WORD & IMAGE: The creation of order in the city

by

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ABSTRACT

Planning-processes are processes of representation and communication: participants represent constituencies, institutions, and other groups, and they communicate by means of representations of the 'reality' they address. Representation therefore has two dimensions, a semiotic and a political one. This thesis focuses on the former dimension and assumes that the way in which planners represent is revealing of the way in which they think. It examines the different forms of (semiotic) representation that planners use to communicate to their audience and uses two case-studies in search for clues about the ways in which these forms lend themselves to the representation of certain conceptions of the city and to the use of certain forms of communication in planning-processes.

The study starts on the premise that planning is the creation of order. It proceeds to examine what the nature of this order is, as suggested by the case-studies and by planning literature, and how features of verbal and visual representation support particular approaches to order. Order is being defined as a state in which regularities can be perceived in the relationships of elements. These relationships provide coherence and unity, and their establishment is a form of legitimation. The study inquires about sources of coherence, unity, and legitimacy in planning and attempts to clarify their relationships to verbal and visual representation.

It appears that these sources -- science, art, and politics -- have taken particular forms in official urban planning, by which conceptions of city and society are made conflict-free. The respective capacities of language and imagery for consensus-building seem to be used efficiently, while capacities for relaying difference and conflict are not being exploited.

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Foreword and Acknowledgements

The following work is a study about the ways in which urban planners represent their ideas and communicate them. It will start with the presentation of a theoretical framework on planning and representation (Introduction and Chapter 1). Two case-studies derived from planning practice will be conducted, in search of knowledge about the ways in which planners use specific forms of representation and in an attempt to understand how planners conceive of the city. The first case-study, on the work of the Boston Redevelopment Authority in Roxbury (Boston), will emphasize the relationship of forms of representation to the exchange of information among different parties in the planning-process (Chapter 2). The second case-study, on the efforts to revitalize Lowell, Mass. in the 1970s, will allow us to inquire more deeply about the meaning of forms of representation for decision-making and consensus-building (Chapter 3).

During these two chapters, the reader will find a continuous introduction of theoretical arguments, in relation to the ongoing analysis. Most of these arguments are based on a theoretical investigation of language and imagery. Because of its purely semiotic nature, this investigation was placed outside the main body of the work (Appendix A). The work will proceed with a summary of the main findings from the case-studies and a further development of the theoretical framework for the analysis of representation.
in planning (Chapter 4). This analysis is then carried out in terms of planning paradigms, in order to evaluate their respective rootedness in particular forms of representation (Chapter 5). The work concludes with some considerations about communication and action in planning as well as with a few recommendations for further study and for planning-practice.

Theoretical discussions on issues of symbolization follow the main text in three parts. They concern, respectively: word and image, denotation and connotation, and depiction and resemblance (Appendices A, B, C).

The two case-studies contained in this work pertain to 'real' people and events. The analysis of these people's work will be critical, but always grounded. It is not my purpose to depict any planner as 'the bad guy' and the resident as 'the good guy'. I sincerely believe that a great many planning professional try hard to make our cities better places to live and I have a lot of respect for some of their achievements. I also believe, however, that they are involved in a very conflictual social-political system and that they participate in a rather rigid professional culture, both of which they do not really control. Within these situations, they have to face many challenges, to which they will sometimes, if not often, react in unconscious ways. The point of this study is to discuss how representation and communication take place in planning and to indicate the premises and consequences of these practices. Critical passages on planners' work should therefore not be read as direct accusations on all of them, but as explanations whose aim is to make people aware of certain problems, in the hope of change.

I would like to express my deep gratitude and respect to Don Schö'n, whose kindness, knowledge, generous toughness, and skills at intellectual
midwifery were a constant help in this study. I would like to thank Ed Robbins, for his stimulating criticism and his support at times of crisis, and Dennis Frenchman, for his enthusiasm in sharing his views and experience. My thanks also go to Tunney Lee, for his openness and for our long discussions. I feel particularly grateful to my friends Christian Marion and Ricardo and Carmen-Gloria Bitran, for their comments but especially for their friendship over the last three years. I would also like to thank Maeera Shreiber, to whom this thesis owes more than she would imagine. Many thanks to all those -- professors, colleagues, and others -- who have contributed to this thesis with their knowledge, time, and friendliness.
Introduction: MOTIVATIONS AND SOURCES OF THIS INQUIRY

The difference between words and images is a very personal issue to me. The perception of this difference as a problem rather than as a mere given originated in my architecture studies. There, both modes of representation\(^1\) shared in the expression of my ideas. Yet I quite rapidly became known in my department as someone who could 'sell' his studio projects thanks to a motivated verbal presentation and defense. What my professors and fellow students perceived was, if I say, only the operational side of something larger.

Behind specific strengths and weaknesses in self-expression lied a specific position and disposition toward verbal and visual representation as modes of interaction with the world. An essential aspect of my trouble was my belief -- which I still hold -- that images cannot carry and convey truth. Because of the absence of truth in the imagistic world, images appeared to me as superficial expressions and as obstacles in the noble and imperative pursuit of Truth -- as threats. It is probably this last characterization that provided most of the fuel for the present study.

Experiencing words and images is one thing, thinking about them is another. My readings and discussions about these subjects made me realize

\(^1\) I will use 'representation' as a synonym to 'symbolization'.
that my attitude, as well as the place and use of words and images in
genral, were psychologically and ideologically significant phenomena. The
notion of truth soon receded into the background, to make room in the
foreground for another one: control. The threat I experienced in the face of
the image\(^2\) appeared to be due to a feeling of lack of control and to the
anxiety this feeling generates. Stories of iconoclastic struggle, of which my
own ethnic and cultural origins -- Judaism -- provide a respectable share,\(^3\)
indicated to me the ideological and political dimensions of the controversy
and of the issue of control behind it.

About a year ago, as a teaching assistant to a studio in urban design at
M.I.T., I was clearing some drawers to make space for the maps which the
students in that studio were to use. In one of these drawers, I came upon old
sheets of paperboard which, as I learned later, were written up at a seminar
on the professions of architecture and planning. Two of these sheets listed
features which the participants to the seminar saw as characteristic to each
type of professional. My attention was caught, in particular, by two words:
\textit{visual} and \textit{verbal}. The former applied, of course, to architects; the latter, to
planners. So, architects are 'visual' and planners are 'verbal'. But what in the
world does that mean?

Another story. A few weeks ago, I was glancing through several issues
of a planning journal, in search for clues about the differences in the
approaches of urban designers and planners to the task of improving the
quality of city-life. If architects were 'visual' and planners 'verbal', shouldn't
the difference hold between physical planners (or urban designers) and

\(^2\) The past tense is telling..., and so is the expression 'in the face of'.
\(^3\) "...no graven images..."
other planners as well? So it seems indeed, at least according to Allan Jacobs and Barry Checkoway. In an article entitled "Thoughts on City Planning Practice and Education When No One Loves Us", Jacobs describes the conditions for the effectiveness of the work of "not planners but urban planners or city planners or physical planners." (author's emphasis) One of these conditions is, according to Jacobs, "clear, understandable, imageable proposals -- pieces of utopia -- that can excite peoples' imagination and which have substance" (emphasis mine).

We find quite a different picture in Barry Checkoway's article "Two Types of Planning in Neighborhoods". Here, the author "distinguishes between 'subarea planning' in which central planning agencies deconcentrate facilities or functions to subareas, and 'neighborhood planning' in which community residents and organizations develop plans and programs for themselves." Checkoway's description of the work of subarea planners -- who are "municipal employees assigned to local areas" -- doesn't specify their belonging to a school of physical or of social planning and gives as only indications about the nature of their plans, that these "are not Master Plans, but are in that tradition" and that they can range from comprehensive to highly localized and specific. Yet about the plans produced by neighborhood planning organizations, he specifies: "These plans generally are not comprehensive but sectoral, not long-range but immediate, not a series of colored designs describing an ideal future but a statement of practical problems and community-based strategy searching for resources." (p.106; emphasis mine).

These quotes do not only reveal differences in modes of representation, however. By their reference to "pieces of utopia" and to "an ideal future," Jacobs and Checkoway link representation to another issue, that of utopian thought and idealism in urban design and planning. Now this came as no surprise to me, for I had seen that link established explicitly by another author, a few years earlier. This author is Françoise Choay, and her description of the connection follows from a detailed analysis of what she believes are the two sources of modern urbanism, Thomas More's *Utopia* and Alberti's *De Re Aedificatoria*. The book deserves lengthy discussion, but for our present purpose it will suffice, I believe, to quote the following passages. Their relationship to the words of Jacobs and Checkoway should be clear.

Alberti masterfully sets forth the consubstantial bond between building and desire and the indefinite openness of the latter. He furthermore avoids the trap of dogmatism and states from the beginning that desire and built environment can be formalized only through arbitrary taxonomic categories. (...) Thus, ... far from being an interpretant, language is first and primary and it lies at the origin itself of the built text, which constitutes only its transcription. That is why, at this level, spatialization in a three-dimensional code does not add in meaning in regard to the formulation of demand and desire initially exposed through language, whose power of dissociation and of re-articulation, in other words the fineness of analysis, cannot be matched by the built text.

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6. Françoise Choay, *La Règle et le Modèle*.
7. The French word here is "langue", which doesn't translate literally in English -- its meaning lies somewhere between 'language' and 'speech' -- so that English speaking semiologists have accepted the French term without translating it. I have chosen to use 'language', for purposes of greater clarity.
8. The French word is indeed 'langage'.
... Raphael\textsuperscript{10} discovers the possibility to radically transform this familiar society\textsuperscript{11}. This radical inversion or conversion, of which we saw that it touches upon each and every signifying element of social practice, could, it seems, take an infinity of forms and never stop proceeding. A breathtaking world of possibles should become available to him who experiences his freedom by deciding to change. Yet nothing of the kind. Raphael finds in Utopia but one solution, the establishment of a spatial apparatus, in other words, of a spatial model. By building the spatial model of Utopia, More forces himself to choose a social model from among the multitude of possible ones and, at the same time, gives it a \textit{visual coherence and individuality} which allow for its designation as subject, by means of a name: Utopia, Amaurote. Thanks to the spatial model, criticism can operate as a mirror; instead of performing the inversion of society which it attacks by means of impalpable and ungraspable concepts, \textit{it crystallizes and fixes it into an image} (More speaks of \textit{imago}), gives it a body and identity.\textsuperscript{12}

The lecture of these passages, among others, increased my awareness of the political and practical importance of the distinction between the verbal and the visual. It confirmed my intuition that the different modes of representation were not neutral tools, because their uses are motivated and partake of specific strategies, in urban planning as well as in other fields and disciplines. It is these uses and strategies that form the object of my inquiry and it is this field and discipline that forms it context.

\textsuperscript{10} Raphael Hithloday, hero of More's story, who describes the island of Utopia, on which sits the ideal city of Amaurote.
\textsuperscript{11} England, where he comes from.
\textsuperscript{12} ibid., p.182. The translation is mine, unfortunately. Italics are mine too, except for "imago".
Chapter 1: PLANNING, REPRESENTATION, AND ORDER

Forms of representation.

In the Fall of 1985, I set out to write a paper on Brasilia for a class in "architecture and cultural production".¹ Looking for literature on new-town planning, I was pleased to hear from Lisa Peattie² that she was just writing a book on her experience in Cuidad Guayana³, a new town designed and planned by an American team, to which she belonged. My satisfaction got another push, when it appeared that one of the chapters of that book focussed on the issue of representation. I had been wondering for a while about what it meant that the whole city of Brasilia had been designed by means of a couple of diagrams. Lisa Peattie's chapter on representation not only fed my thoughts, but allowed me to frame them into the general problem of representation, and that of words and images in particular. This new view related the semiotic dimension of urban planning to its political dimension. In Peattie's words,

All forms of representation are abstractions from reality which bring some aspects forward to the attention and leave some in the

². Anthropologist, professor in Urban Studies at M.I.T.
³. Still an unpublished manuscript.
background or eliminate them completely. At one end of the continuum (formed by the different meanings of the word) the descriptive meaning of "representation" is emphasized; at the other, the political meaning. But a description, because it selects and emphasizes, because it makes a statement about the world, to the degree that people attend to it or are influenced by it has political effects. And at the other end of the continuum, the institutions which we call "representative" stand as, and are intended to be ... descriptions of the societies they represent.

In her chapter on representation, Lisa Peattie discusses three types of symbolizations: sketches and drawings, maps and diagrams, and statistical tables. The starting point, the premise of her discussion is that, "what can be said depends on the language for saying it. That is the interest at looking at representations in planning. The focus here is on the underlying messages carried by the forms of representing" (emphasis mine). In other words, and to paraphrase McLuhan, the medium is also a message. Peattie's arguments about the forms as well as the contents of the particular cases of representation she analyzes are not only interesting and insightful, but they also make a case for the distinction between form and content:

...at this point, we are looking at the table as a form of representation, as a mode of describing reality. The fact that this way of arranging the statistical story is quite conventional should not lead us to assume that there is nothing to be said about it: rather the reverse. Intellectual categories (in the table) arise out of social arrangements and in turn help to make the arrangements seem the only possible ones, and thus

4. I will call *types* of symbolizations or representations things like photographs, drawings, sketches, maps, diagrams, tables, and texts; I will call *modes* of representation the different relationships between symbol and referent: description (or verbal denotation), depiction (or pictorial denotation), expression, and exemplification (borrowed from Nelson Goodman, *Languages of Art*). Type and mode constitute together the form of a representation, which is to be distinguished from its content: 'what' as opposed to 'how'. 
to maintain them. What are the characteristics of the particular mode of representation and its categories before us here?

The last sentence could not be clearer; there are indeed two issues: "the characteristics of the particular mode of representation" -- form -- and "its categories before us here" -- content. But what this sentence also suggests, is that it is not easy to respect the distinction, that it is difficult to keep form-analysis from slipping into content-analysis -- a fact well-proven by Peattie's analysis and by my own. First, because meaning lies primarily and more overtly in what is being said, so that criticism of a representation will be 'naturally' drawn towards that level of analysis. Second, because it is sometime difficult to know what pertains to each level of analysis: are criteria of categorization a matter of content or of form? On the one hand, they organize the representation, give it shape; on the other hand, they themselves have been selected and are being seen as representative of what the situation means.

A second distinction, related to the first one, which Peattie mentions, separates the nature of the form of a representation and the particular use to which this form is being put. The question that this distinction raises is whether a form can have a binding influence on a content: do modes or types have absolute inherent limitations -- by which they radically determine what can be said or shown and how -- or are these limitations only relative, in that they make it more or less difficult to say or show certain things in certain ways (and for certain purposes)? Complementarily, do modes and types have inherent potentials, do they lend themselves better for certain representational tasks, do they allow for more effective communication of specific contents? Or does efficiency depend solely on the
skills of the user, irrespective of type or mode? Is there or is there not, in other words, such a thing as 'formal determinism'?

Yet the most important distinction that Peattie offers in her chapter is, I believe, the one mentioned above and which constitutes the two poles of the continuum of meanings of the word 'representation', the semiotic and the political pole. Her whole chapter can be seen, in fact, as a slow glissando from the former to the latter, exemplified by the following passage:

In retrospect, I believe that I could have made more than I did of the vignettes of personal history and collective struggle which were my "stories" from the site. ... I would have had to be more daring and more explicit in developing a picture of the city as evolving, rather than as planned from above. Perhaps also I could have used my position as a resident of "the site" and participant in the world there to arrange meetings and interviews for the planners with some of the more active persons in the evolving city. ... Had I done so, of course, I would have moved closely towards the political meaning of representation.

This shift has profound consequences; for it means, ultimately, that the planner should re-cast his or her professional role. Planning professionals, concludes Peattie, should "try, as much as possible, to stay out of the business of 'telling people how to run their lives'," and should refrain from "drawing up a blueprint of some ideal state ... according to our present viewpoint." Rather, planners should work "as learners, mediators, and clarifiers." The issue of representation has brought us right in the heart of the actual debate on the role of the planner. How can planners intervene in urban processes? As holders of decision-making power, imposing themselves

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5. Peattie calls this pole "descriptive." In order to avoid confusion with later uses of "description," I prefer to call it "semiotic." This term also clarifies the distinction: on the one hand, the 'material' of the representation consists of signs (notational symbols, objects, events, or mental states) and on the other hand of people (human signs, if one wants).
and their decisions on others? As advisors or spokespeople for specific groups? Or as neutral intermediaries between all parties? When is one modality of presence preferable over the others?

I would like to add, to Lisa Peattie's three distinctions -- between form and content, use and nature, and semiotic and political -- a fourth one, concerning semiotic forms of representation. If the work of planners is primarily to (help) make plans and to guide their implementation, part of their task is also to communicate these plans to other parties, be it to those in charge of implementation, to employers, to providerts of funds, to residents, etc. A major feature of this communication is the fact that its purpose is often to persuade the other parties of the quality and legitimacy of plans. Planning documents therefore can and generally do serve two functions: to guide change and to persuade those who have a stake in the intervention. Let us call the first function the planning-function and the other the communication-function, even if the distinction is arbitrary, even if, in other words, communication is in itself a planning-task. A map in a Master Plan is, when submitted for approval to the City Council, a piece of communication in an approval-procedure and, when used to decide about a new suburban expansion, a planning-tool properly speaking. The artist's representation on the cover of the Neighborhood Plan issued to the local population is, on the other hand, much more relevant in terms of persuasion than in terms of implementation, even if the latter depends partly on the former.

This distinction in functions of the representation is important, for it forces us to consider the possibility that what planners show is not necessarily what they think. I do not refer by this to the possibility of dishonesty, but to the fact that if we want to study representations in order
to know how planners plan, we must be aware of the fact that some of these representations may have been shaped primarily by a desire to persuade and much less by a desire to be 'realistic' in terms of the planning-intervention itself. Yet in both instances, representations legitimize the plan. In their communication-function, they serve as means of legitimation for the plan as a whole; in their planning-function, they carry in themselves, even if only implicitly, the legitimitation of what they represent.

By 'legitimation', I mean that which gives coherence to the representation, internally and/or externally: legitimation of the proposal in its own terms and legitimation of the proposal in terms of its context. The map in the Master Plan has been organized according to principles that legitimize its specific arrangement of objects -- such as principles of urban design, of infrastructure-building, of zoning, etc. -- and it is being legitimized in a public presentation by reference to the welfare of the city, to its problems and resources, the policy of the Mayor, to American Values, or other 'givens'. When proposing a plan for an area or for an organization, the planner suffers from a 'natural' problem, which is that no representation can really capture what the area or organization will be like after implementation of the plan. Not just because of problems of 'realism', but also because "It is very difficult to make predictions, especially about the future" (Niels Bohr). The central problem with plan-making, then, is that plans must be judged primarily on their own internal consistency and on their consistency with their conceptual and physical context, rather than on the quality of the changes they profess to bring about.
Planning and order.

An evaluation of forms of representation, that is, of forms of expression and of forms of action, requires a definition of their context; in this case: planning. Let us therefore ask ourselves what planning is. This, despite Judith de Neufville's warning, that

"planning" is an open concept, in Kaplan's terminology, not fully articulated and with fuzzy boundaries, yet in use and generally understood. We have to be cautious to avoid "premature closure," narrowly defining such ideas too quickly, because the meaning of open concepts varies according to context, purpose, and the understanding of the overall situation.6

Braving the reefs of "premature closure" in order to be able to follow the coast-line of a working definition, I propose to start from the following: planning is the creation of order -- both in time and in space: the word 'plan' refers both to a course of action and to a physical lay-out. Note that the former type of plan primarily identifies a sequence in time, while the latter offers a simultaneous view of the different constitutive elements of a phenomenon. And note, on the other hand, that as a representation, the plan necessarily juxtaposes distinct elements, be it in time or in space.

But what, will you ask, is order? Order, I will reply, is, in its general sense, the sequence or arrangement of elements, the state or condition of the whole which they form. In its narrower sense, it is the perceived quality of a phenomenon, in which "everything is in its right place and functioning properly" (Webster). The perception of order therefore supposes the perception of constitutive parts and of their relationships. Planning is, in that

sense, the ordering of events in time and of objects in space\textsuperscript{7} according to specific principles. These principles form the criteria by which we evaluate whether things are in the "right place" and are "functioning properly."

The perception of parts and relationships involves two movements. In a first instance, an object can only be perceived insofar as it is different from others, setting itself against its context, and it can be identified only insofar as it constitutes an entity (a unit) onto itself. In a second instance, the perception or creation -- perception being in itself an act of (re-)creation -- of relationships among objects inscribes them into a pattern and thereby establishes a certain unity among them. The creation of order therefore consists of a movement of \textit{differentiation} and a movement of \textit{unification}. It is an action that separates things as units in the purpose of putting them back together, in unity, according to given principles.

Since planning creates (or is meant to create) order, it relies on representation. First, because it produces \textit{plans}, which are representations of sequences or arrangements of things or events. Second, because order is (only) a \textit{perceived} quality of things: it proceeds from a re-construction of 'reality' in one's mind -- from a mental representation. Third, because in the case of urban development at least, planning is a social activity. It thus supposes, on the one hand, a specialization of tasks, which follows from a distribution of power, both determining a structure of decision-making -- a structure in which groups will be represented (or not) in various ways. And

\textsuperscript{7} The ordering of things in time is closer to the traditional conception of 'planning', while the ordering of things in space is closer to what we generally understand by 'design'. Yet I will continue to use the former term to designate both physical and non-physical planning. When needed, I will distinguish design from planning in city-making by using the words 'physical planning' or 'urban design'.

it therefore supposes, on the other hand, a system of communication, which consists in flows of representations.

Through communication, planners attempt to persuade their audience and to guide the evolution of the city -- or in other words: to create order in the minds and order in the city. In these terms, we can see better why both tasks in fact overlap. First, the order of things in the city is a quality projected by the mind, and this projection depends on the order of things within the mind. Second, order in the minds is a basis for social order: not just order in perception, but order in behavior. Third, both tasks of persuasion and guidance are further fused in that the latter partly consists of the former. Planning is a social process; it relies on -- better: it is made of communication. Hence the need for one's messages to be understood and accepted -- accepted as legitimate, valuable, and applicable, accepted as basis for action. Planners do not operate, they co-operate. Hence, again, their need to persuade employers, providers of funds, colleagues, as well as those by whom and those for whom their work is to be implemented.

*Object and subject.*

Representation occurs, given the above, at three different levels. Plans: this is the level of the object (as opposed to the subject), of the relationship among its elements, and in general, of the *relationship among objects*. Here, representation consists of "a vertical axis of selection from the repertory of available forms, and a horizontal axis along which the selections
are combined, thus of a choice of representative elements and arrangements.

The perception of order: this is in a way also the level of the object, but in its context: in its perceived context and in the context of its being perceived. How does the object fit into 'the order of things' -- to which the subject him(her)self belongs as well? And if object and subject partake of the same "world-order," how does this order define the subject's relationship to the object? This is thus essentially the level of the relationship between subject and object. Here, representation is representation: making present what was absent, bringing one (back) into contact with things, (re-)estabishing a relationship with them.

Communication: this is the level of the relationship among subjects. Communication is the sharing of information, in an attempt to make the represented object mentally common to all parties. Communication, if successful, can thus help create a community of minds.

The three levels feed into each other. The object offers itself to experience; this experience constitutes a specific relationship to the object; this relationship can, in turn, underly a sense of community among people sharing the experience. Hence a relationship among subjects, based on their shared relationship to an object. But relationships among subjects need not necessarily rely on common objects. Better, if objects are the binding elements of a community, do they not relegate direct interaction into the background? As an anthropologist, Lisa Peattie's aim was to share, even if only temporarily, the experience of the people she was 'dealing with', to

8. N.Bryson, *Vision and Painting*, summarizing the "founding axiom of Jakobson's semiology", p.130
have an experience as direct and personal as possible of the city (the object) as it existed. But her relationship to the city was to be an involvement rather than an abstraction, which would have allowed her to be part of the process which she and others were supposed to guide, to be a member, even if with a special status, of the community they were suppose to shape. And she later describes her position in Cuidad Guayana indeed as that of a "participant observer," a "resident of "the site"," a "participant in the world there." Sharing common experiences and sharing common objects do not amount to the same in terms of social life and identity.\textsuperscript{10}

\textit{Identity and boundaries.}

Planning is a process of differentiation and unification, aimed at creating an orderly environment and an orderly community.\textsuperscript{11} Yes, but the distinction between environment and community should not mislead: physical planning, like all forms of planning, has both social determinants

\textsuperscript{10} For a discussion of the issues of community and identity, see Appendix B.\textsuperscript{11} Even if one's goal is to create disorder in the city, this intervention will inscribe itself into a logic, an "order of things". Take Richard Sennett's proposal, for instance. For one, his 'ideal' community is not one of complete chaos. Second, and more importantly, the very presence of disorder has a raison d'être, which incorporates it into a larger, orderly system. This point shows that my working definition relies on an "open concept" and should therefore appease worries of "premature closure." Cf. Richard Sennett, \textit{The uses of disorder}. 
and social impacts: all "planning is politics." As various authors have demonstrated and as will be illustrated below, planning interventions suppose a political (socio-economic and ideological) structure and a related 'image' of the community. Planning has always been done in the name and for the sake of a community, but what has changed over the centuries and decennia, is the conception of the social body in question, or in other words, the way in which those concerned and affected by the intervention are being represented.

Because planning is a process of representation, and because representation involves the establishment of relationships among objects, between objects and subjects, and especially among subjects, these activities are also processes of social identification. They offer an opportunity for communities to reflect upon and eventually change their own identities and to influence each other's identities. They can even provoke and fuel the constitution of new social groups. The question raised by Lisa Peattie in her chapter on representation is, in fact, whether the origin of these identities should lie with the people themselves or with the individuals 'in charge': "Let the ... planners not begin by drawing up a blueprint of some ideal state of ... organization. ... Let us rather work as ... clarifiers." Let the planner be a catalyst in a process of self-development and self-identification, but not control and manipulate it.

13. For example, Christine Boyer, Planning the Rational City, and Constance Perrin, Everything in its Place.
The terms 'image' (of the community) and (social) 'body', used above, are not fortuitous. They illustrate a specific conception of the process of identification.\textsuperscript{14}

Speaking of identity includes, implicitly, that one speaks of coherence and cohesion: identification rests on the perception of difference\textsuperscript{15} (differentiation) but also of unity (unification).\textsuperscript{16} A neighborhood, for example, exists as such on the basis of an internal system which gives it some kind of perceived cohesion, and on the basis of its differences and boundaries with other neighborhoods. Here, as in other cases of identification, certain criteria are being used to differentiate and to unify: social, economic, physical (and possibly other) criteria.

The form of a representation is of primary importance in this process: the choice of a specific form not only follows from a particular understanding of what constitutes the identity of, say, a neighborhood, but it also shapes future perceptions of it. We can illustrate this idea by pointing at the difference between the name of a place, which often refers to elements of the place's history, and a map showing its boundaries as defined by a bureaucracy; or at the difference between a table, which 'puts the area into numbers,' and a personal account by one of its residents.

The notion of boundary is essential in issues of order and of identification. It refers to the extent to which things, when identified, are being cut off from each other or seen in continuity. Systems of identities -- categorization and classifications -- are fields articulated by networks of

\textsuperscript{14} See Appendix B.
\textsuperscript{15} ...or should I say \textit{différence}?
\textsuperscript{16} In terms of vision: to identify an object means, on the one hand, to separate it from its background, and on the other hand, to perceive it as a whole, as a \textit{Gestalt}. 
boundaries, themselves dependent on criteria of distinction. (Note, *en passant*, the presence of the words 'articulation' and 'boundaries' in the de Neufville's quote about the definition -- identification -- of 'planning'.) Yet if boundaries separate, they also mediate, precisely through the criteria of differentiation. These criteria provide coherence as well as difference -- in one word: identity ¹⁷ -- and therefore also validity and legitimacy: legitimation follows from identification within a context, from integration of an object in a whole that gives it meaning. Different forms of representation, I will argue, have different capacities in terms of integration and boundary-setting, thus in terms of identification and legitimation. Differences are especially important between verbal and visual modes of representation. Both modes establish relationships in different ways and of different natures -- among objects, between subjects and objects, as well as among subjects -- and offer other grounds for legitimation (see Appendix A).

*Purpose of the study.*

We can summarize our arguments about (urban) planning in the following way:

Planning is a process of representation: of the existing situation and of the measures taken to change it, but also of the will of some people in the decision-making process. The question is, whose will?

¹⁷. For a discussion of the specific characteristics of verbal and visual representation, see Appendix A.
Planning is a process of communication: between people within a same group, across groups; between the representative and the represented.

Planning is a process of differentiation and unification: these two movements structure the representation of objects (first level of representation), the relationship between subject and object (second level), and the community of subjects (third level).

The central issue to which this inquiry is devoted, then, is that of representation and communication in (urban) planning. What and who is representative of 'reality'? What and who is represented at the moments of decision-making? How do participants to the planning and design process communicate? How do they represent things, people, and events?

The central premise on which this inquiry is based, is that form has (a) function or, as already said, that the medium is also a message.

The central hypothesis from which this inquiry proceeds, is that the use of a specific form of symbolization constitutes in itself a strategy of representation and communication, given the specific potentials and limitations of each form.

The central question which this inquiry addresses is: how do (urban) planners -- consciously or unconsciously -- use the specific potentials and limitations of various forms of representation, and in particular of the word and of the image, in their tasks? The question is thus not how the use of a form of symbolization affects the contents of a message. Rather, it is how particular forms lend themselves to specific uses (and abuses) in planning and are therefore being selected by planners in their communication procedures. In other words, I would like to lay the emphasis not on the ways in which forms imprint themselves on supposedly passive contents and thereby transform the messages of 'innocent' planners, but on the ways in
which these professionals choose and use forms to fit their purposes, on the ways in which forms of planning and forms of symbolization coincide.

Insofar as planning is but one activity of a society engaged in a continuous effort at controlling and shaping itself, the problem of symbolization can be applied to that society as a whole. The analysis of representation in planning can in that sense be extended into an analysis of symbolization as general social phenomenon and especially into an analysis of forms of symbolization as representations, in themselves, of social norms and values. We can, in other words, attempt to understand how representation in planning uses conventions that belong to society as a whole -- and not only to this specific profession -- as well as to inquire about the meaning of these conventions in terms of social processes in general -- and not only in terms of planning-processes. We will engage in such an inquiry at the end of this work, in trying to identify some social-political attitudes inherent in planning today.

The case-studies.

I will try to provide elements of an answer to the "central question" raised above by means of two case-studies. These will, methodologically, build upon the three distinctions made by Lisa Peattie in her chapter on representation. These three distinctions are: semiotic and political representation, form and content of a representation, use and nature of a representation.
**Semiotic and political representation.** The case-studies will start from the semiotic pole and search their way towards the political pole. Their purpose is to examine, in this fashion, what the relationship of these two poles might be, how they may coincide, overlap, feed into each other. As said, the emphasis of this study lies on the ways in which forms of planning -- that is, forms of politically motivated interventions -- coincide with forms of symbolization.

**Form and content.** Given the above, my analysis will essentially be one of form. Yet a form is the form of something, so that understanding it starts with knowledge of the content it applies to, of the content it shapes. I will therefore have to 'speak contents', while at the same time trying to limit content-analysis to that which is useful and necessary to form-analysis.

**Nature and use.** This study as a whole will deal with the use as well as the nature of forms of representation. I believe that an inquiry into these two issues can and must proceed together, in a dialectical way, yet with great care for their analytical separation, with constant effort to avoid intermingling and confusion. By understanding what people do with certain forms, one can understand what these forms allow for, what their capacities as well as their limitations are. Conversely, insight into these capacities and limitations sheds light on the ways in which people approach the tasks for which they use these forms.

**Communication-function and planning-function.** This distinction is probably the most difficult one to respect in case-analysis. How can the desire to control and order a situation be differentiated clearly from the desire to persuade others of the necessity and validity of this order? Can we not argue, indeed, that the planners need to persuade themselves as much as they need to persuade others, even if for different reasons and without
being conscious of it? Can we not say, for instance, that when a planner
draws a perspective drawing of a city with a specific element in the focal
point of the composition, he or she is not inducing him- or herself to view
the city in a certain way as much as he or she is trying to induce others to do
so? Must we not wonder, whether identification and legitimation- processes
overlap or coincide in plan-making and in communication? Can we not
assume, that certain forms of representation serve both functions of plan-
making and persuasion? Indeed; but despite these problems, I will attempt
to distinguish between these functions, between communication- and
planning-function. I will address both issues, for they constitute, the one as
well as the other, essential dimensions of the planning-process in general,
and I will try to show their areas of overlap. These areas would contain
attitudes and values, ways of looking at things and conceiving of them, that
are shared by planners and non-planners alike.

The case-studies (chapters 2 and 3) will start on the basis of certain
ideas about the nature, the 'mechanisms', of forms of representation, in order
to explore their use in specific examples. A systematic inquiry into the
nature and mechanisms of verbal and visual representation can be found, as
already said, in Appendix A. After the case-studies, the discussion will shift
to issues of (semiotic) representation in planning in more general terms,
drawing on the knowledge gathered in the case-studies and in the
Appendices. We will attempt, then, to further qualify planning-thought, to
further identify essential features of the way in which planning 'deals with
the world'.

For each piece of analysis in the case-study, for each 'vignette', the
only evidence that is available, is the representation itself. This
representation is, among other things, the result of a choice on the part of
the planner\textsuperscript{18} for a particular form of symbolization. We can (only) interpret the message that a representation carries and we can (only) infer the purposes for which its form was chosen. The analysis can therefore (only) produce hypotheses about purposes and their effects, and about the meaning of such motivations and consequences in terms of planning and communication. Arguments made as part of the case-studies will therefore proceed according to the following scheme: 

(1) This is the representation; it belongs to this class of representations.\textsuperscript{19} 
(2) This is the object of the representation; in other words, this is what the representation describes or shows. 
(3) These are the elements of the representation and this is what we can say about the way in which these were selected, shaped in themselves, and organized together. 
(4) This, then, is how one could interpret what this selecting, shaping, and organizing does in terms of the message and its perception -- in other words, this is what the representation can be said to convey (explicitly and implicitly) about its object, this is how the audience is likely to receive that information, and this is how this information is likely to affect the audience's perceptions and ideas. 
(5) If this is what the planners convey about the object and this is how this information affects the communication-process, then this is what we can infer about the planners' conception of the object, as well as about their purposes in this process and their relationship to their audience. 

\textsuperscript{18} I will assume that planners themselves have produced the representations I will be studying. Not because I think that this is necessarily the case, but because they are the ones who are responsible for them. That a graphic artist, especially hired for the circumstance, actually did the cover-drawing for a document by a city planning agency, does not really matter. The fact is, that the agency's planners chose to communicate via this drawing. It is therefore an integral part of their message. 

\textsuperscript{19} This concept -- the class or representations -- will be developed below, in terms of means, types, and modes of representation.
their conception of the object, and their relationship to their audience, then this is what we can infer about their conception of communication in planning and their conception of the role of the planner." This scheme will not be followed literally; it merely indicates the global structure of the argument that I will make in each vignette.

The case-studies will consist of an analysis of a limited amount of representations, drawn from two planning processes. The first one is contemporary and concerns the district of Roxbury, in Boston; the other one took place in the 1970s and concerned the city of Lowell, in Massachusetts. Both studies will start with a short description of the case, of the context out of which the material for analysis was drawn. Each vignette can be seen as an attempt to elucidate a puzzle. For example: in a document from the Lowell-case, three maps are being used to represent the spatial distribution of mixed-use areas, blighted areas, and minority residences in the city. Although all three were produced by a same agency, belong to a same document, and use a same base-map, the ways in which identified areas are being depicted (through shading and/or delineating) varies greatly. Why is this so? Is there any relationship between a map's graphic features and its object? Other vignettes will take off from specific questions such as: Why was this perspective drawing composed in this way, with this specific object, which is not the object of the planning intervention, in the vanishing point? Why was the same metaphor used to describe these two different events? Other vignettes will proceed from a more general question, which in fact underlies the preceding ones: Why was this particular form of representation chosen to represent this object? For instance: why a paragraph made of separate points and not of continuous text? Why, on the
cover of this planning document, a photograph of a person and not a reproduction of the proposed plan?

In order to analyze forms of representation, their nature and their use, we need to develop a framework within which we can identify each form. Categorization-schemes are possible at various levels, constituting together yet a larger classification. A map can be seen at the same time as a pictorial representation, as a specific form of drawing, and as part of a planning document. These qualifications correspond to three levels of differentiation, of categorization: the levels of means, types, and modes of representation.

*Means, types, and modes.*

By *means of representation,* I refer to the context in which representations are being conveyed from person to person. One such context is the printed document being distributed to a public; another is the prepared text or graphic material being presented to an audience; yet another is the direct conversation taking place between people. One could argue that the distinctions between the three means is artificial and does not correspond to practice. It is true that most meetings, for instance, contain a combination of various means of representation. But, first, not all communication occurs in meetings and, second, the character of a meeting depends primarily on the means that is central to its organization. In one of its meetings in Roxbury, for example, the BRA invited the residents of an area to watch a slide-show, to receive an explanatory document about
zoning, and to offer their reactions to what they had just seen. The use of a
prepared presentation, to be followed by reactions, in order to convey a
message has clear repercussions on the respective statusses of that message
and of the reactions to it. (These will be presented during the case-studies.)
To summarize, I will distinguish three basic means of representation: the
printed document, the presentation\textsuperscript{20}, and the conversation (or dialogue). I
will discuss each means in the course of the analysis itself.

\textit{Types of representations} are the different graphic forms which
representations can take: text, tables, charts, maps, diagrams, drawings,
photographs. These types are not absolutely distinct, in that a table can be
seen as a form of text, a chart comprises text, chart and maps are forms of
diagrams, diagrams are forms of drawings, and charts, maps, diagrams,
drawings, and photographs are all forms of pictures. We can, however,
operate one basic distinction -- between text and pictures -- and then
develop it into the seven-term differentiation given above. Each type can
furthermore acquire specific forms: text may be a continuous whole or a
series of separate points; a chart can be made of color surfaces or of a
network of lines; the same line-chart can be more or less randomly
organized or it can be purely symmetrical; etc.

The two-term distinction of types of representation rests, on the other
hand, on the distinction between two \textit{modes of representation}. These are: the
\textit{verbal} and the \textit{pictorial}. (The numerical will thus be seen as a 'sub-
mode' of the verbal.) Modes can be further differentiated according to their
being literal or metaphorical, and to their being denotative or connotative.\textsuperscript{21}

\textsuperscript{20} That is, the presentation of material prepared prior to the presentation.
\textsuperscript{21} For a categorization and description of different types and modes of
representation, see Nelson Goodman, \textit{Languages of Art}. 
Because the type and the mode of a symbolization refer to overlapping categorizations (the two possible modes differentiating two families of representations, each consisting of several types), we will analyze each case in two steps. In a first step, the analysis will occur at the level of the means of representation: What means are being used here? How? What can we infer from their use? In a second step, the analysis will focus on separate 'pieces' of representation (identified at the level of the type) and discuss them in terms of type and mode: To what type does this 'piece' belong? What modes does it rely on? What is its object? etc...

Conclusion.

This study is an attempt to gain a deeper insight into the ways in which planners use various forms of representation and into the meaning of this use, given the nature of these forms. The following case-studies will proceed with this attempt on the basis of selected examples. They will provide grounds on which to build a better understanding of both the use and the nature of means, types, and modes of representation. Ultimately, this inquiry should shed some light on how planners conceive of the city and the community, and more generally, on how the symbolic structures on which they relieve in their work shape society.
Chapter 2: PLANNING IN ROXBURY, BOSTON

The context

Roxbury is one of the districts of the city of Boston. Its population, mostly black and hispanic, is poor and many of its areas are blighted. It consists of eleven neighborhoods, of which the Dudley Square area forms the historic center. Roxbury knows many of the problems that plague urban ghetto's: high unemployment rate, large proportion of families headed by single parents, low average level of education, low median income and high poverty rate, little local economic activity, poor health-care system, large share of publicly assisted housing, poor state of buildings and infrastructure, high vacancy and disinvestment rates, large amounts of vacant land and of tax-forclosed properties, and high crime-rate. As a neighborhood description by the Boston Redevelopment Authority (BRA) makes clear:

Over the last decade Boston's economy as a whole has begun to expand into new vista's of post-industrial America -- professional, business, medical, and educational services, finance, real-estate, insurance, communication, and high-technology industries. The Roxbury community, however, has not yet shared in this new economic future, to any extent. The challenge that presents itself now is how to bring the prosperity of Boston's economy to Roxbury.1

The problem, in fact, is how to use the private market forces that have started to focus on Roxbury, in a way that benefits the local residents.

By its proximity to Boston's Downtown, its resources in land and structures, and its low real-estate prices, Roxbury is indeed becoming a target for private investment. In order to regulate private development and in order to use it for the redevelopment of Roxbury in general, the BRA has started, around 1984, to design its own strategy for intervention. This intervention consists essentially in the creation of a new zoning code for the area. The effort is but a piece of a larger one: to give Boston as a whole a new zoning code, in replacement of the outdated one from the sixties. Yet the preparation of such a code takes years. In order to avoid irreparable wrongdoings and irretrievable losses during these years, the BRA has proposed to use interim zoning, in the form of Interim Planning Overlay Districts (IPODs). The Agency has described these in the following way (the quote is long, but it is worth giving in such length, as it deals with many relevant aspects of the rezoning process):

An IPOD is designed to allow comprehensive planning and rezoning of a neighborhood in keeping with the community's needs. An IPOD provides temporary zoning regulations for an area where the Zoning Commission has determined that zoning may be inappropriate. These temporary regulations may stay in effect for a maximum of two years; afterwards, new zoning may be put in place.

An IPOD is established as a text and map amendment to the Zoning Code.

An IPOD defines the physical boundaries of the neighborhood in question. It establishes a time period for which the IPOD will be in effect. It then details the characteristics of the district which suggest that the current zoning may be inappropriate. ... An IPOD also provides a list of goals to be achieved in developing new zoning. These goals

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2. ...or district...
3. If the new zoning is not ready by then, the old one goes back into effect.
4. That is, to the existing Zoning Code, of course.
result from a process by which a community review committee works with the BRA Zoning staff and Mayor's office of Neighborhood Services to identify problems and consider solutions. These solutions are then put in place as Interim Controls. Interim Controls regulate neighborhood development while the IPOD is in place.\footnote{5}

The IPOD thus represents a specific zoning mechanism but also supposes, at least in the words of the BRA, a specific type of planning process -- namely, a participatory process.

The goal of this case-study, then, is to examine what forms of representations the BRA offered to the residents of Roxbury in the process of designing the IPOD.\footnote{6} The study does not bear on the process of communication itself, on its organization and evolution, on the actors involved or on their respective activities and powers: the political dimension of representation. Rather, I will focus on \textit{how} the BRA has represented its views, ideas, and solutions to the Roxbury community, through what means, types, and modes of representation\footnote{7}: the semiotic dimension of representation.

\textit{Four documents, one presentation}

The following study is being constrained not only by limitations in time and intelligence, but also by limitations in the material that is available for analysis. Of the three means of representations mentioned above, one

\footnote{5}{"Citizens' Guide to Zoning for Boston", BRA, 1986.}
\footnote{6}{I will, from now on, use 'IPOD' to stand for the code and regulations themselves.}
\footnote{7}{See Chapter 1.}
will be missing from the discussion. While I do have at my disposal a series of documents composed by the BRA in the course of its planning effort in Roxbury, and while I got to see -- in a private projection -- the only presentation made to the local population, I did not have the opportunity to attend any of the meetings between the BRA and local residents, nor did I manage to get minutes from the discussions that took place at these meetings. And it proved to be impossible as well to acquire copies from the slides used for the presentation mentioned above. The reader will thus have to satisfy him- or herself with a (verbal) description of this visual presentation. The materials that will support the following analysis are:

- "The Dudley Square Plan: A Strategy for Neighborhood Revitalization"
  (called from now on the Dudley Square Plan)
- the "Citizens' Guide to Zoning for Boston" (the Guide)
- the "Roxbury Interim Planning Overlay District Workbook" (the Workbook)
- the "Roxbury Interim Planning Overlay District Draft" (the Draft) and
- the slide-presentation given by the BRA at the first general meetings with the population of the various neighborhoods in Roxbury.

*The Dudley Square Plan*. This document was written by the BRA in December of 1984, before the actual rezoning of Roxbury started. It was thus not meant as an official piece of communication in the planning process we are considering here. I have decided to use it for the present analysis, however, and for two reasons. First, because it represents the way in which

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8. The reason for this failure to attend meetings is the fact that a first series of open meetings occurred before my choice of the Roxbury development process as case-study and that a second series of them will take place in the (near) future. Other meetings, between BRA staff and members of the Roxbury Planning Advisory Committee, were closed to the wider public.

9. I would have had to steal them.
the BRA initially approached "the problem". Second, because it has been composed in a way and with a tone that make it usable for communication with the residents. Although it is only a draft -- "For Discussion Only" -- it exhibits a desire to persuade a hypothetical audience. It contains mostly text, but also five perspective drawings.

*The Citizens' Guide to Zoning for Boston.* This document, written in 1986, was distributed at the open meetings held for the different neighborhoods of Roxbury, in the beginning of the participation process. The Guide was not written especially for this occasion, but as a piece of general information for the public about the mechanism of zoning. It was thus distributed to the residents of Roxbury to help them understand and accept the type of planning intervention that was to take place: (re)zoning. As noted earlier, the Guide contains a special page about the IPOD -- the specific type of zoning code that would be used for this intervention. It is richly illustrated, with photographs, drawings, diagrams, and charts.

*The Roxbury IPOD Workbook.* Dating from May 1985, this document can be seen as the new version of the Dudley Square Plan -- a version based on the IPOD-technique and much more technical in style than its predecessor. The core of the document identifies the major problems of the area and spells out its essential needs in terms of nine different issues. It also contains "Community Response Forms" for residents' comments on and proposals for the IPOD-procedure, the participation process, the composition of the Planning and Zoning Advisory Committee, and the issues that need to be studied. It consists essentially of text, but its cover displays six small photographs from the area and its last six pages carry current zoning and land-use maps.
The Roxbury IPOD Draft. Issued in March of 1987, this document consists of various parts. Preceding the draft of the proposed zoning amendment itself (the IPOD being an amendment to the existing zoning code) is an executive summary of the "Roxbury IPOD Policy Recommendation". And preceding that, is a five-page letter from Stephen Coyle to the "concerned residents" of Roxbury, further summarizing "the twelve major policy recommendations" presented in the executive summary. The draft of the zoning text amendment itself is a legal text, structured in separate "sections". It is being followed by a map of the IPOD boundaries, subdistricts\textsuperscript{10}, and Urban Renewal Areas. Concluding the whole, is a series of verbal descriptions of the legal boundaries of the various parcels and areas mentioned in the text. This document serves as the basis for the second round of open meetings, which should provide an opportunity for reactions from the community at large.

The slide-presentation on zoning. This presentation was given at the first community-wide meetings, at which both the Guide and the Workbook were distributed. It consists of some seventy color slides and was used to explain to the audience the necessity and relevance of zoning as planning tool.

Means of representation.

Obviously, the same means of representation, the document for instance, can be used in many different ways. A document can ask questions...
and give answers. It may be used to document agreements reached through discussion and to present ideas which one actor would like the others to accept. It may be used to trigger a discussion and to formalize its results. It may be used to guide the design-process of a plan and to guide its implementation. Yet this same means of representation lends itself more readily, given its formal properties, to specific purposes in terms of communication and decision-making.

I will focus my discussion on the following point: documents and presentations are to be set against dialogue, in that both are finished products. Both the substantive and the adjective -- both 'products' and 'finished'-- are important. The first one refers to the fact that documents as well as the presentation (understood as 'that which is being presented' and not as 'the act of presenting') are physical objects: booklets, sheets of cardboard, framed celluloid, etc. The second term indicates that documents and presentations are the final outputs of a production process. Even if they carry proposals and not definitive plans, they are being distributed or presented as self-sustaining and independent entities. Consisting of fixed material traces on a material support, they are necessarily static: speech frozen into writing, visual perception arrested into discrete pictures, etc... These means of representation therefore suppose specific forms of communication: their distribution or presentation constitutes a monologue, even if they are to provide the basis for later discussion. In that case, the document or presentation would not be turned into dialogue, but be 'dialogued upon', be the object of discussion.

Furthermore, any discussion following the reception of a document or presentation will necessarily be based on these representations. These will, in other words, have created the framework of the discussion -- at least, that
is their purpose. This means that their use puts into place an 'active-reactive' system of communication: discussion will, at least initially, proceed in reaction to something given, something more or less well-structured and self-sufficient. Reactions will thus occur primarily in the terms set by the document or the presentation. It will take a particular effort from someone in order to change these terms -- a move which may jeopardize the discussion as a whole. The recipient is thus more or less trapped: one must either accept the terms of the discussion or reject them. In the first case, one loses (some) freedom in the formulation of the problem; in the second case, one does away with the basis for discussion.

In our case, the documents issued by the BRA define the solution to Roxbury's problems in terms of zoning. When residents are thus asked to give their 'input' to the process, they receive an opportunity to discuss proposals within the framework of a zoning process. This type of intervention has its own limitations, such as the fact that it offers a framework for passive decision-making about development proposals, or that it is not the locus of explicit and systematic social policy initiatives. Yet zoning does possess some flexibility. It can define areas in which development must obey to certain regulations, such as concerning the price-category of housing or the size of payments for a neighborhood fund. The form of the zoning code, of the zoning regulations, is therefore of primary importance. (But we are not going to inquire about it further; this would bring us into the realm of content-analysis rather than form-analysis.)

In Roxbury, then, one party produced documents to serve as the basis of discussion; it thereby limited the openness and flexibility of the planning-process. This approach can be contrasted with one involving open dialogue
without a-priori plan or proposal. In this case, an eventual document (or presentation) would be the result, the product of the planning-process, rather than its starting point. The first stage of the process would ideally consist of a discussion of the very terms in which the problem must be addressed. In all stages, all parties would be engaged in a continuous flow of communicative actions and reactions, all taking part in a common initiative. In that sense, such problems of interaction in planning are but instances of the general problem of communication in society, in that the terms 'active-reactive' and 'initiative' are relevant in a discussion of mass-media too. As Jean Baudrillard, points out,

What characterizes mass-media, is that they are anti-mediators, intransitive, that they make non-communication -- if we accept to define communication as an exchange, as the reciprocal space of a spoken word (parole) and a response, thus of a responsibility, -- and not only a psychological and moral responsibility, but a personal correlation from the one to the other in the exchange.

That the use of a means of representation corresponds to a specific system of communication and therefore of decision-making, appears very clearly in the case of the "Lowell Report," which will be the object of later discussion (chapter 3). Here, a plan was submitted by an agency for approval by a legislative body. It was to be taken as it was, approved or rejected as a

11. Again, discussion can be preceded by the exchange of documents stating each party's intentions and goals, but these are not of the same communicational and political nature as documents carrying descriptions and depictions of that which is (or at least ought to be) the object of discussion.
whole. This system of communication and decision-making, in which a document containing a finished plan solicits a "yes" or "no" answer, is but the epitome of a larger class of systems, in which decision-making is being narrowed down by the use of documents produced prior to discussion.

*Types and modes of representation.*

Having looked at the documents and the presentation produced by the BRA in Roxbury from the 'exterior', from the point of view of their being specific means of representation, we will now look at them from the 'interior', from the point of view of their being carriers of specific types of representations, with their underlying modes of representation. Let us, in other words, look at the texts, diagrams, photographs, etc. contained in a document or presentation, and at the modes of symbolization -- verbal or visual -- on which they rely. Rather than get into a systematic survey of all the instances of each type and mode, a task well beyond the limits of this inquiry, I propose to proceed by means of a limited amount of vignettes.¹⁵

Not having been able to acquire copies of the slides from the presentation, I will discuss it in general terms, selecting vignettes from the documents only. These vignettes will include examples of drawings, maps,

¹⁵ You just read: "I propose," but by the very nature of the representation you are holding in your hands, you have no choice but to accept my proposition and read, or to close the document and terminate the communication -- just an illustration of the point made in the preceding paragraph...
texts (or paragraphs), and metaphors. Examples of photographs, charts, texts, and other maps, will be included in the vignettes presented in the next chapter, on the planning of an urban national park in Lowell, Massachusetts.

The slides. The purpose of the slide-presentation was, according to BRA-staff, to explain the importance and utility of zoning in urban planning and design to the community. It was shown to the residents of one or two neighborhoods at a time, together with community-organizers and planners. In fact, this slide-presentation constitutes an essential case in my discussion, for it brings together both visual and verbal expression -- in the form of slides with a commentary.

The presentation can be seen as a proposition, a statement, with illustration. The proposition, as it appears in the Zoning Guide, is:

The purpose of the Zoning Code is to:
- promote the health, safety, convenience, welfare of the people in the City
- encourage the most appropriate use of land
- conserve the value of land and buildings
- lessen street congestion
- prevent overcrowding of land
- provide adequate light and air

16. The drawing, the map, and the text are three types of representations. The metaphor is a form of text (of word, rather), which gets its specificity from a particular mode of symbolization, namely metaphorical reference. This form of reference will be analyzed in the case of images as well, in a vignette on a photograph (chapter 3).
17. I was given this presentation privately, on April 22, 1987, by Mr Tim Gibbs, of the BRA branch-office at Dudley Square.
18. I assume that the commentary I heard when viewing the slides was equivalent in its arguments to the one the residents heard at the public meetings, even if it was different in form and tone.
19. That is, the "Citizens' Guide to Zoning for Boston".
The proposition is also, that the Zoning Code can achieve these purposes, that it can promote the quality of the urban environment and prevent problems that could affect this environment. The BRA hoped to gain support for the type of intervention it is using in Roxbury, to convince people of the fact that zoning can solve some of their problems (all their problems?). The slide-presentation is thus the context of two essential operations: the definition of these problems and the choice of strategy to solve them.

The second part of the meeting, after the slide-show, would be devoted to reactions from the audience, some of which might consist of alternative definitions of the problem(s). Yet as we saw earlier, by articulating the meeting around the presentation of a finished product, the BRA certainly imposed limitations on the openness of the debate, on the (mental) freedom of the participants. The residents were not invited to propose alternative type(s) of solution(s); the BRA was looking for acceptance and support for its choice of medication. And since solutions shape problems, the examples chosen to illustrate the value and meaning of zoning were as many descriptions of the problems at which the weapon could be aimed -- problems of Roxbury itself, insofar as most of the slides showed locations in the district.

The use of slides, of photographic images as representations supposes that the problems being discussed can be visually identified, that they leave visible traces, that they have a physical impact on the environment. Yet this approach contains a danger -- that of confusing a problem with its symptoms. If the symptoms are the problem here, then the latter is of an aesthetic, sensorial order. If the relationship of symptom to problem is less
direct and absolute, then the problem necessarily partakes of issues which affect not just the visual quality of things but also their 'use-value'. Because my purpose is not to carry out an analysis of the contents of representations, I will not dwell on the fact that many of the slides and much of the commentary focussed on design-issues. Yet the fact remains, that the use of slides supposes that each problem addressed has enough visual fall-out to justify photographic representation. And this, in turn, constitutes a limitation on the problems that can be addressed and on the arguments that are being selected for presentation and discussion.

The selection of arguments, I will argue, is located at the level of the commentary. The use of language to accompany the viewing is essential. First, it can describe the problem when the symptoms are not clear or when they might be misleading, thereby 'putting things straight'. It can, in other words, guide and shape the understanding of the picture and, consequently, the understanding of the problem the picture is supposed to introduce. The use of language is also essential because it constitutes the only mode of representation that can articulate judgements. Granted, a picture can offer a sight that provokes a reaction of, say, disgust and thereby lead one to experience something as disgusting. But this picture would not, indeed could not, by itself, depict the proposition "This is disgusting." It can only make one experience disgust and eventually invite him or her to communicate this experience under the form of such a proposition.

The commentary accompanying the slides is thus of primary importance. Not only does it guide the interpretation of the image, thus the perception of the problem it refers to, but it also attributes -- rather, imposes a value-judgement on the image. In some cases, the 'uneducated'

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20. See Appendix A.
viewer will be able to attribute a value to the depiction by him- or herself. In other cases, however, the viewer will be taught by the speaker that the situation shown is good or bad and why this is so. The whole presentation is thus potentially instructive, but this instruction can take two directions. On the one hand, it can content itself with bringing to the viewer's attention some situations that he or she had never considered with a critical eye, and convey judgements according to criteria which are the viewer's own. But it can also, on the other hand, try to teach new criteria of (e)valuation altogether. It would then attempt to convince the listener that certain things which he or she found good are in fact bad (or vice-versa), at least according to certain criteria that this person had not taken into account, had not been aware of.

Here are two examples from the presentation, each made of two slides. One of the first photographs in the presentation, belonging to the 'chapter' on housing, depicts a high-rise senior citizen residence in Roxbury. "Now," said the commentator, "the BRA of course has nothing against senior citizen housing, but this building stands in a wrong location: it is too big, too bulky, especially too high for its area." A second picture of the building shows it from further away, with two- and three-story houses in the foreground. This view makes it indeed clear that qua dimensions, the building is in dissonance with its context. Appropriate zoning, the commentator argued, would avoid this kind of situations, by imposing limitations on building heights in residential areas.

Another couple of slides, from the section devoted to historic preservation, deals with the problem of 'condo-conversions'. The first of the two photographs shows the First Baptist Church in Roxbury, a beautiful
building in a picturesque landscape. Asks the commentary: "Could you imagine this church being turned into an apartment building?" And it goes on: "No, of course not. But this is what happened to this other church..." and on the screen appears another slide, showing a housing complex which indeed incorporates a church building -- or rather, what was left of it after a ravaging fire. Yet, no mention of the fire in the commentary.

In this case, it is clear that the 'text' (the commentary) conveys judgements about the objects and situations depicted. As said, only language can perform this task. The images, on the other hand, carry out the task of identification of objects and situations. When it comes to the representation of the material world, images are obviously highly efficient types of symbolizations. Beyond these general features are more subtle ones. For instance, the fact that both text and images, like all forms of representation, are selective: text is selective, in that it names some things or aspects and not others; images are selective, in that they follow from a framing of a view, making known only what lies within the frame and excluding what lies outside it, and revealing certain objects but hiding other ones behind them. This selectivity is essential in the formulation of an argument. In the first example, the first slide shows a close-up on the tower building, thereby revealing only poorly the open space that surrounds it; the second slide was taken from afar with a rather narrow-angle lens, which 'flattens' the image. Spaces between buildings are out of view and contrasts in scale and size are thus fully exploited. In the second example, the commentary did not mention the fact that the condo-conversion had followed -- and nor caused -- the partial destruction of the church-building, a fact that would alter one's

22. An award-winning design by architect Graham Gund on the corner of Massachusetts Avenue and Beacon Street in Boston.
perception of and judgement about the case. This fact, missing from the 'text', cannot be found in the image. Pictorial representations can only show things as they are at a given moment in time. Correlating a view with what led it to be as it is, can only be achieved by means of other representations, visual or verbal.

The slide-presentation as a whole also exemplifies the complementary use of words and images for the purpose of persuasion, in a way that exploits the specific potentials of verbal and visual representation, not just as discussed above, but also in terms of the perceiver's relationship to the object, both intellectually and phenomenologically. Intellectually, the viewer/listener's acceptance of a message will depend, among other things, on the origin of this message, either a photographer or a speaker. Phenomenologically, the involvement and investment of the viewer/listener will also depend on the mode of symbolization, pictorial or verbal.

In terms of the acceptance of a representation, it seems obvious that the BRA is better served by images than by words: there is (or at least there was, at the time of the meetings) a wide-spread mistrust of the BRA by the residents of Roxbury. These have plenty of reasons, given the past interventions of the agency, to be critical about anything a member of this agency says. Yet there is no reason to believe that a purely mechanical device, the camera, would lie or distort reality. What is being shown is thus readily accepted as real. In terms of the perceiver's investment into a representation, it must be noted that the photograph, as material symbolization resembling its referent, belongs to the world of space and

23. *...except for movies, but these are in fact made of a sequence of pictures, each being static in itself.*
24. See Appendix A.
matter, that it reproduces an existing situation *hic et nunc*, and that it does so all the more easily if the situation is familiar. It re-creates a space of its own, which the viewer can potentially perceive in the same way as he would perceive any other space, since the mechanism of visual perception are the same for real and virtual spaces. All these factors allow for the *presence* of the represented space, for one's presence *in* the represented space -- a presence that cannot be obtained by means of words. These, indeed do not offer to the perceiver a representation of the same nature as its object, but one made of sound. Between verbal signans and signatum, the relationship is (more or less) arbitrary, and the understanding of the verbal sign, that is, the reconstitution of the relationship between signifier and signified, cannot rely on resemblance. Verbal representation therefore does not open the door to the same type and extent of involvement into the represented situation as pictorial representation does.

Yet language has the capacity to make judgements, and logical propositions in general. As said, however, the BRA had to overcome the audience's criticism and resistance in its reception of BRA statements. The use of images did not only enable the agency to state its arguments more easily -- by means of illustrations --, it also enabled it to make them more convincingly, with a greater chance of acceptance, by tapping on the 'acceptability' and 'presence' of photographs. These two qualities are very likely to be transferred from the image to the proposition, given the simultaneity of their experience. The more 'real' the image, the more easily one accepts its accompanying message. What was said about documents is true about single pictures as well: being materially fixed, they can only be accepted or rejected. Once accepted, and with the involvement just
described, the image provides softer landing grounds for incoming statements.

I was told, after viewing the presentation, that it had "created new interest" among the community. Not only did the presentation make the residents "aware of what's around them," while they "had never noticed or realized wrong development," it also "made them want to get involved in the process." Residents had thus accepted, at least according to my interlocutor, the relevance of zoning and the necessity of its use in Roxbury. The presentation further enabled the planners "to change (the resident's) perception of the BRA and the bureaucracy, to take away the bad taste left from past experiences." These conclusions may be exaggerated, or even partly illusory, as other sources seem to suggest, yet they do make sense. By using the potentials of words and images in an appropriate way, be it voluntarily or unvoluntarily, the BRA succeeded, I believe, in persuading at least some members of its audience about the validity of the points that the presentation was meant to make. The acceptance of these points by a resident further legitimizes the BRA's own and specific approach to this resident's problems and its definition of these problems: a form of representation called upon in support of a form of planning intervention.

25. From notes taken at a meeting with Mr. Gibbs, of the BRA.
A drawing. The picture under consideration occupies the first page of the Dudley Plan, behind the cover (title-page) and before the page with the table of contents. It shows us "the site", as Lisa Peattie would ironically say, in the context of Boston.

The picture is a drawing. That is, it is not a photograph: the choice of elements to be shown does not occur merely by framing and orientation, but it is a conscious selection of significant elements. Some of them are means to create the context: natural features, such as rivers and coastline, and roadways; some represent specific items within this structure: areas, buildings, parks. The image is a picture indeed: its elements resemble the 'real things' they represent: spatial configurations are recognizable. But note what the chosen items are and note which ones have been emphasized, by being named and numbered, or rather, note which elements are being used to situate Dudley (and Roxbury -- of which Franklin Park is the most salient feature): Prudential/Hancock, Downtown, Logan, Harvard/MIT, and JFK/UMass. This tells us on the one hand, what the draftsman (-woman) and the agency he or she works for believe to be the landmarks of Boston. On the other hand, it tells us that this person had to make one of two mutually exclusive assumptions about the viewers of his or her drawing. Either he or she believed that these 'receptors' share this view on the city, on what its landmarks are, or he or she believed that they don't. In the first case, the assumption displays an unjustified assurance about popular knowledge and cognitive maps. In the second case, the assumption is being supplemented by

26. From the "Dudley Square Plan." This and all the other pictorial representations are being reproduced here with the same scale as in their original documents.
27. For a discussion of resemblance in pictorial representation, see Appendix C.
another one, namely that this specific view can be accepted, and thus 'mentally incorporated,' despite its lack of fit. In this case, the viewer's former image of the city will be influenced in the direction of the newly accepted image -- the image held and spread by the BRA.

A drawing necessarily selects representative elements in the situation that it depicts. Some elements serve the purpose of contextualizing the central object of the image (formation of a background: 'vertical' relationship between object and context) and some establish the 'family' to which the object belongs ('horizontal' relationship between objects). This inherent mechanism of representation by drawing\textsuperscript{28} is being used here to locate Dudley topologically, geographically, and to establish its relevance in a city-wide system of primary elements.

That some elements are primary and others secondary can be indicated in a drawing in various ways: by their position in the composition, by their technical treatment (level of detail), by their color, etc. In a drawing like this one, which is a perspective drawing (an imperfect one, as we will see), the composition sets as central objects the ones that lie at the convergence of its lines of perspective. This kind of drawing supposes the choice of a definite point of view: reality is being seen from here and from nowhere else; the viewer is stuck, he or she has to view things in this precise perspective. The choice of a point of view is therefore crucial in the organization of the depiction: not just because it disposes things in a specific spatial relationship to each other and because it may thereby reveal some of these things and hide others behind them, but because it creates a hierarchy.

The more central an element, or the more it 'faces' the viewer, the more important it is. In the aerial perspective under our eyes, the focus of the

\textsuperscript{28}...and by other types of pictorial representations except photographs...
perspective is Downtown Boston. The drawing emphasizes its centrality, by revealing -- using -- the convergence of the pattern of streets and coastlines. All roads lead to Downtown, so to speak, and it is thus not Dudley which is at the center of the composition, but the financial and governmental heart of the city. Its greater distance to the viewer than Dudley doesn't really matter: it is being compensated by an adjustment in the density of depiction, even the level of detail, which are similar to that of the middle-ground if not to that of the foreground. A quick look at the height of the buildings in different places will illustrate this fact. In other words, the rules of perspective drawing are being violated in order to the center (of the city and of the composition) more important than warranted normally in such a representation. Downtown is thus being highlighted, emphasized, in two ways: by its location in the focal point of the composition and by a manipulation of pictorial features contrary to the standard requirements of this type of drawing.

The drawing shows how, on the one hand, the necessity to choose a point of view and orientation for the perspective and on the other hand, the possibility to manipulate graphic expression, contribute to the use of this type of representation to convey more than a plain and innocent picture of the area. The specific choice of focus -- Downtown, rather than Dudley -- and the graphic emphasis on this focus beyond the limits of 'conventional' rendering allow for a particular message to be conveyed. And because the image shows all it has to show, all it is, the viewer is left with no alternative\textsuperscript{29} : this is \textit{the} way to look at this view. No amount of movement of either the picture or the viewer will give the latter another perspective, another experience of Dudley's position and context.

As if to compensate for the hierarchy arising from the perspective composition, seven items of the drawing have been numbered. Number 1 -- Dudley: yes, it is Dudley that comes first in the list of our concerns. Also, Dudley is as valuable as Downtown or Harvard University; Franklin Park is as important as Logan Airport or the Hancock/Prudential complex. On the one hand, the words and numbers -- the text -- introduced in the representation as a whole (the full page), compensate for the lack of clarity of a picture drawn at such scale and answer the possibility of some readers not understanding it. But on the other hand, the way in which the text is being used -- the specific items included in the list and their numerical ordering -- is in itself an statement: we are dealing here with Dudley and we approach its problems in a city-wide perspective. This drawing thus reveals a play of primary determinations and compensatory choices, of technical requirements and political motives.

We can interpret -- and this is only a hypothesis -- the ambiguity of the drawing as a sign of the duality of representations in planning in general. These are, as we said in Chapter 1, both instruments of persuasion (public-oriented) and instruments of plan-making (internal to planning agency). Could we say that the perspective composition itself corresponds to the planners' view on the matter and that the numbered list represents the message they want to get accross? If so, one could further hypothesize that the planners did not manage to free themselves from their conventional view on the city -- Downtown is the source and background of all intervention -- nor from some attractive features of a given form of representation: the shape of the city and of its roadway network (the convergence of river and harbor shorelines and of roadways onto the Hub) lends itself to a 'strong' perspective drawing. The effect of perspective would
have been graphically much less interesting, had Dudley been chosen as focal point instead of Downtown. If this hypothesis is valid, then we may infer that either the planning tradition (centrality of Downtown) or the graphic tradition (convergence of lines) or both have influenced the message. In the first case, planners would have not been able to re-frame their view from an authority-centered one to a neighborhood-centered one, to see the problem from another angle (both literally and figuratively). In the second case, they would have allowed graphic features to govern over meaning (rather a strong perspective with a 'wrong' focus than a weak perspective on the 'right' focus). This is only a hypothesis, but one which allows us to realize in what way a form of representation may influence a perception of 'reality'. This would not be such a big problem on itself, were it not that a representation, once made, will serve as basis for further work, will acquire its own validity and autonomy, and will in turn shape the approach to the 'problem' rather than follow form it.

A map (and a paragraph). 30 This map displays three sets of elements: channels of transportation (riverways, railways, highways, roadways, pathways), names of these channels (present even if illegible), and the boundaries of an area (the Roxbury NPC Study Area, equivalent to the Roxbury IPOD Area). These three sets of elements have been selected because they are seen as necessary and sufficient to convey the intended

30. The map comes from the IPOD Workbook, the paragraph from the IPOD Draft. Both are thus originally unrelated. I thank Christian Marion for useful comments on an earlier version of this draft.
message: the IPOD deals (only) with that part of the city which is circumscribed by the thick black line.

The first thing that the map must show is the city, the context in which an area is being delimited. How does the map do that? By means of a circulation plan with names. The obvious question: why so and not otherwise? One answer could be that roads and other lines of circulation are important physical features in the city. They partly overlap with its spatial structure and participate in the perception of the urban environment.31 A related answer would be, that circulation and access form important aspects of the use and appropriation of the city and that transportation and communication networks are important sub-systems in the economic and social life of the city. Yet another answer is that the road-map is the easiest way of representing the city32: it consists of lines and letters and allows for a ‘comprehensive’ view, in that it shows the whole circulation network at once.

Does it, really? What about the small path that Mr. Smith uses on his way to and from work and where his children spend most of their free time playing, when the weather permits? This path is obviously not included. First, it is unplanned and unkept; the city didn’t build it and doesn’t maintain it. Also, the scale of the drawing allows only for a certain level of detail and Mr. Smith’s path happens to fall below that level. Scale is thus a means of selection onto itself. But most importantly, the map represents only a street-pattern: all the rest has been ‘evacuated’: no landmarks, no building masses, nothing that can allow an act of identification, let alone easy localization.

31. See for example Kevin Lynch’s The image of the city.
32. A fact that is being exploited in plan- and map-making -- to such an extent that in some circumstances, “town-planning is in the danger of becoming road-planning” (Abercrombie).
The street-plan is, I believe, the most 'neutral' pictorial representation of the city and it is indeed being used as standard underlay by most planners. The street-plan is 'neutral': it is a highly abstract representation, even though street-lines refer to concrete borders, in that it has abstracted, eliminated, most of the elements of the city that have a specific meaning to a resident and in that its space is, consequently, homogenous. Each part of the base-map has equal value, in terms of its being a background for the superimposed elements, and has thus very little value in terms of identification. First, because identification of an object requires its being different from its context and second, because identification of a subject with or into an object requires the recognition of personally relevant features. The first type of identification is being reduced, in the base-map, to a strict minimum: the shape of street-lines can indicate location. The second type of identification is even more limited: there is virtually nothing to which one can relate personally.

The street-plan itself is thus a way of representing the city which precludes personal involvement, which aims at a supposedly objective perception, and which thus represses the experience and expression of a personal, intimate, emotional relationship to the city or to any part of it. In front of such a map, the BRA planner and Mr. Smith have the same perception -- one which is relatively close to the planner's perception of the area in general but very far removed from the resident's perception of it. Instead of the planner learning about Mr. Smith's experience of the area and the personal meanings of his little path, Mr. Smith is being asked to look at his neighborhood through the abstracting lense of the planner. "Il y a une violence inhérente à l'abstraction, à son usage pratique (social)," says Henri
Lefebvre\textsuperscript{33} -- there is an inherent violence to abstraction, to its practical (social) use -- and this map shows us why this is so.

Another interesting feature of the map, is that the names are either present but not legible or just absent (bottom corner of the area). This removes a possibility of limited identification and involvement which such a map could offer, despite the above. Finding the name of one’s street on a map is indeed an opportunity to establish one’s presence in the representation. With the illegibility of the names, this opportunity is being removed as well and the abstractness of the map is being confirmed.

On a larger copy of the map, belonging to the IPOD Draft, one can also see that some names are being (partly) hidden by the boundary-line. This is only further indication for the fact that the names are not necessary to identify the boundaries of the area. Nor do they seem to be necessary to identify streets and boulevards, given their illegibility. Their illegibility -- on the larger copy as well -- is probably due to the fact that this map has been produced by reducing a larger original, on which the letter-size was adequate. At this scale, however, information comes essentially from the shapes of the street-lines, from morphological clues. People acquainted with the street-map of Boston will readily recognize the part of the city that is being depicted, on the basis of visual resemblance. The map thus supposes a certain type of knowledge, a certain level of information and memory, which planners usually have through their work and education, but which residents often do not have.

The scale of the map dramatically reduces its usefulness in yet another way. Let us say, that Mr. Smith, living close to an adjacent district, in an area that is seen traditionally as between Roxbury and say, Mattapan

\textsuperscript{33}Henri Lefebvre, \textit{La production de l’espace}, p.333.
rather than in Roxbury, would like to know whether his house is part of the study area, because he heard that the outcome of the study will affect all properties concerned (concerned indeed) in a meaningful way. Looking at the map, there is no way he can determine this with certainty. This is most likely due to the fact that this just isn’t the purpose of the representation. It’s function seems to be, rather, to convey a global impression of the area being studied. Not only Mr. Smith’s neighbors will share his problems, but so will the members of the study-team. They need to know exactly which lot or which building they must take into account. For that, they need a much more precise map. The fact is, that all maps must have a scale, like all perspective drawings must have a point of view. Again, the choice of a scale (or of a point of view) is thus a critical element with regard to the message and its usefulness.

Yet the members of the study team as well as Mr. Smith could choose another solution than a cumbersome and costly lower-scale map. They could also rely on verbal description. Consider, for example, the following passage from the IPOD Draft:

**Dudley Triangle Affordable Housing Reserve District**

Beginning at a point on the center line of Blue Hill Avenue at the intersection of Dudley Street and said Blue Hill Avenue following southerly along the center line of said Blue Hill Avenue to a point on the center line of West Cottage Street. Thence turning and running northeasterly along the center line of West Cottage Street to a point on the center line of Dudley Street. Thence turning and running northwesterly along the center line of said Dudley Street to the point of beginning.

This paragraph delimits an area without leaving any room for doubt and confusion. It can do that, paradoxically, by using abstraction(s): the center
line of a street is not a concrete thing, it is an ideal.\textsuperscript{34} The words 'center line' refer to an ideal geometric model, free of ambiguity, because a-priori defined to be so. Embodied exemplars of center lines do not possess this ideal character and always leave room for interpretation, as their identification is relative to mode and unit of measurement. But facing the words themselves, no personal interpretation is possible; language has cut reality into pieces in a strictly unambiguous way. While we can always argue about the boundaries of an area as we see it, words operate radical distinctions and identifications (and so would scientific symbols, such as the axis-line). That is why this paragraph serves as legal description of the parcel in question.

Let us come back to the map. If it is only relatively useful for implementation purposes, what other purpose does it serve? In other words, if it indeed possesses the weaknesses we mentioned, why use it, why display it? I see three possible (and complementary) answers to this question. For one, the map has a materiality which text doesn't have: whereas text can be spoken -- thereby being freed from the paper -- the map is one with its material support. Both a description of the type exemplified above (the paragraph) or one like: "The study area will encompass the whole of Roxbury except Franklin Park", do not convey well enough the physical, spatial nature of the object they refer to. Second, the graphics themselves can help shape the message. We will come back on to this feature below. Third, and most importantly, the map, as a diagrammatic picture, is by definition the product of a process of elimination of signifying features. Whenever something is

\textsuperscript{34} Merleau-Ponty's argument that a word is a gesture -- "La parole est un geste" -- can be applied here (even if it originally has a different meaning): the words "center line" refer to an ideal to which we tend but cannot reach. cf. \textit{Phénoménologie de la Perception}, p.214.
being left out, a door is being opened for the viewer to fill the gap. Yet the viewer's contribution must also be guided and kept within certain bounds, those of the message. Visual or verbal clues -- unambiguous Gestalts or a caption next to the image, for example -- will be used for this dual purpose: to stimulate one's imagination and at the same time channel it in the 'right' direction. This capacity to carry a 'hard' core of common understanding with 'soft' fringes of personal interpretations is proper to all types of representations in general, but it is, I will argue, stronger for metaphors and diagrammatic images.

In this case, clues for stimulation and channeling are given primarily by the intricated network of streets-lines. It is here that the graphic nature of the representation becomes meaningful. Diagrams are composite representations. They contain multiple levels of abstraction, materialized by various types of symbols: words and abstract geometric figures (as in organizational charts), isometric elements and specific symbols explained in a key (as in urban design diagrams), etc. The various levels of representation, couched together on the paper, interact with each other. In general, the more pictorial elements will influence the others, endowing the whole representation and the other elements themselves with a character of physical reality. This is what happens in some organizational charts: by the pictorial nature of the line-construction, the people, departments, or activities (symbolized by words) receive a 'taste' of materiality, of concreteness, which enables one to see them as constituting a (physically) balanced system.35

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35. For more about this issue, see the discussion of a chart of "the Urban Environment" in the next chapter.
Likewise, in our map here, the street-lines and the boundary-line interact with each other. While the latter does depict positions in space, it does so at another level of abstraction than the former: its referent is a mental construct, while the referent of the street-lines are 'real', physical objects. Yet by its presence in the midst of these 'concrete lines', the boundary-line acquires a bit of their concreteness. This is being supported as well by the fact that the line follows the course of streets over part of its length. The more 'concrete' the boundary-line gets, however, the more it becomes self-justificatory: if its location corresponds to real things in space, especially to spatial barriers (Lynch), then that is where it should lie. And the more the boundary-line graphically resembles the street-lines, the better the confusion between the representations of concrete referents and of abstract ones will work.

So, will you ask, what about this thick, full, black line here? Do its graphic qualities not avoid all confusion? Yes and no. Yes, the difference between different types of lines is evident and so is, consequently, the different nature of the referents. No, the boundary-line is still a graphic gestalt, a material presence, which partakes of a world where visual form means concreteness at first sight. Because of that, and because it shares its space with lines that are undoubtedly signs for real things, the boundary-line will surely be subject to the tendency to endow its referents with a certain concreteness. Moreover, the thickness of the line, while limiting the risk of confusion, adds to its self-justificatory nature. By its own width, it manages to interrupt the flow of street-lines and thereby creates discontinuities around itself, as well as continuities in the areas it separates. The area inside the boundary-line can now be perceived as highly coherent, and so can, even if to a lesser extent, the area outside of it. But between both
areas, the separation is radical, created by the thickness of the line and emphasized by the difficulty to follow a street-line as it crosses the boundary-line. The latter has created its own world, by producing a perception that 'imposes' itself on the viewer.

This last point is essential in the light of the map's title: "Proposed Roxbury NPC Study Area". (Let us accept that this map is being used as well to define the IPOD area and that its title is "Proposed IPOD Area") If the location of the boundary-line constitutes only a proposal, it must be open for change. The possibility to change it, to propose another trajectory for it, depends on several factors. One, the possibility to object, to make a counter-proposal, to intervene in the planning and design process. Second, the possibility to identify the exact location of the boundary. Third, the possibility to check the criteria used to define this location.

The first possibility is the most important one but I can, alas, not discuss it, for lack of information about the organization of the decision-making and participation processes. Yet even if the organizational conditions were met, reactions to the area-boundaries would still depend on the other two conditions. We have seen, however, that the map cannot meet the second condition: the scale chosen for it does not allow for very precise identification of the boundary's position. The third condition is not being met either: the map in itself does not 'say' anything about why things are as they are; it just shows them as they are. It is in the text, then, that one should be able to find the criteria of decision-making. Yet the text does not fulfill this task either; nowhere does it indicate why the boundaries are where they are shown to be. Note, also, that were it not for the word 'proposed', the map would not be able to express the conditional character of the boundaries.
In terms of its planning-function, the map reveals an essential feature of the planners' conception of the city. The map constitutes a highly abstracted and objectivated representation of urban space. Of urban space indeed: place does not exist, only space does, that is, a homogenous medium in which activities, in our case in particular the planner's activities, can unfold without influence or hinder from (subjective) values. Rational planning demands objective identification of elements in space and, therefore, objectivation of space itself; it demands in the words of (again) Henri Lefebvre, a substitution of “true space” by the “truth of space.” The homogenization of space is also a feature of legal identification. A network of equal boundaries is being imposed on the city, in general originating in historic developments but often disregarding actual city-life. Boundaries are institutionally necessary but can be socially insensitive, to say the least. They too play a game of external differentiation and internal homogenization. This is what the map shows: an area ‘within’ and the rest ‘outside’, the former appearing as a tabula rasa on which planners can freely inscribe their plan.

In terms of the communication-function of the representation, we have seen how various necessary ingredients of the map provide opportunities for creating an impression contrary to the stated purpose. The scale of the map, its abstract character, the graphic characteristics of the different types of symbols, as well as the very nature of pictorial representation, have contributed to create a situation whereby the document offered to the public does not provide a reasonable basis for discussion, while it is presented as such. Now it is true, that additional and adequate information could be available for those who want it, since the agency needs

36. op.cit., p.346.
it for its own work. (In that respect, it is clear that the essential distinction between Mr. Smith and the planners is that the latter will most likely have an additional description of the boundary, which will enable them to do their work with certainty.) Yet the fact remains, that the document issued in the 'official' communication process does not meet the requirements of openness and clarity that should characterize it. The paragraph presented above, which provides the legal definition of a parcel in Roxbury, does a better job in that respect. But one may wonder whether its specialized language does not constitute a barrier for people with little formal education, who are -- and that is part of the problem -- in great numbers in this area of the city.

This map and this paragraph thus constitute two examples of the possible inappropriatedness of a representation to its formal or official function. Whether this is the result of conscious manipulation, of carelessness, or of a lack of understanding, is not our problem here. The fact remains, that this inappropriatedness enables one party to give information in a way that doesn't really benefit the other parties, a way that does not make them 'informationally stronger'. The conclusion may be far-fetched, considering the very relative value of the representations under consideration. Yet the point is important and it just needs a pretext in order to be made: information is power, which is not easily shared, and specific types of representations lend themselves for a way of seemingly sharing information, yet without sharing power.
A metaphor. 37

_The tide can turn._ Public policy and planning leadership, combined with bold private sector initiatives and community participation, can help achieve the important goal of revitalizing the Dudley Square area as a place to work and live.

_Inability of Public Investment to Stem the Tide._ (title of a paragraph)

Roxbury’s era of throw-away housing and cast-away land is over. Values of residential and nonresidential property are rising. Tax-forclosed structures are being redeemed. Most structures in Dudley Square are in productive use. *Private market forces are moving with the new tide*.

In order to analyze these three passages, some preliminary discussion is needed on what metaphors are. Essentially, a metaphor describes something through something else, a ‘something else’ that belongs to another category of things: “a metaphor might be regarded as a calculated category-mistake.” 38 Metaphors are also called _figures_ of speech, and language which contains many such figures is called ‘picturesque,’ ‘full of imagery.’ What motivates such name-giving? What makes a metaphor similar to an image?

The question contains a first answer: ‘similar’ -- the metaphor describes by means of similarity, of likeness. It offers us a model of the reality it describes. It thereby identifies what characterizes this reality, what characterizes its composition, its behavior, its activity. The metaphor does not claim to offer a complete and straightforward description, but a conceptual one: what is common to objects belonging to different classes cannot be the matter of a point-to-point similarity, but only a matter of

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37. From the "Dudley Square Plan".
conceptual structure. Yet this (conceptual) link, this analogy, is not being spelled out. It is for the perceiver to realize it: to understand by creating it.

In general, description in metaphors operates by relating the object to an analogon whose features are well-known, well-understood, and relevant, thereby allowing for a 'transfer' of these features onto the object and its consequent 'illumination': the object can now be understood in the light of the analogon. The fact that the latter is often concrete, forms a second reason for which we call metaphors 'figures of speech'. As Alan Paivio points out, the metaphor "requires a joint consideration of the mediational function of both verbal and imaginal symbolic processes."\(^9\) This is due to the fact that "concrete sentences" are "high-imagery material,"\(^1\) in that their meaning is not tied to the specific words but to the world of objects and events to which the words refer; such meaning, according to the present theory, is mentally represented in the form of nonverbal imagery. Comprehension of that meaning therefore depends upon the arousal of such imagery, and it is the imagery that is retained -- that is, the nonverbal referential meaning of the sentence.\(^1\)

In other words, by referring to a concrete object (which is not always but often the case), a metaphor stimulates the imagination, the production of mental images. Hence the French expression "language imagé" for highly metaphorical language.

Yet the word (the metaphor) and the image (the mental image) belong to different realms. The former is explicit (it has been spoken out) and is therefore common; the latter is implicit (it is for each one to supply individually) and is thus idiosyncratic. This difference in status allows for a

\(^{10}\) ibid., p.453.
\(^{41}\) ibid., pp.459-460.
certain 'openness': people need only agree on the structural similarities between the object and its analogon in order to share the metaphor but can remain free in their personal interpretation and elaboration of the figure. Another factor of 'openness' is the fact that the object and its analogon are similar yet different, conceptually related yet categorically separated. This creates the possibility to give meaning in a transitive way: if objects A and B are both similar to analogon C, then A and B are similar too.

This possibility of metaphorical representation, as well as its openness to idiosyncratic investment, are being illustrated in the quotes given above. First, the metaphor of the tide provides a model for recent and for projected events. The expression "to stem the tide" in the second quote is being followed, a couple of lines later, by "stemming decline." What is referred to by the metaphor is the process of disinvestment, of "abandonment and demolition," of "loss of population, jobs, and income" that has been taking place over the last 30 years. Not only does each reader have a personal recollection of a tide, either by direct view of the sea or through images and stories, but every resident of Roxbury also has a personal experience of the decline it symbolizes. We will see below, what the 'openness' of the word -- an openness which it derives from its reference to a class of objects rather than to a specific instance\(^\text{42}\) -- allows for in this case.

The second aspect of the metaphor's 'flexibility' -- the possibility of using one analogon in reference to two or more different things -- is being exemplified by the fact that the verbal figure of "the tide" is being used, in the first two quotes, to describe the past and present dynamics of the area -- decline -- while it is being used in the third quote to describe a force going in the very opposite direction -- renewal. There is thus "the tide" and "the

\(^{42}\) This is the case for words in general, except for proper names.
new tide". In both cases, what matters, what constitutes the basis of the metaphor, is the reference to a gigantic mass, a sweeping momentum, as analogies for the forces that shape the area. This allows, in turn, to capture the importance and scale of the past and present phenomena -- which are indeed probably experienced by most local residents as tides against which no one can resist -- and to endow the new (hypothetical) phenomenon with these features. These features, however, are multiple: one of them is an immense mass, energy, force; the other is the impossibility to control this very same force.

While the metaphor is justified in the sense of decline, in terms of correspondance with experience over the course of several decades, it is much less justified in those terms in the sense of renewal. Yet the understanding of the metaphor requires personal investment, the adoption of a certain state of mind, which is most probably not limited to the realm of the one metaphorical word but colors the perception of following ones. In a sentence, unlike in a drawing, elements are nor merely added to eachother, but fused together in a synthetic whole. Although specific words may elicit strong imaginary and/or emotional responses, their effect is not limited to the time of their own perception, but influence the perception of the whole sentence and even more. Understanding the metaphor is, as said, a creative act, which puts things in a certain perspective: not just the one object mentioned at the moment of the metaphor, but indeed other, related, objects. Hence the availability of one's 'imaginal investment' for subsequent (and more problematic) claims. Understanding the metaphor is not only accepting it, it is also entering a community of thought with the speaker, by following him/her in the departure from 'normal' (literal) language, in a side-step into

43. See Appendix A.
the realm of imagination. This community is relative -- to each one his or her own images -- but it does bind: having accepted the metaphor once, one is exposed to manipulation in its later uses.

The BRA seems to suggest that the momentum of the tide in one direction has been re-directed into another direction. That is at least what has happened with the imaginal power of the metaphor. But things are definitely much more complicated. First, because (economic) forces of decline and of renewal are not similar, in that they do not operate in the same climate, context, and according to the same mechanisms; nor are they necessarily of the same magnitude. There is, also and despite these differences, no reason to believe a priori that the BRA will be able to control one “tide” when it has not been able to control the other. Furthermore, economic “tides” are of a different nature than aquatic ones and cannot be controlled by means of engineering works. All these points make it clear that the analogy with the natural phenomenon and the equivalence of the various instances has limited validity. Yet this limitation is exactly what the metaphor does not convey and in fact obfuscates. It does create equivalences between different types of phenomena -- economic and natural ones -- and between different instances -- the old tide and the new one -- equivalences which are sure simplification and possible manipulation. The role of the metaphor is to mobilize attention, energy, commitment, and to cast a new light on the problem. Yet the energy can be misdirected and the light deceivingly illuminating.

The metaphor is an example of cases where the communication-function and the planning-function of a representation are difficult to separate and qualify. Is the metaphor only a metaphorical device, or is it also a symbolization in which planners express their own conception of the
situation. In other words, are the planners only trying to persuade the audience of the likelihood and potential of the "new tide," or are they also (unconsciously) trying to convince themselves of their own possibility to use the tide for the positive changes in the area? In the latter case, the effect of imaginal investment and its transference from one concept to another works for them to. But, more importantly, they would also be the victims of the simplifications they effected by comparing two different phenomena in a reductive way. In cruder terms: the planners may be fooling themselves as much as they might be fooling their audience and they may have to awake one day with the realization that, after all, they did not control the "new tide" much more than they managed to control the other one, or that the new one did not match the old one in size and effect. It is, in fact, in the planners' own interest to believe in both the power of the flow of re-investment and in their capacity to harness it, for their plans and their plans' implementation depend on them.

A paragraph. 44

BOSTON'S ECONOMY

o Boston has a lead role in the nation's change to a service economy.

o This leading role means that Boston's economy should continue to grow faster than the national average.

o Downtown growth means more jobs and more opportunities for neighborhood improvement.

o Boston's economy serves and creates growth in the regional economy. Suburban growth is slowing as outlying cities and towns

44. From the "Dudley Square Plan".
reach their development capacity. The lack of suburban development sites will make Dudley a very attractive area for investment.

- Because of its location, the Dudley area can become the region's best secondary office market.

- To become a strong Business Park, the Dudley area must have two things -- a price advantage and an adequate labor supply.

- Price advantage can be obtained through lower land cost and higher allowable building heights. An adequate labor supply exists in Dudley, and it can be expanded through education and training.

This paragraph will help us understand how the nature of text, as type of representation, allows for specific uses of language in communication. We will concentrate on two essential features of language: its capacity to express chains of logical articulations and, especially, its capacity to relate chains of events.45

This paragraph is a special form of text. Rather than being a continuous flow of words constituting a 'story', it is made of a set of separate 'points', each containing an argument. This specific form is critical. First, because it means that 'reality' has been chopped into pieces -- which is proper to language in general -- pieces which have been internally organized as sentences, but whose inter-relationships in the paragraph have been left more or less open. Second, because this reduction does not only set things apart, but also rests on a conscious selection of material to be presented and a rejection of the rest. Once again, representation is selection.

Each point of the text carries an argument. Taken separately, some of these arguments are mere expressions of 'facts': about Boston's role, about the meaning of growth, etc. Other arguments provide simple deductions from

45. For arguments on verbal representation underlying the following discussion, see Appendix A.
premises to consequences: this means that...; in order to... this must...; etc. Each can be attacked in its own terms, but each can also be defended in its own terms. In fact, most of these arguments are not just right, they are truisms.

What is the purpose of this paragraph? It is, most likely, to provide a series of arguments supporting the BRA's proposal to turn Dudley Square and some of the surrounding area into a "Business Park". Taken together, the points being made suggest that such an evolution is possible, desirable even, that it will require certain conditions, and these conditions can be met. Yet the whole functions like one of these logical puzzles, where each sentence is true, but where the end doesn't agree with the beginning. The mistake then generally lies at the point of passage between two separate sentences, in the unarticulated zone between two arguments. Let us see what the paragraph would become if we filled in the gaps, if we turned it into a continuous text.

Boston has a lead role in the nation's change to a service economy. This leading role means that Boston's economy is likely to grow faster than the national average. We can thus expect a significant amount of growth in the coming years, especially proceeding from the existing Downtown service industry. Downtown growth means more jobs and more opportunities for neighborhood improvements, thanks to these jobs, but also thanks to additional public revenues, such as taxes and linkage payments. Boston's economy serves and creates growth in the national economy. Suburban growth is slowing as outlying cities and towns reach their development capacity. The lack of suburban development sites will make Dudley a very attractive area for investment, especially given its location next to Downtown Boston. Because of its location, the Dudley area can become the region's best secondary office market, to accommodate the expansion of service and R&D companies. This expansion requires the constitution of business centers, or Business Parks, which provide a comfortable and efficient environment for their activities. To become a strong Business Park, the Dudley area must be attractive to investors. It must therefore have

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46...or to halt development because they have lost control over it...
two things -- a price advantage and an adequate labor supply. Price advantage for prospective developers can be obtained through lower land cost and higher allowable building heights than in competing locations. An adequate labor supply exists in Dudley, given the high unemployment rate and the amount of young people, and it can be expanded through education and training.

One could look for internal contradictions, which the new text reveals more clearly. One such contradiction exists between the fact that Dudley is attractive to developers given the economic context and given its location and the fact that it needs to be made attractive to developers if it wants to become a strong Business Park. One could also argue that at no point in the text is the will of the local residents being mentioned. Nowhere does one read something like: "If the community welcomes the Business Park idea...". But rather than deal with these issues, which pertain essentially to content-analysis, we need to look more closely at the specific way in which the text is formally structured, thereby remaining in the realm of form-analysis.

What the edited text reveals, by its shift from a discontinuous to a continuous, discursive form, is the presence of time and of actors. That is precisely what the story-form is all about: the presentation of events in time, of sequences of actions, and of causal links between them. Behind the actions: actors -- in this case, they are Downtown companies, developers. These are, in short, the people behind the "New Tide." With the actors, the text introduces interests and motivations, as well as the potential threats they represent to some readers. This is what the list-form makes possible to avoid. As a set of static descriptions, it not only gives the impression of being merely factual, but it thereby endowes the arguments with an air of neutrality. As Lisa Peattie pointed out, the more selective the representation,

47. See above, "A metaphor".
that is, the more it reduces the amount of representative elements and takes
them out of their context, the less capable it is of conveying the 'reality' of
life: the struggle, the fight, the clash of interests, or the cooperation, the
mutual support.

The fact that a flowing, discursive form of text was not used here
cannot be explained by the general format of the document. True, most of it
is written in this form, but some of it isn't. Their writers knew about stories:
"A few key numbers tell the story" -- so goes the first sentence of a
paragraph describing the *evolution* of Roxbury's demographic and economic
situation over the last 30 years. The paragraph on Boston's economy which I
analyzed here is thus yet another example of how a specific form of
representation -- a specific form of text -- can lend itself to specific purposes
in communication. Yet the question remains: what purposes? Purposes of
persuasion or purposes of planning? Can we not infer from the
abovementioned fact that a larger share of the document as a whole is
written in the 'list-form', that this way of representing 'reality' is not only or
not at all due to a will to deceive the audience but to a professional bias?

This would make sense, and for two related reasons. First, because
'facts' are much more controlable than events and processes. Like language
itself fragments the continuum of phenomena into separate pieces in order
to make it manageable (for conception and communication), so do list of
'facts'. They enable one to have a stabilized representation of the situation, a
representation in which discrete elements offer ease of understanding and
ease of intervention (identification of a limited amount of points where
things can go wrong and where one can to intervene). Second, the planners
may have their own interest in 'forgetting' about the presence of actors and
motivations. Rather than or besides a desire to hide certain things from the
local resident, what explains this paragraph may be a desire to feel in control on the part of the planner, for both the planner and the resident are threatened by the freedom of the developer and investor. While the latter may be the victim of developments in a direct way, the former's job is precisely to guide development (and in this situation, it involves collaboration with the 'actors') and he or she must therefore be able to initiate, anticipate and respond to development initiatives. A retreat into the neutral world of 'facts' would be, for the planner, a self-defeating escape from the economic 'realities' of the planning-context, which he or she has to control (at least to a certain extent) if planning is to be meaningful and efficient in a situation like that of Roxbury.
Chapter 3: PLANNING IN LOWELL, MASS.

The context and the documents.

Sited at the Pawtucket Falls of the Merrimack River 30 miles north of Boston, Lowell became America's first great industrial city, largely because of its proximity to water power and waterways. The marshalling of cheap labor and the large market and distribution capacity of Boston were essential factors in Lowell's growth. As the textile industry grew, Lowell developed into a major population center, drawing immigrants from many origins. The movement of the textile industry to southern states in the early part of the 20th century left many abandoned or marginally used buildings, as well as high unemployment.¹

The move of the textile industry to the South left Lowell, once the largest production-center of cotton-cloth in the world, as a half-dormant and decaying city, yet retaining its ethnic diversity.

Essentially under the impulsion of Patrick Mogan -- a school-principal who saw the city as a learning-tool, thanks to its historic character -- a group of citizens and officials took it upon themselves to develop a plan to revitalize the city. Their main asset: the historic value of the mill-area. Carried by the Model Cities Education Component, this movement came up with the idea of an Urban National Park, which was first concretized by the

¹. From the Report of the Lowell Historic Canal District Commission... -- see below for a description of this document.
Southworths, whose plan "The Lowell Discovery Network" was incorporated and developed into subsequent documents. Three of these documents will receive our attention: the "Lowell Community Renewal Program," the "Lowell Urban Park Development Program," and the "Report of the Lowell Historic Canal District Commission to the Ninety Fifth Congress of the United States of America."

The Lowell Community Renewal Program (the Renewal Program). This document is the contribution of the Lowell Planning Agency to the effort of revitalizing and rehabilitating the city. It was written in the period of 1970-1972 and consists of four reports issued separately. We will study only one of these reports, the third one: "Special Studies" and further concentrate on three of its six chapters: "Mixed use study," "Blight causes analysis," and "Minority group housing study." As the Introduction to this report says,

The third report, "Special Studies" is actually a compilation of six background studies of a more limited scope than the (other reports). These special studies provide a more complete picture of the various aspects of Lowell's urban fabric by isolating other areas of concern, defining problems more clearly and proposing solutions or, at least, some further directions to be explored. ...

The "areas of concern" are: the canals, the textile mills, mixed-use areas, blight, minority housing, and social resources.

The Lowell Urban Park Development Program (the Development Program). This document was produced in 1973 by a private corporation founded by Patrick Mogan, the Human Service Corporation. Its goal was the promotion -- and the implementation -- of the idea of an Urban National Park, by means of personal contacts, activities and ... this document.
The Report of the Lowell Historic Canal District Commission to the Ninety Fifth Congress of the United States of America (the Report to Congress). Patrick Mogan's efforts and that of quite a few other people, among which important political figures, paid off: a commission was created to investigate the feasibility of an Urban National Park in the canal-district of the city. Thanks to the commitment of a group of citizens and politicians, the commission managed to come up with a solid proposal (designed and documented by a team of private consultants), which it submitted to the U.S. Congress for approval in January of 1977. The third document to be analyzed here carries this proposal and was distributed to all Congressmen (-women). Its primary purpose is thus to persuade the legislators to cast a positive vote on the bill formally creating the Lowell Urban National Cultural Park.

Means of representation

In chapter two, we saw that particular systems of communication can underlie -- and benefit from -- the production and distribution (consumption?) of documents. Documents issued prior to a discussion and containing definitions, proposals, or plans, necessarily limit this discussion, its range and its openness. As anticipated in the same chapter, some of the documents now under consideration possess these characteristics to an even greater extent than those issued by the BRA in Roxbury. This is especially the case for the Report to Congress, which was presented as the basis for congressional decision-making -- a specific form of decision-making: a yes-
or-no vote -- on the creation of an urban national park in Lowell. We must specify: this document may very well be the product of a very democratic, highly participatory planning-process, but it is its use as medium of communication between the planners -- whoever they are -- and the decision-makers that interests us here.

On the one hand, the use of a document for this purpose is amply justified by the fact that planners and decision-makers belong to more or less different worlds, both geographically, organizationally, and qua type of (planning-)activity. On the other hand, it is sure that the supporters of the plan -- among which, as said, some prominent New England politicians -- did not limit themselves to dropping the documents in the mail and then wait for each addressee's decision in Congress. Surely, a good deal of personal lobbying took place; political debts, old friendships, and various forms of esprit de corps have probably been called upon to influence the decision. Yet it remains that the document in itself constituted an important tool to try and persuade law-makers of the necessity and validity of the proposal.

Rather than speak of persuasion only, I believe that it is useful to distinguish between conviction and seduction. By the former term, I mean persuasion based on the explicit contents of a message; by the latter, persuasion based on its implicit contents or on its form. Insofar as the medium (the form) is part of the perceived message, insofar as it has meaning onto itself, we can reduce the distinction, at the level of the perceiver, to the explicit versus the implicit message. Again, the distinction does not coincide with the one between content and form (as in content-analysis vs. form-analysis), which operates at the level of the representation, but it refers to different kinds of contents, at the level of perception.
We can, now, ask ourselves whether the various means of representation -- documents, presentations, and conversations -- possess different characteristics in terms of conviction and seduction, whether they lend themselves more particularly to either of these strategies of persuasion, whether they provide fertile ground for specific ways of convincing and/or specific ways of seducing. In order to answer this question, we need to better understand the differences between various means. (We will raise the same issue for types and modes of representation.)

Among the many differences, one deserves particular attention, because of its relatedness to decision-making. It was mentioned in chapter two and opposes documents and presentation, on the one hand, to conversations or dialogues on the other hand. It consists of the fact that the former are, to a large extent at least, prepared in advance, given a fixed (material) form, and delivered to an audience as self-sufficient statements.\(^2\) This, in contradistinction to direct dialogue, which may have been somewhat prepared, but requires first and foremost spontaneous utterance, be it verbally (speech), graphically (illustration or documentation by means of notes or sketches), or gesturally (body-language, illustration or documentation by means of a model with mobile parts, etc...).

This difference means that formal features can be more consciously chosen and exploited in the case of prepared representations, and less so in the case of spontaneous ones. This is due, for one, to the fact that the use of documents and presentations supposes the availability of time for careful formalization, while the pace of expression in meetings, which can be highly variable, allows for less control on this expression. It is also due, more

\(^2\) See chapter two, "Means of representation," for limitations to this argument.
specifically, to the usual differences between written and spoken language (even if they are being produced with the same spontaneity) and to the different contexts of expression. In one case, the writer, drawer, or photographer creates his representations in (relative) isolation, in his own more or less secure and comfortable environment; in the other case, a speaker faces 'Other' people in a more or less conflictual situation. All these factors account for the fact, that the use of 'seductive' forms of representation will be more limited in the case of public dialogue.

Yet interpersonal differences play a very important role in this respect and turns this positive factor into a potential danger. Because of the temporal and spatial immediacy of the confrontation, personal factors, such as ease in public speech and physical presence, as well as one's level of verbal skills and acting talent, will matter quite much. There is no doubt that the possibilities of manipulation by eloquent speech are immense. And when it comes to dialogue, the distinction between conviction and seduction acquires another dimension, given the physical proximity of actors.

Obviously, arguments for and against documents and presentations, on the one hand, and direct dialogue, on the other hand, do not rest solely with the formal features of representation and communication. Political arguments (such as the nature of the participation, the presence of an arbitrator, mediator, or facilitator, etc.) are more important, in that they are likely to define by themselves the means of representation to be used. Yet both levels of arguments, the formal and the political, do touch. It is because law-makers are far removed -- both physically and mentally -- from Lowell and its problems and because they cannot be personally brought into the planning process for the revitalization of the city, that the planners rely on documents as channels of communication and as basis for decision-making.
Likewise, it is because they are the planners in charge and accept residents input only as advisory in nature, and because they have defined the solution to the problem as being a new zoning code, that BRA-staff operating in Roxbury emphasize the use of documents and presentations in their dealings with the local population. The choice of a specific means of representation therefore concerns (follows from, determines?) both the decision-making process and the form of the representations exchanged during that process. It is thus here, in the choice of means of representation, that the theoretical poles of representation -- semiotic (descriptive) representation and political representation -- meet in practice: in the organization of the communication and decision-making process.

*Types and modes of representation*

We can now return to our discussion on conviction and seduction. We must, first, specify the distinction between the explicit and the implicit, which differentiated the messages on which both forms of persuasion rely and which was the point at which we left the discussion earlier. We can specify this distinction, I believe, by referring to modes of representation, namely to denotation and connotation. This last distinction will prove to be essential in the analysis of the workings of some representations. But because the issue is first and foremost a semiotic one, its analysis is to be found in an appendix, Appendix B.
Three maps (and a fourth one). Having analyzed this type of map earlier for its use of a street-plan as background and its use of rigid lines as symbols for boundaries, we will now concentrate on the connotative meaning of such boundary-lines. Take the first three maps: they represent the same area, yet in different terms. One deals with the "incidence of mixed usage," the second with blighted areas, the third with the locations of Black households in the city. Besides this difference in contents, the maps display differences in the way in which an area and its boundaries are being depicted. And while these differences may matter little in terms of denotation, in terms of the straightforward identification of an area and of its boundaries, it does matter quite a lot in terms of connotation.

What differentiates these maps, then, is the strength of the area-demarcations, of the graphical traces that separate an area from its context. These demarcations can be of several kinds, one of them being the contrast between shades and colors, another being the presence of a line to indicate boundaries. We have seen, in chapter two, how such a line could influence the perception of a map, how it could effect radical separations between different areas. The three maps under consideration now constitute variations on the themes of contrast and boundary-line. The first one identifies specific areas by rather light shades, offering limited contrast to the white background, and without the help of demarcation-lines. The second map utilizes darker shades, thus more contrasting ones, as well as explicit boundary-lines, both for the separate patches of blight and for the "General Blight Boundary." In the third map, the contrast between specific areas and context is at its strongest (compared to the other two cases), which allows for the absence of separate boundary-lines for each area. Yet the

3. From the Lowell Community Renewal Plan.
Study Areas - Residential - Commercial
Residential - Industrial
Residential - Industrial - Commercial
Strip Development

INCIDENCE OF MIXED USAGE
PROJECTED MINORITY RESIDENTIAL PATTERN

CITY DEVELOPMENT AUTHORITY
LOWELL, MASSACHUSETTS
general boundary-line is very heavy and claims a lot of attention. This emphasis on the overall boundary rather than on local ones reaches its most absolute form in the fourth map. Here, no particular sub-area is being identified; only the general area counts and it is made present by means of a clear, sharp, and heavy boundary-line, alone one its background.4

We can (or must we?) now ask ourselves why such differences exist among representations of a same type. I will argue that these differences are related to the topic of the representations and that this relationship of form to content is being mediated through connotation. The elaboration of this argument will have to rely on some content-analysis (and not only on form-analysis): the inclusion of this type of analysis is the only possible way to shed light on the workings of this specific mode of representation.

The first map deals with the incidence of mixed uses, thus of cases where various uses (or functions) occupy a same area. Although this may be a positive factor in some cases (residential and limited commercial uses), it is generally seen as a negative one: "Mixed use districts pose sensory and visual problems that are not present in the more segregated portions of the city."5 The second map deals with blight, a state of the environment which points at "deficiencies ... severe and complex problems ... decay ... premature obsolescence" and which "destroys the vitality of the city by a gradual, but constant process of decline."6 The third map (as well as the fourth one) deals with the location and environment of minority residences, a topic also related, according to the planners, to the problem of blight: "trash and litter

4. The background is a street-plan; see chapter two for comments about the meaning of the use of such a base-map.
5. Community Renewal Program, p.54.
6. ibid., p.66.
... eyesores and blighted conditions. Yet the most important problems raised by this issue, are: "lack of education, language barrier, discrimination, inadequate income, living habits."

It seems, then, that the differences and gradations in the strength of the graphic demarcations on the maps correspond to the perception of the problems at hand: the more threatening the problem is to the (presumably white, middle-class) planner, the stronger the contrast between an area and its context and the heavier the boundary-lines. Mixed-use areas pose a threat of a predominantly aesthetic and functional nature; blighted areas pose similar threats as well as economic ones; but minority-dense areas pose a threat of a social and cultural nature. It appears, in other words, that the strength of a demarcation derives from a desire to contain, limit, or bound a source of insecurity, such as dirt and difference (other people's difference). Yet why would this 'work' in a map? How can graphic representation perform this task?

-- By connoting 'security'. In other words, by creating a feeling of security in the viewer (and in the draftsperson). The strength of a color-contrast and the heaviness of a line of demarcation are two means of doing just that. Both emphasize difference, separation; both install boundaries. As Mary Douglas indicates, the creation of boundaries follows from a need to control potential sources of danger and pollution, at the level of the body, of the social group, or of the settlement. What is foreign or impure and (therefore) dangerous must be separated from the rest, or from 'us'. So too

7. ibid., p.93.
8. ibid., p.113.
for the "obnoxious side-effects" of certain uses, the "decay" of blighted areas, and the different "living habits" of minority residents.

The desire, the need to control, expresses itself not only in the separation of the pure from the impure, the safe from the unsafe, the 'them' from the 'us', but in separation in general. Control requires order -- more particularly: mental control is based on the perception of order, or vice-versa: the perception of order underlies a sense of control. Since, according to the premisses of this study as developed in chapter one, the perception of order supposes the perception of constitutive parts and of their relationships, the acquisition of a sense of control will rely on the distinction, the separation of elements and their unification into a coherent whole.

The text which the second map (of blighted areas) serves to illustrate, explicitly describes this strategy: "The main blighting effects were taken into account ... Each of these factors was analyzed separately, listed, compiled, and mapped. ... The city's blighted areas appear on the map as being roughly in the shape of an oval. A first movement: identification of the distinct parts; a second movement: identification of the whole. One: separation; two: unification. Listing, compiling, and mapping are all ways of organizing sets of elements into larger entities -- lists, compilations, maps -- which show elements arranged according to certain principles. In cognitive terms, lists and compilations can be related to categorization-schemes and maps to ...cognitive maps. This point is essential in our inquiry into modes of representation, for categorization-schemes are language-based and cognitive maps are not, at least not necessarily. And if we can trust ordinary language for having some insight into matters of the mind, expression such as 'seeing the greater picture' or 'figuring out how something is put together' seem to
indicate that, whereas verbal representation effects separations, pictorial representation may be called upon to put the pieces back together. The following vignette will provide the opportunity to explore this hypothesis.¹¹

Meanwhile, it is interesting to note that the three chapters containing the maps we are studying here, possess large amounts of tables and lists, at least in comparison to the other chapters of the document. These constitute, I believe, further instances and indications of the effort to control the problems being addressed. We have already seen why this should be the case for lists: they bring together, under a single heading, different elements pertaining to the heading's reference. Tables share the same characteristics. First, they contain numerical representations of separate items and bring them together in arithmetic relationships. Second, and more importantly, numerical descriptions suppose an accepted unit of measurement, a standard element, a universal equivalent, of which all measurements are constituted. Quantification is probably the most extreme form of ordering: all elements are equal and interchangeable, and therefore neutral to the manipulations they undergo. What more could one in search of control wish for?

Let us now return to our maps and look in greater detail at the third map, which depicts the "minority residential pattern." It shows the existing situation and indicates the location of black households in the city. Concentrations of households are being depicted as dark patches and other households are being located by means of their amount in a given location. If the purpose of the map were to denote just these locations and concentrations, it could have done so by means of these patches and numbers alone, or even by means of dots only. Yet it also uses this now

¹¹ For a theoretical foundation and development of this argument, see Appendix A.
famous boundary-line. Why? -- In order to show that the spread of these patches and numbers is only relative, that it can be grasped, reduced, contained into well-defined boundaries, whose validity and solidity is being connoted by the clear-cut character and the heaviness of the line that depicts it.

In case this last map and the two preceding ones were not sufficient to convince one of that point, the fourth one leaves, I believe, little room for doubt. It shows, indeed, the boundaries of the "projected minority residential pattern," of the area where blacks and hispanics are likely to be living in the foreseeable future. Two questions are pertinent here. One: why draw such a map at all? Two: why draw it in this way? The second question is justified by the fact that it would have been possible to depict the area in very different ways, by means of a loose, sketchy, imperfect circle for example. (This possibility was also available, by the way, to the person who drew the map we analyzed in the Roxbury case-study.)

Both questions can be met by the same answer: to create an impression of control on the dispersion\(^{12}\) of minority residents. We will leave this argument in its general terms and not ask the (rhetorical) question whether this control is only of a mental nature or whether it also has a practical, social-economic dimension.\(^{13}\) We will, rather, focus on the fact that formal features can connote values, in this case 'control' and 'security.' We may, of course, disagree about the name(s) to give to the feeling(s) we experience. That is the nature of connotation: all see the same representation, all understand it in globally the same way, but not exactly

\(^{12}\) The choice of this word was not arbitrary; it was motivated by its connotations.

\(^{13}\) For answers to this rhetorical question, see Christine Boyer, *Dreaming the Rational City*; and Constance Perrin, *Everything in Its Place*. 
the same way -- all share a global understanding of, say, the words 'love' or 'pain' or 'sleepiness', yet each experiences love or pain or sleepiness in a radically personal and incomparable way. But as Roland Barthes makes clear in various instances, connotations can be quite securely shaped and guided, despite, or perhaps thanks to the fact that the value of the connoting representation lies in its emotional meaning rather than in its objective meaning -- or the other way around: the meaning of the connoting representation lies in its reference to affects rather than to truth. As we shall see later, this forms the basis of an important aspect of social life, of urban processes, and of planning efforts: the creation of unity and consensus.

This vignette is another instance where the distinction between the communication-function and the planning-function of a representation is not so obvious. Did the planners of the Lowell Planning Agency try to make the readers comfortable in front of 'sensitive' issues, or did they primarily want to map out phenomena in a way that would allow for efficient intervention? The answer is probably: both. The need for control and the specific way of achieving it -- by means of boundaries -- is common to planners and residents alike, to society at large. Zoning has been and is likely to continue to be this game of exclusion and segregation for purposes of order, status, 'security', and financial gain. What these maps show, is that the underlying mental mechanisms of the phenomenon are present in the work of planners even outside the realm of zoning itself.
The representation under consideration now is an epitome of its type and it is being accompanied by a text that provides many clues as to its meaning as a form of representation:

The above chart illustrates (the family-environment-community-economy) relationships as being cyclical, each factor affecting all the others. Each individual item contributes to the functioning of the urban society. In order to keep society in balance a negative aspect, such as drug abuse, must be offset by a positive aspect, such as equal education. The point is that a comprehensive method for treating social ills must be designed and implemented. (my emphasis)

Rather than concentrate our attention on the naiveté of the producer of this text and diagram, which would not only force us into content-analysis but would also be unkind, let us examine the specific types and modes of symbolization that the chart uses. The naiveté of the representation may not make it highly representative of planners' charts, but it does endow it with a transparency that is beneficial to our examination of it.

I have emphasized a few words in the text, because they provide, together with the chart itself, an entrance into the analysis of the types and modes they exemplifie. We can group these words in two pairs: "individual item"--"comprehensive" and "cyclical"--"balance". Each pair refers to a different aspect of the representation as a whole.

Individual item--comprehensive. This pair refers to the fundamental distinction of separation and unification. The planner who devised this chart wanted to show his or her understanding of "the urban environment." This understanding requires the identification of constitutive elements and of

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14. From the Lowell Community Renewal Plan.
15. Quoted from the page preceding the chart. The original text said: "The above chart illustrates these relationships..."
16. A chart is a kind of diagram, as is a map, for that matter.
The above chart illustrates these relationships as being cyclical, each factor affecting all of the others. Each individual item contributes to the functioning of the urban society. In order to keep society in balance a negative aspect, such as drug abuse, must be offset by a positive aspect, such as equal education. The point is that a comprehensive method of treating social ills must be designed and implemented.
their relationships. This is precisely what the chart shows: separate items arranged -- ordered -- into a coherent whole, according to specific rules of organization. These are of a functional as well as of a graphical nature: the "family-environment-community-economy relationships" and the lines in the chart; more precisely: the graphical relationships depict the functional ones.

Yet the pictorial elements of the chart do not depict relationships only. Besides lines are circles, which contribute, by encircling words, to the isolation of "The Urban Environment" and of its various "factors": Family, Social Conditions, Community, Education, Physical Conditions, and Economy. The word 'isolation' emphasizes the fact that identification rests on separation, on contrast and difference. The task of identifying parts falls primarily on verbal symbols: words. "The Urban Environment" s well as the different "factors" and "items" are being named, and then put into relationship with each other. Once more, language has cut reality (The Urban Environment) into pieces. These must now be put back together, which will be done, as said, by means of the lines between "The Urban Environment" and its "factors" and between "factors" and "items." But it will also be done, and this is the point which we will develop now, by means of a particular spatial arrangement.

Cyclical--balance. These two words refer to the just mentioned spatial arrangement: the factors, described by words and depicted by circles, are organized in a circle around "The Urban Environment" and the items, only present as words, are organized according to various symmetries. The items of each factor are disposed symmetrically in relation to a factor's axis and also, all items together (that is, all their printed names) create a pattern that
is both vertically and horizontally symmetrical. The chart as a whole is thus spatially completely balanced.

When the accompanying text says: "In order to keep society in balance...," the word 'balance' is obviously a metaphor. This metaphorical description of the possible state of society has been translated into pictorial terms, or rather, pictorial features have been used to symbolize this state. And what is the nature of this symbolization, or in other words, what mode of representation is being used here? Answer: expression -- or, in the way in which we have accepted it earlier, connotation. As the chart describes and depicts elements and their relationships, as it exemplifies their spatial balance, it indeed expresses social balance. How so? -- By being symmetrical, by exemplifying symmetry, a feature which in itself expresses unity and harmony -- the two sides of a symmetrical composition being, by definition, equal. These features, put in the context of "The Urban Environment" and of its "factors," readily translate into 'social balance'.

What this chart therefore does, is to suggest that "The Urban Environment" or rather the society it houses, is a balanced, harmonious, and united whole. It also suggests, by its well-controlled spatial form, that the planners' understanding, grasp, control of their object is total. The coherence of the graphic representation stands as a symbol for the coherence of the mental representation, thus for its strength and validity. Yet nowhere in the document do the planners present the reasons and criteria that they used to distinguish "factors" and "items," to chop up 'reality' into bits and pieces.

17. Note the two other metaphors in the text: "the functioning of society" and "social ills." The former is a (weak) instance of the mechanistic metaphor of society; the latter is a (plain) instance of the medical metaphor. 18. See Appendix B.
Relationships, on the other hand, are being somewhat justified, in terms of the total picture, but not in terms of their natures and modalities.

Because the chart does not reveal criteria and motives, we can argue that it is a poor basis for discussion. In fact, it precludes discussion more than it opens it up. Not only because it constitutes a fixed, finished product, but also and especially because it metaphorically claims to be self-sufficient and perfect -- and perfection needs no discussion. Moreover, the way in which the planners attempt to persuade the reader of the validity of their argument is dual. On the one hand, the text forms a (meager) attempt to convince him or her that the urban social system is balanced and coherent. On the other hand, at the level of the chart, which is where this analysis primarily lies, persuasion takes the form of seduction: what looks nice 'must' be good and valid. A harmonious and controlled chart -- that is, a chart with attractive formal features -- can have the effect of seducing a reader into believing in its validity and in the truth of its underlying arguments. The chart thus overlays pictorial elements on verbal ones and uses the former to endow the latter with an implicit meaning.

Yet another aspect of this particular chart deserves mention. Namely, its harmony and unity as contents: the well-balanced and coherent urban system. This idea, that society (or 'the community' or 'the city') is a harmonious and united whole, a happy family in an orderly home, will receive our attention later in this study. At this stage, it allows us to realize the congruence or even coincidence of the communication-function and the planning-function of a representation such as this one. The text accompanying the chart makes clear that this representation is not only a means by which the planners want to deliver a message to their audience, but much more a means by which they structure their own work, by which
they organize their intervention. Here, the planners have, in a way, codified their planning-theory, which remains implicit in most other cases. (This points at a specific function of documents: the codification of decisions, conceptions, strategies. I believe that this function belongs to the communication-function in general.) This is not the place to engage in a discussion of planning-theories; suffice it to say, then, that the chart illustrates a functionalist approach, in which discrete factors are functionally interrelated in linear relationships, the whole forming a controlable, predictable machine-like system. This representation is a model, that is, a symbolization whose signifier has a spatial quality to it, but whose signified is highly abstract. The transposition of the abstract into the concrete is at the same time blessing and curse — blessing, because it allows for easy apprehension; curse, because it reduces the infinite complexity behind the concepts into a highly simplified system.

A titlepage.19 This vignette will be an opportunity to delve deeper into the interaction of graphics and verbal symbols and, especially, to introduce the idea of verbal connotation. This representation claims that the (Lowell Urban Park Development) Program can be seen as a park, an area, a revitalization, a catalyst. Let me restate that in an even shorter form: program — park/area/revitalization/catalyst. Now it is obvious that a program can not be all these things, that the various concepts belong to different semantic categories. Yet this is not how they are being presented. Instead of referring to 'program', the four items on the list refer to different elements of the title: 'park' refers to 'park', 'area' to 'park'.

19. From the Lowell Urban Park Development Program.
LOWELL URBAN PARK
DEVELOPMENT PROGRAM

• as National Cultural Park
• as State development area
• as economic and social revitalization
• as catalyst for private development
'revitalization' to 'development' (and eventually to 'program'), and 'catalyst' to 'program'. By not acknowledging this complexity of relationships, the titlepage creates confusion. Yet this confusion has a great advantage: by sacrificing syntactic integrity to concision, the writer has managed not only to denote certain concepts (by means of words) but also to connote their coherence -- the coherence of the four goals placed under the banner of the Lowell Urban Park Development Program.

This is achieved both by the syntactic and the graphic organization of the representation. First, the various elements of the list are listed indeed, they are well-aligned and preceded by the same pictorial symbol (the black dot). Second, the whole representation fits into a virtual rectangle with proportions of (more or less) 1 to 2, for which the title had to be cut in two, and which creates a certain impression of compactness, thus of coherence. Third, the same word ("as") has been used to indicate the relationship of each listed element to the title.20 If the purpose of the titlepage, then, is to persuade the reader of the validity and strength of the proposal from the start, this exemplar performs its task by means of connotation only, since no explicit arguments have been presented yet. We will see, in the next vignette, how the coverpage of another document sets out to do the same by means of a photograph. Meanwhile, let us look closer at the organization of the list itself.

Listing is ordering. Like the perspective drawin (in Chapter 2) has to choose one (or two) vanishing points, the list has to choose a sequence for its elements. Since this brings us into content-analysis, we will only note, that

20 One could argue that the disposition of the various elements of the list has a hierarchical value. This is not the case in formal terms, as has just shown. The argument has more validity, however, in terms of content. This point will be discussed below.
the likely rationale behind the present sequence is a social gradation: from the nation, to the private individual, via the state and the city (which is the level at which economic and social revitalization would occur). The point is now, that these four social entities are heavily value-laden: the Nation (America), the State (Massachusetts), the City (Lowell), the Individual (Private Development). The third one is not present as such in the list; yet 'economic' and 'social', as well as 'revitalization' are, I believe, quite value-laden themselves. And by 'value-laden', I mean that these concepts are highly connotative: they refer to emotional, political, ideological values. The connotative richness of these words will allow one to go beyond syntactic problems and questions of credibility, and be seduced, at least temporarily, by one's reading. This connotative richness is what enables the writer to create an impression of solidity and validity despite syntactic deficiencies. The emphasis does not lie, then, on the logic of the argument, but on its emotional meaning; its persuasive power lies not in a capacity to convince, but in a capacity to seduce.

This phenomenon, by which there is more to a word than what it explicitly says, than what it denotes, is not new to us. We have encountered it in our discussion of metaphors.\(^{21}\) The two modes of representation -- the metaphorical and the connotative -- theoretically linked in that connotation is metaphorical denotation,\(^{22}\) also coincide in particularly important (practical) instances. Namely, in the formulation and use of myths: The American *Dream*, The New *Deal*, etc. As we shall see later, the mythical dimension of planning is essential. And as this vignette has made clear, its function lies at the level of communication, where the purpose is order in the

\(^{21}\) See chapter 2.
\(^{22}\) See Appendix B.
minds. The following vignette, about a photograph, is of the same type and does not claim any planning-function properly speaking. Its analysis will therefore be comparable to the analysis of any other photograph, be it in a newspaper or on a political campaign poster.

A photograph. The photograph can be seen as the perfect image, if we construe the quality of an image in terms of its resemblance to the 'reality' it depicts. As Roland Barthes points out,

From the object to its image there is of course a reduction -- in proportion, perspective, colour -- but at no time is this reduction a transformation (in the mathematical sense of the term). In order to move from the reality to its photograph it is in no way necessary to divide up this reality into units and to constitute these units as signs, substantially different from the object they communicate; there is no necessity to set up a relay, that is to say a code, between the object and its image. Certainly the image is not the reality but at least it is its perfect analogon and it is exactly this analogical perfection which, to common sense, defines the photograph.

Yet the analogical perfection concerns only the level of denotation: the depiction (pictorial denotation) is similar to what it depicts. At the level of connotation (expression), things are very different. Still, both levels are not independent, in that the latter relies on the former for its existence and its efficiency. As indicated earlier, the reader/viewer can supplement the representation with his or her own imagination -- this imaginal supplementation being at the same time stimulated and guided by depicted

23. From the Report to Congress.
Lowell
Massachusetts

Report of the
Lowell Historic
Canal District
Commission
to the Ninety Fifth
Congress
of the United States
of America

Office Use Only - return to DACP,
334 Boylston Street, Boston, MA 02116
elements and features of the representation. As Susan Sontag compellingly argues:

The ultimate wisdom of the photographic image is to say: "There is the surface. Now think -- or rather feel, intuit -- what is beyond it, what the reality must be like if it looks this way." Photographs, which cannot themselves explain anything, are inexhaustible invitations to deduction, speculation, and fantasy.

Not only do depicted objects constitute a source of connotation, but the very fact that they are being *photographically* depicted adds to their capacity to do so. Photographic representation is indeed characterized by the belief which people hold about it, that it represents things as they are, or rather, as they were at the time of the shot, and that recognizable objects in a photograph are real. This belief follows from the mechanical nature of photographic production -- a camera, being a machine, does not lie -- which at the same time indicates the limits of the photograph's capacity to transmit knowledge. Writes Sontag: "What the photograph-record confirms is ... simply that the (object) exists".

What, then, constitutes the photographic message? More precisely, if the photograph itself can only present objects to our eyes, how can we come to perceive a motivation in it? The answer to these questions lies in two words: context and personal experience. It is personal experience that enables us not only to identify an object but also to associate it with other things, values, emotions, with which it has been linked in our previous

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26. Susan Sontag, op.cit., p.165. The sentence reads originally: "...that the subject exists": Sontag is talking here about portraits of 19th century bourgeois. I have replaced 'subject' by 'object' in order to generalize her argument and in order to avoid confusion with word-usage earlier in the text.
experiences of it. And it is the context of an image that gives us clues about how to interpret it; it is the context which narrows down the multitude of possible associations (connotations) which are available to us.

Two features of a photograph's context are essential: its 'communicational context' and its 'representational context'. By the first, I mean the situation in which the photograph is being perceived. The same picture\(^{27}\) will be interpreted very differently if it appears in a political manifesto or in an art-gallery, in a book or in a frame on the wall. By the second feature, I mean the other representations that accompany or surround the picture, in particular a (full) text, a caption, or an overlaid symbol. These will indicate not only how to identify the objects (denotation), but also at what level perception should occur, in what terms the photograph is to be understood, in what register of things the objects are to be apprehended, how they are to be interpreted (connotation). As Barthes says, the linguistic message accompanying a picture is one of the various techniques "intended to fix the floating chain of signifieds in such a way as to counter the terror of uncertain signs".\(^{28}\)

Let us, finally, look at the photograph chosen as example. It represents "Albert Biro, a loom fixer, employed at one of the last operating textile mills in Lowell." This photograph occupies a larger portion of the cover of the Report to Congress; its caption, however, is to be found only on the back of the cover-sheet. The separation of picture and caption and the superposition in print of a badge on Albert Biro's chest are reasons to distinguish between two main levels of communication in this representation. At the first level,

\(^{27}\) For the purpose of lexical variety, I will use 'picture' as synonymous to 'photograph' for the rest of this chapter.

we will focus on our primary perception of the picture: the man, his face, his gaze. At the second level, we will concentrate on the context of the picture: the document, given by the Lowell Commission to the U.S. Congress (communicational context), and the title, the caption, and the badge (representational context). Both levels allow for specific identifications and interpretations.

A first look at the photograph confronts one with Albert Biro's gaze and with his facial expression. Here, it is the factor of similarity, resemblance, or 'realism' of the picture that is the active ingredient: not only can we recognize a man, we can even distinguish his facial expression clearly enough so as to feel what he is 'telling' us, like we would in real life. In this case, denotation rests on resemblance and connotation on empathy. If the present analysis pertains to our perception 'at first glance', the effect of the gaze, however, which this glance discovers, is due to the gaze's very permanence. Thanks to both the material constancy of the photograph and to its 'realism', Albert Biro is staring at us in the same direction and with the same attitude whenever we look at his picture. That we are looking, means that he is looking at us in the eyes -- a tireless, insistant, and unescapable Other -- except when we look elsewhere or close our eyes. And even then, his eyes may be pursuing, haunting us behind our closed eye-lids. Note that he has taken off his glasses for the picture, thereby increasing the weight of his gaze. The fact that this picture appears on the cover of a document makes this pressure even more potent: every time we just look at the document, every time even, that we just see the object (provided it lies face up), Albert Biro is there, staring at us. Those who wrote the Report to Congress thus used the properties of this type of representation -- the materiality of the photograph and its resemblance to the 'real thing' -- for their own and
specific purpose: to exercise pressure on the reader, on whose vote the future of the plan depends.

Other major denoted elements in the picture are the space in which Albert Biro stands, the machinery that is behind him and on which he leans, and the dirt on his overall and on his hands: Albert Biro is a manual worker, standing in a workplace. This fact, however, are not as 'neutral' as is the way in which I stated it. Manual labor is a value-laden concept, with "chains of signifieds" reaching into history and politics. That is exactly the point of the picture: to raise these historical and political issues -- in a favorable light. But what is there to the picture that would put these problems in such a light, that would make us see them benevolently? Two factors, I will argue, perform this task. The first one is Albert Biro's presence and expression: the manual laborer is a nice guy. The second one is inherent in this type of representation: "To photograph is to confer importance" to the things we picture and to "beautify" them.29 One's willingness to give attention to an object or event and to spend energy and material on its reproduction endows this representation with a sense of value and nobility, of importance and beauty.

At the level of a contextualized perception of the picture, four elements appeared to be meaningful: the document as a whole, its title, the caption of the photograph, and the badge on Albert Biro's chest. All these elements help shape the message, that is to say the perception of the representation. The decision-making process within which the Report was produced, establishes a framework for the understanding of a representation in (or on) the document. The title is, in that respect, only a confirmation of the document's status as piece of communication between planners and law-

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makers; and so is the badge. Albert Biro represents Lowell (he is a representative of his fellow-residents) in front of the U.S. Congress; his presence is motivated by his city's desire to persuade this political body; his gaze is not inquisitive but expectative, not imposing but demanding. As for the caption, its function is to add an element of urgency and importance to the worker's quest: he is "employed at one of the last operating mills in Lowell." This importance has two sources: the historical meaning of the mill-industry in Lowell and the economic value of industrial activity in general for the city.

Of all the factors enumerated until now, only the last one provides an explicit and rationally debatable reason on which to base a decision about the future of the plan. All the other ones -- Albert Biro's kindness, humanness, and trustworthiness; the value and meaning of his (manual) labor; and the history behind his trade -- all these factors operate on the basis of emotion and personal value. This is not to say that there is anything wrong with the emotional and value-laden apprehension of reality; on the contrary. The preservation of historically valuable artifacts or activities may be a matter of subjective judgement, the issue is nonetheless and for that very reason important, meaningful, and deserving of attention and discussion. All the factors enumerated, moreover, pertain solely to this one picture, this one page of a whole document. Much of this document's content is devoted to an objective presentation and explanation of the plan for the Urban National Park. A Congress(wo)man's decision about it does not rely exclusively on his or her impression at the view of the document's cover, not even only on his or her reading of its full contents. Yet the fact remains, that Albert Biro's picture, and so many other drawings, engravings, and
photographs in the Report, as well as texts and slogans, manage to turn it into somewhat of an advertisement booklet.

And like a blonde’s long legs are no evidence for a car’s technical performance, like a chart’s symmetry is no proof for its efficiency in practice, Albert Biro’s aura is no warranty for the necessity and quality of the plan he symbolizes. Must we cry wolf in such cases, where different kinds of motivations and different ways of persuasion are being improperly mixed? Must we sound the alarm when matters of conviction are being treated as matters of seduction? Must we intervene when crucial problems are being bypassed, basic contradictions overridden, or essential conflicts avoided by means of emotionally or aesthetically attractive forms? Or must we accept this as part of the game, because “that is the way humans are” or because that is the only way to keep “things rolling smoothly”? The reader will find no answer to these questions here, of course, but some arguments indicating what is at stake and what all this means in terms of planning and order.
Chapter 4: THE AVOIDANCE OF CONFLICT

The vignettes revisited.

The case-studies have been analyzed in terms of means, types, and modes of representation. The analysis at the last two levels has occurred by means of a series of vignettes, each consisting of a formal unit of symbolization: a drawing, a paragraph, a metaphor, etc. These units were not chosen systematically, in order to 'cover' a hypothetical field of phenomena, but for their own sake, because they seemed to be able to teach us certain specific lessons. What have the most important lessons of each vignette turned out to be?

The drawing. The perspective view presented by the BRA to the Dudley community shows Downtown as focus and Dudley as element of the foreground, a foreground 'leading' towards Downtown. It thereby shows that elements of a picture are being selected and assembled in a composition according to specific intentions. The nature of the image allow for a juxtaposition of these elements, but the rules of composition allow for the creation of hierarchies, thereby making some elements 'more equal' than others. The enforcement of such hierarchies may require the violation of these rules of composition, with the effect, in our case, of making all elements appear as equal while at the same time enabling one to be more
meaningful and present. By choosing Downtown to be that element rather than Dudley, the BRA has imposed its own values on a representation addressed to people who hold their own and different values. The viewer is thus being asked to see his or her 'center of the world' in the perspective of another experience of the city. Perhaps this choice of focal element is not the result of a conscious desire to 'teach' the resident about the 'right' way to see the area, but the expression of the traditional way in which a planner in a downtown government agency sees the city. In this case, it is the agency's culture and its biases that accounts for the specific features of the representation. These biases may not be conscious indeed, they are nonetheless potent.

*The paragraph.* The specific form of the paragraph on the economic context of Roxbury -- a series of 'facts' rather than a continuous discursive text -- has done away with an essential capacity of language: story-telling. That is, the ability to describe phenomena in a way that translates time-based experience, reveals causal relationships, and allows for the presence of actors and of their motivations in the representation. The paragraph in question obfuscates politically sensitive aspects of the situation it describes, making it appear not as a play of powers, interests, and values, but as a supposedly 'neutral' background on which to build. In other words, it 'naturalized' or objectified the situation and emptied it of its meaning in terms of personal experience. The planner as well as the reader may be the victim of such a view on things: neglect of phenomena that are difficult to control precisely because they are important (politically and economically) limits both the planners' and the residents' ability to guide the evolution of the area.
The area-map. The map of Roxbury that the BRA used as a means to identify the territory concerned by the IPOD displays the process of objectivation at its fullest. The base-map is a highly abstracted construct, that is, a representation that has summarized the area by extracting from it a single feature -- the street-lines. It excludes the residents 'from the picture' in two ways: first, it contains no elements which might support an act of identification with the representation; and second, the boundaries it depicts are the product of bureaucratic decision-making. The map thus appears as an objective representation, its space as homogenous space, the boundary it shows as legal (legalized, justified) boundary. These reductions undercut the possibility of an image to be a meeting point of different minds in a way that allows for each to identify with it. Rather, it proposes, under the banner of neutrality, a specific and repressive representation of 'reality'. The repressive character of the representation may not follow from a conscious desire of the planner: this form of representation is 'simply' part of his or her professional culture, a culture of rationalism and objectification, at least in this instance.

The metaphor. The use of a same metaphor -- the Tide -- for two events, one historical and the other virtual and hypothetical, shows that the metaphor builds on structural analogy so that two phenomena -- both denoted by the metaphor -- with similar structures can be compared, despite their opposite value and meaning. The metaphor calls for a re-creation by the perceiver of the leap between the phenomenon and its analogy, a re-creation by which he or she will project and invest personal experience into the representation. This means, on the one hand, that various people can agree on a word while understanding it in their very own and personal way, associating it with idiosyncratic experiences (visual ones
especially). It means, on the other hand, that metaphorical speech is a place in language where the traditional semantic structure has been violated, thereby providing an opportunity to 'see' things in a new way. As such, it can serve as a means of opposition to authority, but also as a means of strengthening authority. The BRA seems to be using it in the second way, by selecting a specific point of analogy (an irresistible momentum) while neglecting differences (the direction of the tide, its context and nature) and so as to allow for a transfer of personal investment from the first representation onto the second one, to which the agency associates itself. Yet the representation may prove to be, once more, a case of self-persuasion (self-deception?): the BRA may be trying to convince itself here that it can control the "new tide" and that it can use it to achieve great things. This belief may prove wrong and the BRA may be entertaining illusions about its capacity to control the phenomenon or about its scale.

*The subject-maps.* With the series of maps about Lowell's areas of mixed uses, areas of blight, and areas of Black residency, we encountered the importance of boundaries as controlling devices. Whereas in the area-map of Roxbury the emphasis of the analysis lay on a neutralization of the area as such, these maps highlight the neutralization of specific threats that people perceive in the area. These maps, even more than the other one, make it clear that the specific formal features of the representation are not just results of a desire on the part of planners to impose a particular representation of things on their audience, but follow as well from the way in which planners themselves experience things. In other words, it appears again that in some cases, planners are trying to persuade themselves of a particular meaning of things as much as they are trying to persuade others of it; or more precisely, that their representations are attempts at controlling
things for their own mental comfort and not just attempts at persuading the audience that things are ‘under control’. In the face of uncertainty and insecurity, planners behave just like anybody else, but their particular responses to these threats receive public sanction.

The chart. Of all the representations in the case-studies, it is probably the chart that offers the most dramatic view of the different roles of word and image. Here, indeed, verbal representation appears as what it originally is: a means of classification, that is, of separation. And pictorial representation appears as what it is prevalently being used as: a means of unification. On the one hand, "The Urban Environment" has been chopped up into pieces, each represented by a word (or two). On the other hand, lines joining words to each other and forming a doubly symmetrical pattern appear as the binding elements, the providers of unity. Circles add to the appearance of cohesion by allowing for fuller symmetry, turning the central pieces of the composition into infinitely symmetrical figures themselves. The chart is the very figure of urban planning: séparer pour mieux unir: taking things apart in order to put them back together, but according to selected criteria. These criteria indicate a functionalist bias in this case and they suggest that planners may (sometime) entertain simplified (if not simplistic) notions about the city and their interventions in its development.

The titlepage. Like the paragraph, this representation has autonomized linguistic units and juxtaposed them. In this case, the reduction into parts, the refusal of discursive form, do not deny a certain dimension of the described reality, but the syntactic relationships that ought to unite parts of a verbal composition. By so doing, it allows for the summation of various elements into a very concise form, with a high density of meaning. This density of meaning does not follow from a synthetic flow of linguistic
denotations, but from the juxtaposition of words with long chains of connotations (National, State, Private, etc.). It is the very autonomy of these words, that is, their escape from a strong context, that allows for these chains of signifieds to unfold and to provide meaning to the representation. Unlike its cousin the slogan, which is also of form of dense and concise verbal expression, the titlepage does not even provide statements or propositions. Insofar as syntax is absent, truth can not be part of the meaning of the representation. Like an image, the title-page presents 'facts' and thereby represses the other fact (a real one this time) that in order to be accepted, its message needs confirmation in practice. This representation should in fact be taken as an example for the general phenomenon of 'convincing identification': by defining a phenomenon in a certain way, one gets approval for the proposition (or the proposal) of which the phenomenon is part; not by providing arguments for the truth of the proposition itself (or the quality of the proposal), but by finding favor through pleasing connotations.

The photograph. This vignette highlights the fact that the image, as static representation, also allows for the unfolding of chains of signifieds and that it can determine, to a certain extent, what these chains will be like. The photograph of Albert Biro contains very specific clues, the ones that motivated its choice for the cover of the document, which are typical and well-understood. Together with contextual features (the caption, the document itself, etc.) these clues direct the viewer to experience things for which the depicted person stands: the image does not present to our minds an individual worker with a personal history, but Work and History. Although Albert Biro is there in the picture, he has been partly depersonalized: we can, on the one hand, perceive his expression and
empathize, but we cannot, on the other hand, know what his experiences of the Factory, of Lowell, of America, and of History are. This vignette, more than any other, emphasizes the role of myths in the legitimation of plans. Myths can serve for purposes of 'internal legitimation': the theme "History of the American Industry" underlied much of the design of the Urban National Park. But they also serve for purposes of 'external legitimation': History and Work are values which can motivate a legislator to cast a positive vote.

*From practice to theory.*

The case-studies were an opportunity not only to inquire about the use of *types* and *modes* of symbolization in planning, but also to reflect about the meaning of the use of *means* of representation: documents, presentations, and conversations. What we can conclude from our reflexions about them is valid for the case-studies in general: *some forms of representation enable one to avoid the possibility or the presence of conflict.*

Some means allow for communication without direct confrontation or challenge to values and interests: documents, presentations. Some types allow for the evacuation of all conflictual elements in the situation and for the creation of peaceful harmony: non-discursive texts, charts, systems-diagrams in general. And some other types allow for the creation of consensus at a level of meaning where problems inherent to the plan cannot be addressed: this was the case of the title-page and of the photograph in particular. Means of representation draw their capacity to avoid conflict
from the regulation of personal contacts. Types of representations, on the other hand, find it in the modes of symbolization on which they rely: imagery, connotation.¹

The vignettes of course do not constitute a proof for the present argument, but they illustrate a phenomenon to which one’s attention is often being directed. Planning is a politically turbulent field and planners are most often the pawns who take front-line fire, without being able to do very much about the rules and the course of conflicts.² As representatives of an authority, they will work according to a certain agenda. If this agenda is likely to be met by opposition on the basis of certain phenomena or values, it will be in their interest to eliminate these issues from the (eventual) public debate. Implementation of plans does requires some degree of public acceptance, if not by the people directly affected, then at least on the long run by the people on whose votes the political leaders behind the planning agency depend. It is a fact of democracy, that it requires consensus-building, and who says ‘consensus’ says ‘agreement despite points of conflict’. The displacement of the discussion from a level where differences and problems are plenty to a level where similarity and harmony reign, is a constant of our society, and there is no reason to believe that planning, so embedded as it is in political issues, can avoid it. Rather, it has many reasons to use the method for its own benefit.

There is yet another reason for which planners may want to evacuate conflict from their representations of the city and its development. As we have seen, many instances seem to indicate that they have as much interest

¹ In support of this and following arguments, see Appendix A.
² I will be talking here about planners working for local governments. Although they are not all planners, they constitute, I believe, the most important part of the profession.
to believe in the absence of certain actors and motivations as they have interest in making residents believe in it. The more planners recognize the economic and political forces around them, and especially the strength and potential of these forces, the more they have to accept the limitations of their own actions and the more they have to accept the fact that they do not (often) play an active part in the 'urban game', but a passive one. Their power lies, like that of most professionals, in their specific knowledge, and it is therefore understandable (even if not justified) that they would want to keep it to themselves and resist sharing it in really participatory processes. It is perhaps because they realize that the old situation is untenable, that some planners are already preparing a new mold for the profession: the planner not as planner but as mediator between engineers-planners, politicians-planners, and residents-planners.

The desire to avoid conflict is not something proper to planning as a profession only. It seems to be a constant of mental processes in general. Perception relies on difference -- one could not perceive something if it were not different from its context -- but at the same time, the mind longs for constant coherence. Not just for coherence, but for conflict-free coherence, for a static state devoid of ambiguity and instability: order. This concept, used at the beginning of our study and defined only to a certain extent, can now be further developed. That is, we can now better appreciate what the nature is of the order at which planning seems to be aiming. This order appears to be one of static and conservative coherence, of harmony and resistance to change. What other kind of coherence could there be, will you ask? Well, a coherence which acknowledges constant imbalance and dialectical movements, a coherence of forms in flux and in change.
Coherence is both the condition and the product of two processes: of legitimization and of identification. To identify an element is to see it as different from the rest and as endowed with an internal consistency (as an object or as a Gestalt, in the general sense of the word). To differentiate among various elements is to identify each of them as different; it is, in other words, to operate external separation (between elements) and internal homogenization (of each element). Identification of a phenomenon therefore relies on the possibility to see it as a coherent whole. Legitimation, on the other hand, is external unification, in that it consists in linking a phenomenon with a context that gives it meaning and validity. Like identification, it establishes coherence. As Berger and Luckman argue, it occurs by the construction of "symbolic universes," characterized by order, cohesion, and unity: "integration in one form or another is ... the typical purpose motivating the legitimators."\(^3\) Identification and legitimation are thus complementary processes: the one establishes coherence and unity at the level of element, the other across all elements. In a way, legitimation can be called the identification of relationships among elements: it establishes the principles governing the formation and perpetuation of the whole. (While the term 'legitimation' is usually being used in reference to broad cultural processes, it is being used here to describe processes of unification and harmonization in general, and in plan-making in particular. The reason for this is, that criteria of unification are at the same time criteria by which the use of the representation is being legitimized. The mechanistic metaphor of the city, for example, serves both as a way to define the

\(^3\) Peter L. Berger and Thomas Luckman, *The social construction of reality*, especially pp.92-105.
relationships of the parts of the city to each other and as a way to justify specific modes of intervention on the city.)

Insofar as planning is an attempt at creating order, at creating coherence and unity, what are the ways in which it identifies the constituent element of this order and their relationships, and thereby legitimizes the wholes that they form? In other words, and in terms more common in the planning literature: what are the paradigms that guide planning thought and action and give them as well as their products coherence and validity, unity and legitimacy? According to Donald Krueckeberg there are essentially three such symbolic universes: science, art, and politics. More precisely, there are three specific ideas that have shaped American Planning over the course of a century: scientific efficiency, civic beauty, and social harmony. 4 My argument is, now, that these three sources of planning, which Christine Boyer sees as three means used by capitalism to order the city, to control and discipline it, 5 propose a specific kind of order -- indeed, an order in which conflict is inexistent and in which the realm of social experience has been evacuated under the simultaneous pressure of the Logos and the imaginary.

It is in the very modes of representation, the word and the image, that I propose to trace back the fundamental vectors of planning. I will try to show, to conclude this study, how the Logos and the imaginary, the word and the image, underlie the production of the representations analyzed in the case-studies. In other words, I propose to explain the essential features of these representations within the framework of general planning-theory. This should enable us to understand, at least partially, how some planners think

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and how their thinking fits into contemporary society. Before doing so, however, we need to set the background on which words and images can be qualified in terms of conflict and coherence and reveal the social stakes.

*Nature is not what it used to be.*

The reduction of the whole field of (semiotic) representation to the pair ‘word-image’ may seem somewhat brutal, as does the reduction of the conceptual basis of planning to the rational Logos and the imaginary. The latter problem will be addressed in the next chapter; let us address the former here.

The preceding pages have provided me with ample material to rationalize my emotional commitment to the issue of ‘word and image’. First, they suggested that the two modes of symbolization constitute the bottom level of classification of types of symbolization: while paragraphs (and tables) are verbal or descriptive representations, charts, maps, diagrams, drawings, and photographs are pictorial or depictive ones. Second, means of representation can be distinguished into two categories: documents and presentations, on the one hand, and direct dialogue, on the other hand. While the former means generally contain a large component of visual ‘material’, the latter consists essentially of verbal discourse, eventually supported by visual representation.

Yet from semiotic theory comes a third incentive to focus an inquiry on representation as proposed -- a third reason which parallels the first one and gives it a broader cultural meaning. Writes W.J.T. Mitchell:
The dialectic of word and image seems to be a constant in the fabric of signs that a culture weaves around itself. What varies is the precise nature of the weave, the relation of warp and woof. The history of culture is in part the story of a protracted struggle for dominance between pictorial and linguistic signs, each claiming for itself certain proprietary rights on a “nature” to which only it has access.

And a few lines later in his text, Mitchell adds the following, thereby throwing us right into the heat of the controversy:

...the relationship between words and images reflects, within the realm of representation, signification, and communication, the relation we posit between symbols and the world, signs and their meanings. We imagine the gulf between words and images to be as wide as the one between words and things, between (in the largest sense) culture and nature. The image is that sign that pretends not to be a sign, masquerading as (or, for the believer, actually achieving) natural immediacy and presence. The word is the “other,” the artificial, arbitrary production of human will that disrupts natural presence by introducing unnatural elements into the world -- time consciousness, history, and the alienating intervention of symbolic mediation.6

Mitchell's distinction between culture and nature raises an essential issue, when he describes the image as an artifact that claims to be natural. Berger and Luckman, in their discussion of the objectivation of institutional orders, ask the following question: “To what extent is an institutional order, or any part of it, apprehended as a non-human facticity?” And they add, before answering: “This is the question of the reification of social reality.” Their answer, then, centers around this concept of reification. Reification, the two authors write,

...can be described as an extreme step in the process of objectivation, whereby the objectivated world loses its comprehensibility as a human entreprise and becomes fixated as a non-human, non-

humanizable, inert facticity. Typically, the real relationship of man and his world is reversed in consciousness. Man, the producer of a world, is apprehended as its product, and human activity as an epiphenomenon of non-human processes. Human meanings are no longer understood as world-producing but as being, in their turn, products of the "nature of things."?

We can, in other words, use the couple 'culture-nature' in order to articulate our discussion of representation in planning in a way that reunites the two dimensions of form and content, in that both the form and the content of a representation can be qualified in terms of their relationship to the "nature of things." As we just saw, the image is often being treated a 'natural' sign, and as we will see later, some arguments or phenomena can be presented as belonging to the 'order of things'. The fact that planners plan for an entity called 'neighbourhood' under the banner of "The American Dream" is an example of an a-priori basis for a planning-process. It is clear that this distribution of tasks, the definition of this area of intervention, and the rationale behind the intervention are only specific cultural constructs. But they are being posited (and most often accepted) as forming a 'natural' basis for the planning-intervention.

Naturalization or objectivation, then, are processes by which the fluctuating is being transformed into the stable, the dynamic into the static, the created into the given. 'Nature', in that sense, represents the objective world of given things and mechanisms, a world that cannot be changed and to which one must accommodate one's actions, and saying that something belongs to 'the nature of things' means locating it beyond the realm of human intervention. Part of the 'natural' consists, thus, merely of naturalized culture, while part of it indeed belongs to the physical world of Nature.

Between both, man himself, his own subjectivity and creativity, transforming the material into the cultural: the artificial. Objectivation or naturalization are processes by which the artificiality of man's creations is being obfuscated, in which the human origin of things is being hidden: ideology. The denotative sense of a word, for instance, is its objectivated sense: seen as the 'true' sense of the word, it is nonetheless a human product, and its acceptance as objective is an act of legitimation of the order which it imposes on the world, together with the other words.

Abstractation, formalization, and codification

Processes of objectivation are processes of representation: they form not only stable symbolizations of phenomena and they also constitute codes that will support them, tools of further objectivation. Language is one such code: it is at the same time the product and the effector of a system of knowledge-production, providing society with a "collective stock of knowledge." Semiotic codes such as language, being codes of representation, structure the ways in which we identify and integrate elements. Lisa Peattie's argument, which set off this whole inquiry, that representation is selection is thus right, but insufficient: representation is also abstraction, formalization, and codification.

Representation is abstraction. 'To abstract' means both 'to summarize' (to abstract into) and 'to remove' or 'to separate' (to abstract from). The examples discussed in the two case-studies indicate various ways in which

8. ibid., p.68.
these processes of simplification and separation take place. The street-plan reduces a city into a set of lines; the picture turns a man into a static shadow of himself; the paragraph in list-form reduces a social-economic process into a series of 'facts'. On the other hand, the perspective drawing selects key elements and features from the totality of the city; the chart isolates "factors" and "items" of The Urban Environment; the metaphor removes a phenomenon from its original context. This last example is crucial: representations are abstractions in that they are removed from the 'reality' they stand for and in that they are different in essence from the phenomena they symbolize. A word is not a feeling, a picture is not an object, a diagram -- or at tree -- is not a city.

If we set the issue of representation in a context of people and society, the continuum of meanings of the word 'representation' can be seen in terms of abstraction: the closer one is to the political pole, the more 'concrete' the representation of society; the further away from this pole, the more 'abstract' this representation. At one end of the spectrum people represent people; at the other end, numbers do.

*Representation is formalization.* 'To formalize' means at the same time 'to give form' and 'to neutralize by conventionalization'. The first meaning refers to the action of ordering itself: to give form to something is to enable it to be part of the order of things. Formlessness is the quality of an object that can not be understood as organized, as ordered. It is -- if we accept the idea that representation, as opposed to mere perceiving, depends on order by categorization -- the quality of an object that we cannot grasp and fit into reality. For the human mind, writes Clarence Lewis,

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9. Cf. Piaget et.al., *Logique et Perception*. Goodman's own view comes close to this idea; see appendix C.
It is reality, not experience, which must be orderly. Failure of a certain type of order is the criterion which excludes the given from reality (of a certain type). Thus so far as any one category is in question, our method of understanding experience is to segregate, as "reality," that part which is orderly in the required fashion; the rest is understood by being labelled "unreal." 10

Now, if a representation is to be shared, if it becomes transmission of meaning, it will require agreement about the way in which meaning is being formalized, about the ways in which meaning is made sign. And for a sign to be a basis of shared understanding, it must be accepted by all parties: it must be conventional, thus socially determined -- which is why "the whole repressive and reductive strategy of the systems of power is already in the internal logic of the sign." 11 Insofar as symbolization is "worldmaking" 12 and insofar as communication requires the social (re)construction of meaning into signs, this formalization allows for a transformation of 'reality' and of its meaning according to specific motivations. We have seen, for instance, how the choice of a particular form of text (itself a particular type of representation) has enabled the BRA to represent the economic context of its planning intervention in Roxbury as an inescapable fact, as a *milieu* devoid of actors and of their motivations, as a world free of conflict and struggle. We have seen, elsewhere, how the specific form of a chart (itself a specific form of text and drawing) allows for the perception of a controlled and balanced environment and society. To put into form is necessarily to choose a form over others and also to abscribe oneself to further choices within this formal

system. The nature of the form requires one to choose (elements, arrangements, compositions, etc.) and the use of the form is constituted by the choices made. This is the case, for example, in the drawing of Boston produced by the BRA, showing Dudley in the foreground and Downtown at the center of the composition: the perspective drawing was chosen over other possibilities (map, isometric, etc.) and Downtown was chosen as focal point, over Dudley for instance.

*To represent is to codify.* This last verb means both 'to put into conventional signs' and 'to systematize' or 'to classify'. The formalization of symbolization is in fact nothing else than the creation of a semiotic code. The semiotic code tells one what elements are available to him or her for use in representation, in what ways these can be arranged, and in what circumstances they can be used. This, of course, is no mere technical matter, but also and above all a cultural, ideological one: "Ideology ... is not ... an extra-semiotic residue but the very structure of the code." 13

This action of codifying does not concern only the signs themselves, but also, as suggested above, to their use-in-context. We have distinguished, in our case-studies, three different levels of analysis pertaining, respectively, to the means, types, and modes of representation. At the first level, the context of the single symbolization (as type) could be a document, a presentation, or a dialogue. It is the choice of one of these forms, as well as choices about their implementation that demonstrated the inherent correlation of semiotic (descriptive) and political representation. These choices structure and organize the communication and decision-making process in planning, as in any other activity. The specific uses of documents

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(themselves specific means of representation) in Roxbury and in Lowell were clear indications of the ways in which power of decision-making is distributed in these two cases. The planning-process in Roxbury may be called 'participatory', but the analysis of means as well as of types and modes of symbolization indicate the limits of the participation. The planners in Lowell were entirely dependent on the law-makers in the national capital and therefore had to produce and distribute documents -- documents which used various types of persuasion. Writes Michel Foucault:

...discourse is not only that which translates the struggles of the systems of domination, but that for which, that by means of which one struggles, (it is also) the power that one tries to seize. 14

Hence the importance of the system of communication and decision-making, which grants or denies a party the possibility to participate in public discourse and decision-making, to see its discourse and desires publicly accepted. Hence also the argument that semiotic and political forms of representation meet in the organization of this system. The possibility to have a share in public discourse, to have a stake in decision-making, is not just a matter of getting one's desires heard, acknowledged, and satisfied. It is also the opportunity to publicly identify oneself and to assert one's being and position in society. In this sense too, planning-processes offer opportunities for social identification. The problem, again, is to know who will be allowed to identify whom. The two cases analyzed in chapters two and three may provide some insight into this issue.

The case of Roxbury is, in fact, an extremely interesting one, in that it presents the two poles of the spectrum of possible sources and processes of identification. One pole is that of the City of Boston, here represented by the

BRA, which takes it upon itself to give an account of the history of the Black community in Roxbury.\textsuperscript{15} This can be seen, on the one hand, as a desire to share, to acknowledge things that are of value to the community. It can also be seen, on the other hand, as an act of appropriation. The first plan issued by the agency for the neighborhood centered around a vision prepared in its offices and not translating local popular will, need, or desire. It is true that this plan has been dropped, but is nonetheless true as well that the agency has felt at some point that it was entitled to tell people -- even in the form of a proposal -- what should become of their neighborhood, or rather, what their community should become.

But the case of Roxbury also contains the other end of the spectrum of sources of social identification: grassroot separatism. Believing that they had nothing to expect from the City of Boston, local leaders presented a referendum to the Black community in Boston proposing the creation of an independent city: Mandela. The proposition was rejected, however, and Roxbury is still a district of Boston. Yet, the move was meaningful: it displayed a desire for self-governance, for a liberation from Downtown bureaucracies, among which the BRA. This is not to say that Roxbury would have had the capacity to plan and build on its own, had the referendum been positively met; but the move does indicate a genuine interest in local planning by local people.

The case of Lowell is very different. Here, a community, represented by a group of officials and citizens (volunteers) and their hired consultants, asked itself 'who' it was and came up with an answer. More precisely, some key figures, among which Patrick Mogan in particular, had a vision of the city and attempted to use it in order to revitalize the local economy and

\textsuperscript{15}. In the Dudley Square Plan.
rehabilitate the Downtown area. The issues that this process of identification raised are, one, that a small amount of key figures were ultimately involved in the generation and development of this vision and, second, that the vision was shaped -- at least partially -- with the purpose to 'sell' the city to investors and to Congress. These people and their consultant emphasized two features of the city: its ethnic diversity and, especially, its historical significance for the whole country: "Lowell symbolizes the Industrial Revolution in America."\(^\text{16}\)

In fact, the cover of the report to Congress, with the picture of Albert Biro in his overall, shows the image that the planners (politicians and consultants) wanted to present of 'their' city: a city of hard-working, kind, and deserving people. The picture does not say whether Mr. Biro participated in the production of this identity, but it does say that the planners intended to present the city as a community of people who live by the central values of American society. The description of the city's identity in the rest of the document centers on this one theme: Lowell's industry, its workers and its history. It thereby puts it in terms that are general enough to appeal to outsiders, but maybe too general to be respectful of the city's singularity and complexity. Yet that may be the whole point: to unite a variety of people around a vision, a vision of the past and of the future -- to unite Congress(wo)men in a vote of support, to unite the business community in investment, and to unite citizens into a proud, and harmonious community. The Lowell case, then, seems to be an example where the vision of a few, some of them hired from the outside, has been successfully adopted by the many, and seemingly for the better. The case also exemplifies, on the other hand, that it takes dedicated and inspired individuals to bring

\(^{16}\) The Report to Congress, p.6.
momentum to a process of social identification. In this case, it seems that the population merely accepted and enjoyed the new image of the city after the fact, without great involvement during its generation.17

What the two cases teach us as well, is the fact that both planners addressing themselves to a community in the name of an authority and planners addressing themselves to an authority in the name of a community, called upon myths to win the favor of their audience. In the case of Roxbury, documents speak repeatedly of home-ownership, as central goal for community development. In the case of Lowell, it is on History and on the American Industry that planners insisted, by means of text and by means of pictures. I will argue below that this is an essential part of planning-practice. With this, it is time to turn our attention to the way in which modes of representation underlie planning-thought.

17. Source: Dennis Frenchman, who was one of the consulting planners and urban designers.
Chapter 5: FIGURES

Number, image, and myth

Three different approaches to planning have been advanced: a scientific one, an artistic one, and a political one. I propose to see as their underlying principles: efficiency, beauty, and equality. These principles reflect, I believe, what the various sources of differentiation and unification, of objectivation and legitimation are in planning. While the first two principles do not pose many problems of interpretation into practical terms, the third one is more complex: how does the principle of equality express itself in planning today? I will argue that the main dimension of political thought in that discipline is a mythical one and that equality is being suggested by means of myths, such as The American Dream, which allow for a perpetuation of basic inequalities and a minimization of structural tensions. All three terms, in fact, provide good reasons to call official planning 'conflict-avoiding' and to see it as committed to its own conceptions rather than to the social and political realities of the city. I will also try to show, how various modes of representation lend themselves to the 'neutralization' of urban problems by means of science, art, and myths. Specific uses of language and of imagery underly these approaches to the city, as the vignettes in the case-studies have already suggested.
I propose to rapidly sketch science, art, and myths as mechanisms of objectification and legitimation, following authors such as Berger and Luckman, and Cassirer. The latter describes scientific language as a further and ultimate step in the process of objectification, building on the foundation laid by the Logos:

It is by language that we first learn to classify our perceptions; to bring them under general names and general concepts. And it is only by this effort of classification and organization that the apprehension and the knowledge of an "objective" world, of a world of empirical things, can be reached. (...
(Yet) our common words are not mere semantic signs but they are charged with images and with specific emotions. They speak not only to the understanding but to our feelings and our imagination (...)
In order to conceive the world, in order to unify and systematize his experience, man has to proceed from ordinary speech to scientific language -- to the language of logic, of mathematics, of natural science.
It is only in this new stage that he can overcome the dangers, the mistakes, and fallacies, to which he is subject in the ordinary use of words. (...)

A few pages later, Cassirer offers the following synopsis of the three concepts of science, art, and myth:

We may say that what we find in myth is imaginative objectification, that art is a process of intuitive or contemplative objectification, that language and science are conceptual objectifications.

1. Peter Berger and Thomas Luckmann, op.cit.; the term 'mechanism' is theirs.
4. ibid., p.187; my emphasis. Cassirer adds these words of caution: "There are no strictly separate provinces of the human mind. ... We must not think that what we have called by a separate name is a separate entity or a separate function."
We have already seen what Cassirer means by "conceptual objectifications" as they apply to language and science. What does he mean, then, by "imaginative" and "contemplative objectification"?\(^5\) By the first term, he refers to the fact that in myth, "man objectifies his own deepest emotions; he looks at them as if they had an outward existence." Its objectification is, thus, "not a work of the intellect, but a work of the imagination," which attempts to situate man in the universe by spelling out, even if only "incompletely and inadequately," the origin of things, the 'why?' of the world. The myth, then, is the space of bodily sensations and of emotions. By the second term -- "contemplative objectification" -- Cassirer describes a form of objectification that reconciles the combat between the imagination of the myth and the rationality of language: "art and the artist ... do not live in a world of concepts; nor do they live in a world of sense-perceptions. ... It is a world not of concepts, but of intuition, not of sense-experience, but of contemplation. ... In a certain sense ... art ... is not a language of verbal symbols, but of intuitive symbols." It "is not reproduction of impressions; it is creation of forms. These forms are not abstract, but sensuous." Myth and art can be further distinguished by the relationship of art to language: "What is common to language and art" -- and opposes both to myth -- "is the fact that neither of them can be considered as a mere reproduction or imitation of a ready-made, given, outward, reality."\(^6\) The artist, then, "does not apprehend nature as an aggregate of physical things or as a chain of causes and effects" -- as the user of (literal) language does -- "but just as little does he regard

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5. All following quotes come from the same reference, until notice.
nature as a subjective phenomenon, a sum of sense-perceptions. While myth places man in the realm of these "sense-perceptions" and of emotion, art is not "a mere state of emotion; it implies at the same time an activity of contemplation. ... Art does not deceive us by placing us by a mere phantasmagoria of words and images. It enchants us by introducing us into its own world, the world of pure forms.

This -- somewhat redundant, I realize -- exposition of a classical reference on symbolic forms should enable us to understand better what is at stake in science, art, and myth, and to make sense of these forms of thought in terms of planning and in terms of representation. How, then, do we recognize these three modes of thought in planning? Science: this form of thought underlies what various authors have described as the 'rational paradigm' of planning. Art: this mode of objectivation lies at the roots of American city planning, under the label 'City Beautiful Movement'. Myth: this form of thought is, I will argue, the core of official social thought in capitalist planning, its specific approach to problems of social equality. And how do these modes of thought appear in terms of forms of representation in planning? Science: the rational paradigm of planning relies, in its purest forms, on quantification, on representation by means of numbers, of figures. Art: this is the realm of the drawing (map, plan, or perspective). Myth: in order to draw support for their plans, planners use rhetoric and symbolic imagery, that is, representations with strong connotative power. It seems, thus, that the three major traditions of planning translate themselves in terms of symbolization essentially in three specific modes of representation:

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7. ibid., p.159.
8. ibid., p.164.
quantification, pictorial symbolization, and connotation: numerical figures, drawn figures, and figures of speech.

*Science and quantification.*

One could argue that quantification is a form of verbal representation, a view supported, as we have seen, by Cassirer, as well as by Nelson Goodman. According to this view, then, quantification is verbal symbolization that has reached the ultimate limits of abstraction. This limit is characterized by the fact that all signs are based on a 'universal equivalent'. Ordinary language found its strength in the reduction of the infinite complexity of phenomena in each field of knowledge into systems of externally differentiated but internally homogenized categories. The same word -- that is, the same category-name -- can serve to describe a large amount of similar (but still somewhat different instances). With quantification, science goes one step further: there is to be only one sign per field, a basic unit in terms of which all phenomena can be expressed, in order to be comparable. The logic of quantification is the logic of equivalence, of the possibility to 'objectively' compare different phenomena, thanks to an 'objective unit of measurement: unit of distance, of mass, of energy; monetary unit.

What this means, is that the world is made value-free: things are to be compared not on the basis of some 'subjective' value, but on the basis of 'neutral' quantity. In the process from ordinary language to scientific language, a fundamental feature of the former has been lost: its capacity to express personal, subjective experience, to convey qualitative judgement. I
will not dwell on the characteristics of the rational, objective attitude of professionals, amply documented and discussed since at least half a century. Let me just make a few essential points. First, in the realm of science and quantification, social conflict and human motivations has no place, no means of expression. As Christine Boyer argues,

Knowledge, which is neutral, objective, technical, and scientific, beyond the domain of special group and class interests, became the ideal motivator for social change. It was an empirical screen behind which the basic contradictions of uneven economic development within the order of American cities would withdraw.9

An important aspect of quantification in planning concerns the use of estimations of present or future needs. This should come as no surprise, since both the origins of quantification and one of the sources of Western planning relate to the estimation of needs. On the one hand, quantification as a broad social phenomenon stems from the development of the merchant society in the late Middle-Ages: "Quantification is in appearance technical, in reality financial, in truth moral."10 Second, as Francoise Choay indicates, one of the foundations of planning in the West is the architectural treatise, epitomized by the De Re Aedificatoria of Alberti. Its goal: the creation of a code of rules of building; its tool: a taxonomy of elements and functions. The road to classificatory madness of utopian and scientific city-making is open. On the one hand, we find people like Fourier, whose desire to put everything into taxonomies has been described by Roland Barthes, among others.11 Yet with Alberti and Fourier, the classificatory power of language is still

9. M. Christine Boyer, Dreaming the rational city; the myth of American city planning.
subservient to desire, for it allows people to express what they want. On the other hand, science and technology require the classification of 'demand' into homogenous groups of wants, thereby turning desire, which is active and personal, into mere 'need', which is passive and social. In the words of Jean Baudrillard:

Like concrete work that is being slowly abstracted into work-power in order to make it homogenous with regard to the means of production (machines, energy-sources, etc.), and in order to be able to multiply, thereby, the homogenous factors towards an increasing productivity, so is desire being abstracted to render it homogenous to the means of satisfaction (products, images, sign-objects, etc.) and thereby multiply consumability. Same process of rationalization (unlimited fragmentation and abstraction), but where the concept of need plays a major ideological role, the need--enjoyment (besoin--jouissance) masking by means of all its hedonistic prestige the objective reality of the need--production force (besoin--force productive).12

Consumption, satisfaction, and hedonism: these are the values of capitalist society that allow us to understand why this society is also the society of images -- which brings us to the second mode of representation in planning.

Art and pictorial representation.

Authors such as (the same) Christine Boyer and especially Jon Peterson have described in length the contribution of the City Beautiful movement, and of architecture and landscape architecture in general, to the

12. Jean Baudrillard, Pour une économie politique du signe, p.89; my translation.
development of American city planning. I believe that four features are essential in this association between planning and imagery: the absence of critical reflection and the evacuation of conflict from the world of representation, the supposed 'transparence' of space, the possible realism of depiction of material objects, and the connotative power of the image.

The image is considered to be a 'synthetic' representation of objects, but this conception is based on superficial judgement. The image presents all its elements in simultaneity, which suggests unity, but also in additive juxtaposition rather than synthesis: objects in a picture are and remain distinct. The impression of unity follows the abovementioned simultaneity, from features of the formal composition (such as symmetry), from superimposed formal features (such as a unique color), or from the image's expression (connotation) of non-pictorial signifieds:

...aesthetic reforms were to harmonize the opposition between degrading reality and perfected nature. As with park improvements, the concern rested upon the contemplation of exterior settings: the creation of civic vision and public pageantry in the ceremonial composition of buildings; the authority and dignity of classical architecture; the aesthetic unity of color, design, and texture... 

The same author goes on to make, in her own style, the obvious point about the inherent limitations of such an approach to urban order (a 'clean' order):

By neglecting to respond to the embedded motives of capital accumulation, status acquisition, social prestige, and imperialistic power, the synthetically (sic!) prepared (architectural) forms offered only a formalized view. How, then, could the public gaze perceive a

14. See Appendix A.
15. Christine Boyer, op.cit., p.44.
The birth of the architectural tradition which would lead to the Beaux-Arts movement and to the City Beautiful movement was the fact not only of a revival of classical styles, but more importantly, of a new conception of space. With the Renaissance and its pictorial invention -- the geometric perspective -- space becomes abstract, neutral, transparent. Developments in the science of geometry and in the urban economy push towards a quantitative understanding of space, rather than an emotional or symbolic one. Every unit of space is equal (except in price) and space reveals the objects to human understanding: vision becomes the basis of knowledge. In this process, the drawing becomes essential and allows architecture to shift from a craft aimed at answering demand to an art of producing beautiful objects. In general, communication in design- and planning-processes aimed at the creation of an environment whose primary form of coherence is spatial-visual will 'naturally' rely on drawings. In such representations, the unity of a composition can be suggested in a way that is stronger than could be perceived in 'messy reality', by the selection of views on the area that will not be accessible to most (or all) people: the plan, as orthogonal view from a point (infinitely) far above ground, the bird's-eye view from the air or from the roof of a building, etc. These representations make it possible to show the overall structure of the area with its eventual 'regulating axes' and to present simultaneously a sequence of buildings and spaces. Rather

16. ibid., pp50-51.
17. Cf. Roland Barthes' description of the view on Paris that the visitor to the Eiffel Tower has: "Like Monsieur Jourdain confronted with prose, every visitor to the Tower makes structuralism without knowing it." In La Tour Eiffel; English translation in The Eiffel Tower and other mythologies, p.9.
than develop this familiar argument, I would like to emphasize another aspect of pictorial representation, which touches more directly to the ideological context of contemporary planning.

With the help of cognitive scientists like Mary Potter as well as art-historians and critics like John Berger, we have come to understand the specialization of images as representations of material objects. Phenomenologists as well as art-theorists (Merleau-Ponty, Arnheim) have also described how the bodily relationship of the viewer to the image allows for the possibility of a quasi-fusion with the representation. This means that the viewer can virtually ‘touch’ the objects that are being represented, that these can in a way be consummated on the spot. This is indeed what most advertizing relies on in order to make consumer goods attractive: the objects in the image, both the good in question and other goods that are to be seen in association with it, are being shown in ways that reveal as well as possible their material, their (sometime literally) sensual character. This, in order to stimulate desire and, when translated into the planner’s (economist’s, publicit’s) terms, create ‘need’.

I believe that planning must also be considered under the angle of consumption-society in which it occurs. Planners working for governmental authorities play an important role in this sense: they estimate the need for public goods and plan their delivery (even if decisions about quantity and timing are made by political power-holders) and they also plan the context for the provision of private goods. Many pictures presented in recent urban design processes play heavily on the availability of material goods in the project. This is due not only to the fact that most of the urban design projects nowadays indeed rely on commercial ventures (ex. Quincy Market in

18. See Appendix A for this and subsequent arguments.
Boston), but also to the fact that the promise of material enjoyment (jouissance) is a powerful way of winning people's support for a plan. That private money is the main source for urban development is not the issue. The issue is, rather, that planners (and designers) dispose, with the picture, of a powerful means to seduce people about a plan, by playing on hedonism and consumerism. The image is the mirror of Narcissus. People identify themselves and compare themselves to others through their belongings, their objects. If today the image sells, it is much more literally so than ever.

This state of affairs is not just a problem of ego and money. It is a social problem and a planning problem, and in several ways. First, as said, identification tends to occur more on the basis of objects one possesses (and of the salary that enables one to buy them) than on the basis of, say, personal convictions and social behavior. Second, advancing material satisfaction as primary source of well-being allows for the obfuscation of political inequalities (to each period its own opium of the people). Providing greater accessibility to consumer items to the residents of Roxbury, motivated to consume as they are by their frequent exposure to the advertising messages in the media (TV in particular), would not only fail to solve their chronic problems of joblessness, racial discrimination, and lack of education, but would allow to 'reduce the pressure' and to further delay radical intervention as needed. Third (that is, third social problem associated with material life in our society), as Richard Sennett points out, "material abundance in a community provides the power for enforcing a myth of coherent community life."¹⁹ Not only does it enable the community to exclude 'undesirables' on the basis of purchasing power, but it also make

people more self-sufficient, and thereby reduces the need (and the occurrence) of contacts.

That is what the bourgeois order is all about, I believe: to accumulate objects in order to achieve self-sufficiency, to secure an autonomous home, and at the same time to belong to 'society' (a specific one, of course) by means of the display of socially valued objects. In this logic, writes Sennett, people "are inclined much more to envisage how they are the same rather than what they actually do in their relations with each other." 20 Once again, the principle of comparison, of equalization, of juxtaposition, motivated by the desire to avoid ambiguity and conflict, to eschew direct interaction. This principle is one of the dimensions of what Sennett calls "the myth of communal solidarity" in capitalist society -- which brings us to the third essential mode of representation in planning.

Myth and connotation

In chapters two and three, we have been able to witness the presence of 'naturalized values' in the representations presented by planners to their audience. Although this was not part of any vignette, it is a fact that the residents of Roxbury have been offered to participate in a process by which they could realize the American Dream. 21 In Lowell, Congress(wo)men have been asked to lend their support to nothing less than American History and the celebration of the American Work-Ethic. These concepts, Cassirer and

20. ibid., p.49.
Barthes would call them modern myths. Frank and Fritzie Manuel, on the other hand, would go as far as to call some of them "American utopias." Their description of the New Deal, the Fair Deal, the New Frontier, the Great Society, and the Dream lies in continuity with the preceding argument:

Capitalist societies are not wanting in hortatory, bookish treatises that espouse ideal forms to be established within the existing scientifical-technological framework, their obvious intention being the maximization of capacities for the consumption of goods and services, (while having) little or nothing to say about changed social institutions for mankind.22

You may still be wondering what connotation has to do with all of this, why it is the primary mode of representation for mythical messages. The two authors mentioned above -- Cassirer and Barthes -- will help us understand the link between this mode of thought and this mode of symbolization. For Cassirer, the modern myth, unlike the 'primitive' or the 'classical' one, "does not give us a mere 'representation' of the world. Its principal role is to arouse emotions and to prompt man to certain actions."23 Elsewhere, we read that,

In ordinary speech our words have a double function: a descriptive and an emotional function. They express human feelings or they describe objects or relations of objects. ... In the language introduced by the political myths, however, ... the whole emphasis (is) laid on the emotional side.24

This means, says the author, that words acquire new connotations, which
draw the listener or reader's mind away from "individual judgement and
self-responsibility." 25

Yet the author who most clearly linked myth and connotation (or
expression) is Roland Barthes. Barthes argues that what characterizes the
mythical representation (verbal or visual) is not so much content (l'objet du
message) as it is semiotic form and ideological intention. The author goes at
length to explain this form and its mechanism and he proposes, I believe,
something equivalent to Goodman's definition of 'expression'. He suggests
this himself, when he writes that what makes language so prone to be used
for myths, is its "expressivity" 26 and he joins Cassirer in the view that myths
draw language away from its logical, propositional, descriptive pole: "The
myth ... does not have truth for sanction. The myth is a representation that
thrives on a play between denoted and connoted meaning, between "an
object-language and a meta-language," between "a purely signifying
consciousness and a purely imagining consciousness." Its mode of presence is
memorial (mémoire): it arouses memories, especially visual ones. 27 This
emphasis on the visual character of memory is the view I adopted in my
analysis of connoting representations in the case-studies (the metaphor, the
photograph, the title-page, etc.) and which I take as explanation for the
idiosyncratic nature of one's relationship with imagery in general (images,
mental images, figures of speech).

25. ibid., p.258.
27. The larger part of the stimuli on which we rely in every-day life are
visual; hence the importance of visual memories. A confirmation from the
master of remembrance, Marcel Proust: "Certes, ce qui palpite ainsi au fond
de moi, ce doit être l'image, le souvenir visuel, qui, liée à cette saveur, tente
de la suivre jusqu'à moi." Du côté de chez Swann, p.60.
We are thus in state to better understand the meaning of the connotations which these representations carried. It is this mode of representation -- connotation -- that the planners in Roxbury and especially in Lowell used in their attempts to win approval for their proposal, by means of 'shared values'. The case-studies seem to suggest, in other words, that planners address the issue of social values, and the social issues themselves which are behind these values, in an indirect and implicit way, as if these were not open for discussion. For as both Cassirer and Barthes indicate, the mythical representation does not appeal to the exercise of critical judgement, but to the emotional and imaginary dimensions of human thought. The function of the myth, like other forms of legitimation, is to solve contradictions at a symbolic level, to integrate and unify into harmonious wholes. In terms closer to the subject of this study, Judith de Neufville and Stephen Barton argue, that

Myths ... serve important functions in legitimizing and (justifying) many aspects of our political and social structure. ... As Bennett has argued, one major function of public policy is "to help create and stabilize social reality in terms that conform to the dominant myths that produced them." Thus rather than the myths being designed to support policy strategies, the policies may be designed to support the myths.28

Both Cassirer and Barthes also express the belief that modern capitalist society is a generous time, if one may say, in terms of myths. For Cassirer,

The twentieth century developed a *technique* of mythical thought which had no equal in previous history. Henceforth myths (rationalized myths) were invented and manufactured in the same

sense and according to the same methods as machine guns and airplanes.29

And for Barthes, on the other hand, "our society is the privileged field of mythical significations."30 By "our society," Barthes means (still) a bourgeois society, that is, a society in which the ideological nature of political thought and action is being hidden, denied: naturalized. By addressing people through the emotional and imaginary sides of thought, the myth escapes from critical thought and from social conflict and thereby follows the movement "by which the bourgeoisie transforms the reality of the world in image of the world, History in Nature. ... The world enters into language as a dialectical intercourse (rapport) of activities, of human actions: it comes out of the myth as a harmonious picture (tableau) of essential beings. ... The function of the myth is to evacuate reality (le réel)."31 The myth is thus a "depoliticized utterance" (parole dépolitisée). In that sense, the analogy with the image or the picture is well-grounded: the myth, like the image, does not explain but states; the myth, like the image, presents itself as a 'natural' representation of the world, in which things are static and harmonious.32

When planners use the technique of the myth, then, they 'merely participate' in a general tendency of thought in their society: the desire to see society as conflict-free and stable; the wish not to see human labor behind the world, not to acknowledge the artificiality of things and especially not the repressive character of symbolic codes and universes. By so doing, planners are foresaking the possibility that planning processes

31. ibid., p.229-230.
32. See Appendix A.
offer to communities: the possibility for creative identification. By so doing, they are perpetuating an order of which they are victims themselves, an order that limits planning to stabilization and adaptation and bereaves it of its role as social catalyst.

The message to planners is thus a 3500 year-old one: Do not abandon yourselves to that which proposes itself as natural, for nothing that is human is natural: all that is social is necessarily artificial, inherently conflictual, and potentially repressive. It needs to be acknowledged as such and organized in a way that respects human freedom, that is, moral self-responsibility and autonomy in action.

*Representation and community*

The preceding pages have described what various authors have identified as the three main goals of planning: scientific efficiency, visual quality, and consensus-building. All three find their rationale or at least a certain support in capitalist society and all three emphasize the conceptual above the experiential. In this context, it is not the lives of people in the city that matters but the smooth functioning and peacefulness of the 'urban system'. The middle-ground between Nature and Ideal has been evacuated, it seems: the experience of people as actors and creators, with values and desires of their own, has given way to both the scientific understanding of physical and social 'mechanisms' and the mythical view of a unified society.

I have argued, on the basis of the forms of representation on which they rely, that the primary vectors of planning-thought were forms of
understanding aimed at the creation of order, that is, of a conflict-free situation. The vignettes analyzed in the two case-studies provide illustrations for this (hypothetical) fact. Many of them show how the image can serve to suggest harmony (the chart), how connotation can be used in attempts to create approval on the basis of shared myths (the photograph), or how language can function as a means to 'neutralize' complex and dynamic situations (the paragraph).

Language appears to be both a means of radical abstraction, in its scientific development, and a means of liberation, in its use as narrative and as translator of desire. Imagery can stimulate action, but the image is necessarily a limited fiction, which is poorly suited to serve for direct communication. It creates unity by juxtaposition, by addition, both at the level of objects -- what is in space is necessarily distinct (Bergson) -- and at the level of subjects -- contemplation of a common object, but not direct interaction.

If planning is to be an interactive process, people cannot satisfy themselves with relationships based on shared images or even on disputed images. The image is simply not sufficient for dialogue: it can only state what is. Within the realm of imagery, people can disagree about what is, but not about what ought to be and why it ought to be. Yet these two dimensions of thought, the deontic and the justificative, are essential in social interaction, as they convey people's desires, values, and goals, themselves underlying all conflict and cooperation. Images, then, do not 'carry' conflict. Not that conflict cannot be depicted (as in a photograph of a street-fight, for example), not that images as such cannot provoke conflict (what would account for iconoclasm otherwise?), not that images cannot be part of exchanges in conflict (like the caricature of a ruling politician in a
newspaper from the opposition), but they cannot by themselves convey what it is that people disagree about and what it would take to solve the disagreement.

Richard Sennett has described the formation of communities on the basis of shared 'images. His description of such a community brings together the major ingredient of this last chapter:

The feeling of a common identity (as witnessed in suburbia) is a counterfeit of experience. People talk about their understanding of each other and of the common ties that bind them, but the images are not true to their actual relations. But the lie they have formed as their common image is a usable falsehood -- a myth -- for the group. Its use is that it makes a coherent image of the community as a whole: people draw a picture of who they are that binds all together as one being, with a definite set of desires, dislikes, and goals. The image of the community is purified of all that may convey a feeling of difference, let alone conflict, in who "we" are. In this way the myth of community solidarity is a purification ritual.

Contrary to this 'false' community, a 'true' community would not live on imaginary constructs, but consist of interactions among subjects. It would not owe its existence to objects, but lie in action, indeed be action. This idea sheds some important light on planning-processes as processes of social identification. For the planning-process is, if executed (in part) by the community itself, an event in the life of the community which enables it not only to generate elements of a social and spatial structure, but to constitute itself in action.

The question here is, whether or not what is being communicated in a planning process and the ways in which it is being represented allow for a

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33. The word 'image' has a metaphorical meaning here. For a justification of this use of the word, see Appendix A.)
34. Richard Sennett, The uses of disorder, p.36; italics mine.
35. See also Appendix A.
'real' debate to take place, for interaction where conflict is present and (hopefully) productive. In other words: are people brought to \textit{contemplate} together what an external actor has pre-determined, or are they enabled to \textit{create} together, eventually in collaboration with that actor? Contemplation versus creative interaction: are we looking at ourselves as mirrored by our objects, our myths or our masters, complacent and uncritical, or are we looking at each other, motivated and yet open?
CONCLUDING REMARKS

"Planners are verbal and architects are graphic," so goes the expression that motivated this study. The distinction, of course, it too radical. First, because between both professions is a third one, that of urban designer, whose fuzzy identity means precisely that the boundaries between architecture and planning are less than clear. Second, because architects, urban designers, and planners obviously use both verbal and visual symbolization. For some -- the architectural and urban designers -- images are of the essence in their work, as drawings are their prime form of communication and the production of material objects their principal goal. For others -- the planners -- language is at the core of activities, activities aimed first and foremost at the regulation of decision-making and provision of services. But all professionals of the built environment also share in the use of language for the estimation of needs and the analysis of context, and all share in the use of imagery in their conception of present and future situation.

Language allows for the expression of personal desire and value, as well as for their objectification into needs and laws. It enables residents to claim and argue and demand; and it supports analysis and categorization by planners. It serves to work out agreements and build consensus; and it carries slogans and repressive regulations. Imagery is essential for the
creation of an attractive and functional built environment and the acceptance of its underlying plans and designs. But one can wonder how important the *vision* of such an environment is for successful city-building, how important visual quality is to good city-making. Or better: to what extent does an urban community draw its identity from shared values and codes, on the one hand, and from a material construct that acts as a mirror to them, on the other hand? Let us not fool ourselves, utopias are not mere visual designs; they are the result of codification as well as imagination, of an obsessive will to classify and desire to order.¹

I spoke of good city-making. "Good"? -- What makes a "good" city? To each his or her own answer, and to each answer a different emphasis on efficiency, aesthetics, or social-political values. If planners are verbal and architects graphic, then, it is primarily because planning is unseparable from politics -- even if in a superficial or reactionary way -- and because architecture has been turned into an art of material production. When planners construe of the city as beautiful rather than democratic, they have to switch from the type-writer to the drawing-board; when architects search for 'socially responsible' designs, they must 'talk social' before designing.

If the *question* is, "What makes a good city?", then the *issue* is the city's problems: what are they? what are their different natures? The issue is not one of exclusionary choice between functional or aesthetic or social-political problems, but it is to get our priorities straight. Current priorities, however, have been set: some things are more discussable and open for intervention and some other things are neither the planner's nor the architect's business. Among the latter, precisely business and what business

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¹ See the already mentioned works of Françoise Choay: *La règle et le modèle* and of Roland Barthes: "Fourier", in *Sade, Fourier, Loyola*. 
hates: demand that cannot be satisfied by production, such as demand for equity, social justice, freedom, and other 'big words'. It is already enough that the very existence and work of professional planners and architects bereaves people and communities of part of the action by which they can affirm and develop their own identity -- they need not add to the trouble by further eschewing this desire for self-determination or impose their own matrix on it. Lisa Peattie's words are worth repeating here: planners should "stay out of the business of telling people how to run their lives, ... refrain from drawing up a blueprint of some ideal state, ... and work, rather, as learners, mediators, and clarifiers." It is 'normal' for a professional who is making a plan for a community to try and motivate people to accept and implement it by means of a strong vision. It is less 'normal' that the formation of this vision should lie with the planner only.

Behind these weighty words, the memories from the case-studies and the vignettes: coherence is a matter of form, not of content; difference is to be dealt with by means of separation, not interaction; conflict is to be neutralized, not exploited. An exaggerated picture, I know, and drawn from very limited 'evidence'. So let me conclude with something more positive, with a suggestion for future research and with a few recommendations for practice.

The object of this study was representation in planning. Of the two poles of the continuum which this concept of representation spans, I have emphasized the semiotic, the descriptive one, and have discussed the political one insofar as it seemed to coincide, to overlap with the former. This approach needs to be widened: the interaction of both semiotic and political forms needs to be undertaken systematically. Some questions for further
research: What knowledge do professional planners assume the other participants to the planning process should have? And the other way around, what knowledge ought planners to have in participatory processes, according to local residents? What information could be exchanged? ought to be exchanged? and how can this exchange be facilitated? To what extent are professional forms of representation conciliable with lay forms, and how? Is there a more or less regular empirical relationship between the formal organization of the planning process and the nature of its outcome, in terms of consensus? in terms of community development?

Another problem deserving of further study is that of rule-based versus model-based planning, or of planning by means of regulations as opposed to plans, the ones being verbal the other primarily graphic. This opposition, described in length by Françoise Choay in historical terms, is a topic of controversy in contemporary planning-theory and requires empirical study as to the respective advantages and disadvantages of each approach in planning-practice. Of course, studies of the use of forms of representation by planners and urban designers can and should be undertaken systematically, in cross-case, cross-cultural, and cross-historical ways. This would shed light on the varieties as well as the constants of planning thought.

A few suggestions for practice, to finish, in terms of types and modes of representation, and even if a bit naive. First, use the capacity of the metaphor to transcend established codes, to create new view and attitudes. Second, accept multiple definitions of concepts. Third, rediscover the pleasure and power of narrative. It is the form of representation that can re-create 'reality' in the way that is the most true to its complexity and dynamism, and to the interests and motivations of people. Fourth, for spatial
representations, use conceptual diagrams as picturing tools. While everybody can 'read' pictures, most are at a disadvantage in relation to professionals when it comes to making them. Techniques of diagramming can be easily thought and do not require great skills. Owing their structure directly to language, they are discussable, while also depictive of spatial phenomena, and they do not carry with them the obsession of resemblance. Fifth -- and this is not a recommendation, but a request to the Reader -- please accept my apologies, dear Reader, for monologuing like this for so many pages. I have imposed on you my own classifications, while denouncing the practice of classifying in planning; I have in control over the discussion over the whole length of this document, while criticizing some planners for not accepting direct dialogue. One more piece of evidence for the fact that nothing is simple when it comes to representation.
Appendix A: WORD AND IMAGE.

Coherence and unity.

"I have a clear picture of the situation." "The image of the community."

Why call 'image' a representation characterized by its coherence but of which we do not assume that it is pictorial in nature? Why, in other words, use that word as a metaphor for coherent representations in general? The answer lies in two features of visual symbolization. One is the fact that a picture shows all it depicts at once, that its various elements -- to the extent that we can speak of (separate) elements in this case -- are being offered to our view simultaneously. The other feature relates to the materiality of the image and to its spatiality.

As Norman Bryson convincingly states, the perception of a painting is not a time-less experience.\(^1\) Although Bryson's argument follows from the recognition of two activities-in-time, the labor of production by the artist and the effort of re-production by the spectator, I believe that the idea is valid for other images as well, even if they are not the products of bodily

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\(^1\) Norman Bryson, *Vision and painting*. Anticipating on later propositions and offering a synopsis of Bryson's central argument: "...painting is never totally outside of time, because it is always in the carnal." Maurice Merleau-Ponty, op.cit., p.81.
work like painting is. It is a well-accepted fact, indeed, that the perception of an image occurs by means of point-wise visual scanning of the pictorial surface, an activity which takes time. As the scanning process proceeds, bits of information are being picked up and added to each other in the brain so as to re-create the image in a mental form. Of particular importance are the facts that both the choice of points being scanned and their sequence in the perception process are not fixed and that what happens in time is the perception, not the presentation: the image is there as a whole from the start; it does not unfold in time, perception does.

By presenting all their material at once, visual representations show things in relation to each other and the process of perception is then one of re-creation of these relationships. That this leads to a perception of coherence is, in turn, attributable to three other aspects of visual representation, centering on the spatial character of images. First, images are spatial representations and answer to the laws governing the space of our 'real' visual experience: they contain fictitious space perceived by 'real' vision. Second, since images are objects of visual perception, they appear within a limited (visual) field. Third, man-made images, material or mental, are limited themselves: man cannot visualize infinity. Visual perception therefore concerns limited objects. Even though these may be constituted by an infinity of perceptible elements, they are, as sensorial phenomena, bounded in space. For these reasons, an image can be grasped -- at least that is the impression -- as a whole. Within this whole, the mere simultaneity of

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2. Skillful artists are able to manipulate both the choice and the sequence, however, but only to a certain extent and essentially in the initial stage of viewing. For other arguments showing the relativity of my argument, see Julian Hochberg, "The representation of things and people," in E.H. Gombrich e.a., *Art, perception, and reality*. 
presence of different things in space, their mere coexistence, is a form of coherence: the fact that things can 'occur' together, that they do not cancel each other out, that they do not exclude each other as different bodies in space do, means that they form some kind of unity. Both impressions, of comprehensiveness and of coexistence, account, I believe, for the feeling of coherence which may accompany visual perception.3

While the image can offer a simultaneous and united representation of objects, language has some handicaps in that respect. First, in order to be understood, it requires to be perceived in time and in a more or less strict order. That this order is only relatively necessary derives from the fact that the same capacity of the mind, which accounts for the mental re-creation of the image through temporal perception, operates in language perception as well. This is true in speech, where words indeed come one by one and vanish one by one, in a linear sequence, and must be grouped in order to form coherent propositions. And it also true in the case of printed text, but in a more complex way. Printed text is also a visual representation and thus also allows for scanning according to one's desires. But while its mere sight possesses flexibility, its comprehension cannot tolerate this freedom: understanding a verbal message does require that one follows a sequence of words, even if reading can accommodate back-and-forth movements of the eyes: the global movement must be linear.

A second handicap of verbal symbolization in the creation of a feeling of coherence -- through comprehensiveness and simultaneity -- lies in the ways in which it produces meaning. While images may be constituted

3. The limitations of the distinction between spatiality and temporality as basis for the distinction between text and images are being discussed by W.J.T. Mitchell, in *Iconology*, esp.p.103.
sensorially by unarticulated material, thus by an infinity of elements, their meaning does build on articulate elements, on discrete signs, on 'units of cognition and recognition'. These are fixed and autonomous signs, each recognized as such and carrying its own denotations and connotations. Like language, then, pictorial representation is based on the juxtaposition of 'building blocks'. Yet it is the nature of this juxtaposition that differentiates the two modes of symbolization. I will argue, indeed, that this juxtaposition is essentially an addition in the case of images, and much more of a synthesis in the case of words. On the one hand, the composition shows great respect for the autonomy of the parts; on the other hand, it violates it. In other words, in one case, elements remain present as such throughout the perception; in the other case, elements are being fused and lose their individual presence.

There are two arguments in support of this view, one concerning images, the other concerning language. According to the first argument, pictorial denotation relies heavily, at least in our culture, on resemblance— that is, on the fact that a pictorial symbol visually and therefore physically looks like the object it denotes:

4. Various authors have emphasized this point, some of which already mentioned in this work. See for example Barthes, Mitchell, and Bryson, as well as Goodman, whose ideas about the matter are being discussed in Appendix C.

5. Not only on resemblance, of course: "iconic signs reproduce certain conditions of the perception of the object but after having selected them according to codes of recognition and having noted them according to graphic conventions." Umberto Eco, op.cit., p.178. See also appendix A.
We observe a strong and conspicuous tendency to reify visual signs, to connect them with objects, to ascribe mimesis to such signs, and to view them as elements of an "imitative art".\(^6\)

It is probably because of the ease which such an approach to depiction provides -- by allowing for denotation (pictorial in this case) with very little codification -- that images have specialized into the main role we know them for: the representations of concrete objects. These may be depicted in order to express abstract concepts (abstract objects, in the general sense of the word), but they remain nonetheless the material of the representation. One of the stages of this process of specialization has been described by John Berger, in a discussion that brings together the two features of materiality and resemblance:

...the period of the traditional oil painting may be roughly set as between 1500 and 1900. The tradition, however, still forms many of our cultural assumptions. It defines what we mean by pictorial likeness. (...) What distinguishes oil painting from any other form of painting is its special ability to render the tangibility, the texture, the lustre, the solidity of what it depicts. It defines as real what you can put your hands on. (...) This echoes Rudolf Arnheim's point, that "In looking at an object we reach out for it. With an invisible finger we move through the space around us, go out to the distant places where the things are found, touch them, catch them, scan their surfaces, trace their borders, explore their texture."\(^7\)

And Berger adds, now linking the technical dimension and the ideological dimension of painting:


\(^7\) Rudolf Arnheim, Visual thinking, p.19.
Oil painting celebrated a new kind of wealth -- which was dynamic and which found its only sanction in the supreme buying power of money. Thus painting itself had to demonstrate the desirability of what money could buy. And the visual desirability of what can be bought lies in its tangibility, in how it will reward the touch, the hand, of the owner. (..)

...many oil paintings were themselves simple demonstrations of what gold or money could buy. Merchandizes became the actual subject-matter of works of art. 8

According to this account of the origins of the Western tradition of depiction, the primary use of the image lies, for us, in the representation of material objects. Both their substantiality and their value as autonomous objects will explain the fact that the picture in which they are being represented will present them as separated units and in a way that maintains their independance throughout the process of perception and (e)valuation.

Let us try and qualify this idea. As the same John Berger writes, "visually everything is interdependent," 9 everythings belongs to the same bounded world of sight, while on the other hand, we are culturally 'programmed' to look "at every object or body as though it were complete in itself, its completeness making it separate." 10 Another author, Donald Schöns, sheds light on this characteristic of vision, at least according to common understanding. The use of the expression "to shed light" is not fortuitous, for his argument is precisely that metaphors of vision underlie many formal theories of truth and knowledge. Schöns argues, that in

vision-based theories of understanding, ideas are objects of the mind.

... There is one particularly striking family of assumptions (underlying this displaced theory of vision), all having to do with the

10. ibid., p.178.
independence and objectness of ideas. It is related to our disposition ... to treat ideas as things. (...
Visual objects are treated as self-contained and, in all their concreteness, independent of the eye. When ideas are treated as visual objects, they too become self-contained and pre-existent. (...
The vision-based theory of understanding states that direct inspection, or intuition, results in clear ideas, each of which is conceived individually and discretely (where clarity is sometimes identified with this discreteness). Understanding is an all-or-none affair. Ideas are formed and concrete, like things, prior to understanding; they are independent of person and of the act of understanding itself.11

The image in our society, then, is a construct that represents 'reality' as a coherent and united whole, but in which elements remain separate. Its meaning may be more than the sum of the meaning of its parts, yet these remain the primary, more or less autonomous and self-sufficient, sources of meaning. Chains of signifieds are tightly rooted in each element and guided by it.

The other argument in support of the claim, that pictorial representation functions on the basis of linear accumulation and that verbal representation operates by means of synthesis, pertains to language. In both modes of symbolization, meaning of the whole depends on the meaning of parts and on the forms of their combinations. Yet in language, the relationship of part to whole and the status, the importance of these forms of combinations are different. In both an image and a sentence relationships of elements affect each element's perception and interpretation, each element's meaning. Yet in the sentence, this interaction does not belong to the realm of possibility, but to the realm of necessity: "it is (as Frege asserted) only in

the context of a sentence that a word has reference: nothing is referred to until something is said."12 In the words of Merleau-Ponty:

(In language,) sense appears ... only at the intersection and like in the interval of words. If the (linguistic) sign means anything in that it appears set against other signs, its meaning is completely engaged in language, the utterance (parole) plays at all times on a background of utterance... . We do not have, in order to understand (the utterance), to consult some interior lexicon that would give us, with regard to words or to forms, pure thoughts that these might recover: it suffices that we lend ourselves to its life, to its movement of differentiation and articulation, to its eloquent gesticulation. ... Like the charade, (language) can be understood only through the interaction of signs, of which each taken separately is equivocal or trite, and of which only the junction (réunion) makes sense.13

And in the words of Jacques Lacan: "it is in the chain of the signifier that sense insists, but each of the elements of the chain only consists in the signification of which it is capable at the very moment."14

This, as we have seen, is not true of images, where separate signs on the one hand do influence each other and do compose a unified whole, but where each of them, on the other hand, retains its independance and can be approached for its own sake, on its own terms, within its own little world. (Below this level, discrete elements -- such as pixels on a screen or the points in a painting by Seurat -- may be compared to the letters forming verbal utterances. Yet these do not constitute, as Goodman argues, the essence of pictorial representation: iconic signs -- elements of meaning -- are in themselves -- as opposed to: in relation to eachother -- essentially

dense, that is, unarticulated: the visual field is a continuum, because the
material world which constitutes it is a continuum itself.) The point, here, is
that the ‘thing’ represented in an image is and will always be itself, an
autonomous object: not only autonomous as object because resulting from an
act of objectivation, but also autonomous as representation because
belonging to space: “it is because of their presence in space that (units)
remain distinct.”

The rules that guide the composition of a verbal representation (a
proposition or a set of propositions) are also radically different form the ones
that guide the composition of an image. While rules of pictorial composition,
controlling the spatial, material form of the representation, can indeed affect
its interpretation, rules of verbal composition do not just affect but directly
underly meaning. They too belong to the realm of necessity, by forming
conditions for the very acceptability of a proposition:

"John loves Mary" is an acceptable sentence because it can be used to
say something, and it has that use because it can be true or false. In
this it may be contrasted with such 'unacceptable' sentences as 'John if
Mary'. Acceptablitity in language is connected to the possibility of
truth, and there can be no explanation of linguistic meaning which
does not show its relation to truth. (...) What distinguishes language is not just the relation to truth, but the
fact that its syntax derives from that relation. It is because individual
words in a sentence refer as they do that the sentence is true or false,
(but) the rules of grammar enable us to derive, from the reference of
the words, the condition for the truth of the sentence.

Other authors have insisted on the difference between language and
imagery in their relation to truth. To take but two examples, Jerry Fodor

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16. Roger Scruton, op.cit., p164; some italics mine: "is" and "condition" -- others are the author’s.
argues, in rather laconic manner, that "Pictures aren't the kind of things that can have truth-values," which Jacques Lacan complements by saying: "it is with the appearance of language that the dimension of truth emerges." What is important to us here, is not so much the possibility or impossibility of truth in representation -- although that matters too in general, to say the least -- but the facts that images are acceptable whatever their composition, while verbal utterances are not, and that meaning in language comes forth as the utterance unfolds. This means, in terms of communication, that while the viewer enjoys a high degree of freedom in his or her perception of the image, the reader and even more so the listener, must engage him- or herself in the time of the utterance, must follow the writer or speaker in his process of self-expression and virtually participate in it. That this is not so in visual perception is being made clear by the possibility, which Bryson forcefully criticizes, to perceive a painting as a perception rather than as a production. More importantly for now, it appears from the preceding thoughts, that, as claimed, the juxtaposition of signs in the image is essentially an addition and that, on the other hand, the juxtaposition of signs in a sentence is essentially a synthesis, a "qualitative multiplicity," in which elements are the subjected parts of a larger whole, beings which had to sacrifice autonomy in order to realize their full meaning in their context.

Some phenomena encountered during the case-studies can now be understood in a more general and at the same time more thorough way. We

17. Jerry Fodor, "Imagistic Representation", in Imagery, Ned Block, ed.; p.68.
20. A term borrowed from Bergson, even if its application in this context has only limited validity. See Essais sur les données immédiates de la conscience, especially pp.169-172.
have seen two instances indeed, where continuous verbal representation, 'flowing text' one could say, has been reduced to an addition of separate entities. In the case of Roxbury's "economic context," the paragraph describing the situation consisted of autonomous propositions. Now it is true that within each of these, the characteristics of language that we have discovered above are present. But they are absent between them. In this way, the meanings of the parts are left to what they originally are -- 'neutral facts' -- and that meaning which could arise from the concatenation of parts is being left out -- the political dimension of economic developments. By adding rather than synthesising 'facts', the BRA was able to obfuscate part of the 'reality' behind these 'facts'.

In the title-page of the "Lowell Urban Park Development Program," four goals of the plan were listed separately, thereby allowing for a coexistence not warranted on semantic grounds. Here too, it was possible to transmit a specific message, which did not honor, which represses one should say, the complexity of the issue, the interconnections and mutual influences among the various parts of the situation. The list, as generic form of text, functions on a logic of addition -- this plus this plus this plus this... -- and so do all classifications at a given level: classes fit next to each other and their addition constitutes the whole field at that level.

The chart about "The Urban Environment" displays this problem in a different light. Here, the verbal material is present only in the form of nouns, sometime composed, sometime with an adjective, but free of any verbal elements relating one to another. All representation of relationships lies with the depictive part of the chart: the lines. What the representation as a whole has to say does not lie as much (or at all) in the meanings of the separate terms, as in the composition they form. If the message of the chart is, as the
text below it asserts, that all the elements of the urban environment form a balanced and coherent whole, then the words which symbolize these elements have little value in terms of that message. The circles around some of them emphasize this point: what is important is not what the word means, what it refers to, but that it constitutes an entity within a coherent whole. We see here that the origin of the perception of coherence and unity lies in no way in the verbal part of the chart, but lies totally in its pictorial part: in its spatial composition, in its appearance as a system of distinct parts and linear relationships, as a composition free of conflict because elements coexist, again, next to each other, as autonomous entities whose independence is not being threatened. One may in fact argue that any systemic representation is qualitatively reductive, even if quantitatively comprehensive: the system-diagram not only fixates the nature of the elements and the nature of their relationships, it also represent them as working together, in functional harmony. Yet that a system is functionally integrated does not mean that it is conflict-free, and that is exactly what is not being acknowledged in this type of representation.

But the chart highlights a very important feature of language to which we have not yet given attention: the fact that words are in a first instance fragments of reality that have been distinguished and separated from each other, thereby cutting into pieces what was originally united and continuous. This feature accounts for the fact that the image is traditionally being called 'syntetical', despite the fact that it only adds discrete elements in a way that keeps them discrete, and that language is commonly seen as the source of all separation, despite its capacity to synthesize. The origin of these common conceptions of imagery and language lies in the essential features of both modes of symbolization, which we have mentioned above:
the simultaneity of presence of all the elements of an image and the emphasis on resemblance with 'reality', on the one hand, and the sequential arrangement of linguistic units and their overall arbitrary character, on the other. The image therefore appears as a sign that allows for a perception and representation of things before the differentiating intervention of language: Nature; while the latter indeed effects separation and artificiality: Culture (the Law, the Father).

Their is, in the scientific and psychoanalytical community, disagreement about the place and function of language in mental processes in general. What all seem to agree about, however, is that in order to make the infinitely complex reality manageable, that is, comprehensible and communicable, one needs to reduce it to a finite amount of stable representations. Some, like Jacques Lacan, will argue that it is language itself that underlies this process: "It is the world of words that creates the world of things". Some, like Mary Potter, will argue on the basis of their experiments, that there is a conceptual system of representation that is common to both words and images: "Concepts, not appearances or names, are the enduring mental representations of reality".

Both views are not that far apart, however, at least not in practical terms. Both recognize that naming an object is identifying it as a separate entity. In general terms: language categorizes, in that its vocabulary constitutes a categorization of phenomena (a word refers not to an instance but to a category of phenomena), an arrangement of reality into externally

Many authors have emphasized the social importance of categorizations and classifications, which are one source for the ideological meaning of symbolic codes (see chapter four), especially linguistic ones. One essential feature of the process of classification which deserves emphasis here, and which corresponds to the procedure of separation and homogenization it follows, is the fact that it functions on the basis of boundaries: categories and classes are bounded entities, separated from each other by lines of demarcation. The logic of classification is an 'either-or' logic, things belonging to a class or to another at a given level of differentiation, but not to both (a whale cannot be at the same time a fish and a mammal, although it can be a sea-animal and a mammal in different classification-schemes). Here lies the repressive nature of the linguistic code: it imposes an order on reality in which ambiguity is forbidden and multiplicity repressed: everything in its right place.

Having accomplished its fragmentation of 'reality' in order to make it more manageable and more useful, the human mind will then seek for ways in which to restore the unity it needs in order to feel in control. Norms and values, principles and theories are therefore called into existence, with the explicit goal of integrating the parts into a whole -- a process called 'legitimation' in its social dimension. The need to reduce 'reality' into separate segments and the subsequent desire to reunite them into a coherent whole are precisely the motivations which account for the structure

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23. Rather than offer quotes to support this commonly accepted and understood argument, I refer to the Bibliography.
24. For a description of the difference between both concepts, see David Reason, "Classification, Time, and the Organization of Production", in R.F. Ellen and D. Reason, Classifications in their social context, p.222.
of the chart: the "Urban Environment" was chopped up into pieces, on the basis of names, and then made one again, by means of lines: fragmentation and unification.

These considerations bring us back to earlier arguments, which enabled us to accept as valid the metaphor of 'the image' in reference to any representation that is coherent and unified. Later arguments force us, on the other hand, to consider the loss that the perceiver must accept, the reduction that the symbolization must undergo, the price that is to be paid for coherence and unity. For the image is a representation which does not serve the resolution of conflicts of value and does not treat difference as an evolving phenomenon and as a matter of interaction, but of separation. This is also true for language, but only at the level of words themselves. These represent segments of reality demarcated from each other in (purposely) unambiguous ways. Pictorial elements, some would argue, owe their existence to their having been named; yet it is, I believe, more exact to say that many pictorial elements have been represented because they have an identity of their own (Gestalts), which makes them namable.

Whereas imagery has no means to transcend separation in a synthetic way, language has. Abstract concepts, directly accessible to words (M.C. Potter) or even being words (Lacan), allow for the condensation of various entities (instances or categories themselves) into larger wholes; and metaphors are voluntary "category-mistakes" which defy common categorizations. As we saw, discursive language itself has this capacity to synthesize. The words in a sentence can create meaning because they are different and specific, but their being in a sentence means at the same time that they lend themselves to a whole that makes them somehow disappear, that blurs their (semantic) boundaries and denies their autonomy.
The image, then, suggests the idea of conflict-free coexistence in mutual separation and it is the same idea that we found in Sennet's description of the middle-class suburban community. Is the link between semiotic and social forms fortuitous, is the application of labels from one field to the other merely metaphorical? I believe it is not. The preceding pages have shown why: insofar as the reality of 'the community' lies in man-made objects and not in action itself, this reality is in and of itself a representation, a perception of these objects and an object itself, as opposed to an unobjectified, direct involvement in interaction. The representation of a community as an 'image', in the sense of a coherent representation of independent parts, corresponds to one's relationship to this community: it is a view from outside, the perspective of one who is not engaged in communal action. And when this 'image' is all there actually is to the community, then the latter consists of an addition of independent individuals who interact with each other through objects, one of which is this image; individuals who look together in the same direction but do not really look at each other; individuals, therefore, who are not engaged in dialogue, in discussion and debate, but in the common contemplation (and in the exchange) of objects.

Another point that needs to be mentioned as we are concluding this section, is that it is dangerous to speak of the 'nature' of forms of representation: what we see as the 'nature' of the image -- its reference by means of resemblance, for instance, a feature which is determinant for other aspects of the image's 'functioning' -- is often only a culturally determined use of pictorial symbolization. The only 'natural' features of the image are those we use in order to objectively define it. Here, as Nelson Goodman demonstrates, the difference between paragraphs and pictures lies in the
structure of both symbolic systems, in the fact that verbal signs are articulated and pictorial one are dense.\textsuperscript{26}

What, then, can we say about the specific characteristics and limitations of words and images, of language and imagery -- in our culture -- in terms of the relationships between objects in a representation? It seems that the image has been specialized, by basing much of its reference on resemblance, into a tool for the denotation of material objects in space, while language carries the specific task of denoting abstract concepts:

Thus the verbal system is specialized for representing abstract knowledge whereas the image system represents perceptual properties of objects such as their shapes, colors, and sizes. Since speech is temporally ordered, the verbal system is specialized for the representation of serial order, whereas the image system is specialized for the representation of simultaneous spatial position.\textsuperscript{27}

The fact that we tend to see some features of imagistic representation as 'natural', while they are cultural products forces us to consider that some objects are not only being presented as 'natural' while they are artificial, but are also being represented, symbolized in a way that claims to be natural. We are back to square one, where we encountered, through Mitchell's words, the claim to 'naturality' of the image. This issue is of primary importance, I believe, at the second level of representation, the level at which subject and object meet, the space in which one encounters the world, but also at the third level of representation, where people meet each other.

\textsuperscript{26} Cf. Languages of art; for a definition of density, see especially pp.127-157.
\textsuperscript{27} M.C. Potter, op.cit., p44.
It is at the second and third levels of representation that iconophobia and iconoclasm find their feeding ground. They are reactions, I will argue, to the possibility of fusion with the image and of reification of the image, on the one hand, and to the necessity of dialogue and action as binding elements, as essence of the community. This section will focus on the first of these two issues.

We have already been introduced to the problem of reification by Donald Schon, with his discussion of visual metaphors of understanding, and by Roman Jakobson, with his description of our "strong and conspicuous tendency to reify visual signs." I propose to develop these thoughts, as well as inquire about the other issues raised above, on the basis of a 'classic' of iconoclasm: the second commandment from the Bible. By trying to understand what might have motivated this edict against the production of (graven) images and the context in which this edict appears, we will come to grips, I believe, with the fundamental features of words and images both in terms of subject-object relationships and in terms of inter-subjective relationships.

The second biblical commandment is, according to the tradition, a prohibition against idolatry and, according French author Jean-Joseph Goux, a prohibition against …incest:

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28. From the title of a book edited by Joseph Gutman. The full title is: *No graven images; studies in art and the Hebrew Bible*. I have unfortunately not been able to consult this work.
29. Let me make clear that what follows is a personal interpretation of the biblical text and that I do not claim any erudition in biblical matters. I will merely use this 'case' as an instrument for my discussion, as a guide for my thoughts.
To hew images of the gods is to make material images, an image of the mother; it is to adore sensually the maternal figure. To withdraw, on the contrary, from the seduction of the senses, is to turn away from the desire for the mother, to elevate oneself towards the sublime of the father and to respect his law. 30

Three ingredients: the senses, the imagination, and the law -- and behind them, three features of one's life: the body, the world inside one's mind, and society. It is around these three dimension that the discussion of representation can unfold, both in terms of one's relationship to the world and in terms of one's relationship to fellow (wo)men. 31

Why does Goux, then, assimilate the prohibition against idolatry to the prohibition against incest? Why is it, according to Victor and Edith Turner, that icons of the Virgin Mary "excited both the greatest devotion from iconophiles and the greatest hostility from iconophobes"? 32 What link is there, in other words, between idols and mothers? This link does not just lie in the fact that most primitive idols were mother-figures or that some idolatrous rituals were the scenes of incestuous intercourse. It lies, primarily, in the word mater. Of course, the fact that this word forms the root of both 'maternal' and 'material' is no proof for some kind of 'natural' relationship between 'mother' and 'matter' (although there are other reasons to establish that relationship). But it does indicate that in a culture that knows and uses these two terms, which is the case of our own culture, the two concepts they stand for are being perceived and understood as linked. As Goux

31. I will, from now on, use the masculine only. Not only does that simplify my writing, but it is much more true to the biases of which the protagonists in this story suffered -- metaphorically speaking, but also literally speaking. 32. Quoted by Margaret R. Miles, in Images as Insight; visual understanding in western christianity and secular culture, p.12
demonstrates, Western philosophy posits, in many stages of its development, the principle according to which the material is of feminine essence and the formal of masculine essence: mater and pater -- matter and pattern -- substance and form.

The Bible-story of 'm'sṭaḥ torah' (the gift of the Law) on Mount Sinai can be read in exactly these terms. It relates, on the one hand, the prohibition against visual, material representation and on the other hand, the acceptance of a verbally expressed legal pattern of relationships between man and his neighbor and between man and his divinity. What took place around the mountain was indeed the formation of a social and religious entity on the basis of the Law. But what makes the specific meaning and strength of this event, is the convergence and synthesis of these two births: the simultaneous birth of a social structure and of a religious structure. What links them to each other, through this Law, is the necessity to mediate differences by means of boundaries -- boundaries between man and the world and between man and God, boundaries that respect and effect ontological differences -- boundaries, in other words, between man and matter and man and the Spirit. Man occupies a realm between pure matter and pure spirit, being himself material and spiritual, and he must acknowledge and exploit this position. A retreat into matter, that is, an abandonment to the senses, must therefore be avoided at all costs and so must the idea, the pretention, of being on a par with God. Idolatry is precisely that attitude in which man breaks both boundaries and mixes up matter and spirit in the veneration of physically present, materially represented divinities. Here, then, are the two first problems to which the second commandment reacts so forcefully: fusion (with matter) and reification (of the spiritual).
Idolatry is fusion and fusion is idolatry. Idolatry lies in the endowment of a material, artificial object with powers that are proper to a spiritual being, thereby removing the boundaries between the material and the spiritual. This endowment, this projection opens the door to a fusion of two entities that have been made equipotential, but possibly to more: to a confusion of roles — between subject and object: the man-made representation, the object, becomes an all-powerful subject and his creator (man) becomes the idol's object. On the other hand, reification is idolatry and idolatry is reification. While idolatry as seen from the point of view of fusion consists in the elevation of an object into a subject, of matter into spirit, idolatry as seen from the point of view of reification operates the other way around. It consists of a reduction of spirit into matter, of the materialization, the substantialization of the spiritual.

To make a graven representation of God is thus a double sin: the reduction of pure Spirit into an object and the projection of spirituality into matter. In both cases, most importantly, a thing is being overvalued, and the activity of the subject, human or divine, is being downplayed, erased: God is being constrained by a material embodiment and man is being reduced to a passive role, a dependency on the idol. In both cases, an object is being interposed between men or between man and God. This, then, is the crux of the matter in idolatry (and fetishism): the idol (or fetish) is being endowed with an objective autonomy of its own, to the detriment of free-will and direct interpersonal interaction. Money: not just a means, but a goal; not just a concept, but a logic; not just a shared object, but the medium of all 'sharing'; not at all an opportunity for contact, but an obstacle to it.

Yet there is a third problem against which the second commandment constitutes a reaction. While this commandment may not be, really, a
prohibition against incest, it is certainly, on the other hand, a condemnation of the loss of control on the senses and on the imagination, a prohibition against the loss to the sense and the imagination. The 'right' relationship to the world is one that lifts up man from his materiality and brings him closer to pure spirituality. That is, I believe, the underlying concept behind the Law: to sanctify, to spiritualize the world. In this sense, what gives meaning, what constitutes identity, and what underlies all representation, is not the materiality of things, but their spirituality, not concrete objects, but abstract concepts. Pure spirit (God) must be grasped outside of matter, of sensorial perception: in History and in the Law, in action and in the values and principles that guide it.

The Law, built on these values and principles, is a means of creating order in society. First, at a given moment in history, it provides the basis on which a united people -- the Hebrew people -- can be formed out of an amorphous and disparate group of tribes, nomadic tribes in fact, which are known for their traditional avoidance and resistance to central authority. Over time, the law is the code that regulates interaction within the people (and between the people and God). The medium of the Law is language, which is the only symbol-system with which one can denote "do" or "don't". The Law is the eternal framework of social and religious life. As life goes on and circumstances change, it must be developed in order to apply to situations that had not been mentioned explicitly. This work of development is to be one of deduction and inference, not one of imagination. Likewise, one's relationship to God is to happen through intellectual and spiritual development, not through imagination either. Why? Because the imagination is a mental faculty over which one has too little control, at least
if one's thoughts are too remain within a coherent social framework, and which turns the individual inwards, away from social life.

This, then is the third 'problem' behind the second commandment: the volatility and introversion of imagination. The imagination is indeed the realm of personal, idiosyncratic wandering into the unknown; it is a space that cannot truly be shared, nor really subjected to external control. Yet it is exactly this realm and space which the viewer enters in front of the image. And not only does the image stimulate the imagination, it also and thereby puts one in danger of committing idolatry, by fusing with the image and by reifying what it represents. Three issues, then: imagination, fusion, and reification. Let us now try and understand how they illuminate the distinction between words and image.

Both verbal and pictorial representation proceed from a code, which specifies what signifier is to stand for what signified and in what relationships various signifiers may be set. The usual distinction between the artificial and the natural sign -- the word and the image -- is indeed a false one, in that the distinction does not hold in absolute terms. First, because the image as we know it is the product of a long cultural development and second, because the distinction holds, in this cultural framework, only for the denotation of concrete objects. Within this narrow realm of symbolization, the word indeed stand in an arbitrary relationship to its referent, while the image possesses some of its perceptual qualities. First, it visually resembles its (concrete) referent and second, it is, like this referent, a spatial object or the illusion of one (in mental images).

The "narrow realm" of symbolization within which the pictorial sign appears to be 'natural' is at the same time immensely vast, in that it constitutes the greater part, the central part in fact, of the western world of
depiction. Traditionally, western image-making relies on visual resemblance, and it does so to such an extent, that this form of reference is being seen as 'natural' indeed. Various authors, such as Foucault and Panofsky, have described the place of vision in the birth and growth of modern western thought and have emphasized the epistemological status of visual perception. Yet the belief that vision shows what actually *is* (To see is to believe), has been own to western society since long before the Quattrocento. This can be checked by looking for the origins of the words used to denote visual representations: *image* and *icon*. Again, I realize that the etymological argument is not an ontological one: the origin of a word does not constitute a proof as to the nature of what this word refers to. But it does teach us about the historical roots of our understanding of a concept and hence to a certain extent about its current meaning.

The word 'image' comes from the latin *imago*, which shares its root *im* with the word *imitari*, to imitate. The term was in fact extended to other elements that re-create the perception of their 'original', as for example in *imago vocis* (echo), as well as to representations that replicate structural features of an object (as opposed to perceptual ones), as for example in Cicero: "Alexis imago Tironis" (Alexis who is a replica of Tiron). The word 'icon' was also known to the Romans, who had borrowed it from the Greeks. The Greek word for 'image' was *eicon*, based on *eic*: to be the same as, to resemble. We thus see that the involvement of resemblance with depiction is deeply engrained in our cultural past. This allows us to mean by 'image' a

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33. Michel Foucault, *Les mots et les choses*.
34. This paragraph was drawn primarily from: René la Borderie, *Les images dans la société et l'éducation*, pp.13-14.
pictorial representation that visually resembles its referent, even if this
definition does not honor the purist’s principles.

Although there is an essential difference between the visual
perception of a ‘real’ object and of its representation, both are nonetheless
visual. The difference is, that ‘reality’ can be visually perceived in an infinite
amount of different ways, under an infinite amount of angles and
perspectives, while the image shows ‘reality’ in a single and pre-determined
way. It presents all it has to show and there is nothing the viewer can
discover ...except in his imagination. But, as said, perception of the real world
and of its image do share a common core: vision, or in general, sensorial
perception. The senses: our gates to reality -- not quite: our bodily gates to
reality, or, if one wants: our gates to space and matter. Between me and the
world as materially present, either in ‘reality’ or in representation, is my
body. Writes Merleau-Ponty:

My corporal outlook (visée) on the objects of my environment is
implicit, and does not suppose any thematisation, any “representation”
of my body nor of the milieu.35

For Merleau-Ponty, the body is the basis, “the stabilized structure” of one’s
existence; it mediatizes all relationships “between things or between the
aspects of things,” by relating them to itself, by bringing them back to “the
origin”36:

I have the world as unfinished individual through my body as power
of this world, and I have the position of objects through that of my
body or inversely the position of my body through that of the objects,
not in a logical implication, and like one determines an unknown
dimension (grandeur) by its objective relationships to given

dimensions, but in a real implication, and because my body is movement towards the world, the world, point of support of my body.\textsuperscript{37}

In that sense, all perception is a communication or a communion, the recovery or conclusion by us of an alien intention or inversely the accomplishment outside of us of perceptive powers and like an intercourse (\textit{accouplement}) of our body with things.\textsuperscript{38}

This last sentence, with its ambiguity, is, I believe, the crux of the matter: bodily perception is an unthematized, unmediated experience, in which the continuity between body and world is being asserted. Hence the danger of fusion, of forbidden "intercourse." Sensorial perception and incest are thus not unrelated: the experience of mat(t)er is originally one in which boudaries are unexistant, an experience that is to be subjected, by the intervention of culture, through objectivation, to the establishment of boundaries between subject and object. The presence of \textit{mater} -- of the embodied and of the maternal -- appears clearly in the following quote from Margaret Miles' work on imagery:

A line, a color, may be enough to touch us; we will contemplate that line, that color, until we recognize in it, perhaps, the perfect mother none of us has ever known, the stimulating or comforting touch for which we long when we feel "the mortal cold of the universe."\textsuperscript{39}

Yet we have seen how, in the development of western thought, vision has precisely and paradoxically been an instrument in the process of objectivation, how it has become the source of objective knowledge. Or, to continue the argument in Merleau-Ponty's words:

\textsuperscript{37} ibid., p.402.
\textsuperscript{38} ibid., p.370; italics mine.
\textsuperscript{39} Margaret R. Miles, op.cit., p.149. The phrase in quotes is Camus'.
...objective thought .. has as constant function to reduce all the phenomena that assert the union of the subject and of the world and to substitute to them the clear idea of the object as en soi and of the subject as pure conscience. It thus cuts the links that reunite the thing and the embodied subject and leaves as constituents of our world only the sensible qualities .. and preferably the visual qualities, because they have an appearance of autonomy, that they link up less directly to the body and present to us an object rather than introduce us into an atmosphere.40

The image is therefore a paradox: at the same time material presence and sign of the absence of that which it represents; at the same time part of my bodily space and different, virtual space; at the same time direct bodily experience and process of objectivation. This paradox is nothing but the paradox of the simultaneous possibility of fusion and of reification. On the one hand, the perception of the image is a fusional experience:

...if my look knows the moonlight, it is like a manner of joining me to the phenomenon and to communicate with it. ...the light of the moon and of the sun in our remembrance occur to us primarily, not as sensorial contents, but as a certain type of symbiosis, a certain manner in which the outside invades us, a certain manner in which we welcome it... 41

And on the other hand, the image is a representation of objects, of things perceived as independent and autonomous. It is this autonomy of the pictured object, together with its physical presence as representation, that put the image as an easy prey to idolatrous motives. This is all the more true for graven images42, whose material and spatial presence is stronger, more real, than that of any other image. By being outside of us as autonomous

40. idib., p.370.
41. ibid., p.367.
42. Martin Buber argues that the prohibition against images was directed only against statues. Cf. Moise, p.148.
objects but within our own bodily space and by possessing a materiality of their own but as imitations of known phenomena, images can readily be endowed with the dynamism of the body and its life and with the features of these phenomena, their powers and their values. The object thereby becomes a subject, to which the person will 'subject' himself, that is, paradoxically, of which the subject will become the object.

In language, then, the problems of fusion and reification are, if not absent, then of another kind. Linguistic signs are of a completely different nature than pictorial ones. Images -- visual, but also auditory, olfactory, or tactile ones, if one accepts the broader, Latin definition of the term -- can simulate their original, can reproduce the stimuli that the 'real thing' would generate. Words cannot do that; they are abstraction before being perceptions, they communicate about concepts even if they do so by means of percepts. That is why we may want to speak of realism (or fidelity) in the case of pictures but of truth in the case of sentences. One could argue, on the other hand, that one can get lost into a speech like in an image, or that 'words have power' like images do.

That this is indeed so, is due to the possibility of rhetoric and to the possibility of presenting words out of context, as independent entities. In the first case, the speaker uses 'formulas' that have acquired in the people's minds, over the course of their lives, a certain autonomy: they have been used over and over again, so that the user has been able to accumulate meaning around them, to build chains of signifieds, to create sets of mental images for them, which they can recall easily and to which they can add at each new occurrence. Likewise, words that have power are exactly those words that freeze the flow of speech, that force or enable one to 'stay with

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43. Cf., for example, Umberto Eco, op.cit., pp.154-167.
them and play with them for a while. This may be a result of the specific form of the representation -- this is the case of the political slogan, a self-sufficient phrase -- or of its content -- words that hurt or rejoice because of their emotional meaning. In both cases, like in the piece-meal paragraph, the title-page, or the chart, the flow of expression has been halted and/or eliminated and the separate parts of the representation can now function autonomously, each securing for itself a maximum of imaginator

the part of the perceiver, free of other possible meanings that could have been (or should have been) included.

For what concerns the third problem that iconoclasts see in imagery, namely, the lack of control on the viewer's imagination, we can return to what has been said earlier. The essential characteristics of the image, in that respect, are the following ones: the image (except for the cinematographic image) shows all it has to show, all at once, and in a static way. This means that the process of perception relies, over its whole course, on pre-selected and unchanging information and that the viewer, therefore, has the opportunity to follow, in his or her imagination, the chains of signifieds which originate in each signifier. In language (and in movies) the representation constantly changes and does not give the listener or reader the same opportunity to engage in imaginary associations. Here, perception, experience, and meaning are constantly being guided, each unit (word, view) contributing to a process of convergence on the specific message that the representation wants to carry across.

44. We assume that mental images, even if changing over the time of 'viewing', possess a certain degree of constancy. The fact that movies are very dynamic images makes them indeed very different, in terms of imagination, from static images, as we shall see below.
That is, then, what makes both the specific strength and the danger of language (and of movies): the ability to engulf the perceiver in a semiotic field in which everything leads to the same point or area, to virtually drown him or her into a flow that moves in one direction: "Limited only by the skill of the author, texts attempt to draw the reader into acceptance of a persuasive logic," a network -- a texture -- of meanings that imprison the mind. The danger is, in a way, even greater in the case of written text: questioning a speaker can (potentially) yield more additional information than interrogating a text -- the former being a living source of language, the other a fixed one. Likewise, the openness of the image to the work of imagination is at the same time its blessing and its curse. It allows for a large extent of personal interpretation of and personal projection into the representational object (the sign). But it thereby jeopardizes the possibility offered by communication to create a community based on direct interaction and allows for the unfolding of centrifugal forces around, away from, the representation.

We have, I believe, reached a point at which we can summarize our thoughts about the way in which the word and the image mediate the relationship between subject and object. Note, that these two words betray in themselves the separation between man and the world as effected by the Logos, by language and the rational mind. The word, then, posits a radical separation between subject and object, like culture alienates man from Nature. It is, though not in its use but in its creation and to the exclusion

45. Margaret Miles, op.cit., p.30.
46. Bible commentators might not agree. Some texts may indeed possess a richness and complexity that enables centuries of inquiry into it to keep discovering new things in it. But the fact is: the writer(s) of the Bible does not speak to us anymore. All we have is a finite amount of his (their) words.
perhaps of onomatopoeia, an arbitrary sign, which owes its existence to the mind. The image, on the other hand, though relatively arbitrary as well and to the exclusion of mental images, enjoys a material autonomy and refers, in the mainstream of western tradition, by means of resemblance. This last feature accounts, by its reduction of the arbitrariness of the pictorial sign, for the view of the image as a natural sign.

Because the image is really or virtually spatial, it partakes of the bodily world of the subject and of the material world of the concrete objects it (often) represents. It is a symbol system specialized in establishing man in relationship to the world as a body in relationship to material things. Its life is the life of the body, its existence is physical existence, its dimensions are the dimensions of the senses. But the life of the body is a process that leads man from a state of fusion (with the mother) to a state of bounded separation and again to a state of fusion (with matter), a game of setting and opening up boundaries, of gaining and losing control over them. So too is the process of one’s relationship to the image: one the one hand, the objectivation of the referent, its perception as an autonomous object, and on the other hand, the projection of one’s body into the representational space and of one’s imagination onto the sign.

The relationship to the image is, consequently, a highly individualized relationship and its experience is an idiosyncratic and self-centered experience. The perceiver of the image is an embodied human being rather than a rational mind, an organism that needs and desires. "Vision," writes Margaret Miles, is "the engagement of attention and affection" and "neglect of images is neglect of contemplation." Neglect of language, on the other

47. op.cit., p.151.
48. ibid., p.150.
hand, is neglect of reflection. It refers not to particulars, except when using proper names, but to universals, to classes -- not to the thing, but to the concept of the thing. Through language, man is radically estranged from Nature, and his relationship to the world is disembodied and abstracted. Language brings distance from the senses and proximity to the intellect. The relationship to the world that it supports is one of understanding, as opposed to one of contemplation in the case of imagery, one of values as opposed to one of affects.49

Law and order

In order to address the issue of language-and-imagery at what I have called 'the third level of representation' -- the level of inter-subjective relationships -- I propose to return to the events on Mount Sinai. For the prohibition against graven images that was issued there was but one commandment of the Decalogue, but one element of a new cultural system. My purpose, again, is not so much to discuss the biblical text itself as to use it as a support for the discussion.

In semiotic terms, the essential component of the 'Revelation' is the affirmation of the absolute character and centrality of the Word or, one should say, of the Letter of the Law. We have seen, in the first section of this

49. This last distinction calls for clarification: an image may express values, but identifying them is a matter of labelling (cf. Nelson Goodman, op.cit., for example p.92). The same holds for feelings, but one can recognize a feeling, I believe, without verbalization; memory is the key here, rather than convention. One could argue that a value is a conventionalized (verbalized) affect. The desire to help a poor person is a feeling, charity is a value.
chapter, that language is initially a fragmentation-device: words categorize and classify, imposing a network of boundaries on the continuum of phenomena. Anthropologists such as Mary Douglas have emphasized the role of both conceptual and practical boundaries in each culture. The case of the Hebrews is a classical example of a culture's reliance on a well-developed system of strong boundaries, in which major distinctions are that between the pure and the impure, the sacred and the profane, Good and Evil. What is important to us here, is that such systems are formed on a verbal basis, by naming and listing objects belonging to each category, or by naming the terms of abstract distinctions.

Yet that is not all of what accounts for the centrality of the word for the Hebrews. Essential to this centrality is the fact that language is the only possible medium with which to establish a contract among parties. I say "parties," because the notion of contract in the Bible applies as well to the relationship of man to his neighbor as to his relationship to his divinity, both giving each other 'their word' that they will abide by their promises and oaths. Here lies, as we already saw, the particular nature and strength of the historical event at Mount Sinai: the simultaneous constitution of a code of behavior both for humans among themselves and for humans and God in their relationship vis-à-vis each other. Our question for this section, then, can be phrased in a like manner as the one we asked about the image: why call 'word' that which people give each other as a sign of their acceptance of a contract? My answer to this question will proceed along three points: the universal character of language, the presence of the speaker in the utterance, and the ability of language to signify values and logical articulations.

50. For Mary Douglas' work, see Purity and Danger and Natural Symbols.
"What raises our of nature is the only thing whose nature we can can know: language," writes Jürgen Habermas. "Our first sentence expresses the intention of universal and unconstrained consensus." Using language is necessarily accepting its universal rules (some would argue that one has no choice.) and if linguistic signs are seen as arbitrary, it is because they follow from conventions which hold for each and every speaker. Pictorial signs too may be said to be conventional (see Appendix), but with the difference to which we pointed earlier, that disrespect of the rules of depiction do not make an image unacceptable. It merely makes it difficult to understand the 'message' intended by the depictor. Disregard for linguistic rules, on the other hand, does make the utterance unacceptable and turns it into non-language, into a meaningless addition of words or of phonemes. Refusal to accept the "order of discourse" (Foucault) in general, be it linguistic or pictorial, places one outside of the social order that produced it and which it supports.

The universal character of language is a relative matter, however. Not only is the term 'universal' being qualified differently by various authors (pure artificiality or also genetic basis?), but it also sends us back to the problem of objectification. By this, I refer in particular to the argument made by Jean Baudrillard and others, according to which "denotation relies entirely on the myth of 'objectivity'." Language is thus universal to the extent that its conventions are shared by all and transcend the time and space of individual and communal life. As Jacques Lacan states:

51. Jürgen Habermas, Knowledge and Human Interest, p.314; quoted by Margaret Miles, op.cit., p.18.
52. Jean Baudrillard, Pour une critiaue de l'économie politique du signe, p.191.
The subject, who may appear as bondsman of language, is much more bondsman of a discours in whose universal movement his place is already inscribed at birth, be it only in the form of his proper name. The reference to the experience of the community as to the substance of this discourse, solves nothing. This tradition, long before historic drama inscribes itself into it, founds the elementary structures of culture. And these structures themselves reveal a coordination of exchanges which, be it unconscious, is unconceivable outside of the permutations which language authorizes.53

The second essential feature of language is the responsibility it supposes. By 'responsibility', we understand both accountability, as moral principle, and answerability, as principle of communication. What makes language a tool of democratic socializing is the fact that it enables people to answer each other from within their freedom, seen as autonomy in responsibility. What makes it a helpful to keep a community 'healthy' is the fact that it is an instrument for self-reflection, analysis, and therapy. What makes it a tool of oppression, on the other hand, is the transformation of its utterances into universal Truths and the possibility to lie. Again, the same feature is both a blessing and a curse: since a verbal expression can have truth-value, it can also fake it, and it can be asserted as absolute expression and serve as instrument of repression, despite the formal possibility of conversation: "the absolutization (/absolutisation/) of an utterance under the formal mask of exchange is the definition itself of power."54

Another way of understanding the artificiality of the verbal sign is to see the necessity of the human mind behind it. This, of course, is in direct contradiction to the biblical claim that the Word is also and primarily God's. In a conciliatory stance, we can argue that the word is necessarily the

product of the will, be it human or divine: it translates an intention.
Linguistic rules can be seen as rules to which an utterance must comply if it
is to translate intensionality. But intensionality is not a condition --
requirement nor feature -- of the image and its appreciation does not
depend directly on the purpose of its creator. Language is thus the medium
by which people can share their intentions towards each other and by which
they can anticipate and regulate them. This function of language is made
possible as well by its ability to denote logical articulations, such as causality,
conditionality, hypothesis, etc. We will return to this below.

The image does not reveal the presence of a creator like the utterance
does. First, as already said, because it does not translate his (His) intention as
the utterance does, and second, because it emphasizes the presence of the
viewer over the presence of the creator. As we saw, the relationship of
subject to object is characterized, in the case of the image, by an immediacy
and proximity of the perceiver to the depiction. We can -- somewhat
oversimplifying things -- argue that the utterance says "I" while the image
says "You", or that with the utterance, it is the speaker who says "I", while
with the image, it is the perceiver who says "I". The 'narcissism of the image'
and its function as mirror has been emphasized by many, in particular by

In a famous article, Lacan in a way provides a bridge between
semiotic forms as modes of communication and semiotic forms as modes of
identification, when he asserts the role of the mirror-image as formative of
the self. As Kohut also described it, but with an emphasis on the mother as

55. "Le stade du miroir comme formateur de la fonction du Je telle qu'elle
nous est révélée dans l'expérience psychanalytique", in Jacques Lacan, op.cit..
source of this self-image, the child builds an image of itself as an embodied whole, as a "narcissistic" or "cohesive self"\(^{56}\) -- an image, however, which figures a static Gestalt as external identity of the self. As Lacan himself notes, this image is fictional and therefore alienates at the same time as it bestows identity and permanence. If the mirror-image is only virtual, it means that the identity it provides is not objective, precisely in the sense that we have given to this word earlier: it is only with the introduction into social life that one can acquire an objective "I", with the formation of the subject through language, through its dialectical relationship to the other and its representation in universal terms.

While the image is, again in simplified terms, a source of identity that builds on fiction and narcissism, language identifies the subject in relation to the Other. Its source as well as its context are Difference, but it gives one the possibility to mediate separation and place it under the sign of the universal. That is precisely the nature and function of the Law: it binds people together after having separated them: "The Law founds an equality of right: all are equal in front of it. But on the other hand ... people must be separated in order to be equal,"\(^{57}\) since comparison requires distinction. All codes, be them legal or semiotic, function on the double process of separation and harmonization, on classification and organization. For a Law to act as source of harmony for both humans among each other and between them and a Spirit, it must function on the basis of organizing principles shared by all and regulating all interactions. In the case of the Hebrews, these principles are

\(^{56}\) Quoted from an unpublished PhD dissertation by Maeera Shreiber, Brandeis University, Dept. of English literature. Originally from Hans Kohut, \textit{The analysis of the Self}.

\(^{57}\) Jean Baudrillard, \textit{De la séduction}, p.184.
not only principles of purity and sanctity, but also and especially ethical ones.

This brings us finally to the third feature of language in its constitution of sociality: its capacity to denote abstract concepts, values and principles. These, as Margaret Miles notes in her studies of imagery in religious life, can only be made present by the word:

The contemplation of an image does not ... yield a "detachable conclusion" (a truth), either in the form of a single correct interpretation or in constraining or even suggesting particular conduct or activities. The 'yield' from the contemplation of an image is not translatable into action to correct social injustice; an image does not direct the viewer either to love his neighbor or to kill his enemies.58

If, to conclude, language is specialized in carrying value and supporting reflection, and imagery in carrying affect and supporting contemplation; if the word 'universalizes' and the image 'particularizes'; if verbal representation 'objectifies' and pictorial representation 'subjectifies', does it mean that the former only are capable of providing coherence to society and that the latter are socially disruptive? Does it mean that the ones are 'centripetal' and the other 'centrifugal'? No, in that both allow for individualization as well as social coordination: language is also a means of subjective expression (poetry) and shared images help unify subjective attitudes (national symbols, advertising).

The main difference between language and imagery in terms of social relationships is, I believe, that the word is intimately connected to action and inter-action, while the image leaves people in individual contemplation. First, because the former can represent action-in-time with its causal and teleological dimensions, while the other cannot. Second, because speech

58. Margaret R. Miles, op.cit., p.33.
allows for direct communication and interaction between subjects, while the image is a material medium between both (the case of gestual language is troublesome in that respect). Third and primarily, because language can carry rules and laws of action, of conduct and behavior, with their ethical technical dimensions, while images cannot. The truth of a proposition is therefore not only a matter of internal consistency, but also of consistency of action to spoken word. After having received the Law, the Hebrews were asked for an oath of allegiance to it. The specific sequence in their response -- "We shall do and we shall hear" -- emphasizes that very point: not only is a word given worth nothing without implementation, but what matters is the latter, before the former: society and community are action, inter-action, not just a shared representation of things.
The distinction between denotation and connotation may be relative and traitorous, as some authors have argued.\(^1\) It is nonetheless useful. And in order to ground or 'neutralize' it, we can borrow Nelson Goodman's distinction between denotation and expression.\(^2\) Although Goodman does not give an explicit definition of *denotation* himself, I believe that, were he to give one, it would be something like: "Denotation of an object B by a representation A is the conventional reference of A to a class of objects to which B belongs." That is, A denotes B if we all agree that (1) A refers to a class of objects of which we share the essential features and that (2) B belongs to this class. We commonly agree, for example, that 'table' refers to a class of objects used as furniture and "consisting of a flat top set horizontally..."

\(^1\) For example, Jean Baudrillard: "Ainsi la distinction dénotation/connotation apparait vaine et elle-même idéologique." For his complete argument, see *Pour une économie politique du signe*, pp.191-194. Also, Roland Barthes, in *S/Z* (quoted by Baudrillard) and in *L'obvie et l'obtus*: "Ce caractère utopique de la dénotation...", p.34.

\(^2\) Nelson Goodman -- a real master at 'neutralizations' of this kind -- distinguishes between denotation (verbal or pictorial: description and depiction) on the one hand and expression and exemplification on the other hand, and not between denotation and connotation. We will, however, accept 'expression' as synonymous to 'connotation', according to common usage of these words. For Goodman's descriptions of these modes of representation, see *Languages of Art*. For another description of denotation and connotation, see (ironically) Roland Barthes, *Mythologies*, pp.195-202.
one or more legs.'\(^3\) If we all set our mind to call such objects 'blirks', then that word will denote them and thus denote the object on which my wordprocessor and my notes lie. Denotation is thus a matter of convention.\(^4\)

Still following Goodman, the reference of representation A to object B will be called \textit{expression}, if A can be said to metaphorically possess B or to be metaphorically denoted by B. Calling a picture 'sad' is equivalent to saying 'this picture possesses sadness' -- a statement that can only be metaphorically true: only people can be sad, so that the attribution of such a feeling to something else constitutes a "category-mistake."\(^5\) To say, on the other hand, that the word 'sad' denotes a picture can only be metaphorically true as well, since 'sad' denotes a class of objects to which the attribution of the feature 'sadness' can only be metaphorical, for the reason given above.

We have seen in chapter two, that metaphorical reference possesses a certain 'openness', in that it rests on a structural core of agreement but allows for idiosyncratic completion around that core. This is exactly what happens in denotation and connotation. In the first case, agreement about the referent is, ideally, total and absolute; in the other case, there is an inevitable room for interpretation, although tied to the denotative elements in the representation.\(^6\) Connotation thus presents these two aspects, the conventional and the idiosyncratic, the social and the individual, and operates on a play between the commonly accepted and the personally

\(^3\) This definition may not be completely adequate, but I hope that it illustrates the argument well enough. The quote is from Webster's.

\(^4\) While this idea makes obvious sense in the case of verbal denotation (description), it is more difficult to accept in the case of pictorial denotation (depiction). Yet this is, explicitly this time, Goodman's argument. See appendix A for a presentation -- and a critique -- of this argument.

\(^5\) See the discussion on metaphors in chapter two.

\(^6\) Sorry about that one.
projected, the abstracted and the invested. As we saw in the case of the metaphor, this duality is here to be exploited, and sometime with negative consequences. Unlike the metaphor, however, the connotative representation, which can be pictorial as well as verbal, is generally not being used in order to suggest more or less valuable or more or less misleading analogies, but to create a community of minds through an emotional *rapport* to a common object.
Appendix C : A NOTE ON DEPICTION AND RESEMBLANCE

Searching for the 'nature' of words and images, or for the 'nature' of their difference, in today's literature, one is bound to stumble upon Nelson Goodman's *Languages of Art*.\(^1\) The crucial passage of this work regarding this issue is to be found on page 225, under the title, "Pictures and Paragraphs." Here, Goodman finally comes to "clarifying the nature of representation" -- this last word being synonymous with 'depiction', according to a definition given at the beginning of the book.\(^2\) Three quotes will, I believe, suffice to summarize Goodman's standpoint.

Nonlinguistic systems differ from languages, depiction from description, the representational from the verbal, paintings from poems, primarily through lack of differentiation -- indeed through density (and consequent total absence of articulation)\(^3\) -- of the symbol system. *Nothing is intrinsically a representation*; status as representation is relative to symbol system. A picture in one system may be a description in another. (p.226; italics mine)

Although representation depends upon certain syntactic and semantic relationships among symbols *rather than upon a relationship (such as similarity) between symbol and denotatum*, it does depend upon their status as denotative symbols. A dense set of elements is representational only if ostensibly provided with denotata. *The rule for correlating symbols with denotata* may result in no assignment of

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2. p.4n
3. For 'density' and 'articulation', see pages 135-137, 152-154, and 160-162.
any actual denotata to any symbol, so that the field of reference is null; but elements become representations only in conjunction only in conjunction with some such correlation actual or in principle. (p.227-228; italics mine)

This all adds up to open heresy. Descriptions are distinguished from depiction not through being more arbitrary but through belonging to articulate rather than to dense schemes; and words are more conventional than pictures only if conventionality is construed in terms of differentiation rather than of artificiality. Nothing here depends upon the internal structure of the symbol; for what describes in some systems may depict in others. Resemblance disappears as a criterion of representation, and structural similarity as a requirements upon notational or any other languages. The often stressed distinction between iconic and other signs becomes transient and trivial; thus does heresy breed iconoclasm.

Yet so drastic a reformation was imperative. It allows for the full relativity of representation and for representation by things other than pictures. Objects and events, visual and nonvisual, can be represented by either visual or non-visual symbols. (p.230-231; italics mine)

Rather than expand on the meaning of 'density', which Goodman sees as constitutive of depiction, let us give a closer look at the fate of resemblance. "Resemblance," says Goodman above, "disappears as a criterion of representation." And he adds: "although representation depends upon certain syntactic and semantic relationships among symbols rather than upon a relationship (such as similarity) between symbol and denotatum, it does depend upon their status as denotative symbols." (my emphasis) This is one of the two conditions of depiction.

The first condition of representation (- depiction) is, that "a picture must function as a pictorial symbol; that is, function in a system such that what is denoted depends solely upon the pictorial properties of the symbol."

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4. As most semioticians would have it: words are arbitrary symbols (a redundancy, in Pierce's terms), images aren't, or at least not completely.

5. That is, of the symbol itself, as opposed to the symbol system as a whole.
These properties are characterized -- incompletely, as Goodman himself confesses -- by saying "more or less completely and more or less specifically what colors the picture has at what places." (p.42). We can call these properties 'visual properties', since color is a characteristic of light, which is being apprehended through the visual sense. As we saw, the specificity of these properties, is that they constitute a dense system.

The second condition to which elements must comply in order to be representation (depictions) is, as indicated above, that they must be denotive: depiction is a form of denotation. What, then, is denotation? It is a 'direct' relationship of symbol to referent: "Representation and description relate a symbol to things it applies to," (emphasis mine) as opposed to exemplification, which "relates the symbol to a label that denotes it" and to expression, which "relates the symbol to a label that metaphorically denotes it." (p.92) This doesn't bring us much further. What is the 'application' Goodman talks about, or the 'reference' he mentions later (p.228)? What does he mean, when he writes: 'The plain fact is that a picture, to represent an object, must be a symbol for it, stand for it, refer to it'? This means, I believe, that the picture must be commonly accepted as a label for a class of objects: "...with a picture as with any other label, there are always two questions: what it represents (or describes) and the sort of representation or description it is. The first question asks what objects, if any, it applies to as a label; and the second asks about which among certain labels apply to it. In representing, a picture at once picks out a class of objects and belongs to a certain class or classes of pictures." (p.31; emphasis mine) Therefore, "representing is a matter of classifying objects rather than of imitating them, of characterizing rather than of copying".(ibid.)

6. ...which are two forms of denotation...
This view of depiction has dramatic consequences. For it means that the relationship of picture to referent is the product of a deliberate act of 'worldmaking'. Indeed: "representation is matter of choice" (p. 38; emphasis mine). Goodman therefore concludes:

Reference to an object is a necessary condition for depiction or description of it, but no degree of resemblance is a necessary or sufficient condition for either. Both depiction and description participate in the formation and characterization of the world; and they interact with each other and with perception and knowledge. They are ways of classifying by means of labels having singular or multiple or null reference.7 (p.40)

Yet there is even more to it than that. Indeed, Goodman distinguishes between a picture that denotes (refers to) a man and a picture that is a man-picture. In the first case, the man is a real person, in the second case, he is a fictional character. In the first case, we can speak of representation; in the second case, we must speak of representation-as: "A picture that represents a man denotes him; a picture that represents a fictional man is a man-picture". (p.27-28) Although this may seem like an unnecessary complication to this discussion, I have included it, because the distinction is a 'weak' one in practice. First, because it may not be important to know whether the object depicted is real or not (what is "real" anyway?). Second, and more importantly, because it may not always be possible to know that for sure (p.26). Problems of manipulation may therefore arise, when an unreal object is being presented as real and the means to decide about its reality are being eliminated. In fact, this problem of realism is central not only to the critical

7. See pages 21-33 for a broader discussion of the classificatory and organizatory nature of picturing. Here, Goodman seems to agree with cognitive scientists like Bruner and Piaget, who argue that perception necessarily include, rely on, categorization. See for example Piaget e.a., *Logique et Perception*.
analysis of pictorial material in terms of social interaction, but to art-theory itself.\footnote{For Goodman's reflections about the problem, see especially p. 34-39.}

Let us come back to the issue of resemblance. While this form of semiotic relationship is not a necessary nor sufficient condition for depiction, Goodman does accept the fact that there is such a phenomenon as "a constant relation of resemblance". (p.39n) Yet, this relation is not "a constant and independent source (...) of representational practice", but is "in some degree (a) product of it." (p.39) Why? -- because it follows from a choice (see above; p.38 in *L.of A*). In other words, the emphasis of western art on resemblance in depiction is but a cultural bias. This point -- which Goodman, concerned and concentrated as he is with and on the technical nature of forms of symbolization, does not explicitly acknowledge and much less discuss -- is, however, essential when one looks at symbolization as a social-cultural phenomenon. But let us go beyond this, and try to understand what motivates both Goodman's argument and my reaction to it, for that may help us understand essential features of pictorial symbolization.

Let us ask, then, why, first, western pictorial art has put resemblance at its own center\footnote{This is obviously not true for the whole of western art, considering twentieth century movements. Yet these can literally be seen as exceptions to the rule: they constituted reactions against the traditional school.}, why it has chosen to do so, and second, what this choice has meant and still means for the place and role of images in our interaction with the world. That resemblance is an ingredient of western picture-making since early times can be checked by looking for the origins of the words used to describe its products: *image* and *icon*. I realize that the etymological argument is not an ontological one: the origin of a word does not constitute a proof as to the nature of what this word refers to. But it does teach us about
the historical roots of our understanding of a concept and hence to a certain extent about its current meaning.\textsuperscript{10}

The word 'image' comes from the latin \textit{imago}, which shares its root \textit{im} with the word \textit{imitari}, to imitate. The term was in fact extended to other elements that re-create the perception of their 'original', as for example in \textit{imago vocis} (echo), as well as to representations that replicate structural features of an object (as opposed to perceptual ones), as for example in Cicero: "Alexis imago Tironis" (Alexis who is a replica of Tiron). The word 'icon' was also known to the Romans, who had borrowed it from the Greeks. The Greek word for 'image' was \textit{eikon}, based on \textit{eiko} : to be the same as, to resemble. We thus see that the involvement of resemblance with depiction is deeply engrained in our cultural past. Again, according to Goodman, this did not \textit{have} to be so : there is, according to him, no determinism in depiction, but rather, "full relativity of representation" (p.231).

This brings us back to our question as to why resemblance was chosen as strategy of depiction. The answer is, I believe, straightforward: resemblance minimizes the codes that must be established, shared, and thought in order to constitute a pictorial symbol system. The greater the perceptual likeness between an object and its picture, the easier the recognition of the former through the latter will be. One can thus distinguish two levels of ease in recognition: one, relying on the familiarity with the code that relates symbols to their referents; the other, based on the perceptual resemblance between both. Goodman recognizes only the first one

as absolute in character and subordinates the second one to it: "Reading of (a realistic picture, painted in ordinary perspective and normal color,) is by virtually automatic habit; practice has rendered the symbols so transparent that we are not aware of any effort, of any alternatives, or of making any interpretations at all. Just here, I think, lies the touchstone of realism: not in quantity of information but in how easily it issues. And this depends upon how stereotyped the mode of representation is, upon how commonplace the labels and their use have become." (p.36) Yet we may repeat our question here: why have certain modes of representation become stereotyped and certain labels commonplace? And we may repeat our answer as well: because of the 'natural' ease they offer in perception, in recognition.

In fact, the difficulty with the ultimately realistic image (Zeuxis' grapes) would not reside in the education that is required in order to learn how to recognize the depicted objects, but in the education needed to perceive the image as an image, as an artifact. One can tell the story of the so-called 'primitive' who cannot read a photograph handed to him by an explorer or of the lay person who doesn't understand the sectional drawing of the architect; but one can also tell the story of the child who believes that Napoleon is really there in his history-book or of the Parisian bourgeoisie fleeing en panique from the train coming on them in "Le train entre en gare", first sequence of images that we describe now under the label 'movie'. It is the quality of the image illustrated by the second set of stories -- its ability to make things real, to make them present to the viewer -- that is culturally important: here lies the basis of the ideological struggles that

11. ...and thus with trompes-l'oeil in general... -- This point is important: a trompe-l'oeil is possible because the visual perception of a real object can be artificially re-created. More about this below
have surrounded the image throughout history. Goodman may well argue that this is a mere accident, an avoidable side-effect of depiction; but what is culture if not an assembly of such 'accidents' and 'side-effects' resulting from the choices we make, above and beyond the determinism of the nature of things, of Nature itself?

I just mentioned the image's ability to make things present. But isn't that what representation -- re-presentation -- is all about: making things present, bringing to our consciousness that which was removed from it? Indeed, and if we take 'representation' to mean 'symbolization' in general, we will need to specify the different ways in which this (re-)introduction of things into one's mind occurs, according to the different modes of symbolization; we will need to understand the specific quality of the 'presence' of objects as perceived through each mode. And if we take 'representation' in its narrower sense, as Goodman does -- that is, if we take it to be synonymous with 'depiction' -- then our inquiry is part of the larger one just described: what is there to images that makes them so special in their action of re-presentation? What do images 'have' or 'do', that has made them and still makes them the objects of so much debate and controversy, fight and struggle? What is it that provoked and provokes iconophobia and iconoclasm?

This is, unfortunately (0 frustration!), not the place to attempt to give a full answer to these questions.12 Allow me, however, to indicate one point, already mentioned. That is the fact that the image can deceive (as in the trompe-l'oeil; see footnote 11) -- a fact which Goodman acknowledges, but only in his own, relative way: "...what will deceive me into supposing that an object of a given kind is before me depends upon what I have noticed about

12. See Appendix A, though.
such objects, and this in turn is affected by the way I am used to seeing them depicted." (p.39). While the last argument is true in a general sense, it must be met by two questions. First, what are the nature and extent of this 'affection'? Second, what about things that one has not seen depicted before? But, more importantly, the statement as a whole does confirm the possibility of deception.

Deception occurs when one believes that what is being perceived is a real thing, while it is in fact a simulacrum of that thing. And here lies, I think, the essential difference between word and image. Images -- visual, but also auditory, olfactory, or tactile ones, if one accepts the broader, Latin definition of the term -- can simulate their original, can reproduce the stimuli that the 'real thing' would generate. Words cannot do that; they are abstraction before being perceptions, they communicate about concepts even if they do so by means of percepts. That is why we may want to speak of realism (or fidelity) in the case of pictures but of truth in the case of sentences.13

Deception by the image means not just that something is being mistaken for something else, but that the features, characteristics, potentials, or powers with which the 'original' is endowed, are being projected onto the image. Here lies the connection between the prohibition against idolatry and that against graven images, which forms the second commandment of the Bible. The belief that a mere stone or engraving has any power in and of itself is to be radically rejected. Yet this observation can be readily extended to all objects: people too easily endow them with powers and values, which allow, in the long run, for a reversal of the nature of things: the object becomes subject, the subject becomes its object: idolatry.

13. See Appendix A.
The critical features of the image are thus its materiality and its likeness or resemblance to what it depicts. The first feature means that, in fact, the image need not resemble anything real, but can constitute an original entity onto itself. This feature places the image into perceptual space and allows it to partake of our own bodily world. Like the rest of that world and the body itself, it needs to be carefully controlled if it is to sustain rather than subvert the order of society. The second feature of the image -- resemblance -- together with the first one, provides the opportunity for projection and investment: the pictorial object can be endowed with the characteristics -- and powers -- of what it depicts, god or person, event or thing. This potential for projection and investment must be closely controlled as well, if the image is to constitute a means of honest communication.

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