# 2 The Circulatory Turn

WILL STRAW

## The Stable and the Variable

> La transmission des savoirs se joue entre l'ouverture et la clôture, entre condensation et dissémination, entre nomadisme et ancrage dans le territoire. (Bourassa 2005, 21)

Familiar images from the world of mobile, wireless technologies show us two individuals communicating with each other, via digital device, across shifting relationships of distance and directionality. (Think of any episode of *24*, for example.) In these scenarios, people pursue their own, uncoordinated pathways of movement, against the backdrop of unwavering wireless networks. The fundamental dialectic of mobile communications is expressed here, in the open unpredictability of human action and the (relative) constancy of the network or infrastructure which makes communications possible. Indeed, the roving mobile user may seem the perfect embodiment of all those models of social action which set agency against structure, figure against ground, and freedom against its limits. These models seem all the more pertinent when we speak of mobile communication in its urban contexts. The weighty physical structures around which people and information move in cities serve to exaggerate the unmoored character of wireless communication. Mobile communication often may seem like a clandestine undermining of the city's structural solidity.

If the difference between variable events and stable structures defines wireless communications, that difference has often inspired an unease among artists and activists, as if it were the symptom of an unfinished

revolution. Commercial and artistic experiments respond to this sense of incompletion by either destabilizing networks (endowing them with the variability of randomized human behaviours) or stabilizing human action (turning it into a predictable feature of network functioning). We find the first of these responses in certain works of locative media, like the *LOCA* project, which embed signal transmitters in obscure parts of the urban environment. When signal relays or transmitters are made to move in unannounced patterns, or to be triggered by unsuspected actions, we see the attempt to include network infrastructure among the variable and surprise-producing features of urban life (http://loca-lab.org).

Works such as these participate in the long-standing fantasy which casts urban space as the site of perpetual estrangement. The sensory-rich cities described by Charles Baudelaire and the Situationists presumed both the unconstrained freedom of the human stroller and the endlessly surprising, richly communicative character of the urban backdrop itself. As Thomas McDonough has suggested, the Situationists sought out urban phenomena which functioned, not as points of orientation or collective experience, but as the bases of a 'behavioural disorientation' which would produce the city as forever strange (McDonough 1996, 59). The revival of interest in these thinkers, over the past fifteen years, has coincided with the rise of digital wireless communications, influencing the terms in which technological experimentation involving mobile media has imagined and expressed itself. (A Google search of sites containing both 'Situationism' and 'wireless' produced 36,000 hits in January of 2010.)

Conversely, another set of innovations wants to make human action as solidly invariable as network infrastructures, turning human behaviour into one of the reliable supports of communications systems. Drew Hemment has written about Ester Polak's project *Amsterdam Realtime* (http://www.waag.org/project/realtime), in which participants meandered through a city with GPS devices that registered their movements on a public screen:

> At the outset the screen is blank, but as the journeys are recorded, individual meanderings fuse into a composite representation of how people occupy and use the city – density and concentration are recorded in the luminescence of overlapping lines; spaces unvisited remain dark. (Hemment 2006, 350)

The aggregation of variable movements into solidifying maps of predictable behaviour allows people to 'write' a new (and seemingly

personalized) cartography of the city even as the same people become the enactors of collective patterns which, ultimately, become repetitive. The gap between the random variability of the participants' GPS transmissions and the network's drive towards cartographic stability is thus overcome with time. In his study of Parisian culture in the early twentieth century, Adam Rifkin describes the efforts by artists to combat the sameness which resulted when human movement within a city, however chaotic and subversively imagined, inevitably reproduced a stable complexity (Rifkin 1993, 157). For contemporary artists, the demonstration that individual behaviours aggregate within collective networks and movement systems is one way of revealing forms of community behaviour which may challenge official understandings of such behaviour. A project like *Amsterdam Realtime* offers, as one of its many 'outputs,' new knowledge about the city's unacknowledged use patterns – knowledge which may compel administrators to revise their understandings of how a city is inhabited and used. (This is one of the social benefits of the *Amsterdam Realtime* project discussed at http://www.interdisciplines.org/move/papers/3). For Rifkin's Surrealists, in contrast, the characteristic response was to embrace obscurity, to embark upon patterns of movement and behaviour which clouded any administrative understanding.

The transformation of variable behaviour into stable structures is evident in the more banal ways in which digital communication interfaces stabilize shifting relations of distance and mobility between people, disguising them with identificatory marks which betray little or nothing of human variability. The Skype interface, for example, announces incoming calls with the faces or names of the individuals making them, rather than with phone numbers, which (like postmarks in postal communications) would betray a caller's place of origin. Our contact lists register the slow growth of our interpersonal networks, rather than our constantly shifting relations of proximity to others.

Any theorization of urban communications must confront the relationship of stability to impermanence, of stasis to mobility. Versions of this duality are scattered throughout cultural theory's claims about cities and the communication which transpires within them. We may find this tension at the heart of Victor Hugo's oft-cited recognition that the printing press, as an agent of incessant disruption, would challenge the deeply anchored authority of the Church (Hugo 1831). It is not simply that one social force would, with time, eclipse another (as a result of democratization and secularization). The restless mobility of the press

offered a more apt expression of the dynamism of collective urban life than did the architecturally entrenched power of the Church. More recently, Karlheinz Stierle has written compellingly of the ways in which urban languages flow promiscuously in speech and interpersonal exchange, then are captured, rendered immobile within enduring textual forms, such as magazines or commercial signage, 'just as cold comes to be fixed within ice' (Stierle 1993, 2001, 29, my translation). The historical work of David Henkin (1998), William R. Taylor (1991), and others on New York City traces the ongoing traffic of language between ephemeral acts of speech and the physical structures (such as billboards or newsstands) on which vernacular language comes to be affixed. (See also Darroch 2007 and Fritzsche 1996, for similar work on other cities.) Some of the most interesting theoretical thinking about the visual communications of cities has addressed the ways in which different media manifest the tension between the stable and the variable. Akbar Abbas, writing of Hong Kong, distinguishes between urban architecture and cinema, setting the stable spectacle of buildings against the partial and ever-changing viewing positions offered by films (1997, 64). In different contexts, Alain Mons (2002) and Pascal Pinck (2000) have written of urban photography and the 'skycams' of airborn news-gathering in terms of their constant stabilizing and destabilizing of the city as an object of sensory knowledge.

## Distance Reading

The analysis of mobile communications (of cell phone conversations or SMS messages, for example) typically operates at either of two extremes. At the highest level of generality, we find infrastructure and system, studied from the perspectives of a political economy of media or as elements of urban infrastructure. At ground level, we find the flickering of impulses and signals, interesting for the micro geometries of human or social action which, through this flickering, are created or revealed. Midrange phenomena, like the texture of messages and semantic substance of communicative textuality, easily drop out as significant concerns in the analysis of wireless devices. It seems much more pertinent, in the analysis of digital device communications, to pursue what literary theorist Franco Moretti has called a 'distance reading' – to undertake the analysis of small phenomena from afar, so that messages reveal little more than positions and linkages within social space. In a 'distance reading,' Moretti writes, 'distance is ... not an obstacle, but a specific

form of knowledge: fewer elements, hence a sharper sense of their overall interconnection. Shapes, relations, structures. Forms. Models' (Moretti 2005, 1). What is sacrificed in a distant reading, of course, is the meaningful substance of communications. Social texture is no longer a world of meanings shared or contested, but a set of diagrams produced by the rhythms and geometries left as residues by successive communicational events. A distant reading seems appropriate to media forms (like the text-messaging mobile phone) whose textual expression is fleeting and, by most standards, trivial.

Perhaps because of this triviality, mobile device communications have received little attention within the rich renewal of media theory which has transpired over the last decade or so. This renewal, best characterized as a turn towards ideas of 'materiality,' is dispersed across several currents within cultural analysis. In contemporary humanities scholarship, for example, concepts long dormant or discredited within advanced media scholarship, such as 'transmission,' have been the focus of renewed interest and elaboration (e.g., Guillory 2004). This renewal has been most influential and provocative in the recent work of the so-called 'German school' of media theory, in the work of Friedrich Kittler, Bernard Siegert, Norbert Bolz, Hans Ulrich Gumbrecht, and others. Over the last decade, special issues of such journals as *New German Critique*, *Configurations, Critical Inquiry*, *Literary History, Theory, Culture and Society*, and the *Yale Journal of Criticism* have served to develop this ferment beyond this unitary German contribution, enlisting within it more localized developments in book history, architecture studies, film studies, and the social study of science.

This work is heterogeneous in its claims and points of departure, but united in its interest in the so-called 'externalities' of media forms. 'Externalities' does not simply designate those dimensions of media we might consider hardware or packaging. The term invites us to consider the materially embedded character of cultural expression, its inscription (as with writing) or iteration (as with performances) within arrangements of technologies, bodies, and physical structures. Media forms, this work argues, provide the contours in which cultural expression is contained and shaped; media forms store or transmit this expression in culturally pertinent ways. David Wellbery has usefully traced the theoretical genealogy of this interest, from Michel Foucault's imperative to 'think the outside' (Foucault and Blanchot 1987, 1–5) to the tendency of Kittler and others to think within a 'presupposition of exteriority' (Wellbery 1990, xii).

For all its emphasis on 'externalities,' however – on the defining contours of technological encasement and public interface – much of this work is concerned with the ways in which media gather up within themselves the communicative substance of urban life. Recent theoretical work has enumerated the characteristics of media forms in a list of functions whose degree of overlap is striking. Kittler's definition of media – as technologies for the 'storage, processing, and transmission of knowledge' (quoted in Griffin 1996, 710) – is echoed in other work on media or social discourse which may or may not follow his lead. Here, we find media forms defined by their capacities to 'absorb, transform and rediffuse' (Angenot 2004, 212), 'absorb, record and transform' (Heyer and Crowley 1995, xvi), 'circulate, record and organize' (Esposito 2004, 7), or to serve within processes of 'processing, storage and transmission' (Wellbery 1990, xiii) and 'preservation, transmission, and translation' (Knauer 2001, 434). Each term in these lists describes one way in which the media *work* upon the pre-given practices and semantic substance of the social world.

Unexpectedly, much of this recent media theory seems poorly suited for the newest of media technologies, such as digital hand-held devices. For all its attentiveness to computer technologies and scientist knowledge systems, most of the work in media theory just described has found its fullest deployment in the study of print forms such as literature, wherein the sedimentation of social discourse is richest and most obvious. Mobile messaging may well 'absorb, record and transform,' in capturing bits of slangy speech or registering preoccupations (like ingroup gossip) which pre-exist and circulate through it. This capturing cannot help seem minor, however, set alongside the ways in which the literary novel or the theatrical performance absorbs social thematics and appears to organize knowledge and emotions. Likewise, the argument that literary forms are interfaces, or devices of storage and transmission, will seem innovative because these forms have rarely been thought of in these terms. These conceptions seem much more banal when used to discuss mobile communications devices, whose instruction booklets contain such terms in their description of functions. In the same way, the claim that scientific or artistic work may profitably be thought of in terms of network structures seems more genuinely novel than the claim that mobile communications might be considered in those terms as well. A variety of recent currents within media theory suffer, in their application to mobile device technologies, from being too close to the self-understanding of those engaged in their production and use.

**The Circulatory Turn**

Alongside this busy renewal of media theory, and interweaving with it at multiple points, we find a set of gestures within cultural analysis united by their concern with the idea of circulation. Here, the principal question concerning media is not their action in relation to some prior substance (like social discourse, knowledge, or subjectivity) to which they give form. Rather, the turn to circulation comes with an understanding of media as mobile forms circulating within social space. This 'circulatory turn' has been most influentially defined by Dilip Parameshwar Gaonkar and Elizabeth A. Povinelli as the imperative to study the 'edges of forms as they circulate' (2003, 391). Edges here are no longer just the outside, container elements of cultural substance. Edges constitute the interfaces of cultural artefacts with human beings and other forms, the surfaces which organize a form's mobility.

The nature of this intervention is an anti-interpretive one, intended to challenge a concern with cultural forms which sees them principally as bearers (however mobile) of meaning. The bases of this challenge to interpretation will vary across a range of recent interventions. For Hans-Ulrich Gumbrecht, the 'uncontested centrality of interpretation' within cultural analysis has blocked an attention to 'presence,' to the sensuality and tangible materiality of the cultural form (Gumbrecht 2004, 17). Put succinctly (even crudely), Gumbrecht suggests that the purpose in analysing cultural artefacts should cease being that of 'imagining what is going on in another person's psyche' (2004, xiv). Rather, it should address the conditions under which cultural forms occupy social space, interconnect and move in relation to each other. For Gaonkar and Povinelli, the most vital cultural analysis will be that which learns to 'foreground the social life of the form rather than reading social life *off* of it.' The key question is no longer that of how personal or collective life registers itself within communicative expression, but of how the movement of cultural forms presumes and creates the matrices of interconnection which produce social texture. In what might serve as an invigorating program for the analysis of mobile device technologies, they call for an ethnography of forms 'that can be carried out only within a set of circulatory fields populated by myriad forms, sometimes hierarchically arranged and laminated but mostly undulating as an ensemble, as a mélange, going about their daily reproductive labour of mediating psychosocial praxis' (Gaonkar and Povinelli 2003, 391–2).

Like the Kittlerian media theory described earlier, this intervention is more dramatic when it acts upon fields of inquiry long accustomed to unpacking the rich discursivity of a given artefact or practice. Of all the weaknesses that have plagued the analysis of wireless communications, however, a preoccupation with the in-depth interpretation of complex textualities has not been one of them. As suggested, the individual message, utterance, or text within wireless communications flickers in and out of the analytic gaze; that gaze, in turn, locks more easily onto a view of the overall infrastructure of interconnection. In our opening image of mobile communicators moving in multiple and uncoordinated directions, the rearrangement of bodily geometries will automatically seem more significant than the exchanges of words which reveal (or justify) such rearrangements. Even this scenario, however, still has human beings at its centre with mobile devices as the tools wielded in the maintenance of relationships across space. Theory need only take one more audacious step to see this scenario as one whose geometries are defined by the relationship between technological devices, rather than that between the human beings to whom these devices are attached.

'Circulation' was the theme of the April 2005 issue of the art magazine *Frieze,* an event which cemented the concept's move to the centre of art criticism's contemporary vocabularies. In the issue's programmatic statement on circulation, Jorg Heiser traced the concept's multiple roots. The work of Gaonkar and Povinelli, and of Benjamin Lee and Edward LiPuma (all of them writing in the journal *Public Culture*), was a key influence here. Such work, born within (or on the margins of) cultural anthropology, has come to the attention of an art world already engaged, for almost a decade, in working through the notion of a 'relational aesthetics.' Formulated first in the art criticism of the French curator/critic Nicolas Bourriaud, a 'relational aesthetics' offers the following premises as characteristic of a range of contemporary art practices:

> Each particular artwork is a proposal to live in a shared world, and the work of every artist is a bundle of relations with the world, giving rise to other relations, and so on and so forth, ad infinitum. (Bourriaud 2000, 21)

As Heiser suggests, the theoretical program for a relational aesthetics gestures towards 'circulation' without using the word. It does so through its emphasis on the moment of encounter, on the meeting of actors and works at determined places within social space. In Jacques Rancière's account, an aesthetics of the encounter assumes importance

when it no longer seems radical, possible, or interesting to conceive the artwork as a critical engagement with the surrounding world of signs or commodities: 'Yesterday's distance towards commodities is now inverted to propose a new proximity between entities, the institution of new forms of social relations. Art no longer wants to respond to the excess of commodities and signs, but to a lack of connections' (Rancière 2006, 89).

At the same time, Heiser argues, a relational aesthetics, with its commitment to healing fractures in the social bond, bumps up against the limits of its own humanism. It remains too tightly moored to a vision of artworks as tools employed in the act of communication between people (between artists and their audiences):

> They [Boris Grouys and Nicolas Bourriaud, key theorists of relational aesthetics] consider the relationship between artists and the forms they propose (understood as the embodiments of ideas), and the interactions between people and the world triggered by it, but they seem to ignore the relation between these forms and other forms. The term 'circulation' is shorthand for the ways in which the fluctuating relations between forms (from both inside and outside art) co-define the relations between artists and their audience. (Heiser 2005, 79)

Heiser's most compelling phrase here – 'the fluctuating relations between forms' – quickly evokes the 'undulating' ensembles of forms imagined by Gaonkar and Povinelli. Both images are part of a broader imagining of communicational universes as populated by cultural forms talking to each other, their geometries of distance and interconnection made and remade in ongoing fashion. For Heiser and others, one advantage of 'circulation' is its displacement of 'production' and 'reception' from a cultural analysis which has spent too much time fretting over the relative primacy of each in the life of cultural artefacts. Circulation is not just a third level of analysis (like 'distribution' in the study of the cultural industries), but names the point at which production and reception have collapsed as meaningful moments.

Elsewhere, Michael Giesecke has used similar language to characterize literary production on the Internet:

> Pressured by new technological media, artists and scientists instantly orient themselves away from the notions of 'production' and 'reception' typical of industrial and print-based cultures. Literary projects on the Internet, among others, frequently do not allow for a strict distinction

>between authors and users, participation and distance. (Giesecke 2002, 11)

We must be careful, however, not to confuse these arguments with those of Heiser or other theorists of circulation. For Giesecke, the distinction between production and reception disappears within a new participatory regime of creation which deepens the involvement of all concerned. (This is a common claim about Internet-based literary production, and was always already true of the telephone conversation.) To circulation theorists, the distinction loses interest as its constitutive terms themselves lose descriptive usefulness. The movement of a cultural form (a newspaper or SMS message) is not one which bridges a source and destination, but the realignment of forms in relationship to each other, within 'undulating ensembles' that give cultural life its character.

## Circulation and the City

'In a given culture of circulation, it is more important to track the proliferating copresence of varied textual/cultural forms in all their mobility and mutability than to attempt a delineation of their fragile autonomy and specificity' (Gaonkar and Povinelli 2003, 193). As a slogan, this comes as close to any in capturing my vision of a cultural studies which is compelling. Those of us who study ephemeral forms, from SMS messages through old dance tracks, know that a preoccupation with content and interpretation will seem less powerful than an analysis of the ways in which these things are inscribed upon visible or sonic surfaces. Any one instance of SMS messaging or rhythmic sequence is less interesting than the re-mapping of the city which goes on as the edges of these things join together in series or pathways. To study the 'edges of forms' is to study not only the containers of meaning, but the systems of assembly and interconnection which give texture to urban cultural life.

Calls to study the 'materialities' of communication and the 'edges of form' represent significant interventions in media theory, but they invite us, as well, to revise our ways of thinking about the city. The city is constituted to a significant degree from these materialities and 'edges of form.' The routes traced by postal workers tell us little about the substance of letters or parcels, but in the organization of cities as systems of routes and addresses, a spatial rationality is built upon the circulation of intimate expression (see Siegert 1999). The physical edges of the city's built environment are almost inevitably mediatized, either through the functions they assume as points of orientation, or through

the ways in which they become literal surfaces for inscription and text. Information or cultural expression does not simply blow weightlessly through the city, but becomes a pretext for the building of structures and the organization of space, for the fixing of interfaces (like the public telephone) to particular kinds of places and for the assembly of people around media nodes (such as the sports bar television) (McCarthy 2001).

Models of circulation will vary in the extent to which they emphasize the controlling character of circulatory processes or work to convey their open-ended flux. Clive Barnett has pointed to the divergent, even contradictory, meanings which 'circulation' has assumed within cultural analysis. On the one hand, the word may designate a 'circular, tightly bound process,' the setting in place of control systems through repeated patterns of movement and the building of stable structures to channel this movement. This sense of circulation is powerfully conveyed by Kaika and Swyngedouw (2000) in their account of the development of urban infrastructures for transporting water, electricity, and gas. In this historical analysis, the development of cities has involved the ongoing integration of natural forces within technologically based circulatory systems. On the other hand, 'circulation' can suggest a 'scattering and dispersal,' the dissolution of structure within randomness and uncontrolled flux (Barnett 2005). The movement of news, gossip, money, commodities, and people, outwards from their places of origin or routinized departure, involves the ongoing drawing and redrawing of circulatory maps whose variability works against any sense of stable urban infrastructure.

The difference between circulatory processes which are 'tightly bound' and those marked by 'scattering and dispersal' returns us to the tension with which we began. Cartographic mapping processes which register individual movement through the city capture the scattering of human action even as repetition deeply etches these passages within regularized, 'tightly bound' patterns. We are used to thinking of cities in terms of speed and mobility, but the complex circuitousness of cities also makes them places of delay and blockage, of a tightening. A city's circuitousness means that movement within it is stretched out, that things and practices and connections are given more space and time in which to eventually disappear. We might ask, in studying wireless device communication, what, amidst the novelty and rootless mobility of such communication, is being perpetuated: the friendships which would otherwise fade away were there not this low-commitment means of staying in touch? The connections to an earlier home or occupation or interest, which are now readily available for resuscitation?

A commitment to circulation as the orientation of analysis does not presume the claim that life is more mobile, fleeting, or fragile in the world of new media technologies. It does require attentiveness to the ways in which media forms work to produce particular tensions between stasis or mobility. When wireless computing, in and around hotspots, builds on much longer traditions of café-based observation, contemplation, or reflection, mobilizing the same sorts of literary ambitions which motivated Baudelaire or Edgar Allan Poe, it is serving an inertial function, slowing down the disappearance of ideas and sensibilities from the world. This sense of wireless computing challenges the more conventional understanding which casts it as the precondition for endless mobility. Discussions of technology are forever balancing competing images of a heightened mobility and a demobilizing entrapment. Diagnoses of an impending obesity epidemic mobilize the spectre of the immobile computer user just as advertisements emphasize the fluid groundlessness made possible by gadgets. Everyday complaints about new communications devices are as likely to emphasize their capacity to immobilize us, within the traps of responsibility and availability, as they are to trumpet their capacities for freedom and escape.

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