FCJ-221 Collecting Elements of a Minor Future: Commoning in Alphabet City-

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Impressions from an imaginary walk across the streets of Alphabet City, resonant with the architectural echoes of an optimistic modernism, its socio-technological design rooted in a widely shared belief in the governability of urban ecologies.

Much more than an exercise in urban development, the smart city is the harbinger of a providential processuality, announcing yet another machine age of algorithmic architectures. Marked by the missionary rhetoric and sense of manifest destiny immanent in the infrastructural informatisation of vast cartographies of communication, it is the cloud-based 'city upon a hill' of an imperial imagination, coupling the terraforming of the topographies of life and labor with visions of technological transcendence. In this Alphabet City, there is a multitude of folds to map, but no strategic hill to scale – and only non-places to plant the flags of a new regime. The didactic fictions that organise the semiotics and socialities of 'smart citizenship' are epic in scope, confronting us with the open worlds of a distribution beyond reaggregation. As ambient media changes and challenges what we understand to be the 'environment' of the human, commoning finds itself on the new terrain of a subjective economy, of economies of capture that intervene in processes of collaborative constitution, and of forms of cognition that engender collective commitments to technological solutionisms. As a politics of economic and environmental justice, ambient commoning refers not only to the transformation of our physical environments, but to the ways in which ambient media affects the way we communicate, create knowledge, and engage with others in the pursuit of life and labor.

What follows are impressions from an imaginary walk across the streets of Alphabet City, resonant with the architectural echoes of an optimistic modernism, its socio-technological design rooted in a widely shared belief in the governability of urban ecologies. As we struggle to transform the city into an 'arrival city' (Saunders, 2010) capable of managing multiple migrations, it seems that we no longer share this optimism. Or perhaps it is simply that such imaginary walks exhaust us, our sense of individual and collective agency,

allowing us to embrace both this exhaustion and an entropological sensibility (Stiegler, 2015) more at ease with dissipation than with determination, sharing a sense that distribution is not only a logistical assemblage but our condition. Whichever way we walk, we collect elements of a future fiction to sustain the story of an urban existence not eager to rival the epic narratives of technological empowerment as we, perhaps, simply prefer not to participate, opening ourselves to minor futures that are common rather than exceptional.

Z as in Zorns Lemma

Since there is no linear order in the city of ambient media, we might as well start at the end, the imaginary end of an alphabet, the illusion of a finality. Hollis Frampton's visual essay creates a cartography based on the mise-en-scène of urban typographies (Scheffer et al., 2015a; 2015b). An aesthetic practice revolving around the experimental enmeshments of type and image, typemotion films combine the artistic conviction that film is the aesthetic practice best suited to comprehend the dynamics of the modern metropolis with an awareness of the operative role of writing as a cultural technique: 'So as we follow the movement of type in motion across more than a century of aesthetic experimentation, acts of reading scale our senses to comprehend the topologies across which our contemporary experience unfolds, less in terms of their role in processes of signification than in their role in our logics of existentialization' (Zehle, 2015: 240). And as we walk the streets of the contemporary media city, we cannot but immerse ourselves in its dynamic assemblages.

M as in Ambient Media

Ambient media refers to the 'environmentalisation' of media: from media as (separate) tool to media as environment. The focus on 'ambience' captures the environmental character of media, but also recalls the holistic interest in the ethical implications of ambient media, shared by ambient intelligence pioneers but a minor concern in current ambient intelligence/pervasive computing/ubicomp research. Technologically, this shift is driven by a series of overlapping ICT developments, including the availability of real-time networking infrastructures and the deployment of sensor networks especially in urban contexts. In terms of interface design, the disappearance of media into our environments is a consequence of the shift from command line/graphic user interfaces toward natural user interfaces (gesture/touch, speech, eye/motion tracking). Economically, this shift is supported by new economies of capture and commodification aiming to integrate the data (exhaust) we generate into new value chains, including (in the US) the 'Big Five' (Amazon/Apple/Facebook/Google/Microsoft), a GE-led 'Industrial Internet' coalition (including AT&T, IBM, Cisco, and Intel) inspired by the analytics of infrastructure automation, and a corporate 'sharing' economy designed to operate below current regulatory thresholds of economic and environmental justice (Sterling, 2014 & Scholz, 2014). Politically, this shift has been supported by enthusiasm for big data and internet-of-everything policies and strategies as well as the prioritisation of technological over cultural, economic or social innovation. Raising hopes for the democratisation of processes of governance, the arrival of ambient media continues to meet with growing resistance to private (commercial/corporate) and public (intelligence/security) surveillance (Schneier, 2015).

D as in Distribution

We lead lives ruled by distribution – as a logic, as a layer of technological systems design, as a logistical assemblage. Facilitated by new approaches to infrastructure studies, analyses of ambient media have drawn attention to the scope and structure of logistical systems. Comprehending the infrastructural socialities of a new era of surveillance-based services in logistical terms, they remind us of the primacy of distribution – of labor, of political sovereignty, of the technical object – in the design of supply chains, of forms of governance, of objects. The reaggregation of agency and accountability distributed across 'post-political' infrastructures (Wark, 2014) to reach the critical mass and thresholds of visibility required by a politics of representation is a struggle, if not considered an already lost battle. The fiction of real-time governance is an epic story with unknown beginnings, the endless series of an authoritarian machinism whose opening season we have always already missed. There will be no zero-latency democratic decision-making. Somewhat surprisingly, distribution confronts us with the limits of democracy, not only as the transcendental dilemma of distributive justice (Hardt and Negri, 2010) but of the sovereign logic of technological distribution. Less surprisingly, the despair is graspable across the digital society: What used to be the public sphere of agonistic encounters is now an empty parking lot next to a data center, a strip mall abandoned by ecommerce enthusiasts leaving room for little more than a mock trial of search algorithms. Of course, the nostalgia for agonistic encounters is rooted in a romance with the political. But it is an agon based on our comprehension of politics as aesthetic practice, perhaps in the form of a populist drama staged to put the sublime objects of a sensuous sociality into circulation (on Podemos, see Mouffe and Errejón, 2015), perhaps as situationist game of war striving to master lines of communication (on the Panama Papers, see Harding, 2016). We have no choice, it seems, but to accept the determination of sovereignty by distribution.

A as in Algorithmic Accountability

Accountability is not a model of politics; it is, above all, a principle of design. So before we resign ourselves to popular fatalisms (we love the apocalypse and its decisionist designs of the political), we can and should subject the parameters and protocols of assessment and automation to public scrutiny (Pasquale, 2015) – if only to better comprehend the role of the semiotics of software in new regimes of governance (CFTC, 2016). Not, however, to simply rekindle the hopes of a new era of openness and transparency, where data is folded back into existing mechanisms of a politics of representation – access alone cannot change the fictions that organise the semiotics and socialities of algorithmicised agency. But even the modest approaches of algorithmic audits can already help us assess whether and which existing mechanisms established to guarantee information freedoms remain useful in strategies of ambient commoning; the same holds for the blockchainisation of such strategies (O'Dwyer, 2015). And of course we can take algorithms to court; we have taken animals to court (Fischer, 2005; Humphrey, 2002), and there might be a model there – not of getting algorithms to accept their guilt, but to elaborate the standards of human sociality in ways that facilitate our comprehension of the dispositions of machinic systems (Easterling, 2014).

E as in Experience Engineering

To understand ambient media, we let go of the concept of agency as a capacity that is always already given and instead attend to the dynamics of subjective constitution – to the ways in which (ambient) media affect

our capacity for cognition and relation. As a condition and consequence of the individualisation and personalisation of digital goods and services, experience itself has become a key terrain of economic valorisation. The concept of a 'subjective economy' shifts attention from goods and services to the implications of these developments for individual personhood and the ways in which they constitute and constrain the agency of individual and collective subjects (Lazzarato, 2014). Because the subjective economy of ambient media operates on the commons of our affective and cognitive capacities for communication, commoning engages the question of access to the conditions of subjectivity. As the individual subject becomes the focus of new growth paradigms, the question of agency – its constitution, scope, and forms of articulation – acquires a new relevance as the subjective economy exhausts, exploits, and empowers us at the same time. The ambient commons is not only about standards or technologies open to multiple forms of reappropriation, but about who we become when we communicate.

C as in Ambient Commoning

The idea of an ambient commons takes its point of departure our position in the subjective economy, combining attention to the transformation of experience with analyses of the infrastructural changes that make this transformation possible. An increase in individual freedom (especially if pursued by following the model of consumer choice) is not necessarily accompanied by an increase in social freedom: the freedom to have a say regarding the nature and number of choices available, the freedom to be involved in processes of collaborative creation. A commons is a general term for shared resources in which each user has an equal interest. Relations among users are based on collective governance frameworks of interdependence, cooperation and shared use rather than exclusive property rights. In the analysis of sustainability, the commons has been one of the most significant concepts, increasingly applied to computational environments. Long dominated by ahistorical accounts of the so-called 'tragedy of the commons' (overuse as a consequence of the absence of regulation, an 'absence' that effectively ignored the rich tradition of governance systems based on neither state nor market), contemporary analyses have emphasised commoning as a form of collective self-determination aimed at maintaining and reproducing commons for present and future use. Because its cultural, economic and political conditions of possibility are distributed and regulated across multiple layers of governance, a commons is always both local and translocal. A focus on the enclosure of the ambient commons broadens the horizon of analysis beyond the digital society and the short history of ambient media, linking contemporary practices of commoning to the archive of historical practices of self-determination and collective governance (De Angelis and Harvie, 2014).

T as in Cultural Technique

Since ambient media confronts us with a new set of environmental concerns, we need to comprehend media both as a set of discrete technologies (subject to co-design, reappropriation, and collective governance) and a condition, changes in which call for a more comprehensive politics of sustainability. As core dynamic of such a politics, ambient commoning can be understood as a cultural technique. Rather than struggling against the hegemony of technological innovation, we should politicise its optimistic faith in technological solutions, if only to concretely engage with the limitations of a technological solutionism. Or to conclude that we need even more technological innovation – but not on the level of objects, rather on the level of the cultural techniques that organise their constitution and couple them with others actors in chains of operation. The concept of cultural technique has been adapted from the domain of agricultural

engineering to address processes of cultural constitution and counter the analytical tendency to explore the symbolic rather than the material (ontological) dimensions of culture (Siegert, 2015). As such, cultural technique offers a way to acknowledge the cultural, economic and social registers of commoning and comprehend multiple articulations of resistance and resource governance. Such a cultural technique is both hybrid in its adaptation of existing practices and perspectives, and distributed across different political forms and practices. The concept of cultural technique resonates with philosophical accounts of the co-evolution (or co-originarity) of technology and the human, a point of departure for analyses of the physiological and psychological implications of the environmentalisation of media. In cities like Bologna (Foster and Iaione, 2016) or Barcelona (Utratel, 2016), a new generation of urban policymakers is already engaging these dynamics through commons-based techniques of urban governance.

U as in Complete Users

Above and beyond the nostalgia of craft and custom manufacture (and the unexpected return of undead creative industries frameworks), one of the effects of new maker movements has been to expand the horizon of digital literacies – acknowledging the need to shift from the 'critical use' of existing infrastructures to their co-design, and perhaps even more importantly, encouraging us to hold on to the figure of the 'complete user' envisioned in the comprehension of computation as a general purpose technology (Lialina, 2012). If the tentative tale of a common city is to have any chance of countering the massively-multichannel fictions of the city of capture, we will need concepts of comprehensive agency at the core of our storytelling. The figure of the Anthropocene has been suggested to help imagine the fullest-possible scope of human agency across spatial and temporal scales; maybe the complete user is simply another figure for the human living under the condition of distribution. And if a polyamourous operating system can embark on a quest for self-knowledge and the zen of technology (Jonze, 2014), why shouldn't we, aided by xenofeminist enthusiasm regarding the reconfigurability of the human machine?

I as in Seamful Interfaces

If we begin to comprehend a medium at the time of its disappearance (the instant institutionalisation of digital humanities notwithstanding, media theory is always limited by its own epistemic latencies), it seems that given the healthy state of interface theory, interfaces are about to disappear. It so happens, however, that the current state of interface design is less interested in complete users than one would expect, given the endless string of empowerment commercials that accompany product releases. The environmentalisation of media has been driven by a focus on experiences that prioritises seamlessness to the extent that both the 'inter' and the 'action' parts of interaction are about to disappear from view. Embraced by pioneers of ubiquitous computing who already anticipated the becoming-invisible of computational technologies (Weiser, 1991), the idea of seamlessness stresses the intuitive interaction with computational systems. Moving toward natural user interfaces (touch, speech, eye-tracking), designers have successfully expanded the range of users by lowering the thresholds for interaction. At the same time, new thresholds have been created through closed hard- and software systems offering use based on a take-it-or-leave-it model. The disappearance of seams is, then, perhaps more usefully understood in the crude terms of political economy rather than the flashy idioms of UX design. Instead of imagining ambient media as a seamless space of frictionless communication, imagine it as a bordered space of conflict and recall that what is cast as friction in visions of 'frictionless capitalism' (Gates, 1996) or 'frictionless experience' (Zuckerberg, in Eldon, 2011) is the conflictual dynamic to be engaged by commoning strategies.

Because interfaces are experience architectures, the valorisation of 'invisible interfaces', a major element in the environmentalisation of media and an influential aesthetic principle, has far-reaching normative implications. Seamless rather than 'seamful' design approaches focus on constraining (in the name of efficiency, freedom, and simplicity rather than control) the powers and potentialities of the 'complete user' implied in the comprehension of computing as a general purpose technology. 'Seamful' design strategies are to 'invisible design' what experimental film is to continuity editing, that is, a form of aesthetic resistance to the disappearance of the work and workings of montage. Whereas seamless invisible design makes work (and with it alternative forms of agency and expression) disappear, the seam is the potential site of a politics. The distribution of power lines and the location of power plants have already been focal points of political contestation, suggesting that whenever infrastructures become visible, they also become graspable as potential objects of a politics. Such terrains of common experience are a reminder of the direct link between shared use and infrastructural design. Hiding the materiality of technical systems not only limits our capacity to use them in creative ways. It also regulates access to the very means involved in our individual and collective self-constitution.

E as in Common Ecologies

While ambient media is a rather recent development, we are already aware of its ecological and social costs: natural resource exhaustion, increasing energy use, rebound effects of mass consumption that outpace any efficiency gains, new waste streams, occupational health and safety concerns across supply chains and workplaces, and the need for sustainable design – all of which have been the focus of electronics activism (Good Electronics Network). Commoning cuts across and couples ecologies, not least because in our experience they already flow together. Rights to informational self-determination and rights to non-toxic technologies, for example, are not exercised in different worlds. Their separation is not a given but an effect of governance by different epistemological and political regimes – concern over climate change notwithstanding, we continue to analyse and govern 'the economy' and 'the environment' by separate institutions. The existence of the common is not the result of a choice, to embrace and enact different theories of property, for example. The commonality of ecological effects is an irreducibly collective experience; we cannot but share this space of continuity. And the deterritorialising discharge from electricity generation and electronics production, for instance, not only cuts across the geographies of sovereignty – toxic dusts, flows, and seepages also remind us of the leakiness of our conceptual containers. We do not have to create the common, it already exists as material actuality.

P as in Parametric Politics

In the sense of commoning as a cultural technique that links actors and objects in new chains of operation, to engage in remaking this world of ambient media is to envision a redesign of its operational infrastructures. A comprehensive imagination of urban infrastructures as dynamic system brings into view the protocols and parameters that define these operations. This can mean building on maker and design thinking approaches as well as embodied cognition research for hands-on methods to imagine and co-design new interfaces that can operate as sites of commoning and commons-based production, but also the codes of new currencies aiming to reorganise the distribution of wealth (Terranova, 2014) in the common city. And because attention to the transformation of agency necessarily includes the transformation of labor, a parametric politics must address both economic and environmental justice. The separation of the politics of labor and those of the environment, one of the consequences of our collective

insistence on culture-nature distinctions, does not make sense in the context of ambient commoning.

To focus on walking is to evoke figures such as the flâneur or the Lettrist dérive, surrounding our strolls across the sentient semiospheres of the 'smart city' with an appropriate atmosphere of nostalgia but also return to walking as a practice of self-distribution. Such walks are, necessarily, a hybrid experience, as we cease to pit analog and digital spaces against each other since we no longer expect dichotomous discretisations to secure realms of experience. The 'we' that emerges is, perhaps, the accidental we of collectivities encountered in the course of roaming the streets of our cities, perhaps also the we of early dystopian accounts of total transparency that expand our sense of contemporaneity beyond current articulations of computationality (Zamyatin, 1924). The subject of these experiences is not simply an I, and its horizon much wider than that organised by a 'quantified self' engaged in economies of optimisation. We need the space of a we, whatever the we, to create conceptual constellations that can facilitate our exploration of the enmeshment of our expression with the a-signifying semiotics of machinic communication. From the becoming-mobile of our gaze, explored in the serial photography of Charles Malville that accompanied the Haussmanisation of Paris, the street photography pioneered by Eugene Atget, or the modernist mise-en-scène of urban experience in the city symphonies of Calvalcanti, Strand and Sheeler, or Vertov to our current engagement with the 'nonconscious cognition' (Hayles, 2014) of the machinic systems sustaining the sentient city of infrastructural informatisation: to walk the streets is to encounter Alphabet City on the ground level, as an aleatory alphabet that announces the possibility of a shared story even without a full sense of its plots and protagonists, of its storytelling architecture.

The 'epic struggle' (Sterling, 2014) for the future of environmental media also calls for stories that comprehend the 'total configurations' (Rams, 1976) that cut across processes of technical and subjective constitution, stories that reimagine design on the level of institutions. We are in the process of creating of tools to facilitate such storytelling – infrastructure studies train our analytical gaze to follow the constitution of technical objects across vast supply and value chains, software studies and analyses of the subjective economy teach us how to comprehend the mixed semiotics of semi-autonomous systems, the vision of an 'extrastatecraft' (Easterling, 2014) reminds us that we cannot simply map the dynamics of collective self-determination onto the matrices of state, market, and civil society, the geologisms of the Anthropocene encourage us to reflect on the reach of human agency beyond 'smart citizenship'. At the same time, there is no need to rival the epic scope so characteristic of the empowerment narratives that have accompanied the environmentalisation of media. We already know there is no outside: all consequences of our actions remain in the same space of shared experience. In this context, the role of the figure of the ambient commons is not only to suggest new cartographies of this shared space. It challenges the spatial imagination of our sense of the political. And as we live in this space, scaling our senses above and beyond the horizon of micropolitical solutionisms, there is no need to subsume such sensing to a new master narrative, as even minor fictions can be turned into a series of minor futures.

Biographical Note

Drawing on perspectives from comparative literature, philosophy, and translation, Zehle's research interests include the role played by media architectures in framing our communicative modes of relation. Lecturer in Media Theory at the Academy of Fine Arts Saar, he also co-initiated and currently works as managing director of the academy's xm:lab - Experimental Media Lab.

References

- CFTC. 'Staff Roundtable: Elements of Proposed Regulation Automated Trading', transcript, (Washington, D. C.: US Commodity Futures Trading Commission, 2016), http://www.cftc.gov/PressRoom/Events/opaevent_cftcstaff061016

- De Angelis, Massimo, and Harvie, David. 'The Commons', in Martin Parker, George Cheney, Valery Fournier and Chris Lan (eds) *The Routledge Companion to Alternative Organization* (New York: Routledge, 2014), 280-294.

- Easterling, Kelly. *Extrastatecraft: The Power of Infrastructure Space* (New York: Verso, 2014).

- Eldon, Eric. 'Live Blog: Facebook's f8 Developer Conference 2011 Keynote', Adweek (September 22, 2011), http://www.adweek.com/digital/live-blog-facebooks-f8-developer-conference-2011-keynote/

- Fischer, Michael. *Tierstrafen und Tierprozesse - zur sozialen Konstruktion von Rechtssubjekten* (Muenster: LIT Verlag, 2005).

- Foster, Sheila R., and Iaione, Christian. 'The City as a Commons', *Yale Law and Policy Review* 34 (2016), 281-349, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2653084

- Gates, Bill. *The Road Ahead*. Rev. ed. (London: Penguin, 1996).

- Good Electronics: International Network on Human Rights and Sustainability in Electronics, http://goodelectronics.org/

- Harding, Luke. 'What are the Panama Papers? A guide to history's biggest data leak' (The Guardian, April 05, 2016), https://www.theguardian.com/news/2016/apr/03/what-you-need-to-know-about-the-panama-papers

- Hardt, Michael, and Negri, Antonio. *Commonwealth* (Cambridge: Harvard University Press, 2010).

- Hayles, N. Katherine. 'Cognition Everywhere: The Rise of the Cognitive Nonconscious and the Costs of Consciousness', *New Literary History* 54.2 (Spring 2014), 199-220.

- Humphrey, Nicholas. *The Mind Made Flesh: Essays from the Frontiers of Psychology and Evolution* (Oxford: Oxford University Press, 2002).

- Jonze, Spike, et al. *Her* (2014).

- Lazzarato, Maurizio. *Signs and Machines: Capitalism and the Production of Subjectivity* (Los Angeles: Semiotext(e), 2014).

- Lialina, Olia. 'Turing Complete User' (2012), http://contemporary-home-computing.org/turing-complete-user/

- Mouffe, Chantal; Errejón, Íñigo. *Construir pueblo: Hegemonía y radicalización de la democracia* (Barcelona: Icario editorial, 2015).

- O'Dwyer, Rachel. 'The Revolution Will (Not) be Decentralised: Blockchains', *Commons Transition*, 11 June (2015), http://commonstransition.org/the-revolution-will-not-be-decentralised-blockchains/

- Pasquale, Frank. *Black Box Society: The Secret Algorithms that Control Money and Information* (Cambridge: Harvard University Press, 2015).

- Rams, Dieter. 'Design by Vitsœ' (New York: Vitsœ, 1976).

- Saunders, Douglas. *Arrival City: The Final Migration and Our Next World* (Toronto: Knopf Canada, 2010).

- Scheffer, Bernd, Stenzer, Christine, Weibel, Peter, Zehle, Soenke (eds). *Type Motion: Type as Image in Motion* (Ostfildern: Hatje Cantz, 2015a).

- Scheffer, Bernd, Stenzer, Christine, Weibel, Peter, Zehle, Soenke (eds). *Schriftfilme: Schrift als Bild in Bewegung / Typemotion: Type as Image in Motion*. 208 films on 14 DVDs, booklet. Studienedition / Study Edition (Karlsruhe: ZKM digital arts edition, 2015b).

- Schneier, Bruce. *Data and Goliath: The Hidden Battles to Collect Your Data and Control Your World* (New York: W. W. Norton & Company, 2015).

- Scholz, Trebor. 'The Politics of the Sharing Economy' (2014), http://www.publicseminar.org/2014/06/the-politics-of-the-sharing-economy/

- Siegert, Bernhard. *Cultural Techniques: Grids, Filters, Doors, and Other Articulations of the Real* (Fordham University Press: New York, 2015).

- Sterling, Bruce. *The Epic Struggle for the Internet of Things* (Moscow: Strelka Press, 2014).

- Stiegler, Bernard. 'Automatic Society 1: The Future of Work – Introduction', trans. D. Ross, *La Deleuziana* 1 (2015), 121-140, http://www.ladeleuziana.org/wp-content/uploads/2015/05/Stiegler.pdf

- Terranova, Tiziana. 'Red Stack Attack: Algorithms, Capital and the Automation of the Common', in Robin Mackay and Armen Avanessian (eds) *#Accelerate: The Accelerationist Reader* (Falmouth: Urbanomic, 2014), 379-397.

- Utratel, Ann Marie. 'The Commons Collaborative Economy explodes in Barcelona', *Commons Transition*, 18 April (2016), http://commonstransition.org/commons-collaborative-economy-explodes-barcelona/

- Wark, McKenzie. 'Postpolitical Infrastructures', *Public Seminar*, 17 November (2014), http://www.publicseminar.org/2014/11/postpolitical-infrastructures/

- Weiser, Mark. 'The Computer for the 21st Century', *Scientific American* 265.3 (1991), 94-104.

- Zamyatin, Evgeny. *We*, trans. G. Zilboorg (New York: E. P. Dutton, 1924).

- Zehle, Soenke. 'Scaling our Senses: Type in Motion between Sentient Semiospheres and a Semiotics of Intensities', in Nathan Jones and Sam Skinner (eds) *The Act of Reading* (Manchester and Liverpool: Corridor 8 and Torque Editions, 2015), 239-266.