

>> Psychogeography: the 'Psychology' *in* the Technological Environment

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Abstract:

This paper tries to trace a speculative outline of the city as a product of technologically mediated human activity and as itself a technological artefact that facilitates the kinds of projective and intentional movements and connections we perform within it. It begins by seeing the technological not as something set against the human, but as a particularly human way of extending our subject-centred capacities for action in the world. It goes on to outline the way our only apparently chaotic urban environment becomes a technology, simply structured in respect of this subject-centred viewpoint, and built in 'scapes' to facilitate to greater or lesser degree (in broad correspondence with the distribution of power within the panoptic 'machine') intentional action and interaction.

The machine and its 'ghost'

The city is a technology, a machine; but not a machine of cogs and wheels, nor one of bits and bytes and synapses or switches, nor some kind of input-output equilibrium mechanism or computational device. The city is not a machine of closed logics or indeed of any sort of closure within a bounded frame either physical or abstract. The city is, according to a construction I will try to sketch here, a technology built in a space or diagram of action and intention – to the form of, and capturing within that form, the active and intentional engagement of the subject with the world. The proposal is that this technology-city is one which is – for those who have access to and the power to engage with its built and systematising movement and communications infrastructures (or 'scapes') – open and affording of the exploratory and the probing, to the impulse at whatever scale, to diffusion, engagement and assimilation, and to the opening of ways to the variously scaled horizons of lives lived in the city. The city affords though of course differently in different places and, critically in relation to issues of power, differently to different people. The city is a machine of trajectories, of pathways connecting us in a series of leaps to ever more expansive horizons that exist simultaneously in our imaginations of the world, and in that world itself – which is after all a condition our imaginations.

And there is quite literally, and in the terms which Gregory Bateson¹ proposes, a *mind* in this city-machine, making finally redundant all talk of 'human-environment interaction', making redundant all talk of 'mental maps', of 'cognitive models' or 'cognitive schemas' existing apart from the environment itself and our active joining with it. Bateson talks in his essay 'Form, Substance and Difference'² about a 'mental determinism', in conformity with, and standing alongside, a 'physical determinism' as

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a constituent of our worlds. This 'mentality' or mind is not the *transcendent* Mind of western enlightenment thinking, but is, he claims, *immanent* in the world, a function of and product of complexes of relationship; a concrete embodied 'knowledge' or 'intelligence' existing *in* the world.³ Our minds, our tools and our actions are all part of this larger mind, as our bodies are constituents of a larger urban body, and, in the context in which he spoke in 1970 – against the 'mastery' and despoilation of the environment – "it is in our power, with our technology, to create insanity in the larger system of which we are parts."⁴ Our minds, our tools and actions are also though, and before we begin to engage in the pressing discussion of the insanities of our actions on this planet, part of the *intelligence* and the positive 'knowledge in the world' that we share with this larger mind. I will attempt here to describe how such an intelligence is embedded in the material form (which is simultaneously psychological) of our urban landscapes.

This, by the way, is precisely what we will mean when we speak of *environmental form* – and this form is precisely what the environment *means*, before and quite apart from, and making redundant I would argue, any overlaid 'symbolic' or 'essentialist' cultural meaning.

This is a large step from the more conventional belief that intelligence subsists in us and that the form of the city is a matter of a more or less meaningfully composed brute matter against which this subject-centred intelligence plays. I want to show that this conventional view is a crude error, even in the supposedly formless city of today, and that 'intelligence' is something that extends from the subject deep into our urban surroundings; that it is immanent in urban form as an ever present and ever pertinent answer to the question posed by the searching movements of minds and bodies within and as part of this form.

Action, society, technology

Part of the reason the view of the city I will be outlining is not second nature to us is that we have become accustomed to seeing technologies as things apart from societies and cultures, even today to seeing them as an external threat – coming from beyond the realm of culture itself – to well-known and well-valued cultural ideas and life patterns. We all too often today see technologically mediated movement and communications as one of the factors threatening our social environments – our understandings of these environments couched in the comfortable presuppositions of small-town place and neighbourhood.

The anthropologist Tim Ingold⁵ reminds us that the difference between hunter-gatherer cultures and our own, as it concerns technology, is not so much that hunter-gatherers have simple technologies compared to our own; rather that they do not have technologies at all in the terms that we commonly understand them. The effective move from the technologies of the hunter-gatherer to our own is not, according to him, a move of complexification, but one of *externalisation*. It has to do with the withdrawal of the tool-user from the centre of the process where he or she exercises subject-centred skills, to one where the technology-user may stand by to oversee a mechanical operation of production. We have come to associate the idea of technology with this withdrawal of the process of production from the subjective producer and user. Technical skills in the case of the hunter-gatherer on the other hand, are constituted, and extend personal and social capacities, within social relations. Their technologies do not become bounds on social relations but are internalised, and then diffused or *projected* as skilled ways of relating in physical and social environments with other persons, animals and things. Their purpose is not to structure or control and close into a techno-environmental system, but to open and *reveal to use* in social relations. Technologies become seamlessly integrated in fact

in the skilled activities of searching, opening, exploring, path-clearing, and problem-solving which characterise most of their everyday activities.

The externalisation of technologies and the withdrawal of the subject from the centre of the process, along with the corresponding tendency for life patterns to become procedures, can be seen as constituting part of the division we have constructed and then naturalised in modernity between separate realms obeying on the one hand social laws and on the other natural. This 'constitutional settlement', as Bruno Latour calls it,⁶ makes it part of a 'natural' order of things that societies and cultures should be formed and transformed by *social* laws and structures, *public* policies, *social* norms and values, but not by the fabric of actions and contact and connection of our everyday engagements with a concrete experiential world. The relational and connective matrix of our world is a dumb instrument of location, access and connection; movement and encounter is a trivial ingredient, a neutral filler, in a recipe for society that is about *socially* lawful hierarchies and structures. According to the 'official' version of the story therefore, respectful of the divides just mentioned, our lives have become by now so densely overlaid and mediated by technologies, that, through the disruptive impact of especially mobilities and connectivities, these technologies begin putting under stress and threatening the very stabilities of the societies and cultures which support these lives in their 'social structures' and identities. We are threatened with breakdown of social structures, and the story of technologies and their development, can only be seen in such a framework as one of an increasing intrusion of an 'artificial' and disruptive factor into an 'authentic' social reality whose nature is given in structural terms. The more extreme forms that this fear can take, are visions of cybernetic futures lived in socially and psychically disengaged digital dreamworlds, or of a merging of the human and the technological in a threatening image of the cyborg.

In fact, a merging of the human with the technological is precisely, it seems, what characterises so-called 'primitive' technologies, and as Andy Clark points out, we merge in all sorts of ways with technologies, and we are in fact already and thoroughly all of us cyborgs.⁷

The body and intentional, outwardly projective subjectivity imposes a certain spatial schema, which is the form of the internalisation of technologies that Ingold describes, and is implicated in the invisibility that such a subject-centred internalisation seems to necessarily imply. What I will propose is that this spatial projection onto the environment forms and informs that environment. This schema becomes the form of our subject-centred emplacement in the 'intelligent landscape' I mentioned earlier, and imposes certain constraints, tendencies, vectors, on the form of the landscape and on its possible futures. We need to take account of the directionalities and tendencies imposed on the world by the depth and layering of our bodily and subject-centred, technologically meditated, emplacements in the world. It is clearly an increasingly technological world we inhabit – so much remains uncontroversial – but we should be careful about the exact form of our enslavement to this technological world. The panoptic prison we inhabit (and I will not develop this point here)⁸ is not one of bounding cells, but one of constraining and variably available pathways and visibilities.

The way we understand this circumstance in a world in which 'mind' seems 'by nature' to occupy a realm separate from that of 'matter' can distort the way we see our necessary *place* in this world. The point I want to make here therefore and then build out in order to sketch a form of the city is that societies and cultures, supposedly under threat *from the outside* so to speak, are much more accurately seen as being constructed, at any point in historical time, *within* social relations, and that means within technologically enabled, enhanced and mediated relations. Societies

and cultures are the emergent and provisional suspensions out of a technological and technologically mediated fabric of relations, rather than technology being a disruptive addition to an essentially *social* world. Technologies make societies rather than societies making technologies.

Technologies of relation

Technologies that mediate from the subjective centre are all in some sense connective or communicative, and projectively and intentionally so. And when we think of communication and the integration of tools with humans, surely our most integrated communicative tool has to be that of language. Here I don't just mean that language is a tool and is communicative in that we use it for transferring data or information, I rather mean that it is constructive of meaningful organisational pattern, it is a tool of organisation and form. Language is a tool we use intentionally (within some onerous constraints of preformation and habituation) to shape the world around us; we use it to organise, communicate and coordinate our relations with others and to negotiate these with respect to the tasks we take on individually and collectively.

Public language coordinates and sustains the organisational patterns, trajectories and schedules of the business of everyday social life. It also enables us to coordinate and exploit individual and collective capacities in ways that reach out to new intellectual and behavioural horizons. As I have said, an important quality of technological integration is its invisibility; the writer becomes forgetful of his pen, the archer of his bow. The intimacy of the relations between thought, action and language, and the 'socially constructed' organisations language is capable of forming and sustaining, makes it difficult to determine where the user stops and the tool and its constructions begin. In fact language is one of those things whose influence and significance only becomes apparent to us when we try to imagine life without it, and find we cannot.

A cognitive scientist like Daniel Dennett⁹ can go so far as to propose that what we understand as consciousness itself has not to do with the 'hardware' of the brain, but with the way our minds are 're-programmed' by language. I want to avoid the software-hardware analogies because they may seduce us into taking the computational model as being *the* way of understanding the processes of mind. In fact, because he is caught up in the model of consciousness as computation, Dennett cannot help but see the mechanics of the very original idea he is proposing as being located in his computer – in the brain. The idea may be right but the location wrong. The brain may be a relay rather than a terminal point in the process, so why should we believe that it is all a matter of what happens in the head when it could just as plausibly, or more plausibly I would maintain, be about the way we organise – and the way we see or understand – the world outside the head. What we see is after all – it cannot help but be – the thing (as Merleau-Ponty would have it) 'for us', and language, combined also with other tools of seeing or understanding, is something that is capable of profoundly altering 'for us' the ways, and the things, we see. Indeed, we use language for this purpose all the time.

From this point it requires just a little imagination – and the bare beginnings of an acceptance of the complex interdependencies between the world of the mind and that of things – to begin to fathom just how our relations to the material world can be configured and reconfigured in language, even before we acknowledge the extent to which language is implicated in the straightforwardly material reconfiguration of the world. We may begin at this point to intuit just how the astonishing complexity of the potentials of the relational world may be actualised in multiple parallel ways as deceptively simple and solid relational forms. In other words mind may indeed be immanent everywhere in the world around us – and the possibility of changing our mind, individually or collectively, is forever there, just by making the leap of seeing things differently. I don't believe I am claiming here any more than Thomas Kuhn

for example in *The Structure of Scientific Revolutions*, or Foucault in *The Order of Things*.¹⁰

We could of course, just as profoundly be concretely ‘re-programming’ the material world around us by way of the organisations and institutions and networks we build into it. By this work of material and organisational alteration we could of course also be profoundly reconfiguring the shapes, scopes and breadths of our own consciousness. And drawing on Foucault again or on Simmel, the medieval townsman is different to the early twentieth century metropolitan.¹¹

But our communicative and relational worlds begin even before language. The anthropologists and philosophers remind us that location itself needs to be seen as a profoundly relational entity,¹² and if this is so, then just *being* somewhere involves a construction simultaneously in the imagination and in the material world. Once again we coordinate and organise and give form, individually and collectively, to location and situation; we make it intelligible and we make it collective, we make it part of a larger mind and reality – though not always by design, consciously knowing what we are doing – by way of a technology, the technology of the path. Again the invisibility of this technology is simply, I would argue, a factor of its integration in our subject-centred worlds – and again, in order to see it we have to imagine the world without it. Imagine for a moment what an impenetrable thicket we would inhabit if no human being had ever followed in the tracks of another.

It begins, when we point this out, to be apparent that almost no way exists in our world that hasn’t been laid down already as a pathway. We track always paths already trod – and yet, in exactly the same way as in language we are always capable of using well-worn pathways of speech to say something new, this ‘already-walked’ aspect of our world of positionality and movement and engagement in no way precludes creativity and originality in the way we do things.

The city, I am going to propose, is a product of path-making, and by means of path-making of the formed, intelligible, situated and enabling world we inhabit. Andy Clark sees language as a ‘socially constructed’ scaffold for the practices and patterns it organises and enables and makes intelligible.¹³ I would say that we need rather more scaffolding than he proposes in order to support and make available *situation* for social use. I have already proposed elsewhere, and we may perhaps add this to Dennett’s proposal – relocated as I suggested in the ‘mind’ of the urban landscape – that the ‘form’ of consciousness itself is intimately related to, even identical to, this form of our pathway-constituted landscape.¹⁴

Compared to the creative constructions of our lived and seen worlds manipulated through the tool of language, the construction of the intelligible configurations of our movements and locations and situations is going to be simplicity itself. Perhaps once we understand the very straightforward way we form *situation*, as a construction simultaneously imaginative and physical and on both counts immanent in the world and real, we can come back to the much more complex and arduous task of understanding how we shape our social worlds and the spaces of our everyday lives, and how we will continue shaping them into the future, *within the constraints* of concrete real-world situation. One part of the trick is just the realisation that the world – even the hard physical reality of the built environment out there – can be, as Bruno Latour says, ‘simultaneously real and constructed’. We need simply to acknowledge that we have a real world with which we are in constant and intimate contact – and that this world is the condition of our knowing anything at all. This world *itself* contains in its array of potentials the ‘mental’ maps or ‘cognitive’ schemas we require for thought and intention. We need to realise that the world constitutes and contains *already* the forms of our projections onto and into it, and that we will always ‘see’ and intend in this world in the exact form in which we act and move in it.

The technology of the path

As sentient beings we exist then not in our heads, but indeed in a mind distributed through the material, and immanent, materially social worlds within which we act. The human mind cannot be seen as being bound by the limits of our skins, and it is likely that we will find, once we learn to see it, that the mind of no other larger body, such as society or the city, is bound either by borders or limits as 'organ' or 'organism'. Our minds have never been thus restricted – and nor have those of any other living creatures. What marks us off from other creatures is in fact a matter of degree rather than kind; a difference in the power of extension, projection and diffusion (through technology), and in the power to creatively build on that extension. What we seem to have escaped in fact, and here other creatures (long-distance migrations notwithstanding) have been somewhat less successful than we have, is a 'labyrinth of the local' where all exchanges and all interactions are conducted purely at a level of face-to-face immediacy. We have learned to technologise and regularise, to systematise an unruly fabric of relations to the point that we live with less rather than more direct and face to face interaction than our cousins the baboons, and are in this sense less rather than more social than they are.¹⁵

Our existence in the world becomes diffused and extended into that world, not only through our actions but also through the habits, projections and intelligence which we *invest in* the world – share with the world, and with its other subjects and objects. One way we facilitate that extension and project ourselves outwards, is by way of the technology of the path. The pathway is one of those basic technologies – along with the word and the number – that affords us an extended and subject-centred reach into the world. Such technologies, once up and running in the institutions and organisational and spatial 'machines' which surround us, do much more than allow for the simple storage and transmission of ideas – they come to constitute relatively frozen *infrastructures* of networks, systematising life and activity, defining preferred and efficient and habitual pathways which 'discipline' contemporary patterns of relations, but which can then also be further built out. This building out can prompt a cascading evolution of our power to engage with the world. It can also perform in the course of that evolution, upheavals in the way we are and in the way we *do* in the world – affecting our very natures within the relational matrix that makes up the world we individually and collectively inhabit. It may at the same time, in absolutely concrete ways, transform that world itself – and not always in the exact form of our collective understanding of it.¹⁶

What we think of therefore as the autonomy of the subject, of place, of any entity or thing in fact, is overcome – and overcome through the mediation of our own constructions and projections onto and into the world. The functional entity, or 'organic' unit (or 'body') – whether this be the subject, or the group, or the neighbourhood, or the centre, and this probably applies in practical terms at all scales below the limit of the globe itself – is a structure whose power lies precisely in its capacity to gear its activities to collaborate with, to merge and to integrate with, external sources of order and intelligence at higher orders of scale.

We may simply find some of these external sources of order and intelligence, some will be created or manipulated into being through our actions and constructions (not always knowingly), and many others again will be accidental or systematic by-products of our actions and constructions, that we may then creatively absorb or appropriate into projective and extensive lives. The city may indeed be, at least in part, as much by-product as product, and as much an *effect* of our movements and communications, as a thing-like product in its own right like 'settlement' or 'home' or 'community'.

The city becomes an evolved and developed technology of the path, *producing a culture* of inhabitation in its own right at a level way beyond that of simple movement and connection – just as verbal and media culture may be seen as an evolved and developed technology of the word, producing at a level way beyond that of the simple exchange of information. We see it as part of our research agenda to develop an understanding of the city as this evolved and developed technology of the path and of movement.

Homes between horizons

The form of the city is therefore a repository, a ‘memory’, of habitual actions, our own habitual actions and others we can ascribe to larger and smaller (mainly larger) ‘bodies’. It is one with the processes which formed it and has evolved as an accumulation of habit. The form of the city is a form which began, I will argue, and as others like Jane Jacobs¹⁷ and Deleuze and Guattari¹⁸ have already intimated, when the first traveller traced a path across a plain that others followed. It is a form that is revealed when we grant that we, and other ‘bodies’ that inhabit this world, share our intelligence and our intentionality with the world around us.

The first property of the space I will sketch concerns the scalar resolution of the experience of place. This idea is easiest to understand when considered in relation to common notions of place like ‘home’ for example, where, depending on our point of view or, depending on *where* we are, these words can mean different things. ‘Home’ is a particular apartment when I am in my neighbourhood, it is the building or its surroundings when I am in another part of Amsterdam, and it is Amsterdam when I am in Paris or Hong Kong. ‘Home’ is in other words resolved at a different grain depending on the scale at which one is projecting towards it. Or as Edward Casey might have it; ‘Home’ is resolved between different horizons – and those horizons reflect the scales within which one is acting and thinking. The logic of all this slips so easily past us that we barely notice it – another one of those invisibilities that should warn us that we may be dealing with something very interesting indeed as far as the conditions of our experience of the world are concerned. This suggests in the first place that places are not entirely an external reality, they are not ‘objective’, sufficient and complete in and of themselves, but are also subjectively constructed and understood.

It suggests also that places are always seen in relation to a context, and in relation to a context of a rather particular, centred-in-the-place-itself sort. In fact, in the world of our experience, we understand the world not as locations in space but rather as networks of places.¹⁹ Edward Casey proposes that places are defined by the movements (and this should include mental as well as physical movements) we make between them. He calls the “area concatenated by peregrinations between the places it connects” a ‘region’.²⁰ The region can be seen then as the effective context – the network of places which contributes to the definition and meaning – of particular places in the above scheme. Places and the regions of which they form a part constitute an indissoluble whole and places reference one another at a scale related to the projection we are making towards that place. In this ‘ecological’ perspective, place, subject and context come together in a rather special and integral relationship with one another.

Places *gather* the world around them to one point. Their meaning is not given by culturally embedded schemas, as if culture was a layer we impose over them; rather their meaning is given by the way they particularise the world by virtue of their unique perspective on it.²¹ A place is the world seen from one point, and from one point of view, and at a practical level that world has an horizon – a breadth and scale which is appropriate to the *region* in which it is embedded and within which we are acting (or actively thinking). It is scaled to the range of the activity or movements or intentions of the moment.

The second property of the space concerns the *times*, rhythms and speeds – or the ‘vibrations’ which characterise times as particular – which operate in these differently scaled networks of places. While it could be argued that these networks of region and place, held between differently projected horizons, are defined thus far in a purely psychological space, as soon as we begin to act out and live these spaces, they begin to differentiate from each other and to differentiate *physical* space. They form themselves as separately *performed* place and region networks as well. Networks of places seen at a global-regional scale are of a different order and a different quality of movement experience (time experience) to networks of places seen at metropolitan-regional or neighbourhood-regional scales, and are maintained as such by the incommensurability of the respective times and rhythms which they produce. What we begin to see is a stratification of place-region networks into what I will refer to as ‘shells’, which while they may overlap with each other, are nonetheless distinguished from each other by the rhythms and the speeds (the ‘vibrations’) at which they operate. Even scales of movement and place-network which are rather close to each other and display a lot of overlap – like the movement at the local neighbourhood scale and that at the larger city scale in the traditional fabric of the historically formed European centre – are also clearly stratified. The functional and experiential differential between the shopping street and the residential street or backstreet is not simply an incidental or accidental matter of contrast and colour, but is a part of the ‘intelligent’ operating mechanics of this fabric type – a mechanics which confers on it its typical functionality and intelligibility.²²

So the third property of the space involves the systematisation of this network stratification in infrastructures and routines of movement and connection. At the simplest level, movement (and communications) grids or infrastructures are laid or become laid as a consequence of the tracteries of movement between the places that make up the region involved. The places constituted by a cluster of villages in a particular geographic region become a region by way of the paths and lanes that open up to facilitate movement between them. At a different level of systematisation by way of technical infrastructures, rails may be laid, stations built, schedules formulated, and a rail network established connecting a national or continental network of cities. Or airplanes, airports and so on are built to become one part of a system conveying flows of people, information, goods and finance to make, in Saskia Sassen’s account, a global region of global cities.²³ These network infrastructures tend to spread out – to distribute between the places that constitute their regions.

They tend also to a certain consistency of movement experience and speed, related to the scale of the region involved. They form, in fact, stratified webs or grids of horizontal connection which I propose are the basic elements of environmental and urban form. They form also, and I will develop this point in future publications, in the *interface* between shells and the grids which concretise these shells, many of the effects we understand as the city. The city becomes therefore in this account, not an centre-object but a centrality-effect *produced* by shells and the interaction between them.

There is therefore a fourth element to the argument which is developed further elsewhere,²⁴ which is about the production, in place, of centre and of place. Horizontal grids of infrastructure concretise place-region shells, making them performable, and facilitating the appearance of shell times, ‘vibrations’ and scales in local place. Particular located conditions are then the product of the ‘machine’ just outlined; conditions which themselves support very directly the appearance of particular types and concentrations of activity and the street-scenes that go with these activities. Place is produced as a spontaneous *event* associated with a *conrescence* of activity and shops or other facilities. This production is out of the mobile populations of people, goods, money and information within movement and

communications matrices – which are themselves concrete and *built*; systematising and constraining what they at the same time produce and enable.

The productive capacity of the grid lies however not just in the way it shapes the communications it enables; it derives also from the fact that movements are not equivalent to abstract linkages of points, but are bound to pathways and produce effects on those pathways. Indeed, in traditional urban fabric, much of the interface *between* shells referred to earlier takes place *on* pathways which are turned into points of high social and economic productivity by virtue of that interface. These places become meaningful by virtue of the processes which form them, and in our traditional centres these conditions have delivered typical urban – or better urban-social – forms, which have inserted themselves into everyday social life and are supportive of those lives. These forms become appropriated into urban social space and urban social life but are in the first instance a product of the space of an *urban* machine. Our urban practice today has not thus far been able to add very effectively or creatively to this repertoire of urban produced and socially supportive forms which is one of the reasons the traditional ones still provide our best public places.

Thus is the built landscape constructed as a psychologically and functionally effective and integrating space – around a subject-centred technology of the path whose product is a lived culture of movement, connection, encounter and situation. Thus is a form of the environment integral with our own dispositions and inclinations, and by which we are integrated with the world. Thus is ‘mind’ and ‘intelligence’ diffused through the environment, and thus are we integrated physically and psychologically with this environment, by way of pathways to the differently scaled horizons which refer to the differently scaled and meaningful places and regions of our lives.

Exploring intelligent space

J.J. Gibson was an environmental psychologist and ecological thinker who proposed that our relationship with the world is not that of the reconstruction of sense data in terms of pre-defined mental schemas, into a mental picture. We are not static receivers of perceptions of an external environment which we then work into internalised representations in order to act in the world. Rather we act in the world in order to perceive it, and perception is an active process that takes place between and with full participation of both subject and world. We deal with the world, Gibson proposed, in an exploratory way, moving, adjusting to the world, orienting and reorienting to its orders, in order to pick up the information we need for the task at hand.²⁵

The orientation of our engagement with the world is therefore quite unlike that of orientation on a map, where we engage with representations of the world and look at the world as if from the outside and from above. In experience, we look at the world from the particular perspective we happen to have on it, and the orientation of our perceptual processes are active, goal-directed and outward from the point at which we stand – a sort of personal ‘funnel-vision’ of the world.

Places have a logic which is exactly equivalent²⁶ to this diagram of us and world, just in the reverse direction; where we project onto the world, places gather the world to themselves. I have already suggested that places and the regions that places depend on are capable of being stacked over and nested within one another at different scale levels, and that places become particular and known and meaningful in terms of the different regions and scales within which they are defined. I would like to combine this idea of a different kind of ‘mental map’ (better described as a *space*) of the world produced from (and particular to) a situated body-centred perspective – engaged in time and by exploration rather than as a seen-from-above or seen-from-outside representation – with the idea of nested scaled regions, to address a rather simple

question regarding the spatial logic of our surroundings and how they are made. It is proposed that much of the layered quality of urban place, and the richness of the meaning it conveys in its best examples, depends on the kind of logic being outlined here – where it becomes possible to switch smoothly in the process both of one's physical and mental peregrinations through it, from places and their regions that are defined at a more local scale, to places and their regions that are defined as being part of a more extensive urban context (while connective space simultaneously delivers its contributions to place in the opposite direction from different regions). For the urban inhabitant it means that the region he or she inhabits may be very local and then, by just a shift of the scale of his or her projected movement or intended action, related to a much wider urban context. The same logic working in the other direction (along concrete and performed pathways) is the space by which the local becomes urban, metropolitan and global.

There would appear to be a logical proviso to all this however: If this simultaneous 'emplaced-psychological' inhabitation of differently scaled regions is going to deliver an intelligible bringing together of the local and larger scales in the experience of the urban inhabitant, it needs to be possible to perform the switch between the scales concerned while in that exploratory subject-centred mode of spatial 'probing' and engagement. One needs to be able to shift as easily (or with only the extra energy of the footwork involved) between scales in the physical networks as one does in mental space. In order for this to be a reality therefore, the urban fabric itself needs to be organised by a logic of space which *already* constitutes this nested order and which accommodates the probing and the seeking for the next level of expansion of the explorer. It needs to be organised in such a way that the explorer can find his or her pathways to the urban, to the metropolitan, and ultimately to the global – and to the intermediate places where these things are brought to him or her in the urban surface, because of course one doesn't need to go all the way to the global in person these days in order to encounter it.

The leap to a higher scaled network and grid occurs in traditional urban fabric in structures pointed to by the difference between the scales and the character of the backstreet and that of the high-street in London, or the boulevard in Paris, for example. The fabric becomes 'explorable' to the extent that the network of the boulevard and the scale it delivers is 'findable' from the network of the backstreets, and that implies something about the directness and permeability of the overlap between the physical grid of the boulevard and that of the backstreets. Of course today not everyone finds their way out of the 'labyrinth of the local' by way of traditional urban fabric. Nevertheless we can begin to see the principles of such a manoeuvre²⁷ and, as importantly, the requirements implied for urban public places in terms of intelligibility, legibility and communality (of 'mind' and of purposeful action), by understanding the explorability of traditional fabric. One can begin to deduce the principles of exploratory openness and the way fabric delivers a capacity for creative use and surprise by this study of traditional fabric.

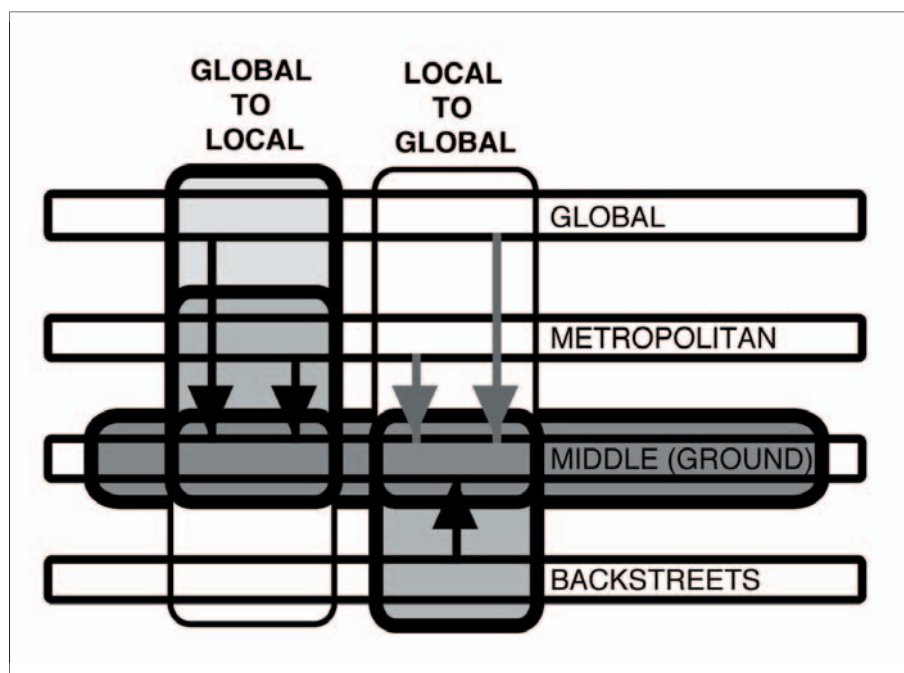
Gathering and ground

In fact none of us these days need, like Marco Polo, to go all the way to the global in order to find it. As another of those at first sight paradoxical anomalies of the phenomenon of the global and of the systematising machine of our global world, we find that the effective factors today in the construction of global places have shifted back to the local. In our by now thoroughly and ubiquitously globalised world, where pathways to the global have been cut to every local place, it is rather the special properties of local places – given by a 'thickness' of overlap generated by multiple grids performing multiple shells, in multiple modes, 'vibrations' and scales, and a 'criticality' this overlap confers on place – that determines and delivers an open *urban* character and vitality and viability from Tokyo to Nairobi or from Amsterdam

to Zwolle. Further, it seems that in our thoroughly globalised and metropolitanised world, effective places today everywhere just *are* global, they *are* metropolitan, and insofar as 'medieval' places or 'small town' places exist anymore, they exist as forced and staged constructions built on dubious exclusionary presuppositions.

The global and the metropolitan are everywhere today precisely because they are not 'over there' in a horizontal relationship of distance to us. The vertically stacked shells of the global and the metropolitan set up grids that penetrate and traverse every viable urban place, and the 'branch-lines'²⁸ of the global to the local have already been constructed in these grids. We exist in a *vertical* relationship to all these higher scales – they are stacked up over us and the centralities they generate act simultaneously on all local places. Today then, the qualities and mechanics of the points of meeting of the global, metropolitan and other higher scales, with the local, are the significant factors. We could say better that the issue for today is *how the local is constructed* as a bridge between the global and what we still call the local as if it were (which it is not) the exact counterpoint and opposite of what we call the global.

I offer a diagram of the way this bridge is constructed, within the scaled shells I have already proposed, as an ecology of relations and movements *vertically* between these shells. A 'horizontal mapping' of these relations exists simultaneously with the 'vertical mapping': what we need to do is identify and distinguish in plan the grids constructed in or appropriated to the various shells and their scales – we need to differentiate the boulevard grid from the backstreet grid in Paris for example – and then work out how the local condition of place is constructed in the overlap between these grids. At the same time the 'branch-lines to the local' are delivering the global and the metropolitan (that delivery of Coca-Cola driving past on the freeway, the copy of the franchise contract in the post from Seoul, the lawyer on the high-speed train on her way to see a client, the school-teacher commuting by car to give his class). We get a very concrete construction in the local of shops and offices offering goods and services depending on and connected to the higher scales, supported in a place which has depth and particular character thanks to its being caught within an even finer-grained parochial.



One may legitimately object that most people do not live in such a construction any more, underpinning with a local-particular character a bridge, embedded in a fabric of grids, between that parochial and the higher scales. What is true at the same time though is that a considerable number of people travel to these kinds of places or to a more metropolitan-scaled version of the same (the grey arrows in the diagram) to exploit and enjoy the qualities of these places *as places*. What's more, in doing this, these commuters and metropolitan and global nomads of a variety of sorts, add themselves to the diverse 'critical mass' layered into that place, and contribute to the metropolitanisation and globalisation of that place. The contribution *of the place itself* to urban character and function, and the principles of its construction, are simply too little understood or too crudely misunderstood and will be outlined in a further paper.

I don't however wish this to become a plea for 'urban traditionalism': what I want to suggest is simply that there exists an ecology, working simultaneously in psychological and physical space that structures and situates our being in the world. Where we feel that that existence and situation is illegible and insubstantial, we will probably find, I will propose, the reasons in the framework I have outlined here. This framework – and the considerable amount of detailed elaboration it still needs – sets the parameters for our continued situated existence in this world, an existence which, when we understand its principles, can take on and assimilate any amount of novelty, design and invention.

Conclusion

Gregory Bateson, drawing his 'organic' and 'ecological' view of the world from philosophers such as Whitehead and Bergson, shared with them a great insight, one that can open a wide way through the dilemmas we face with respect to technological urban cultures and the way these are diffused within our urban territory. He proposed that we engage with and act in a world already formed, physically and psychologically, to ourselves as part of that world. He proposed attempting to understand this world as being continuous, and as continuous with us. In a world whose reality we understand as consisting of bounded domains, we think of invasion, of violation, of rupture, and create a space of defence and partition and fragmentation. I have proposed here a continuous distributed form of the city capable of differentiating without borders; a form that can map over the urban space of our lived experience, and embody (rather than represent) that experience.

The idea that our cognitive structures are diffused through our surroundings is not a new one; what is different in what is proposed here is that we have actively articulated our world through a developed subject-centred technology of the path, somewhat analogous in its workings (and invisibility as a positioning, situating, meaning imbuing, technology) to the developed technology of the word (or language). The creative and vital of the world may be centred everywhere, and not just in us; it is not only non-humans with whom we are co-involved in the exercise of urban life, there is also the extra-human of the human population and I would argue of the city itself. And this object-agency doesn't just work at the level of distributing life and activity through the urban surface – it also *acts* on us. Through us, it is also our acting in the world – a distributed being and knowing, a *psycho-geography*.

- 1 Gregory Bateson (2002), *Mind and Nature*, Hampton Press, Cresskill NJ. p. 178, p. 102
- 2 Gregory Bateson (2000), *Steps to an Ecology of Mind*, University of Chicago Press, Chicago, pp. 461-2
- 3 The idea can perhaps be enriched and developed in reference to the notion of 'subjective vitalism' discussed by C.H. Waddington in chapter 1 of *The Nature of Life* (1961, George Allen & Unwin, London), and 'mental' and 'physical' 'determinisms' could perhaps be seen as being tied to each other through the 'biological' idea of intuition developed by Henri Bergson in *Creative Evolution* (1998, trans. Arthur Mitchell, Dover Publications, New York). What we get after this is not far from in feeling, and will probably serve as well as, Merleau-Ponty's 'perception as form' for our purposes of connecting the phenomenal and the physical – the 'creatura' with the 'pleroma' in Bateson's terms – in developing an urban morphogenesis.
- 4 Bateson (2000) p. 473
- 5 Tim Ingold (2000) *The Perception of the Environment*, Routledge, London, ch. 16
- 6 Bruno Latour (1993), *We Have Never Been Modern*, trans. Catherine Porter, Harvard University Press, Cambridge Mass.
- 7 Andy Clark (2003), *Natural-Born Cyborgs*, Oxford University Press, Oxford.
- 8 Stephen Read (2005), "By way of an introduction: evolution, involution, hybridity, space", in: Read and Camilo Pinilla (eds.) *Visualising the Invisible*, Techne Press, Amsterdam.
- 9 Daniel Dennett (1991), *Consciousness Explained*, Penguin, London.
- 10 Thomas Kuhn (1970), *The Structure of Scientific Revolutions*, University of Chicago Press, Chicago; Michel Foucault (2002), *The Order of Things*, Routledge, London.
- 11 Michel Foucault (1991), *Discipline and Punish* (trans. Alan Sheridan), Penguin Books, London; Georg Simmel (1997) "The metropolitan and mental life" in: Neil Leach (ed.) *Rethinking Architecture*, Routledge, London.
- 12 See: Edward Casey (1996), 'How to get from space to place in a fairly short stretch of time', in: Feld S. & K.H. Basso (eds.), *Senses of Place*, School of American Research Press, Santa Fe; Also: Ingold (2000)
- 13 Andy Clark (1997), *Being There*, MIT Press, Cambridge Mass.
- 14 Stephen Read (2005), "Questions of Form", paper presented at the 5th Space Syntax Symposium, Delft University of Technology, Delft.
- 15 Shirley Strum & Bruno Latour (1987), "The meanings of social: From baboons to humans", *Information sur les Sciences Sociales/Social Science Information*, 26, 783-802.
- 16 Gerhard Bruyns & Stephen Read (2005), "The Urban Machine", in: in: Read and Camilo Pinilla (eds.) *Visualising the Invisible*, Techne Press, Amsterdam.
- 17 Jane Jacobs (1972), *The Economy of Cities*, Pelican, London.
- 18 Gilles Deleuze & Felix Guattari (1994), *What is Philosophy* (trans. Graham Burchell, Hugh Tomlinson), Verso, London.
- 19 Casey (1996)
- 20 See: Casey (1996), p. 24.
- 21 See: Ingold (2000), ch. 9.
- 22 See: Stephen Read (2005 – forthcoming), *Flat City*, Techne Press, Amsterdam.
- 23 Saskia Sassen (2001), *The Global City*, Princeton University Press, Princeton NJ.
- 24 See for example: Stephen Read (2005 – forthcoming) "The Urban Image – Becoming Visible" in: Deborah Hauptmann (ed.) *The Body in Architecture*, 010 Publishers, Rotterdam. Also: Stephen Read (2005 – forthcoming), *Flat City*, Techne Press, Amsterdam.
- 25 J.J. Gibson (1979), *The Ecological Approach to Visual Perception*, Houghton Mifflin, Boston.

- 26 This equivalence is the basis of the power of space to reintegrate worlds that have been disintegrated by our categorising activities back into hybrid (in terms of our categories) wholes – both ‘for themselves’ and ‘for us’ according to Maurice Merleau-Ponty (1983, *The Structure of Behaviour*, Duquesne University Press, Pittsburgh Penn.). Note the idea of ‘concrete universals’ (as opposed to abstract or categorical universals) as described by Casey (1996).
- 27 Involving the process of ‘exploration’, which is one of ‘translation’ between a psychological shifting between shells, and a physical ambulatory one.
- 28 Latour (1993)