain, for example, refer to the boundary line as a 'fence' so as not to recognise a separate legal jurisdiction in Gibraltar. It was also widely referred to in my research as a 'weapon' wielded against Gibraltar— a trope with its origins in 1969 when General Franco closed the boundary, altering established regimes of movement so that no vehicles or pedestrians could cross by land, no ferry's by water, or planes by air. In addition to being the 'most palpable political geographic phenomena' in the contest (Minghi in Van Houtum 2006:672), the border also provides an opportunity to deepen understandings of the role of the elemental, and particularly the intersections between elements and the body.

As numerous participants informed me, and as I learned through informal conversations with local people and border crossers, the border has more recently become a place of 'border play' (Cuttitti 2014:201) where people may experience frustration and anger as the queue is operationalised by Spain to disrupt movement and the circulation of bodies and materials. Whilst the border may be very quick to cross one day, it could take much longer the next leading to complaints from the Gibraltar government to the EU and from border crossers who must wait to cross a border that is otherwise relatively permeable⁷. During a particularly tense period in 2013, the queue could be up to five hours. Both Gibraltarians and Spaniards cross the border on a regular basis making this a geopolitics that very much saturates everyday life (O'Tuathail and Dalby 1998). Whilst a new initiative from the Spanish

⁷ Spain assert that the delays are a means of tackling the prolific and highly visible problem of tobacco smuggling, whilst the Gibraltar Government claim that the queues are a strategic assault on their economy and a deliberate 'strategy of disruption' (Dodds 2012).

Government may see workers from La Linea⁸ fast tracked through the delays (Gonzalez 2014), movement for the masses will remain at times modulated through the technical/political/architectural ethos of a queue.

Whilst this 'time politics' (Cwerener 2004:72 and Bagelman 2013) does not immediately raise elemental questions, a number of comments from participants point to the intersection of bodies and the elements at the contested boundary. On particularly hot days for example one regular visitor to Gibraltar and Spain complained that her food shopping would spoil with frozen products melting – transitioning from a solid state to liquid - in the delay; on another occasion Govan (2013) reported in *The Daily Telegraph* that people were forced to wait in 'scorching temperatures' inducing sweat, and bodily discomfort as they transitioned at varying speeds through a mode that 'is neither here nor there' that 'neither stops nor goes', their motion captured, altered, and directed into a controlled sequence under the heat of the sun (Fuller 2014:2011). According to Smallman's (2013) report, Gibraltarian ministers began the process of distributing water bottles, the ambulance service delivered six thousand paper cups provided by the MoD and assisted those suffering from medical conditions, and the airport terminal building was kept open to provide toilet facilities. The demands of the body here altering the very shape and function of day to day border operations.

This example provides a powerful illustration of the elements and the body colliding. We might, as McCormack (2015:87) suggests, begin to think about bodies that are not simply immersed in 'an elemental field' but how a body 'mediates or translates the affects of

⁸ La Linea is a small town which lies by the border on the Spanish side. It has close economic and social links with the OT with workers commuting between Spain and Gibraltar on a daily basis.

another, in other words, how wind becomes shivering, sun becomes warmth, gas becomes death'. In this instance, 'sun' becomes, heat, discomfort, sweat. If the border of the skin were to be peeled back we would see the blood vessels at the body's surface dilating to increase blood flow and rid the body of unwanted heat. As blood is diverted to expand cells near the skin, the same amount of blood goes to more of the body whilst at the same time the blood is losing volume as liquid is sweated out. The heart in turn has to work harder to deliver less blood to more of the body. The fiery heat of the sun and the body's inner molecular workings collide in a form of elemental biopower in the time-space politics of the queue. As water mixed with sodium, potassium, calcium, magnesium and a host of other minerals leaks from the body in the form of sweat, border crossers are provided with a visceral and corporeal reminder that they are crossing from one territory to another. The combination of geopolitics and the elements is, in this case study, a marker of re-territorialisation as 'man's natural life' is incorporated into calculations of power (Agamben 1998:119).

These intricate bodily reactions prompted by geopolitical imperatives at the border provide an opportunity to reflect on, as McCormack (2015:87) suggests, new ways of thinking about the intricate relationship between elemental and human bodies. The work of John Protevi might be useful here. Through the concept of 'political affect' Protevi (2009, see also Anderson 2012) investigates the 'imbrication of the social and the somatic: how our bodies, minds, and social settings are intricately and intimately linked'. In order to fully engage with these linkages, Protevi (2009:4) goes 'above, below, and alongside' the human subject - above to the social context in which the subject is acting and below to the somatic, precognitive bodily reactions. This is not to discount the cognitive, the psychological, or the conscious subject, rather it is to acknowledge that there are certain instances that skip the

subjective level and move from the social to the somatic in a complex ‘interplay of brain, body and environment’ which in turn may prompt cognitive felt responses (Protevi 2009:29). For Protevi (and others engaging with affect, see also Anderson 2009, Adey 2009) this interplay can be highly political with government institutions ‘employed to control non-subjective physiological processes’ – fear being a prime example. This ‘Political Physiology’ as Protevi terms it may translate into cognitive ‘Political Feeling’ as it unrolls from incredibly complex and impersonal individuations to felt experience. This has significant resonances for the Gibraltar case study, although, rather than being a socio-political phenomenon, it is driven by an elemental political physiology. For the people in the queue, as their body somatically responds, feelings of irritation, discomfort, and frustration emerge, this in turn prompts feelings about the wider geopolitical context and verbal and written complaints about the lengthy border delays. As this example demonstrates, it is not merely the social, political, and somatic that intersect but the natural elements - the heat of the sun, or in the earlier example, the conditions within Gibraltar’s limestone tunnels. As the sun beats down on the body, or as sound is reflected back on eardrums from rock, we can begin to hone in on the geopolitical and geographical complexities of this dispute. Following Protevi’s lead and going above to the geopolitical context and elemental conditions, below to the somatic reactions taking place beneath the border of the skin, and alongside the subject to their subsequent feelings, provides a productive framework through which to explore these intricate and extremely significant interactions that in turn, powerfully shape people’s perceptions of the dispute as a whole.

Moreover, an elemental political physiology might also be productive in understanding the body as an elemental volume – or even the body as an intrinsic part of wider elemental processes. McCormack (2015:87) writes that the body ‘mediates the affects’ of the elements

but perhaps this could be taken one step further to understand the body not as a mediating entity but one that is itself an intrinsic actor in the earth's elementality. It forms part of this elemental world, both being affected and exerting affect. The body's 70% volume of water for example might leak from the body in the form of sweat in the sun, but as the distribution of water at the border demonstrates, this must be replaced with more water from the earth's supplies. It not only mediates the elements but is itself elemental and active in an intricate and expansive elemental world. This is not to disregard the phenomenological, rather it is to additionally attend to the 'non-humans of which the human is composed' in ways that make 'the human more, not less, interesting; more, not less, wondrous; more, not less, alluring' (McCormack 2015:88).

Tensions in the air

We might also turn to air, an element that pays no respect to any border lines, visible or otherwise to unpick the elemental aspects of this contest. Each year the majority of Gibraltarians take part in Gibraltar's national day celebrations and as I was informed by a Gibraltarian Minister, these celebrations deliberately rise upwards, filling the air with highly visible Gibraltarian colours in the form of confetti, helium balloons, and fireworks set off in the contested water between Spain and Gibraltar. The 30,000 balloons represent each Gibraltarian and as a number of participants told me, those present hope that the wind is blowing towards Spain: 'if the wind is blowing towards Spain, you should see the people here. They will be shouting 'Go!', cheering as the balloons float away'. These balloons, in their basic form, are nothing more than an envelope or container for the capture of a lift generating air (McCormack 2009) but in the context of this nationalistic event, the helium

within the balloon takes on an agency as it lifts its container into a highly visible display of nationalism. Helium itself is a dynamic element, it is as McCormack (2015) highlights, recalcitrant, it 'skips blithely past' most interfaces; it is unpredictable and difficult to control. As the helium lifts its container, the balloon in turn enters into a 'dynamic relation with atmosphere' and air (McCormack 2009:29-30). Its affective presence is defined by its kinetic relations with gusts of wind or 'volumes of gas', its movement prompting uplifting atmospheres of anticipation and animation as onlookers watch and cheer the balloons into Spanish territory. Helium gives life to an aerial geopolitics and invites 'us to think about what it might mean for an entity not to be immersed in anything, but merely to enter into relations with other entities' (McCormack 2015:87). The helium filled balloons also are also generative of affective atmospheres (McCormack 2008:413) demonstrating that the air and the vertical can be agential, utilised, and inscribed in ways that go beyond the state and the military (see Adey et al 2013, Gregory 2011, and Williams 2010, 2011). The matter of the air lifts, carries, and transports the soundless freight of atmosphere, mood, and emotion from below (McCormack 2008). It is a medium of relation, host to vibrant airborne and invisible affectual atmospheres emanating from the cheers below as the balloons rise upwards (Jackson and Fannin 2011:442). The agency of this invisible substance in the atmosphere and within the balloon renders visible the wishes of 30,000 Gibraltarians and in doing so reminds both Spain and Britain that there are people at stake in this dispute over land, water, and air.

We might also turn to the airport in Gibraltar to explore the role of elementalism and (in)visibility in the contest in relation to the air. To understand this, it is important to note that the Isthmus connecting Spain to Gibraltar was not ceded to Britain under the terms of the Treaty of Utrecht (see Pack 2014). According to the Spanish Foreign Ministry, British

occupation of the space is illegal and it has therefore always remained 'under Spanish sovereignty' (Ministerio Exteriores n.d.). The airport is the primary piece of infrastructure 'occupying' the isthmus and is both symbolic of the dispute, whilst also serving as an underlying agitator (Gold 2010). Under the Spanish Socialist Government in 2006, work to extend the airport through a joint terminal linking Gibraltar and the Campo de Gibraltar was agreed and whilst Gibraltar have a terminal that could be fully operational (Figure 2), Spain have yet to begin construction. Visible from the window of the terminal, the flat, brown land across the road is the only indication that something might or even should be standing there (Figure 3). Meanwhile when standing in Gibraltar's empty, surplus terminal, it is the lack of bodies that gain agency; the stark, empty building complete with trolleys, immigration desk, advertisements, and a luggage conveyor belt existing in a relative stillness and silence (see Figure 3). These absences are only exaggerated by the presence of empty brown land, the elemental gaining agency here in the material and geopolitical fractures it reveals. The Gibraltarian Government, for example, continue to experience frustration at Spain's lack of engagement with the project they had agreed to complete (Interview with Gibraltarian Official).



Figure 2 The surplus terminal (photo by author)



Figure 3 The missing terminal (Photo by author)

The space above the earthy ground only serves to complicate this relationship between the elemental, absence, and potentiality. Indeed, as Adey (2015) observes there is always unrealised potential and possibilities inherent yet intangible in the element of air. The possibility of flight for example, the political ascriptions of ‘airspace’ and their associated, invisible boundary making practices. The noise associated with airspace – of aeroplanes leaving the ground, of the hustle and bustle of the airport, of planes coming back to touch earth– are absent. The suspended air particles both in the atmosphere and in the terminal are not vibrating from these familiar sounds and as a result, ears register the unexpected – the relative silence in the air terminal, the sound of lorries passing by close to the window. Other senses are also confronted by absence. The smell of aeroplane fuel for example no longer travels through the ‘mediating force of intensive relationality’ that is the air (Whatmore 2006:604) and looking up, no planes fill the sky. Yet these airy absences also contain within them possibilities for overcoming hostility and tensions over boundary divisions. This might take place through flight with aircraft flying over and through divisions but also through the re-opening of negotiations to create a new airport building – to turn air into airspace. We are reminded here that ‘the relations encountered in and

through...elements, do not just arrive unconditionally, or out of thin air' (Adey 2015:60).

They are crafted in this example through geopolitica and imagined through the absence of material objects and substances that travel through and in the air and interact with the body to produce expectation, a sense that something is missing; imaginations that both materialise from air and are projected back onto it (see Adey 2015).

Conclusion

This paper has sought to bring together scholarship on territorial volume, the elemental, and the body in order to explicate the ways in which the elements function within the contested territorial volume of Gibraltar. In previous scholarship on territory, sovereignty, and volume (and on Gibraltar itself), the elements have been back-grounded and interpreted largely as the foundation on which, through which, and above which geopolitics takes place. This paper on the other hand, has sought to foreground the elemental and elucidate the ways in which the elements have agency. As a result, the elements of rock, water, air, and fire emerge as central actors in the dispute but also as entities with their own specificities, volumes, and properties that interact with the body in a co-constitutive relationship that shapes and critically underpins *geopolitical* constructions of the territorial volume. The molecular structure of limestone, for example, has enabled and disabled certain geopolitical realities throughout Gibraltar's history; the mobilities and power of the sea and its waves have ignited tensions as power is exerted by and over this elemental substance; air both contained within a balloon and in the atmosphere becomes the driver of affect. The elements also prove agential at specific sites such as the border where the heat of the sun interacts with the body and provides a rich site through which to explore the

intricate, molecular elemental relationships that form between the sun and the people held in a queue. Moreover, the 'missing' and 'surplus' airport terminals highlight the capacity of the elemental to reveal absence, possibility, and potentiality and the human capacity to project imaginaries onto the elemental.

In addition to demonstrating the value of foregrounding the elements in this territorial contest, these case studies from Gibraltar are also helpful in conceptualising the elemental more generally within geography for a number of reasons. Firstly, the vignettes outlined in this paper attend to the question of scale that has pervaded elemental discourse. There is something excessive, exorbitant, and indefinite about the elements yet there are also instances, geopolitical ruptures, molecular compositions, moments in time, and in space in which we are reminded of the 'fragile, minute, world-specific localisation' of the elemental (McCormack 2015:87). Far from being a background 'from which drops of percept, affect, and sensation precipitate' (McCormack 2015:86 on Adey 2015), the elements can move powerfully in ways that are momentarily graspable. It is in these moments that we can begin to hold the elements to account. Desalination processes, the mapping, profiling, and negotiation of the molecular structure of limestone, the seat induced in the heat of the sun, are just a few examples of the ontological traction that can be gained by honing in on the molecular, on the local implications of the monstrous elements, and on the geopolitical and geographical consequences of the individual specificities of elemental-bodily encounters.

Secondly, the possibilities for productive discussions about the body and elemental are made apparent. Whilst this has only been touched upon briefly in this paper, there is great potential within geographical scholarship for this to be further explored. The work of Matt Farish (2006) might be useful here as he examines how the bodies of US military personnel

and Inuit were examined and engineered to adapt to the immersive elemental extremes of the Arctic during the Cold War. The elements and the body once again collide in the cold temperatures, the body's molecular response shaping the ways that the military could inhabit the space and the demands that could be placed upon them.

This in turn raises questions about the elements we consider to be immersive and inhabited. Air is the most apparent but we might also consider the bodies of divers operating beneath the sea where the pressures of the water place entirely new demands on the human body (see Merchant 2011 and Straughan 2012); spaces such as tunnels, the Rock of Gibraltar, and caves are also immersive – they are micro environments that can be inhabited with conditions mediated by their rocky surround where sound echoes, light is absent, and air circulates differently. Honing in on the molecular also reveals the body as an elemental volume that interacts with rock, water, air and fire. The body's cells, for example, are immersed in liquid and minerals that respond to and interact with external stimuli such as heat and sound to produce other effects, such as water leaking through the membranes of skin. If these ideas are to be explored further, geographers must be comfortable with an ontology that operates in elemental registers that are less attached to solidity and comfortable with grasping at that which may only exist temporarily and cannot always be held firm. Temperature would be a prime example here – it is something that cannot be seen (unless mediated through technology), which is produced through enormous elemental reactions and processes in the earth as a whole, but is intimately experienced and corporeally felt, with, as is the case at the border, political affect.

Whilst it may present methodological challenges, the geographical and geopolitical implications of these interactions, and the relationalities between the elements more generally certainly warrant further scholarly interrogation. Indeed, rock, water, air, earth, and fire have emerged in this paper as entangled mechanisms in the complex 'bundling of political technologies that constitute the performance of territory' (Adey 2013:52); as 'practices of territory' that 'work through more than area alone' (Bridge 2013:55). Whilst avoiding the snares of geographical determinism and 'reactionary regressive politics,' this paper has sought to demonstrate that in addition to filling volume and interacting with volumes such as the body, the elements can also 'speak volumes' about this dispute. As they do so, the 'geo' in geopolitics proves worthy of a more prominent position in our understandings of territory (Elden 2014) and the elements of land, earth, water, air, and fire in our understandings of the constructions of territory, sovereignty, and security.

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