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ARCHITECTURAL AND URBAN ATMOSPHERES SHAPING THE WAY WE WALK IN TOWN

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Summary

This contribution contains the results of research funded by France's National Research Agency (ANR) on walking in towns. Research focussed on two cities: Geneva (Switzerland) and Grenoble (France). Starting from a simple question – what prompts us to walk in town? – and an innovative methodological protocol we call the three-person walk – the author queries the implicit relations between the act of walking and atmospheres. How and to what extent do architectural and urban atmospheres affect our decisions when walking in town and influence a pedestrian's gait? By constituting two lexicons – one describing sensory configurations that are more or less favourable to walking, the other describing the types of relation possible between pedestrians and the city – the author makes two contributions to the debate on urban walking: first that there are many ways of walking; and secondly that we adapt our gait to suit – it is perhaps even shaped by – architectural and urban atmospheres.

Keys-words : ambiances, body, urban public space, to walk, pedestrian

1. What makes us walk in town?

With environmental concerns the focus of much debate, walking is becoming increasingly popular again in France and all over Europe. In the ideological battle with cars, urban walking has several obvious advantages: it consumes little energy and occupies less space; it is healthy; and it sustains social links. Despite this favourable context, the number of urban journeys made on foot is far smaller than those made in motor vehicles. We need to ask why but we also need to understand what makes us walk in town.

Some engineers, transit-economists and policy-makers cite circumstantial or structural reasons to explain the small number of journeys on foot. Geographers and town planners prefer to focus on the determining factors for urban walking, highlighting the influence of urban morphology on modal choices. Whatever their merits both working perspectives all too often reduce the act of walking to its strictly motive dimension, restricting research into the conditions that make walking possible to just the built or developed qualities of towns. Our approach differs from these two lines of research. First, we consider walking as a social, sensory and plastic act. Walking in town brings pedestrians into contact with others, requires them to deal with bodies in movement and their proximity, anticipate eye-to-eye contact and so on. All these constraints implicit in walking, apart from those imposed by urban design, demand, on the part of the pedestrian, a number of navigation techniques (Ryave & Schenken, 1975; Livingston, 1987) and body techniques (Mauss, 1954). When we glance forwards to anticipate the presence of the crowd, slide a foot across the ground to gauge the slope, or even dodge slightly to one side to avoid the crowd, we are indulging in forms of movement that make travel on foot possible and operational. Secondly, we assume that

urban and architectural atmospheres impinge on modal choices and the way we walk in public spaces. With its tightly packed or empty places, and the activities they accommodate, and its materials, a town maps out spaces of visibility, listening, touching and so on, that may be plural, contrasting and changing. These urban and architectural atmospheres shape and modulate the way we walk, much as urban morphology or spatial design. Furthermore they contribute to the existence and expression of different ways of walking in town: walking is (...) often described as a unique form of locomotion and then contrasted with running; but attentive observation reveals that there are several types of walk, that the gradation between them is not continuous, but rather that each one has its own particular intensity (after Morris, 1978). From this point of view the quality of urban design is probably not enough to encourage us to walk in town. We need to explore the capacity of architectural and urban atmospheres to affect modal choices and shape multifarious ways of walking.

This proposition was the focus of a Franco-Swiss research action recently funded by the National Research Agency (ANR)¹. Teams of sociologists, architects and town planners observed *in situ* the real walking practice of pedestrians. Work was guided by two assumptions. The first assumption posits the existence of heterogeneous, variable ways of walking in town depending on sensory contexts: walking is not a generic category of travel on foot; it varies in its form, pace and expression as a function of architectural and urban atmospheres (Thomas, 2004, 2007). The second assumption posits the existence of operational relations between walking and atmosphere: the nature of the relations established, by walking, between a pedestrian and the city may well impact on modal choices. This means we must qualify such relations and understand in what respect and how architectural and urban atmospheres can work as triggers for walking in town (Thomas, 2008).

The present article is divided into three parts. After reminding the reader of the methodology used for the purposes of this research action and the locations where it was deployed, we present two of the main results of our analysis². The first result concerns the constitution of an exploratory lexicon describing a number of “sensory configurations” that are favourable, or unfavourable, to walking. The second hinges on the attempt to qualify “walking situations”, describing the nature and intensity of relations between pedestrians and architectural and urban atmospheres.

2. The three person walk³

This project required innovative methodological protocols, the purpose of which was not only to avoid disassociating the subject of research from empirical techniques but also to establish a dialogue between the accounts of heterogeneous pedestrian routes. In this respect

¹ Research was coordinated by Yves Winkin, Deputy-Head of the Ecole Normale Supérieure Lettres et Sciences Humaines in Lyon. The results presented here are taken from the work done by the Cresson team: Thibaud Jean-Paul (ed.), Bonnet Aurore, Leroux Martine, Thomas Rachel (2007). “Les compositions de la marche en ville”, Contribution by the Cresson team to the final report, Winkin Yves and Lavadinho Sonia (ed.), *Des villes qui marchent, tendances durables en urbanisme, mobilité et santé*, Projet ANR SEST 05 019, Final report, Université de Lyon, ENS-LSH, 113 p.; Intermediate report, Cresson, volume 1, January 2008, 105 p.


² This article reports on the work of the Cresson team as a whole, but the two results refer more specifically to analysis by Rachel Thomas concerning the establishment of exploratory registers for “types of walk”, “walking descriptors” and “walking situations”.

³ For a detailed presentation of this methodological protocol, see: Thibaud, Jean-Paul (2008). Je-tu-il, la marche aux trois personnes in *Urbanisme*, n° 359, March-April, pp. 63-65.

it meant “setting out on foot” in the field, observing and experimenting in the company of pedestrians various ways of walking in town (alone or with several others, strolling, passing through, hurrying, etc.) in order to gain a better grasp of the processes at work in pedestrian movement, the tiny modulations to which walking lends itself and the sensory “affordances” (Gibson, 1986) underpinning it. To this end an innovative methodological protocol was tested in four districts – two in Grenoble (France) and two in Geneva (Switzerland) : the “three-person walk”. This new methodology is based on the articulation of three complementary approaches which all give meaning to the subjectivity at work in the practices of city dwellers, and to the community of perceptions and feelings underpinning them.

2.1 Walking in the first, second and third-person singular – I, you, he or she

In the first-person (“I-walk”), the researcher is immersed in the study zones taking photographs at whim for half a day. He or she walks freely, without previously defining a route, drawn onwards by the terrain and atmosphere. A dictaphone is used to record passing impressions, in conjunction with a digital camera to fix noteworthy events, situations or vistas. Once this non-directional walk is complete the researcher produces a summary document in which the narrative and photographs bear witness to the route as it was perceived and felt. The middle column in the table contains all the comments and photographs collected *in situ*. The column to its right isolates, for each place the various elements brought into play while walking. The classification of these elements into three categories – built, sensory and social – refers to the three dimensions of the urban environment that shape pedestrian practice: architecture and urban design; architectural and urban atmospheres; forms of public sociability. Lastly, the column to the left of the middle one, contains a lexicon of ways of walking in town. It was obtained by cross-referencing data analysed in the other two columns.

QUALIFICATION OF WALKING	REFERENCE TEXT PHOTO ILLUSTRATION	ELEMENTS BROUGHT INTO PLAY BY WALKING
<p>SHOP FRONT STROLL (Along the Cours)</p> <ul style="list-style-type: none"> - Stroll, without hurrying, but marked by pedestrian vigilance, the need constantly to avoid bumping into or rubbing against the bodies of others - Being carried away by the sights and physical feelings. Sense of being drawn despite oneself by the street and pedestrian flow (required by other bodies to walk at 	<p>Fluid traffic on Cours Berriat. Long, wide thoroughfare, stretching into the distance, pulling a well-ordered flow (everyone has their appointed lane) but comprising several forms of traffic (trams, pedestrians, cars, cyclists). Impression of being carried away visually and bodily by this flow.</p>  <p>At the St Bruno tram stop the impression of fluidity is broken. From here on everyone is constantly re-negotiating the trajectory and pace of forward movement.</p>	<p><i>Buildings</i></p> <ul style="list-style-type: none"> - Long, wide thoroughfare - Homogeneous, low-rise buildings <p><i>Senses</i></p> <ul style="list-style-type: none"> - Framed vista but opening onto distant prospects. - Coloured lights at night - Sound trail: tram - Emergence: tram bell - Rhythmic sound and vision - Metabolic: steps and voices at the St Bruno stop - The street has a certain beat <p><i>Social</i></p> <ul style="list-style-type: none"> - Organized flow of people on the move, with various means of locomotion (trams, bikes, cars,

a given place and pace, avoiding contact). - Pleasure accompanying walking.		walking) - Quiet, unhurried activity, loitering. Valid day and night - Social throb of the street, at the St Bruno tram stop, with large numbers of pedestrians arriving and departing
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Example : Drift down Cours Berriat (Grenoble)

In the second-person (“you-walk”), the researcher carries out a series of pavement interviews with pedestrians. Accompanying them on a portion of their journey, he or she questions them on the reasons for their journey, the choice of route and how they see the neighbourhood. A dictaphone is used to record their answers as they walk. If the person being interviewed agrees, the initial exchange at the end of the route may be extended, turning into a semi-directive interview. In this case, the questions raised previously are explored in greater depth but it remains an open discussion so that the pedestrian is free to express his or her views. Speech is recorded during the walk, as for the first-person I-walk, using a dictaphone. About 60 people were interviewed in this way in France, the field location on which we have focussed analysis. These pavement interviews have helped to plot the routes taken on a map and serves as the basis for a transcription of the answers given pedestrians. This analysis has two merits. First it reveals the social and collective representations linked to each neighbourhood and the pedestrians’ appraisal of its qualities. Secondly our analysis highlights the relation between personal motives that may prompt us to walk and the various conditions that enable walking actually to happen.

Lastly, with the third-person (“he or she-walk”), the researcher carries out "route reproductions". He or she follows unidentified pedestrians at a distance, paying attention to their practical actions (how they cope with the developed space, practical activities, stay in space...), their social conduct (how they handle encounters, the presence of others or a crowd), their body attitude (rate/rhythm of displacement, visual orientation, trajectory of the step.) and the events and characteristic of the crossed contexts. This sort of tailing, also recorded on a dictaphone, is transcribed in two ways: plotting on the map of the observed route; and a written description (gestures, trajectory, speed of movement, events, etc.) recorded *in situ*.

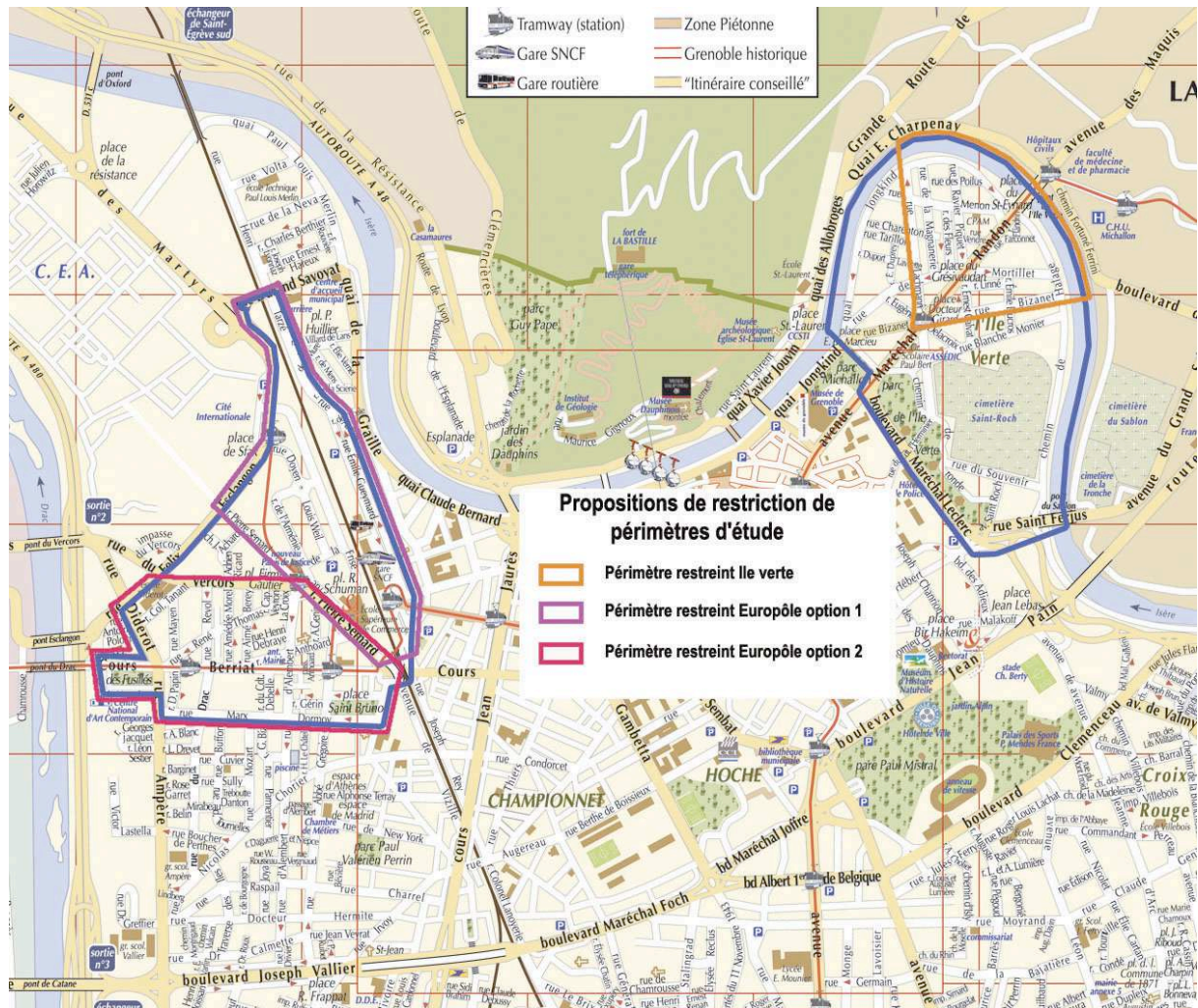
Route account n°11 – On Place du Grésivaudan, a woman who was on the left-hand side and has just crossed is now on the opposite side, walking towards La Tronche. She is carrying two loaves. She starts hurrying. She must be in her 70s. She crosses the road just to the right of the pedestrian crossing and enters a little side street, Rue Farconnet, which slopes gently downwards. She is walking on the pavement, but about 15 metres further along she steps into the road as if she was taking a short cut. Ten metres later she returns to the pavement, having taken a minor short cut at a bend in the street. She carries on walking along this very quiet street, going quite fast. There is a bin taking up almost all of the pavement, so she moves to the right but without stepping into the road. She carries straight on. She seizes something with her hands and looks up to the top of a building, then goes in (n°4).

Example of a transcribed account of a route – Grenoble, Ile Verte

We recorded 143 route accounts in France. Analysing them gives us a grasp of the way pedestrian mobility is modulated, in the dynamic of movement and depending on the context.

2.2 Europole and Ile Verte districts of Grenoble: two fields of experimentation

We experimented this survey protocol in Grenoble, in two districts: Ile Verte and Europole4. This was not a random choice: both districts have a strong identity in the town and enjoy direct links to the town centre (by car, tram and on foot). They also seem to lend themselves to walking (in that both have amenities dedicated to this form of travel), while offering very different, multiple conditions and settings for walking.



Map of the districts covered by the study – Manque échelle + nord

The Ile Verte (green island) district, located to the north-east of the town centre, is a setting that certainly impacts on the way pedestrians choose to travel. It is quiet and residential, organized around a network of often deserted streets, where the slightest presence attracts the interest of local people. The Isère river runs round more than half of the district's perimeter and paths have been laid out along the banks, attracting large numbers of people

⁴ In Geneva the Equiterre team deployed these survey protocols, assisted by the Cresson team, in the Cressy and Le Pommier districts.

at weekends, walking, running and cycling. Over and above the significant role played by vegetation in the urban scene (extending into St Roch cemetery, referred to as the area's "green lung"), Ile Verte has a wide range of shops and services along the main thoroughfare, Avenue Maréchal Randon. This road is comparatively mineral in its make-up, with dense traffic, connecting the centre of Grenoble to the nearest suburb, La Tronche. Place du Docteur Girard, halfway along the avenue, has a surprising star configuration, now operating as a roundabout, with pedestrians, cyclists, cars and trams coexisting in considerable confusion demanding plenty of give-and-take on all sides.



Riverbank paths



Deserted streets



Avenue Maréchal Randon



Place du Dr Girard

The urbanscape of the Ile Verte district⁵

The Europole neighbourhood, located to the west of the city centre, is the new business district. Designed primarily for services (World Trade Center, law courts, international secondary school, graduate business school, etc.), much of the area is given over to recently built office blocks, in which steel and glass play a predominant part. Through its centre runs Rue Pierre Sépard, divided into two separate streams of traffic with a regular, reasonably peaceful flow of cars and trams. In this largely mineral environment, pedestrian use of public space corresponds to a regular and often rapid back-and-forth movement. They cross Avenue Doyen Gosse or Place Schuman, often without stopping, very probably taking advantage of these hygienic expanses (smooth surfaces on the ground and on the facades, no rough edges, high proportion of masonry) to keep their walking functional. The decor and atmosphere change as they approach Cours Berriat. This street marks the border between an old, working class neighbourhood, St Bruno, and the new business district. Cours Berriat reflects this mix: in the forms of transport (pedestrians, cycles, motorcycles, cars and trams all pass through here), in its population (a blend of classes and ethnic origins), and lastly in

⁵ All the photographs in this document, and all the commentaries on the various districts under study, are taken from the "Je" campaign. They were all taken, or made, by Aurore Bonnet, Martine Leroux, Jean-Paul Thibaud and Rachel Thomas.

its trade (with restaurants, sandwich bars and a wide range of shops and services). Pedestrians seem quite at home in this mixture and profusion, constantly adapting their behaviour to the micro-events that colour the location and make it attractive.



Avenue du Doyen Gosse



Place de Sfax



Place Schuman



Rue Pierre Sénard



Cours Berriat

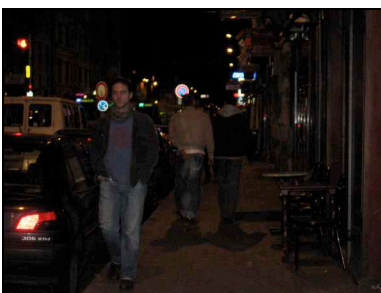
The mineral character of the Europole district

Each of these neighbourhoods thus had the benefit of viewpoints – by an outsider (researcher or one-off pedestrian testing the terrain) and an inhabitant – who, far from offering any opposition, contributed to a cross-referenced acquisition of the atmosphere and the various elements contributing to each neighbourhood’s walkability.

3. The sensory configuration of walk

The analysis carried out as part of this research action shows that architectural and urban atmospheres contribute just as much to the choice of walking as the quality of urban design available to the pedestrian. Choosing to walk, over and above personal or passing motives, depends on the ability of a neighbourhood to embody multiple forms of spatiality. In other words, its capacity to prompt attachment or aversion, pleasure or fear (Watson, 1995), to allow meetings or the expression of a whole range of walking styles ... are all qualities of the environment that weigh on the choice of walking and contribute to our attachment to a district. From this point of view, it is possible to identify some sensory configurations more conducive to travel by foot than others. By "sensory configuration" we refer to the result of the process by which pedestrians select, organize then shape the sensory material structuring their perception and action during the journey (Thomas, 2005). This restructuring of space, in the walking dynamic, should be understood as a “deformation of the built environment as it was designed and a recreation of the space through feeling and motivity” (Augoyard, 1979). Six sensory configurations were identified: attractive, spreading out, mobilizing, suspensive, accelerating and inhibitive. Each one operates jointly or separately on motor action and affective level. In the following we present four configurations.

For example, the attractive mode encourages exercise through walking and triggers pleasure in the pedestrian. This sensory configuration is characterized by powerful, rhythmic sound, numerous visual openings and lively sociability. The combination of these characteristics not only contributes to setting a tempo for walking but also awakens the subject's senses. Caught up in and carried away by the atmosphere pedestrians adjust their gait to the pace of the place, listening to their surroundings and extending their visual attention. Bodily and perceptive immersion prompts a state of harmony that procures a feeling of pleasure and well-being. Strolling or ambling embody this pleasant relationship. Walking in this way, pedestrians are open to others and to outside events. In Grenoble Cours Berriat generally attracts walkers, despite significant design faults and dense, multimodal traffic. But this space, which offers many different views and is busy at all times, gives pedestrians an impression of leaving the town and being caught up in the rhythm of the place.



Back with other pedestrians, I allow myself to be caught up in the movement (dynamic) of Cours Berriat. This attraction coincides with the impression of returning to a neighbourhood, in the sense that its population is visible, with activity and a sense of presence. All along the street there are neighbourhood shops, shoppers, clutter on the pavement: shop displays, advertising signs and so on. The pedestrians on this route display bodily movements expressing avoidance and contortion, sometimes stopping to allow the person coming the other way to pass. People's movement or simply their presence prompts me look into the side streets (Rue du Drac, Rue d'Alembert).

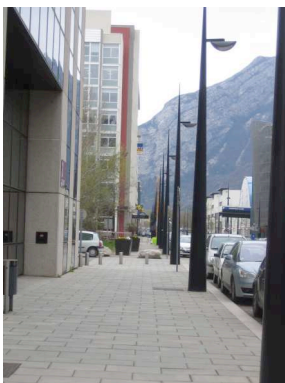
I reach Cours Berriat and here it is much more lively, with more light, people getting into their cars and driving off. The Fontaine end of Cours Berriat is less attractive, not very brightly lit, whereas on the other side it leads to the town centre. Several youths are withdrawing cash outside the bank. A young woman cycles past on the tramline. There are one or two other people also cycling. I decide to cross the road. On the other side there is a kebab joint and a sandwich bar, with several people inside. I notice various meeting places, each with a few people. It is more conventional here, in the sense that there are bright, multicoloured lights, and traffic lights. Earlier on it was a feeling of solitude, really very quiet, giving the impression that one is no longer in the lively part of town, a neighbourhood with history, people, things going on and bright lights.

Cours Berriat – Grenoble Quartier Europole extended

The pleasurable feeling is also prompted by the suspensive configuration, but unlike the previous one it replaces walking with loitering or longer stays. In other words the suspensive configuration suddenly breaks the pace of progress, raising the pedestrian's perceptive acuity and reducing contacts with others: under the influence of crystal-clear or reverberating sound atmospheres, rough or slippery surfaces, a landscaped or stylized backdrop, the pedestrian stops walking and adopts a contemplative pose. In this case, the aim is to take the time to enjoy the environment's remarkable qualities. The public park and the square are

common examples of this type of configuration, that is found frequently in the Ile Verte district. But the “suspensive” configuration can also be linked to the space having a particular functionality as a market, cemetery, tram stop or railway station, which can also encourage this variation in the pedestrian’s pace and perceptive acuity. This is particularly the case as we pass through the railway station. This cube-like space, with large expanses of plate glass and a ground surface that is shiny and slippery, is characterized by a high level of sound and light reverberation. We observed three regimes of social interaction: short waits; long stays; and passing through. The combination of these qualities gradually reduces the speed at which pedestrians can move, forcing them to disperse their attention, which sometimes means they stop walking altogether.

The inhibitive mode is an illustration of the ambivalence of the urban development. In this case, places offer pedestrians ideal conditions for walking – wide, unencumbered pavements, smooth surfaces, agreeable night-time lighting, visual directionality, etc – but paradoxically they also make walking somehow inadequate. More exactly, walking it nevertheless makes the pedestrian feel ill at ease and out of place. Faced with an anti-septic environment the pedestrian feels foreign and, at the same time, exposed to the glances of local inhabitants. Moving through this vacuum, walking turns into flight, a brief crossing or a form of infiltration. In the first case the pedestrian suddenly starts to hurry. In the anguish of this precipitation their body shrinks in on itself, gestures become jerky, the torso and face turn downwards, bowed over in self-protection. In the two other cases the style of walking betrays a functional relationship with the surroundings. Crossing involves taking advantage of design features that facilitate faster progress and a more streamlined gait. Infiltration is a slower, more cautious way of walking, the aim being to enter a place discreetly while keeping watch for visual and sound events that may reveal another's presence. This configuration was observed on Avenue du Doyen Louis Weil, in the Europole district. The middle of this long, straight thoroughfare is occupied by two-way road traffic. On either side rise recently built office blocks and flats, often quite high and faced with glass panels, framing the distant landscape. At the foot of these buildings, wide pavements, clear of any obstacles and dotted with designer street lamps, await the occasional pedestrian, soon tired by this overly smooth environment.



On Avenue du Doyen Louis Weil I decide to venture as far as the international secondary school. The pavement is wide and comfortable, so as a pedestrian I feel at ease. Ahead of me rises the Chartreuse range. For the first time in Grenoble, I have the impression of being hemmed in, halted at the same time as being drawn towards the mountains. Their presence is not stifling. They resemble a goal to be reached, concentrating my gaze. Perhaps because in my immediate surroundings there is nothing really captivating. I walk down the avenue, which is almost deserted, going into the wind, which is unpleasant. The occasional car passes going one way or the other, in the middle of the street, looking for somewhere to park. The rare pedestrians I meet are walking slowly. Since leaving Place Schuman, I have been able to hear birds chirping, getting louder as I go on. They cover up the sound of the city. In fact I really get the impression I am outside the city, yet at the same time the facades of successive buildings along the avenue play a powerful role in the landscape, constricting the way I walk and where I look. I am not ill at ease, just bored. I look for a way out and decide not to carry on as far as the school.

Avenue du Doyen Louis Weil – Grenoble Europole

The accelerator is a powerful configuration in the Ile Verte district. The key characteristic of this configuration is that it speeds up pedestrian movement. This quality results primarily from a mixture of specific spatial properties: strict alignment of facades, high buildings and a broad thoroughfare affording visual prospects and giving the place a form of “directionality”; cadenced frequency of passing cars and/or trams, matched by the pendulum-like movement of pedestrians, giving the place a visual and acoustic rhythm. In the same way the sensory qualities of the space – and in particular its ability to confront pedestrians with sudden changes of atmosphere – contribute to the swift pace. As we walk through the Ile Verte district we perceive and cope with rapidly increasing and decreasing levels of noise, with variations in its source too, and the sudden appearance of a frame around the view. These characteristics, that are present for example on Rue de Mortillet, Rue Lachman or Avenue Maréchal Randon have a psycho-motive effect: they change the pace at which pedestrians walk and encourage them to adopt a more linear route.



The width of the avenue constitutes a visual and aeraulic opening to the outside of the town. The pavements are not in contradiction with the overall scale, but their repeated narrowing to allow for parking can be troublesome outside the shops opening onto the street. After doing some neighbourhood shopping people go home to one of the smaller side streets in the vicinity, between the river and this thoroughfare. The wide avenue has a central reservation for the tram lines, and on either side a stream of road traffic – cars, buses, etc. This constitutes a major divide in the avenue, that is not easy to cross. Observing passers-by shows that attention focuses on the various crossroads, but the wish to cross somewhere other than the pedestrian crossings – particularly as the avenue sometimes seems relatively empty – leads to risk-taking. A woman with a stroller ventures out, counting on the kindness of a car-driver.

Here, there is a change of decor, a fairly abrupt shift in the atmosphere, with urban bustle, cars, trams and quite a high noise level. It all “takes hold” of me. I might feel out of place if I did not swiftly yield to the rhythm of the place. However something attracts my attention, an area slightly to one side where the urban bustle seems to have subsided momentarily. It is the sun-drenched terrace of a cafe, Le Grand Café, where a few people are taking their time over coffee and a chat. I watch them, wondering how comfortable they are, then concluding that the avenue displays a graduation in traffic rhythms: a break on the cafe terrace, a buffer zone formed by the pavement, the road and then the tram line.

Avenue Maréchal Randon – Grenoble, Ile Verte

For each of these sensory configurations the architectural and urban atmospheres consequently exert an influence on the two registers of walking, doing and experiencing. By providing pedestrians with a sensory basis for their conduct and awakening in them a range

of emotions, they contribute just as much to walking as does urban design. Furthermore they prompt ways of relating to the city that are probably related to our daily choice of a means of locomotion.

4. The intensity of walking situations

In other words, architectural and urban atmospheres also play a part in the intensity of the relationship between the pedestrian and the city. We may distinguish walking situations that reflect such relationships: paradox, opposition, adjustment, neutrality and conniving. These situations are neither predefined nor stable during an urban journey. They evolve, succeed or confront one another depending on objective material conditions, fuzzy, fluctuating sensory conditions, and the affective state of the pedestrian.

Paradox thus reflects an ambiguous relationship, a disparity between the (physical and sensory) contexts of walking and the pedestrian's (perceptive and emotional) expectations. This situation is observed in two specific cases. Firstly the quality of urban design fails to make up for the poverty and the unappealing atmosphere. Walking is chosen and the location traversed for strictly functional, practical reasons: doing shopping, going to a meeting or to work. In this type of context, walking does not become a set habit and another form of locomotion, less in keeping with the environment, may take its place:

Immersion on 6 April 2006: I "enter" the avenue walking along the left-hand pavement. The pavement is wide and comfortable, easy on pedestrians. Ahead the Chartreuse range rises, but it is not at all overwhelming, more a goal to achieve on which my gaze is concentrated. Perhaps too because nothing much in my immediate surroundings is really captivating. The avenue is deserted and I am walking into the wind, which is unpleasant. The facades of the building that line the avenue are very forceful in the landscape, a constraint on the way I walk and where I look. I am not ill at ease, just bored, looking for a way out.

In the other case the quality of the atmosphere makes up for the shortcomings of the design and makes the place genuinely attractive. With the prospect of various routes, a pulsating sound atmosphere, an open visual field that excites the senses, instils a feeling of freedom and well-being, and contributes to the overall good mood. Pedestrians really settle into this environment, to such an extent that they frequently walk through here or turn a simple walk into a pleasant stroll :

Immersion on 20 April 2006: the thoroughfare is immediately attractive. There is a quiet bustle of activity on the shaded left-hand pavement: young people around a cash point, others sitting outside a café, passers-by, cyclists, trams. There are not many cars at this time of day. The contrast between sunlight and shade, that one cannot fail to notice, is both an invitation to take sides and an ingredient all the way along the route in some ephemeral spatiality. I am inclined to start by walking along the street, without hurrying, fitting in with the easy-going springtime mood, then perhaps to digress.

A relation of complicity occurs when the expectations of pedestrians and the sensory quality of a space converge. In practical terms such complicity is fostered by the co-existence of attractive urban atmospheres and amenities that facilitate walking. Smooth or green environments that are peaceful and away from the urban drone, such as the small protected enclaves one may find in town centres, favour a feeling of freedom with scope for investing the place and a sense of ease in pedestrians. In addition to this attractive side, these sensory configurations have the power to suspend the rhythm of walking, giving pedestrians an opportunity to slow down or stop for a while. The peaceful atmosphere of parks and squares may nurture such a relation, but some contemporary spaces may also lend themselves to such complicity. Mineral areas with smooth, reverberating spaces, intermediate spaces with only sparse urban furniture, and recently refurbished historic sites sometimes become, for some time, places of intimacy or play where contacts may occur, with other people and with the fabric of the place.

Drift on 7 April 2006

A parenthesis in urban life. The riverside is split, at this time of day, into two climatic strips: one part in the sun; the other in the shade (on the built side). I opt to walk in the sun. I am cut off from the noise of road traffic, now barely audible far behind me as a background hum. Birdsong is predominant, wrapping me in a sound bubble. I walk slowly.

Drift on 17 April 2006

Here we enter a square. It has little walls on which one can sit. It is nevertheless quite large and spacious. A youth is practising tricks on a skateboard. Two other people are roller-blading. That makes quite a lot of people on rollers, but there are also one or two pedestrians. It is about 21.00, on the holiday Monday of a long weekend.

The relation of complicity between pedestrians and urban atmosphere gives rise to quite different types of walk. People may be seen strolling through shopping streets and parks. This relationship is characterized by less vigorous use of the body, glances cast in all directions and a greater inclination to listen to new sounds. Strolling is a particular form of slow walk which does not visibly imply any desire to reach anywhere (after Morris, 1978). Strolling is an aim in itself, a way of observing the urban scene just as much as a way of enjoying the city's shifting moods. Urban glide [roller-blading, skateboarding, etc.] is a special case and probably linked to the development of a style of contemporary architecture with few affordances, a fabric dominated by fluidity, as the city is embodied in a stripped-down plasticity. Urban glide differs from strolling in its speed, in its stylized postures and its repeated friction with textures. Leaning forward, looking far ahead, arms swinging beside the body, the pedestrian penetrates the air, brushes against or catches on available surfaces the better to push through space. Mobile among the mobile, those who glide are in some sense archetypal figures in the contemporary urban world where fleeting relations rule.

Adjustment, though similar to complicity, differs noticeably. On the one hand, complicity is characterized by harmony, adjustment is more a matter of conforming. In other words when this relation is engaged between pedestrians and the urban environment, it depends more on functionality and neutrality, than on affects or affinity. On the other hand, although atmosphere plays a key role in complicity, urban design is a major factor in adjustment. This betrays a strictly practical relation between pedestrians and the city. It reflects not so much the pleasure of walking as its adaptation to the pedestrian's goals and the scope it offers for taking advantage of the qualities of a given space.

Drift on 7 April 2006

Change of scene, with a fairly radical change in atmosphere: urban agitation, motor vehicles, trams, quite a high noise level. All this "takes hold" of me. I might feel out of place if I did not swiftly yield to the rhythm of the place.

Drift on 17 April 2006

I enter the street. A wide pavement, actually quite pleasant for walking, really wide. Here it is really modern, with non-slip, white paving stones that afford a really good grip. There is a light cool breeze but that too is quite pleasant. The street is really very longitudinal. There are not many alternatives, all there is to do is go straight forward. An avenue with modern buildings on either side but it is not too overwhelming. Contemporary design. I carry on walking, the ground still affords a good grip. It is quite pleasant for walking. White lighting, pointed street lamps, in a line one after another, giving a sense of perspective and direction.

This relation of adjustment between the pedestrian's goals and urban atmospheres is reflected in a particular type of walk: crossing. Crossing a space, means passing through, making tracks across it either by necessity, or because it is on a route taking the pedestrian from point A to point B. Like urban glide and flight, crossing is a type of swift walk: the goal for pedestrians is to complete the trip efficiently, taking advantage of spatial components to speed up their pace and give greater direction to their progress. In this type of walk,

pedestrians adopt a form of behaviour that is stylized but less flexible than for urban glide: the bust is thrust forwards, the gaze switches constantly between the far distance and the ground in front, and the ear is alert to any remote sounds that may indicate a change of bearings. Every aspect of pedestrians' behaviour and attention to urban atmospheres reflects their walking savvy and ability to anticipate.

As for induction, it reflects a relation of causality between the pedestrian and urban atmospheres. In this type of relation pedestrians' behaviour and attitude are directly shaped by the sensory qualities of the spaces through which they pass. The "efficacy" of architectural and urban atmospheres is expressed in heterogenous sensory configurations. Some atmospheres mobilize (ie set in motion, make more mobile) the pedestrian's pace and attention to such an extent that they sometimes require an adjustment of gestures, the rhythm of movement and/or, less usually, the actual route. Thus, mobilizing places are often homogenous in terms of the buildings, laid out in straight lines with a linear perspective. Framing of the view and minerality are two other characteristics. Most covered arcades or passages act as mobilizers. Other types of sensory configuration contribute to a relation of induction. But as well as mobilizing pedestrians' pace and attention, they contribute to distributing and spreading them in space and time. In many cases they are in fact nodes, joining or articulating several spaces. In addition to offering pedestrians a choice of routes they are characterized by two noticeable sensory qualities: a high noise level, in conjunction with a wave effect; one or more lines of visual flight, allowing pedestrians to anticipate at some distance the route to be taken.

Drift on 6 April 2006 :

The passage seems empty, cold, white and slippery. I want to hurry on and get out of this place quickly. I walk faster. I keep looking towards the horizon. Then I slow down, realising that if I walk faster my heels ring on the ground and the sound causes reverberation.

At the tram stop, routes cross, with pedestrians hanging around at the stop, others getting on or off trams, pedestrians coming and going between the two nearby squares, or walking along the street on the left-hand pavement. All these pedestrians have one thing in common, they are walking quite fast, giving the impression they are only passing through, that they did not come here for a stroll but because they have a specific purpose.

In this type of sensory configuration, flight or crossing are habitual styles of walk. Flight reflects the pedestrian's feeling of unease or insecurity. It differs from urban glide in the action and emotion it prompts. Flight is also characterized, not so much by speed as by a hurrying step. Pedestrians suddenly start walking faster as if they wanted to leave the place as soon as possible. In their precipitation and unease, they draw themselves inwards: gestures become jerky, arms are wrapped tightly round a handbag or jacket, the bust and face turn downwards. In such circumstances there is little chance of meeting or exchange. In crossing we are more likely to observe the tactics of negotiation and avoidance deployed by pedestrians to cope with urban furniture and other members of the public. Much as stamping this is a jerky, uneven style of walk. Crossing varies between waiting, hesitation and precipitation. Less active when waiting, a pedestrian's bodily and visual mobilization increases in moments of hesitation, becoming even more noticeable with precipitation. This type of walk is an illustration of how motion can be "shaped" by urban atmosphere.

Conflict is probably usual in the relations between pedestrians and urban atmospheres. It not only reflects the contradictions between pedestrians' expectations, the way they use a space and the city's sensory qualities, but also translates the everyday confrontation that opposes them. This opposition between pedestrians and the city feeds on the mobilizing quality of urban atmospheres. This mobilizing force sometimes determines a route and the pace of movement, but it can in some instances place a straitjacket on mind and body. This happens in places with a lot of people and a metabolic sound atmosphere. In a context of this sort

pedestrians feel hampered or “gripped” by the atmosphere to such an extent that they may lose a degree of autonomy in their movement.

Drift on 20 April 2006

Pedestrian versus amenities. Here I encounter an example of particularly complex urban design which, to my mind, encapsulates the difficulties I have as a pedestrian in Grenoble: tram lines, lanes for motor traffic – with raised tram-stops and pavements, and in some cases no real pavement, just stubby posts, bollards or fencing separating the pedestrian area from motor traffic. Here the marks on the ground indicating cycle lanes (one in the road, one on the pavement, as I realise after thinking there are really too many cyclists here) and the pedestrian crossings, make walking very complicated. Crossing is just as challenging, involving several stages. Sound plays an important part here: the passing of cars and trams is sufficiently audible in the overall calm to awake one’s attention.

This conflicting relationship with urban atmospheres is embodied in a characteristic type of walk: stamping. This is a slow, jerky, sometimes impatient walk, particularly common when pedestrians want to continue on their way, but are forced to stay put or only advance with small steps, in keeping with the rhythm of the place or other pedestrians preceding them. In this type of walk the body is constantly mobilized: the bust leans left and right to avoid collisions and/or anticipate the next opening; the gaze focuses on other walkers or further ahead, while deliberately not staring at pedestrians coming the other way; lastly the feet grip the ground, sometimes even striking it. For this type of walk, the speed is substantially lower, the feet sliding cautiously over the ground. The feet are not raised, from the heel to the toe, but remain parallel to the ground, barely lifted. Steps are very short, the feet “sliding” forwards with a scraping, dragging noise. They progress at a snail’s pace, but it does avoid complete immobility (after Morris, 1978). More than any other type of walk, stamping reveals the friction that constitutes urban existence and the almost tactile roots pedestrians put down in the city.

5. Conclusion

In other words, individual neighbourhoods, places and atmospheres all shape our way of walking, which is every bit as much a type of urban travel as a form of bodily expression (Le Breton, 2000). Alternatively we may say that walking in town is a carnal experience: “streets, pavements or pedestrian precincts are places where bodies avoid or approach one another, embrace, totter, hesitate, turn away, bend and settle into the city matter with a very special sensuality” (Thomas, 2007). In this process of constant exchange, walking and urban atmospheres are articulated with an almost plastic flexibility. Conflict, paradox, induction or even pleasure are, much as complicity and adjustment, types of relation between walking and urban atmospheres that evoke the intersensory dimension of the urban experience. As they walk pedestrians are constantly stimulated, inhibited, mobilized, carried away ... by sounds, smells, colours and multiple flows. In these heterogonous configurations, crossing, flight or even strolling are every bit as much ways of embodying this sensory material as of taking bodily shape through the material.

The lexicons we propose here are just sketches, neither exhaustive nor closed on themselves. Other types of walk and other sensory configurations probably exist, expressing other types of relationship between walking and urban atmosphere. But these lexicons do give some indication of the complexity of the choices facing pedestrians and the ambivalence of walking processes (Solnit, 2002). The walkability of a place or neighbourhood is probably due to its material design, but what makes a pedestrian walk is also the quality of a town to offer alternatives, awake the body and senses, stimulate emotion and exchange ... ultimately modelling multiple forms of spatiality in movement. Such results raise questions about the Scandinavian norms, exemplified by the Stroget pedestrian precinct in Copenhagen, which are becoming widespread in Europe. Streets are intended to channel crowds, but the organization of traffic and the functionality of walking should also remain a collective concern (Benjamin, 1989), remaining a *de facto* means of urban expression. But, in the face of

attempts to smooth the rough edges of city life, work on atmospheres – by giving meaning to the senses (Straus, 1989) – offers a way of questioning street design in terms of sensory affordances for walking. This is a new perspective which, we believe, may open the way to a renewal of the ways we conceptualize city walking and urban design.

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