



Poetic Metrics: Unfolding Dissent in Intensive Space

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Abstract

This work traces a distinction between the extensive optics of capitalized knowledge production that engender extraction and accumulation, and an intensive optics that relies on integration and errantry. This distinction reflects the extensive and intensive properties observed in physics and measurement. Within, I map this distinction onto notions of narrative and poetic causality. At heart, this work is concerned with operationalizing the social changes necessary to halt the perpetually accelerating asymmetrical growth of wealth that beckons the mass extinctions of the Anthropocene and manifests injustice and inequity around the globe. To such ends, this discussion unites threads within philosophy, physics, and literature that posit causality as emergent and contingent, as opposed to sequential and teleological. That is, this article allies itself with the stance that time and space are not extensive qualities of a pre-existing universe, but rather intensive affordances that emerge through material interaction. I attempt to deploy these strands of theory toward political engagement with a novel form of non-cumulative measurement to destabilize the data-based epistemology used to justify inhuman development policies. Specifically, I examine the increased neoliberalization of urban space over the past decades, and the effects of this homogenization on public demonstrations of outrage and dissent.

Keywords

Measurement; capitalism; algorithmic governance; causality; object-oriented ontology; climate change; poetics



Introduction

There is a statue of Robert E. Lee in Charlottesville, Virginia's Emancipation Park that has both extensive and intensive properties. It may weigh about 20,000 kilograms (extensive) and depending on the time of year be about 20 degrees Celsius (intensive). Any object, space, or event shares this fusion of extensive and intensive attributes with Lee's Statue. Extensive properties are accumulative and extractable. Intensive qualities describe indivisible internal compositions of an object (slicing the statue in half will change its weight, but not its density). The statue also possesses several attributes which resist quantification. It has a justifiable-ness. It has a rebelliousness. Fluctuations in these non-numeric attributes can be measured just as well as temperature, but not with a thermometer. They are measured through protests, rallies, and judicial decrees. Which attributes of an environment one observes or deems worthy of noticing is socio-politically mediated. This article attempts an engagement with the intensive aspects of public spaces and materials, arguing that the increasing neoliberalization of urban surfaces has been catalyzed by a privileging of extensive properties as more worthy of observation. The hope is that the conceptual galvanization within may offer as yet unnoticed approaches to dismantling structurally entrenched social injustices.

Two paradigms for conceiving of causality are articulated within: 1) a narrative causality that echoes the extensive measure of environments as individuated, stacked, or collected moments, and 2) a poetic causality reflective of intensive properties, which cannot be dissected or collected, and by which change occurs through shifting environmental relationships. This distinction is examined through the financialization of urban space, that is, the manner in which the city is being redesigned as a conduit for the asymmetrical growth of wealth. This discussion is further nuanced by addressing how instances of popular outrage over the past decade have been made public—where was anger manifested, how did it move, who saw it, how did it feel, and what impact did it have? Key to neoliberal efforts at programming public space to grow wealth, I argue, are the gargantuan data collection undertakings of both the private and public sector. Finally, I suggest a methodology for engaging the poetic causality of intensive properties to circumvent obstacles to equitable social reform. By fusing the poetic errantry of Édouard Glissant and the rational obscurity of poet Veronica Forrest-Thomson, this work maps an approach to emancipatory social change that deploys counter-normative measurement to erode the accretion of data violence.¹

To be clear, throughout this article, wherever the words extensive or intensive appear they are meant very precisely as the concepts from physics, not as generic adjectives meaning big or focused. Most saliently, change occurs to extensive properties by adding or subtracting, while change occurs to the intensive properties of an object by altering its relationships and interactions. Further, while I have

¹ Similar efforts at poetic praxis in geography have been articulated by Candice Boyd (2017).

juxtaposed extensive and intensive qualities in a somewhat combative way, this is not to suggest that these qualities are in competition or mutually exclusive. Every object possesses characteristics of both types, and most intensive measurements are constructed by using proxy extensive observations (e.g., the intensive quality density is derived from the extensive qualities mass and volume). Equally, I do not wish to suggest the compositional styles of narrative and poetry are in contention. Rather, the serious playfulness advocated below is beholden to experiments in stylistic blending, such as the queer performance-theory of Paul Preciado's *Testo Junkie* (2013), the feminist technohistory of Sadie Plant's *Zeroes & Ones* (1997), or the theory-fiction of Reza Negarestani's *Cyclonopedia* (2008).

Dystopian Redundancy

In 2017, 550 Vanderbilt, a high rise of 278 residential condos, was completed in the Prospect Heights neighborhood of Brooklyn. The building was part of the Atlantic Yards development project whose centerpiece was the Barclay's Center, home to the Brooklyn Nets basketball team and host to numerous high-profile concerts, notably Beyoncé and her husband. This development project was the target of much agitation in the decades leading up to its completion. Area residents to be immediately displaced through destruction came together with surrounding residents who feared economic displacement through rising rents to rally, protest, petition, and plead against this development project. The outrage was echoed by thousands more that opposed the disintegration of the distinct neighborhood character through an influx of homogenous chain retailers and high-end formulaic boutiques and restaurants. The construction was delayed for six years, but after many appeals the state determined that the *public* interest would be best served by making this space generate more *private* profit. The ensuing makeover of this and adjacent neighborhoods has been rapid and substantial. Variations of this story have occurred with increasing frequency in urban areas around the globe over the past decades.

As is well-documented, cities have increasingly become safe and lucrative repositories of capital investment (Weber 2002). In the face of dot-com bursts, housing bubbles, and the derivatives implosion, investments in urban real estate have offered rising returns for two decades now. Equally examined has been the economic evisceration this has imposed upon urban residents. This violence has taken the form of unconstitutional policing strategies such as stop and frisk, aggressive harassment of residents by development companies, negligent landlords, unlawful evictions, and the general disabling of mechanisms of community resilience and reproduction (Squires 2012). While these developments are well-documented, less visible are the means that rationalize such insidious practices.

Of particular concern here are the quantified metrics that inform government and public debates, justify legislation, and determine zoning policies. Quantified data are produced and curated to serve as authoritative evidence for determining the most ideal use of space. Of course, when it comes to the ideal use of urban space there are numerous stakeholders with radically varying opinions on the matter. As much

scholarship illuminates, as well as the larger history of capitalism (from the British enclosures to privatized prisons), the use of space deemed most ideal tends to be the use that maximizes profit (Smith 2005). While this is not new, the role that prevailing forms of measurement play in enabling this perception deserves closer scrutiny. In addition to the dehumanization of aggressive policing, I argue that there are equally dehumanizing, if subtler, effects of extensively quantified mensuration.

In granting building permits for commercial or residential developments, community boards and legislators are likely to review a series of numbers (usually compiled by developers). These may include median neighborhood income, crime rate, population (perhaps broken down by age or ethnicity), time-sliced trends of these numbers, as well as projections of how proposed construction will impact these numbers. Such projected (hypothetical) metrics may provision for the inclusion of low and medium-income housing units, or figures on the amount and type of jobs that the new development will generate. Within housing developments, there are spatial figures provided for the dimensions of the various units being proposed. These fact sheets usually carry more weight in the trajectory of neoliberal urban planning than the heartfelt personal testimony of longtime neighborhood residents at a community board meeting. Why?

The history of quantification and its role in the development of capitalism is well-studied. Poovey (1998) concludes that the primary reason that European decision-makers began privileging the reality created by quantified metrics is that numbers began to be perceived as amoral—a good thing in the estimation of Bacon and Hobbes because it circumvented political or religious biases (such as the heartfelt testimony of longtime neighborhood residents). That is, quantification was promoted as objective and disinterested evidence. However, as Sally Merry writes, “Those who create indicators aspire to measure the world but, in practice, create the world they are measuring (2016: 21).” As such, the myth of numeric neutrality has been widely questioned by social scientists, but this scholarship has not impeded the gears of urban “renewal.” When it comes to guiding policy decisions these numbers almost invariably describe extensive phenomena, as opposed to intensive.² Extensive data is particularly useful for facilitating perpetually accelerating asymmetrical wealth accumulation.

Given the privilege afforded numeric information, cities have increasingly become vessels for the accumulation of quantified data. Interactive electronic surfaces have sprouted up in gentrifying neighborhoods and public transportation hubs, ostensibly offering citizens free internet access or a quick phone charge, but discretely collecting data (Holleran 2018). Increasingly every surface of urban space

² There are “quality of life” scales, but these are most often constructed out of extensive proxies such as the amount of schools or parks.

is programmed to elicit profit. It is difficult to escape public electric screens.³ This trend of generating data out of every interaction is, of course, not confined to urban space, but is intrinsic to digitized space. Such space cannot be engaged or occupied without generating data. It is data.

The aim here is not to foreclose the reliance on numbers, but rather to suggest that since numbers are not neutral, perhaps they could be deployed as a ventricle for social agitation and reform. In an economy that is reliant on the brutal efficiency of quantification in determining the distribution of its resources, the possibility of generating subversive quantities presents itself as an avenue of dissent.

The lobby of 550 Vanderbilt exhibits the antiseptic design common to well-curated spaces of 21st century wealth. The ubiquity of this urban style could perhaps most visibly be traced to Manhattan's High Line park—the pinnacle of neoliberal urban planning (to be discussed in more detail below). This colonizing aesthetic is not inherently unpleasant and even attempts to integrate benign ecological principles into its designs, however it has no capacity for semiotic dissonance. Its carefully programmed surfaces have no room for poetry, projecting only a top down narrative of aesthetic value. The High Line perpetrates a form of wealth pollution—littering public space with gentle reminders that *it's important to make money so that our spaces can look nice*. Of course, these spaces are often dotted with delicate cafes and shops offering high-priced delights.

Extensive Narration

The aforementioned numbers often contained within a developer's spec sheet pertaining to income, housing units, jobs, and spatial dimensions are all based on extensive observations. That is, these quantities signify attributes which are cumulative and individuated. Centimeters, jobs, and wages share the feature that they are composed of individual, extractable, and interchangeable units. Ten jobs can be added or subtracted from a neighborhood. Ten low-income units can be added to a housing development. Ten centimeters can be added to a doorway to comply with accessibility codes. Absent from these spec sheets are intensive attributes, such as temperature, density, pressure, or momentum. Despite their invisibility in promotional and governance literature these intensive attributes are nevertheless consistently present, lying dormant within any space waiting to be elicited. Efforts at neoliberalizing urban space rely heavily on extensive qualities to make space more accumulative. While an environment is never eradicated of its intensive properties,

³ As concerns the electrification of every surface, the direct relationship between the growth of profit and the consumption of energy should be briefly noted here. Since 1800 wealth and energy consumption have risen almost in tandem at a rate near 3% annual compound growth (Sieferle 2010). There is no way to continue growing wealth exponentially without corollary increases in energy consumption and the potentially irreversible disintegration of habitable environments this forebodes (Moore 2016).

such as pressure, these are rendered invisible and irrelevant through neoliberal methods of knowledge production that have been sharpened over the preceding three centuries.

The emphasis on extensive quantities in knowledge production since industrialization engenders a specifically sequential conception of time and space as accumulative—we can collect vacation days! The concern herein is with the effects of this sequentialized conception of change upon efforts towards social justice movements. Distressingly, such movements frequently deploy the very same observational and epistemological tools which were designed to produce the asymmetrical growth of wealth upon which capitalized inequity is underwritten.⁴

Intensive quantifications are certainly capable of being co-opted into the neoliberal machinery of inequity, but they do defy simplistic notions of additive change. On a fairly straightforward short essay question concerning forms of discrimination historically faced by non-white people in the United States, students in my introductory anthropology course often include some language asserting that while there may still be discrimination, the situation for non-white people is much better today than it was under chattel slavery or in the Jim Crow South. It is a slightly peculiar position to argue against this sentiment expressed by the students, as though one might somehow be sympathetic to slavery or internment. In suggesting to my students that the systematic devaluation of minority populations has never rescinded, it has only taken a more palatable form, I encounter a deeply ensconced teleological appreciation of social change—that there is “less” inequality today, as though inequality were an extensive, accumulative attribute that can be added to or subtracted from. Troublingly, despite the inroads of intersectionality, the attribute racism seems by default to be conceived of as extensive (additive) among many public university undergraduates.

I would argue that the popularity of this sentiment is the product of a critically lacking interpretation of time, change, and causality that normalizes a narrative overcoming and accumulation of space and time. This sentiment culminates in self-congratulatory expressions such as ‘there is less discrimination against people of color today than there was a century ago’, or suggestions that raising five million dollars to alleviate poverty in Africa is evidence of a more equitable distribution of global resources—a positive social change.⁵

Efforts at social change that restrict themselves to rearrangements of the extensive (e.g., adding 10,000 people to a protest, or adding ten affordable housing units to a condo development) can only induce aesthetic (re: exterior) alterations of space. Extensive rearrangements of conditions may sometimes be beneficial, but they operate within and contribute to the narrative regime of causality that

⁴ One could bring up Lorde’s observation about the tools of the master here.

⁵ Critiques of such neoliberal charity can be found in Fraser (1993), Evans et al. (2005), and Parson (2014).

presupposes the redundancy of lived experience in favor of the quantitative output of a trend (Schwartz 2017). Extensive narration colonizes space-time outward from the present (accumulating and occupying). Narrative knowledge production frames the present as something to be transected; an abstract notch in a sequential time line, nothing more than a bit of data to feed through an algorithm. This disposal of the subject paints uncertainty as an obstacle demanding to be overcome because it inhibits the predictive capacity of narrative causality. The formulations of “straight time” put forth in the queer scholarship of Edelman (2007) and Halberstam (2005) echo this conception of narrative causality.

Intensive Poesy

Recently, this extensive-centric conception of causality has been under attack from philosophers, ecologists, mathematicians, physicists, and social scientists. The prevailing counter-normative assertion is that time and space are themselves emergent properties of the interaction of objects (Arkani-Hamed & Trnka 2014; Barad 2007; Morton 2010). By *emerge through interaction*, the assertion of such scholars is that time and space are not *a priori* theaters in which objects operate, but rather are indebted to the behaviors of objects. If objects do not interact, there is no time or space. This notion has a deeper lineage, which could be traced through Charles Peirce, Alfred North Whitehead, or Niels Bohr.

Rather than dwell on the ontologies and cosmologies of the philosophers and physicists, the literary criticism of Édouard Glissant, particularly his elaboration on errantry (1997), offers an artery for engaging the emancipatory potential of this causality. In his book *Poetics of Relation*, Glissant plays with the productivity of getting lost, of setting out but going astray. Glissant’s errantry creates openings to occluded trajectories lying dormant in narrative. This errantry is generative, but not energetic (energetic implying both the consumption of energy and the kinetic compulsion of neoliberal economics). In this formulation, Glissant offers a unique critique of Deleuze and Guattari’s nomadism, distinguishing between rhizomes and roots. Deleuze and Guattari’s nomad can never be errant, he argues, because the nomad is never in exile. The nomad is never on the wrong course. The nomad is liberated in a sense that the modern neoliberal or (post)colonial citizen is not and is incapable of being. The capitalized citizen is involuntarily born into a narrative causality, a trajectory, a trend. From this vantage, the only way to elicit change is to enter the “wrong course”—to become errant.

Glissant’s work is positioned within the chronology of his post-colonial present. He writes, “Starting from the moment that cultures, lands, men, and women were no longer there to discover but to know, Relation represented an absolute that, paradoxically, set us free from the absolute’s intolerances (27).” I would suggest that the paradox of knowing to which he alludes is perfectly illustrated in the extensional epistemology utilized in the asymmetrical growth of wealth over the past two-hundred years. Insofar as capitalized measurement is an effort to understand the

world it wishes to control, Glissant appends, "...we shall perhaps see that the verb *to understand* in the sense of 'to grasp' has a fearsome repressive meaning (26)."

It is increasingly difficult to become errant in the neoliberal city. It is difficult to get lost, not least of all because of enhanced surveillance technologies, but also through mere design. It is impossible to get lost in Manhattan's High Line Park. It is a carefully curated conduit for aspirational capital, minutely programmed for maximal user interface satisfaction. A decade earlier however, this very same space was quite a different place. It was rather precisely a bit of space where errant New Yorkers could "go wrong." As an abandoned elevated train track it epitomized escape from controlled, programmed neoliberal space. To be sure, entering such a space was legally dubious, but more than simply against the law, it was a space of legal nebulosity—a wandering "now" hinged orthogonally to the exterior (Forrest-Thomson 1978). If caught there by policing agents one would be removed but there was not a bureaucracy for criminalizing such offenses.

GeoMetrics

Discussions of geometrical concepts within geography (both physical and human) are infrequent. This lacuna is perplexing given that most tenets of urban design implicitly deploy geometric principles. Perhaps matters of geometry seem too abstract or beneath the purview of socio-aesthetic or tectonic discourse. The work of the dissident geometer Gilles Châtelet (2014) refutes such dismissiveness, illustrating the political evolution of how shapes, angles, velocities, and distances are noticed. Châtelet may be discussed alongside Glissant most saliently through the concept of distance, or more specifically, distance traversed. Key to Châtelet's reworking of the extensive through the intensive is his construction of distance as a surface (as opposed to a line joining two points). As regards Glissant, this offers a plane of errantry through which to ambulate, a more liberated causality. Distance needs elbow-room; it cannot be confined by lines. Châtelet closely echoes Glissant's errantry with his provocations, "No length without velocity!... No space without the power to envelop things (Châtelet 2000, 49)!"

Glissant's errantry entails a form of noticing divorced from the accumulative, discretized extension normalized through the optics of capital. Approaching environments while lost or off course creates openings in noticing. While the lost traveler may attempt to count tree branches or streets (extensive noticing), they may also begin to notice the color of a house or car, the timbre of a machine or bird, the undulations of a hill (intensive properties). These are not discretionary attributes—color, sound, or slope. You cannot add more red to red, more falsetto to falsetto, or more degrees to an angle (yes, there are angles of greater and lesser arc, but 90 degrees is not composed of 89 individual degrees plus one; it is a spatial relationship). To this end, the errant noticer may produce a metrics of less extractible aspect. Could a focus on such intensive qualities countervail the suppressive capacities of capitalized observation and knowledge production?

Glissant's poetics of relation breaks the hold of narrative causality. It uncompletes narrative. Uncomplete is here meant rather distinctly from incomplete. Incomplete suggests something yet to be finished. Uncomplete suggests active breaking of the possibility of closure. Could neoliberal urbanscapes become uncomplete, errant? The final sections of this article suggest that through methods of counter-normative (or poetic) measurement such efforts may be possible—measurement as social agitation.

Public Dissent: Impotence & Violence

How is social agitation noticed? How is outrage enacted? How does it move through space and time? And how is its impact absorbed? This section examines instances of publicly expressed dissatisfaction with the status quo and efforts to elicit social change, focusing on how the responses to such actions were mediated by the spaces in which they occurred. Specifically, I look at two sites of agitation related to the Black Lives Matter movement that erupted in 2014—New York City and the St. Louis neighborhood of Ferguson, Missouri.

Campaigns for social justice often concentrate on visibility—the 'raising of awareness' that runs from compulsory to trite. Thus, much emphasis has been placed on large-scale public gatherings in highly conspicuous spaces. Often these congregations take place in contested areas significant to a particular cause. Site-specificity has traditionally been an active conveyer of signification in the anatomy of the protest. However, the increasing homogenization of urban space is rendering the city an innocuous intermediary (invoking Latour's (2005) conception of *intermediary* actants that passively replicate the signals they encounter, as opposed to *mediating* actants that transform inputs and multiply differences). The hegemonic public aesthetics of wealth throw into question the efficacy and utility of the public and publicity as a tool for effecting social change. If there is no possibility for errantry, no possibility of "going wrong," only exterior and extensive changes seem possible.

Epitomizing this impotent agitation would be an event like the Global Climate Marches held in September 2014. Parading under the approving glare of the numerous H&Ms, Chipotles, and Starbucks that dot midtown Manhattan undercut the message of a movement concerned with reducing the mass exploitation of the planet's resources. Additionally, the march's route was predetermined and shepherded by police officers and their extraneous barricades. There was no organic or spontaneous movement, just a conveyer belt of bodies preceding sequentially down Manhattan's grid. There was no getting lost.

Also in 2014, at various spatio-temporal scales, a number of demonstrations emerged with immediacy from the anger surrounding the killings of Eric Garner and Michael Brown, as well as the unsatisfying indictment proceedings of their killers. Of specific interest here are the well-organized protests and rallies that occurred in New York City and the more spontaneous, combative demonstrations that occurred

on the streets of Ferguson. It is illustrative to review the responses to these instances of dissent, both by policing authorities and the popular media. These responses highlight the distinct character of the narratively streamlined neoliberal space of New York and the errant, contestable, and economically unproductive space of Ferguson.

While some novel strategies for expressing dissatisfaction with the unaccountability of police violence occurred in New York City, such as the Grand Central die-ins, large marches against the violent policing of black bodies such as the one held on December 13, 2014 through Manhattan were docile affairs affirming a pre-written script. The engagement was more akin to a parade of agreement than social renegotiation. The demonstration's impotence was made all the more surreal by its co-occurrence with the annual parade of drunken inanity known as SantaCon.

These marches and rallies took place in very expensive space. Like walking through the High Line and being "inspired" by the pleasant arrangement of concrete, wood, and flora, it can be inspiring in marches such as these to see multitudes sharing sentiments of injustice that affirm one is not alone in their outrage. However, much like the High Line, such marches feel more like therapy than social justice, sedating more than agitating. Much like the High Line, one cannot get lost in a Manhattan protest.

Ferguson, conversely, is an urban area that has endured nearly half a century of systematic devaluation, as a result of zoning and taxing politics common to many unevenly developed urban areas (Smith 1984). Ferguson is one of many outlying municipalities of the city of St. Louis that constitute St. Louis County (legally separated from the city itself in 1877). A patchwork of suburban towns, St. Louis County is highly heterogeneous, economically and demographically, with dwindling public resources increasingly siphoned from the predominantly black North County toward the whiter Mid and South counties (Gordon 2014).

As a site of neoliberal neglect, was Ferguson allowed to serve as a canvas for violence in the wake of the Michael Brown shooting and early Black Lives Matter demonstrations? The police response to the unrest in Ferguson was dramatically different to that of New York, as was the form of the unrest. The response by law enforcement in Ferguson was highly militarized, with tanks and the National Guard rolling through the St. Louis suburbs. With munitions procured from the U.S. military, the local police demonstrated a level of destructive capacity often associated more with Kandahar than domestic suburbs. Unlike in New York, the Ferguson unrest included smashed storefronts and damage to private property. Was such a militaristic show of force necessary for this vandalism? I believe not. Among other reasons (such as the persistent fear of angry black men by white landholders), the militaristic display was intended to buttress the narrative causality of neoliberal space; to reassert that spaces that do not contribute to the teleological growth of wealth are subject to violent reprisal. Much like the preparation and response to the violence of Hurricane Katrina, most of the private property damaged in Ferguson was economically unproductive relative to surrounding areas. Violence is permitted

in areas that are not contributing to the growth of wealth. The tanks showed up when protestors approached St. Louis proper or the more affluent neighborhoods.

Tanks will not roll down 5th Avenue in Manhattan because it is too valuable. The neoliberal urban planning of Manhattan prevents errantry from the narrative of wealth accumulation. New York City's outrage was peacefully quarantined, less by the authority of the police than the authority of expensive aesthetics. No one wants the wealth pollution to get dirty. Many mainstream news outlets featured pundits calling the actions of Ferguson residents "irrational" (referring to property damage within their own community). What is the rational response to five centuries of systemic injustice? Marching peacefully between Starbucks with police approval?

Renegotiating social realities, such as the naturalization of violence against black bodies, must intrinsically take place socially as it requires collective realignment of noticing. But where? In the streets? In the media? Online? Does "hashtag activism" constitute a novel form of intensive noticing? Could the space of social media be capable of inducing intensive compositional changes, or merely extensive redistributions of advertising revenue?

In conjunction with the killing of Michael Brown, Twitter became a highly visible space for social agitation via the appearance of #ferguson. #ferguson contained a site specificity that served metonymically for racialized police violence around the country. In this sense, digitized space became a potent actant in the negotiation of social realities. One of the advantages of conveying and producing knowledge in this manner is that it offers a non-hegemonic, non-narrative platform upon which to communicate (Brassard & Partis 2014). This digitized agitation utilizes a non-linear medium, which encourages the spontaneity of subjective expression (Bonilla & Rosa 2015). Outrage was made public electronically concurrently with its manifestation on the streets of Ferguson and other urban areas.

However, the relationship between data and knowledge cultivated by social media is rather troubling. While one could certainly elicit some information that approximates knowledge from Twitter, Instagram, and Facebook, this is not why they exist. They exist to produce and sell data. Digital space has the peculiar habit of reversing the entropic path between data and knowledge (Machlup & Mansfield 1983). Traditionally conceived, data is used to produce knowledge. Increasingly, however, data is the desired end-product. In the case of YouTube video tutorials, knowledge is being used to produce data. It is data (not knowledge) that can be plugged into an algorithm and output a subsequent course of action. It is algorithms (not knowledge) which increasingly drive governance decisions. The result of this inversion of the data-knowledge pathway is that it deranges the intensive affordances of causality (to be unpacked in the following section). That is, digitalized capitalism creates extractive spaces that compress the sloppiness of inter-subjective interaction, forsaking Glissant's poetics of relation.

Object-Oriented Intensity

The process through which intensive properties are altered (undergo change) is strikingly similar to the ontological causality suggested by Graham Harman (2010)—change occurs through the elicitation of withdrawn affordances. Temperature, for instance, does not change by the addition or subtraction of bits of Celsius. Temperature changes through rearranging environmental relationships. A 10°C stone could be put next to a fire or in an ice bucket to change its temperature, but you cannot inject the stone with ten units of heat. Similarly, Harman’s vicarious causation suggests that all objects have an endless reserve of withheld affordances (potential properties) that may variously be manifested through interactions with anterior objects. That is, the stone possesses the affordance to be hot and cold, but depending on what is interacting with the stone, one of these attributes may be withheld while the other is elicited into actuality. Like the dynamics of intensive properties then, in object-oriented ontology there is no extensive collecting and accumulating of attributes, but rather the withdrawal and exposure of affordances based upon how objects notice each other.

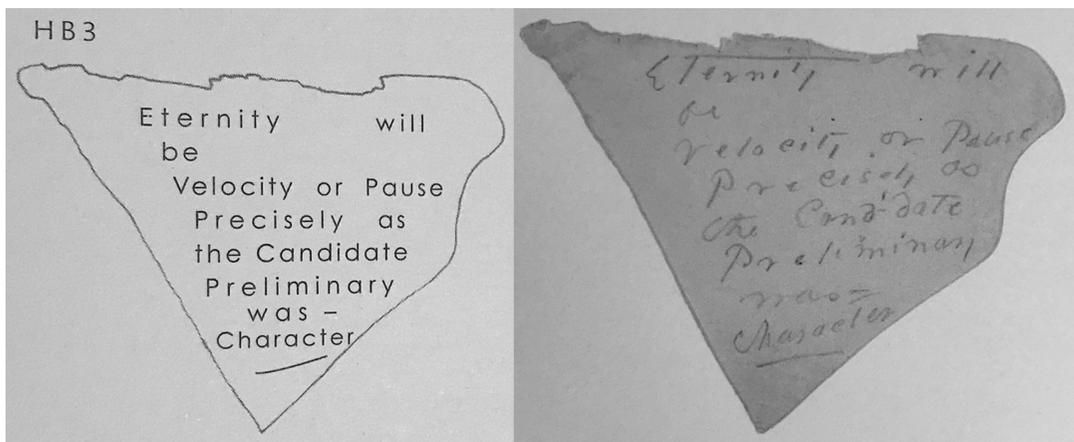
My aim is to put into conversation this paradigm of intensive causality with efforts toward eliciting new social realities. To offer tangible examples, a withheld affordance prior to 1973 may have been the legal permissibility of abortion in the U.S. That is, unwanted pregnancies are “abortable” today. This affordance of bodies and pregnancies was not socially real for millions of women before *Roe v. Wade*. A withheld affordance today might be the digestibility of plastic (if in the future plastic becomes edible) or the punishability of excessive wealth disparity (if holding too much wealth becomes a crime in the future). These withdrawn affordances are intensive. They are not ordinal or accumulative constructs. Abortability, digestibility, and punishability cannot be extracted or accumulated. Social changes (the eliciting of withheld affordances) result from alterations in how environmental objects relate (an intensive process), not adding or subtracting amounts.

Even if one believes anthropogenic climate change is a hoax, no one likes floods and droughts.⁶ There is no group whose primary goal is to render our planet unlivable. The destructibility of the environment is a revealed affordance of the currently dominant manner of resource distribution. The attributes of space, time, and social interaction that are deemed worthy of noticing among capitalized populations are ones which do not preclude the perpetually accelerating consumption of resources. Capitalism elicits the attributes destroyable and disposable from the environments with which it interacts. I would suggest that among non-capitalized populations (of past or present) forests, rivers, or coastlines may not exhibit the attribute disposable. Among non-agrarians, the attribute “farmable” is probably not immediately associated with an open prairie.

⁶ Perhaps with the exception the apocalyptic Christian sects clamoring for the end of the material world (Bernard & Szasz 2015).

The ineffectiveness of public demonstrations such as the Climate or Science Marches, I argue, derives from the privileging of extensive metrics for success. This includes an over-developed concern with quantities (e.g., 400 ppm of CO₂; 10 city blocks; 40,000 people). These metrics are cardinal and sequential; they can be extracted and penetrated. Ten city blocks is just nine blocks plus one more. Obvious sure, but this emphasis on individuated units (on extension) frames the channels through which change and determinations of success are manifested. It manifests notions of history as an accumulation of discrete changes, as opposed to an interaction of malleable affordances.

Could an operable program of intensive protests for social justice be attempted? As suggested above, the pursuit of perpetually accelerating asymmetrical growth of wealth (and the inequity, injustice, impoverishment, and environmental spoliation upon which it is built) exists within a narrative causality. Is this accumulative causal architecture socially negotiable or metaphysically inviolable? If the former, what would it look like to occupy alternative causalities, such as a poetic causality? The enfolded sequences in Emily Dickinson's Envelope Poems (see Figure 1)? The voided durations of John Cage's composition 4'33"? The radial redundancy of Samuel Beckett's novel *Watt*? Alterior causalities are constantly being generated. While such works may be lauded for their creativity, beauty, and craft, they are rarely considered as appropriate or useful depictions of capitalized duration. They do not conform to the utility and progress of the Baconian doctrine (Harrison 2015, 117).



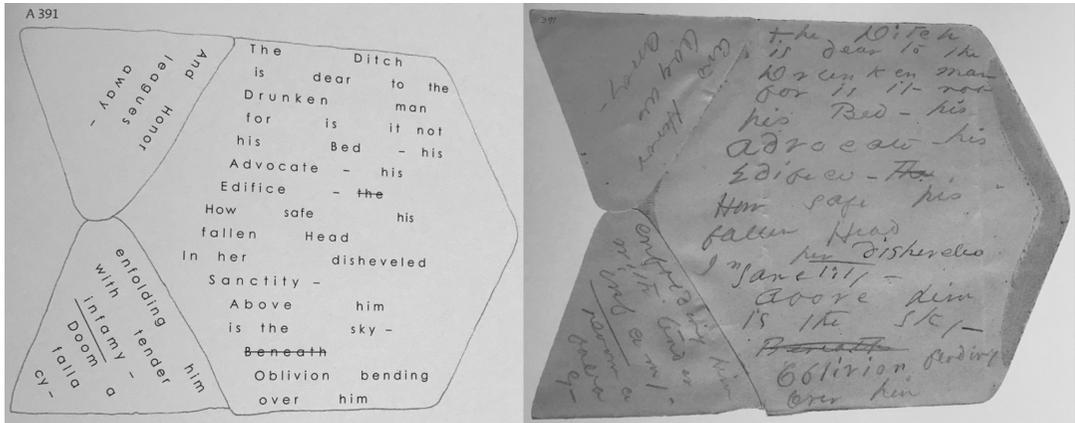


Figure 1: GORGEOUS NOTHINGS, copyright © 2013 by Christine Burgin and New Directions. Transcription images copyright © 2013 by Jen Bervin and Marta Werner. Reprinted by permission of New Directions Publishing Corp.

Within narrative causality, the poeticized observations of Emily Dickinson would not be a preferred basis upon which to make predictions of subsequent outcomes. Such works describe a universe in which causes are not discretely demarcated from effects. As Forrest-Thomson suggests, poetry has a mobile “now.” That is, within poetry “now” is not a moment within a sequence but a moveable vantage of noticing (1978). Poetic causality does not defer the present to hypothetical, projected pasts and futures. Within a poetic causality, then, measurements need not be predicated on control and accumulation; need not presuppose the overcoming of the present. The poetic causality manifested by the above artists notices withdrawn affordances, and attempts to elicit them into reality—the precise work of Harman’s object-oriented causality. To those born within a capitalized spatio-temporal trajectory however, such works of causal (re)negotiation are perhaps appreciated as aesthetically clever, but rarely do they become praxis.

This is not to say that art is a panacea for social ills and inequalities, but rather to suggest efforts at renegotiating social realities, such as the right for anyone in the U.S. to own an automatic killing machine, may be abetted by arguments from a variant spectrum of noticing. Those that feel passionately about the right to own automatic weapons will not have their sentiments swayed by extensive numbers pertaining to fatalities, profits, or burglaries. Extensive evidence generally fails to alter internal sentiments. Passions are not often swayed by centimeters, kilograms, or gigabytes. However, very tangibly, shifts in temperature, pressure, or momentum do induce shifts in temperament. Angers calm in amenable atmospheres. Again, extensive changes can be enacted like raising the minimum age for purchasing a gun, which would probably lead directly to a quantifiable reduction in the number of gun fatalities. Which would be good. But remains an aesthetic (exterior) alteration.

The rearrangement of resources and energy necessary to halt ongoing environmental derangements cannot be achieved through extensive actions alone.

That is, extensive reforms, such as capping and trading carbon emissions or mandating some percentage of a nation's energy usage be renewable will not change the premier attribute of capitalized environments—that they are vessels for the asymmetrical growth of wealth. The IPCC's estimates of sea-level rise or peak oil consumption are illustrative of the narrative-centric knowledge production that created the present environmental predicament. Capitalized populations could continue efforts to predict, narrate, and control the contours of climate change through efforts at uncertainty suppression, but this will not deter the deleterious commoditization of the planet's resources.

Poetic Metrics

As Karen Barad's careful tracing of Niels Bohr's work suggests, every measurement that derives data from a phenomenon demands a cut be made (2007). Generating data is a process of carving boundaries into knowledge. Every new datum accumulated excludes a phenomenon from part of itself. With every bit of data accumulated through one's online mouse clicks or Amazon purchases one becomes more apart; more categorizable and predictable.

In Foucault's terms, categorization, cutting, observation, and measurement are efforts at control (1977). In Nick Land's parlance this may be conceived of as the violence of organization (1993).⁷ Measurement and observation employed toward the ends of narrative knowledge production could be seen as violent in the sense that they make exclusionary cuts designed to produce a more predictable-controllable world. But what if observation and measurement are not employed toward the ends of predictive-narrative knowledge production? This section outlines a program for poetic metrics that is focused on eliciting the intensive properties of environments into causal visibility.

How does causality become poetic? By poetically measuring it. Capitalized epistemology measures the world as exploitable and extractable, thus co-opting numeracy into observing accumulatively. Numeracy, then, may be the most operable *entrepôt* for plummeting through capitalist space. As Land (1998) subtly observed, numbers never end. This is not trivial, and as Châtelet (2014) alludes, a system of infinite symbolization is a prerequisite for the epistemological underpinning of capital, given its presupposition of perpetual growth. Capital always has a subsequence. It is pure subsequence—deferral of presence. Every number has a number after it. As Châtelet shows, numeracy is a window or wormhole through which the extensional and intensional may be inverted, refracted, or diffracted.

Ordinality is one example of a taken-for-granted extensive capacity of numbers. However, numbers are not inherently sequential. They can certainly be

⁷ In his own words, "Digitocommodification is the index of an...escalating technovirus... a self-organizing insidious traumatism, virtually guiding the entire biological desiring-complex towards post-carbon replicator usurpation (Land 1993: 479)."

used to denote order, but this function is no more inherent to numbers than to letters. Orders could be equally described as ‘A, B, C, D...’ Indeed, in the English alphabet B comes before C, but we would not say that this imbues B with some level of greater innate ‘beforeness’ than C. The same could be said for the number 2 in relation to 3.⁸ This applies to real world objects as well. When counting people in a room, you may count them individually in an order, but the person you count third is in no way “before” the person you count fifth.

In invoking intensive qualities, even the normalized idea that 3 may universally be considered “more” than 2 is problematic in real world situations. The precise character of intensive attributes like temperature (as opposed to extensive quantities like kilograms) is that 70°F is not “more” degrees than 50°F, it is just a different description of the activity of particles. Equally, 70mph is not more velocity (intensive) than 50mph. It could be said to be more miles (extensive) in *fewer* hours (extensive), but there are not 50mph inside of 70mph. The point here is to echo the critique raised above that there is not “less” discrimination today than a century ago. Rather discrimination exists in a different arrangement.

One could counter the accumulative and extractive focus of extensional narrative measurement by developing a metric to gauge depletionary phenomena like how many times one does not fall down per day, how much food is unconsumed per day, how many white people are not stopped and frisked per year. Another program could attempt to fold extensive qualities in on each other. Measurements could be made of how many years per hour a tree grows. How many kilograms per minute does a car weigh? More straightforwardly (perhaps), already intensive values may be applied to phenomena to which they are usually not (e.g., what is the angle of this protest? What is the temperature of this law? What is the momentum of my last commercial transaction?).

Numbers are just as capable of signifying these metrics as they are of signaling their accumulation-centric correlates. Developing a methodology for measuring these phenomena may seem difficult, but only if it is assumed they exist within a narrative causality. A poetic causality does not perceive of uncertainty as an obstruction to knowledge. These examples may seem more like an amusing performance art project, but such novel approaches to observation and measurement could be applied to unhinge capitalized data accumulation. In the race to reduce knowledge to data, such attributes as the density of my credit rating do not algorithm well, thus undermining the predictive precision of Big Data collection. This is the “science of imaginary solutions” put into practice (Daumal 2012).

Undermining algorithmic projectability inhibits the ability to cultivate the growth of the exploitable future. By plugging massive amounts of data into algorithms, empowered interests (be they corporations, systemic tendencies, or

⁸ By definition, the word ‘second’ means ‘before third’, but these are not inherent properties of the numbers two and three.

nations) are able to exert great control over the social presentation of reality. If, included in this data are mutinous figures on the air pressure of an emotion, then perhaps a new causality could be represented that was less extractable and exploitable. A more affectively subversive act than passively parading around the numb spaces of a hegemonic urban area to express affiliation with a suppressed ideology, may be to infuse data aggregators with a variant on the intensive metrics outlined above in order to confuse the algorithmic parsing of categorical behaviors.

Action along these lines could offer the building blocks of a new form of protest that attempts to reclaim space from capitalist arrangement. By not letting the narrative of extension be the only source from which knowledge is produced and integrating with intensive (uncolonized by capitalism) space, poetic metrics offer an alternative to increasingly narrowing options for resistance.

The Horizon is a Machine

In *Poetic Artifice* Veronica Forrest-Thomson lucidly critiques a reliance on extensive relations under her concept “rational obscurity”:

Reliance on the already-known is not, of course, bad in itself...What one objects to is rather the tendency to make the already-known or already-thought the point of arrival, to make poetry an obscure and figured statement which one understands by translating it into the already-known. Poetry...must assimilate the already-known and subject it to a reworking which suspends and questions its categories, provides alternative orderings (1978, 53).

With the previously outlined poetic metrics, I am advocating for just such a reworking of the already-known into alternative orderings.

For Forrest-Thomson rational obscurity is the element of artifice which coheres a poem. She is critical of obscurantist movements within poetry (such as Dada or concrete poetry), which attempt to thresh meaning from the interiority of words. Much like intensive changes or Harman’s object-oriented causality, meaning can be elicited and withheld, but it is persistently latent within our symbols, and thus can only be ignored at great cost. Forrest-Thomson’s work fore-echoes that of the speculative realist movement within philosophy (Brassier 2011). She insists on a reality outside of words—a bold position to take in 1978. She believes that the discursive very much belongs in the domain of reality. The discursive is not some hallucination that our misguided species has evoked to induce self-harm. Equally, the poetic causality and radical measurement I wish to invoke is not intended to create a post-modern form of protest or knowledge that is a chaotic, nihilistic denouncement of a world of material interactions, but rather to propose a poetic way of noticing that is defiantly obscure, not irrationally obscure—a stance shared by the xenofeminism of Laboria Cuboniks (2015).

I would contend that critical to the inability of Occupy Wall Street to enact larger social change was that its demands were made in extensive terms—More

justice! More equality! Fine demands. However, like temperature, justice is not an attribute that you can have more or less of. I don't want more justice. Because no one can give me more justice, and even if they did it would still suggest the possibility of a quantitative imbalance. I want warmer justice. I want less dense justice. This is not meant abstractly. It is meant poetically. Laws have a temperature in that the particles which constitute them have an average kinetic energy. Very tangibly, diminishing the average kinetic energy (temperature) of CitiBank, means that CitiBank would expand less virulently, would be less compelled to exploit resources. Justice has a density. Depending on what object it interacts with, justice may float or sink. You can divide justice's mass by its volume. Try it!

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