

CHanging
Priorities

3rd VIBRARCH

NOVEMBER 9-11, 2022



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ARCHITECTURE AS A HETERONOMOUS DISCIPLINE. DEBATE, THEORIES, PERSPECTIVES

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ABSTRACT

The debate surrounding the universal criteria of education is the starting point for an exploration of the specific nature of teaching architectural disciplines, based on a balanced alchemy between scientific, humanistic and technical knowledge, and characterised by an essential experimental approach. In this scenario, are there codified formulae for arriving at a definition of education in architecture that is capable of responding to the needs of a renewed approach to knowledge and the discipline's evolution? We are living in a historic phase where the dynamics of training are being constantly revised, which should see teachers once again play a central role as the cornerstone of an educational and formative journey, consistent with the current reconfiguration of professions. It is a maieutic method of learning which interprets the conceptual, design-oriented and constructive dimensions as substantial and integrated elements of architectural practice; methods and tools are the means and not the ends of a teaching environment that is open and increasingly connected to each individual student. As an intellectual figure, the architect requires holistic – as well as scientific – training, able to strengthen a cross-cutting search for the foundation of an architect who should have mastered the art of constructing real buildings and living spaces, and have an evident sensitivity towards measurement, space and harmony. Today it is essential

to formulate a reflection on the role of the architect, in relation to contemporary urban and social dynamics which place the environment – and its protection – at the centre of the debate. Design is learnt by designing. This means that the transmission of the values of design culture should be understood as critical competence, capable of synthesising cross-cutting contributions and addressing the complex problems of contemporaneity, by means of a conscious creative process. This contribution examines this phenomenon in order to outline methods and tools capable of training architects of the future.

KEYWORDS

Architecture; heteronomy; education; teaching; design.

Architecture is one of the many disciplines which, based on its heteronomous nature, aspire to represent a community's future, present and past.

The synthesis deriving from artistic-humanistic factors, together with the technical-scientific component, constitute the root of the process that shapes the architect as an intellectual figure capable of presiding over material processes connected to the ability to masterfully select schedules, phases and actors – elements which are all flanked by that magical and

essential sensitivity to composition which has fed this craft since its origin.

Over time, the cultural debate has broadly examined the issue of art having to surrender to heteronomy while preserving the needs for aesthetic autonomy. The act of examining architecture's role through the filter of its *autonomy or heteronomy*, in times of knowledge hybridisation and disciplinary interpermeation, fosters an understanding of the current trends, and encourages the updating of fragments of a debate that have been chiselled out in our culture and tradition. The risk of forgetting its own ontological status, of losing its own identity in the fragmentation and entropy of contemporaneity, finds a response in the concept of design as the synthesis between artistic ideation and environmental and social conditions, configured as an element capable of marrying the antithetic drivers towards an autonomous vision of the work, on the one hand, and a heteronomy linked to geographical, cultural, sociological and psychological characteristics, on the other.

Thus, heteronomy, as a condition in which an agent party receives the rules governing its own actions from an external source. The etymology of the word, which comes from ancient Greek and sees the merging of two terms – ετερος *éteros* "different, other" and νόμος *nómos* "law, government" – suggests that, at its core, is a dual sentiment which today pervades architecture: the sin of self-referentiality and the strength of dependence on other knowledge.

Just as constructing buildings does not entail one single response to a need, but rather incorporates the concrete translation of desires and aspirations, other disciplines pertaining the world of design also reflect, in their evolution, the issues of contemporary life. In fact, the fragmentation of skills, the specialisation of knowledge, the rapid modification of work tools, digitalisation and the hyper-development of communication constitute phenomena which substantially

impact the evolution of such disciplines in a reciprocal interaction with the intangible values – economic, social and cultural – of a community, and the material structures represented by the places in which said interaction is expressed.

The challenge of complexity is based on social, technological and environmental changes, and it is a challenge which involves space, as a tangible resource, on its global scale and in its human measure; and *time*, as an intangible resource, currently assessed in terms of speed and flexibility, but also duration and permanence. These elements impact design viewed as a whole, as the synthesis of multiple areas of knowledge which, given their constant evolution, are subject to continuous debate.

In an acceptance of heteronomy as a condition in which actions are not guided by an autonomous principle, intrinsic to the discipline, but are rather determined by interaction with external factors, this theoretical reflection on the evolution of the tools of knowledge and practice, is intended to define possible scenarios capable of dealing with the risk of losing the ability to synthesise the relationships between the conditions that define the identity of architecture itself.

Difference chosen on the basis of value and the ability to establish relationships between several points of observation become key moments in a practice of assessing the process and the method of affirming architecture as a discipline. The term *heteronomy*, used in contrast to *autonomy*, by Kant and then others after him, has taken on a positive value connected to mutual respect between reason and creativity, between exact science and the empirical approach, between contamination and isolation, introducing the social value of its existence every step of the way.

At the 1949 Lima Conference, Ernesto Nathan Rogers claimed that there was also a social dimension running alongside the principle of "architecture as an art": "Alberti, in the extreme precision of his thinking, warns us that the

idea must be translated into works and that these works must have a practical and moral purpose to harmoniously adapt "to use by men", and I would like to point out that he uses "men" in the plural, namely society. The architect is not a passive product nor a creator completely independent from his own epoque; society is the raw material that he transfers by giving it an appearance, an expression, and the awareness of these ideals which, without him, would remain implicit. Our prophecy, like that of the farmer, already contains the seeds of future growth, since our work also stands between the sky and the earth.

Poetry, painting, sculpture, dance and music, even when they express contemporaneity, are not necessarily limited in practical terms. But we architects, whose task it is to create synthesis between utility and beauty, must at all creative times feel the fundamental drama of existence because life continuously contradicts practical needs and spiritual aspirations. We cannot reject either of these needs because a merely practical or moralistic position denies the full value of architecture, just as much as a purely aesthetic position would do; we must mediate one position into the other" (Rogers, 1948).

Rogers discusses the relationship between instinctive forces and knowledge acquired through culture, together with thinking about the role that study plays in an artist's training. In fact, it was during some of the debates that arose at the *International Congress of Modern Architecture (CIAM)* that the issue topic of architecture, as a discipline placed between self-sufficiency and dependence, acquired centrality within the architectural context. In that scenario, the issue of the autonomy and heteronomy of pre-existing environments took on a role of strategic importance.

The reasoning inherent to the significance of form in architecture and the need to be liberated from heteronomous influences did not manage to weaken the idea of an architecture capable of influencing the governance of an entire society, thanks to

an attitude that was very consistent with the writings of Rogers himself. Participants in the 1959 CIAM meeting in Otterlo included Ignazio Gardella, Ernesto Nathan Rogers, Vico Magistretti and Giancarlo De Carlo as members of the Italian delegation; every architect brought a project to share and comment on as a manifesto. Ernesto Nathan Rogers, who exhibited the Torre Velasca, and Giancarlo De Carlo, who displayed a house in the Spine Bianche quarter of Matera, were openly criticised because none of the principles approved by the CIAM could be recognised in their works.

De Carlo's design identified a break with the consolidated design and construction method used in Matera. Under these cultural circumstances, in order to justify the decisions made, Giancarlo De Carlo affirmed the following: "my position was not in fact to break away from architecture, into sociology, for example. I cannot stand those who, to paraphrase what I said, dress up as politicians or sociologists because they are incapable of doing architecture. Architecture is – and can only be – the organisation and formation of physical space. It is not autonomous, it is heteronomous" (De Carlo, 2001). Even more than in the past, today it is not possible to conceive of an architecture cooped up within its own enclosure, adverse to contamination and relationships with other disciplinary worlds; architecture is the world and the world is the combination of our knowledge.

Architecture triggers reactions and phenomena: it is not only and exclusively the passive and active outcome of a person's material work. "We believed in the heteronomy of architecture, in its necessary dependence on the circumstances that produce it, in its intrinsic need to be in harmony with history, with the experiences and expectations of individuals and social groups, with the arcane rhythms of nature. We rejected the notion that the purpose of architecture was to produce objects and we maintained that its fundamental objective was to ignite processes

to transform the physical environment, capable of contributing to the improvement of the human condition" (De Carlo, 2001).

Productive and cultural reinterpretations place the discipline of architecture at the epicentre of critical reconsideration regarding living spaces and workplaces. Consequently, new interpretative models emerge, which often highlight the fickleness of architecture constructed in the absence of a robust theoretical apparatus, demanding that *technical rationality* capable of restoring the centrality of the constructive act, through the contribution of actions which in fact have their origins in other areas.

The transformation of building practice has in fact entailed direct changes to the structure of the nature of knowledge, to the role of skill, to the definition of new professions based on the needs emerging from the productive and socio-cultural system.

The architect can no longer ignore the fact that architectural practice is not completed by means of an implosive dynamic, but rather he is called to dialogue with the many iterations that the cognitive act of design itself entails, calling into question a theory of disciplines which, to a different extent and using different logics, offer their significant contribution to the creation of the design and the work.

As Alvaro Siza affirms, "The architect is not a specialist. The depth and variety of the knowledge that the practice of design entails, its rapid evolution and its progressive complexity mean that an architect can never have enough knowledge or expertise. Bringing things together – pro-gettando [‘designing’ in Italian] – is his domain, a place of compromise that does not mean conformism, of navigating the intricacies of contradictions, the weight of the past and the weight of the doubts, and future alternatives, aspects which explain the non-existence of any contemporary established agreement on architecture. The architect works with specialists. The ability to connect, use bridges between areas of knowledge, create

beyond the respective borders, beyond the precarities of inventions, requires specific learning and stimulating conditions. [...] Architecture is therefore risk, and risk requires an impersonal and anonymised desire, based on the fusion of subjectivity and objectivity. In short, a progressive distancing from the self. Architecture means compromise transformed into radical expression, that is, the ability to absorb the opposite and surpass contradictions. Learning this requires an education in searching for the ‘other’ within oneself" (Siza, 2008).

We witness the co-existence of contrasting – often extreme – design trends, aimed at reaffirming the historical and traditional framework of constructing by means of the constant re-proposition of the characteristics of *persistence* that consolidated architecture, by its very nature, promotes, and at interpreting the evolutionary – and markedly intangible – guidelines that contemporary society promotes as phenomena of daily life. Speed, temporariness, resilience and flexibility are just some fragments of this. In other words, the suggested direction points towards the immediate creation and prefiguration of innovation as the element that characterises stylistic features, materials, languages, technologies, and only later do we tend to delineate the space they generate; from this, there emerges an anomalous pathway which leads from *technique* to *function*, through *form*, denying the circularity of the three factors at play. Hence the need to reiterate the "humanistic and human" dimension of the practice, which also guides the training processes, in line with the words of the historian-philosopher Youval Noah Harari, when he says: "Many pedagogical experts argue that schools should switch to teaching ‘the four Cs’ – critical thinking, communication, collaboration and creativity. More broadly, they believe, schools should downplay technical skills and emphasize general-purpose life skills. Most important of all will be the ability to deal with change, learn

new things, and preserve your mental balance in unfamiliar situations" (Harari, 2018). This needs, which reopens the issue of the dualism between "art" and "discipline", superseding it in favour of a terminological coexistence since it is the quality of the design and the work that define its belonging.

Reflecting on the fundamentals of disciplinary pathways and tools, in light of the innovations which involve the theoretical foundation of design in not only conceptual but also instrumental terms, means reasoning with regard to the concept of "design culture", understood as the ability to operate by means of the synthesis of various contributions, tackling complex problems through a conscious creative process.

The threat of a short-circuit deriving from a discourse that supersedes practice, together with a standardisation aimed at establishing construction's dominion over architecture, again taking up *Rogers'* discourse, create the possibility of finding a lifeline in an attempt to find a balanced mix between figurative research and technology in the wake of the ever-current example of the Bauhaus or consolidating the thinking of some masters of modern Italian architecture operating in that post-war era that is synonymous with both physical and moral reconstruction. The attitude of the latter towards formal and technical transformation and adaptation is an paradigmatic example of conforming methodological choices in reference to the supremacy of design and the articulation of the phases thereof. In exalting the outcome, the strength of the process is often imperceptible; in the acritical celebration of architectural work, the method seems to dissolve into the finished product. Technical innovation and disciplinary self-referentiality tend to deny the concepts of continuity and transversality, through a constant act of isolation; on the contrary, the act of design, as a selective operation carried out from within a vast wealth of knowledge, cannot fail to deal with variables of a functional, formal, material and linguistic nature in a common unity of

purpose, while said variables have, over time, constituted the source of energy for both theoretical formulation and the works being created.

For years, the debate in architecture has focused on the synergic or contraposed dualism between cultural approaches linked to the *venustas* and the *firmitas*. With regard to the interpretative coupling of *tectonics and form*, Kenneth Frampton notes the existence of a dual tendency that is both identifiable and conflicting: the willingness to favour the formal sphere as the predominant one, rejecting all constructive implications, on the one hand; and the tendency to celebrate the constructive framework as the generator of morphological style, emphasised by the ostentation of architectural detail, including that of a technological nature, on the other.

The design of contemporary architecture is enriched with sprawling values that are often fundamental, yet at times even damaging to the successful completion of the work: it should identify the moment of synthesis within which the designer pursues balance between all the interpretative categories that comprise it, espousing the Vitruvian meaning, according to which practice is «the continuous reflection on utility» and theory «consists of being able to demonstrate and explain the things that are made with technical ability according to the principle of proportion» (Vitruvius Pollio, 15 a.C.).

Architecture will have to increasingly demonstrate how it represents an applied and intellectual activity of targeted synthesis, of a complex system within which it is not only desirable, but indeed critical, for the cultural, social, environmental, climatic, energy-related, geographical and many other components inherent to it to interact proactively, together with the more spatial, functional and material components that materialise in the final construction itself through factors borrowed from neighbouring fields, and not just factors endogenous to the discipline of architecture alone.

As Thomas Kuhn demonstrated with his writings addressing scientific revolutions, if the sciences cannot be understood in the absence of their historical dimension, then disciplines such as music, the arts as a whole, philosophy, and indeed architecture, are cultural phenomena that are only fully comprehensible when viewed in relation to the culture of the time and with the multiple factors that fed them. However, precisely as demonstrated by Kuhn's theories (Kuhn, 1987), their evolution is also fed by "scientific revolutions" – moments of rupture capable of changing the community's attitude towards the discipline itself and especially the inherent paradigms.

Such disciplines, when divided and enclosed within their own disciplinary fields, are not capable of expressing the poetic quality of life and therefore "making one feel and making one conscious of the aesthetic sentiment" (Morin, 2019). Within a unitary vision that exists parallel to the transcalarity that said vision presupposes, the technology of architecture – as a discipline often called upon to play the role of a glue that binds various areas of expertise together – acts as an tool of domination within which science and technology interpret man's intellectual needs, expressing the most up-to-date principles of contemporary culture. The ability to prefigure the new, as is implicit in the very etymology of design, and, at the same time, to interpret continuity understood as coherence of method and of values, is common to the majority of the disciplines that interact with it. Dealing with culture, society, cities, landscape and environment requires a multifaceted vision and the ability to interpret problems, but also mental openness towards opportunities, mastery of complexity, in the face of a concept of quality determined by principles of efficiency and the consequent standardisation of languages.

The importance of relationships, the search for those which Eiffel called the "secret laws of harmony", the disciplinary specificity of design as the ability to connect "in order to

understand, critique, transform" (Gregotti, 1981), and the ability to identify the difference by involving it in the transformation process inherent to design, constitute the foundations for the evolution of heteronomous disciplines through the surpassing of notions of technique and context as passive reference points, but rather aspects which generate possibilities and conditions for references to be adopted critically.

Hence the validity of a "polytechnic" cultural approach capable of employing tools and skills that can address the operating conditions of a heteronomous context, but also stimulate critical approaches oriented towards innovation and manage change from the perspective of design as an opportunity, to cite Franco Albini, for "experimentation and verification in relation to the advancement of construction techniques, survey instruments, knowledge in various fields and in relation to the ever-changing contemporary culture" (Albini, 1968). Within the concept of tradition – as inferred from its evolutionary character – form, technique and production, in their historical *continuity* and not placed in opposition to one other, make up the fields of application through which, in parallel, research proceeds in order to ensure a coherent synthesis of design. The *technology of architecture and technological design* have the task of reinstating architecture's personal hallmark: a sort of DNA to be handed down to future generations, in part as a discipline dedicated to amalgamating the skills originating from other areas of knowledge. In the exercise of design, the categories of urban planning, composition, technology, structure and systems engineering all converge, with the result being increasingly accentuated by multidisciplinary nuances, in pursuit of a sense of balance between the parts; a structure founded upon simultaneity and heteronomous logic in the study of variables, by means of translations, approaches and skills as expressions of variegated identities. "Architects can influence society with their

theories and works, but they are not capable of completing any such transformation on their own, and end up being the interpreters of an overbearing historical reality in which, if the strongest and most honest do not succumb, they alone therefore represent the value of a component that is algebraically added to the others, all acting in the common field” (Rogers, 1951). Construction, in this context, identifies architecture as the main element in the transmission of continuity, placing the *how* at the point of transition between past and future, rather than making it independent of any historical evolution. Equally, architecture determines its path within a heteronomous practice of construction through an effective distinction between the strength of the principles and codes inherent to the discipline – consolidated thanks to long in-built innovation – and the energy of experimentation in its own right

Sometimes, faced with the difficulty of establishing the identity of disciplines, one seeks to trace a border that makes it possible to understand their sense and contents. However, it seems even more important “to work on the limits of each area of knowledge”, to cite a concept expressed by Salvatore Veca (Veca, 1979), placing communication between the fields at the centre, interpreting relationships and connections, and identifying the relational perspective as the foundational aspect of the practice.

Architecture’s position as an “art on the borderline of the arts”¹, as reiterated on several occasions by Renzo Piano, allows for reflection on its identity, placing it in a position not so much of marginality as of centrality. A concept of “border” inspired by the sociological perspective which distinguishes the “finite limit” (boundary) from the “area of interaction” (border) (Sennet, 2011; Sennet, 2018), in which variable but constructive contact takes place with the necessary entities in order for it to stay up-to-date. The heteronomy of architecture coincides with its “universality”, a concept which for

Alberto Campo Baeza (Campo Baeza, 2018) constitutes the identity of architecture. Dependency on the life of man and on the development of society and its cultural growth derives from a single and unavoidable factor: its heteronomy, a necessary condition for a process – both artistic and technical – that must express the values of a community over time and represent not only the “new” but also the “beautiful”.

To cite some concepts previously expressed by Edgar Morin, a design practice based on “necessary as well as possible contaminations”, on the contribution of “knowledge as an open system”, but above all aimed at working “against continuities that are unable to encapsulate the dynamics of change” (Morin, 1974) therefore becomes an opportunity for theoretical elaboration on the identity of the discipline itself, placing it in balance between the technical and the poetic spheres, but necessarily being brought up-to-date in the completed work, thus giving substance to the “webs of intricate relationships that seek form” (Italo Calvino). Architecture will have to seek out and affirm its own identity, its essence as a discipline that is at once scientific and poetic, its essence represented by the harmonies, codes and measures that history has handed down to us, along with the pressing duty to update them as required.

The complexity of the architectural field occasionally expresses restricted forms of treatment that are bound within narrow disciplinary areas or, in contrast, tend towards an eclecticism so vast that it prevents the identification of any discernible cultural perimeter. In spite of the complex phenomenon that characterises the transformations that involve the theoretical foundation of design and the figure of the architect, it is a matter of urgency to attempt to reinterpret the act of design and architecture as a coherent system rather than a patchwork of components.

“Contemporary architecture tends to produce objects, even though its most concrete

purpose is to generate processes. This is a falsehood that is full of consequences because it confines architecture to a very limited band of its entire spectrum; in doing so, it isolates it, exposing it to the risks of subordination and delusions of grandeur, pushing it towards social and political irresponsibility. The transformation of the physical environment passes through a series of events: the decision to create a new organised space, surveying, obtaining the necessary resources, defining the organisational system, and defining the formal system, technological choices, use, management, technical obsolescence, reuse and – finally – physical obsolescence. This concatenation is the entire spectrum of architecture, and each link in the chain is affected by what happens in all the others.

It is also the case that the cadence, scope and intensity of the various bands can differ according to the circumstances and in relation to the balances or imbalances within the contexts to which the spectrum corresponds. Moreover, each spectrum does not conclude at the end of the chain of events, because the signs of its existence – ruins and memory – are projected onto subsequent events. Architecture is involved with the entirety of this complex development; the design that it expresses is merely the starting point for a far-reaching process with significant consequences” (De Carlo, 1978).

The contemporary era proposes the dialectic between specialisation, the coordination of ideas and actions, the relationship between actors, phases and disciplines: the practice of the organisational culture of design circumscribes its own code in the coexistence and reciprocal exploitation of specialised fields of knowledge and the discipline of synthesis that is architecture.

With the revival of the global economy on the horizon, the dematerialisation of working practice has entailed significant changes in the productive actions and social relationships that coordinate the process. Hence the need for a humanism closely

tied to the reintroduction of the concept of “beauty”, in terms of its modern meaning that has shifted from a subjective sense of value towards a universal one. This in turn leads to the importance of dialogue with disciplines that combine within a polytechnic matrix that forever pays close attention to the relationship between theory and practice, to architectural design as an act that is simultaneously intellectual and technical. Therefore, starting with the assumption that “no theory can be brought forward without hitting a wall that only practice can penetrate” (Deleuze and Foucault 1972; Deleuze, 2002; Foucault, 1977; Deleuze, 2007), today it is essential to promote the humanist figures of artists, musicians, philosophers and architects capable of mastering design as the synthesis of external factors but also as an internal dialectic, as well as skills that can create culture understood as technical knowledge.

Despite a growing need to implement skills and means of coordination between professional actors, disciplinary fields and sectors of activity, architectural design has become the emblem of the act of synthesis. This is a representation of society which, having developed over the last three centuries, from the field of social sciences that once defined it as a *machine*, an *organism* and a *system*, is now defined by the concept of the *network* or, more accurately, by the notion of a *system of networks*, in which a person's desire to establish relationships places them within a multitude of social spheres.

The *heteronomy* of architecture, between *hybridisation* and the *contamination of knowledge*, represents not only an objective fact, but also a concept aimed at providing the discipline with new and broader horizons, capable of putting it in a position from which it can energetically and courageously tackle the challenges that the cultural, social and economic landscape is increasingly throwing at the heart of our contemporary world.

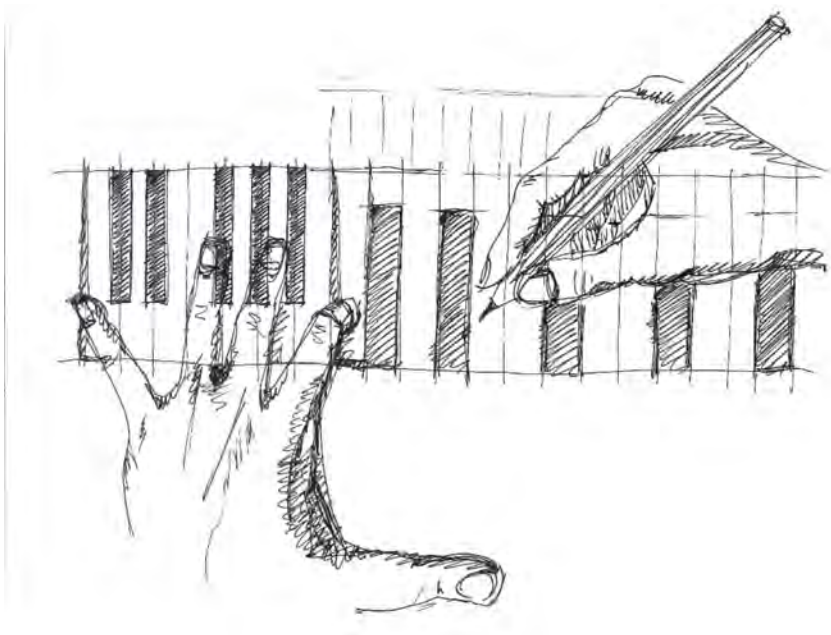


Figure 1. Music becomes Architecture



Figure 2. Architecture becomes Music

REFERENCES

- Albini, Franco. "Appunti per il seminario introduttivo". In *Problemi didattici di un corso di progettazione* edited by Franco Albini. Milan: Istituto di Composizione della Facoltà di Architettura del Politecnico di Milano [Institute of Composition at the Politecnico di Milano Faculty of Architecture], 1968.
- Borsa, Davide, and Carboni Maestri, Gregorio (2018). "Architettura, progetto, università. Intervista a Kenneth Frampton". In *Le scuole di architettura nel teatro del mondo*, edited by Francesca Belloni, and Edoardo Colonna di Paliano, "Architettura civile" no. 20/21/22, Cuneo: Araba Fenice, 2018.
- Campo Baeza, Alberto. "Rinuncia e Universalità", *Milano Arch Week 2018*, 23 May 2018. Milan: Scuola di Architettura AUIC del Politecnico di Milano [Politecnico di Milano AUIC School of Architecture], 2018.
- De Carlo, Giancarlo. "Editorial", *Spazio e Società* no. 1 (January 1978): 6.
- De Carlo, Giancarlo. In *Conversazioni con Giancarlo De Carlo*, edited by Franco Bunčuga, 106-115, Milan: Eleuthera, 2001.
- Deleuze, Gilles. *L'isola deserta e altri scritti. Testi e interviste 1953-1974*. Turin: Einaudi, 2007.
- Deleuze, Gilles. *L'île déserte et autres textes. Textes et entretiens 1953-1974*. Paris: Minuit, 2002.
- Deleuze, Gilles and Foucault, Michel. "Les Intellectuels et le pouvoir", *L'Arc*, no. 49 (1972): 3-10.
- Foucault, Michel. "Gli intellettuali e il potere". In *Microfisica del potere. Interventi politici*, edited by Michel Foucault, 107-18. Turin: Einaudi, 1977.
- Frampton, Kenneth. *Tettonica e architettura. Poetica della forma architettonica nel XIX e XX secolo*, edited by Mara De Benedetti. Milan: Skira, 2005.
- Gregotti, Vittorio. "La nozione di contesto". *Casabella* no. 465 (1987): 9-10.
- Harari, Yuval Noah. *21 Lessons for the 21st Century*. Florence, Milan: Giunti Editore/Bompiani, 2018.
- Kuhn, Thomas. "What are Scientific Revolutions?". in *The Probabilistic Revolution*, edited by Lorenz Kruger, Lorraine Daston, and Michel Heidelberger. Cambridge, Massachusetts: The MIT Press, 1987.
- Lévi-Strauss, Claude. *Il crudo e il cotto*. Milan: Il saggiatore, 2004.
- Morin, Edgar. *Il paradigma perduto. Che cos'è la natura umana?*. Sesto San Giovanni, Milan: Mimesis, 1974.
- Morin, Edgar. *Sur l'esthétique*. Milan: La Feltrinelli, 2019.
- Pollione, Marco Vitruvio. *De Architectura*, edited by Franca Bossalino, Rome: Kappa, 1998.
- Rogers, Ernesto Nathan. *Il dramma dell'architetto*, text taken from the lecture "El drama del arquitecto" given at the Faculty of Literature and Philosophy at the Universidad Mayor de San Marcos, Lima in 1948. In *Esperienza dell'architettura*, edited by Luca Molinari, 165-171. Milan: Skira, 1997.
- Rogers, Ernesto Nathan. *Evoluzione dell'architettura italiana contemporanea* (1951). In *Architettura, Misura e grandezza dell'uomo*, edited by Serena Maffioletti, 430-433. Milano: Il Poligrafo 2010.
- Sciascia, Leonardo. "Io mi ricordo...". In *Questo non è un racconto. Scritti per il cinema e sul cinema*, edited by Leonardo Sciascia. Milan: Adelphi, 1987.
- Siza, Alvaro. "Sulla pedagogia". *Casabella*, no. 770 (2008).
- Sennett, Richard. "Boundaries and Borders". In *Living in the Endless City*, edited by Richard Burdett and Deyan Sudjic, 324-331. London: 2011.

- Sennett, Richard. *Costruire e abitare. Etica per la città*. Milan: Feltrinelli, 2018.
- Sennet, Richard. "The Open City". In *Building and dwelling. Ethics for the City*, edited by Richard Sennett. London: Allen Lane, 2018.
- Veca, Salvatore. *Il filosofo e la città. Platone, Whitehead, Husserl, Marx*, edited by Enzo Paci. Milan: Il Saggiatore, 1979.