Design codes for better integrated urban development
The Urbact II Working Group Hopus - Housing Praxis for Urban Sustainability

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Housing the city: scarce urban quality, scarce sustainability

European cities are haunted by the growth of sprawling suburbs, the progressive fragmentation of urban space, and the subsequent loss of identity of urban centers. In turn, the quest for meaningful places to live drives citizens towards an increased mobility, overburdening infrastructures and consuming resources.

Recognizing the advent of this crisis, in 2007 the Leipzig Charter for Sustainable European Cities called for the use of integrated urban development as the principal instrument to promote quality in urban centers.

Yet what are the problems facing the governance of our cities?

A problem of governance: the poor management of territorial resources

Increasingly, public funding has grown scarce, leading the public / private initiative ratio to become strongly imbalanced, often in a 1:10 or even smaller ratio. The even greater problem is however bound to the fact that, for cultural, economic or political reasons, public authorities have only been able to exercise a timid control over the quality of private enterprises. The entire system is out of balance, with economic forces gaining increasing control over the future development of the city.

A problem of awareness: “the market knows best”

Housing developments make up for most of the new city: thus the average quality of these developments accounts to a good extent for the overall quality of the city. Yet like all markets, even the housing market is strongly influenced by economic forces, which orient the consumer’s preferences, claiming to know better than anyone else what is actually good for them. Paradoxically, it is a very unregulated market, where most aspects can hardly be measured, and advertising often misleads consumers. Why can housing not be considered like any other marketable good, protecting the safety and interests of end-users?
The lack of qualitative guidance

It cannot be said, however, that regulations are not in place: on the contrary, urban development is often overregulated, with multiple overlapping rules concerning public spaces, buildings, construction, street design, traffic, fire prevention, etc. Yet most of the time regulations are not qualitative but quantitative; they don’t tell what one should do, but only what one is not allowed to do. They are rigid, multiplying prescriptions which can in turn hamper variety and flexibility in design. Regulations are the expression of the top-down government approach, as opposed to the middle-up-and-down integrated urban governance approach.

Although these are general considerations, to different extents and with variable nuances they can be considered to be common problems at the European level.

What can design coding do for quality?

In this perspective, design codes offer some more sophisticated possibilities for urban governance. Design codes are specific documents which are “negotiated” in advance between all involved stakeholders: local authorities, developers, citizens’ associations, etc.. As such, they are meant to reduce conflicts, streamlining the process and ensuring the achievement of greater qualitative levels. They are not further regulations, rather specific indications which set a general framework for the developments, outlining basic quality criteria. Their use ranges from the definition of urban space to building aspects, and they are particularly useful in promoting the implementation of energy-saving strategies in urban design and building.

Coding examples

Design coding is a sophisticated tool which has a tradition of successful implementation in England, and has also been promoted at government level. Nevertheless, codes and similar forms of “smart” project guidance have been adopted with various declinations in many European developments.

The Borneo and Sporenburg islands developments in Amsterdam, which is considered one of the most successful recent cases of urban design, have been carried out with the help of a design code, which set out basic guidelines regarding block and building density, height, layout, façade treatment, etc. A site-specific tool to promote unity within variety in large development areas.

The City of Rome produced a Code of practice to be used for 37 small social housing areas around the city. The implementation is still in progress: in this case the tool is not site-specific, and is rather conceived to outline fundamental quality criteria related to urban space, building design, energy performance and environmental sustainability.
Finally, the Sheffield City Council is drafting a **Residential Design Guide**, meant to foster specific attention towards critical issues such as landscape and urban space in the renovation and new construction of residential areas.

**Coding for quality**

The range of applications for design codes and “smart” project guidance is vast and these can easily be adapted to the case-by-case needs of the promoting authorities. From urban design, to building design, to building construction: coding can provide flexible indications on a wide range of topics.

Being non-binding tools, the implementation of design codes need to be implemented through appropriate strategies: **quality labeling**, a system similar to energy labeling, is one of the ways to reward developers who decide to respond to the indications found in a design code. As for domestic appliances and many other consumer products, the end-users will have the possibility of looking into at least some aspects of the dwelling’s quality in advance, eventually raising the general level of awareness.

**Coding for energy**

Coding is extremely efficient in defining urban space and building design; nevertheless, it can engage and guide all aspects of design which eventually influence the buildings’ energy performance. Rather than dealing in the quantitative aspects, it can be used to set out criteria related to massing, layout, shading and the use of specific building elements: it can be therefore considered a perfect complement to existing regulations related to energy performance, such as the national implementations of the 2002/91/EC directive.

**In conclusion**

Design coding is not a simple tool to prepare or use: it requires political will, time, resources, the active engagement of all stakeholders, and the capacity on behalf of the local authorities to use the tool to assess what is being developed. Nevertheless, **integrated urban development** is a complex process itself, and it is likely that it cannot be achieved unless a new generation of tools – such as design coding – starts being adopted on a wider scale.