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From situated perception to urban ambiences

Jean-Paul Thibaud

Abstract
Perception is central to the theory of ambience. Far from being one of many fields of research, perception is present throughout work inspired by ambience-oriented thinking. What models of intelligibility of perception can be used to pinpoint and clarify the notion of ambience? Alternatively, in what respects do architectural and urban ambiences prompt us to adopt new ways of addressing the problematic of ordinary perception? The aim of this paper is to highlight the close relation between ambience and perception. We seek to demonstrate that one of the issues for the notion of ambience is a reappraisal of the situated, sensory and practical character of perception. Three basic arguments are developed: ambience can be characterized as the quality of the situation, as a motor solicitation and as a sensory background.

Key words: situation, quality, mood, sensory-motor schemes, background

Introduction
Perception is central to the theory of ambience. Far from being one of many fields of research, perception is present throughout work inspired by ambience-oriented thinking. In other words, ambience and perception go hand in hand, feeding on one another. Any ambience-oriented approach involves an understanding of perception, even if it is rarely explicit. But that is perhaps the nub of the problem. Our difficulty providing a precise definition of the notion of ambience is due to this shortcoming.
To exaggerate slightly, there are perhaps two positions on the notion of ambience. The « implicit » attitude involves looking at this notion from a strictly operational point of view. From this standpoint, ambience is not defined as such, it is simply a means to identify a corpus of work on the perceptible urban space. This approach may also focus on physically characterising the built environment (measured ambience), computer modelling of perceptible phenomena (simulated ambience), environmental-quality conscious architectural design (projected ambience), or indeed the everyday experience of city dwellers (experienced ambience), without
necessarily attempting to further clarify the notion of ambience. Its sole purpose is to stake out an existing area of research and praxis that focuses on the various perceptible components of built space. Naturally the results of work on various aspects of ambience all contribute, in one way or another, to consolidating the notion of ambience. However, if we restrict ourselves to this approach, there is no way of testing the coherence and compatibility of the items of definition that we may extract, \textit{a posteriori}, from this work.

The « explicit » approach involves attempting to thematise the notion - constructing and delimiting it to pinpoint its specific features. From this perspective, ambience cannot be assimilated to neighbouring terms such as environment, landscape or comfort. It involves a specific conception of the perceptible world and requires the elaboration of its own categories and methodologies. This approach therefore has broader aims, raising issues that are only just beginning to take form. Quite clearly, our purpose is not to claim that perception is the key to the thousand and one problems encountered in these fields of research, but rather that it constitutes a backdrop to each of them. After all, attempts to measure ambience are based entirely on psychophysical rules which set sensitivity thresholds for our perceptive organs. Modelling surely requires phenomenological validation of its results, which may be obtained from visualisation or « auralisation » techniques. Architectural imagination draws its creative energy from sensorial references and basic sensory-motor schemes that enable us to give intuition a spatial form.

In short, as soon as we attempt to define the notion of ambience and adopt the second approach, we are inevitably confronted by the problem of perception. But what models of intelligibility of perception can be used to pinpoint and clarify the notion of ambience? Alternatively, in what respects do architectural and urban ambiances prompt us to adopt new ways of addressing the problematic of ordinary perception? The aim of this paper is to highlight the close relation between ambience and perception. We shall seek to demonstrate that one of the issues for the notion of ambience is a reappraisal of the situated, sensory and practical character of perception.

The situation as a whole

We should start by pointing out that an ambience-oriented approach places the perceiving subject right in the middle of the world he or she perceives and puts the emphasis on its enveloping nature, rather than a face to face relation\textsuperscript{1}. If the ambience surrounds and submerges us, it necessarily results in perception from the inside, which throws doubt on the possibility of the subject stepping back from his or her environment. Turn of phrase is also suggestive in this respect. We may be part of the ambience or feel it, but it is not something to be contemplated from a distance. In other words, ambience puts us in immediate contact with a situation in its entirety and involves consequently an \textit{ecological approach to perception}. Arguing along these lines leads us to affirm that perception cannot be dissociated from the concrete

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\textsuperscript{1} The word “ambience” comes from the Latin \textit{ambire} which means to surround or go around.
}
conditions in which it occurs. It is necessarily caught up in the built environment, sensory phenomena and ongoing actions that render it possible. In short, in everyday life, when I perceive, I am always somewhere, exposed to my surroundings and in the process of doing something. Far from being simply epiphenomena, these contextual dimensions are an integral part of perceptive activity. As a result, if we proceed in an exclusively analytic fashion, treating parameters one after another, or indeed quite separately, we fail to apprehend what makes a particular situation a consistent, unified whole. Having accepted that, we must not only admit the heterogeneity of the conditions affecting perception but also ask how the various factors are integrated in everyday situations. How then are we to conceptualise the unity of a situation? We submit that it is ambience that links and unifies the many components of a situation. It proceeds from an overall movement that gives each situation a specific appearance.

To develop this initial assumption we must start by specifying what we mean by situation. There are many approaches to this notion, but the one discussed by John Dewey provides the best introduction to the question of ambience. However, we shall have to digress briefly and mention his philosophy of experience. According to Dewey, situations form the basic units of all types of experience and can be defined as an experienced surrounding world. The word «situation» does not designate an isolated object or event nor an isolated set of objects or events. For we never experience nor form judgements on isolated objects or events, but only in connection with a contextual whole. This is what we call a «situation».

A situation, therefore, cannot be reduced to a series of isolated or separable elements. It necessarily involves a unity that gives meaning to the whole. Defining a situation in terms of the context as a whole raises the question of what unifies a situation. To answer this question Dewey introduced the notion of «pervasive quality». This notion is particularly important in so far as it is connected to the notion of ambience. Indeed, it is perhaps a particular way of referring to it. The three components used to define pervasive quality certainly concern the notion of ambience itself.

**The quality as a unity**

First, for a situation to exist all the components of a context must be integrated in a single quality. Otherwise the experience would be lost in a series of confused, inconsistent perceptions. Empirical philosophy makes a distinction between primary (form, number, movement, solidity) and secondary qualities (colour, sound, smell, taste). But Dewey highlights what Santayana referred to as «tertiary qualities». Whereas the first two categories refer to specific aspects of an experience, the third one applies to the experience as a whole. In other words pervasive quality ties the

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components of a situation into a consistent whole and gives each situation a specific character. In Dewey's terms, any situation is both qualitative and qualificative: qualitative in the sense that quality « constitutes in each situation an individual situation, indivisible and unduplicable »; qualificative in that the very same quality penetrates and colours all the objects and events materially involved in the experience. This first point concerning pervasive quality could equally well apply to ambience. An ambience may be described using a single qualifier which does not apply to such and such a specific component of the situation, but rather to the situation as a whole. We say that an ambience is happy or sad, frightening or playful, pleasant or depressing, and so on. From this point of view, the ambience cannot be reduced to a sum of isolated objects, discrete signals, successive sensations or individual behaviour patterns. It unifies the situation, colouring the whole of the surroundings.

**The quality as a mood**

Secondly, pervasive quality is a quality apprehended in its immediacy, it is felt before being conceptualised or analysed. It consequently relates to the concrete character of the situation, the part we live. From this point of view it is less the knowledge of the experience that is at stake but rather the actual experience itself. By emphasising this distinction, Dewey opposes an overly intellectual approach that reduces reality to the object of knowledge and cognition. Pervasive quality involves the pre-reflective dimension of the experience, a way of grasping reality based on intuition. In other words, this quality operates at a lower level than articulate language and is more a matter of comprehension than interpretation. In short, it belongs to the realm of immediate sentiment and bodily feeling, attributing value to the aesthetic side of ordinary experience. Here again, this argument is reminiscent of what we may say of ambience. In everyday language, we experience or feel an ambience, rather than perceiving it. It is always charged with emotion, which is precisely what distinguishes living creatures from machines. By placing us in a certain bodily and emotive disposition, it reminds us that perception is never disembodied or dispassionate. In other words, ambience can under no circumstances be reduced to a simple act of interpretation. It confers value on what is perceived and expresses the prevailing emotional tonality. In addition, we say that an ambience submerges or impregnates us, that we are caught up in it. If an ambience pervades a space, we can hardly localise or circumscribe it, giving it a specific place and setting clearly identifiable limits. For example, although it is impossible precisely to delimit a fragrance or an area of warmth, this does not prevent us from feeling their presence in the surroundings. Here is a diffuse, disseminated presence, that is nevertheless perceived with varying intensity depending on what precedes and follows. To conclude, if ambience relates to the immediate, pre-reflective character of experience, it is, in so
far as it is the result of vagueness logic\textsuperscript{4}, separate from the logic that applies to the world of material objects.

\textit{The quality as a process}

Thirdly, the qualitative character of the situation is fundamentally temporal and teleological. A situation represents the solution to a practical problem. For this to happen, it must be the subject of an inquiry, in other words a process transforming a problematic or ill-defined situation into one that is clearly defined. The inquiry should nevertheless not be seen as a strictly intellectual or cognitive activity. It is based on a series of perceptive and motor actions (selection and configuration of the items relevant to the current action, adjustment and coordination of gestures, etc.). It initiates the transaction between an organism and its environment and must provide for the passage from an initial state of imbalance to a final state of balance. In this respect, pervasive quality is precisely what motivates the inquiry and gives internal consistency to the situation, conferring meaning and a clearly defined orientation. To paraphrase Dewey, the inquiry is the controlled or directed transformation of an indeterminate situation into a situation that is so determinate in its distinctions and constituent relations that it converts the components of the original situation into a unified whole. The original, indeterminate situation is not only « open » to inquiry, it is open to inquiry because its constituent components do not hold together. In contrast, the determinate situation that marks the end of the enquiry is a situation, a closed and finite « world of experience »\textsuperscript{5}. So pervasive quality is not only a question of passive reception but also involves a course of action. It is neither localised in the organism of the perceiving subject nor in the objects of the environment, but applies to the situation itself, in other words the field of activity defined by the interaction between an organism and its environment. As we shall explain in greater detail below, ambience is related to the manner in which we act and behave. However, for the time being we shall restrict ourselves to showing that it also results from a dynamic and that this dynamic contributes to ongoing social activity. When we say that an ambience is setting in, catching on, at its peak, disintegrating or deteriorating we are not only revealing its temporal character but also underlining that it emerges and develops in a certain direction. From this point of view, an ambience is not necessarily a stable and invariable state but rather a dynamic process comprising various phases, one leading to the next. But here again the dynamic of the ambience is part of an overall movement that expresses and conditions the way we behave and act collectively. Depending on the state of the ambience at a given time, the situation will be more or less tense or relaxed, conflicting or consensual, problematic or easy-going. In short, by

\textsuperscript{4} For a discussion of vague logic, we refer the reader to the article by Charles Peirce: How to Make Our Ideas Clear. \textit{Popular Science Monthly}. 12, 1878, pp. 286-302. If we follow Peirce's thinking ambience would undoubtedly be a part of firstness, a category related to quality and feeling. In \textit{Paysage et environs, une logique du vague. Critique}. 1995, n° 577-578, pp. 449-457, Anne Cauquelin applies vagueness logic to ambience.

\textsuperscript{5} \textit{DEWEY} J. \textit{Logic}. op. cit.
giving a shape to ongoing activities the ambience impacts on the manner in which a situation unfolds. The second part of the text will discuss this point.

To sum up, this digression via the thoughts of John Dewey now enables us to formulate an initial proposition regarding ambience. Drawing on the notion of pervasive quality, we shall define ambience as the *quality of the situation*. In this respect, perceiving does not just mean interpreting the world, it also involves integrating a situation, in other words it requires us both to pull the various components of a context into a consistent whole and make a practical contribution to its activities.

**Potential activity**

In this second part we wish to emphasise the fact that the perceiving subject is involved in the world he or she perceives. The subject is always engaged in situations that demand attention and mobilise to a greater or less degree. Ambience engenders a form of tension in the body, calling on our capacity to act. It consequently justifies a *praxeological approach to perception*. Several recent publications explore this problematic and attempt to pinpoint the close relationship between perception and action. In cognitive science there are those who advocate seeing perception in terms of « simulation of action » or « enaction »7. Ecological psychology advances the notion of « affordance »8 to show how the environment functions as a series of resources for action. Lastly, ethnomethodology focuses on « situated action »9 and defends the idea that each of our ways of perceiving has specific practical potential10. The authors are clearly working in very different fields, yet, each in their own way, they defend the idea that perception is closely linked to action and that it draws on properties of the environment. What is more, most of this research puts the accent on the sensory-motor dimension of our actual interaction with the environment.

**The capacity to act**

But how does ambience fit into this problematic? How does it actually contribute to ongoing activities? To answer these questions, we should start by pointing out that the ambience affects our conduct and bodily state. An ambience may stimulate or relax us, grab us or carry us away, transport or paralyse us, and so on. The use of verbs of this sort indicates that an ambience is not just felt. It also affects movement. In other words, sensibility and motivity are two indissociable facets of the same phenomenon, without it being possible to give priority to one or the other. As Kurt Goldstein

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demonstrated in his sensory-tonic field theory, explaining that we may accept that for any sensorial impression there is a corresponding perfectly determined tension of the muscles. He identified what he called tonic phenomena. If we follow this argument, we may consider ambience as an energy system that reveals its presence in physical signals delivered by the environment and in how tonic living creatures may feel. From this point of view there is no radical break between living creatures and their environment. In its way, ambience reminds us that living organisms and their milieu are one and the same thing. What is more, by saying that ambience corresponds to a certain bodily tension, we introduce the idea that it also affects our capacity for action. Some types of ambience - such as, for example, fairgrounds, major sporting events or night clubs - are particularly stimulating. They are designed to plunge us into a state of tension and excitement that makes it impossible not to react. Other types of ambience - as, for instance, in museums, churches, or hospitals - tend to calm us down, prompting contemplation and thought. These are, of course, extreme cases, but they nevertheless show that an ambience may increase or reduce our capacity for action by placing us in a particular physical and emotional disposition. Whereas we are used to considering action as one of existence's unavoidable givens, the notion of ambience prompts us to ask what may instigate or neutralise it.

**Styles of motivity**

We have just seen that ambience is connected to practical activities, but we must now look in greater detail at what such an argument means. To do this we should start by pointing out that the ambience affects all types of action, of whatever sort. It concerns not so much the nature of the activity (the "what" of the action in the process of being accomplished) but its manner of execution (the "how" of the action, or the form it takes while being accomplished). By creating a state of tension in the body, the ambience sets the rhythm of our movement and modulates the manner in which we move.

In other words it summons action at its most elementary level, namely the gesture. But, though gestures support action they should not be confused with it. Gestures are both functional (action) and formal (expression). Gestures do not only enable us to accomplish actions. They accomplish them in a certain way. For example, the action of walking may take a thousand and one different forms. Our step may be slow or quick, smooth or jerky, and so on. Yet these different qualities of movement are not specific to the action, they may also apply to all sorts of other activities, such as opening doors or going downstairs. The same action may take different forms and conversely.

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11 **Goldstein, K.** (1939) *Der Aufbau des Organismus*.

12 Some work in experimental psychology runs along the same lines as this argument, showing that sensory experience is a way of doing things. More exactly it seems to “to exercise mastery of sensorimotor contingencies”. Cf. O’*Regan J. K. & Noë A. What it is like to see: A sensorimotor theory of perceptual experience. Synthesis. (paper submitted)

13 The word “gesture” comes from the Latin “gestus” based on the root “gero, gerere” which means both “do” and “carry”. Gestures thus accomplish and support.
different actions may involve identical qualities of movement. Does this mean that there is no consistency or logic to be found in the manner in which an action is accomplished. One answer would be to look at the problem from a strictly individual standpoint. In this light, every human being may be characterised by a specific way of moving. This bodily style which is particular to each of us represents in some sense the subject's signature. This proposition, though interesting, is barely sufficient for our purposes. If bodily styles were exclusively individual it would be difficult to understand how they could coexist in the same space. Once a place is frequented by several people, their conduct must be synchronised with a certain amount of mutual adjustment, so that they share the same rhythm. A second answer is consequently needed. This involves looking at what is going on from a local and a collective point of view. In other words, we shall assume that each ambience corresponds to a style of motivity and this style is shared by all the participants involved in the ambience. In this case the manner in which we move would be informed by the place in which movement occurs. Our style of movement would express not only a way of being in a given environment but also a way of being together. Of course this does not mean that individual differences are erased or neutralised but rather that they contribute to an overall movement that cannot merely be reduced to the sum of its parts. Gestures and ambience are therefore consubstantial, in so far as both confer a specific form to ongoing action. Both are part of the articulation between myself, the world and others.

To sum up, introducing action into the ambience problematic leads us to a second proposition. We may now define ambience as a motor solicitation, in the sense that it activates sensory-motor schemes on the basis of which we engage with the world. In this respect, perceiving cannot be reduced simply to passive contemplation of the world. It involves more generally acting in a certain manner.

**Perception according to the ambience**

In the two preceding sections we have tried to provide a number of ideas on the relation between ambience and situation, and between ambience and action. We shall now attempt to make the relation between ambience and perception more directly explicit. To do this we shall need to implement a phenomenological approach to perception. The value of this approach is that it highlights the sense-related character of perception and queries the idea that perception is always about perceiving objects. Perception is not just an objectifying act that enables us to apprehend the world as a set of separate, recognisable things. How then are we to find an alternative to this largely predominant conception inherited from Descartes?

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14 The film characters played by Charlie Chaplin or Jacques Tati are particularly striking in this respect.

15 On the topic of intercorporeity as the fundamental dimension of being together, refer in particular to: MERLEAU-PONTY M. *Le Visible et l’Invisible*. (1964) Paris: Gallimard
The medium as the third term

Casting doubt on perception as a purely intellectual exercise does not necessarily involve adopting an empirical position that sees perception as the sum of discrete sensations. In fact what we need to clarify is the distinction between perception and feeling. The main argument developed in this final part is that ambience is not in any way an object of perception. Rather, we maintain that it establishes the terms of perception. In other words, we do not perceive the ambience, we perceive according to the ambience.

We should start by pointing out that the objects that we apprehend through perception are never separate, but always part of a relationship, always arranged one in relation to the other. One thing may, for instance, hide another or partly cover it. As the psychology of form has demonstrated, it is not so much isolated objects that we grasp but rather configurations, articulated assemblies. But here again, objects affect the environment surrounding them. In a way they radiate, projecting their qualities outwards and colouring the whole of the surrounding field\textsuperscript{16}. It is sufficient to subtract or add an object in a particular place to see that it does not just create or fill a vacuum. In some more fundamental way it changes what is there to be seen. We may cite as proof the problems currently encountered in research into simulating light ambiances. When virtual objects are embedded in photographs of real places it is also necessary to take into account light-related interaction that would inevitably occur in situ between existing buildings and new structures. It is difficult to calculate with sufficient accuracy diffuse inter-reflection between surfaces, without which the picture would be quite unrealistic with respect to what a spectator would actually experience on the spot\textsuperscript{17}. This brief digression into vision-related issues, highlights the importance of the medium as a fundamental component in perception. Perceived objects always appear under certain lighting conditions and necessarily suppose a light structure that specifies the manner of appearing\textsuperscript{18}. Even vision, an objectifying sense if ever there was one, cannot be understood without some reference to the ambient light. In fact, light constitutes a third term, forming a link between the perceiving subject and the world perceived. What we have just said about visual perception applies all the more so to other types of perception. Our perception of sounds, smells or heat cannot be assimilated to the identification of a one-off source or a discrete signal. It always supposes a field of appearance out of which phenomena emerge and take on specific properties. In short, introducing the medium as the third term of perception enables us to conceptualise the perceptible world in terms of phenomena by revealing the conditions and manner in which they appear.


\textsuperscript{17} It is certainly not a coincidence that the calculation model used is a radiosity model. Cf. PERRIN J.P. & FASSE I. (1998) Simulation d’architectures en synthèse d’image. Les Cahiers de la Recherche Architecturale. n°42/43, pp. 105-115.

\textsuperscript{18} James Gibson (op. cit.) proposes the notion of an ambient optic array to analyse the manner in which a light field is structured.
The basis for perception

To conclude, what is the consequence of the preceding argument? If ambience can be distinguished from the world of objects it is precisely because it is of the order of the medium. That is why we talk about « luminous ambiences », « sound ambiences », « olfactory ambiences » or « thermal ambiences ». These qualifiers refer to the nature of a medium. But in addition, in characterising an ambience in this way, we are also saying that it is not perceived itself but rather that it renders perception possible by specifying a field in which these phenomena appear. We never perceive all that is encountered by our senses. As Merleau-Ponty demonstrated so clearly, « all perception is only the perception of something accompanied by the relative non-perception of a horizon or background, that it implies but does not thematize » 19.

If the background is not perceived as such, it is precisely because it is itself the basis for perception. Starting from it phenomena and events assume individual characteristics, differentiating themselves from others. This argument enables us to make a distinction between « perceiving this » and « perceiving according to » 20. The first case assumes perception of a determinate object by a perceiving subject. Perception is conceptualised in transitive and punctual terms: transitive in the sense that a direct relation is established between a subject and an object, punctual in the sense that what is perceived can be clearly identified, localised and delimited. In the second case, emphasis is placed on an attitude to something without presupposing an object to be perceived. Perception is conceptualised in intransitive and differential terms: intransitive in the sense that the medium acts as an intermediary term between object and subject, differential in the sense that the perceptible world configures itself by differentiation and tension between its various components. We need hardly say that, in our opinion, ambience is part of the problematic of the background as defined by the second approach.

To sum up, this phenomenological approach to perception leads us to define ambience as a sensory background that specifies the conditions under which phenomena emerge and appear. From this standpoint, perceiving does not only involve discerning objects in the environment, but also experiencing the state of the medium at a given time.

Conclusion

We have tried to outline a number of arguments to pinpoint the notion of ambience. Our aim was to show that this notion is not equivalent or assimilable to the more conventional notion of environment. To achieve this we have advanced the hypothesis that ambience implies a particular

20 Regarding this distinction and the following development, consult, in particular GARELLI J. (1992) Voir ceci et voir selon. In Merleau-Ponty. phénoménologie et expériences. Texts collated by Marc Richir and Étienne Tassin, Grenoble: Jérôme Million, pp. 79-99
conception of situated perception. Drawing on expressions in everyday language, we have proposed three ways of characterising ambience, each one rooted in perception. Far from being antinomic these three approaches must be treated as complementary. Obviously there is much more to be said on the subject. Our modest objective was to initiate discussion of the possibility of a theoretical foundation for the notion of ambience.