

# Governing the Unknown

## Adaptive Spatial Planning in the age of uncertainty

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### Preparedness for Uncertain Times

#### Considerations on Urban Planning and Design from Italy in the Age of COVID-19 Pandemic

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#### Track 7. COVID-19 and territorial governance

##### Abstract

Starting from the ongoing effects of COVID-19 in Italy, this contribution explores the possibilities of urban planning and design beyond any predictable risk, in other words, in conditions of radical uncertainty.

The proposed reflections draw from the ongoing work of Planning Post-COVID, a group of scholars and young researchers –including the two authors of this paper– from the Politecnico di Milano.

For the group (Armondi *et al.*, 2020), the pandemic calls for an update of the discussion on planning in conditions of uncertainty. Indeed, if today neither conventional nor strategic forms of planning are effective, if it is not possible to plan solutions in front of *unknown unknowns*, we still need to build response capacities. Therefore, in a logic of appreciative inquiry, valorising latent resources (Hirschman, 1958) and negative capability (Lanzara, 1993), the group bonds the concepts of responsiveness and adaptation with the one of preparedness (Lakoff, 2017; Keck, 2020; Balducci, 2020). Preparedness allows grasping uncertain future events, bringing them into a space of present intervention.

Starting from literature review, desk analysis, and interviews, this paper aims to test these theoretical concepts by emplacing them in the Italian case, one of the areas first hit by the pandemic in Europe. Italy indeed is a multifaceted case study to explore the relationship between preparedness, pandemic new scales, planning ideas, design explorations, and uncertainty. On the one hand, the pandemic has revealed severe weaknesses of some of the wealthiest Italian regions and cities. On the other hand, many territories have fostered fast and creative responses to uncertain scenarios. This is the case of bigger cities, such as Milano and Bologna, that have become a pandemic/post-pandemic urban planning and design model. Still, it is the case of other areas, that proposed alternative ways of inhabiting and designing territories for futures based on proximity and solidarity.

##### Keywords

Preparedness; Urban planning and design; Uncertainty; Italy.

## 1. Introduction

The COVID-19 pandemic is challenging urbanism, and it would probably continue to do so even after the emergency phase that we are currently experiencing at a global scale. However, it is not only COVID-19 that is challenging urbanism, but all the ‘unprecedented’ critical events have been occurring at an ever-increasing rate for several decades – i.e. from the devastating manifestations of climate change to increasing social erosion, from terrorist attacks to economic crises. These events often impact at a global scale, overlapping, associating, and boosting one another, thus defining our time as an era of uncertainty, where the probabilistic risk assessment is no longer enough.

Starting from these considerations, since the months of the first Italian lockdown, a group of professors and young researchers<sup>1</sup> from the Department of Architecture and Urban Studies of the Politecnico di Milano –to which the authors of this paper also belong– has been engaged in sensemaking in the pandemic.

This choral reflection starts from the assumption that the pandemic, perhaps more clearly than other unprecedented crises, highlights the limits of conventional and strategic forms of urban planning and suggests a shift in focus from planning solutions based on assessing risks –which are increasingly unpredictable– to building response capacities that construct a state of fundamental preparedness.

In this contribution, we seek to combine the considerations emerging from this working group with some theoretical references from the literature on planning and uncertainty, articulating the reflections through cases we observe in our two PhD research – dealing respectively with migration and public space.

### *The pandemic as an unknown unknown*

That between urban planning and uncertainty is a relationship studied since the 1960s – we recall Hirschman, Schön, Lindblom, Rittel and Webber, Christensen, Crosta, Donolo, Fareri and Abbot among other authors. However, if urban planning has progressively changed during these almost sixty years, the type of uncertainty we face is no longer the same.

To understand what kind of uncertainty we are increasingly dealing with today, let us consider the *Knowns and Unknowns framework*. It is a set of categories rooted in ancient Greece –with the Socratic “I know that I know nothing”–, developed by Islamic culture –with the work of the poet Ibn-i Yamin–, and recently brought back to the centre of attention by a famous speech in 2002 by Donald Rumsfeld, former US Secretary of Defence.

According to this framework, depending on the nature of the problems, it is possible to outline a different kind of planning (Balducci, 2020). The *known knowns* are the things we know that we know, they move within a condition of certainty, and are associated with the field of action of conventional forms of planning. The *known unknowns*, that is to say, the things we know we do not know, dwell instead on a condition of quantifiable uncertainty, in which it makes sense to assess and try to manage risks, as they are predictable risks. This one can be considered the field of strategic planning, which since Lindblom, Christensen, Bryson and Roering, and Albrechts have progressively influenced the practices of urban and territorial planning. The *unknown unknowns*, the things we do not know we do not know, unfold in the realm of radical uncertainty, where foreseeing is a fruitless exercise because events are unpredictable and unprecedented –like COVID-19–, thus challenging the categories of urban planning. In this latter case, Balducci (2020) suggests renouncing to plan a solution according to conventional or strategic forms of planning, working instead on building reaction capacities – in particular, responding, adapting, and above

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<sup>1</sup> The working group is composed of S.Armondi, S.Balducci, M.Bovo, P.Bozzuto, M.Bricocoli, A.Bruzzese, D.Chiffi, A.Coppola, F.Curci, V.Fedeli, B.Galimberti, A.Kërçuku, F.Infussi, E.Morello, A.Moro, C.Pacchi, G.Pasqui, A.Petrillo.

all preparing, building scenarios, and activating existing, latent, and new capacities to be networked. Therefore, radical uncertainty is a matter of fact, a ground for another type of urban planning.

## 2. A type of planning which 'stay with' uncertainty

To situate this form of planning, which is neither conventional nor strategic and able of stay with and succeeding in radical uncertainty, we briefly review some of the most crucial concepts that have marked the literature on planning and uncertainty – drawing on urban and organisational studies.

Planning problems –like the challenges posed by COVID-19– are generally wicked (Rittel and Webber, 1973), without a fixed formulation and impossible to classify. They are usually exceptional and complex problems, which become even more so in a framework of radical uncertainty. Tackling this complexity from a problem-solving perspective can be numbing. In this respect, Hirschman's (1971) possibilism approaches the question differently. Hirschman makes a shift from the –predictive– probability to the real –or perceived as such– possibilities present in the context on which the wicked problem insists. Working not on what is probable but on what is possible means planning by starting from what is already present, following an approach that later would have been called appreciative inquiry. It is not about reformulating the present without introducing new variables, but about planning by enhancing what is already working well, networking and sustaining virtuous realities, and enhancing a territory's *latent resources* (1958).

Resonating with this approach, Lanzara (1993) observed the first days of action following the 1980 Irpinia earthquake, a tragic event in Southern Italy that brought a protracted state of uncertainty and which Lanzara defines as “a social laboratory in which unplanned experiments and actions were conducted and where, even in a situation of [...] despair, new modes of action emerged, often in an improvised way” (p.9, our translation). For instance, “while aid and relief supplies passing through government channels were subjected to countless formal checks [...] before they could finally be distributed to the population, a group of students from a nearby university managed in a few hours to build and operate a logistical system to collect and distribute first relief supplies [...]. The system bypassed official channels and controls and made it possible to carry out relief and assistance operations limited in capacity, but useful and effective [...]. A crucial asset to their ability to operate effectively was their 'local' knowledge of the region” (p.10, our translation). Lanzara argues that “the creative capacity of these actors does not consist in the invention of a new activity, but in the discovery that the same activity, although banal, could be performed in different contexts [...] enriching itself with new meanings” (p.12, our translation). An ability that, paraphrasing the poet John Keats, Lanzara calls *negative capability*, that is the ability to stay with uncertainty, without quickly looking for meaning, but accepting one's vulnerability and making it a lever for action. It is an action that “arises from emptiness, from the loss of sense and order, but that is oriented to the activation of contexts and the generation of possible worlds” (pp.12-13, our translation). *Latent resources* and *negative capability* are two concepts that refer to the fourth category of the *Knowns and Unknowns framework: the unknown knowns*. This category refers to what we do not know we know, but which, if brought to light, can contribute to the building of capabilities useful to plan under conditions of radical uncertainty.

These observations allow looking at the resilience framework from another perspective, emphasising the importance of capabilities such as *adaptation* and *responsiveness* and suggesting adding a further aspect, concerning the ability to stay with uncertainty in the way Lanzara suggests. Our working group identifies this third element as *preparedness*, the ability to be prepared. However, before focusing on *preparedness*, let us briefly touch on the concepts of *adaptation* and *responsiveness*. These are two aspects of what is usually called ecological or ecosystem resilience (Holling, 1996) –what Chandler and Coaffee (2017) call “autopoietic resilience”, that is the one responding to a shock not by mechanically restoring the previous state, but rather by changing, weaving new connections, adapting. Adger (2003) argues that ecosystem

resilience focuses on the ability to persist and adapt, for Folke et al. (2010) *adaptation* is the ability of socio-ecological systems to learn, combine experience and knowledge, and adapt responses. Persisting and adapting become more efficient if one is ready to respond. The concept of *responsiveness* is mostly associated with new technologies –from the Internet of Things to machine-learning–, but its meaning is more comprehensive, including digital and analogue responsiveness.

Starting from these two concepts and within a framework of radical uncertainty, let us introduce a third approach: *preparedness*.

The medical sociologist Lakoff argues that one always prepares for the wrong emergency (2017, p.161) and that therefore, once the focus is no more on the nature of the single emergency, there remains a focus on flexible preparedness. This broad preparedness copes with the unexpected “by working on scenario building, protecting critical communication infrastructure, setting aside stocks of supplies and devices, putting in place immediately actionable warning systems, designing coordination systems between different actors and periodically checking their functioning” (Armondi et al., 2020, our translation). Thus, in terms of spatial planning, we are talking about a typology of planning that is: *redundant*, where stocks are prepared; *ethical*, ready to share those stocks, which can be material supplies or capabilities; *alert and aware*, able to imagine new types of scenario planning; adaptive and *responsive/proactive*; *decentralised and fractal*, where communications are agile and where the tilt of one part does not cause the tilt of the entire system, but rather the rest of the system can function and simultaneously take care of the part that is out of order. The observations by the anthropologist Keck complement the ones on preparedness. Indeed, during his long observations in the Far East areas affected by SARS, Keck identified as crucial the presence of *sentinels* that detect a crisis’s arrival before others do. In the SARS case, sentinels were wild birds that were the first to give signs of the new virus. In the case of spatial planning, it is a question of *sentinel-territories*, that are places that are particularly vulnerable or exposed to significant stress factors and that may be the first to show symptoms of a new crisis.

### 3. Concepts at work

We have seen how the pandemic represents a condition of radical uncertainty and has challenged some urban planning approaches and policies. On the one hand, the recent events claim to rethink and go back to a set of concepts that planning theory uses to address unpredictable changes; on the other hand, these concepts may be used to read and interpret the various initiatives that emerged in the last months in response to the pandemic. In this section, drawing on some of the mentioned concepts, we will put them at work through an overview of some initiatives from March 2020. To this aim, we will simplify the changes brought by the pandemic outbreak by unpacking them into “phases,” this analytic and narrative gimmick will be framed at the section’s end. However, as a premise, there is a need to assume a long-term perspective and contextualise (Pasqui, 2007) the recent COVID-19 pandemic into a broader framework. Many have described the pandemic as a unique and unprecedented event; however, there is continuity in discontinuity. Recently, indeed, we have been witnessing a series of unpredictable events that have been defined as unique and unprecedented. In this sense, a reflection on urban planning and policies towards uncertainty appears urgent, especially in the cases of *unknown unknowns*.

The unpredictability of the COVID-19 has prevented the possibility of planning any solutions or alternative answers before its actual outbreak. Instead, it has been crucial to rely on existing infrastructures and ordinary resources, steady and already available before the crisis’s beginning. In an interview with the Bocconi University, Cosimo Palazzo, Director of the Area Rights Inclusion and

Projects of the Municipality of Milan<sup>2</sup>, states that during the lockdown, the coordination skills and the networks put in place long before the crisis turned out essential, beyond the implementation of specific emergency measures. In the historic centre of Palermo, in Southern Italy, in the first lockdown, the crisis has been more social than sanitary; here, the third sector has played a crucial role in interpreting the new needs and in providing immediate answers, and this was possible thanks to already existing networks among associations and the steady and rooted relationships with the territory and its inhabitants. In this sense, the notion of preparedness gains relevance: in the face of the increasing unpredictability of the current socio-political, economic and environmental instabilities, cities and territories must be more and more prepared by strengthening a response capacity, rather than planning specific solutions (to unpredictable changes). In ordinary times, “getting prepared to be ready” (Armondi et al., 2020) means to work on existing essential infrastructures –as territorial health services–, on the plan of coordination systems between different actors –starting from the awareness of the different “social intelligence” on the field–, on existing networks and the construction of different scenarios.

Any unpredictable event starts with a shock that often seems paralysing and that questions the role of planning. In an interview<sup>3</sup>, a Municipal Council Member, taking part in Palermo’s Planning Committee, argues that “we plan the future and govern the present.” Indeed, at the exact moment of the pandemic outbreak, we witnessed a drastic reduction of the planning room for manoeuvre; this was related to the uncertain character of future developments and the impossibility of planning current events. In many fields –from everyday lives to public initiatives–, action prevailed on planning. In the storm’s eye, the traditional process where planning precedes, and shapes action has been reversed. Instead, we have witnessed many spontaneous initiatives that have set the premises for planning activities. In this sense, it is worth observing how different actors *acted*, from the most institutional ones to individuals. The Mobility and Planning Department of some Italian Municipalities, within the first months after March 2020, have implemented alternative mobility plans, known as *Bikeplans*. Although they have provided these plans to respond to the emergency introduced by the COVID-19 outbreak, they have not been developed from scratch but have been accelerating existing programmes<sup>4</sup>. This example shows that within a public administration, which often cannot provide rapid solutions, it has proved crucial to start from what was already there, making the best use of it. In this perspective, we recall organisational studies and the episode written by Weick (1995). He tells how a *Pyrenees* map had helped a group of soldiers to find their way home in a snowstorm in the *Alps* during WW1. Quoting Weick, “when you are lost, any old map will do. For example, extended to the issue of strategy, maybe when you are confused, any old strategic plan will do. Strategic plans are a lot like maps. They animate and orient people.” (pp. 54-55). During the first months after the pandemic outbreak, several social actors, third sector, associations, and volunteer networks have effectively reacted to the new challenges, often thanks to a degree of agility – often more significant than that of public actors proved crucial in answer to unpredictable events. Not by chance, the Municipality of Milan asked the NGO Emergency to set up the structures and management models of the social and sanitary service spaces. Similarly, in Palermo’s historic centre, third sector associations have been the first to open helpdesk spaces and offered immediate support to process public aids procedures, otherwise highly inaccessible. These examples give an insight into certain actors’ ability to define new coordinates and meaning to services and spaces, that in the crisis have lost their conventional ones. In other words, these experiences show these actors’ *negative capability*, intended as a great resource of collective learning, legitimization, and effectiveness. In the exact moment of shock,

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<sup>2</sup> Interview held on April, 15th 2020, accessible at this link <http://www.cergas.unibocconi.eu/wps/wcm/connect/cdr/cergas/home/observatories/covid+observatory/sharing+management>

<sup>3</sup> The interview has been conducted by M. Bovo, within her ongoing PhD research, on July, the 30th 2020.

<sup>4</sup> As told in this short article, accessible at this link [https://www.chiara.eco/il-piano-per-la-pedonalita-emergenziale-partire-dallemergenza-per-rispondere-a-bisogni-reali-e-diffusi/?fbclid=IwAR2ht0rI0t\\_trQhxs5LHP1oVzteBZeUjVjyLzSxUdJ\\_19Q3Rf-YqyUqGAZk](https://www.chiara.eco/il-piano-per-la-pedonalita-emergenziale-partire-dallemergenza-per-rispondere-a-bisogni-reali-e-diffusi/?fbclid=IwAR2ht0rI0t_trQhxs5LHP1oVzteBZeUjVjyLzSxUdJ_19Q3Rf-YqyUqGAZk)

single individuals have also performed unexpected uses of the territory, out of plans, revealing its weaknesses and strengths. These uses became visible in domestic interiors and job places, in the residential buildings' collective spaces, assuming new layouts for the new needs emerged in the lockdown. Also, public spaces have witnessed "light uses," as in the *Emergency tales* perfumed for children in the Milanese periphery by the group Brigata Brighella, one of the volunteer groups born spontaneously during the lockdown<sup>5</sup>. Similarly, public spaces have also witnessed temporary and more transformative actions, as in the case of #stodistante (eng. I keep the distance), a removable grid painted by the small architecture firm Caret on the pavement of Giotto square, in the town of Viticchio, near Florence: here a chessboard outlines the physical distancing and becomes a playful experience<sup>6</sup>.

The COVID-19 pandemic has also implied reflecting on how to deal with the crisis's end and adjust the course. In this phase, planning gains back some ground and needs to take an exact position on what has happened during the crisis. The COVID-19 pandemic in some cases has caused an interruption of existing dynamics, in others, it has accelerated ongoing phenomena, and in others, it has allowed the emergence of new scenarios. In Milan, Mayor Beppe Sala has decided to extend beyond the initial deadline of October 2020 the permission to commercial spaces to occupy outdoor public spaces<sup>7</sup>. During the first lockdown in Paris, the existing program *Paris Respire* has been integrated with a further 50 km of temporary bike paths, the so-called *corona pistes*. Major Anne Hidalgo<sup>8</sup> confirmed that the paths would become permanent and constitute the main structure of the new program *La Ville du quart d'heure*. These experiences show how, in the crisis' exit phase, urban planning shall exploit the changes, recognizing its unexpected results and integrating them within the chosen course. Here, it serves well the notion of *appreciative inquiry*, that describes the Hirschmanian approach to address, *ex-post*, uncertainties, and changes in development projects.

Going through the COVID-19 pandemic's evolution until today allows us to put at work some urban planning theory notions. As mentioned earlier in this section, we simplified the crisis's development into some main phases; however, we know that this analytic tool needs to be contextualized within a complex and less linear framework.

#### 4. Conclusive remarks

The crisis introduced by the COVID-19 pandemic, the exchange within the DASTU Department, and the fields explored within our researches have triggered the reflection proposed in this contribution on how unpredictable changes and radical uncertainty challenge some planning approaches. From our perspective of young academics and with an open and curious attitude, we chose to retrace some theoretical concepts addressing these issues, trying to put at work them within the territorial context we have been studying and living in.

With this aim, the paper selects some fundamental notions used in the past and present planning theory to address the relationship between planning and uncertainty, and it links them to the different steps of the pandemic evolution and the related planning challenges. According to Balducci (2020), depending on

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<sup>5</sup> See the article "Ogni settimana, nel teatro-cortile, va in scena la Brigata Brighella" (25.06.2020) accessible at this link <https://www.milanosud.it/ogni-settimana-nel-teatro-cortile-va-in-scena-la-brigata-brighella/>

<sup>6</sup> See the article "Stodistante. Una installazione temporanea a Vicchio dei Caret Studio" by A. Benelli (12.05.2020) accessible at this link <https://www.area-arch.it/stodistante-una-installazione-temporanea-a-vicchio-dei-caret-studio/>.

<sup>7</sup> As reported in this Facebook post, published on September, the 24th 2020; accessible at this link <https://www.facebook.com/beppesalasindaco/>.

<sup>8</sup> The project is described in "Welcome to the 15-minute city" by S. Whittle (16.07.2020) on The Financial Times accessible at this link <https://www.ft.com/content/c1a53744-90d5-4560-9e3f-17ce06aba69a>.

the problem's nature, we shall consider different forms of planning; however, drawing on the closer observation of the COVID-19 pandemic as an *unknown unknown*, we would argue that even within a single change, we shall assume different planning approaches. In other words, in the face of a variety of challenges related to radical uncertainty, planning should be able to adopt a variety of approaches. In ordinary times, before an unpredictable event, it is crucial to “be prepared to be ready,” working on our *preparedness* and strengthening our response capacity. In the moment of the shock, the room for manoeuvre of planning gets smaller, whereas the agency and unplanned actions gain relevance and open unexpected routes; at this moment, we need to recognise the *agency's negative capability* of any actor organizational moves and unexpected results. Finally, in the way out of the crisis, planning undertakes back a central role and needs to adjust its course; in so doing, planners shall assume a possibilist approach, making the best out of the crisis.

Even if simplified, this narration shows how within radical uncertainty, planning cannot work on a single capacity, but it must implement a set of plural capacities. Hence, none of the mentioned theoretical concepts shall prevail over the others. Instead, all of them display necessary capacities in different moments and ways. In this perspective, we argue that the complexity underpinning radical uncertainty calls for a complex answer, made of a plurality of capacities and approaches, that as a whole may support a plural social intelligence, increasingly relevant in planning today.

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