PIERCE, J., WILLIAMS, O. R. (2016) Against power? Distinguishing between acquisitive resistance and subversion, Geografiska Annaler: Series B, Human Geography 98 (3): 171–188

RANDOLPH, R. (1995). O planejamento comunicativo é possível? Indagações sobre novas formas de articulação entre espaço, Estado e sociedade. Paper presented at the XIX Encontro Anual da ANPOCS, Caxambu - MG.

RANDOLPH, R. (2007) Do Planejamento Colaborativo ao Planejamento "Subversivo": Observações a respeito da superação de conflitos entre a expertise dos planejadores e a experiência cotidiana da população envolvida. Paper presented at the International Conference "New concepts and approaches for urban and regional policy and planning?", SP2SP project ESDP-network, Catholic University, Leuven, Belgium

RANDOLPH, R. (2014) Subversão e planejamento como práxis - uma reflexão sobre uma aparente impossibilidade. In: LIMONAD, E., CASTRO, E. (Orgs.). Um novo planejamento para um novo Brasil?. 1ed.Rio de Janeiro: Letra Capital Editora, p. 40-57.

RANDOLPH, R. (2015) A origem estrutural da subversão em sociedades capitalistas contemporâneas, suas práticas baseadas na vivência cotidiana e um novo paradigma para um contraplanejamento. In: Geraldo COSTA, G. et ali (Org.) Teorias e práticas urbanas. Condições para a sociedade urbana. Belo Horizonte: C/Arte, pp. 103-127

RANDOLPH, R. (2016) A utopia do planejamento e o planejamento da utopia: o longo caminho de um contraplanejamento até o alcance da justiça. Presented at XIV Coloquio Internacional de Geocrítica - Las utopías y la construcción de la sociedad del futuro - Barcelona, http://www.ub.edu/geocrit/xiv_rainerrandolph.pdf

SAGER, T. (2011) Activist Modes of Planning: A Systematic Overview. Paper Presented in Track 8 (Planning Theory) at the 3rd World Planning Schools Congress, Perth, (WA), 4-8 July

SANTOS, B. S. (2003) Para uma sociologia das ausências e uma sociologia das emergências. In:

SANTOS, B. S. (Org.) Conhecimento prudente para uma vida decente: "Um discurso sobre as ciências" revisitado. Porto: Afrontamento; access by <http://www.ces.uc.pt/bss/documentos/sociologia_das_ausencias.pdf>

VANEIGEM, R. The revolution of everyday life: the reversal of perspective, 1967 disponível em: http://library.nothingness.org/articles/SI/en/pub_contents/5

ID 1623 | ROLE AND GOALS OF ONTOLOGICAL ANALYSIS IN UNDERSTANDING SPACE AND PLACES

Maria Rosaria Stufano Melone[1]; Dino Borri[1]; Domenico Camarda[1]; Stefano Borgo[2]
[1]Politecnico di Bari, Italia; [2]Laboratory for Applied Ontology ISTC CNR, Trento, Italia
mariarosaria.stufanomelone@gmail.com

1 INTRODUCTION

Places are landscapes as seen from far away, places are cities lived from inside or cities imaged from outside: are they ecological ecosystems too? We intend to focus our attention on lived places. Physical places are complex entities. Nonetheless, we should first distinguish a concept of space from a concept of place. Each of these concepts has different declinations and for each declination there is a possible definition. From a cognitive or a designer's perspective space is instead conceived as something different, at least not explicitly a 3-dimensional subspace (Freksa et al., 2014).

A place is an interpreted space, a reasoned space, a space with feelings, a result of an aesthetic fruition of a physical space. We can define physical space as a set of mental images, spaces of representation, and the architecture of cognitive processes in vision theory. The essence of place lies in the quality of being somewhere specific, knowing that you are "here" rather than "there" (Rapoport, 1977) for example enclosure becomes a very important aspect of place-making which also seems, in some way, to be related to the concept of territory.

We understand places through cognitive contexts. This is the reason we 'read places' we live in. We can interpret our being in a space as an objective proposition according to geometrical rules/indications. Nonetheless, our being in a place is defined only via a richer description. Every single person that stays in a place has a subjective point of view. Points of view and contexts are results coming out from a historical – cognitive -cultural selection. Our knowledge of places can derive from experiences, from stories that structure ideas and feelings about them. When we talk about 'subjective knowledge' of places, what are we really dealing with? 'Subjective knowledge' is a kind of representation of places, and a representation vary not only from different subjects, but even during one subject's life (Orr, 1992). "Knowledge of a place — where you are and where you come from — is intertwined with knowledge of who you are. Landscape, in other words, shapes mindscape."(Orr, 1992)

In literature there are many attempts to get a definition of representation of space. Ontological research is increasingly seen as providing methodologies and tools to move forward in this direction. Ontologies, these systems being typically specified in languages that allow to abstract away from data structures and implementation strategies. The languages of ontologies are closer to first-order logic than languages used to model databases. In computer and information science, an ontology is a technical term denoting a conceptual artifact that is designed for a purpose, which is to enable the modeling of knowledge about some domain, real or imagined (Gruber,1993).

2 ABOUT PLANNING

Today's awareness of the complexity of social and natural environments implies that in using state-of-the-art techniques to model these complex systems we must accept a dramatic, and perhaps discouraging, level of uncertainty. The traditional deterministic and quantitative approaches to urban planning and design in risky contexts seem to increasingly fall short of expectations in environmental domains; and this is now widely recognised (McConnell, 2010).

Planning tries to manage complexity, it is the result of an interaction between collective knowledge and project, through the intersection of knowledge: it is a value that should be treated with the principles of sharing, as the foundation of a necessary political dimension of the contemporary design (Formato and Russo, 2014).

The 'futurisation' of reality (pro-jectus) finds consistency and dynamism in the concept of process as a source of reflection that constantly provides new impetus to new proposals and a consistent updating of that locally-based langue, the expression of a culture's identity (Gregotti, 2007).

An urban project as a plan or a strategy have to evolve over time, it can't stay frozen [8]. The planner like the urban designer has always to look at changes of the territory and have to read the different relationship between built space and complex urban organization.

Architecture, social sciences or anthropology have an active role in the thinking and the development of urban projects. About anticipation city is a relational system and must be thought as a whole and not district by district (Ingallina, 2007).

We have to point out that knowledge in our domain is not completely coded. There are large part of non formal/uncoded knowledge; the more there is a knowledge not explicitly expressed.

Our domain refers to a low structuralized knowledge.

3 CARVING UP GEOGRAPHICAL PLACES

Humans live, move in and observe complex spatial environments using different paradigms. The interaction of humans with space is sophisticated. It continuously changes over time and relies on a variety of information types that can be classified in terms of topology, geometry perspective, dynamics, affordance, society, culture and so on. Perhaps due to the richness of this interaction, humans are not aware of how their understanding and interacting with space is realized. Ontological analysis, the study of what is at the core of our view on reality, can help to recognise, clarify and organise the essential elements

and features of space that is crucial to humans in terms of objects, properties and processes. Searching for a general framework where to discover and organise this kind of information, we can list a few levels that seem quite relevant. Without aiming at an exhaustive list, we propose to subdivide these levels as follows: spatial, artifactual, cognitive, social, cultural and processual. These levels, in turn, can be subdivided in finer levels as we show for some of them.

3.1 THE SPATIAL LEVEL

Mereological level (where one understands space in terms of spatial parts), e.g. recognising the subdivisions of an area like a neighbourhood Topological level (where one understands space in terms of contact and unity), e.g. recognising the contiguity between neighbourhoods and the unity of a neighbourhood Geometrical level (where one understands space in terms of shapes), e.g. seeing the geometrical shape of a neighbourhood Geographical/morphological level (where one understands space in terms of locations and their descriptions), e.g. distinguishing being in a valley or having a radial/grid/linear pattern.

3.2 THE ARTIFACTUAL LEVEL

Material level (where one understands space in terms of materiality), e.g. seeing the presence of wood, concrete, water Structural level (where one understands space in terms of qualified components), e.g. distinguishing natural vs manmade, residential vs production vs recreational area Artifactual level (where one understands space in terms of intentionality), e.g. looking at entities as planned/intentionally modified things like buildings Functional level (where one understands space in terms of functionality), e.g. understanding a building as a place for gathering or as a shelter.

Production level (where one understands space in terms of manipulation), e.g. seeing an object/material as needed to produce something else.

3.3 THE COGNITIVE LEVEL

Cognitive level (where one understands space in terms of experience), e.g. perceiving how to move across the objects

Representation level (where one understands space in abstract terms), e.g. perceiving the relationships among entities

Observation level (where one understands space in terms of how it does or may change), e.g. perceiving the change of the relationships among entities

Phenomenological level (where one understands space as a moving entity), e.g. perceiving space as an evolving situation

Perspectival level (where one understands space as something where one is located in), e.g. perceiving space from a specific point in it

Conceptual level (where one understands space as a collection of realised concepts), e.g. perceiving space as the manifestation of natural and artificial objects

Action level (where one understands space as an entity in which to act), e.g. perceiving the changes that one can bring to it

3.4 FURTHER LEVELS

The Social level is the level of norms and social roles and includes the organisational level, the service level, the economic level and the political level.

The Cultural level is the level of knowledge and meaning and includes the behavioural level, the living level, the knowledge level, the historical level and the community level

The Process level is the level of temporal change and transformation, it includes the dynamic level, the development level, the temporal level and the interaction level.

4 THE CASE STUDY

An example we can refer to is the making of the Taranto's strategic plan to 2065.

We started community-based, interactive processes of knowledge exchanging, aimed at building future scenarios for the new plan.

Community-based, interactive processes of knowledge exchanging were carried out in Taranto, southern Italy, aimed at building future scenarios for the new plan during the 2014's spring/summer.

They were carried out to support policies and decisions on urban socioeconomic as well as environmental domains, basing on a sequence of face-to-face brainstorming forums, aimed at cooperatively singling out strategic lines to build alternative development scenarios. From a methodological point of view, it was a 2-step scenario-building activity (Khakee et al., 2002). First, agents were invited to report problems they faced in their town districts. Then, each agent was invited to generate a reflection about the future of the district, particularly concerning expectations of future changes. Such sessions were organized in all town districts, indoor or outdoor, with participants divided in groups each of them sitting around a dedicated desk. A municipal representative coordinated each desk without taking part in the generative session, she/he had only the task of transcribing in linear charts concerns, problems, expectations and desires presented by the participants at the desk.

In order to manage the results in real time (synthesis and refinement), the interactive process was supported by the use of conceptual maps drawn using dedicated software tools (Decision explorer, Inspiration) (Heft, 2013) (figure 1). This resulted in a real/virtual hybridization of the process, following well-established research trends, as reported in a number of case studies (Borri, Scandale, 2005; Khakee et al., 2002).

Results achieved during the nine organized meetings were very different from one another. In particular, the first meeting was organized in the Città Vecchia (inner city district) with its great historical, environmental and cultural resources as well as significant environmental, physical and social degradation problems. In the Città Vecchia session the citizen participation was very high. About 80 stakeholders joined form different societal domains: residents, merchants, students, tourists, visitors. These agents, gathered around 6 desks and about 150 instances were collected.

The database collected during this session resulted interestingly rich and articulated. Because of this reason, it is a significant and valuable source for the present research effort.

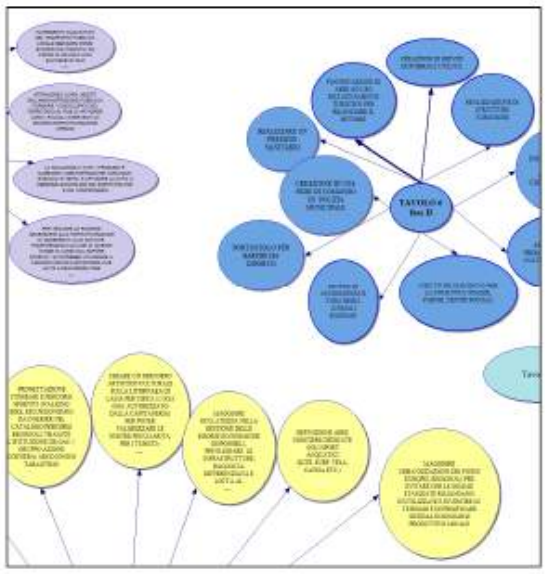

Fig. 1 – Example of di conceptual map

This process has allowed the definition of two great categories of instances: a. contextual problems; b. future visions. These two categories of instances are about each quarter of the city and about the city in general.

What emerges is that the environment is the most recurring issue. It is present in community problems and/or expectations, but also in the perceptions of the physical reality of the city.

The industrial problem often seems absent from protocols, but it is difficult that final strategies could ignore industrial relations.

A first common character is the natural environment that persists in many city representations, so apparently resisting the consequences of an industrial culture.

A second one is related to a more structural relationship with the sea, intended as an element of union and communication.

A third common aspect is the potential of tourist attraction to the city, linked to different characters in relation to the different peculiarities of the area.

The industrial problem often seems idiosyncratically absent from protocols, but it is difficult that findings can be used for strategies disregarding industrial relations.

There was an almost total absence of participants in the forum session held in the industrial district, perhaps given the disillusionment with past policymaking. Other issues are related to the inadequacy of urban and metropolitan linkages to the city center, as well as related to the recovery of many illegal settlements.

Other instances are about the inadequacy of the urban services and about the inadequacy of metropolitan connections, other instances are about the recovery of unauthorized coastal settlements.

The session held in the inner city was crowded and complex. The session was held with a hybrid computer-based and traditional, rather conflictual interaction. Outcomes showed a clear prevalence of visions on mere problems: important issues were the unstopped relation with the sea (for tourist aims and/or city infrastructuring) and the enhancement of Taranto as archaeological and historical center (Magna Graecia colonization).

5 ANALYZING THE SOCIAL LEVEL

Once we outlined the general framework we proceed to analyze levels one at the time. This analysis is useful to identify if every level is well structured or if it is necessary to model additional information. Then we can proceed to characterize every specific sublevel.

We intended to start from the higher levels of abstraction, so we have started our analysis from the social level, then we will analyze the cultural level and subsequently the process level.

The data we have about Taranto haven't been meant for research objectives, they were collected during the participation activities belonging to the strategy planning process. Nevertheless we thought that it could be useful to start from these data for a first delineation of 'objects', 'attributes' and 'relations' populating the social level.

First of all it is necessary to point out what we mean by 'social': we mean social practices , the way people live a city, or a part of the city (the quality of the interactions between people and how dynamics have been built). In the social level it is difficult to elicit the distinction among formal and informal knowledge, because the social knowledge is principally informal, tacit and implicit.

According to ontological analysis methodology we are interested in modeling this kind of information about this levels. In fact it is important to survey what kind of relation exists between places and the social meaning of places, and what kind of relation exists between social practices in the places. Agents that live the city have certain references of certain places and at the same time they have a common knowledge of the social places. As we outlined, this common knowledge emerges from the database that has been produced during the participative process that took place for the preliminary works of Taranto's strategic plan TA2065.

The procedure is: a. to single out references of places and landmarks that are of interest also for the relevance they have in social practices; b. to single out the kind of the relevant entities and the relations that exist between them; c. how inhabitants use those places and the habits they have.

Analysing the social level it emerges that the objects of the city (or of part of the city) are cognitive objects and that they are a set of many meanings/signifiers, so in this analysis it is necessary to model some complex entities' definitions.

Anyway it is important to clarify that the participative meetings that gave us the data we have were of a claiming kind and not narrative or expositive. We have chosen data about the ancient centre (città vecchia) because it has more stories, denser projections of sense and a denser presence of social places.

We have to underline that some objects of the city's tissue that a technician would image essential key points for the sociality are not mentioned in the database (for instance: Cattedrale San Cataldo, Chiesa S. Domenico, Ringhiera, Colonne doriche, Castello Aragonese, Piazza fontana, Ponte di pietra, Ponte girevole, Municipio). We wondered: are those objects not considered as landmarks?

The very first analysis about the social level for Taranto–Città vecchia has been about the search of entities/places/services useful to elicit social relations, as follows:

Places/Landmarks:

-Beachfront
+Bathing establishments
-Porta Napoli's area
-Bulging of the port (for loading and unloading goods industry)
-Pier
-Archaeological sites
-Molo s. Cataldo (old fisherman's wharf, a project today to cruise ships dock)
-The three levels of the old town
-The island -The seafront
+Huts of fishermen
+Gardens of the Vasto descent
-Lanes (Garibaldi, Nove Lune, Zippro, Abbastante, Santi Medici)
-The forty hypogeum
-Plazas, squares, courtyards
-New Acropolis (in Cardo and Decumanus)

-Prestigious Palaces (noble Palaces)
-Dewatering ILVA (steelwork industry)
-Mar Piccolo (internal lagoon)
-Navy sites
-Crumbling buildings

Objects:

-Buildings
+Sheds (the fishermen)
-Cruise ships
-Pier
-Archaeological finds
-Fishing boats
-Crumbling Buildings
-Sea
-Port
-Lanes

Roles:

-Capital of Magna Graecia
-Intermodal plate (area behind the port for unloading ship-borne goods-truck-train)
-Convergence point (road junction and railways)
-For service center
-Old city as a place of urban junction between parts of Taranto
-City 'as old as eco-museum
-Engines for tourism
-Catalyst historical and cultural identity
-University

Services (existing and desired):

-Pubs, cafes, restaurants, shops, bookstores
+Bathing establishments
+Gardens of the Vasto descent
-Cinema -Refurbishment -Leases
-Recycling
-Sewer services, electrical ...
-Cultural workshops
-University laboratories
-Toilet (for tourists)
-Tours / excursions by fishing boat
-Connections via sea
-Pedestrian network (e.g., on the waterfront)
-Tourist routes, thematic tours for sightseeing
-Organization of events and cultural attractions
-Subdivisions peripheral block
-Business block 'loading / unloading material to the port
-Parking lots
+Mussel museum
-Police station

Desiderata:

-Tourism -Work
-Involvement of local residents in tourism
-Break down the non-recoverable
-Giving air and light to the city
-Close to traffic

Primary and secondary infrastructure:

-Regulatory use of public spaces
-Development history of the area
-Refurbishment of ancient buildings
-Enhancing archaeological sites

A first delineation of the elicited relations may be outlined as follows:

Space-city (division)

-Space-object
-Space-landmark / role
-Space-service
-Existing space-desired space
-Existing service -desired service
-Object-role
-Object-affordances

Service-social practice

-Space-social practice
-Landmark-social practice
-Social practice -social practice

6 CONCLUSIONS

There is a strong contextual aspect in the way we live in places. Here, by context we mean a description (often implicit) of a place that includes at least what are considered the relevant elements in it. Typically, in discussing a place where we are, the context is what surrounds us and can be perceived; ideally, the set of entities that we see and (actually or only potentially) relate with. Thus, a context provided by an place is

an information entity that contains: a (typically partial) description of the place, what there is in it and how the place is evolving (e.g. things moving, leaving or arriving, agents acting and transforming them etc.) and possibly the potential interactions between us and what is in the place. A ground context, as opposed to a generic context, is a context that refers to one or more actual/existing entities. A context has to furnish the link between the ontological classification of what we use for understanding places and the actual place that we are experiencing. For this reason, the context has to include physical elements (e.g. location) with material components (e.g. enclosed spaces, object distribution); agentive figures (e.g. habitants, organisations, social roles) with the relationships across them and objects (e.g. generic dependences and actual goal or habits). We intended to start from the higher levels of abstraction, so we started our analysis from the social level. Here we have reported the very first achievement of a long and complex path of an ontological analysis that could be useful to share the complex knowledge that forms the city.

BIBLIOGRAPHIC REFERENCES

Freksa C., Nebel B., Hegarty M. and Barkowsky T. (eds), (2014), Spatial cognition IX, Heidelberg, Springer.

Rapoport A. (1977), Human aspects of urban form: Towards a man-environment approach to urban form and design, Oxford, Pergamon.

Orr D.W. (1992), Ecological literacy: Education and the transition to a postmodern world, New York, SUNY Press.

Gruber T.R. (1993), A translation approach to portable ontology specifications, Knowledge Acquisition, 5, 2, pp. 199-220.

McConnell N.C., Boyce K.E., Shields J., Galea E.R., Day R.C. and Hulse L.M. (2010), The UK 9/11 evacuation study: Analysis of survivors' recognition and response phase in WTC1, Fire Safety Journal, 45, 1, pp. 21-34.

Formato E., Russo M. (2014), Re-use/re-cycle territories, TeMA INPUT 2014 Print ISSN 1970¬9889, e-ISSN 1970-9870

Gregotti V. (2004), L'architettura del realismo critico, Laterza, Roma

Ingallina P., (2007), L'attractivité des territoires: regards croisés, Ministère de l'Ecologie, de l'Energie, du Développement Durable et de l'Aménagement du Territoire Ministère du Logement Direction Générale de l'Aménagement, du Logement et de la Nature PUCA -Plan Urbanisme Construction Architecture

Khakee, A., Barbanente, A., Camarda, D., Puglisi, M. (2002). With or without? Comparative study of preparing participatory scenarios using computer-aided and traditional brainstorming. Journal of Future Research, 6, 45-64.

Heft, H. (2013). Environment, cognition, and culture: Reconsidering the cognitive map. Journal of Environmental Psychology, 33(0), 14-25.

Borri, D., Scandale, L. (2005). Aspetti cognitivi e organizzativi di campagne politiche come strumenti di visioning e pianificazione strategica. Evidenze dal caso dei 'Forum per Bari'. In A. Bruzzo & S. Occelli (Eds.), Le Relazioni tra Conoscenza e Innovazione nello Sviluppo dei Territori (pp.100-121). Milano: Franco Angeli.

ID 1637 | TERRITORIAL OPPORTUNITIES FOR URBAN REQUALIFCATION PRACTICES

Annamaria Bagaini[1], Clara Musacchio[1], Francesca Perrone[1]
[1]La Sapienza Università di Roma - Dipartimento di Pianificazione Design Tecnologia dell´Architettura
clara.musacchio@uniroma1.it

1 THE TERRITORIAL PERSPECTIVE AS A PLANNING AND ANALYSIS MATRIX

The urbanization processes of the last thirty years show a profoundly changed urban framework related to the functional and formal orders of the previous periods.