

Towards a 'Space of Action'

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Abstract

Spatial 'gradients' have been discussed before in space syntax. These gradients have been proposed to be significant for the actions, experience and modes of inhabitation of people. Robinson has developed a 'territorial gradient' of increasing privacy from the neighbourhood and street to the most intimate spaces of the private house. Read has proposed a measure of the 'integration gradient' from the grid of neighbourhood streets to the grid of streets that connects urban neighbourhoods through the fabric of the city. Both these concepts set up a space that notionally orients people towards (or away from) zones or spaces of increasing publicness. The concept of 'orientation' offers a way into thinking of these spaces in terms of an established theory of action. This paper will explore and develop these ideas in relation to neighbourhood space and the forms and 'forms of life' of neighbourhoods. It will prepare the ground for a comparison 10 neighbourhoods in Amsterdam for the ways gradients are set up in space and for the way people act in and use the public space of these neighbourhoods in relation to these gradients. The work is intended to clarify the terms of a 'space of action' of neighbourhoods (as opposed to 'economic space' or 'social space' understood as reflections of economic or social 'structure') and to allow us to begin to comment on the forms of neighbourhoods in terms of the ways they enable or empower people in everyday ways. A further aim will be to propose a way of looking at 'place-value' and its variation across city fabrics and how this may have been constructed in order to begin to understand the reasons certain areas persistently maintain value while others equally persistently don't.

1. Aims and method

This paper is about space and about the complex integration of our urban world achieved spatially – which is to say relationally and dynamically. Many urban thinkers in modernity have thought about our cities as problems of time and the problem of urban integration one of an integration in time. According to Fishman, speaking of Los Angeles, “freeways were truly to unite the whole region into one decentralized city, permitting rapid travel in any direction and between any two spots on the map. Once these high speed corridors were in place, even the vast distances of the Los Angeles basin could be covered in minutes.” Space was static and simply containing; time added the dimension needed to achieve the integration required to make modern cities functional. Unfortunately, this took our eyes off space and we continued, while paying lip-service to the multiplicities of space (Soja 2000) to act as if the map was in fact the territory and that the planar Cartesian surface (and its distances, 'overcome' by speed) was the true and real space of the city. Adding time to an inadequate space does not help us understand the characteristic processes of cities, whose space is quite literally one of shifts and breaks, emergent boundaries and unexpected slippages (Serres & Latour 1995) – and nothing like the flat surface of the map.

I will propose that space orients people towards (or away from) zones or spaces of increasing publicness, and the concept of 'orientation' offers a way into thinking spaces in terms of action. This paper will explore and develop these ideas in relation to neighbourhood space and the forms

and 'forms of life' of neighbourhoods. It will prepare the ground for a comparison a number of neighbourhoods in Amsterdam for the ways gradients are set up in space and for the way people act in and use the public space of these neighbourhoods. A further aim will be to propose a way of looking at 'place-value' and its variation across city fabrics and how this may have been constructed in order to begin to understand the reasons certain areas persistently maintain social and economic value while others equally persistently don't.

We know all this from our experience: our cities are amenable and resistant, formed to and against the perceptions and practices of creatures of finite perspective. But the inhabiting creatures are humans and humans work ceaselessly on their environment over historical time creating, I have argued, 'objective' spaces of inhabitation as they go along (Read 2009b). And that work endures, and conditions what we do in cities and how we do things long after the work has been done. Work creates what Leroi-Gourhan has described as 'social memory', outside the body and in the man-made environment. We live in a world of things and material processes and these constitute a material culture which is our capacity to inherit experience through generations via technics and things (Stiegler). In particular humans have developed technical ruses and strategies over time to break out of the confining limits of the local. These are all technological but certainly not all high-tech: while all organism-environment couples are mutually forming, humans have formed their environments in particularly directed and technical ways to support non-local processes like movement and communication, trade and political administration (Read 2009). We, like other creatures, inhabit a world rather than occupying it, staying close to it and responding to what it affords by constructing over time places that enable more than disable our being. I will be arguing that there is no mystery to this as long as we remember that in living in place over time we construct the collective 'objectivities' and affordances that are the enabling (and technical) spaces of our cities.

I will be taking a particular view on technology here that sees it as a fundamental condition of human existence (Read 2008). Technology is not simply means to ends or ways of making ends more easily or efficiently achievable; it constitutes the ways we engage the world in any way further than the most intimate and proximate at both 'cognitive' and practical levels. We live in a world of technical things and processes and these constitute the process of remembering and anticipating and the possibility of acting in ways which would not be possible if we had only our biological memory to draw on. In this view culture is our capacity to inherit experience through generations by way of the things around us that endure (Stiegler 1998).

2. Spaces of reality

A target of this paper is the explicit or implicit reading of urban space as Cartesian or cartographic. In fact I will propose that there are two issues here concerning space – and two spaces which are confused by the fact of our having to represent them to read them. The distinction between the spaces may turn out to be elementary, but it is a distinction that remains apparently hard to see, at least until it is pointed out. The first issue concerns reading and the perspective of the reader or observer. Geography and cartography are topics tied together by a long history and by an overarching presupposition. This presupposition is that we can command the world and understand it objectively from a viewpoint directly above. Marking the world down on paper makes it ours and available to our reading. Unfortunately it also hides the really interesting spaces of the city. There is a subtext to all this which has to do with notions of objectivity and subjectivity, where 'objectivity' is supposed by definition to involve a viewpoint outside of the action and the spaces of that action, while a 'soft' 'subjective' error-prone viewpoint is immersed in the melee. The cartographic space from above is understood as being not only objective but the ultimate real space. It becomes in fact the surface to which we have to reference things if we want to understand them objectively. There is one big problem with this – there is little to reference anything to in cartographic space apart from the coordinate system the space itself establishes. The representation starts calling the shots and the represented has no power any longer to define itself. What we miss in Cartesian space is any inter-indexicality – how the things we are looking at are intrinsically related to each other – that works off the things being looked at rather than the extrinsically defined space of the representation. The spatial objectivity or reality of things is in a

sense removed from the things themselves and the 'cognitive' has no alternative than to creep into the 'subjective' because there is nothing for it to attach itself to in the 'objective'. In a Cartesian frame the only real handle we have on things any more is distance and distance becomes universalized so that it strangely denies the reality and objective immediacy of our direct actions and intentions that leap over distance.

Distance determines, because nothing else can be found to do the job. On the other hand if we begin to take seriously the idea that the things we deal with are real already and don't require a particular kind of representation to become real (see Hacking 1983) there comes a dizzy moment when the 'observer' and the 'agent' seem to coincide, merge into the world of action and become coincident with 'structure' – structure-agency becomes a complex and the autonomous agent disappears. These metaphysical dilemmas are important because they have to do with how we understand agency in the world. My point is that getting into the world, giving up some of the 'autonomy' of the agent, and finding agency already in the world – distributing 'intelligence' and agency out into the world – also allows us to come to practical and interesting ideas about the roles of cities as spaces of doing. This agency is a factor of something I have called elsewhere 'technicity': a technical instrumental relationality we strategically build into the world in order to enable action (Read 2008).

3. 'Subjective' spaces of action

Jakob von Uexküll proposed a different space and a different order of priority in his ecological take on the world. For Uexküll all creatures inhabit different environments [Umwelten] even though they may be in the same place. This is because each creature has different capacities and competences and different interests in what its surroundings afford. In these spaces of inhabitation, things are indexed to active points of view and real-life perspectives on the world. In a strange twist the second space I referred to above turns out to be apparently rather objective. This is a space which puts indexicality first and asks as a first question: what is related to what? There is nothing 'soft' or internally 'mental' about any of this: it is about the oriented and focused relation of the subject to the object or objects of his, her or its attention. Uexküll's 'subjective' spaces become manifolds of things related to viewpoints in quite objective spaces (that Heidegger calls 'regions') of action – also the 'places' of our direct practical experience. Uexküll reverses the traditional Cartesian order of priority of the subjective and objective – subjective spaces, looking out on the world and seeing what one can from that finite perspective, come first. Relationality in Uexküll is not simply the relations between things, they are the relations subjects-to-things: they are intentions, and intentionality is not just towards things, it is also with things¹ in such a way that the things in a creature's Umwelt begin to co-constitute each other for the intentional subject (Arisaka 1996). They begin in fact to make sense not autonomously as things that can be defined apart from other things, but contextually in relation to other things. Relationality turns out to be not about things in any simple way, but about sets of relations (in settings) that themselves define the things and their particular functionality.

If we listen to Goffman even the subjects themselves are different in different settings. For Goffman, there is a 'macro' or background order extra to the 'micro' interactions in the spaces we inhabit. This background order includes the physical settings in which interaction takes place and the roles we adopt there. These settings are not determining of interactions, nor are they even produced or reproduced by them; however they do contextualize them so that particular practices, standards and patterns of interaction or behaviour seem appropriate or even required within them. They set the context for regular, repeated and predictable action and communication. Generic settings help to define who we are going to be in any situation, so we do things in regular and repeatable ways – also in ways we can collectively understand and talk about. The interactional order is distinct from the order of the setting but contextualized by it in ways that remain tacit and background, so that while there is clearly some connection between the two, this connection may be loose. There can, according to Goffman, be a considerable degree of autonomy of individuals in the interactional order but relations are built in meaningful settings which have themselves large normativities built into them. These establish collective framings for messages sent and received. The primary resource for communicability turns out to be not some abstract larger order shared by

all but the array in the local of objects and 'equipment' people share in everyday practices. This is the 'world between men' in a logic of 'appearance' proposed by Hannah Arendt – establishing common ground in a struggle to make sense in a real world where we live between people and things.

The settings are themselves also, I have argued, frames for action, placing within reach the technical means ('equipment' in Heidegger's terms) to perform actions repeatably and reliably in place (Read 2009a). Action is facilitated by the placement of appropriate 'equipment' in the local setting. Today's European city is more a city of neighbourhoods than a workplace, more a 'division of services' than a 'division of labour' – and we find shops, administrative and public facilities, etc. distributed in the typical local neighbourhood environment. It is also in a very direct sense this 'equipment' and the houses that line the streets that define the context of 'neighbourhood' as a setting – as a 'region' and a 'place' – in the first place. These are all set in a relation to one another that makes them available in movement. As the equipment in Heidegger's example of a carpenter's workbench is purposefully arranged in a 'region' to be 'to-hand' in action, so the 'equipment' in a neighbourhood is arranged in a walkable 'region' to be 'to-hand' in movement. The prepared 'region' for the carpenter's working, and to keep his equipment in place, is the bench itself with prepared placements for his tools. In the case of the neighbourhood, it is the grid of streets that keeps all flexibly but reliably 'to-hand'. There is no prescribed order to the use of this 'equipment' but there is an order to the flexible arrangement that is shared and communicable and somewhat generic – communicable in terms like 'neighbourhood', 'high street' or 'back street' or 'neighbourhood centre' even to people who do not know the specific neighbourhood. The defining spatial order of the neighbourhood is in other words a relational (as opposed to an extensive or Cartesian) region of functionally significant things.

One of the questions is: do we need more than this to explain action at a distance? How might action at a distance be already part of and facilitated by the local environment? The answer turns out to be quite straightforward as I will explain, starting with ideas of orientation, gradients and scale, but leaves us with a larger question still to answer: if we can act at a distance in regular and repeatable ways in virtually all neighbourhoods, why do some neighbourhoods still have more 'value' as places of action than others? The possible answer I will propose concerns the variety of actions and 'delegated actions' possible from any particular place and the different scales those involve.

4. Structure in space syntax: gradients of centrality

Structure in space syntax is produced by calculating simple topological relations between the linear elements of the 'axial map'. These elements string together to represent the movement networks in urban fabric, the elements being distributed such that the least number of elements possible give a full coverage and continuity of the movement networks. Structure in space syntax is an indication that some kind of order exists in the city, arguably pointing towards a distribution of 'infrastructural power' (Graham 2000) or of 'cognitive power', or even both at the same time. But the instrument is not the thing: the physical city as a knot of pathways or as a matrix of places is not made up of axial lines, it is made up of engineered systems for movement, laid down, and laid over one another, over time. I am proposing that this structure may not have much to do with spatial or infrastructural or cognitive 'laws', rather with something attained over time in quite straightforward and even deliberate interventions, all products of their times, that have over time made the city – and kept it functional and up and running as a practical necessity.

If we look at axial maps, particularly of European cities, some of the axial elements are longer than others because they cover relatively straighter and more continuous road sections, and it is a feature of at least this sort of axial map that long elements tend to join up into a coarser grained grid overlaying the total grid of the fabric. This coarser grained grid has been called the supergrid. When we look at this supergrid in the real world we find it represents a network that carries a very significantly higher volume of traffic than non-supergrid grids. It also carries most if not all the public transport. I have argued elsewhere that what we are looking at here is not a matter of accident or chance but a deliberate construction intended to integrate an urban fabric spreading

outwards in the industrial era, and spreading further under the regime of the welfare state (Read 2009).

The supergrid ends up as a clear recognisable structure in the fabric of European centres, carrying the tram and bus networks. It carries also virtually all traffic at a range higher than the scale of the neighbourhood. It was the way integration was maintained in the expanding city and joins up neighbourhoods with a clear and specialized infrastructure designed and constructed for this purpose.



Figure 1

Axial map of Amsterdam showing supergrid lines in red

The result of the laying of the supergrid over the grid of more local streets is a characteristic structure working simultaneously at neighbourhood and city scales. I have argued that central urban fabric was constructed to the normative scales of neighbourhood and city, and that this simple two-level structure is the real origin of the structure we find in the space syntax analysis (Read 2009b). Again, I don't believe there is anything accidental about the two scales represented here though their origins may be deeper in our stocks of background presuppositions than many other planning ideas: 'city' and 'neighbourhood' are scalar norms that condition all of our thinking about cities, and the movement infrastructures serving the central city reflect the same scales. They also become gradually more systematised and specialised over time in processes linked to standardisation in planning practice. When said in this way this sounds almost trivial; it is only when we try to understand cities separately from the particular norms, times and practices in which they have been constructed – in terms of a universalized space of distances for example – that they start to become complicated.

We can begin to see some of the details of this central fabric structure when we look at it reflected in the scattergram of integration radius 3 against integration radius n for a relatively centrally located neighbourhood in Amsterdam. The regression line of the neighbourhood is characteristically steeper than that of the city as a whole – which is to be expected: the neighbourhood should show variation in 'local' (radius 3) integration while 'global' (radius n) integration will vary much less because the axial lines of the neighbourhood are closely clustered globally.

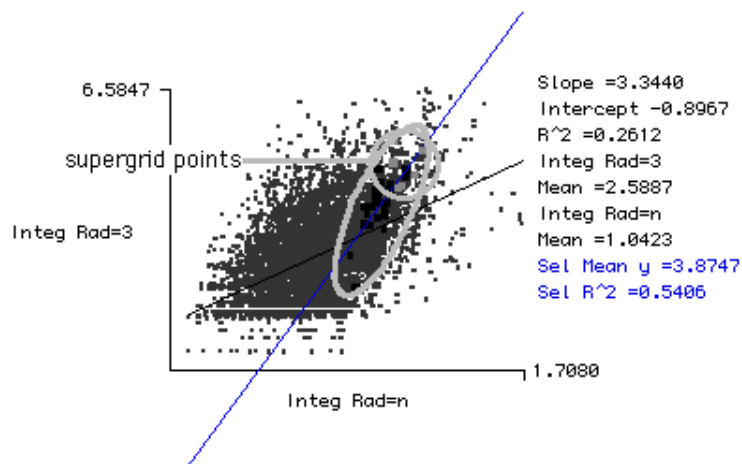


Figure 2

The 'intelligibility' scattergram of the Pijp inner-city neighbourhood in Amsterdam

What is it that is being integrated at these two different scales and what structure are we talking about exactly? If we understand this scattergram as representing 'intelligibility' – i.e. that the city is simply a singular knot of physical pathways to be negotiated by intelligent 'reading' of the structure from the local – we miss the full significance of the structure of the supergrid. The scattergram reflects each neighbourhood as a steep gradient of 'local' integration measures (on the y axis) clustered around a steep regression line, while individual neighbourhoods would show up as (roughly) parallel regression lines from the most central on the right side of the x axis to the most peripheral on the left. Supergrid lines passing through these neighbourhoods always show up as the top few points in the neighbourhood clusters.



Figure 3

left: Street-scene on the supergrid, the Pijp, Amsterdam; right: Street-scene in the local grid

In fact typical neighbourhoods in the central urban fabric are centred on segments of the supergrid. These segments show up as the most public and publicly visible streets in neighbourhoods with most of the shops and other facilities of the neighbourhood lining them. The rest of the neighbourhood is set on either side of this 'high street', typically strongly oriented both

functionally and perceptually towards it. There is typically a clear gradient of public space use intensity from the highly used supergrid high street to the most remote and 'invisible' back street. At the same time, neighbourhoods in the more central parts of the central fabric have in general better used public space through the neighbourhood as a whole than more peripheral ones (Read 1999). They tend to also have more publicly visible high streets in the context of the city as a whole with higher shop-floor rentals. There is a gradient of public space use intensity from central to more peripheral neighbourhoods at the same time as there is a gradient of value in the same direction. This distinction in 'value' shows up in multiple ways; in rentals and land value, in commercial and public investment, in the distributions of economic classes and minorities, in the general visibility of places in public life and the (positive) attention they are accorded in the media, in the attention accorded to their public spaces and public space quality, etc.

We end up with two gradients at two different scales reflecting the patterns we see in the scattergram above and we begin also to see how these gradients are articulated around the neighbourhood high street – 'downwards' into the neighbourhood at neighbourhood scale, and 'upwards' towards the centre at city scale. The high street of a particular neighbourhood locates itself with a particular centrality relative to other high streets in Amsterdam while it at the same time locates itself as the centre of the neighbourhood.

5. What does all this mean for neighbourhoods and the ways they afford action?

One of the defining aspects of the order of the carpenter's bench is the fact it has a front and a back: there is an orientation to the bench that orients the carpenter and sets him in an oriented relation to his equipment. The brief overview of a typical Amsterdam neighbourhood shows it to be oriented on its high street, where also we would expect to find most of the facilities belonging to the neighbourhood including its local shops. The first issue we want to investigate is action: how exactly do we act in urban space? The way we conceive this is through the notion of technical settings that hold things and their places 'to-hand' and in place for us and aligned to our movements. Neighbourhood things exist in neighbourhood 'regions', with other complementary things and places against which and in the context of which they acquire their particular identities and meanings. One of the interesting things about these regions is that there may be many of them, all occupying the same basic place in the manner of Umwelten: there may be a set of things and places that are meaningful to a native Dutch population and another set of things and places meaningful to a Turkish or Surinamese population – and there may be many more of course all overlapped over one another, occupying the same territory and creating a diverse street life. This is all pretty local: what about action at a slightly greater distance? I will illustrate this through the technical setting of the tram network. Acting through the tram network involves delegating that action to a system that has evolved and been systematised over time to support an 'image' of the city that has itself been an evolution. The tram system is planned and constructed to facilitate efficient transportation. It is one that travellers 'plug into' to get where they want to go, but it is also planned and constructed against the background of the image Amsterdammers (and the planners are for the most part also Amsterdammers) have of Amsterdam. It supports this image and reconstructs it on an everyday basis as people use it. The tram network 'mediates' Amsterdam for its inhabitants, and it is through the tram network and others that people learn and know the city. The system doesn't simply configure itself around already existing places and their names; it defines places in the system. System logic maps over the city in a way that makes it, for the purpose for which it was designed, as good as if it was the city itself. Acting at a distance is a matter of having a tram-stop 'to-hand' along with a map of the system – further than that all the work and 'intelligence' are in the system.

The gradient in this tram network is part of that background image of a city integrated towards its centre and 'bleeding' out to its edge. Trams cluster in a knot around the centre and then trail out towards the edges. This centre and edge construction is supported not only by an image therefore but by the way the infrastructure realizes this image by operationalising its own working diagram, concentrating more travelling people in the central parts and fewer in the edges. This is not just a 'social construction', this really does things.



Figure 5
The tram network of Amsterdam

Just as much a technical system though is the supergrid, constructed to the standards of its own time and worked on ceaselessly (certainly in the Netherlands) ever since. Although the system appears less constrained and regimented than the tram system, it is very systematic in the way it links up places of complementary scale and status in the central fabric – integrating and realizing the whole while it reveals neighbourhoods as places by linking them up in a network. It is the supergrid that makes the city intelligible by creating direct routes to all its significant parts. Setting out on the supergrid one is between neighbourhoods rather than between places in the neighbourhood – in a setting of neighbourhoods rather than in one of places in a neighbourhood. The second issue is the one of ‘place-value’ and how this varies over the surface of the city. The image of Amsterdam from the point of view of the tram-travelling inhabitant is not the only image available. Different images can be revealed by the way they are ‘mediated’. Amsterdam itself is not one thing and we see this when we see that tourist Amsterdam is ‘mediated’ by the airways of the world and by the shuttle of trains, busses and taxis that link Schiphol to Central Station and the historical centre. It is through this ‘mediation’ – and that if other media – that the image of Amsterdam as a tourist centre is supported. The shape of tourist Amsterdam, and Amsterdam of the weekend out of town shopper, is different to the shape of inhabitant Amsterdam, defined not by the supergrid but by the way Central Station spills its passengers into the historical centre. From this perspective lower valued neighbourhoods are simply out of sight and people in the historic centre can sustain a particular image of the city.

These three images, or types of image – produced in perspective from inside the neighbourhood, from between neighbourhoods, and from outside Amsterdam – define, along with the gradients mentioned earlier, spaces and a form that will be investigated further for the way they might establish a landscape of differential value in the surface of the city. We have chosen ten neighbourhoods in Amsterdam so we can trace these ideas about places as technical settings and infrastructures through real places and research how different neighbourhoods perform as enabling environments. We will be thinking particularly of inhabitants ‘images’ (Lynch 1960) of Amsterdam and how those images are realized at neighbourhood level.

Notes

- 1 Mitsein. Heidegger was very interested in Uexküll's work and I am freely associating Heidegger's ideas with Uexküll's. The problem of the 'ground' of things is difficult and contested in Heidegger studies and I am following a position perhaps best exemplified by Frederick Olafson and by Hannah Arendt.

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