# Architectural quality and evaluation: a reading in the European framework

Fabiana Forte \*

keywords: architectural quality, evaluation, institutional context

## Abstract

Among the objectives of the conference "Evaluation in the architectural project" we find "the intention of promoting the development of legislative and operational tools capable of improving the architectural quality of works carried out, considering this as an essential component of the physical quality of territories and cities". Such an intention cannot but seek to trace some essential points that characterise architectural quality, which, for some time, has been an object of attention for the European Union and many of its Member States (through laws and/or policies). This is an "open", multidimensional concept, which assumes not only personal and subjective connotations, but also cultural and collective ones (the public interest in architectural quality). As such, it is necessarily the subject of an evaluation process which is already well established in various European countries. Therefore, starting from a European normative framework on the theme of architectural quality, and from some of the more recent state laws, this paper intends to study further the common traits that allow the identification of a number of essential criteria (the "minimum requirements") for the evaluation of quality in the architectural project.

#### 1. ARCHITECTURAL QUALITY: AN OPEN INTERPRETATION

Dealing with the theme of architectural quality is not easy, since it is a complex subject "both in its general meaning and as a way of designing, producing and controlling it" (Capasso, 2006). It should also be noted that many and numerous possible approaches have been proposed on the topic, both in Italy and abroad. In a more specifically estimative context, the evaluation of the quality of the architectural project has been dealt with on various occasions in different articles published in the Rivista SIEV, Valori e Valutazioni (Journal of SIEV - Theories and Experiences).

Long the subject of theoretical debate, since Leonardo's Vitruvian ratio, the concept of architectural quality is connected to a set of values, and is therefore "multidimensional"; in the same way, it is a concept which embraces *intrinsic* qualities concerning the architectural object itself (technical, physical, functional, etc.) and extrinsic qualities (perceptive, symbolic, subjective, etc.), which instead have to do with the location of the object in the overall urban and territorial context. These are the qualities that John Locke called "primary", those based on the objective determination of reality, while, those based on subjective sensory aspects are 'secondary' (Abbagnano, 1971).

Furthermore, since the creation of architectural quality ought to be the ultimate goal of any project, it is clear that this quality cannot be isolated from the historical moment, culture and specific context in which the projected work is to be placed. According to Rönn (2011), that of architectural quality is therefore an "open" adaptable concept, which takes on not only personal and subjective connotations, but also cultural and collective ones (the public interest in architectural quality, as recognised at European level since 1985 with Directive 85/384/EEC).

Insofar as it is connected to *values*, the concept of architectural quality is necessarily the object of an evaluation process, which in many European countries is already substantially established. In Italy, with its exquisitely estimative tradition, the need to investigate architectural quality is not at all new, even if limited to specific themes. Here it is worth mentioning that as early as the 17th century, one of the first writers on the Estimo (science of valuation), Alessandro Capra (1608-1683), had realised that the "*entire price*" of a building, that is, its value, depended on a series of variables (Brusa, 2007):

$$Vf = f(Qs; S; A; C)$$

where:

- *Vf* = value of the building;
- Qs = quality of the site (which depends both on its location and factors of amenity and air healthiness);
- *S* = substance and quality of the materials (i.e. the quality and quantity of the materials used in the construction);
- A = artifice of the fabricated (that is, the constructive ability employed in the building);
- C = ease of living (i.e. the internal distribution and comfort of the inhabitants).

In 1947, with the article "Valore economico della bellezza" ("Economic value of beauty"), Pietro Porcinai began his collaboration with the Rivista di Estimo Agrario e Genio Rurale, maintaining and demonstrating, among other things, that... "beauty, in constructive art, has a concrete, even venal value" (Porcinai, 1947).

Giuseppe Lo Bianco, in 1961, in his text *Estimo*, dedicated a whole chapter to the "most likely venal value of buildings of a luxurious nature", i.e. those buildings, characterised by particular merits and "...built for the sole purpose of satisfying a pleasure in civilised men, which serve to provide enjoyment and therefore, in most cases, do not provide an explicit income". By offering a wide range of views from those who had expressed themselves on a topic "much discussed and much opposed", the author brought the solution within normal estimative doctrine, recognising that the problem "does not arise so much from the exceptional characteristics of the asset, but rather from the inadequate personal technical and economic preparation of the surveyor". Salvatore Misseri in an article published in 1973 in Genio Rurale, illustrating a practical process of estimating the value of a tree using "aesthetic requirements" following its being chopped down, took the opportunity to attest to «how tight the procedural mesh of traditional appraisal is and how we struggle to find within it every solution for every type of estimation. Much more plausibly, we need to find new paths ... ».

But it is above all Carlo Forte who already in Elementi di Estimo Urbano (1968) indicated "transformation value" as the economic aspect to be considered in the evaluation of buildings with particular historical, artistic or environmental characteristics and, subsequently, in 1971, in the Economic Plan for the Environmental Renewal of the Historic Centre of Naples, he introduced the category of "intangibles". In his last paper, "Exchange and social-use value of real estate cultural assets" (1977), the author proposed a different measure for the "value" of cultural assets, distinguishing those for which an exchange value can be determined from those which, due to their "cultural quality", subtract themselves from this, to thus arrive at the formula of the "social use value" (Forte, 2018).

Also with reference to the market evaluation of "ordinary" cultural assets, Carlo Forte also provided "a fundamental contribution to the reading of the qualitative characteristics of assets, identifying and classifying those that were intrinsic or extrinsic" (Fattinnanzi, 2009). As Ferruccio Zorzi rightly points out "in Italy, interest in studying how the different characteristics contribute to the formation of value was already significantly present at the start of the '70s in the studies of Carlo Forte; he not only identified the principal characteristics that influence the value of residential real estate, but for each he had analysed the relative contribution (percentage weight) expressed through an interval of oscillation. The later formulation by "points of merit" by Forte introduced the pluri-parimetric approach into Italian estimative practice for the first time" (Zorzi, 2010), where it is precisely the intrinsic positional and technological characteristics that underline the "architectural value" or degree of refinement of a building or single housing unit. Later, the ever-increasing attention paid to individual qualitative-quantitative aspects in forming the real-estate value led to thinking about the "theory of hedonic prices" and the first experimental applications, which today have led to a consolidated theoretical and applicative base. Since then we have witnessed an extraordinary evolution of the procedures to evaluate "quality" in its many dimensions, with reference both to historic-architectural and environmental resources, and to real-estate assets and planning activity in general.

With specific reference to the evaluation of new real-estate cultural assets, or the new "architectural emergencies", a testimony to the creative sensitivity of our times, an attempt was made to focus on the "overall value of beauty" in its many dimensions, starting from the evaluation of the impact of some of these works, both in Italy and abroad (Forte, 2007; Fusco Girard, 2009).

As regards the evaluation of the quality of the planning of "ordinary" real estate assets, the operational contribution of Enrico Fattinnanzi with the SIVA/SISCo (Integrated Architecture Evaluation Systems) evaluation model, developed for residential building, is significant. It was introduced in 1995, the forerunner of the BIM Model. SIVA/SISCo, in fact, brings together and organises in a unitary methodology, a series of procedures and instruments for assessing quality and costs that interact closely with all the choices that characterise, in all its phases, the process of designing a project (Fattinnanzi, 2011; Campo and Rocca, 2017). In parallel, in order to understand and evaluate the "quality" of a building or a project and take into account the different stakeholders involved (clients, investors, users, designers, entrepreneurs, etc.) numerous multi-criteria evaluation and support tools have been developed to assist in decisionmaking from a multidimensional perspective. Some of these methods have been patented and widely disseminated in both academic and professional fields, and they pay particular attention to the architectural component of the building as well as to the "perception" of the end user. In particular, with regard to this last aspect, the combined use of marketing and decision-support tools, offers broad and effective possibilities for experimentation (Massiani and Rosato, 2008; Lami and Vitti, 2011; Oppio et al., 2017; Forte and Russo, 2017).

## 1.2 Quality vs. architectural value

Although quality finds various references at the regulatory level (both in the EU and in Italy), it has to be reiterated that it is difficult to formalise since, especially in its perceptive implications, it involves the profound relationship that is established between the architectural object and the individual and the modalities according to which the latter elaborates the environmental stimuli in order to attribute to the object itself symbolic and emotional connotations that are wholly peculiar. There is no doubt that the demand for environmental sustainability has now imposed a conscious approach on architectural planning, in which unitarily oriented formal and constructive aspects converge. And it is to this demand that the most recent regulations and procedures have been directed in order to pursue greater "quality" in building processes; at the same time, numerous evaluation tools have been developed to support environmental planning at different levels (territorial, urban, neighbourhood, building, etc.). With particular reference to the energy-environmental assessment of buildings, most evaluative procedures use a series of indicators and parameters that relate to environmental aspects, both macro (site, climate, etc.) and micro (materials, technological systems, etc.), but still fairly "neutral" with respect to the more exquisitely aesthetic and symbolic components that characterise architecture.

Therefore, if the concept of quality, understood as "compliance with requirements and suitability for use" refers to more tangible and easily measurable components, the concept of *architectural value* is broader, albeit more nuanced (Forte, 2012). It refers to the subjective perception of space, colour, light, shapes and the totality of meanings and symbols that individuals attribute to architectural places and objects. To better clarify the concept we might, in accordance with Paschini (2006), refer to what Baudrillard (1972) sustained with regard to objects. He identified the value of an object not simply in its utility and exchange value, but also in its symbolic value. Similarly, an architectural asset too is made up of a multiplicity of "categories" (requirements or attributes) that define its overall value

(exchange value, utility value, symbolic value, aesthetic value, etc.). The reference to these categories and their possible combinations can help to clarify the logic for the definition of architectural value. Sometimes it might be that the function and use are more important than the quality of the form, or that the symbolic representation is the main element to be considered; this approach brings out clearly what characterises a piece of architecture and differentiates it from a "mere" building: it is not about the cost or utility value; a building is not defined as architecture only because it is expensive or because it houses a specific function. In agreement with Paschini «the possibility of recognising a building as architecture (if not even as a masterpiece) lies in the aesthetic gualities of form and volumes and in its ability to deal with the symbolic and representational requirements of its customers or visitors».

Therefore, in identifying the various components of architectural value, or the different gualities of an architectural work (Bentivegna, 2019), the perceptive approach becomes essential. Still little practised with reference to the building organism, such an approach has its origin in the individual. Individuals react and interpret events, not only on the basis of the objective characteristics of the specific situation or structural elements, but above all starting from their subjective consciousness, from aspects that are psychologically significant for them. According to this approach, the subject perceives the organisational context and a psychological representation is created. In particular, it is in the field of visual communication that the School of Psychology of the Form (Katz, 1969) has attempted to shift towards the architectural dimension of perception with results that are worthy of attention. Knowing the physiological and psychological principles that motivate the awareness of visual judgment means, in fact, understanding the object perceived prior to our judgment; the form is therefore no longer aesthetic, but meaning and content, and as such understandable in its structural modules such as balance, space, light and colour. At an urban level, "The Image of the City" by Kevin Lynch (1964) remains one of the fundamental texts, in which the concept of the imageability (as he put it) of the city becomes central, that is, «the quality that gives to a physical object a high probability of evoking in every observer a vigorous image. This consists of that shape, colour or arrangement that facilitates the formation of vividly identified, powerfully structured and highly functional environmental images».

With regard to the perceptive aspects, we cannot but refer to Umberto Eco, who in his text "The absent structure" (1968) offers, in the Semiology of Architecture section, an interpretation of architecture as communication, following the model of verbal languages and, more particularly, the architectural object as a sign within a code (Giuffrida, 2019).

Of particular effectiveness is the distinction that Eco uses with respect to the architectural object between "denotation", the first meaning of a signifier, and "connotation", or the potentially infinite series of further meanings that the sign assumes. Eco therefore calls the denoted architectural meaning the first function, and the connoted meanings the second function. Like linguistic signs, architectural meanings too change over time and, faced with the change and possible obsolescence of the architectural object, Eco includes "designing variable first functions and open second functions" as a task of the architect. Therefore, the work of architecture is one that is not finished or "closed" in its message, but offers itself to the user because from time to time they conclude it by living and interpreting it, making being open a condition for the aesthetic appreciation of a work. But the real problem for the semiotics of architecture (still unresolved) is the identification of a code: if in verbal language it is possible to identify first and second units of articulation, the same is not so simple in architecture.

In reality, according to Dorfles (1969), a possibility to be decoded can be recognised to architectural forms not so much on the basis of a code that can also be completely lost, but on the basis of a type of symbolic, or rather signic message (since it is not that it is based on a convention) – that manages to overcome its time, to be instead "out of time" – yet synchronic, as happens for many forms of ritual, myth and symbolic and metaphorical expressions of humanity.

Starting from this premise on the concept of architectural quality and/or value and the theoretical-operational contribution that the disciplines of Estimation and Evaluation have been able to make, we intend to frame the issue of quality in the European context, from the general regulations up to a number of state laws, highlighting the centrality of evaluation in their essential common traits.

# 2. ARCHITECTURAL QUALITY WITHIN THE EUROPEAN FRAMEWORK

In the European setting, the first official document on architectural policy (Acampa, 2019) was Directive 85/384/EEC which was approved in 1985 (concerning the reciprocal recognition of professional qualifications) and, taking its inspiration from Art. 1 of the French law on architecture (Law 77 of 1977), this stated that "the architectural creation, the *quality* of buildings, their harmonious insertion into the surrounding environment and the respect for the landscape and urban layout as well as for the collective and private heritage are a *public interest*".

At the same time, as part of the main instrument for implementing European Union research policy, the PQRS - Fifth framework programme 1998-2002 (the ninth with Horizon Europe 2021-2027 is imminent) included, for the first time, a key action on the topic of cities of the future and cultural heritage, and studied the possibility of creating a quality built environment.

In addition, the European Space Development Scheme (ESPD, 1999) already spoke of conservation and the creative management of the landscapes of cultural, historical, aesthetic and ecological interest, and, with regard to the creative management of urban cultural heritage, indicated, among various policy options, the incentive for the construction of contemporary works of great *architectural value* (political option 160, point 59). Meanwhile, in Italy, in 1998, the first Conference on European Policies for Architecture organised by the CNA (of which the late Raffaele Sirica was president from 1993 to 2009) was held in Assisi and the European Forum for Architectural Policies was born. In 1999, the Architects' Manifesto was presented in Turin with the first Italian draft law on architecture<sup>1</sup>.

The resulting "Council Resolution of 12 February 2001 on the architectural quality of the urban and rural environment" (2001/C73/04), signed under the French presidency of the EU and presented in Rome, encouraged Member States to intensify their efforts for a better knowledge and promotion of architecture and urban planning, and to promote architectural quality through exemplary policies in the public construction sector. Its adoption by the European Council represents the general political recognition of the value of architecture for the quality of life of European citizens; architectural quality is considered an integral part of the environment, both rural and urban. Architecture is understood as an intellectual, cultural and artistic, and professional performance. It is therefore a professional service that is both cultural and economic. Subsequently, the Leipzig Charter on Sustainable European Cities of 2 May 2007, among the various action strategies considered as priorities, emphasises the creation of high-quality spaces, according to a Baukultur approach (launched again by the most recent Davos Declaration).

In December 2008, the Council of Europe adopted the "Conclusions relating to architecture: the contribution of culture to sustainable development" (2008/C319/05), which recognises that: architecture is a discipline based on cultural creation and innovation, as well as on technology; it is a remarkable illustration of the extent to which culture can contribute to sustainable development, given its impact on the cultural dimension of cities, but also on the economy, social cohesion and environment. Architecture is also an example of the transverse character of culture, insofar as various public policies, and not just cultural ones, affect it. Sustainable urban development implies, among other things, that an architectural creation of quality is promoted, a factor of economic dynamism and tourist attractiveness for cities. From this perspective, the Council invites Member States to ensure that architecture "plays a role of synthesis and innovation in the process of sustainable development right from the stage of the conception of an archi-

<sup>&</sup>lt;sup>1</sup> Bill no. 4324, presented to the Council of Ministers on 9 November 1999 – the Melandri Bill – Dispositions for the promotion of architectural and urban culture. Since them a series of bills, none of which have ever been approved, had architectural quality as their object (DDL Urbani from 2004; DDL Zanda, DDL Asciutti and DDL Bondi from 2008). All the way up to the recent proposal from CNAPPC of 2018 (Maxxi, 2018).

tectural, urban or landscape project<sup>2</sup>, or rehabilitation of a site".

To arrive, therefore, at the Davos Declaration of 2018: "towards a high-quality Baukultur for Europe" (adopted in January 2018 by the European ministers of culture), which emphasises the implementation of a culture of quality construction for Europe. The term "Baukultur" refers to a concept which "includes every human activity which transforms the built environment". The entire built environment, which includes all designed and built assets, incorporated and correlated to the natural environment, have to be understood as a single entity. Baukultur means existing buildings, including monuments and other elements of cultural heritage, as well as the design and construction of contemporary buildings, infrastructures, public spaces and landscapes".

From an evaluative point of view, of particular relevance is the vision explained in the Davos document: "the culture of quality construction is expressed through a considered and concerted planning of all construction and design activities that do not prioritise short-term economic profit but cultural values. A culture of quality construction, therefore, does not only respond to functional, technical and economic requirements, but also to the social and psychological needs of the population". It is evident that a "considered and concerted" planning, which takes into account not only economic, technical and functional aspects (exchange and utility values of the architectural asset) but also and above all cultural, social and psychological aspects (the symbolic values referred to in the previous paragraph), cannot fail to be pervaded, throughout its development, by an evaluation process that allows the structuring of the decisional problem (objectives - criteria – alternatives – choice), according to a process that is logical (of sequential phases), rational (attribution of value judgments based on explicit, shared and provable criteria) and coherent (with respect to the system of objectives). In exactly the same way as the multi-criteria approach which, as it has evolved, helps make explicit the criteria and preferences, thus ensuring transparency and controllability in the decision-making process, and, therefore, in the project (Fattinnanzi, 2018; Fattinnanzi et al., 2018).

At the conclusion of this brief *excursus* on the main European documents concerning the quality of architecture,

the most recent Innsbruck Declaration of 4 May 2019 "Pour un environnement bâti de qualitè" presented at the ACE conference – Architects' Council of Europe –, marks a decisive step also from the point of view of evaluation activity, which is explicitly called into play. Among the various relevant points of the document, there is in fact one relating to the essential characteristics of quality (the criteria) which unquestionably involve economic, social, environmental and cultural benefits for individuals and society (Mondini, 2016). Everyone can grant a higher or lower value to these benefits (points of view, weighting), but they all have to be taken into consideration during the whole quality assessment process. Therefore, the essential characteristics of a quality place include (Tab. 1):

**Table 1 -** The essential quality characteristics(source: Innsbruck Declaration, 2019)

Aesthetic	Architectural quality from an aesthetic point of view
Habitability	If the place satisfies the functions for which it was designed
Respect for the environment	The place has been designed to be efficient and resilient to climatic changes throughout its entire life cycle
Accessibility and mobility	Efficiency of connections
Inclusive character	The place has been designed for everyone
Distinctive character sense of belonging	The place is specific, it is adapted to the local context and has distinc- tive characteristics that create a sen- se of belonging
Economic accessibility	Compatibility with the programme and budget of the client
Environmental intgration	The place is integrated into the built, natural and cultural environ- ment in a way that is harmonious and coherent

Quality is therefore understood as the result of multiple interdependent factors. Designing a place of quality requires made-to-measure solutions, based on a rigorous assessment of the context and needs of end users, in order to optimise the economic, social, environmental and cultural values. To this end, the "Good practices and general principles for assessing quality in the built environment" are indicated: although recognising that the complexity of the concept of quality makes its evaluation difficult, the importance of the evaluation process is highlighted, which will have to take into account: *interdisciplinary dialogue* (which allows for an objective assessment of quality, legitimising the project itself); *political commitment; citizen participation* (consulting the end users to understand their needs); an

<sup>&</sup>lt;sup>2</sup> The role of evaluation in the phase of the conception of the architectural project is a theme which, starting from the contributions of Bentivegna and Fattinnanzi, the author has dealt with on various occasions ((cfr. Forte F., I giudizi di valore nel processo di ideazione del progetto, in Rivista SIEV- Valori e Valutazioni, vol. 4/5, DEI, Roma, 2010; Forte F., II processo progettuale nell'approccio di Purini Thermes Architetti: il ruolo della valutazione, in Rivista SIEV - Valori e Valori e Valutazioni, vol. 13, DEI, Roma, 2014, Forte F., Implicazioni del metodo scientifico nel rapporto tra processo progettuale e valutazione, in Fattinnanzi E., Mondini G. (a cura di), L'analisi multicriteri tra valutazione e decisione, DEI, Roma, 2015).

approach based on the *specificity of the place* and its history; a *holistic* approach (all possible impacts have to be assessed and decisions must favour social, environmental and cultural values, rather than short-term economic ones); *flexibility* in compliance with the regulatory framework (planning and construction regulations are a minimum basis; they guarantee the respect of the technical norms but are insufficient to guarantee quality); a "live" approach to the built environment.

To conclude the picture of the essential points of the various general documents that promote architectural quality in the European context, it is appropriate to recall some significant elements of the state laws on architecture currently in force in Europe.

#### 2.1 State laws

In Europe only three countries have so far adopted a specific law on architecture. These are France, Sweden and Catalonia.

In France, the country that first with Pompidou and later with Mitterand opened the season of the Grands Projects, Loi n° 77-2 du 3 janvier 1977 sur l'architecture, represents a milestone not only insofar as it establishes a public interest in the architectural creation, the quality of buildings and their harmonious integration into the environment, respect for the natural or urban landscape and heritage, but also because it intervenes in the regulation of the exercise and organisation of the profession. The more recent Loi n° 2016-925 – Dispositions relatives à la liberté de création, à l'architecture et à la création artistique, integrating the previous law, in addition to enhancing "ordinary" architecture, promotes innovation, experimentation and architectural quality, through various competition procedures.

With regard to skills (a point that is still particularly critical in Italy), the 1977 French law establishes an ad hoc body, the CAUE – Council for Architecture, Urban Planning and the Environment – to promote the quality of architecture. The CAUE are born as voluntary and non-compulsory bodies and carry out activities of cultural mediation, assistance and support for choices regarding private citizens and local administrations in the field of architecture, urban planning and the environment, for the promotion and dissemination of architecture. These are bodies that operate at the level of the Departments (the equivalent of our Provinces), invested with a mission of public interest.

The forty years of experience in France (Bedrone, 2011), demonstrate how such organisations have become so widespread, since they can count on a minimum specific payment from building permits and thanks to forms of funding from the Departments and other entities (Bedrone, 2011). Today there are 93 CAUEs in 93 departments. Among the different activities of the CAUE, the Observatory on Architectural Quality of Housing is particularly significant: the projects selected by the CAUE present a diversity of programmes (single housing, social housing, etc.), of nature of the interventions (redevelopment, extension, new construction), of legal status (public, private), and localisation (urban, periurban, rural). Each architectural work is evaluated according to the following quality criteria:

 
 Table 2 - Quality assessment criteria (source: CAUE, 2019)

1	Assembly, planning, carrying out and manage- ment of the intervention
2	Urban insertion
3	Aesthetic dimension
4	Functionality, habitability, utility value
5	Construction and technical choices
6	Innovation
7	Environmental dimension

Furthermore, again in 1977, the MIQCP – Mission Interministerielle pour la qualitè des constructions publiques (one of the main promoters of the MOP Act of 1985) – was established in France. This institute was born as the result of a strong political will to promote quality in the field of public works, which has continued up to the present. In 1999, a manual was produced with the parameters and procedures necessary to ensure quality in the construction of public works. The parameters of quality are shown in Table 3. It is an approach that already at that time (1999) considered the multidimensional nature of quality, referring to its multiple and heterogeneous values, including symbolic and cultural value (which was mentioned in paragraph 1.2).

 
 Table 3 - Quality parameters for public works (source: MIQCP, 1999)

1	Times
2	Social importance of public buildings
3	Symbolic value
4	Cultural value
5	Urban value
6	Continuity of intern and extern public spaces
7	Utility value
8	Technical quality
9	Executive quality
10	Economic quality
11	Environmental quality: eco construction, eco management, comfort and health

In 1998, Sweden approved the "Framtidsformer. Forms for the future, An Action Program for Architecture and Design" (1997/98: 117). This is an act prepared by the Ministry of Culture and approved by the Government which focuses on a

## Architectural quality and evaluation: a reading in the European framework

series of objectives to improve the quality of architecture, specifying that quality and aesthetic values must not be subordinate to financial aspects. "Aesthetic clauses" are also introduced, which will then be taken up in subsequent acts.

Finally, in Spain, the autonomous community of Catalonia approved Ley 12/2017, de 6 de julio, de la arguitectura, after 4 years of joint work by the Department of the Territory and Sustainability (Government of Catalonia) and the Order of Architects. This is a "shared and inclusive" law<sup>3</sup> which establishes the public interest in architecture and promotes the recognition of its social value. The text of the law, structured in 3 chapters and 22 articles, starts from the fundamentals: the European regulatory framework; then the object of the law, the definition of architecture and its values (Chapter 1). With regard to the definition of architecture, the law wisely understands it as the result of a multidisciplinary process: architecture, according to the provisions of the law, is in fact understood "as a result of the process of designing, directing, implementing, rehabilitating and maintaining, during their entire life cycle, the public buildings and urban spaces resulting from process of the management and execution of the urban plan, through the collaboration of various professional disciplines". Furthermore, the concept of quality is explained through a set of "values" (the value approach of the disciplines of Estimation and Evaluation). Article 2 (point 3) indicates, in fact, the guality values inherent in architecture that the law seeks to "protect" (tangible and intangible values), as in Table 4:

# Table 4 - The inherent quality values of architecture<br/>(source: Ley 12/2017, Catalonia)

1	The suitability and technical quality of construc- tions for their intended use
2	The Improvement of the quality of life, provi- ding wellbeing and comfort in a context that is safe and accessible
3	The contribution to social cohesion and the improvement of relationships through the arti- stic and cultural dimension
4	The adjustment of the context and the landscape
5	Environmental, economic and social sustainability
6	Beauty, artistic interest and contribution to the cultural debate

The "specificity" of the value of beauty (Forte, 2007; Forte and Fusco Girard, 2009) and the contribution to the cultural debate ("architectural quality is an open concept that promotes debate" Rönn, 2010) deserve particular attention. *Architectural quality* furthermore "is measured by the optimal, weighted and efficient satisfaction of each of the values, in a process defined in a global and unitary way" (Article 2, point 4)<sup>4</sup>.

Here then is evaluation that becomes an act of synthesis: architectural quality is always a composition of elements stratified over time. It is the sum of the individual qualities and at the same time their synthesis. Evaluation aggregates the elements both in reference to the architectural object and in reference to the context in which it is inserted (Fattinnanzi et al, 2018).

Another important element is the attention paid to skills (as in the French law). Chapter 2: "Measures to disseminate architecture and boost architectural quality" establishes the Council for Quality in Architectural and Urban Planning (a council established by the Government, which has the task of defining the criteria for architectural quality), and the advisory bodies on architectural quality of the local administrations, made up of representatives of the various professional and entrepreneurial areas involved in the architectural process. The law seeks also to promote the development of architecture through mechanisms such as the Catalonia Prize for Architecture and the built heritage.

Finally, Chapter 3 lays down the "Complementary rules relating to contracts", including the transparency and publicising of public tenders and procedures for access to the profession of young graduates.

#### 3. CONCLUSIONS

The conference organised by the Journal of SIEV together with the Order of Architects of Rome (Rome, October 2018), with the aim of promoting the development of legislative and operational tools capable of improving architectural quality, offered an opportunity to study in greater depth a theme, that of architectural quality and the evaluation process connected to it, dealt with on various occasions by the Journal of SIEV. The documents and state laws analysed in the European framework demonstrate how there is a powerful convergence on the concept of architectural quality, on the evaluation process related to it and on the essential criteria (minimum requirements) for its determination. We thought it necessary to return to thinking about architectural quality, taking into account that although the multi-criteria approach has its historical genesis in architecture ("the three specifications of the Vitruvian ratio"), and constituting today a full-blown discipline

<sup>&</sup>lt;sup>3</sup> «...Starting from the '80s, the positive image of a modern and efficient Spain was given to the world through architecture and the Catalonians were able to grasp the opportunity to approve a law that was "shared, pioneering, inclusive, modernising and structural" which establishes the public interest of architecture and promotes the recognition of its social value establishing measures of diffusion, promotion and education». (Carrano, 2017).

<sup>&</sup>lt;sup>4</sup> This point is also reported in the Bill for Architecture, elaborated by the CNAPPC and presented at the VIII National Congress of Architects in 2018 (version of 3/05/2018).

in the in the field of Operations Research and Decision-Aiding, it is still struggling to become a widespread practice in the planning and development phase of the project idea, both in the professional field (despite the evolution of the most recent regulatory instruments) and in training. With regard to this last aspect, if the foundation of architecture courses is still *design*, the need to train designers who know how to learn to "control" their intuitive capacity is long overdue. Also from the point of view of the new procurement code (centrality of the project and role of evaluation, DL 50/2016) it is necessary to adopt more systematic approaches and methods in order to be able to externalise the dynamics that intervene in planning processes and make them accessible and understandable to the scientific community, for the purpose of a progressive advancement of knowledge ("the project as an instrument of communication and production of knowledge", Mondini, 2009). If the conception and constructive process, by its nature, is today as complex and unpredictable as ever, being able to "control" it seems to be a necessary but not sufficient condition, above all if we consider the very Italian tendency on the part of clients to fragment the design process into distinct sections, where the specificity of the architect as a "creative propellant" of the entire process, fails, unlike other countries where the architect is recognised as designer and coordinator of specialist contributions, in the by-now widespread culture of project management (Fregonara, 2011), finally also implemented in the procurement code (LD 50/2016).

As can be evinced from the Davos Declaration, the scenario that is unfolding is that of a Baukultur of high quality for Europe, which will be expressed through a considered and concerted design, or through a process of rigorous and pervasive evaluation, as made perfectly clear in the more recent Declaration of Innsbruck.

\* Fabiana Forte, Department of Architecture and Industrial Design, Università degli Studi della Campania "Luigi Vanvitelli" e-mail: fabiana.forte@unicampania.it

#### Bibliography

ABBAGNANO M. N. (a cura di), John Locke, Saggio sull'intelletto umano, UTET, Torino, 1971.

ACAMPA G., European Guidelines on quality requirements and evaluation in architecture, Valori e Valutazioni, Vol. 23, 2019, pp. 47-56.

BAUDRILLARD J., *Il sistema degli oggetti*, Bompiani, Milano,1972.

BEDRONE R., *L'esperienza francese dei CAUE*, Il Giornale dell'Architettura, Vol. 2, 2011.

BENTIVEGNA V., *The quality of the architectural works: the relational aspects*, Valori e Valutazioni, Vol. 23, 2019, pp. 23-29.

BRUSA G., Metodo e prassi estimativa, dal XVI sec. agli anni '70 del XX secolo, Maggioli Editore, 2007.

CAMPO O., ROCCA F., The parametrization of physical quantities in the definition of parametric costs. The Legislative Decree n. 50/2016 on public works design, Valori e Valutazioni, Vol. 19, 2017, pp. 3-10.

CAPASSO A. (a cura di), Costruire per abitare Conoscere e governare l'organismo architettonico dalla programmazione alla dismissione, Aracne, 2006.

CAPRA A., Geometria famigliare, et Instruttione Pratica D'Alessandro Capra, Architetto cremonese, per gli edifici nuovi e vecchi, 1671.

CARRANO E., La Catalogna dà un esempio di modernità con la legge sull'architettura, Il Fatto Quotidiano, Mondo, 16 ottobre 2017. DORFLES G., Valori iconologici e semiotici in architettura, in *Op.cit.*, Edizioni II centro, Napoli, 1969.

Eco U., *La struttura assente*, Bompiani, Milano, 1968, pag. 216.

ESPD, European Spatial Development Perspective, Towards Balanced and Sustainable Development of the Territory of the European Union, Postdam, European Commission, Maggio 1999.

FATTINNANZI E., The quality of the city. The role of evaluation in methodologies to the preparation of plans and projects, Valori e Valutazioni, Vol. 20, 2018, pp. 3-12.

FATTINNANZI E., *La qualità nell'Housing Sociale. Il suo ruolo nello sviluppo urbano e nel mercato delle abitazioni,* LaborEst, Dipartimento PAU, Università degli Studi Mediterranea di Reggio Calabria, n. 4, Laruffa Editore, Reggio Calabria, 2009, pag. 32.

FATTINNANZI E., *La valutazione della qualità* e *dei costi nei progetti residenziali. Il brevetto SISCO*, Valori e Valutazioni, Vol. 7, 2011, pp. 49-66.

FATTINNANZI E., ACAMPA G., FORTE F., ROCCA F., *The overall quality assessment in an architecture project*, Valori e Valutazioni, Vol. 21, 2018, pp. 3-13.

FORTE C., *Elementi di Estimo Urbano*, Etas Kompass, Milano, 1968.

FORTE C., Valore di Scambio e Valore d'uso Sociale Dei Beni Culturali Immobiliari, esemplare fuori commercio, Arte Tipografica, Napoli, 1977.

FORTE F., Historic, Artistic and Cultural Patrimony for a "Habitable City": Incentives for Care", cap.19, in Mondini G. et

#### Architectural quality and evaluation: a reading in the European framework

*al.* (eds), Green Energy and Technology, Integrated Evaluation for the Management of Contemporary Cities, Results of SIEV 2016, Springer, 2018.

FORTE F., *La bellezza come "valore" del paesaggio urbano: i grandi progetti di architettura,* Agribusiness Paesaggio & Ambiente, Forum, Udine, 2007, pp. 217- 226.

FORTE F., FUSCO GIRARD L., Creativity and new architectural assets: the complex value of beauty, International Journal Sustainable Development, Vol. 12, n. 2/3/4, 2009, pp. 160-191.

FORTE F., Il valore architettonico di un immobile: criterio e/o obiettivo?, Valori e Valutazioni, Vol. 8, 2012

FORTE F., RUSSO Y., Evaluation of User Satisfaction in Public Residential Housing - A Case Study in the Outskirts of Naples, Italy, IOP Conf. Series: Materials Science and Engineering, Vol. 245, 052063, WMCAUS-IOP Publishing, 2017.

FREGONARA E., *Estimo e Project Managment: l'orientamento disciplinare italiano*, Aestimum, Vol. 59, Firenze University Press, 2011.

GIUFFRIDA S., The grammar of the house and of the city. Theoretical approaches for generating project, Valori e Valutazioni, Vol. 23, 2019, pp. 65-75.

KATZ D., *La psicologia della forma*, Bollati Boringheri, Torino, 1969, pp. 65-75.

LAMI I., VITTI E., A combination of Quality Function Deployment and Analytic Network Process to evaluate urban redevelopment projects: An application to the Belle de Mai – La Friche of Marseille, France, Journal of Applied Operational Research, Vol. 3, 2011, pp. 2-12.

LO BIANCO G., Estimo, Vol. 1, Hoepli, Milano, 1961.

LYNCH K., L'immagine della città, Marsilio, Padova, 1964.

MASSIANI J., ROSATO P., The Preferences of Trieste Inhabitants for the Re-use of the Old Port: A Conjoint Choice Experiment, FEEM Working Paper (74/08), 2008. MAXXI, 2018, Verso una legge per l'architettura, http://www.versounaleggeperlarchitettura.it/

MISSERI S. C., Sui Limiti scientifici dell'estimo ovvero le provocazioni di un albero, Genio Rurale, n.12, 1973, pp.17-25.

MONDINI G., La valutazione come processo di produzione di conoscenza per il progetto, Rivista SIEV, numero 3, anno II, DEI, Roma, 2009.

MONDINI G., Valutazioni integrate per la gestione delle nuove sfide sociali, Valori e Valutazioni, Vol. 17, 2016, pp. 15-17.

OPPIO A., BOTTERO M., FERRETTI V., *Designing Adaptive Reuse, Strategies for Cultural Heritage with Choice experiments,* in Stanghellini S. et al. (eds.), Appraisal: From Theory to Practice, Green Energy and Tecnhology, Springer International Publishing, 2017.

PASCHINI L., *Fluent Bodies, Fluent Times, Fluent Places.* On *MAD's works*, in Files - arch'it, rivista digitale di architettura, 2006.

PORCINAI P., Valore economico della bellezza, Rivista di Estimo Agrario e Genio Rurale, Edizioni Agricole, Bologna, 1947, pp. 443-446.

RÖNN M., *Quality in Architecture - A Disputed Concept*, ARCC 2011 - Considering Research: Reflecting upon current themes in Architectural Research, Detroit, MI, 20-24 April 2011.

RÖNN M., *Quality in Architecture- learning form. History, practice and competitions.* In Architecture as Human Interface 2012, The 4th Symposium of Architectural Research in Finland - The 4th International Conference on Architectural Competitions, 2012.

ZORZI F., *Presentazione*, in Rosasco P., Modelli per il Mass Appraisal. Applicazioni al mercato immobiliare Genovese, Alinea Editrice, Firenze, 2010, pag. 9.