The Scroll Shadows of Electric Urbanism: Geometries of Alienation & Boredom¹

Scott W. Schwartz

Abstract

The geometry of the screen is pretty boring-rectangular. This article attempts to dissect and refashion the electric rectangles that consume so much of today's visual field. Rather than static surfaces. I argue that the hand-held screens of smartphones host a geometrical underworld that allows urban interactions to be rethought. Electric platforms offer a new density-millions of interactions can take place in a few cm² of a phone display. How are we seen and how do we hide at these scales? The nanoscopic aspect of electrons reshapes traditional modes of narrative visibility. The velocity of electricity renders today's images semiotically stochastic. I explore these concerns by engaging the philosophy and aesthetics of xenofeminism along with Gilles Châtelet's geometry, which conceives distance as a surface rather than a line. As a case study, I analyze the electric object "#xenofeminism" on Instagram. Geometry is useful in studying electric geographies because it is scale independent (geometry works at planetary or subatomic levels). Today's screenscape induces alienation and boredom. I examine these affects to better appreciate xenofeminism's "politics for alienation "

La geometria dello schermo è piuttosto noiosa: rettangolare. Questo articolo è un tentativo di dissezionare e rimontare i rettangoli elettrici che consumano così tanto il campo visivo di oggi. Piuttosto che superfici statiche, sostengo che gli schermi portatili degli smartphone ospitino un mondo geometrico sotterraneo che consente di ripensare le interazioni urbane. Le piattaforme elettriche offrono una nuova densità: milioni di interazioni possono aver luogo nei pochi cm² del display di un telefono. Come siamo visti e come ci nascondiamo a questi livelli? L'aspetto nanoscopico degli elettroni rimodella le regole tradizionali di visibilità narrativa. La velocità dell'elettricità rende le immagini odierne semioticamente casuali. Esploro questi problemi coinvolgendo la filosofia e l'estetica dello xenofemminismo insieme alla geometria di Gilles Châtelet, che concepisce la distanza come una superficie piuttosto che come una linea. Come caso di studio, analizzo l'oggetto elettrico "#xenofemminismo" su Instagram. La geometria è utile nello studio delle geografie elettriche perché è indipendente dalla scala (la geometria funziona su scala planetaria o subatomica). Lo schermo di oggi induce alienazione e noia. Esamino questi affetti per apprezzare meglio la "politica per l'alienazione" dello xenofemminismo.

Parole chiave: xenofeminism; Gilles Châtelet; screens **Keywords:** xenofemminismo; Gilles Châtelet; schermi

¹ An Italian version has been released by the editors. It is available at this link: https://bit.ly/3nFE2nj / I curatori hanno reso disponibile una traduzione italiana del testo consultabile a questo link: https://bit.ly/3nFE2nj







«To die for the invisible–this is metaphysics» (Levinas, 1969: 35).

Introduction

Some people say the world is flat (Friedman, 2005). Some insist it's a sphere (Sloterdijk, 2011). Some think it's a hologram (Susskind, 1995). Still others say it's a small world after all (Disneyland). These disposable proclamations are too meaningless to be wrong, but they do suggest a more relevant point. The world doesn't fit. The world is so ill-fitting that agreement on its shape or size remains elusive. To add to these aphorisms, I could suggest the world is a wool sweater run through an aggressive machine-dryer-constricting. The shape of the world is inhibiting. The aim of this article is to diagnose the size of the world, to study the geometric deformations that have left this world so misshapen. This engagement is pursued by examining the geometry of electric space, particularly how the density of electric interaction shadows urban living.

My focus on the scale and velocity of electricity may feel antiquated-didn't McLuhan and other twentieth-century theorists thoroughly plumb these depths? Electricity isn't cutting edge. Surely, the landscapes of the quantum, digital, crypto, cyber, streaming, trans, or biotech would be more pertinent? While these are fascinating terrains, at the end of the day, the shape of the world with which I am concerned remains primarily governed by electricity (at least spatio-temporally). While digital currencies or quantum computing promise to carve out new terrains, they remain beholden to electric current.

Electric surfaces reconfigure the spatiality of the urban. I argue within that platforms such as Instagram reconstitute urban interaction at the ahuman scale of thermodynamic particle distribution. This reshaping consists of a repulsive escape from the scale of the eye, the scale of the visible. The city streets become hegemonically redundant, camouflaged in boredom, made increasingly indiscernible (and what cannot be discerned is invisible). Simultaneously, interaction is being drawn into the scale of the electron, shrinking into the microscopic. As the scale and shape of the urban is altered, a new geosemiotic dexterity must be employed for people, businesses, events, or causes to be seen and heard. A new kind of visibility is needed (as distinct

from a 'way of seeing', ala John Berger).

In examining these contours, this article presents two potential trajectories the geometry of electric scales forebodes: 1) a terrain of generative alienation and 2) a terrain of exploitative boredom. The following advocates for the former and illustrates the dangers of the latter. In this pursuit I zoom in on the emergence, deployment, and resonance of a particular hashtag of minor popularity across electric platforms-#xenofeminism. I pair this with a discussion of the geometrical criticism of Gilles Châtelet. as articulated in his mathematic treatise Figuring Space and his suicidal polemic To Live and Think Like Pigs: The Incitement of Envy and Boredom in Market Democracies. To operationalize these divergent spheres, I focus on the screenscape, presenting a microphysical screen theory (subtly gesturing toward string theory). In order to better perceive the shape of the future (but not necessarily to make it visible), the following asks what is behind the screens and below the scroll?

Xenophoria

In recent years the prefix "xeno-" has become intellectually and aesthetically fashionable. While certainly not singular in its connotations, it often signals an appreciation for the otherworldly. More academically, the prefix points to a dissatisfaction with the dominance of eurocolonial-enlightenment thought and an ambition to reconstruct thought from the ashes of the recent centuries of omnicide. Unlike the prefixes "post" or "neo", xeno aspires for a sharp cut from lineage and tradition. Xeno is outside, alien, and mutinously other. Leading this wave, if not principally responsible for its academic vogue, was the 2015 launch of the Xenofeminist Manifesto by the working group Laboria Cuboniks (laboriacuboniks.net).

The manifesto did not emerge from a vacuum. Its authors (a group of artists, philosophers, musicians, and poets) had/have a shared interest in the theatrically rational gray theory loosely associated with the Urbanomic imprint. Among some of the bigger names associated with this motif are Reza Negarestani and Ray Brassier, but the ventricle sprouted from the Cybernetic Culture Research Unit (CCRU) led by Sadie Plant and Nick Land in the 1990s, itself built upon prisms of Georges Bataille, Donna Haraway, and William Gibson. This band of thinkers has

sometimes been associated with varieties of Accelerationism (Mackay and Avanessian, 2014; Dean, 2017), a intellectual bent that suggests the only way out of capitalism is through it, so to speak. Xenofeminism overlaps with such thought, as well as earlier cyberfeminist sentiments, around the idea that technology needs to be liberated from the narrow confines of patriarchal exchange value. Alongside this ideology, is an embrace of a mutinous cyborg aesthetic that I would loosely describe as *liquified electronic alienation*–H.P. Lovecraft from the 22nd century.

Today, the prefix xeno adorns magazines (Xenomórfica), scholarly articles, bands (Xeno and Oaklander), and social media profiles. A xenofication of the restless and dissatisfied is underway with both aesthetic and philosophical manifestations. Unlike with Critical Race Theory or the Alt-Right, neither left nor right mainstream politics is smart enough to worry about this xenophoria. For the auto-Othered (xeno-fied), left and right are alien perspectives, invisible subjectivities. Many xenophiles associate with left-leaning ideals (anti-exploitation, pro-dignity). but the xenoverse also hosts pockets of explicit neo-reactionary, race-essentializing, hyper-capitalists (some may suggest xenoaesthetics have paralleled a rise in xenophobia, re: the global nationalist movements, but most strident xenophobes don't identify as xenophobic). The literal posterchild for the spectrum of xenovibes (superficially anyway) might be X Æ A-Xii. the offspring of Grimes and Elon Musk.

Aesthetics aside, the Xenofeminist Manifesto diagnoses the death of one regime of thought and outlines a new. Against postmodern and poststructural rounds of feminist thought that point to the intrinsic patriarchal violence in the project of Western rationalism and reason (Clarke, 2001; Fox Keller, 2017; Grosz, 1994;), XF calls for an alter-rationality, a feminist reason. The manifesto suggests that while enlightenment-rationalism has been enwarped by colonial exploitation, this is not intrinsic to the rigorous thinking that underlies the pursuit of reason. "To claim that reason or rationality is 'by nature' a patriarchal enterprise is to concede defeat...If today [science] is dominated by masculine egos, then it is at odds with itself...Reason, like information, wants to be free, and patriarchy cannot give it freedom" (Cuboniks, 2015). Reason and logic don't belong to

Descartes, Hobbes, Locke, and Kant, and surely not to suspect characters like Stephen Pinker, Richard Dawkins, or (heaven forbid) Jordan Peterson.

Some critics of colonial-capitalist history (and present) have called for burning down rationality as a tool of euroviolence [Federici, 2004; Ferreira da Silva, 2014]. Alternatives to reason have been offered in the form of indigenized knowledge (Montgomery, 2020) or Traditional Ecological Knowledge (Atalay, 2006). However, the XF project argues that eurocolonial assumptions were smuggled into reason, not intrinsic to reason itself. The historically situated normalization of Cartesian rationality as rationality (full-stop) reveals the dominant patriarchy of the past few centuries. Rationality isn't inherently patriarchal; the normalization of Descartes' rationality is patriarchal. "Feminism must be a rationalism-because of this miserable imbalance, and not despite it" (Cuboniks, 2015). Xenofeminism, as a technophilic philosophy, aims to engineer a non-exploitative reason (and science). Whereas patriarchal reason offered the violence of the steam engine. a xenofeminist rationality might aspire toward emancipatory reproductive care technologies or pleasure-tech.

To these ends, the manifesto promotes an epistemic alienation-a way of making knowledge from outside the world (world conceived terrestrially or sociogenically). The steam engine is a technological extension of dominant social values in upper-class Europe which lionizes the pursuit of economic growth-a technology of the ego. An alienated technology would presumably be unbeholden to dominant human values or even anthropomorphic bodily forms-perhaps a technology that increases the pleasure bees derive from pollinating flowers? Alienation has held a negative connotation for much of the nineteenth and twentieth centuries, suggesting marginalization, detachment, or exclusion. XF rehabilitates these connotations and forges a generative conception of alienation aligned more with the notion «visitor» (Reed, 2019). To be alienated is to be treated like a visitor, a sojourner offered hospitality. Of course, in many traditions, treating guests with kindness-sharing food or lodging-is a paramount ethical obligation. This articulation of an epistemology that values the welcoming of strangers (and their knowledge) is perhaps the manifesto's sharpest break from colonial epistemology, which silences and marginalizes knowledge that doesn't reify the cultural superiority of European socioeconomic organization.

While Kant's Reason has a situated socio-somatic perspective, such efforts to figure out what thought is capable of remain crucial for the emancipation of intelligence (Negarestani, 2018). Kant's most indelible imprint upon reasoning was his alienation of humanity from knowledge of things-in-themselves, the alienation of thought from noumena. Alienation is intimately entwined here with visibility. The inability to know the noumena is tantamount to an inability to visualize it comprehensively—the human mind cannot contain noumena. While the making-invisible of alienation-as-marginalization disempowers, an emancipatory alienation frames the gaps and distances between bodies as fertile playfields for new thinking. If Kant is right about the obscured visibility of noumena, this is an invitation to imagine and think more forcefully. More important than the thing-in-itself is thinking-in-itself.

In discussing xenovisibility, it's fun to consider the visibility of aliens (extraterrestrials). "Sightings" of UFOs wax and wane. This contested visibility is precisely what makes them interesting. Very few people ever see UFOs, yet this invisibility only reinforces narratives of superior interstellar technologies or the depths of conspiracies hiding them. For astronomers working at SETI, signals of xenolife remain invisible as well. According to statistical arguments, however, it seems incredibly unlikely that there are no other lifeforms in the galaxy. In this sense, aliens feel statistically visible, but sensorially absent. For many, the invisible is the real and the visible is a lie. It is such visible abstractions or abstract visibility which I interrogate below in developing a geometry of the screen.

Unfolding

Few mathematicians express more eloquent vitriol toward statistical logic than geometer Gilles Châtelet. In his books Figuring Space (2000) and To Live and Think Like Pigs (2014) (the English translation of which was put out by the above-mentioned Urbanomic), Châtelet consistently belittles the concept and social role of "averages"—an epistemic product of statistics. While acerbically decrying averages as «puerile empiricism» (as part

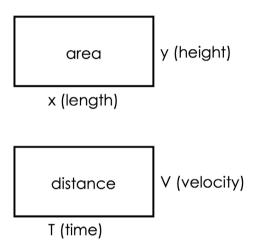
of a larger screed against middle-class life) in *Pigs* (2014: 49), in *Space* he more clinically dissects «averaging operation[s]» as «attempts to neutralize after the fact the disparity of a collection of objects by producing a standard measure whose iteration exhausts this collection» (2000: 50). That is, averages diminish the significance of diversity, instances, and embodied perspectives.

Châtelet's critique of averaging indicts the violence of boredom as an induced, abstract disappearance of irregularities. Such critiques are not uncommon in the social sciences (Cooper, 2008; Merry, 2016; Mitropoulos, 2012; Verran, 2001) but illuminating the drawbacks of averaging operations for mathematical rationality is far less common (especially from mathematicians). This incrimination sets up a fertile opposition between the average and the alien, the normal and the other, the boring and the exotic, particularly how these realms negotiate the theme of visibility in contemporary urban settings.

The crux of Figuring Space concerns how geometry is deployed to visualize relationships between properties-mass, velocity, length, density, volume-and how they undergo transformation. The abstract (geometric diagrams) is melted into the bodily (height, weight, etc.). Electricity, as a nanoscopic conveyor of information, exists in tension between these worlds. Châtelet's diagrams dissect the interactions of extensive properties (e.g. weight and length) with intensive properties (e.g., density and velocity). Briefly, extensive properties are composed of discrete extractable units-ten meters contains nine discrete meters. Intensive properties are indivisible and spectral-ten degrees Celsius does not contain nine discrete degrees. There are not 60 km/h inside 80 km/h. If you cut a rope in half, it changes the extensive length of the rope but not the intensive density. As Châtelet puts it, the intensive «aims to grasp...the gap that separates the deformities» (2000: 43). Aristotle (among others) believed it was impossible to quantify intensive properties. discussion Oresme's fourteenth-century Châtelet's of work illustrates how this quantification was accomplished, geometrically.

Châtelet highlights how the intensive serves as a hinge capable of folding and unfolding properties in space. It is through such means that I suggest the small velocities of the electric world

are capable of enfolding urban space. Specifically, Châtelet shows how distance can occupy area by using velocity (an intensive property) as a hinge between time and distance. That is, as opposed to constituting merely a one-dimensional length (from A to B), distance exists in two-dimensions-time and velocity. Rectangles are often represented as having length along an x-axis and height along a y-axis, but distance can take velocity and time as its x and y axes to form a rectangular area as well (Figure 1).

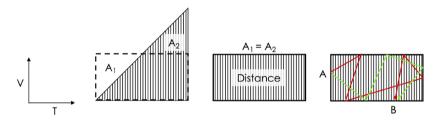


This geometry can be generatively applied to analyses of screenlife by conceiving the two-dimensional rectangle that constitutes a smartphone screen as a dynamic distance-assurface. The smartphone screen, particularly on platforms like Instagram or TikTok offers an unending distance via the functionality of the scroll. You cannot scroll to the end of Instagram. The platform-scroll generates miles and miles of "finger traffic" (contra foot traffic) if unwound linearly, but must a deep scroll be confined to up-down linearity?

Today's endless scroll exemplifies the reciprocal relationship between boredom and alienation. Scrolling isn't simply tedious (like a treadmill), the more we scroll the more distance we manifest—the greater distance we electrically travel. Boredom becomes distance, alienation. That is, rather than the 14cm that comprise a smartphone's static height, scrolling from one image to the next manifests another 14cm. Scrolling down

through ten images manifests 140cm of distance (14 x 10). While this could be conceived of as linear distance between points, Châtelet's geometry suggests scrolling need not manifest a length (a separation) between point A (you) and point B (your friend). Rather, this scrolling creates more surface.

A gut reaction toward distancing operations might be negative (e.g., the marginalizing connotations of alienation discussed above), but drawing on xenofeminism this manifestation of distance-as-surface offers an *opportunity* to pursue generative alienation. In distance perceived as a line, the greater the line grows, the more separated are its ends, thus the greater work required for the two ends to interact. However, with distance-assurface, rather than merely separation, a multitude of possible paths is opened. The greater the distance (as surface), the more possible routes are available for traversing the distance (see Feynman's sum-over-histories). Two-dimensions offers more freedom of movement than a singular linear path (Figure 2).



Lines prevent breathing room, suffocate. Surfaces offer room to experiment, room for errantry (Schwartz, 2019). Rather than the ostracization of linear alienation, in which separation marginalizes, isolates, and Others, this surface alienation generates multiple ways of knowing (Others). This distance can have multiple pathways and multiple destinations. A distance does not have to be the *end of the line*.

For those questioning the geography of scrolling, I offer a personal anecdote. Sitting with a small group in the early hours, a friend grabbed their phone and said they were going for a "morning scroll"—meaning checking their platform feeds. Intentional or not, this comment obviously resonates with a "morning stroll"—a geographic excursion through space. Equally, morning scrolls take place in a space, but in the small electric spaces of our screens. While this space is quite small in terms of

three-dimensional extent, if we reconceive our scale to that of the electron, screen space becomes nearly endless.

Screen Theory

Much has been written on the screen and its impact on spatial perception. Winthereik et al. (2011) conceptualize «screens as material-semiotic objects» (Ivi, 2). From McLuhan (1962) through the cyberfiction of Philip K. Dick (1956) and William Gibson (1984) to historical and artistic critiques by Sadie Plant (1998) or Hito Steyerl (2013), there is no shortage of theorization on how screens transform perception. Shannon Mattern has illustrated the drawbacks of over-reliance on screens in urban governance (2021). Geoghegan (2019) offers an insightful history of the development of the screen, highlighting its germination in militaristic anti-aircraft applications. Many cybernetic pioneers (Norbert Weiner, Claude Shannon, John von Neumann) cut their teeth on such military research.

Geoghegan suggests screens have «incorporated [the] material aesthetic honed in aerial defense into a burgeoning attention economy» (Ivi, 88). The same user vigilance demanded of those monitoring enemy aircraft has been smuggled into the screens from which many of us receive our information. We are «constantly mobilized by our digital devices to practice vigilance in monotony, to beware the eruption of the unpredicted amidst the incessant transmission of indifferent information» (Ivi, 89). The internet at its worst is a kind of exploitative boredom, inducing its users to engage in a monotonous social self-surveillance, looking for the latest transgressions.

My concern is how screen interactions reproduce and distort urban interaction. The compression of electric space within the screen makes it incredibly dense. Millions of ideas and perspectives crammed into the ~100cm² of a smartphone screen. Electric space is capable of such density because it is governed by the interaction of electrons, actors roughly 10-16cm in size. Trillions of electrons can fit on the surface area of a screen. While urban studies focuses on social organization in cities (how they are policed, fed, entertained, disputed, and otherwise reproduced), a key concern is understanding how living and behaving in close proximity uniquely influences human (and non-human) interaction. It's difficult to imagine greater density

than the billions accessible through the smartphone screen. The concept of scale has a long history of discussion in urban studies (Brenner, 2001; Marston, 2000; Swyngedouw, 1996). Is the scale of the electric an extension of such conversations or a new hyperurban plateau?

Dense interaction spaces are often presented alternatively in terms of cosmopolitanism (favorably facilitating cultural exchange) and scarcity (inducing multivariate antagonisms). Does the electric smallness of the screen ameliorate or exacerbate this (potentially false) binary? Theoretically, there is such an abundance of electric space that one should be able to avoid hostile interactions. Yet, the compression, velocity, and anonymity of electricity seems to facilitate simmering aggressions. This tension between cosmopolitanism and scarcity leads to the emergence of neighborhoods, divisions, diversions, inequalities, and (formal and informal) codes of conduct. This heterogeneity can be (and is) commercialized. This seems just as applicable in screen space as street space.

In arguing that «the city is not a computer», Mattern denounces «contemporary calls for cities to be built from the internet up» (2021: 62). Mattern is certainly correct that such endeavors seem painfully naive. However, my concern is the converse-that screen interaction is built from the city down. The fear is that the neoliberalization of urban space (including the banal hostilities it engenders) has been scaled to the density of the screenscape—the logics of profitizing exclusion translated from three to two-dimensions. Echoing Geoghegan's lament above, Châtelet describes late-capitalist «airport cosmopolitanism» as «scarfing down all the best of's on the planet» (2014: 109)—urban life as a series of listicles about the top seven ramen restaurants in Dallas. It becomes difficult to tell the city and the internet apart (not because the city has become like the internet, as Mattern fears, but because the internet has become a neoliberal city).

While Harvey (1989) and Katz (2001) have articulated the commercialization and privatization of urban space, Châtelet's incriminations vividly translate this to the screenscape (writing prophetically from 1998):

«All our new urbanists do is turn a profit from a placement, a double movement that pulverizes and compactifies spacetime so as to subordinate it to a socio-communicational space governed by...the cellphone. From now on the spacetime of the city will be a matter of the econometric management of the stock of skills per cubic metre per second, and of the optimization of the number of encounters of functional individuals, encounters that naturally will be promoted to the postmodern dignity of 'events'» (2014: 108).

Châtelet's observations allude to the inevitable envy induced by commercialization, a process of simultaneously manifesting impatience and boredom. The velocity of today's screen media, he asserts, «enables the capturing in one bloc of hatred all the energy of fermentation steaming out of the tens of millions of units of envy whose interaction ensures the consistency of market democracies» (Ivi, 90). Châtelet describes this as a «Fordism of hate» where «one can amplify the well-known effect of the scapegoat by placing *bête noires* in series, like electrical batteries...possessing the power to make absolutely anyone detest absolutely anything at all» (Ivi, 94).

This prescient and dire imagining of screen space probably rings true to many contemporary ears, but are there alternate conceptualizations of electric interactions that can compete with Châtelet's hatescape? Without resorting to the naive cyberutopianism of the 1990s, can Châtelet's boredom and envy be reworked through a generative alienation, as framed by XF's electric epistemology? The manifesto declares:

«XF seizes alienation as an impetus to generate new worlds. We are all alienated-but have we ever been otherwise? It is through, and not despite, our alienated condition that we can free ourselves from the muck of immediacy...The construction of freedom involves not less but more alienation» (Cuboniks, 2015).

With sympathy for these liberating ambitions, the following section tracks some of the actual work being done by xenofeminism in electric space today.

Spacedata

Xenofeminism was born on the screen (released in 2015 as the URL laboriacuboniks.net, it was subsequently published in book form). The manifesto is certainly cyber-realist or at least not cyber-naive. «If 'cyberspace' once offered the promise of escaping the strictures of essentialist identity categories, the climate of contemporary social media has swung forcefully in the other direction, and has become a theatre where these prostrations to

identity are performed» (Cuboniks, 2015). This sentiment echoes Châtelet's bite, but this problem of enforced or policed identity is precisely what XF's generative alienation aims to challenge.

Generative alienation counters a form of violent inclusivity (typical of platform socialization). Colonial efforts to *include* the global population within the epistemology of upper-class Europeans have induced unconscionable violence over the past four centuries—a rationality that refuses the ontology of the other. That is, the *unincluded* are *unreal*. Countering prevailing narratives of African genocide, Zakiyyah Iman Jackson draws attention (via Toni Morrison) «not to the violence of dehumanization but rather to the violence of humanization...the terror of liberal humanism's attempts at humanization» (2020: 46-47). If "human" is naturalized as "European colonizer" then inclusion in this category is annexation into its ontology of violence.

Forced inclusion, whether via colonial efforts to quantify the subjugated (Verran, 2001) or electric commercialization platforms, creates a panoptical hypervisibility. The abstract world has no shadows in which to hide. The planes of geometry, the maps of colonizers, or the screens of the internet are all efforts to create perfect visibility. Of course, this perfection is never attainable. "Perfect visibility" is generated through the data loss of assumptions.

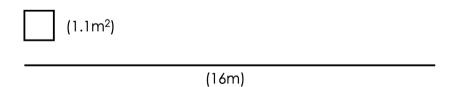
Could XF provide much-needed shade in screen space? Two-dimensional surfaces lack shade, but can the scrollscape offer more topological nuance? Folded, crinkled surfaces could block the omniscient light of charged electrons. Mattern notes how shade in urban design, can offer a welcome respite from the concrete but also serve as cover for illicit activities, such as drug deals (2021). Both these uses of shade are necessary for healthy cities. Mental health demands the possibility of not being seen. Constant observation induces paranoia, a retreat into conspiracy (QAnon was practically inevitable as screentime exploded during the COVID lockdown). The vigilant monitoring of the screen alluded to by Geoghegan primes viewers to see enemies (screens being designed to see enemy aircraft).

«There is a special affinity between probability and psychosis. Paranoia—a central symptom of psychosis...is not the opposite of reason but an exacerbated version of it» (Teixeira Pinto, 2019: 317).

The alienating ambitions of XF suggest a new optics beyond the

enemy screen. Here, I geometrically analyze how xenofeminism has performed electronically over the past seven years on Instagram. Is XF currently, at this early stage, doing the work laid out in the manifesto? What more could it do? And is Instagram a useful gauge of xenofeminist performance?

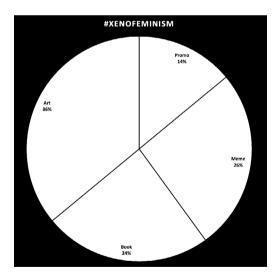
On Instagram #xenofeminism occupies ~1.1m² of surface area (on an iPhone 7). With only 1,390 posts tagged with "xenofeminism" (as of February 2022), the term constitutes a rather insignificant percentage of the platform's total terrain. This limited engagement makes #xenofeminism a manageable artifact of study-it is not too arduous to scroll to its "bottom". The figure 1.1m2 was calculated by taking 1,400 total posts divided by the 12 posts (four rows of three) that are visible on my screen at a time and multiplying this by the dimensions of the screen (13.8cm x 6.7cm). By the same calculation #donnaharaway occupies ~8.3m², #beyonce occupies ~14,265m² and #love (the most popular hashtag I found) occupies ~1.8 million m². Critically, these figures are areas. If calculations were attempted to derive the length of #xenofemism, a figure of 16 meters is reached (1,400 posts / 12 per page x 14cm of screen). Clearly, when a separation of 16 meters is generated, this puts the opposite ends of the line at a much greater distance than any two possible points within a ~1.1m² rectangle (Figure 3). This surface space enfolds distance, bringing any two points within the plane closer together.



It is difficult to grasp whether the $\sim 14,265 m^2$ occupied by #beyonce seems large or small, but this is a different scale of interaction so density might be a helpful metric. One random screen's worth of twelve #xenofeminism Instagram photos on my phone had 2,343 Likes—a potential barometer for interactions per screen. The area of my phone is $\sim 100 cm^2$ ($\sim 0.01 m^2$). The 1,400 posts for #xenofeminism take up 116 lengths of my phone (1,400 / 12). Extrapolating the 2,343 Likes for all the 1,400

hashtags, gives a total of 271,788 total interactions within the ~1.1m² of #xenofeminism. While #xenofeminism may not be representative of interactions with other hashtags, this rough figure of 270,000 interactions per square meter is an interesting figure to begin the conversation regarding electric density and screen urbanism. This figure is not a proxy for population, but rather density. While the above calculations could be considered arbitrary and carried out with different variables (I could have based my metrics on viewing one image per screen as opposed to the twelve I see in thumbnail form), the point is to apply a consistent operation for comparative purposes.

Basedonasample of 570 posts, the composition of #xenofeminism posts can generally be broken down into four categories: 1) promotions (upcoming exhibits, lectures, concerts), 2) images of printed copies of the XF Manifesto (or adjacent literature), 3) memes, and 4) images of artworks (either digitally generated or photos of three-dimensional pieces). Note that it can be challenging to discern some memes from forms of digital art (Figure 4) (seven images consisted of people at public protests).



The aesthetic engaged here predominately features mutinous formations either digital or fleshly-visual efforts to melt boundaries of gender, body, and form. Many are inspired by H.R. Giger's *Alien* (from the film franchise)—a xenofeminist icon. This collection of posts was relatively non-commercialized (with

only books and sex toys being advertised), at least in comparison to #love. Still, could the xenofeminist project of alien-alterity try to work outside this semiotics of accumulation upon which exploitation thrives? How effective are memes as forms of noncommercial, ideological promotion? Looking at XF memes, they nearly all fit within what could be called "meme academia." This marginal subculture is characterized by the condensing of phrases from prominent academic theorists into meme format (a few pithy words over a funny image). XF memes include text from Donna Haraway, Octavia Butler, Judith Butler, Audre Lord, Sylvia Wynter, Sadie Plant, and Nick Land, but predominantly draw from the XF Manifesto itself, which has no shortage of meme-able phrases. Among the most popular are: "If nature is unjust, change nature" or "We want neither clean hands nor beautiful souls, neither virtue nor terror. We want superior forms of corruption" or "Xenofeminism is gender abolitionist" or "Let a hundred sexes bloom!" While these posts are often amusing and aesthetically appealing, do they amount to an «insurgent memeplex» (Cuboniks, 2015)?

There's an inherent rebelliousness and irreverence to memes and they are playful in a manner desperately needed in academics (Memmott and Heckman, 2017), but they cannot help but be reductionist, boiling down the nuance of Deleuze and Guattari into a sentence. Does the decontextualization of memes render the scholarly arguments they represent impotent? Does it defang politics? Does memeification reduce Donna Haraway and Michel Foucault to aesthetics incapable of catalyzing change? Well. How much change have Donna Haraway and Michel Foucault's books catalyzed so far? Certainly, they've changed the lives of many grad students, but the forms of disempowerment and domination they unveil persist.

It might be using the master's tools a bit much for some, but if memes are seen as marketing, they may be more inciteful while less insightful. Clever, catchy slogans over artful images is how advertising works, with its commercialized manipulations of envy and boredom. In the manifesto Cuboniks write, «The will will always be corrupted by the memes in which it traffics, but nothing prevents us from instrumentalizing this fact, and calibrating it in view of the ends it desires» (2015). Thus far, however, the memes of the Alt-Right or QAnon appear far more

capable of catalyzing change than substantial academic works from Luce Irigaray or Hortense Spillers, sadly.

#xenofeminism memeing seems well-positioned to foster the collaborative alienation extolled in the manifesto, but its visibility remains dim (in quantitative terms of users and followers). While there is an entire industry dedicated to increasing social media visibility, I suggest this impasse is precisely where the novel emancipatory potential of Châtelet's geometry and xenofeminism can be forged to develop a new conception of visibility.

Electrivision

The first century of electric visibility failed to move past linear perspective-conditioned sight. As electric screens gained prominence, efforts were increasingly made to overlay a linear perspective world atop this surface (or fit the linear world into the screen). For the past six hundred years the aesthetic of linear perspective has been what reality looks like (in the eurosphere). Prior to the Renaissance, reality looked different, but after, «The concept of space strips itself of...materiality and becomes a purely ordinative complex» (Cassirer, 2020: 185-6). Reality needs a new look. The eschatological drive of linear perspective is smashing screen-users into the horizon at pregnant velocities. How might electric vision differ from linear?

The electron is invisible to the human eye. Any electron's position and mobility can never be seen, thus it must be 'observed" statistically, i.e., aggregately. By the end of the 1800s thermodynamicists conceded the impossibility of ever knowing the precise loco-motion of individual particles. The position and motion of particles could be 'known', however, based on statistical derivations (the Maxwell-Boltzmann distribution). That is, it is impossible to see the characteristics of any individual, but with very high certitude it is possible to see the behavior of the "average" particle. Thus, in addition to its militaristic history, the electric screen is also embedded in the epistemology of statistical thermodynamics. Keeping in mind that averages are illusions—they don't represent actual iterations of phenomena-the electric world is one that sees nonsense (non-sensible) information, while experiences become invisible (just like UFOs).

This has implications for the semiotic temporality of electric interaction space. Information dissemination in the post-Renaissance (proto-capitalist) world was increasingly formatted narratively. Edgerton (2009) suggests that narrative and linear perspective effected a society-wide transformation in perception. Narrative epistemologies certainly betray teleological tendencies common to the ethnocentrism of colonization. That is, the world (and its history) has a plot-a beginning, middle, and end-that enwraps the world. While the surface of the painting or book lends itself to narration (the painting is constructed stroke-by-stroke, the book printed sequentially), the electric surface, as a statistical aggregate of particles, is less amenable to this linearity.

There's nothing implicitly wrong with stochastic aggregates (the screen image) as long as we know what they are and do not try to see narrative where none exists. QAnon's emergence results from the forcing of narrative onto electric screenspace. The electric needs to be seen on its own terms, a vibratory agitation of microscopic particles. Electric representations of information and knowledge cannot be narrated. It makes a difference if you read a book on an electric surface or paper, if you read an academic article as an electric PDF or a printout. McLuhan was right. This article, for example, is a different entity when read on electric screen or paper. Sure, the words are the same, but the semiotic geometry is altogether distinct. This article is not narrative because it was written on an electric screen (if this is a printout, it's a narrative portrait of a non-narrative work).

Per Châtelet, if the screen surface is seen as an enfolded distance, its multiple pathways and moving destinations luminate a semiopoiesis—a meaning-making machine. Throughout its history, the electric screen has endured efforts to narratively colonize the information it emits. As electric screens, from TV to smartphone, become increasingly commercialized, they become increasingly narrated, as evidenced by Facebook and Instagram's promotion of the "stories" and "reels" functions. Turning one's life into a story with narrative arcs turns one's life into a line, in the manner of Halberstam's «straight time» (2005). A xenofeminist life is a surface, not a line. Efforts to use electric screens to convey narrative information necessarily cause confusion and corruption of information. This is why interpreting information from the

internet screen as reality (particularly news) is so dangerous and corrosive. The electric screen resists the narrative formatting of reality upon which enlightenment-colonialism was built.

How should one see the electric screen then? A diffusion of overlapping trajectories (electron behavior), as opposed to a series of diagonals leading into the oblivion of the event horizon (linear perspective)? Does this adjustment seem difficult? Perhaps. It's always difficult to see what we haven't seen yet, but when we do see it, we can't unsee it. Châtelet writes of, "the urgency of an authentic way of conceiving information which would not be committed solely to communication, but would aim at a rational grasp of allusion" (2000: 14). The information that comes to us from electric screens must be viewed not as a communication of the actual, but as an allusion, a gesture toward a distanced phenomenon. This "rational grasp of allusion" seems in keeping with XF's call for a feminist rationality or poet Veronica Forrest-Thomson's "rational obscurity" (2016).

Conclusion

Just as things can be too small to see, they can also be too big to see. New York City's blooming skytowers of the past decade are too big to see. From ground level, it is impossible to view the ninety-floor buildings. They are visible on the skyline from a distance, but a skyline is an aggregate-a collection, the neutralization of disparity. Likewise, to have zillions of followers, users, or likers of an electric object, #beyonce for example, is to be aggregated-impossible to be distinguished. That is, the most looked at electric objects are invisible (or visible in the old fashioned, non-electric way); are the most average. Think of the Marvel Cinematic Universe, a gigantic film series scientifically designed to be average-audiences can stare directly at the screen, but never see a thing. To have a million followers is to be averagely looked at, and «a political force never emerges from mere aggregates of bad tempers» (Châtelet, 2014: 89). To be seen is to be average. To be average is to be boring. To be boring is to be exploited.

Châtelet writes of the «audacity in daring to bring the boundary forms of pure geometry into contact with the world of moving bodies» (2000: 5). This is quite close to XF's aims—to melt together abstraction and body into "boundary forms". Linear narrative

distances don't have boundaries, they are pure separation. Distance as a folded surface area offers incalculable mutinous shapes for deformation performances. This folded up space creates shadows, allowing new forms of visibility-vivid obscurity, blinding timidity, luminescent indifference. With distance-assurface, the destination and origin are distributed multiply. Thus, if we seek the destination "gender abolition," we must crisscross alienated pathways. There is no straight line for which "gender abolition" is at the end.

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Scott W. Schwartz is an Adjunct Assistant Professor in Anthropology at City College of New York and Visiting Fellow at the Max Planck Institute for Social Anthropology. His work focuses on the material culture of numbers and epistemic deviation. His first book was published in December 2021– An Archaeology of Temperature: Numerical Materials in the Capitalized Landscape. sschwartz@gradcenter.cuny.edu