Steven Melemis, Damien Masson, Naïm Aït-Sidhoum

Representing Spatial Hybridities
A Pragmatic Approach to the Representation
of Emergent Figures of Public Space

Steven Melemis

Architect, Urbanist

Tenured Associate Professor of Architectural and Urban Design,

Grenoble School of Higher Studies in Architecture, FR

B.Arch University of Toronto (Canada); D.E.A. Architecture and Urbanism; Université Paris 8;

Doctorate, School of Higher Studies in Social Sciences (EHESS), Paris for 2009.

Member of the Sonic Space & Urban Environment Research Centre (CRESSON)

Member of the urban design collective Bazar Urbain

Steven.Melemis@grenoble.archi.fr

Damien Masson

Urban Planner – PhD student in Urban Studies

Sonic Space & Urban Environment Research Centre (CRESSON)

Grenoble School of Higher Studies in Architecture, FR

Steven.Melemis@grenoble.archi.fr

Naïm Aït-Sidhoum

Architect, Founding Member of the architectural collective ZOOM

Lecturer at the Grenoble School of Higher Studies in Architecture, FR

naim@zoomarchitecture.fr

Steven Melemis, Damien Masson, Naïm Aït-Sidhoum

Representing Spatial Hybridities
A Pragmatic Approach to the Representation
of Emergent Figures of Public Space

As the paper's title suggests, we will associate a number of terms among which the relations may not immediately be obvious. One of these is the "figure" – understood in the sense of figure-ground relations, derived from gestaltist psychology of form, as they appear in the field of architectural and urbanistic theory. A second term, no less important here, is that of hybridity; it refers to emergent spatial environmental conditions that can be defined in terms existing elements (or fragments of them) which recombine to produce new territorial figures that seem to resist classification within pre-existing categories.

The objective of this presentation is to examine each of these terms separately in light of certain difficulties related to the understanding of the contemporary territory, and then to associate the two in a way that carries some implications for the study of and design within it.

This work has been developing in our research and, at the same time, in the context of the design studio. In both of these contexts, we have worked in situ on studies of spatial conditions around recently constructed tramway lines in Cologne and Grenoble conurbations (2006-07), and on microclimate-related situations around Grenoble (2007). Both of these subject have served as the basis for devising and testing specific methods for identifying and intervening in what we have called hybrid figures. The second theme allowed us to extend ideas about spatial hybridity which had previously been formulated. Among these was the question central to this paper: that of the invention of specific modes of computer-generated graphic representation related to the notion of hybridity itself.

 First it will be necessary for us to consider the notion of the figure in its relation to the territory and this will mean re-examining a few founding references on the question in the domain of architectural theory. It refers to that instant in which a set of relations – be they temporal as in the case of music, visual as in the cases of pictorial representation or of architectural form, or elsewhere – appears to constitute a whole that is something more than the sum of its parts. The perception of form thus occurs through this "coming forward" or detachment of the figure from a more or less complex texture or ground ; it appearance corresponds to the moment in which it is perceived and designated, be it with a name or even just the pointing of a finger. Since the form-experiments and theorizations of Klee, Albers, Moholy-Nagy and others at the Bauhaus, the determination of viable, strong forms within the volatile, rapidly changing visual context of the modern world has been very frequently explored in terms of such relations between "figures"- which one generally wishes to be a sharply defined and stable as possible – and "grounds" which are often of great complexity.
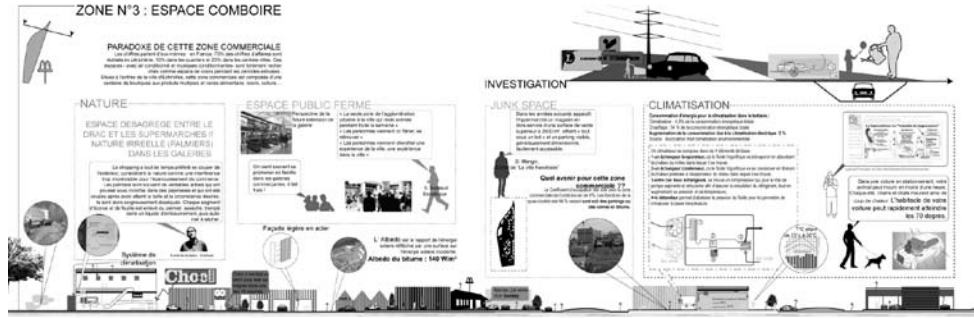
Figure 1
"Climatic section", Grenoble-Echirolles, detail 1 (F. Ivol, A. Bordean, masters students, 5th yr, ENSAG, 2008).
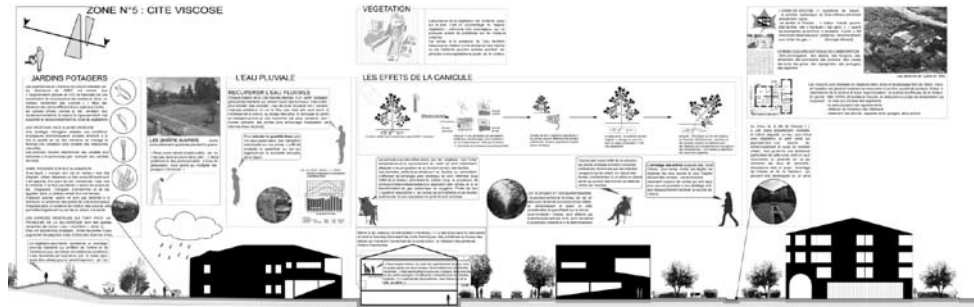
Figure 2
"Climatic section", Grenoble-Echirolles, detail 2 (F. Ivol, A. Bordean, master's students, 5th yr, ENSAG, 2008).

These ideas of course make it to the United States in the post-war period, brought there by the key people who had first explored them – Rudolph Arnheim at the New School, Moholy-Nagy at the New Bauhaus and Gyorgy Kepes at MIT and at Harvard. It was perhaps Kepes that provided the most forceful and public expression of what he called "the language of vision" in art, design and architecture; it was based on them that the young Kevin Lynch proposed some idea about the perception of urban forms and corresponding methods for architects and urban designers working within the already problematic framework of the American city. (In a moment we'll come to the still more problematic current state of the territory.) The work of his that we all of course know sets out a paradigm of reflection that has proven extremely durable; it involved re-situating the architect's gaze at least momentarily at the level of the users of urban space in an attempt to capture the ways in which strong form-consciousness emerged – or didn't – as one moved around in city space.

In opening up this path to the user's apperception of the city's plan, if rather crudely at first, through the notion of the mental map, Lynch lent credibility to what the senses – for him mainly that of sight - could convey, often independently of any significant degree of discursive definition. In doing so Lynch contributed to the displacement of the architect's mode of understanding urban form away from modes of functionalistic explication to a more empirical perspective based on the city as known by those who use it.

Since then of course, the question of the figure has held a central place in urban design theory that goes well beyond the architectural applications it had before. Its remarkable longevity is certainly linked to the fact that it informs a situation of rapid and profound change in the urban environment that causes us to reconsider over and over the principles of intelligibility that best apply to the project situations we are faced with. Today, as the very idea of the city appears fatally compromised – and with it of course that of the country (and also that of "wilderness") – the question of how one might understand spatial forms in the territory demands yet another reformulation. Rather than clear, structural oppositions between overriding figures – city and country in the first instance – we are confronted with mixtures of small or large fragments. It seems more and more difficult not to see the explosion and radical transformation – some would say the disappearance of the city itself – initially exposed by Henri Lefebvre, Françoise Choay. The evolution of techniques has of course played a enormous role in this. As many authors such as Bruno Latour in the domain of the sociology of science and technique have insisted, the greater the promise of control or of power a scientific discovery or a technical invention offers, the more unexpected and potentially uncontrollable the effects it can unwittingly unleash. As any architect or urban designer or planner knows, power and single-mindedness in the technical realm frequently go together. In the territory of course, the side-effects of a project often emerge literally alongside or around the site on which something has been built; a piece of transport infrastructure, a shopping mall, a residential subdivision or even around an ordinary apartment tower.

In such contexts, if the urban or post-urban territory continues to contain intelligible spatial figures, these would appear to belong only in part to familiar systems of architectural and urban form, or to the specific pictorially-derived frame that we call landscape… It would appear that a good deal of the "things" we see and live with cannot be said to belong to one or the other of these two frames. As a result, it would appear that from now on we will need to think in the broader and more abstract terms that the notion "environment" implies, as difficult it may seem at times to relate them to our lived experience of the urban milieu.

This brings us to the notion of hybridity, in the first instance not in the realm of representation but in the territory itself. We have come to adopt the term – at least temporarily – in a sense close to that which Bruno Latour has given it. Latour's idea concerns the way in which "networks" of relations form not only within the social realm in the strict sense, but between it and the world of things and of living, non-human beings. According to him, these elements tend more and more to combine and produce unexpected phenomena to which we have all contributed through our actions but which were not initially sought out and which may not be wanted. It is only when a particular sum of interactions produce a notable effect.

The "thing" seizes our attention in the moment of its intial designation ; we point it out and think, "there is something there though I don't yet know how it could be defined or exactly what it could be called". We are interested in how we might position ourselves as designers with respect to such moments, be it ourselves or others who have initially done the pointing. We are most interested in those situations in which a variety of individuals simultaneously designate more or less the same thing, perhaps based on different forms of expert scientific or professional knowledge or simply on their experience as a users of space, and how such situations can initiate more or less formal processes of collective designation.

Constructing an Approach

In the constructing an approach, we have insisted on the importance of the framework provided by architectural theory while introducing a some new premises that associate the notion of the spatial figure with that of the hybrid "object" (or "quasi-object in Latour's terminology). In doing so one of our intentions has been to construct more explicit ties between research done on architectural and urban atmospheres in our research called the CRESSON since it was founded in 1976 following the first publications of Jean-François Augoyard. Looking at space from the perspective of pedestrian practices (Augoyard, J-P Thibaud, R. Thomas), or understanding urban space according to different sensory components, focusing on such themes as sound phenomena in the urban setting, nighttime lighting, sensory accessibility and others, a field of research was gradually built by the CRESSON on the theme of architectural and urban ambiances. The group approaches space as a combination of physical, social and sensory components. In addition, such approaches to space have led inevitably to new forms of representation. How does one qualify a sensory route through a given space? How does one illustrate the reach of sound, thermal or olfactory phenomena? How, in general, does one represent perceptions and work with perceived qualities that comprise an urban ambiance? These approaches, by nature complex in that they most often position themselves in the dialectical relationship between body and space, considering them not as separate but rather as permanently in relation to each other, require modes of representation which go beyond simple cartography and text. Intermediary forms of representation had, therefore, to be invented, combining text and image, frontal and overhead views, analytical elements and projections etc. (see Grosjean and Thibaud, 2001).

Informed by these past studies, our position in this new one might be described according to the following principles:

1)	That of an engaged posture (as opposed to an overhanging or exterior one) and a pragmatic (in the sense of "practice-oriented") perspective with respect to the space of the territory, which gives primacy to empirical knowledge gained through practice and experiment, sensory experience and apperception. Clearly, this approach bears some relation to Lynch's explorations in the early sixties. At the same time, opening this perspective up to include both the empirical knowledge of users and the diversity of forms of expert knowledge can bring a somewhat new, properly environmental aspect to design.

2) An emphasis on spatial narratives that reveal both how space is apprehended. Approaches that explore spatial narratives and theatricalities or course traverse the whole of the last fifty years, from the Townscape of Cullen to interesting if obscure recent approaches to cinematic experience and to "event cities". Our specific approach involves the collection of narratives directly in the spaces and along the spatial trajectories that they refer to.

3) An openness to sensory experiences of all kinds, thus not only to visuality. We attempt to identify moments of syn-aesthetic convergence; that is experiences that depend upon a diversity of different sensory components (kinesthetic, visual, sonic…).

4) The assertion that the definition of architecture as a discipline must be seen as changeable and must consider the place in which it is situated within a constellation of other disciplines it is related to. However brilliantly argued, the idea of the city as dependant on an array of archetypal architectural forms and the dictum "Architecture is architecture" of Aldo Rossi epitomize the idea of architecture and the city as one entirely self-referential and closed "system". The gestaltist "themes" of O.M. Ungers or the manipulations of figure-ground relations of Colin Rowe and Frank Koetter also define city-form almost entirely in visual / architectural terms which are no longer sufficient.

5) The assertion in order to approach the "hybrid" spatial figures we are concerned with we will require very specific methods of identification and description which, we suspect, could carry some implication ofr the way we understand and practice design.

6) Another assertion, that approaching hybridities in the territory implies a mixing, or perhaps even a hybridization of modes of representation.

Observing and Rendering Visible

Thus with this last point we return to the central question concerning modes of architectural representation. Representing something implies that one has already at least observed or "seen" it in some preliminary way. At the same time, to create a representation is to participate in its definition. There is usually some degree of concurrent development of the mode of representation and of what it is to render visible.

The ability of architects and other designers to manipulate what has what Kepes called "visual language" clearly gives them a major role to play in what we would define as the collective process of spatial configuration. The importance of their role is linked to the primacy of the sense of vision itself in modern society and the fact that images, unlike sounds or smells for example, to show up on paper next to the printed word. It is true that the printed image tends to play a secondary, illustrative function with respect to the text, but as we all know image and text can combine into figurative forms that render visible thought processes in spatialized terms, and in the figurations of spaces themselves. Images can momentarily adopt the role of "carrier" of discourse in their own right, for example in the texts of excellent architectural historians or theoreticians (S. Gideon and Colin Rowe).

All of these uses are of course indispensable but there is another point to be made which is of particular importance with respect to the notion of hybridity which interests us here. The first

concerns the capacity of the graphic image to "unhinge" or to "pry apart" the rapport between what we perceive and our capacity for discourse. In his book Discours, Figure, François Lyotard uses the metaphor of "figural space" to describe how in the "moment" of apperception, our mental apparatus ranges freely over what we see and, as a function of desire or will, explores the figural possibilities of the stimuli surrounding us. Lyotard sees the "figural energy" deployed in these moments as the source of a liberty to reconsider the world in terms of future life-possibilities. He sees certain artists' explorations of pictorial space in the twentieth century as an mode of exploration of figural space which in some sense contradicts a definition of good form as the highly determined visual figure to which a precise denomination can be given and attributes to pictorial space figural possibilities with respect to sound, to time, to tactility and to the kinesthetic.

This mode of approach to the figure is important for the idea of hybridity in that it implies the possibility of stepping out of ordering principle in order to embrace another. In the present context, this implies the possibility of sorting-through the experience of complex and near-unintelligible urban situations. Such a possibility could suggest ways of recombining and transforming existing elements of the environment into new modes of intelligibility, notably concerning the status of public spaces, "urban" and "rural", "manmade" and "natural" etc.

Within this process, graphic representations which architects and planners produce might play a double role: 1) one of integrating existing representations and forms of knowledge about the territory into heterogeneous or hybrid graphic representations that suggest relations between different ways of knowing the territory; 2) one of combining the elements, which might allow the identification of common figures that can be developed as projects. Latour and Callon, and also Michel Serres, have spoken of "translation" in referring to the ways in which the thoughts and actions of actors can in some sense be absorbed and reacted to by others, thus producing new forms of association. Other specialists in the field of science studies have spoken of the constant need of contemporary technicians and scientist to invent "border languages" or intermediate vocabularies in order to be able to interact with each other.

This is precisely what we wish to explore ; how architectural drawing might play such a role between different professionals, researchers and users.

Two experiments on two themes

During the last two years, in research at the CRESSON and in the design studio, we have worked on two themes. One concerned the possibilities for future development of a variety of local conditions following the creation of a new tramway line that extends across the entire Grenoble conurbation. This tramway line traverses a number of "natural" spaces – and rivers and their banks – that divide up the territory. It crosses the borders between a number of different boroughs (communes) that have long existed in a fairly autonomous way. Most importantly perhaps, the tramway and the renovation that occurred around its stops affirm the presence of the pedestrian in places that were previously only hospitable to cars. These give a conventional impression of urbanity to spaces that were formerly crossed at a higher speed and that had a more clearly fragmented character resulting from a number of uncoordinated, juxtaposed, layers of develop-

ment that mixed rurality and even something approaching wilderness with suburban and urban fragments. The fieldwork which the research-team carried out along the tramway demanded a study and survey process that could itself be considered "hybrid". It unfolded in two stages:

The first reflected the diversity of disciplines represented by the members of the research-group: architecture, geography, sociology, photography, urbanism. The advantages and difficulties that this diversity implied were treated as an essential part of the work itself. Each member first studied the terrain independently, deploying his or her own methods and grid of observation. Each freely described what was seen and experienced according to his or her own way of seeing. In this sense, the approach encouraged a form of engagement with the terrain rather than a distanced, « overhanging » attitude. It is important to note that at no time was an over-riding, specifically architectural point of view expected or encouraged except or course when it was an architect who was speaking in his own name.

At the end of this first phase, each member of the research-group had produced an individual monograph most frequently combining both text and image. Each was then read by all the other authors and commented upon. After this point, a single co-written monograph – which we have qualified as « equivocal » – was constructed. A number of means were employed to draw out the different forms of relation that existed implicitly or explicitly between the various authors' points of view. The final result of the research was not only the monograph itself but an enumeration of the different, eminently practical tactics and strategies deployed to write such a co-disciplinary document.

The second theme – the one we will concentrate on here – involves the problem of what it is like to live in Grenoble's increasingly hot, humid and polluted summer climate. Working with a variety of professionals and scientists, the students were asked to portray and to combine forms of scientific and empirical knowledge within the same drawing. The assimilation of the different discourses had to be carried out in such a way as to render each form of knowledge as communicable to others as possible. Care was to be taken to consider the particular graphic conventions employed by different actors in inventing those of the actual drawing. At the same time as different forms of knowledge were being integrated, the shared, empirical realm of experiences of the hottest days of the year in Grenoble was to be brought forward.

In order to capture all of this, students were to start by collecting data that fell into two broad categories which we called "clinical", that is related to methodical forms of observation, and "metonymic", understood in the sense of "creating an opening towards narrative". These two registers were in the end to be combined as seamlessly as possible.

The type of projection to be used was also given; the students were to draw sections at 1/100 scale covering a kilometer of the conurbation, thus producing drawings ten meters long and in general a little more than a meter high. The graphic means employed could be as heterogeneous as one chose and there were no restrictions on the means to be used. The only limit to the heterogeneity of the drawing was posed by the clarity with which it could communicate.

The transects across the territory were roughly determined by the professors; they were some-

what arbitrary though care was given to choose a number of quite different climatic conditions and places (or milieux) of a more or less iconic status.

The choice of the section reflects a choice that is also a refusal. In the face of such insidiously global phenomena as climate and global warming we chose to at least temporarily avoid all use of plans and especially all recourse to panoptic, totalizing forms of imagery such as aerial views or Google-Earth inspired zooms; the transect considered to portray global phenomena in terms of what Latour has called "the local in movement".

The sections in question were to be drawn using computers. The point was not by any means to innovative in a deep sense in this domain (as many are today in domains such as that of geolocalization), but to be inventive with the tools architects have at hand. Computers mattered in this process because they allow for a relatively effortless manipulation of found imagery, new graphics and photographs. All these could be combined into a seamless whole, something entirely different from the technique of collage.

At the root of all this is an objective that relates the activity of modifying the urban or post-urban milieu through design. It has to do with the fact that we expected the sections to contain areas of a particular graphic density or intensity. These would be areas in which a diversity of persons, in different capacities and possessing different forms of knowledge, all designate more or less the same thing and then, around the thing in question or rather the controversy the thing provokes, can start to interact in ways that give it a more explicit and more common definition. In fact, when the students moved on to design their projects (which they are now in the process of finishing) we asked them not to choose a site or a program in the first instance, but rather to choose the controversy they wanted their project to address and to work on the territorial figure that it corresponds to.

One last word about these sections: the decision to proceed through large sections of this kind reflected the fact that the drawings would later be presented to a general public within the framework of an exhibition and seminar during Grenoble's Biennale of Sustainable Habitat. The drawings are thus intended for a particular form of public existence. It is our hope that those who see them will want to take a marker pen and spontaneously add to or modify the content of the drawings.

Conclusion

Based on a variety of contemporary approaches by architects and urban planners and from the social sciences (notably those of the CRESSON research group on urban atmospheres), we have been attempting to associate environmental issues with questions of perception of spatial form. In order to do so we were led to criticize and to look for ways to extend approaches concerning figure/ground relationships in the domain of architectural theory.

We have insisted here on the idea of identifying not much pre-existing figures but rather emergent ones, and of getting as far as possible beyond the domain of the visual to embrace other forms of sensory experience in order to enter more fully into what could be defined as an environmental approach.

The student work that has been produced suggests that it may be possible to invent hybrid forms of representations that allow us to identify and engage with figures of hybridity in the territory ; at the same time, it has made us aware of many methodological flaws that remain to be addressed. We intend to pursue the experiments in the design studio and through practice in coming years while continuing to develop the theoretical perspective we have presented today.

Bibliography

AMPHOUX Pascal , Jean-Paul THIBAUD, Grégoire CHELKOFF (eds.), Ambiances en débats, Bernin: À la croisée, 2004, 309 p.

APPLEYARD Donald, LYNCH Kevin, MYER John R., The View from the Road, Cambridge, Mass: The M.I.T. Press, 1963, 64 p.

CONAN Michel (ed.), Landscape Design and the Experience of Motion, Washington, D.C.: Dumbarton Oaks, 2003, 326 p.

CORCUFF Philippe, "Justification, stratégie et compassion : Apport de la sociologie des régimes d'action", Correspon-dances (Bulletin d'information scientifique de l'Institut de Recherche sur le Maghreb Contemporain), 1998, n° 51.

GROSJEAN Michèle, THIBAUD Jean-Paul (eds.), L'espace urbain en Méthodes, Marseille: Parenthèses, 2001, 217 p.

KEPES Gyorgy, Language of Vision, 1st Edition Chicago 1944.

KUHN Thomas, The Structure of Scientific Revolutions. 1st Edition Chicago 1962.

LATOUR Bruno, Nous n'avons jamais été modernes. Essai d'anthropologie symmétrique. Paris, La Découverte, 1991.

LATOUR Bruno, Reassembling the Social : An Introduction to Actor Network Theory. Oxford University Press, Oxford, 2007.

LATOUR Bruno, "Paris Ville Invisible. Le Plasma". Catalogue of the Exhibition Airs de Paris, Editions of the Centre Pompidou, Paris 2007.

LYOTARD François, Discours, Figure. 1st Edition Klincksieck, Paris 1971

LYNCH Kevin, The Image of the City. 1st Edition Cambridge 1960.

MELEMIS Steven, MASSON Damien, THOMAS Rachel, MORRILL Eric, AÏT-SIDHOUM Naïm, Grenoble-Köln. Proces-sus d'émergence de figures territoriales dans les espaces de la mobilité quotidienne, Grenoble: CRESSON, 2008.

ROWE Colin, KOETTER Frank, Collage City. MIT Press, Cambridge, 1984.

THIBAUD Jean-Paul et al., "L'observation des ambiances", Les Cahiers de la Recherche Architecturale, 1998, n° 42-43.

TORGUE Henry, Les espaces publics au long de la troisième ligne de Tramway - Agglomération Grenobloise, Grenoble: CRESSON, 2005, 102 p.

UNGERS, Oswald Mathias, Die Thematisierung der Architektur. 1st Edition Köln 1983.

#C3

#D1