Geographies of Consumption

The early 21st century has perhaps now aged enough for us to evaluate what may be some of its more lasting effects. Quite a number of technologies, policies, and economies have sprung forth in the recent past–most of them as a function what we call the Internet–that have a fundamental impact on our subjectivity. In other words, as the things in the world change, so do we, and as we change, so do they; but not only things (or objects), also spaces, territories, economies, infrastructures, and a great many others that concern the makers of things.

The most appropriate place to study this (or almost anything) in the 21st Century is in the city. We live, as it were, in the century of the city. The United Nations has informed us of the existentially risky statistic that more of us Earthlings live in cities than do not. But what we argue in this paper is that given some (perhaps even riskier) ways of considering the city, the ratio of urban-dweller to non-urban-dweller on this planet may be far higher than we thought.

Historically, the city is constituted as a mass-point: as a centralized place coherently defined by quantifiable infrastructures, borders, territories of governance, and population. Our understanding the city has always included the assertions that: it is place, it has an edge, there are things inside of it and outside of it, it has a center (that generally attracts the flow of money), etc. The city has been a locatable entity, and within it there are certain ways of organizing spatially. But the contemporary city–the digitally networked city–is as much defined by the immaterial as the material. It is composed of concurrent fields of influence that are distributed across vast virtual and physical geographies, constantly configuring and reconfiguring the urban landscape [fig. 1]. It consists as much of Hertzian space, logistical space, and Junkspace as it does Cartesian space. The air is thick with microwaves that construct and define the space of the contemporary city as much as the buildings and streets do. The city, then, is not a mass- point, but a surface articulated by relational folds in which territories of influence are transposed. Thus, the urban territory extends far beyond the perceptual experience of the urban dweller (the experience of walking the city is only one of many experiences superimposed on one another simultaneously across territories) to produce subjects far more complex, far more interwoven with and dispersed through networks of exchange and economies of desire than the urban dweller of the 20th Century.
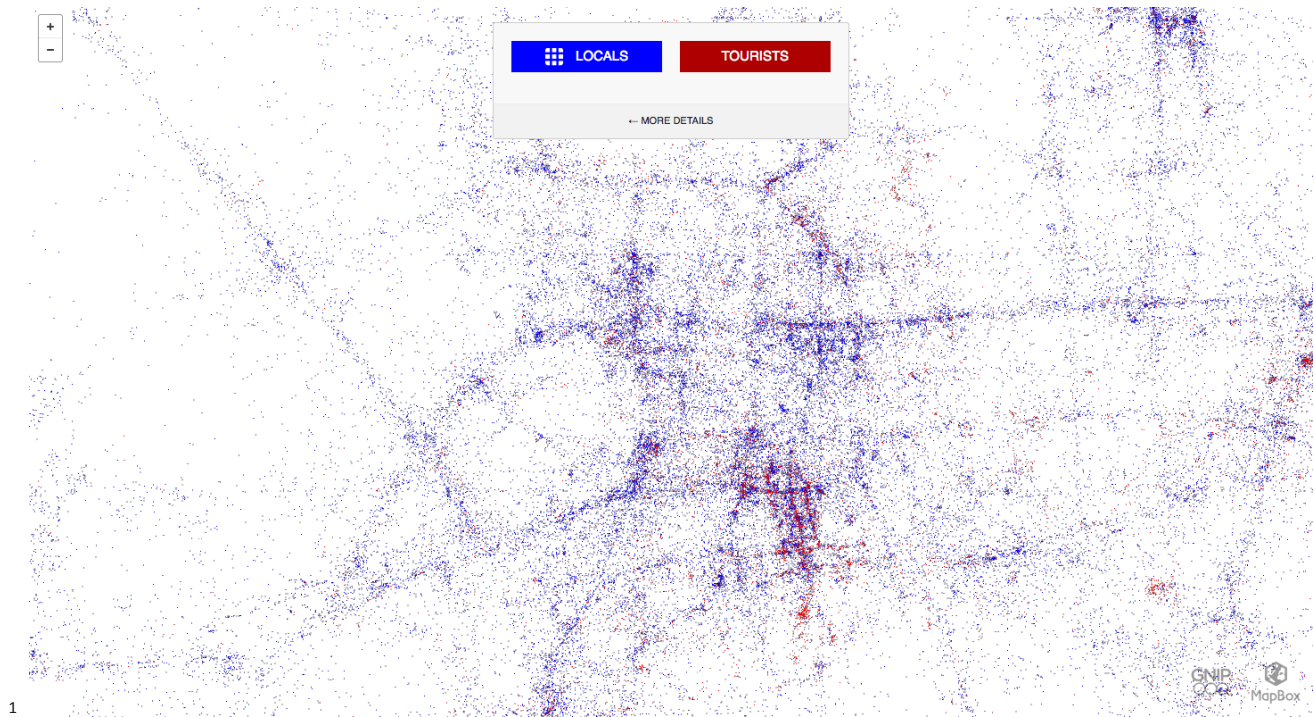
A thoroughly postmodern urban subject is not limited by discreet physical geographies but rather dispersed through digital networks and fluid economies of

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Figure 1: A portion (in Seoul) of a worldwide map of 3 billion tweets from locals (blue) and tourists (red), *source: MapBox.*

desire. The 21st Century city, meanwhile, has developed a series of territorial and constitutional response mechanisms to the new subjectivities it produces and is produced by–new ways it organizes, develops, and values. The city produces tethers and extensions that move urban processes beyond what could traditionally be considered "the city." These new, expanded constitutions of the urban dweller are made most vivid, as they always have been, by networks of consumption and production–from online purchases to millisecond trades to special conditions of importation and exportation.

This is The Urban Condition par excellence: an expanded network of virtual and physical subjects across dislocated territories, tied not to the city itself but to all the conditions the city makes possible. Thus, as a subject of and within a place that is becoming more placeless all the time, the urban dweller and the city alike reach far beyond their jurisdictional borders to gather their identity. The city and the city dweller, then, are never fully actualized, but remain entangled in a process of becoming,[1] where enactments of the material and immaterial constitute our current urban experience.

INFRASTRUCTURE OF EXCHANGE

The logistical engines of Amazon.com radically reconfigure the traditional model of the economic enterprise. It replaces the architectural storefront with a digital one, of course, but it also refigures the act of purchasing as a series of material and immaterial processes layered onto one another. While the average fixed market, store, or shop figures the point of purchase very near the end of a long logistical train of getting 'those goods' to 'that place', the online store (and especially Amazon) places that purchase somewhere ambiguously in the middle of that logistical sequence–anticipating what you will want, where and when, and reacting instantaneously to what you have decided to buy. Amazon figures the point of purchase (and the online purchaser) as an inevitable moment in a constant circulation of goods and capital–a circulation made possible by the city as we know it.

The city, above all, is a locus of exchange–of money, knowledge, power, etc. It organizes people and space in such a way that it produces types of exchange unique to the city itself (rather than, let's say, the rural). Or, at least it always has been unique to the city. Amazon finds ways to extend the urban condition far outside–in fact even detaching altogether from–those things on this planet we know as "cities". Amazon challenges the desire of urbanism to be centric (and concentric) in favor of more rhizomatic forms of urbanism that produce relational territories in real-time, mixing goods and services, physical and virtual infrastructures, analog and digital interfaces.

For instance, Amazon's large warehouses–or Fulfillment Centers as they call them–are staged at careful, very-locatable places on the globe, usually near but not in cities. The Fulfillment Centers are aimed more at regional populations, state tax regulations, operating and fuel costs, and land availability than at the locale of the metropolis as we might expect. For many reasons, they must be on the periphery– or perhaps one could say "in the middle of nowhere."[2]

These large spaces (something like a massive storage warehouse combined with a large-carrier shipping center) privilege and feed off of the spatial configurations of the urban periphery [fig. 2]. Like the big box, they need abundant generic warehouse space, proximity to major transportation infrastructure, appropriate zoning–requirements that anticipate or predetermine a certain type of geography or landscape. But the Fulfillment Center seems to escape even the title of "big box" by shear volume; it is a kind of extra-big-box, or "big box plus". These monsters are concerned not with a strategic location *in-town* (as with the big box) but rather with a strategic location *on the globe*, recognizing urbanity as a drawn-out system of production and consumption that escapes any singular city. So, the Fulfillment Center must be, in effect, "nowhere". This "nowhere" is both geographic and conceptual–geographic because it demands the conditions of the strewn-out periphery and conceptual because the digital interface of Amazon.com does not assign shopping (which is itself a distinctly urban situation) in one specific place but in every place simultaneously.

Amazon's urban experience is not place-based but networked, or what Foucault might call "site"- based;[3] it is nowhere, but the most strategic nowhere possible, capturing urbanity as a field of populations and practices on a regional (and

Figure 2: Amazon Fulfillment Center interior,
Source: Wired.com.

global) scale. Amazon cares not for place, but for proximity. It relies on a quality of relational fields rather than mass-points. It produces what we might call a "You May Also Like" urbanism, or perhaps even better, "Customers Who Bought This Item Also Bought" urbanism. Amazon–its network of Fulfillment Centers, its anticipatory logistics, its digital interface–represents a fast-moving, nimble, infinitely-adaptable, very-urban infrastructure based not only in the city geographically, but historically and ontologically as well.

SPEED OF EXCHANGE

Algorithmic stock trading represents a crucial shift in the formation of the concept of urbanity–specifically, of course, in how wealth is produced and concentrated, but ultimately also in how one conceives of them selves within the production and exchange of value provided by the technological city. Software now controls a great deal of the decision-making in and around the trading of ownership (stock shares) at a pace beyond human understanding. Instantaneous algorithmic trading compacts space and time into an infinitesimally small moment [fig. 3]. Billions of times a second, these speculative formations of value are no longer single, traceable transactions but must be understood as a series or processes that can only be followed by studying the trends of the recent past.

These algorithms are set up to perform in certain ways, but operate in a capacity that outstrips our ability to actively participate with them in real-time. The job of the investor or fund manager is now simply to push the "on" button and let the money roll in, not rather to make individual decisions about transactions. At times, algorithmic trading is a process that appears to be organic and self-organizing, as if it were naturally there; an independent, intelligent machine abstracted out of everyday consciousness. These processes even seem to make us as we make them. At the scale of the millisecond, their speed makes them incomprehensible, and thereby they take on an existence of their own, autonomous and outside of our minds, giving the impression of preexistence and inevitability. The only way to participate in the process is to visualize and re-disseminate it–measure it, observe it, and represent it back to our selves. The speed of algorithmic trading enlivens a new conception of visualizing and living within this process; the market of our making in turn reproduces us as fast- market-subjects and spectators.

Though, this re-representation is an important turn. Wall Street's Flash Crash of 2010 was an important rupture between two different scales of history. Within five minutes, the Dow Jones Industrial Average had the biggest one-day point decline in its existence. The average dropped at an unfathomable rate for those flesh-bodied traders and market-watchers paying attention. The cause of the drop (and the subsequent recovery) was largely mysterious to traders simply because the rate and scale at which the decisions were being made by computers was too fast to be perceived at human speeds. This was a meeting between parallel histories. On the one hand, the lengthy history of the city has a start, a progression, and series of events that we can document and measure as linear and determinate; its history is one of centuries, millennia, perhaps eons. But events like the Flash Crash make it clear that a new constitution of the city relies just as much on a history of milliseconds–a landscape of indeterminate relational events made possible by the speed of computation and digital communication. The market recovered its loss almost immediately–the history of the Great Depression compressed into about 20 minutes.[4]

Only since have we even able to speculate on the agency of computational trading processes in the daily economy of the city. The representation of massive data is the crucial tool in describing a relation amongst computation and subject-construction in the 21st century urban economy. That which was previously un-measurable and unobservable, described as "fleeting" and therefore irrelevant to the development of the city (and history), has become measurable, observable to a scale that comes into the consciousness of our everyday. The tradition of the durable city only allowed for transformation and evolution on the scale of human history, but the very notion of history in our current epoch is governed by speed of computation and fiber optic flashes.
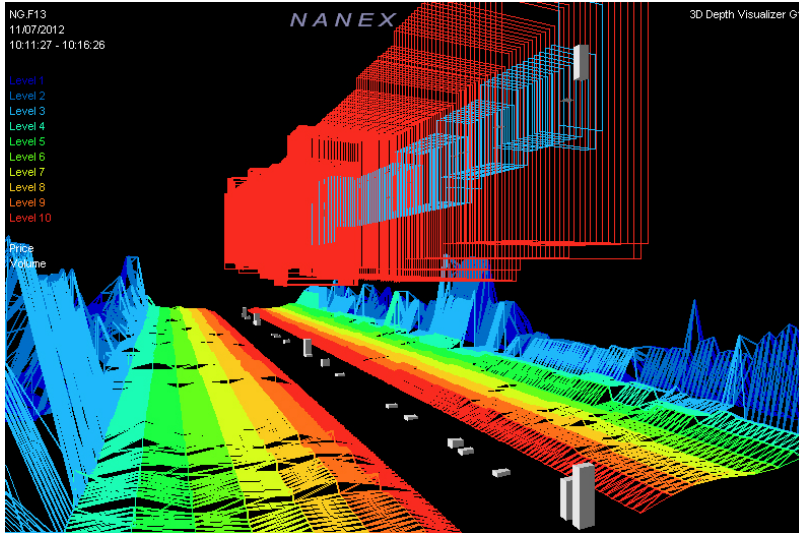
While high-frequency stock trading is perhaps the easiest example to under-stand, it is certainly not an isolated instance amongst other computational, para-metric, or algorithmic processes for attending to value. One can imagine targeted Facebook advertising, credit card tracking, or Google Ad Sense. Instead it repre-sents a new speed of exchange and valuation that constitutes urbanity not at a city-scale but at a global one, where the city is digitized, algorithmic, and distrib-uted fiber optically. Our geography is no longer best-described by the speed of the telegraph, the train, the car, the telephone, the airplane, or even the radio wave but by the speed of light and break-neck speed of computation. The city, despite its best efforts at solidity (and solidarity), is never fixed, but pulsating and changing based on tides of global economy that is shifting constantly and updat-ing instantaneously. Value is constructed in real-time across vast geographic dis-tances and in barely-measurable time scales.

In fact, the economy of the city (via the speed of exchange) now escapes well out into the larger territories that now constitute it. For instance, even a corn farmer in Iowa is figured in and amongst global markets whose ebbs and flows reconfig-ure his economy and that of the city instantaneously. By most definitions, he does not live in a "city"; though his participation in (and care for) global economies may suggest otherwise. Political movements in Brazil fuel prices in China, and ecological legislation in Washington D.C. all have an impact on the global asking price for corn, which he can track instantaneously via 4G data speeds in the middle of his farm in Iowa. He not only has a stake and interest in processes across the globe, but can track and participate in them in real-time. [We have not even mentioned that his GPS guided equipment will soon drive itself.] By his participation in the extension of

Figure 3: Vizualization of algorithmic trading; a few seconds on 7 November 2012, *source: Nanex.*

1988

1996

2010

4

Figure 4: Urbanization of Shenzhen 1988-2010,
source: humanscalecities.tumblr.com.

the urban condition he is no longer distinguishable from the urban subject located in a physical city center–he is now just as good an urban dweller as any other. His distance from the city center, in terms of how fast he can access it, is just-as-near as any other. He may or may not know what happens in the market, from millisecond to millisecond, but he is available to it (and it to him); it reaches him. His level of participation with the algorithmic apparatuses of the market exceeds that of most currently living in cities. His participation in the city is felt, and is likewise felt by him; algorithmic trading (and other computational and communicative apparatuses) eliminates place as a requisite for participation in the 21st Century city.

JURISDICTION OF EXCHANGE

The global economy is, in many ways, made possible by sanctioned territories of exception that allow for performance and practice beyond the typical bind of urban codes and policies. These territorial exceptions are a means by which the jurisdictional reach of the city is extended and reconfigured to generate new moments of exchange. Outwardly, these moments often appear to be inefficient and sometimes absurd, but in fact they are highly calculated, precise choreographies dictated by the interaction of internal dynamics and global economies.

A prime and often-cited example in this category of exception is the Special Economic Zone–a geographical area designated to operate with special policies and protocols that encourage economic exchange. While special trade zones began to emerge as early as the 1950's, they only became an influential global condition late in the 20th Century, and have become, in the 21st century, critical to the operation of global economies. Initially, SEZ's as they came to be called, were merely delineated territories adjacent to, but separate from the city and offered special tax incentives, grants, port benefits, and other favorable treatments for the private enterprises residing there. Early manifestations of SEZ's had a clear logic: to generate wealth by incentivizing private enterprise, thereby boosting exports. More often than not, SEZ's were (and often still are) strategically located in depressed areas, often in urban peripheries, and used as much as a catalyst for local economies as international ones. As SEZ's gained momentum in the structure of international trade and began to proliferate throughout the globe, these territories went from being peripheral zones that merely offered benefits, to spaces of urban exception that became centers in their own right, albeit counter to the traditional city.

In China, for example, exceptions afforded to SEZ's eventually shape new policies and local modes of governance. These SEZ's set the conditions around which new cities will arrive–they prime it. In some cases, the SEZ and the city gain equal standing, and in fact, the SEZ eventually authors the city itself (rather than vice versa). In Shenzhen [fig. 4], one of China's most prominent SEZ's, the arrival of massive waves of migrant workers inflated a small town into a metropolis seemingly overnight. Here, the city and the SEZ are conflated, and is an exception to and of itself–an inversion that allows for the desires of the state to unfold and extend outward while limiting the inward reach of unregulated (and mostly untaxed) economies. The SEZ is the exceptional city, the other city, the counter-city. It allows for the city to maintain its identity as such, while also performing beyond the policies and protocols on which it was founded, and act variably across territories: controlling and closed in some, while simultaneously permissive in others. In the contemporary city, these protocols are fluid, allowing the city to operate in different ways 'here' and 'there'–leaving some thresholds porous and permissive while yet others are limited and exclusive.

OPEN CITIES: The New Post-Industrial World Order

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These economies, permissions, and urban gestures often lead to convoluted scenarios where goods and services are routed through unlikely, often excessive, and contradictory trajectories. For instance, the practice of so-called "round-tripping": sending freighters of material goods [fig. 5] overseas to a nearby nation, docking for a given period of time to have freight classified as an export (thereby benefiting from export tax credits and waivers), then, without off-loading freight, returning to home-port in order to sell the goods as imports. For goods such as fabrics and clothing, the "exporters" are able to keep their prices low and perpetuate the exceedingly global culture of cheap fashions with high turn over rates.[5] Because of the SEZ, the consumer is allowed access to the city in ways otherwise unavailable. The city gains another life (a counter-life) in the SEZ, and so does the consumer-subject. The irony here is that the policies and protocols enacted by SEZ's, participated in by consumers, produce nonsensical, non-exchanges that are highly inefficient and span international distances, nonetheless sustaining and even energizing a culture of cheap-and-quick. The long-and-slow at one edge of exchange begets the cheap-and-quick at the other; the inefficiencies of exchange within and between one set of territories permits the hyper-efficient exchange in another.

The sleight-of-hand of the SEZ (and of "round-tripping") is primarily a jurisdictional one. The city releases jurisdiction in one place in order to capture it somewhere else. Or perhaps better put: it reaches a jurisdictional arm over and across these permissible territories in order to extend itself on the other side–as if through the SEZ, the city elongates across shipping lanes, into work forces, and ultimately around the globe. "Round-tripping" transgresses jurisdictions–this is how it generates agency: The boat crosses from this jurisdiction (a nation in most cases) to that jurisdiction, and back again.

Another example of this jurisdictional cheat is a recent effort by the Los Angeles County Sheriff's Department to police drug transactions in the desert with semi-autonomous flying drones. While L.A. county does not have legal jurisdiction of the ground, the extensive economy of drug trafficking around and across the U.S.-Mexico border suggests an emerging urban territory larger than L.A. County itself, across Southern California and Northern Mexico–one that cares little for the edge of cities like Los Angeles, San Diego, and Tijuana. In an effort to police the trafficking of people and goods through Los Angeles, the Sheriff's Department has, in practice, extended the urban jurisdiction to include any place where this urban economy exists.

Figure 5: Cargo ship at port, source:

avalonresearch.co.uk.

ENDNOTES

1. Instead of the "real," Deleuze and Guattari prefer to oppose the "actual" to the "virtual," implicating an extended process of "becoming" from the virtual (the realm of possible outcomes) to the realm of the physical present. Whereas the "real" and "virtual" is a binary condition, the "actual" suggests a complex relationship with the "virtual" where one is never fully separate or distinct from the other, nor fully fixed, but captured in a process of re-definition and re-representation: *"The actual is not what we are but, rather, what we become, what we are in the process of becoming–that is to say, the Other, our becoming-other."*

    Gilles Deleuze and Félix Guattari, *What Is Philosophy?* trans. Hugh Tom- linson and Graham Burchell (New York: Columbia University Press, 1994), 112.

2. The logistical algorithms that determine the global layout of fulfillment centers may not be made public, but it is clear that they define a very particular sort of periphery: one that formulates the consumer public as more than urban population density, and includes a wide array of other regional criteria to determine "density." We might infer from what we know of Amazon, that these criteria might include regional demographics, which factor into consumer desire and buying practices, or likely in the future, access to drone and/or unmanned vehicle delivery networks. These criteria begin to form a radical logistical sensibility of the city, suggesting a new image of urbanity.

3. Foucault differentiates between epochs of space and time–the Middle Ages being a space of emplacement, Galileo's Renaissance being a space of extension, and today a collection of what he calls 'sites'. "The site is defined by relations of proximity between

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Figure 6: Hollywood sign with Communications towers in background, *source: Wikimedia.*

points or elements." He refers to several kinds of sites, all equally considered as such: the storage of data in computer memory, automobile traffic, etc, and compares them against "type[s] of storage, circulation, marking, and classification of human elements…" He goes on, "Our epoch is one in which space takes for us the form of relations among sites." We include spaces like those Amazon.com produces when considering was Foucault goes on to describe as "heterotopias", as many of the qualities of this space get caught between here and there.

Foucault, Michel, *Of Other Spaces.* trans. Jay Miskowiec, Diacritics, vol. 16 (Baltimore: The Johns Hopkins University Press, Spring 1986), 22-27.

4. During The Flash Crash, the DJIA lost 600 points within five minutes after losing over 300 points earlier in the day (for a loss of nearly 1000 points on the day). The market regained almost all of the 600 points within 20 minutes. By comparison, on Black Tuesday in 1929 the market lost 30.57 points on the day, and on September 29, 2008 the market had its largest net loss of 777.68 points.

5. See Bloomberg News, 27 January 2014. Various sources such as Bloomberg report "round-tripping" as a possible explanation for distorted bilateral trade numbers between China and Hong Kong. These distortions are said to fuel both individual private enterprise as well as State enterprises.

"China Trade Puzzle Revived as Hong Kong Data Diverge," Bloomberg News. Web. 27 January 2014.

In the case of the SEZ, the city extends its territory in order to instigate far-reaching economies. In the case of the drone program territory is extended to disallow them. In both cases however, there is a careful and clear relationship between governance and economy: the former through companionship, the latter through conflict. Regardless, each emerging jurisdictional territory extends well outside the traditional frontiers of the city. And so, as the edge of the city becomes increasingly fuzzy and difficult to track, its reach becomes indeterminate and shifts as necessary. This extension likely has more to do with regions and fields than with borders and lines, and provided that jurisdictional vectors continue to proliferate, there is no reason to believe the jurisdiction of the city will become any less complicated.

CONCLUSION

We would like to conclude with a final thought about The Urban Condition: While we have described many ways in which it can be outside what we have always deemed "the city", it is still constituted by similar mixtures of hardware and software, material and immaterial, production and consumption. The agency of the designer (and indeed, architect) can be felt at precisely that moment when one moves into the other–when immaterial processes meet material manifestations (and vice versa). The extension of the city digitally, economically, and conceptually in the 21st Century does not signal a loss of opportunity or agency for those designers, but quite the contrary: it indicates an equally extensive potential for designers and makers of things to operate in-between those moments; to insert architectures capable of manipulating inputs and outputs of the 21st Century City.