

URBAN PLAN, SMART CITY AND EMERGENCIES: THE DIFFICULT RELATIONSHIP. THE CASE STUDY OF L'AQUILA

Fabio Andreassi, Cinzia Barbara Bellone

Marconi University - Rome

Rome, Italy

fabio@proteoassociati.it; c.bellone@unimarconi.it

ABSTRACT

The article examines the recent transformations of the spatial and functional organization of L'Aquila.

The relationship between the Urban Plan and the technological innovation of ICT is analyzed when urban transformations also undergo frequent settlement, institutional, and social crises.

They are examined:

- the preliminary document for the new Urban Plan which intends to overcome the Plan still in force since 1975;
- the results of the reconstruction after the 2009 earthquake;
- the smart projects announced by the Municipality.

But during the years 2009-2021, there have been changes in municipal administration and health crises that have complicated the management of the city. The result is a public activity of the government of urban transformations that is fragmented and shortsighted because it follows the daily needs and emergencies. The spatial and functional organization of the city is not improving despite the important public funding that has been allocated for the reconstruction and the digital innovations.

KEYWORDS: Urban plan, smart city, L'Aquila, fibre optic

THE PRELIMINARY DOCUMENT FOR THE NEW URBAN PLAN

In 2013 the City Council of L'Aquila began the preparatory activities for the New Urban Plan (DGC, 2013). Two years later it approved the Preliminary Document and initiated the phase of the public debate (DGC, 2015). Subsequently, the Plan Office started the first draft of the New Urban Plan taking into account the analysis carried out in the preliminary stage and the outcomes of the consultations with the *Consigli Territoriali di Partecipazione* (Territorial Councils of Participation), with the separate Administrations of the rights of common and with the Environmental authorities, the latter having been consulted in the first phase of the

analysis of the Strategic Environmental Evaluation. It is worth noting that words such as “discussion” and not “participation” have been used. Unfortunately, it should be considered that, on the basis of the definition of the analytical framework of knowledge, the aim has been to exclude the local society from its wide-ranging expert and common knowledge. The City Council has intended the Plan as a nostalgic end procedural outcome which is juridically and factually verified at the end of the drafting process, on the occasion of the observations done during the time occurring between the adoption and the approval.

The analytical data gathered in the Preliminary Document, as well as the integrated reading of the state of the territory and of the population, led to the first drafting of the Plan. In 2017, a few months before the elections for the City Council, the assembly took account of the progress of the formative procedure, the proposal of the New Urban Plan as in the first draft, it initiated the participative phase, but did not adopt the Plan (DCC, 2017). In fact, the New Urban Plan is associated with the political part which draws it up, therefore at each change of local government, the drafting process is started again. In 2007, soon after the victory of the centre-left coalition, the variation of the New Urban Plan by the previous Centre-right Government and drawn up by Francesco Karrer, was set aside. From 2009, the year in which the earthquake hit the city, to 2017 the reconstruction has been governed by a centre-left coalition with the mayor belonging to the Democratic Party. After ten years of centre-left government, the 2017 elections saw the power alternating with the victory of a centre-right coalition led by a mayor belonging to the party *Fratelli d'Italia* (Brothers of Italy). With the change in government the drafting process of the New Urban Plan, which started in 2013 and after a standstill period, was resumed in 2019, but then it came to a stand again in 2020, also because of Covid19 and the forthcoming municipal elections. In the meantime, the reconstruction was obviously following its course.

THE RECONSTRUCTION AFTER THE 2009 EARTHQUAKE

The awareness of the risks deriving from a reconstruction based mainly on the administrative-authorizing and building site aspects has not emerged in a widespread way between the public actors. Indeed, the first ones were aimed at keeping under control the legal matters and the second ones were mainly aimed at increasing the performance of the building (Andreassi, 2018). In fact, one finds:

- the absence of the developing models and of the subsequent Plans which qualify the substantial public financing;
- the absence of territorial Plans within the seismic crater capable of integrating resources, objectives and municipal opportunities;
- the limited presence of the topic of the public city in the reconstruction (the debate on the public city is reduced to sub-services and urban furnishings);
- the absence, in the public debate and in the municipal official guidelines, of the need to demolish emergency public and private buildings, falsely declared temporary;
- the limited awareness of the need to reduce the gap between supply and demand to limit the loss of property values;
- and finally, the absence of a long-term approach is replaced by easier presentism. All of the above make real the risk of re-building edifices which are destined to remain empty, with serious financial damage because of the reduced or no-existent real demand of use.

Public presentism arises from the myopic activities of those involved who only respond to the immediate needs without a long-term vision and it is translated, in physical facts, in the densification of the residual open spaces with buildings, misleadingly declared temporary, which reduces the possibility of subsequent redevelopments (Andreassi, 2016). The following projects have been carried out:

- **4.448 public housing with 15.205 sleeping accommodations distributed in the 19 settlements of the CASE (Eco-compatible Sustainable Anti-seismic Complexes) project,**
- **1.270 single or terraced wooden MAP (Temporary Housing Modules) houses,**
- **33 MUSP (Temporary Modules for School Use) prefabricated schools,**
- **a road in an archeologic area,**
- **20 roundabouts,**
- **12 concert halls / multifunctional rooms,**
- **about 3.000 private detached houses authorised by a specific resolution of the City Council.**

Many public buildings have been prosaically built where there was an empty space, without the necessary consistency checks with the number of Plans endowed to the Municipal Administration since 2009, the year of the earthquake, and without the accessibility checks. As an example, one could quote the Auditorium in the Park surrounding the Castle, the Sports Arena in Centi Colella, the Palangeli, the Music High School, the MUSP school in Gignano, and the CASE project in Camarda.

Social partners come into this framework with a proactive action stimulated by the Municipal Administration.

Amongst the private actors directly involved in the reconstruction, in their representative forms (professional associations, professional bodies and unions) as well, one has to highlight the role that Ance L'Aquila assumed. Complexifying its sphere of action, traditionally focused on its members' activities, the builders' association emphasised the risks deriving from the public will of reconstructing the city and the seismic crater without a specifically drawn up territorial Plan.

Over the years the provincial section of Ance has addressed the issue of the Plan in various documents, both through specific and general topics, focusing on the needs and the proposals for coherent management of the urban and territorial transformations which can aid economic recovery and development in line with the European Agenda for the Environment (Ance, 2013), (Ance 2015b).

The main relevant elements are:

- **the need for effective operational tools with administrative procedures and certain timelines in order to respond to the demands of a recovering market which is rapidly changing its own values of investment opportunities;**
- **the requirement of clear choosing instruments and priorities with which one creates the business plan;**
- **the possibility of structuring ways of loyal collaboration, recognising roles and rules, with the institutional bodies to promote a general vision of development and the pursuit of the choices made.**

- Whereas Ance initially cares about themes of general interest, amongst the few initiatives which attempt to complexify the reconstruction, extrapolating from the mere administrative, accounting and building aspects, the one supported by the social partners in 2012 is to be remembered.

In fact, the workers' unions (CGIL, CISL e UIL) and *Confindustria* (General Confederation of Italian Industry) engaged the Department for Development and the Economic Cohesion of the Ministry of Economic Development, the European Commission Directorate-General for Regional Policy, the OECD and the University of Groningen. The study organised by Calafati by the title *Abruzzo 2030 sulle ali dell'Aquila* (Abruzzo 2030 on the wings of L'Aquila) raises the question of the relaunch of development of the city after the emergency earthquake period, within a medium and long-term strategic plan. The research indicates the smart city model towards which to direct the reconstruction and concentrates on the development hypothesis based on the transformation of L'Aquila into a university city that increases the number of non-resident students from 2,000 to 20,000 by 2020, with the objective of stabilising the demography and the employment in the local economic system, but also of increasing social cohesion. This work also hasn't left significant traces in the reconstruction. In December 2008 the University of L'Aquila had nearly 29,000 enrolled students, in 2018 just slightly more than 15,000. The decreased overall attractiveness, except for a few fields of study, can be represented by the field of study more involved in the reconstruction: despite the relevant ongoing building activity in the city, the degree course in Building Engineering Architecture was chosen by just 29 enrolled students in 2017 compared to the 147 places granted by the Ministry of Education. In 2018 the number of enrolled students was even less: 14. At the moment the trend is on the rise.

THE SMART CITY

In 2020 the City Council submitted a project for a smart city which takes into account the geographical context and is developed in seven areas:

Table 1 L'Aquila: the smart city

Area	Objective
Buildings	Reduction of energy consumption
Economics and People	New start-ups, business incubators, Living Lab, ICT diffusion
Energy	Reduction of Energy Consumption for public lightning
Environment	Reduction of water waste, improvement of differentiated waste collection, monitoring of air pollution
Administration	New open data
Urban liveability	Improvement of digital public services
Mobility and Transport	City Logistics, to be considered as the process capable of optimizing last-mile logistics and the transport activities of

	goods in the urban areas; improving of people’s mobility with new environment-friendly and sustainable systems.
--	---

These statements are not yet enforceable.

Until now the Smart City theme has mainly regarded the building activities carried out by some public actors, whereas an integrated approach to the city services are still missing on the part of the public actors regarding, for instance, the health, the education, the safety, the mobility and the work sectors (Andreassi, Bellone, Naselli, 2021).

The laying of ducts for the 5G connection is currently underway (but it is not reaching the industrial sites) and the insertion in the underground of the city centre (but not in the hamlets) of a large accessible tunnel where some sub-services are going to be located. It is a work which postpones the management and uses agreement between the service providers to when the work will be finished. Consequently, there are no binding commitments between the actors on data sharing and the realisation of public utility projects. Investments have been made in the implementation of high and expensive technology, but without establishing cooperative relations between the parties concerned in advance and in a stable manner. One has not even thought about making the provision of a home fibre optic network compulsory.

CONCLUSIONS

The reconstruction has so far proposed and pursued a model which is centred on an unaltered state, also to guarantee less litigation between the involved actors. In fact, it has been preferred to concentrate on building aspects and low contentiousness of the reconstruction for fear of legal issues, rather than seizing the opportunity of the widespread replacement constructions and of the substantial public funding to improve the layout of the city and its functionality.

After ten years of reconstruction focused on the management of the building processes and not on the urban planning ones, the chances of regenerating various parts of the city by taking advantage of the public funding are more and more limited. Despite that, there will still be the chance of renovating the public city, as long as the building and urban renovating procedures are encouraged and managed with the aim of reconfiguring the existing building heritage and thematising the open spaces.

The New Urban Plan, with its long proceedings, is an instrument which is slow in its approval, complex in its drafting and ineffective as far as the reconstruction is concerned. The model proposed by the New Urban Plan, historically outdated, can be complexified so that it can more effectively respond to the objectives and the requirements of the communities: it is necessary to introduce procedures capable of improving the effectiveness of the implementation of the settlement structures and of the subsequent projects proposed by the public and private actors. In this way one overcomes the generally inflexible projections, sufficiently valid in case of long-term settlement growth, but which do not respond to the problems and needs of the post-seismic, economic and social feasibility which are on the contrary short-term and are characterised by a housing supply which is double compared to the demand.

The themes of the Smart City, even if intricated in their declaration, have not succeeded in improving the spatial and functional organisation of the city yet and do not have a pivotal role in the Preliminary Document of the New Urban Plan. This is perhaps a missed opportunity.

ACKNOWLEDGEMENTS

This article announces the partial results of the research carried research on the relationship between urban history, smart cities, and optical fibre. PhD in Physical Sciences and Industrial and Energy Innovation Engineering, XXXIV Cycle, coordinator prof. Pierluigi Carci, supervisor prof. Cinzia Bellone, PhD student Fabio Andreassi, University of Guglielmo Marconi.

REFERENCES

Ance. 2013. Hearing on the fact-finding survey on the green economy at the Commissions VIII and X Chamber of Deputies, Rome, 2013 November 22.

Ance. 2015a. Hearing on the DDL 1836/S: proposals to encourage the reconversion and redevelopment of abandoned industrial areas, Rome, 2015 July 22.

Ance. 2015b. Hearing on proposals for the formation of the annual and multi-annual budget of the State n. 2111/S, at the joint Budget Commissions of the Senate of the Republic and the Chamber of Deputies, Rome, 2015 November 2.

Andreassi F., 2016. Le trasformazioni delle città dopo le calamità naturali: il ruolo della solidarietà pubblica nella iperdotazione insediativa in: "Archivio di Studi Urbani e Regionali", 116, FrancoAngeli, Milan, Doi: 10.3280/ASUR2016-116002, pp 27-48.

Andreassi F., 2018. Il ruolo dei disastri naturali e dell'azione pubblica nella destrutturazione dell'immaginario collettivo della città in "Archivio di Studi Urbani e Regionali", 123, FrancoAngeli, Milan, <https://doi.org/10.3280/ASUR2018-123001>, pp- 5-25

Andreassi F, Bellone C., Naselli F. 2021. Between Crisis and In Settlement Speeding Up: The Case of L'Aquila in "Innovation in "Urban and Regional Planning. INPUT 2021. Lecture Notes in Civil Engineering", D. La Rosa., R. Privitera, Eds, 146, Springer, New York, https://doi.org/10.1007/978-3-030-68824-0_52, pp. 483-489.

Calafati A., 2012. Abruzzo 2030. Sulle ali dell'Aquila, OCSE, Rome.

DCC. 2013. Municipal council resolution, 118, L'Aquila.

DCC. 2017. Municipal council resolution, 38, L'Aquila.

DCG. 2013. Municipal council resolution, 17, L'Aquila.

DGC. 2013. Municipal council resolution, 567, L'Aquila.