**Air’s Affinities: Geo-politics, Chemical Affect, and the Force of the Elemental**

**A Introduction**

*“Rifts are breached here, in segues that are more or less reasonable”* (Leslie, 2006: 23)

 *“We are on the point of apprehending them in all their power and distinctness; such natures as, when they come in contact, at once lay hold of each other, and mutually affect one another, we speak of as having an affinity for the other”* (Goethe, 2008: 54)

This is how Charlotte, a character from Goethe’s *Elective Affinities*, begins to understand the chemical force of affinity as explained by her husband Edward and the Captain, a visitor at their house. Affinity, the power of chemical attraction, had entered the writing of authors such as Goethe who was already interested in the science of modern meteorology (Hamblyn, 2001).[[1]](#footnote-1) Goethe would bring affinity to life in the couple’s household as a manner of a relation, and it was affinity that would describe the disruption and violence of love. It is affinity as social, affective and magical that animates the *Elective Affinities* with passion, disquiet and eventually marital discord. The story, as Charlotte notes later on, is an entanglement of forces, characters and backgrounds moving into and away from one another. The literary geography of the novel is a chemical landscape told through airs of appearance, attraction and repulsion, new pairs and bondings forming. Heavy and light atmospheres distribute longing and expectancy as if an air hanging about the protagonists that could be caught or touched.

In this paper I explore a series of diverse examinations within Human Geography that have sought to take the matter of the air seriously. These include physical geographic writing inspired by cultural geographical and predominantly representational accounts of the meaning of air in a ‘cultural climatology’ of clouds, sky and the climate; histories of science concerned with the burgeoning systems of thought and classification of the weather or urban air; political economic accounts of particular bodies of air that threaten financial stability (De Goede & Randalls, 2009; Thornes & Randalls, 2007); and the governing of air through science, risk (Barry, 1998), insurance and financial products to produce what Mark Whitehead (2009) has called the making of ‘atmospheric selves’. Then there are a more contemporary series of forms of power that intervene on the atmosphere through production, science, models, ways of living and other levers in order to anticipate, moderate and secure climate change, or that seek to secure life in emergency. An important body of work concerning urban airs is difficult to separate from these studies as recent research has begun to explore the emerging epistemologies and disciplinary makeup of an urban climatology within which particular kinds of lives and living conditions endure. There is the study of air that examines its entanglement with a politics of life, an approach Peter Sloterdijk pursues through the explication of air in technologies of killing and in the consumer oriented practices of capital accumulation. To finally a more phenomenological orientation of scholarship, what Jackson and Fannin (2009) have recently labelled an ‘aerography’ (see also McCormack, 2008), which encounters air as simultaneously meteorological and affective. What also follows these arguments are particular kinds of writing and representation which might be called atmospheric (Stewart, 2011).

 Even if this list is not exhaustive Human Geography suddenly seems afloat with airs and winds, fogs and aerial fluids, with volumes, verticals and objects in the air.[[2]](#footnote-2) But with what import? Is there now a moment to take stock and consider a wider trajectory of geographical research and thinking around air, particularly air and the elements? How might geographies of air interact with other facets of the discipline or other materials such as water, which has received far more critical attention within areas such as political-ecology (see for example Loftus, 2009; Swyngedouw, 1997)? The task of this paper is partly to bring this diverse body of research together for the first time thematically but more substantively to attune with far more precision air with the elemental, and in so doing, explore the elemental to be more than its current rendering as physico-material agency, but into a different register of more-than-chemical affinity. The paper outlines what an elemental geography of air could look like in two main ways.

Firstly, the paper responds to Fannin and Jackson’s particular concern to preserve the incisive analyses of political economy and other formulations of power, especially in approaches to air that directly attend to the minutiae of practice and experience. That is, the paper attempts to bring air to account in some way that does not demarcate the expressiveness of air’s encounters from a politics and rendering of power. Second, the paper examines what other avenues Jackon and Fannin’s (2011) ‘aerographies’ might follow in the pursuit of a geography which has perhaps only begun to scratch at the surface of an encounter with air and the ‘elemental’. For what is Jackson’s and Fannin’s ambitious call but a demand to interrogate the *element* of air more seriously? What, however, might we mean by element or the elemental?

Gaston Bachelard (1988), in his famous treatise on the elements, describes them as ‘hormonal’ inspirations for the imagination (see also Anderson & Wylie 2009). For Bachelard, there is something essential about elements, which could be to suggest that there are different orders of matter or substance, varying differences and intensities of the elemental that call for quite a different study of materiality. An elemental geography may be far more concerned with an ambit of air that is not reducible to the new theorising of things in the recent writings on materiality, affect and enchantment, or other geo-physicalist epistemologies and ontologies. Elemental approaches might draw on some more familiar ways of considering affect and emotion; elemental philosophies that reaffirm older senses of the elements as anterior to human perception; and, notions of affinity – thought more as method – which listen to unlikely affinities, marriages and disjunctures between art, industry, poetics and conflict.

 The paper proceeds as follows. First I go some way towards mapping some broad areas of existing studies and a potential typology of how and where air is approached. The paper then turns towards theorisations of chemical and affective affinity, elemental philosophy, and towards some form of method. The final section deploys an analysis of air’s affinities through several fields of enquiry where an elemental geography of air might be encountered and taken further, first, in forms of writing about air, gender and modernity first; and secondly, and most substantially, in a geopolitics of air.

**B Geographies of Air**

In this section, the different ways human geographers have examined air is explored. It is suggested that current approaches remain relatively fractured and distanced from one another. An elemental geography that has perhaps never left the discipline’s concern might be rediscovered, but before we can begin to reconcile those differences, let us explore them in more detail.

***Representing Air***

Perhaps some of the most interesting areas of air’s exploration have been at the hinge-point of sub-disciplinary dialogue between human and physical geography, outlined and initiated in the field of ‘cultural climatology’. First coined by Birmingham Geographer John Thornes, the term shares a clear resonance with the field of ‘urban climatology’ whose lineage is much older (see below). What both fields show is a very materialist sort of geography of air which assumes that the climate and the weather are not physical processes somehow divorced from us (Thornes, 2008). Rather a cultural climatological approach seeks to bring physical and human geographers together to ‘integrate approaches to climate and society and culture’ (Thornes & McGregor, 2003: 190). Albeit using terms such as weather, atmosphere, climate and sky interchangeably, such an approach has drawn quite heavily on cultural geographies of landscape to explore air as a physical and cultural phenomena. The approach has tended to although not exclusively focus on representation by drawing on Donald Meinig’s famous ‘Beholding Eye’ essay to develop a visual methodology for interpreting the skies that both identifies the ways in which the sky might be meaningful, and what it might tell us about the physical processes that constitute its forms.

From the analysis of Constable, Monet to Eliasson, the cultural climatic approach is not a superficial reading of air, but an attempt to examine the relationship between representation and process. It is to almost work back from the air, skies, clouds and how they are perceived and represented in order to consider, for instance, the precise hotel room Monet painted his London series from (Khan et al. 2010)[[3]](#footnote-3); or the particular meteorological conditions that might have inspired Turner’s diffused and atmospheric scenes. Cultural climatology makes visible the meteorological processes at work in popular representations of the skies. The aims are pedagogic in order to use a ready vocabulary of appreciating cloud formations and conditions of light so as to stimulate scientific discussion over its making. The approach is to bring the air into a system of representation that attempts to assign value to it. In that regard, and perhaps more instrumentally and problematically, the proponents of cultural climatology have insisted that the air can be valued as a ‘service’, naming 12 different services the atmosphere performs (Thornes et al. 2010). We might say, however, that these approaches are less instructive for the manners in which the air is lived, experienced and encountered. And it is here where we can turn to approaches more directly concerned with phenomenological traditions and non-representational theories to do so.

***Materiality, Mobility and Phenomenology***

Phenomenological approaches to air have not explicitly negated or dispensed with representation. Such a point is made by anthropologist Tim Ingold (2010).

For Ingold, scientific rationalities and representations on air tend to render human beings as ‘*ex*habitants’ of the earth. Ingold’s critique is that far from external to us, ‘like the ground we tread, the sky belongs to the world that people *in*habit’ (2010: 524). What this proposes is a kind of geography of air and sky which does not see air divorced to a ring around the planet apart from us somehow. Instead, a study of air would follow what Ingold calls a ‘weather-world’, where there is no distinct surface separating earth and sky, but an inter-involvement of land and air which surfaces in the difficulties in attempting to represent that entanglement in the ‘open’. ‘Life is rather lived in a zone in which substance and medium are brought together in the constitution of beings’ writes Ingold, and who ‘in their activity, participate in weaving the textures of the land’ (2007: 534).

Investigations of the phenomenal immersion in air, and those tacit knowledges, has become far more familiar to human geographers, as John Wylie’s (2002) classic ascent of Glastonbury Tor near Bristol, England, first showed. His walk illustrates the involvement of our bodies in moving up into different sort of airs and landscapes. The Tor itself is an combination of light, landscape and morphology, described as having a ‘magnetic atmosphere’ below a stillness of air. As one climbs they feel the wind whipping up and round the Tor. At the summit one sees from in the air and above the clouds. And as one climbs, a double movement occurs, evocatively explained by Wylie as if the ‘occlusion of two weather fronts’. By moving up and through the Tor’s air, the climber emerges as a viewer, their body feels heavy but the chest light, ‘a feeling of occupying an airy volume of depth and of being lightly supported and elevated *by* the landscape’ (2002: 451).The approach distinguishes air as it is encountered and inhabited as a materiality constitutive of affective atmospheres, a gathering or folding of landscape and subjectivity.

Phenomenological accounts of air give the sense of ‘immersion’ in a volume that is qualitatively different to the recent volumetric accounts of territory and verticality (Elden, 2013). Such an approach is also in contrast to the sense of surface – although that need not necessarily imply surface in the sense of artifice (Forsyth et al. 2013) – so that we have what Craig Martin (2011) has described a ‘fuller’ sense of the air in something like fog. Just as the landscape might be moved-*with* in these traditions, the air is the subject of not only terrestrial but aerial navigation. McCormack’s (2008) historical and ethnographic writings on ballooning has pioneered the coevolution of meteorological science and atmospheric mobility and, thus, the entwinement of atmospheric thought, measurement, machinery and affect. What is more, aware of Ingold’s critique of a scientific rejection of the phenomenal confusion of inhabitation in favour of an objective and rational view of the air or the sky, it does not mean that we should give up on how science has apprehended air. In-fact, in McCormack (see also 2010) the air becomes sensible through the distribution of knowledge, sensations and feelings across the early technologies of balloon flight and a raft of public demonstrations, popular science and expeditionary investigations.

Similarly, Martin repositions geographic inquiry in the ‘midst of the aerial, intensifying the schism between lightness and heaviness, entangling us with space in a determinedly material sense’ (Martin, 2011: 455). Martin’s approach does not simply jettison thought or representation. Following McCormack and Wylie, he evocatively shows that while the surplus or excess of air and fog may exceed some manners of representation and expectations, particular kinds of writing can promise to evoke and express air and atmospheres in such a way that the difficult to represent is not simply erased. Fog is a ‘admixture of earth, air, and body’ argues Martin, forming as a gathering force by pulling together perspectives and positions, disorientating, ‘gathering together near and far through the intensification of the incoming and outgoing functions of place and body’ (Martin, 2011: 462). In this sense, for Martin, ‘the body gathers fog, just as fog gathers the body.’

***Virtuous Air***

It is important that we should not feel as if we have moved so rapidly forward in the discipline’s attitude to air through some sort of evolution or that what has come more recently should mean rejecting the approaches of the recent past. Because if we look to historical work on air, we might see that recent phenomenological accounts speak to the anxious and moral senses of air and atmosphere of the 18th and 19th centuries. Later on in the paper I seek to recover some of those notions.

An important area of the study of air in human geography and further afield has concerned notions of urban public health. Perhaps that is because the very mechanisms and administrative functions of states have often been performed through the urban governmental application of power to the environment as well as the body (Rabinow, 1995). Felix Driver’s (1988) tracing of the history of geographical ideas in the context of the 19th century city, alongside Simon Schaffer’s (1983) exploration of pneumatic science, show how the emergent discourse of air was bound up in a moral geography of morality and virtue, which would reference, quite explicitly, a conceptual and linguistic vocabulary of humours drawn from Hippocrates to Galen.

As these ideas were woven into engineering principles of sanitation and public policy, geographers have indicated that a social science emerged in particular geographic imaginations of the air as a potentially creeping, oozing subject. The humours, sometimes known as human elements, conformed to an earlier Empedoclean notion of four elements (earth, air, water, fire), with oppositional qualities (moist, dry, hot and cold), as the foundational substance of all things (Arikha, 2007). In modern account of the city, urban airs could emanate from, transform into rain, slowly creep and traverse the city in difficult and uncontrolled ways. Air by all accounts, was both physical and a ‘moral’ issue. Social problems could poison the moral atmospheres as much as physical miasmas would spread physiological diseases.

To a certain extent the virtuous material-existential imagination of air in the humours has been lost, while the governance of air as pathology or indeed ‘nuisance’, despite changing social and medical sciences, has persisted. D Asher Ghertner (2008; 2012) explores the middle class attitudes to aesthetic improprieties in contemporary Delhi, for example. Further still, as recent ethnographic and legal research in India has shown, 19th century ideologies of sanitation and their practices found strange repetition in the colonial cities of Mumbai and Delhi, cities that underwent their own colonial governmentalities of air as elites removed themselves to supposedly purer and more tolerable climates in the hill stations for health and social separation (for one of the best analysis of colonial India see Kennedy, 1996). As Steven Legg (2007) has demonstrated, the colonial government tested air borne technologies – such as tear gas – in order to suppress an insurrectionary populous. Techniques used for the suppression of politically vocal populations as several authors (Nieuwenhuis 2013; Theophanidis 2013) have explored recently in the Turkish protests, might resemble what Peter Sloterdijk (2009) has called ‘atmoterrorism’. This notion sees the struggle for public space ‘increasingly taking place in the air’ (Nieuwenhuis, 2013).

Whilst miasma and later germ theory dominated 19th and early 20th century imaginations of air in the minds of public health officials and scientists, a more intensified terrain of atmospheric monitoring, surveillance and the governmental regulation of conduct could be seen by the 1950’s and 60’s, giving birth to what Mark Whitehead (2009) has described as the atmospheric self. As Andrew Barry (1998) has also written, concerns to ‘monitor, assess’ and even ‘inform’ have been key pillars of a governmental approach to urban air through increasingly sophisticated technologies and networks that attempt to grasp, with even finer resolution, the air and what is in it. And yet, Barry argues, in this ‘political chemistry’ the concern for the molecular makeup of air quality and the ability to communicate its virtues to concerned citizens, has proven remarkably incommensurable with the urban experience - what it is like to live and breath in air.

Today geographers have shown how other kinds of registers of urban air have found legal expression in the advent of nuisance law that bans the proximity of certain odours near middle class neighbourhoods, and therefore the very activities that produce them. As Desai, McFarlane and Graham (In press n.d.) argue, slum populations must navigate inadequate infrastructure provision by using informal sites to urinate and defecate in order to do so conveniently and safely. Therefore while nuisance law appears to be against a particularly unpleasant air, it has far more pernicious consequences upon the urban population deemed to be responsible for it. It is as if the miasmas and dangerous airs of the past have been re-inscribed into aestheticized legal and class debates of a contemporary urban politics.

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In summary a magic, animacy and intimacy undoubtedly colours existing takes on the inhabitation of air, living-with air, writing about air, and other aerial representational encounters. What appears evident is how a catalogue of affects, percepts, sensations, embodiments, meanings, values and virtues find expression in these different and diverse approaches. But we can see the clear light of day between these different takes. The phenomenological is often told apart from economic, legal and class struggles, so obviously imbibed by aesthetic sense and meaning. Technological apparatus fail to grasp the experiential lives of the population they are meant to inform. Meaningful representations of air are told apart from feeling and praxis. As Jackson and Fannin argued in their ‘aero-graphies’, extant approaches towards air appear as fragmented ‘dissolutions’, and in other respects, blunt in their critical import to reveal inconsistencies and inequalities, to negate, resist or reject power relations, to imagine other worlds. They write:

“Could we take the dust of these dissolutions and form something new and wider, more expansive and less crusty, something which speaks to the need for an affective, fluid, and ecologically reflexive holism while at the same time preserving the incisive analyses of a critical political economy? Where would our material geographies take us then?” (Jackson and Fannin, 2011: 438)

This need not mean the uncloaking of something new or the reveal of a lower order or stratum, as if the mist fogging Diller and Scofido’s famous Blur building on Lake Neuchatel was blown away by the wind for a moment to reveal the hard materiality of the scaffolding beneath its inhabitant’s feet (see Dorrian, 2007 who explores this analogy in more depth). That scaffolding or structure is certainly important to this analysis, but it is more the closeness of matter, bodies and associations that is of my concern for an elemental geography. It is the way the air seemed to hang and waft around the structure as a pairing of steel and vapour, not girded but in tension with force, labour and power

Moreover, it seems to me as if air is apprehended in such a way that the elemental seems lost. The air, except through its humoural tendencies found in historical geographies of the city, appears just a bit too human. But what if the air in these accounts could be readdressed? How to resolve our attention to elemental air as a different kind or order of materiality, without the denigration of representation and imagination in doing so? Not only does an essential quality of air and other materials and substances seem removed from these investigations, but the imaginative and meaningful, the sensorial-affective and the power plays of struggle appear broken up or fractured into the multiple but constitutive parts or pieces of an aerographic literature. How then, to give better account of the air in the midst of these relations of class, power, inequality and politics, and a whole host of immersions, sensations and embodiments?

**C Affinities for Air**

 *“What if we reflected on the matter of an elemental consort with air” (Jackson and Fannin 2011: 438).*

Do we require other sorts - perhaps even older sorts – of thought, politics and vocabulary to address and write the air as elemental? Is there demand for more precision in the way that we write and conceptualise the elements as more than shorthand for a particular order of materiality? The approach to air developed in this paper is influenced by a different set of what might appear to be quite opposing and contradictory sets of genres, taking at first inspiration from chemical notions of the elements, especially the idea of affinity and its reception in alchemy, science and literature, before moving to an emergent philosophy of the elements themselves. Through these literatures we will establish theorisations of elemental air as a backgrounding condition, structure or ‘force’, but also, and, just as crucially, as method of affinitive listening.

Firstly, we must notice that affinity has a different kind of genealogy to that usually explored within the more popular histories of the revolutions in elite science (Gyung Kim, 2003). Affinity is attributed as a particular and innate forcefulness held by elements and the mixtures and combinations they come to assemble and reassemble. Affinities defined certain properties and characteristics to elements and materials - tendencies to complement and attract one another. Indeed, affinity is usually told as an alchemic magic of attraction outside of the rationalities of the chemical revolution, even if it would become absorbed into the locus of chemical compositions and the tabularisation of elements and their properties.

It is important to note that beyond Goethe’s application of affinity as an analogy for love, desire, familial relationships and morality discussed earlier, affinity was not a popular notion. Instead it penetrated the circles of a small number of intellectuals and scientists. For example, Max Weber (Howe, 1978; McKinnon, 2010) (influenced by Goethe and a German elite tradition in the humanities) would draw on elective affinity as a way to understand quasi-causal systems of thought – between religion, ethics and science. Mellin would go on to even order the notions of concepts in Immanuel Kant into a table of ideas and their affinities To that extent, the late 18th century would see the laws of affinity or attraction catalogued across different elements, first for Etienne-Francais de Geoffrey in over 24 substances and then in Torbon Bergman’s *De attractionbus electivus*  - a table of 51 elements in 1775.

In this paper, we are interested in the actual forces of intimacy and attraction implied in the notion of affinity between elements, especially air but also *of* the thing or element itself, in such a way that *thing* may not be an appropriate category to think about air or the elemental. In modern chemistry, of course, air is not an element but a combination of others that it holds in compositional suspension. In remaining true to this earlier spirit, however, the paper will try to hold on to some sense of elemental wholeness such that attuning to the elemental does not simply demand an ever closer finer microscope on material-human relations. Instead, the elemental thinking discussed below requires that we partially withdraw the elements to a position anterior to our perception.

Departing modern chemistry to take earlier ideas of affinity seriously, demands particular methodologies sensitive to the elements that may help us towards quite other senses of the air. Affinities can bring certain compositions together while destroying others. Affinities mean leaping beyond material substances but to a wider and yet intimate terrain of bodies, practices, cultures and technologies. Furthermore, the wider use of chemical or elemental affinity may help us make sense of the ways in which particular affinities and elements make and remake certain kinds of conditions that can be subjected to critique.

In this manner a geography of elemental and chemical attraction, dissonance or repulsion can help to remind us that the relations encountered in and through air and other elements, do not just arrive unconditionally, or out of thin air. Indeed it is worth pointing out the relation to Katherine Stewart’s notion of atmospheric attunements. What this approach does differently, albeit attuning to similar kinds of practices of writing and representing, is to bolster existing modes of critique (for example of difference, order, power, invisibility) and attempt to illuminate them rather than eluding them. Let us turn our attention and critique through the elemental and its affinities in three main ways.

**Elemental Affect**

In Goethe’s novel, the affinity that has drawn together and – to a certain extent - pulled apart the characters, creates the conditions for what is called an ‘extraordinary affection, an incipient passion’. The arrival of two new visitors to the family sees this incipient passion emerging after some time only to express itself in a ‘visible effervescence, and runs foaming over the edge’. This kind of affinity is a dispositional ‘opening out’ between individuals and the group. As a property of elements and their compositions, affinities create particular affective conditions that shift like atmospheres in and out of presence (see Anderson 2009), moving and disposing bodies and their subjects. Thus, first, I want to suggest that we consider the elemental, and elements like air, as chemistries within which entities move around and certain kinds of relations cohere.

Elsewhere affinity has been announced as a way of considering habit-as-structure. Dewsbury has recently drawn on Felix Revaisson’s writings to describe the almost gravitational forces and lures and drives that move bodies to seek out repetitive and habitual actions, like the ‘deepest synthesis’ of chemistry (Dewsbury, 2012: 80). Revaisson’s chemical enunciation is not so unusual because affinity in its genealogy shares something directly akin to the ‘structures of feeling’ Raymond Williams (1977) proposed as a kind of chemical solution, as distinct from a process like precipitation. Rather, as or in a solution, particular practices, thoughts, ideas and sensations might not be just articulated but structured around certain elements, what Williams describes as the ‘particular linkages, particular emphases and suppressions, and, in what are its most recognisable forms, particular deep starting-points and conclusions’ (Williams, 1977: 134). Suitably Williams calls parts of those structures elements and connections found with forms – social and material – as well as evidence of them. As a living form or process, these are ‘elements of impulse, restraint and tone’ (1977: 132), that seem in flux but they are not pure flux because they are emerging and generating particular kinds of patterns.

In sum, in relation to a theory of affect, elements like air could be thought not merely as substances, but as gathering tendencies towards structures of feeling: practices, thoughts, ideas, sensations structured by the elemental.

**Anteriority**

If a chemical elemental geography of air attends to its emergence from a particular solution to form a composition, how an element like air could structure certain sets of feelings, impulses, restraints and tones, then it could paradoxically, attend to the elemental in such a way that does not reduce an element to a compositional arrangement. Put another way, are these concepts of the elements as affective structures of feeling so incompatible with another set of qualities that emphasise the forces of the anterior, exorbitant and primordial that elsewhere have been called a kind of geopower (Yusoff et al. 2012)? Might these offer quite a different relation to the elements that could be found, for instance, in the weather-world of Ingold’s phenomenology, which deliberately pulls the elements into an intimate comingling with bodies and subjects. What if an element like air retained qualities outside of those relations?

 Within geography Mitch Rose has begun to consider these questions in relation to quite different set of debates around how life exceeds its ability to be governed. Drawing on Emmanuel Levinas’s notion of the elements, Rose explores Levinas’s question: ‘What is the origin of wind’. He writes:

“Levinas here is not talking about the sensations of light and wind, but light and wind themselves – tangible agents that have no origin. The wind, for example, appears from nowhere. Its presence forces itself upon us and we are at its mercy. We mourn the loss of warm sun on our skin or ache for the appearance of a cooling breeze. We want these things but have no recourse or claim on their coming and going. Life itself is the unattainable source that bequeaths such things or takes them away. It signals those elemental features of our being that are wholly beyond our grasp” (Rose, 2013: 218).

For Rose, then, the elements constitute a primordial but centrally ‘negative anterior dimension’ to life, an absence that ‘transcends human capacities and defies all governance’ (221).

The absences and chasms in the performance of governance are revealed by an elemental philosophy that writes the obtrudences of the elements that fill this space in our lives. John Sallis calls us to reconsider the Odyssean philosopher, rehearsed by Hegel, who oblivious in his solitude in free thought and contemplation forgets (see also Irigaray 1999) ‘the sky above and the earth beneath, as if such a one had forgotton that thought’s entry into solitude is precisely a *withdrawing* from the elements’ (2000: 148). The resurfacing of Greek philosophical notions of the elemental in Sallis, means taking more seriously what is above and below, while putting aside the moves of chemical addition and subtraction, ‘above all, that the elemental not be dissolved, decomposed by way of seemingly rigorous compositional projects’ (Sallis, 2000: 156).

In this thinking, the elements intervene in the sensible and the subject as open ‘in feeling the gentle breeze […] setting one’s feet on the earth […] in gazing bedazzled at the starry heaven or in shuddering at its austere remoteness’ (2000: 25). This does something differently to addressing the elements as simply the things subject to our sensations of them, but as sorts of back-ground that bounds them, ‘Elementals are encompassing’, Sallis argues, always already there. It is the elements in this regard and not people who ex-habit the earth.

“As the thunderstorm approaches, the landscape, canopied by black clouds, becomes ever more sombre, as if in preparation for those first heavy raindrops that portend the downpour soon coming to drench everything. Enclosed by the low cloud cover and pounded throughout by the driving rain, the entire valley is encompassed by the storm. Living beings may flee before the approaching storm, taking shelter from the elements; the very sense of their flight and of their taking shelter is linked to the inevitably encompassing character of the storm, which they endure in a certain way rather than escape” (Sallis, 2000: 157).

Which is not to say that elementals cannot combine with one another, from the storm that brings various elements into play, that ‘intersect, overlap and envelop one another’ in a ‘coincidence’, but to break them into constituent parts, or their effects as compositional, may remove exactly their elemental quality – the ‘*from which*’ of manifestation.

 Such an approach does not setup an opposition between the intelligible, perceptible and bodily sensed, to rehearse an existing claim levelled at notions of affective atmospheres somewhat unfairly. Sallis’s kind of elementalism does not assume the interaction of thought with bodily perception through a kind of contamination either, but, instead, a phenomenology of imagination that assumes an anterior operation of imagination to be constitutive of perception. These are notions of force of the kind of order that could be equated with Elizabeth Grosz’s elaborations of geopower, as relations ‘that exist in an impersonal, preindividual form that are sometimes transformed into modes of ordering the human’ (Yusoff et al., 2012: 975), which is not the same thing as trying to recover a determinism common to earlier geographical thinking influenced by biological analogies of nations, states and population.

Within this figuring of the elemental, we also see the potential challenging of non-representational theories of bodily action, which tend to leave little room for the imagination apriori perception. Could we reassert the possibility of a far older, archaic elemental and essential presence instead?

**Affinitive Listening**

Ester Leslie (2005) turns to a rather different period and site of chemical affinity in the institutions of industrial production in Western Europe, specifically Nazi Germany and after. Following Adorno and Benjamin, Leslie’s approach is a sensitivity through chemical affinity that re-imbues the sciences of production with the kind of ‘affinitive listening’ that art more regularly pursues. Leslie’s method is a re-energising of lost connections by discovering the ‘cooperative magic’ or relations between science, industry, its technologies, labour and systems of production, with art, culture and systems of thought – affinities drawn out through the emergence of chemical synthetic products – dialectical circuits between new scientific discoveries, industrial processes and movements in art, aesthetics and thought. Understanding the elements and their affinities for Leslie is about taking seriously spaces and associations that are industrial, productive or creative, that tracks movements in chemistry seeping back into philosophy or art, science and aesthetics.

I propose to develop elemental affinity as method. The affinities of science, art and industry that Leslie has explored, form some sense of background or condition. In this location investigations of the elements could follow the affinities of how and where they have travelled and transmuted through numerous processes and systems, through the hands of people and machinery to the paint brush and the strokes the elements might compel or inspire. An elemental affinity draws our attention to listen so that we can hear odd and sometimes unlikely relations that animate them and that are animated by them. Furthermore, by moving elemental affinities to the economies of chemical and colour production as Leslie investigates, helps us to depart in an admittedly weak sense from the magical fetishism of the substances of consideration. In other words, affinity helps to avoid the danger that the aura surrounding elemental materialities and the aerographies we discussed earlier might too easily circumscribe power relations from further investigation. If we are not careful to prevent the divorcing of phenomenology from these kinds of relations, the ability for critique might be relinquished or lessened.

On the one hand, Leslie’s work opens the elements up to affinitive scrutiny or critique by forcing methodological attention to the material, political, scientific, magical and aesthetic, whether this is in figures, ‘seen as part of an unfurling story of chemical-poetic encounters: they […] characters, symptoms, manifestations of a wider history’, figures who at the same time ‘guide the story: they are narrators, meta-figures, points of illuminating light’ (2008: 21), or perhaps the chains of commodity production through which certain labour, social and political relations would be born. On the other, this is not a form of critique set in relief so simply to other aesthetic modes of address, some of which were discussed in the previous section. Indeed, Leslie’s approach reminds us that methods attentive to the chemical elemental affinities which ‘jutted out’ at her, may perform other modes of critique not so central to the illumination of power. Elemental affinities are allowed to ‘collect, convulse and coruscate’ in parts of her writing, for example, bringing ‘the utopia of science, the deadliness of chemistry, the relationship between us and nature, the dreams of our mineral selves, the invention of new colours’ into curious collisions (2008: 20).

This approach could be held in common with parallel modes of atmospheric address, seen for instance in Derek McCormack who finds other ways to write stories of the circumstantial, narratives of atmospheric things which respond directly to the circumstances, properties and relations of the thing ‘or event they fringe’. Crucially and helpfully, these writings provide ‘a device for excursions that generate affects and experiences of variable reach and duration’ (McCormack, 2014: 6). Looking further to other modes of writing, Tim Choy’s (2010) poetics of air performs diffuse forms of capture that both condense and mimic the technological apparatuses which accumulate and record air quality, turning the diffuse into ‘something substantial’, by collecting a range of contexts and stories around how air comes to be worth talking about. Furthermore, other research may perform a more experimental ethics in approaches attuned to the aesthetic and the poetic, for example, in the research of Sasha Engelmann (2013) who explores artistic practices that elicit different manners of living with and in air, as in Dryden Goodwin’s installation *Breathe*. Thus while elemental affinity as method may be motivated by the more traditional concerns for the expression, performance and critique of power, it acknowledges other ethics, aesthetic and experimental engagements that may make possible a more nuanced and potentially quieter mode of critique.

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Might the affinities of chemistry and a philosophy of the elemental take us then to a geography sensitive enough to encounters with other substances and materialities - to their strange attractors, odd repulsions and apparently back-grounding exorbitant character. As in Goethe and Weber, affinities expose the close knitting of apparently distant disciplinary boundaries and barriers to ideas, culture, science, industry and crucially power that bring forth elements and substances. The affinitive scrutiny or listening this paper will try to practice involves making jumps, cuts, collages and comparisons in order to tell unfurling stories of the elements. Constituted by those affiliations and encounters, elements and their affinities resemble a structure of feeling, but where we leave chemistry behind we find that elements are also forces that cannot be easily decomposed from the processes of constituting parts. Elements can be prior, withdrawn from us for most of the time, but nonetheless there. In what follows the paper pursues these impulses by examining air in the form of the novel, and then geopolitics.

**D Novel Air**

Mary Elizabeth Lewis (2012) has written of the ‘novel’ associations that gave rise to the novel itself and the very writing about air. She describes these backgrounds as literary atmospheres or, ‘negative spaces registered […] [as] atmosphere’, as conditions as and for elements, experience and expression. In other words, the consideration of elemental affinities in this way means oxymoronically that something like air is registered, perceived, experienced and written about only in the right conditions.

Take Cromer on the north Norfolk Coast. Elizabeth Gaskell’s Margaret Hale seeks mental and bodily strengthening upon the death of her parents and a family friend. In *North and South* (2005[1855]) we see an emerging autonomous and independent mobility of a woman (see Parkins 2008) taking advantage of the Victorian railways extending their way to the seaside resorts, pulled in by the good and healthy air. Margaret, now tragically relinquished of her father and mother, goes to Cromer for the sea air and solace. While other characters move about her Margaret’s is a less passive submission to the air. Braced by the wind, on Margaret’s return to town she takes her life into ‘her own hands’ and from this chrysalis a new woman is born.

Like Goethe and more recently Primo Levi’s writing through the gaseous materialities that inspire his *Periodic Table* (Levi, 2012)*,* Gaskell’s *North and South* is a book full of air and atmospheres which foretell of Hale’s modernity. Writing through air expresses a wider societal concern for a certain sort of bad atmosphere, borrowing from the humoural temperament of melancholy which Robert Burton would comprehensively explore in his *The Anatomy of Melancholy* (1651). In literature and writing we can discover other sorts of elemental encounters that directly parse classical elemental and *humoural* notions of air with some kind of background or what we have called ‘literary atmosphere’, from which the form of the novel would emerge. For Lewis, such an approach is possible as writing may register those very ‘surrounding backgrounds’, and as we will explore, certain political-economic conditions. Exploring writing, as Lewis asks, is to examine what‘are such things like once we understand them to be ‘in the air’, subject to our suspended convictions about them?’ (Lewis, 2013: 23). In this section we explore how elemental air gains shape in writing and, in so doing, the writing of air mediates between a particular set of urban labour and living conditions, and a micropolitics of gendered voicings and affects.

Melancholy was a temperament that would commonly affect the literate and artistic classes circulating 19th century literary communities and the people they were writing about. Its airs appear thick, cloudy, foggy and impure. Melancholy expresses an air of dejecting spirit, infections of the heart, melancholic air attacks from without and within. Such is the kinds of air which plague Margaret before Cromer. They immerse her, express her moods, suffocate her mother with dampness. But there are also airs that she eventually confronts and through that process, restores some sense of power back to herself. In Cromer, Margaret takes the air for her own while earlier in the book in Milton she battles it. It starts as her father leaves his role as a minister for a position in the north in Milton, Darkshire. The winds of change in this part of the book setup an inevitability which Margaret cannot change however much she voices her concerns. Unpacking the house into the rented accommodation they take at first outside Milton, Margaret sees ‘a thick fog’ surrounding the house. It is said to creep with searching fingers, feeling their way into the house through the windows in white unwholesome mists.

In Gaskell, and similarly Dickens, the novel expresses a literary atmosphere of class and gender inequality, urban pollution and publishing networks and rather different sorts of registers of air that we might also call elemental. As Yeats argues of Dickens,

‘Air’s material and metaphorical qualities are so intimately connected for Dickens that the phrase with which he signed off a letter to Elizabeth Gaskell, ‘London looks gloomy,’ might be read as a complaint about either the national or the meteorological outlook, or possibly both at once’ (Yeats 2011: 329).

According to Yeats, in Dickens the air surfaces in a way which does not supress but articulates the conditional affinities of the socioeconomic, the meteorological and the affective. Thus, a novel like *Little Dorrit*, can be seen as an expression of theories of humoural pneumatics (Connor, 2002) along with an emerging urban climatological and public health discourse advocated by the likes of Luke Howard and Edwin Chadwick. These affinities would create new ‘equivalences between insalubrious socioeconomic climates and physically dirty atmospheres’ (2011: 334). Authors of the time could not but help express the contemporary conditions of working disputes and public health legislation, cholera outbreaks, polluting industries, developments in miasmatic theory - even the terms of epidemiology penetrates their language. But there is also an essential notion of air possessed by external, larger forces at work which the characters seek to endure, challenge, and ultimately possess and be empowered by.

In *North and South* the character Bessy is famously poisoned by the fluff, the suspended particles of cotton from the textile mills destroying the workers lungs. Air, body and spirit are conflated in these novelists’ pseudo realism, as the element of air appears a force outside of hope or intervention. Characters like Bessy become full of analogies that dissolve their boundaries with the surrounding spaces. Bodies become like chimneys or steam engines adding to the pollution of the city, women appear to struggle with the wind while men are set against it.[[4]](#footnote-4) The mill owner Mr Thornton in particular battles the elements, he moves in-spite of them - to spite the air itself. When it is announced that Mr Thornton is coming to tea Mrs Hale fatalistically announces, ‘‘But, east or west wind, I suppose this man comes”. Mrs Hale and Margaret can only wonder at the man’s indifference, ‘The more it rains and blows, the more certain we are to have him”.

 In this elemental metaphysics, gender empowerment means not only physical and social mobility, but learning to confront the air and even to use it as breath, as voice. We see this as labour relations in Milton breakdown. Things come to a head when Mr Thornton stands his ground in the factory forecourt as a growing mob of workers congregate to voice their dissatisfaction and verge on rioting. In Milton it is Margaret and not Mr Thornton who is ‘struck’ metaphorically by the crowd whose motion and atmosphere are ‘buzzing’ with ‘excitement’. The crowd takes on the ‘thunderous atmosphere’ of a storm which boils morally as well as physically, around her, starting in ‘a low distant roar’, reminiscent of Dickens’ description of the storming of the Bastille (see below). The turbulence builds as a volatile mixture of air and fluid, first from the ‘slow-surging wave of the dark crowd’, atmospheric disturbances which forced ‘themselves on Margaret's notice’ (Gaskell, 1855: 170). The crowd’s bodies are turned into battering rams against the gates of the mill, the strong gates aquiver, ‘like reeds before the wind’. In the standoff, and losing the moment, Mr Thornton’s authority is arrested as he fails to speak or move. Folded up, his arms crossed as if a barrier and his body taught - as ‘still as a statue’ - his silence almost lets the raging whirlwind free. At this moment, Margaret anticipates the uproar and the possible explosion of men, boys and passions that will easily sweep beyond them. She sees some boys about to give flight to their wooden clogs, their missiles a potential spark to the unrest – perhaps taken by the devil’s opportunity to agitate their spirits for “when the humours by the air be stirred, he goes in with them”. She rushes to confront the crowd but cannot speak. Margaret’s effect is an almost equal and opposite force as her air vacates her – she cannot speak - but it halts the tide and causes the atmosphere to waver. Margaret gasps, breathless. The accounting of air in writing like this enables us to distil the inequality of labour relations, working and living conditions through the elemental. Air penetrated language and gave shape to Dickens, Gaskell and others making sense of an emerging public health discourse and the bigger machinic, economic and spiritual forces at play in the fates of their characters.

Even if we have to be very careful in the comparison (and developmental narrative loops that posit how non-western cities follow the path of the west), these accounts are not dissimilar to those that can be found in writings of the city and its class relations today. For example, Katherine Boo’s journalistic novel (2013) rejects the romanticism of qualitatively different airs that appear in writing describing the living conditions of slums in Mumbai or Delhi, cities often lent a troubling and potentially orientalised ‘urban charisma’ (Blom Hansen & Verkaaik, 2009). Boo’s journalism of the Annawadi slum does not simply direct our attention away from humours of the devil’s command to the ecological systems that make up megacities. Rather Boo juxtaposes concentrations of bodies, buildings, industry and traffic, biometerological effects of micro and nano particles causing countless lung and pulmonary health problems (poor health the source of so many resident’s woes) as almost elemental conditions, quite ungraspable.

 In the pockets of life in-between the ‘elegant modernities’ of Mumbai international airport and its ecologies, in the thresholds between slum and airport, under and over-city – the airport road and the rapidly accelerating development of the site understood as ‘a smogged-out, prosperity-driven obstacle course’ from which not only exploitation but ‘wads of possibility had tumbled down to the slums’ (2011). In the embodied, metabolic exchange with the children, like Abdul, rooting through the garbage spewed out by the airport which turns his snot black, it almost appears that the elements are governing their fate. The slum is subject to the monstrous expansion of the airport amidst turbulent global economic changes, the distant roar of Mumbai’s terror attacks, and environmental migrants flooding the city.

In Boo’s narrative air and affects attune in affinity or resonance sparking off micropolitical contestations. The book hinges around the events that unfold from a known prostitute whose half-hearted (but obviously quite desperate) self-immolation goes wrong. Blaming and victimisation, the fire, and the smell of burning leg in the air, sets off a chain of events that threaten the already vulnerable informal economy of the slum by police, prison officials and corrupted state officials who routinely terrorize the inhabitants. Air as element provides a way of writing and making sense of social, economic and ecological conditions.

**E Geo-politics**

An elemental notion of air may challenge a series of burgeoning efforts to reconsider geopolitics in relation to its constitutive materials: these include its objects and agencies or ‘force relations’ (Meehan et al. 2013); the geophysical and volumetric constructions of territory (Elden, 2013); and, the assemblages into which matter may be enrolled as ‘‘more-than-human’’ (Depledge, 2013; Dittmer, 2013). As Steinberg puts it in relation to the seas, we might be compelled to take notice of a range of different actors and expertise ‘as they interact with and are co-constituted by the universe of mobile non-human elements […] including ships, fish, and water molecules’ (Steinberg, 2013, p.159). An elemental geography, however, may attend to these co-constitutive parts and relations rather differently, to address not the makeup of the oceans, their internal processes and torsions, or those things that traverse it (Hasty & Peters, 2012; Lambert et al., 2006), but other sorts of elemental forces and relations.

In this section we will explore an elemental account of conflict, as firstly, the elementals of air and war that composed a structure of feeling to mediate an 18th and 19th century wartime of anticipation. Second, the way air and war would be produced through the affinities of systems of production, war-making and representation that would create the conditions to make war and accounts of it possible in the early 20th century. And thirdly, how the writings and technologies of air war - focusing specifically on the writings of Carl Schmitt - have drawn on elemental notions of air as quite monstrous and exorbitant.[[5]](#footnote-5)

The association of air and conflict is not new. Ernst Jünger (2004) would locate war as a meteorological phenomenon – a storm of flying mettle and violently compressed air.[[6]](#footnote-6) There is a comparable longer and romantic tradition of human conflict and air in which air and war become interchangeable and intractable bedfellows. For Mary Favret (2009) tracing the history of weather and war, their affinity competed with others to mediate weather/war and ultimately offering ‘a history of affect, even perhaps the ‘climate we call modern wartime’ (2009: 122). In Favret’s study of late 18th and mid 19th century writings and georgic poetry, the turbulent weather in Barbauld, Campbell and Coleridge divine what is to come in war, bringing news from the French revolutionary wars in Hohenlinden, Marengo near Alessandria, and further trouble in the colonies. Favret’s is a history of precipitating affects that coupled conflict with the scientific development of modern meteorology beginning to relinquish the shackles of a tradition of climatology, perhaps closer in association with the environmental determinism of the early 20th century. War is expressed meteorologically and the air is understood through war in an ambivalent and confusing set of conditions, ‘here or there, felt or unfelt, strange or known, aberrant event or on-going condition – extends itself into the circumambient air, the atmosphere’ (Favret, 2009: 145).

Arguably, and ironically, the accounts of conflict borrowed heavily from the emerging science led by John Woodward, John Flamsteed and Edmund Halley, who theorised the violent agitations caused by exhalations of gases from the earth mixing dangerously with those in the air (Jancovic, 2000: 28). As with the georgic writers, the elemental and meteorological air in these accounts almost compelled conflict and foretold of dangerous clouds on the horizon in other parts of Europe. The explosive analogies could even be found in accounts well after the French Revolution, whose writers would write *of* and *in* an atmospheric style of dangerous chemical and disharmonious mixtures of air mixed with water and gunpowder (earth).

French Historian Jules Michelet (discussed in relation to Schmitt below) described the moments before the capture of the Bastille fortress in his distinctive historical semi-fiction. It was an evening that ‘had been stormy, agitated by a whirlwind of ungovernable frenzy. With daylight, one idea dawned upon Paris’ (Michelet in Chase & Goldstein, 2009: 743). This was revolution and the air bubbled, ignited in the account. Something has ‘impregnated the air, the temperature has changed; it seems as though a breath of life has been wafted over the world’ (Michelet, 1860: 53). In *A Tale of Two Cities* (1859)*,* Charles Dickens reconstructs a similar scene. A tempestuous air describes the movement of the revolutionary crowd. The noise is immense, gathering, ‘like the growling of distant thunder, resounds nearer and nearer, rushing on with the rapidity and roaring of a tempest. The Bastille is taken’ (Dickens, 1859: 156). Revolution is a dangerous mixture of air and water, moving together as one. The sound of the crowd is all the breath of France, whilst their movement is a living sea, ‘Through the fire and through the smoke – in the fire and in the smoke’ movements, materials and air multiply. Dickens repeats these pairings and compositions, over and over; ‘muskets, fire and smoke’, ‘cannon, muskets, fire and smoke’, ‘cannon muskets, fire and smoke’, slight displacements of the raging sea, ‘blazing torches’, ‘shrieks, ‘volleys’, a boiling tumult that bursts and spits, leaping ‘into the air like spray’.

And so from revolution to mediating the events of the Napoleonic wars and the fate of the British Empire, 18th and 19th century poets and novelists brought the turbulence of war and political change home in and through the air. Air prophesised – selling the doom that would follow - making imminent war palpable through air, if a ‘not fully articulate’ and yet total elemental voice heard on the winds of change (Favret, 2009: 139-140).

These affinitive conditions of the romantic experience of mediated war would meet differently in the mechanised conflict of the early 20th century, as Peter Sloterdijk explores in the 1915 release of poison gas at Ypres during the First World War. Sloterdijk’s suggestion that air and climate theory are the ‘primary forms of post-terrorist knowledge’, is patently some claim, but his broader exploration of air’s explication and its apparent excess to power’s intervention is the more successful one, signalling an intimacy of body, environment and expressiveness in war that are drawn together by air’s affinities to make gas warfare and the modern experience of war possible.

 Both Connor and Leslie anticipate Sloterdijk’s exemplary moment of explication of the 20th century in movements in art and industrial production as Britain’s modernist Vorticist movement found in their publication *Blast* an affinity of body, machine and violence, ‘Interiority expelled like dust by a sharp gust of *Blast*ish air’, writes Leslie (2008: 124). The ‘metallicized nature’ of the battlefield war begins to appear more like the environment of a factory of machinery in Enrst Jünger’s witnessing of gears, levers, arms, the ‘air quivering’. Whilst the very atmospheres that were produced and captured in photography relied upon, as Leslie shows, ‘the same technologies and the same mined and processed materials as the synthetic colours of the new rainbow’ produced through the revolution of chemical production in Germany (2008: 127). In this affinity the ephemeral and visceral meet as colour, conflict and climate.

While in Sloterdijk we see an account of environmental explication with air in war, it is possible to identify affective, chemical and visual affinities in a wider system of production and photographic reproduction in wartime Germany. The chemical chlorine released by the Germans was manufactured by the chemical production capabilities of BASF, Bayer, Agfa and others. Phosphorous, mustard and Lewisite were all part of this chemical production but particularly chlorine. They were also heavily involved in the production of colours indigo and sulphur black. Thus advanced mining and chemical production would be necessary for those nations competing in gas warfare, the visual testimony that revealed its brutality, and as James Robinson has shown recently, even in the paint, dyes and materials used to camouflage the landscape, to make it disappear from the view from above (Robinson 2013). In this sense, air’s affinities reveal a broader system of material, political, visual-representational and economic conditions for war-making as well as its defence (and as Leslie goes on to show, a wide poetic and philosophical climate).

At almost the same time, elemental air would permeate 20th century geopolitical thinking, a diffusion we can see if we turn to Carl Schmitt’s writings on sovereignty, territory and law to explore this further (Legg 2011). Schmitt’s treatise on the *The* *Nomos of the Earth* [1950] and, as Steinberg has explored (2011) in his ‘bridging’ book, the law of the seas (Schmitt, 1997 [1942]), is particularly important for its elemental writing and assumptions.[[7]](#footnote-7) Schmitt is explicit in his interest for the geopolitical import of particular kinds of territory which he calls elemental, locating them in the classical form of land (earth), sea (water), air and fire. Schmitt is, however, careful not to relinquish the construct of international law for either a ‘geographical-scientific or an elemental-mythological approach’ (in Steinberg 2011) – approaches he reads into the verses taken from Goethe in Schmitt’s forward to *Nomos*. Indeed, it is precisely in that potential determinism where Schmitt rejects an entirely deterministic elemental geopolitics by the affinities we have been exploring. As Schmitt explains the possibilities of so doing,

“the different human types belonging to the four elements, such as for instance, the exclusively terrestrial and the exclusively maritime, would have little to do with each other. They would be strangers to each other, and the mutual isolation would be all the greater, as their “exclusivity” increases. The mixed breed would produce good and bad specimens and entertain friendly or hostile relations on the pattern of chemical affinities or repulsions […] There would be no human history in the sense of a history of man’s acts and decisions” (1997: no pagination).

However, neither does Schmitt want to discount those affinities, nor could he be accused of the same environmental determinism found in the geopolitical legacy of early 20th century geographers, even if he would come to similar conclusions as Mackinder (Legg, 2011). Instead, Schmitt’s geopolitics comes from a different kind of orderings that we are understanding as elemental. According to Mitchell Dean he cannot ‘avoid mythology and poetry’ (Dean, 2006: 3), for by drawing on Goethe and the postulates of a strange chemical *and* mythic geopolitics, Schmitt blurs the scientific with the mythological and the theological to account for the affinities of air with the other elements in a kind of succession. Schmitt’s indebtedness to elemental thinking even go further than Goethe. Jules Michelet (mentioned above) is also mentioned in both *Nomos* and *Land and Sea*. Schmitt’s evidential loyalty to a branch of geo-mythological thinking is nowhere more obvious than his references to Michelet’s *The Sea*, a book packed full of elemental sympathies and the melancholic pathos of the humours.

These ideas are especially evident in the exploration of Schmitt’s favoured pairs: the land and the sea in relation to the air and fire, towards the constitution of new *nomos*. In this context, geopolitical contestation is understood in some teleological move that foresees a transition from classical understandings of the elements – such as the seas - as a lawless space outside of human influence. Civilizational progression means the march forward, what would be a history or a ‘voyage through the elements’. In the presumption of evolution from one element to the other, in Schmitt, as with Mackinder (with whom Schmitt finds affinity), there are special affinities between the elements that coincide and feed each other. Schmitt argues that it is in fire that the colonisation of air is made possible. As Michael Marder explains, the element of fire signals a kind of ‘pyropolitics’, so that the ‘energy needed for the politics of air literally to take off the ground derives from the fire (which, itself, requires oxygen for burning) of combustion engines’ (Marder, 2012: 264).

Schmitt’s is an articulation of a different kind of geopolitics that is not reductive to a thingness, associations or the physical properties of objects in assemblages. The space of the sea, although soon striated with the laws and assertions of states and, as Steinberg explores the internal geophysical properties that internally order, structure or resist any notion of an open or free space, is overtaken by the frontier of the air. The aeroplane – as winged bird - whose natural element is the skies, overcomes the sea’s dominance of the land. Thus it is ‘air’, argues Schmitt, which is ‘the new elemental space of human existence’, setting up the sorts of iconography depicted in Disney’s famous production of De Seversky’s air power doctrine in *Victory through Air Power,* the iconic battle of Japan’s Octopus strangling the pacific with America’s eagle pouncing with its razor sharp beak and talons, to defeat the creatures characterizing the existing nomos of the land or sea (see Kaplan 2006).

The monstrous and the elemental often go hand in hand. For example, in *Nomos* and *Land and Sea* Schmitt frequently invokes mythic creatures and monsters, tying up cabalist myths of behemoths tackled by leviathans with flaps and fins (see also Dixon & Ruddick 2013 for these debates in geography). There is an essential and monstrous sense of force bound up in these elemental myths because the elemental, as Sallis (2000) notes, takes on a sense of being both from but also outside nature, a hypernature that is uncontrollable or merely harnessed for a while. The elemental space Schmitt renders of air, in contrast to the air and sea, appears almost limitless in its infinitude, what Bachelard calls the obliteration of dimensions (Bachelard 1988, p.9). Perhaps, however, elemental magnitude and monstrosity should come as no surprise given some very common ways of thinking about sovereign power (Derrida 2011). Mark Neocleous (2014) shows that pairs of monsters have often characterised the different but antagonistic qualities of modern sovereign power in the form of policing. Indeed, Dean notes how Schmitt would characterise the domination of the new element air as a police action, air power deployed ‘as vertically as St. George used his lance against the dragon.’ (Dean 2003 [1950]: 321).

Equally, the alchemic and mythic origins of geopolitical thinking around air power would be diverted to explore how the anticipations of the progression to aerial bombing Schmitt was announcing could be made sense of in the rather different register of Jungian psychology. Consider Jung’s interpretation of a dream of a Parisian air raid. A warning is sounded, the Champs Elysees is emptied and the dreamer instead of seeing expected bombers perceives a flying saucer, ‘a metallic sphere shaped like a drop […]’. Jung’s dreamer has the impression that they are being observed by the drop, the ‘atmosphere was most uncanny’ (Jung 1959, p.26). In Jung’s analysis, the appearance of the UFO amid the panic of an air raid signifies the presence of a ‘heavenly fluid’, the ‘*deus ex machine* of alchemy’ and an expression of a Mercurian object - threatening and dangerous, and about to fall from the skies. The flying object in this case is a projection of material volatility, as if the psychology was an alchemic moment of transformation. The unidentified object appears suddenly; it is a disappearance and reappearance as if the vaporization of water or quicksilver. In Schmitt, the threat of elemental air is likely to be total. According to his now often used quote, ‘It is conceivable that the air will envelop the sea and perhaps even the earth, and that men will transform the planet into a combination of produce warehouse and aircraft carrier. Then new amity lines will be drawn’ (2003 [1950]: 49).

The affinities of an elemental geopolitics is also explored by geo-philosopher Reza Negarestani (2008) who deploys another work of fiction. His novel *Cyclonopedia* is about a young woman who arrives in Istanbul and finds a manuscript of writings from an academic Hamid Parsani, who has written a cultural and political archaeology of the Middle East that is animated by primordial elements. The scientist’s elementalism is aligned with Schmitt’s re-orderings, refusing political-geographical boundaries and scales, ‘how is it possible’, the scientist asks ‘for one to geographically stick to the middle east when it is territorially obscure […] when it evidently has sentiments, a life and interests of its own?’

Negarestani’s world is a ‘cosmos crafted by its outside […] fiendishly indifferent’ (2008: 98). Oil and air are some of the primary elementals in *Cyclonopedia.* Petropolitial distribution shapes how society makes sense of politics, economics, war: ‘history and progression are determined by the outflow and influx of oil’. As with Sallis this is a thing that cannot be politically distilled, ‘cannot be broken into its constituent elements or main constituents’.

This tellurian materiality of elements exhibits other affinities. The earth holds qualities of dryness and wetness, tendencies that attract and repulse. Negarestani writes his own mythology of the political-mythic. Ancient Assyrian and Babylonian figures like Pazuzu appear as a timeless bringer of plagues and death, the figure of wind and dust. Pazuzu is embodied as a winged bipedal humanoid with talons instead of feet. It also has two pairs of wings, an almost fleshlesshead, like a dog or lion’s skull. The demon is a radical outsider, ‘its exteriority of the demon cannot be captured’. These elements and myths surface in bedtime stories and social memories that emphasize the intervention of elements that come to ‘storm’ the normal course of events.

It is impossible not to explore the broader ways that these different elements and affinities could persist in the contemporary industries and economies of the military. Take the presence of the politico-mythic in the romantic naming of US military technologies, such as the drone’s infamous ‘gorgon stare’ which turns as Derek Gregory has explored, suspects into targets, just as Medusa’s ‘Gorgon’s stare petrified its enemies to death, turning them into stone, so this too is a deadly gaze’ (Gregory, 2013; see also Gregory, 2012). The so-called Gorgon Stare, sold and advertised by Exelis and Sierra-Nevada Corp, has also to be seen in the context of similar technologies of airborne sensors like ARGUS, or Autonomous Real-Time Ground Ubiquitous Surveillance-Imaging System, which mimics the wakeful alertness of the god Argus Panoptes, a primordial giant with 100 eyes and ‘Blue Devil’ – the now grounded surveillance blimp – able to survey up to 64 square kilometers at a time, although it had to settle for an ‘Angel Fire’ sensory system which limited its acuity to just 4km. Jordan Crandall paints a vivid picture of just these kinds of elemental myths in action,

“the winged fusion of human, beast and machine of its namesake, with claws of steel, bulbous head and large unblinking eyes […] Although menacing in its demeanor—fangs bared and nostrils flared as it readies to inhale and consume—it is understood to have protective qualities for its deployers. Heir to the symbolic apparatuses of myth, its figures are everywhere present on objects, documents, ideologies and units of value exchange, manifesting hopes of warding off evil” (Crandall, 2013, p.294).

So far from absolving our ideas of air and more romantic notions of the elements potentially divorced from the political or geo-political, we find that elemental air and associated elementals pervade the fetishized technological-aesthetics of the military and its economies.



Figure 1. Exelis and Sierra Nevada Corporation's Gorgon Stare

There are perhaps, then, clear differences between these approaches and existing investigations of the material and the geophysical that I would just like to make more clear. Air’s affinities might expound, as we have seen in accounts of air and conflict in romantic poetry and writing, broader affinities of material, political and economic conditions of war making and visual representation. Air expresses the anxieties of elemental alchemic magic, and the geo-politico-mythic obtrudences persisting in today’s geopolitical and militaristic discourse. In this new light, recent accounts of the material certainly have the promise to deepen investigations of borders, territorial disputes and sovereignty claims, but what is elemental about these measures or registers of material association, physical force and composition of things born from empirical and scientific observation and capture? As Sallis argues, it is the ‘indefinite’ in the elemental, its particular giganticism that is exactly what constitutes the elemental as elemental. As he argues,

“Not that certain meteorological measures could not be applied: yet as soon as the rain and the wind are submitted to such measure, their character as elemental will have been reduced and the difference sustained at every site of manifestation, between elementals and things will have been levelled out” (2000: 158).

In short, as soon as we reduce the elements to the epistemologies and ontologies of networks, science and geo-physics, we may remove precisely what is elemental about them.

**G Conclusion: for an elemental geography**

I appreciate that an elemental geography of air might appear to be something of a step backwards to what could be perceived as an older, certainly dangerous and out-dated sense of the elemental. But it should not be a necessarily regressive move to ways of contemplating the elements that we have been careful to surpass and, in some contexts, heavily reject. Instead an elemental geography of air might mean drawing our attention to particular set of materialities and imaginations, material-imaginations that still persist and can be taken seriously, despite their reductionism and essentialism.

Of course, accounting for air in these relations is not easy because it appears that the air is almost what Steven Connor (2010) has called a ‘pure mediation’, which makes it particularly difficult to grasp or fix. Air is accompanied by an ideal, it is posed as a metaphor, it is filled with thought, projected onto by images, and yet, it is also somehow so intractable because we are already caught up with it. Air’s ‘inextractibility’ makes air ‘the thing that is nothing’ (2010: 31) or ‘mediation itself’.

The kinds of accounts of air developed in this paper do not go deeper into a flatter sense of networked assemblies in which air is but a part, or a thicker reach into the micro-physical forces at play in a moving atmosphere. Rather in the affinities of air opened out between chemical alchemy, affinitive listening, and a rejuvenated political mythology of the elements - an elemental geography that can be written and explored in writing - is more closely attuned to backgrounds, to conditions, and to the exorbitant. As Sallis suggests, this is a manner of depth but from a slightly different point of view, to the extent that we can consider an elemental geography as fundamentally about thinking with, feeling with, living with an element like air as an indefinite and incomprehensive background. To take the air as elemental, therefore, is to already be ‘encompassed’ by it so that ‘one can not readily take distance from it as from a thing’ (Sallis, 2000: 161). An element like air occasionally obtrudes into appearance but most of the time it is endured and worn, and particularly difficult to abstain from because of its anteriority.

What this paper has tried to achieve is to give space to the seemingly unspaced, to the negative spaces of air – or absences of a thicker materiality - that coalesce into certain conditions or possibilities, ephemeral structures of feeling, and affinities between things and other elements that might have been completely unreasonable to assume. Furthermore, it is to potentially re-embrace Bachelard’s insistence on the elemental in the imagination, a remembering of the elemental and its proclivities in the texts and things that describe and populate the world, from literature to military rhetorics. Taken further, Sallis’s material-imagination may help us challenge some of the phenomenological tenets of non-representational theories and where they locate thought, perception and experience.

This should not mean the loss of any kind of critical edge. Should the affinities of air enable us to bring air to account, then they will do so by not disguising power, production, representation, aesthetics and experience through the clouds of doubt that divorce them from scrutiny or relation. Indeed it is probably in the confusion and disorientation of different airs that such an approach becomes possible. Moreover, this should not circumscribe its excesses to the scripts of power or technology either. In the affinitive writing practiced above, the tendency to begin to shape or discipline air and the elements into a series of relations – and potentially infinite affinities - must be warned against. Care should be taken not to deny the excess of the elemental from thought or writing, to ignore its capacity to withdraw from us, being brought-to or taken-into any kind of account. A more modest sense of affinity is required. Affinity should not become a surreptitious and totalising force, steering attention away from the relations or non-relations that may constitute breaks or caesuras in the ways that elements give form and force to life.

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1. According to Richard Herbert Howe, Goethe’s novel was one of the primary ways the notion and the term entered the elite intellectual consciousness (Howe 1978). [↑](#footnote-ref-1)
2. The kinds of volumetric geography in play right now are focused on other sorts of questions that have less to do with volumes as they are immersive and inhabited, and more to do with the legal, techno-strategic domains of governmentality, territory and militarism (Elden 2013). [↑](#footnote-ref-2)
3. The Birmingham team worked out precisely the room at the Savoy with the correct view of Waterloo Bridge [↑](#footnote-ref-3)
4. These are clearly not the only forms of elemental writing, especially with air. For example Jane Urquhart’s *Changing Heaven* troubles the highly unequal bonds of power and possession in the love affairs of two women who are shaped indeterminably by the air and the wind. In another register *Elemental South* collates a number of short writings of the elements in the American south. [↑](#footnote-ref-4)
5. In so doing I am aware of the tendency to equate elemental geopolitical notions of territory with what Nigel Clark has called the ‘primacy of antagonism and conflict’ (Yusoff et al. 2012, p.976). [↑](#footnote-ref-5)
6. Useful comparisons could be made with the atmospherics of Gaston Gordillo (2014) and his forthcoming writings on ‘ambient thickness’. I think what this account shows is that these gaseous materialities are historically produced in quite distinctive ways. Furthermore, that elemental atmospherics may render quite different apprehensions of air. [↑](#footnote-ref-6)
7. Eduardo Mendieta (2011) suggests that *Land and Sea* functions as part of several sorts of bridging of different phases in Schmitt’s work, between his study of Hobbes to *Nomos*, but also from his earlier ‘decisionist’ phase on parliamentary democracy, dictatorship and sovereign power, to his the later arguments on the spatial ordering of legal and political power. [↑](#footnote-ref-7)