

Drawing and Design. Declensions of Terms and Practices Actualizations

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Declensions of terms

"It is interesting to think about the relationship between drawing and design, and about the role of drawing in design: this is almost a play on words, but –as often happens– playing can lead us to reflect more deeply. On English-language design courses, the word 'design' is almost always accompanied by another term to specify the field in question: furniture design, car design, lighting design, and so forth. It is perhaps not very well-known, however; that the word 'design' actually derives from the Italian word 'disegno', meaning 'drawing', which in turn derives from the Latin 'design-are'" [Pasca 2010, p. 12].

With this introduction, in the essay *Drawing and Design*, Vanni Pasca in 2010 questioned the positioning of sketching and, more generally, analog drawing as a suitable practice for transmitting a conceptual reflection irreplaceable of project: the manifestation of the idea. Although in some specific areas of design, early

approaches to creation do not necessarily contemplate it –guiding choices toward forms of visualization made up of assemblies, disassemblies, and reassemblies that synthesize sources of inspiration– drawing once again assumes a central role in recording changes in the entire methodological process, confronting the fleeting or dilated times of production. Moreover, the term is inscribed in the same word that in English denotes both the noun and the verb, binding the subject and the action in the fulfillment of a definition: 'design'.

As Pasca shrewdly observed, the Latin derivation of *designare*, in *signum*, makes the practice of design coincide with that of drawing, which, in several cases, becomes the identity card of those who through signs, lines, trac-

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ings and backgrounds leave their mark, summarizing in a sketch the tortuous start of a process made up of re-thinking and transformations converging in the final act of realization, whether of a tangible or intangible nature. Just as we have joined the word design into our common vocabulary, at times misusing it, even Anglo-Saxon scholars agree in finding the translation of the noun 'drawing' by '*disegno*' very reductive, because the actions and tools of the former do not necessarily contemplate the semantic charge and cognitive dimension of the latter, whose genealogy traverses a very long history that begins to emerge, textually, from Cennino Cennini's late 14th-century treatise [1].

In addition to documenting medieval techniques, in fact, the *Libro dell'Arte* opens precisely to the stimulation of thought as the painter states that "the intellect delights in drawing" [Tambroni 1821, p. 4]. But it is the theoretical debate, arising from the studies of the most important Renaissance protagonists, that intercepts the epistemologies of a discipline that is as much conceptual as it is demonstrated by empirical research, yesterday as today. Thus, in 1435 Leon Battista Alberti's *De Pictura* enshrines in the "*circoscrizione*", "*composizione*", and "*ricezione dei lumi*" the necessary conditions for the 'good drawing' of pictorial art [Grayson 1980], Leonardo da Vinci's 1540 *Trattato della Pittura*, on the other hand, defines the latter as a science for which "you must first use drawing, to give with demonstrative form to the eye the intention and invention first made in your imagination" [Tabarrini 1890, p. 44]. Furthermore, referring to Michelangelo's work, Filippo Baldinucci recalls the recurring principle that painting, and sculpture are derived from drawing and contribute to the artificial imitation of nature [Baldinucci 1681].

It is easy to understand how, for the Renaissance man, the conception of drawing should be expanded and should also extend to the *maquette* [Powers 2020], just think, for example, at the description of the fundamental steps by which Filarete arrives at the design of Sforzinda city, appealing to the "*disegno rilevato*" that results in a wooden model [Finoli, Grassi 1972].

In general, the treatises of the fifteenth and sixteenth centuries move on a double register: on the one hand, they document the terminological and linguistic interpretations that contribute to the specification of the different methodologies, technical and operational, used in the depiction of simulated reality and/or designed from

scratch, ranging from the sketch to the physical prototype; parallel it explicates subjective conceptions of an intellectual activity devoted to the stimulation of design thinking and the imaginary liberation. This attitude is also confirmed by Federico Zuccari who, in 1608 published *L'Idea de' Pittori, Scultori et Architetti*, making a distinction between external and internal drawing [Zuccari 1608]. Returning to the word 'design' meanings –even before its institutional recognition as a professional activity closely interrelated with the industrialization processes– its Anglo-Saxon origin lies during the Elizabethan period, and over the course of a century it absorbed three different terminological declinations, whose roots are respectively of Latin, French and Italian derivation [3].

Specifically, the noun dates back to 1588 and is used for "a particular purpose held in view by an individual group [...]; deliberate purposive planning [...]; a mental project or scheme in which means to an end are laid down [...]; a deliberate undercover project or scheme [...]; a preliminary sketch or outline showing the main features of something to be executed [...]; an underlying scheme that governs functioning, developing, or unfolding [...]; a plan or protocol for carrying out or accomplishing something (as a scientific experiment), also: the process of preparing this [...]; the arrangement of elements or details in a product or work of art [...]; a decorative pattern [...]; the creative art of executing aesthetic or functional designs" [Mish 1994, p. 313].

But reconsidering the centrality of the word 'drawing', debating rhetorically the concept of design understood as the art of building, is Sir Henry Wotton, English ambassador to Venice who in 1624 published the Vitruvian-inspired treatise *The Elements of Architecture* [Wotton 1624].

Today, we are well aware of how the word 'design' has taken on an international scope in classifying design practices that are inserted onto the various cultural, commodity and production sectors in which they operate; however, if you ask a recent graduate –who is applying to enroll in a design degree program– to formulate a possible definition of the subject he or she intends to study and explore in depth, the answer will most likely be articulated by the following nouns: art, creativity, design, technique [4]. Indeed, art and technique for a long time were regarded as two separate entities in Renaissance and modern culture, only to begin a centuries-long process of reunification in the nineteenth century, when technological advancement began to affect the function

and material of artifacts, however much the replacement of the figure of the craftsman by that of the machine was initially not viewed favorably, especially on the aesthetic side of the results [Vitta 2001].

Today, “design roughly indicates the place where art and technique come by common accord to coincide (and along with them their respective scientific and critical modes) paving the way for a new form of culture” [Flusser 2003, p. 3].

In a context of widespread planning across multiple fields, made up of processes in the making, drawing has always played a preferential role as the language that anticipates and conducts the entire experience. It is sufficient to record the protagonists’ thoughts to understand how, for example, for those involved in conceiving products it is essential to resort to the sign on paper to express ideas and give them an order, so the use of drawing analog techniques becomes a necessary condition that transcends the pervasiveness of computer media, the moment one takes possession of the neutral space of the blank sheet.

For Odoardo Fioravanti, the first trace opens to the narrative of an event that expresses the individual identity and subjectivity; therefore, sign and drawing are configured as simulacra of the person and the designer, respectively. For Luca Scacchetti, drawing itself continues to be the project, because it argues its reasons. Alessandro Mendini and Riccardo Dalisi, on the other hand, consider it in the same way as a dance performed by hands [Veneziano 2009]. Indeed, choreographic analogies also affect visual communication design and are evident in Giovanni Anceschi’s thinking when he states that while not dealing with three-dimensional objects, preparatory sketches for a graphic design often draw on the visual languages of notational systems [Bistagnino 2018].

Shifting the focus to fashion design, it should be considered that despite having a long tradition related to illustration in advertising –later interrupted by the advent of photography–, the creators’ sketches and *croquis* are hardly made public and are considered by them as personal, sometimes intimate, working documents that multiply and evolve before reaching the completeness of technical drawings [5], at plane development processes of paper patterns to be delivered to the tailors departments for garment making.

Some fashion designers do not trust on sketching, opting for conceptual work made up of cut-outs, disassem-

bles and reassemblies of images, flowing into the synoptic pictures of one or more mood-boards from which to extrapolate sources of inspiration; others prefer the manual work of three-dimensional modeling of fabrics to be draped directly on bodies or dummies, exploiting the potentials of *moulage* techniques through which sartorial patterns are easily obtained. But those who do not give up drawing tend to formulate a shareable thought that we could extend to all areas of design: “A drawing can convey numerous and multifaceted unimaginable realities [...]. There is an intimate and direct relationship between the hand [...] and the medium it uses. A drawing has no boundaries, it is infinite and tactile” [Borrelli 2008, p. 146].

Practices actualizations

The articulation of the semantic mosaic so far outlined and the complexity of the connections that exist between drawing and design have seen their scope further actualized and expanded, with the progressive redefinition of both terms in the light of the transformations that have stratified them through the ages and given them over to contemporaneity. The current scenario represents, at the same time, the outcome of a series of revolutionary changes in approach, which have contributed to tracing new and more fluid disciplinary margins, and the starting point of a cultural framework still in the making, nourished by a multiplicity of meanings and application fields. This multiple dimension emerges from the breadth and pervasive diffusion of design practices and systemic strategies that contribute to defining an updated epistemology of design and that are rooted in a conceptual substratum from which an open vision of the drawing discipline originates, in its value as both a creative and representative act.

Concerning design, its more traditional meaning relates it almost exclusively to the formal definition of the designed object, identifying it with the product sphere and taking root extensively in common language, so much so that the use of the specification ‘design’ as a qualification of a generic artefact –often to label it as ‘bizarre’– still pollutes the collective consciousness regarding the term. In recent decades, however, the discipline has undergone “a strong development linked to the expansion of its research areas and its theoretical and methodological contents, as well as its fields of intervention” [Tosi 2021, p. 17]. This exten-

sion of disciplinary horizons has more distant origins, as it spans the entire 20th century and matures in consequential stages. Its evolution has been punctually recorded – and thus historicized – through a series of landmark documents that have witnessed over time the evolution and configuration of a knowledge and skills set that has now become decisive, both in terms of its highly persuasive role and consequently its ability to guide choices, and in terms of its cultural influence at a global level.

Tracing the evolution of design thinking through these manifestos [Bollini 2003; Piscitelli 2020] allows us to understand how that value of ‘critical consciousness’ associated with a field that is both theoretical and applicative, that “precise *mandate* [...] that goes beyond the albeit noble objective of optimally combining form and function” [Riccini 2020, p. 415, translation by the authors], is the result of a continuous process of redefinition and sedimentation as well as of renewal and attribution of a cultural role.

Already between the lines of the programmatic *First things first* manifesto [Garland 1964] lay the basis for the awakening of consciences on the theme of the rejection of capitalist logic and the aggregation of designers in a corporative form animated by ethical principles. A form which recognized its theoretical origins in Tomás Maldonado’s thought, who “notes [...] the tendency to sacrifice the design hope too globally and too hastily” [Maldonado, cited in Piscitelli 2020, p. 194], affirming instead that “the project intertwines political themes and major social and environmental issues” [Riccini 2020, p. 416]. Later, it is with the *Design memorandum. Dall’etica del progetto al progetto dell’etica*, signed by the ADI (Associazione per il Disegno Industriale) in 1987, that the call for a multidisciplinary vision of design becomes even more explicit, with the definition of three main design assumptions: the environment, the culture of peace, and the respect for rights and duties. The designer figure is now capable of bringing together “the functional dimension, the communicational dimension, the dimension of desire” and becomes the bearer of a global design thought, “able to set new cultural references” and to “make synthesis from the various elements of knowledge to create objects and systems charged with aesthetic qualities” [ADI 1987, p. 2]. The *Munich Design Charter* of 1990 acknowledges this vision by placing design in the European scenario, defining it in terms of “a balance between technological and humanistic aspects of culture” as well as “one of the most extensive ethical theorems of Eu-

ropean thought” based on three “humanistic theorems” pivoting on the word ecology: of complexity, of design, of relationships [The Munich Design Charter, pp. 74-76]. The dimension of sharing triggered since the 2000s, with the democratization of critical thinking through the web, “amplifies the culture of responsibility previously relegated to the self-referential confines of designers to open up to intellectuals, thinkers, scientists and institutions” [Piscitelli 2020, pp. 198, 199], determining a global involvement and widespread feeling in which any user becomes active and responsible. This dialogical condition places design at the center of a collective debate that emerges in the most recent *Montreal Design Declaration*, published in 2017 and updated in 2019, which configures itself as an open document on a participatory level synthesized by the mode of the call to action, whose writing and updating assume a character of temporal continuity [*Montreal Design Declaration* 2017].

The transition of design “from being a functional activity of the production and market system to the complex contemporary galaxy of design as critical thinking (critical design)” [Riccini 2020, p. 415] requires an analysis in the light of its relationship with drawing. Always the expressive language of choice for any form of project, drawing has radically changed and expanded its semantic scope and field of investigation and application too. In recent decades, through the debate on visual culture, a series of turning points have followed one another, corresponding to as many critical positions formalized on several occasions in the field of visual studies [6]. Theoretical reflections centered on the visual domain have focused on studying the cultural dimension of vision and images, examining “all the aspects [...] that contribute to situating certain images and certain acts of vision in a precise cultural context” [Pinotti, Somaini 2016, p. XIV]. In this field, the genealogy of visual studies [Luigini 2020] has brought to light, with different declinations in the Anglo-American and European contexts, the concepts of pictorial turn – understood as the occurrence on a global scale of the actual technical possibility of “a culture completely dominated by images” [7] – of iconic turn – defined by parallelism with the linguistic turn, that is, establishing a “comparison [...] between those two twins that are image and word” [Boehm 2012, p. 129] – and, in a broader sense, of visual culture – understood as both “cultural construction of vision” and “visual construction of culture” [Mitchell 2002].

But the theoretical issues have not only concerned the interpretation and signification of the gaze and the role of images in society. The international debate forms itself and debates from different points of view regarding the activity of image production, that transdisciplinary field of studies constituted by the visual sciences – those areas of research, culture and academic studies that deal with “the elaboration of visual images” [Cardone 2019]. This definition, now fully mature, represents the arrival of an evolutionary path that has seen the appearance, firstly, of the field of visual science –which proposes to bring together in a single body the competencies based on spatial thinking, representation and geometry [Bertoline 1998]– and secondly, of the field of image science – through which emerges the aforementioned approach to the image defined as a new and complex investigation object [Mitchell 2018].

With the evolution of critical thought around the graphic sciences, different taxonomies have been proposed, which have analyzed their uses and diffusion in the most varied spheres of knowledge; among these, the river diagram elaborated by Massironi has proved particularly suitable to reflect the changing nature of this field of study, precisely because of its flexibility and ability to adapt and reconfigure itself over time [Massironi 2001]. Cicalò’s updated proposal of the diagram recomposes the evolutions brought about by the post-digital era into a unitary framework, confirming, on the one hand, the validity of such a methodological approach –inclusive, open, and liable to further implementations in the future– and offering, on the other hand, its indispensable actualization concerning the multiple complexities of the current scenario [Cicalò 2020].

The result of the two processes –chronologically parallel and disciplinarily intertwined– of semantic expansion of the fields of ‘design’ and ‘drawing’ can be read through the references that define their research topics and application contexts in the academic sphere, specifically the most recent declaratory of the academic disciplines first [8] and then the academic recruitment fields [9].

Concerning the “ICAR/13 - Design” academic discipline, the contents of the first declaratory (2000) are expressly declined about “theories and methods, techniques and instruments of the design of the industrial product –material or virtual– in its productive, technological-constructive, functional, formal and utilitarian characteristics and the relations that it establishes with the spatial and environmental context and with that of industry and the

market”. However, the concluding words already make explicit a conceptual frame of reference that concerns “design as an interdisciplinary practice”, from which “specific areas of research in continuous evolution” arise. The second –and current– declaratory (2015) for the “08/CI - Design and Technological Planning of Architecture” academic recruitment field, regarding the sector of design, broadens the scope to “theories, methods, techniques and instruments of the design of material and virtual artefacts”, introducing the theme of user-centered design and making explicit the concept of “economic, social and environmental sustainability”. In addition, the reference to “design thinking as an interdisciplinary practice and moment of synthesis of the multiple knowledge involved in design” is emphasized and further specified, delimiting “the areas of research and application [of] product design, communication, interior design, fashion and their systemic integrations”, perhaps still reductively concerning the theme of person-person and person-environment interaction.

Concerning the “ICAR/17 - Representation of Architecture” academic field (simply named “Disegno” in Italian), the declaratory of 2000 refers first of all to the “representation of architecture and the environment”, identifying the disciplinary pillars in the principles of descriptive geometry and the survey; the opening towards a broader panorama is affirmed by the definition of “drawing as a graphic, infographic and multimedia language, applied to the design process from the shaping of the idea to its executive definition”. The subsequent 2015 update substantially confirms the approach of this concise formulation, except for some necessary clarifications regarding the current tools, techniques, and procedures. A greater adherence to the multiple dimension that characterizes the present panorama of the uses of drawing, as a transdisciplinary language and as a space of dialog common to a variety of sectors, emerges from the proposal for the revision of the declaratory of the “08/EI - Drawing” academic recruitment field, formulated by the UID Scientific Society [10]. This proposal makes explicit a polysemous disciplinary character of transversal application, in which “two main areas exist, with possible interrelationships one scientific-technological and one social-humanistic”. The domains and fields of application range from concept to modeling, prototyping, communication, and thus “management of the entire life cycle of products, including digital ones”. The sector operates in the context of research and didactic-educational activities,

declaring for the term drawing the “broadest meaning of cognitive means of the formal structure, of instrument for the analysis, transmission, fruition and dissemination of existing values, tangible and intangible”.

Although a new update of regulatory references, linked to the reform of knowledge, is on the horizon, these steps appear indicative of a growing awareness of the multiple, dialogic, and inclusive dimension of the discipline of drawing. An open and flexible perimeter that reflects the nature of the field –specifically referring to the use of graphic sciences– when it enters relation with other disciplinary fields.

Conclusions

Today, the meaning of design has expanded and has gone beyond the limits of artifactual tangibility, claiming

Notes

[1] The first printed edition is dated 1821 (edited by Giuseppe Tambroni).

[2] The origin of the manuscript is unknown, and it is assumed that Francesco Melzi collected the drawings and annotations of Leonardo da Vinci, contained in the Urbino codex 1270, in c. 1540.

[3] *Designatio, Dessain, Disegno* [Côte-Real 2010].

[4] This survey was carried out at the Università luav di Venezia and confirmed by Massimiliano Ciammaichella's admission interviews for the degree course in Product, Communication, and Interior Design –Product Design and Visual Design curricula– in September 2022.

[5] Also known as *croquis*.

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ture e Architettura lasciata la rozzezza delle maniere Greca, e Gottica, si siano in questi secoli ridotte all'antica loro perfezione. Firenze: Santi Franchi.

the multiple values of a design culture that acts in the variable course of life, in the relationships between people and their interactions with the environment, in and on bodies. Design has emerged on the global scene as a strategic innovation resource indispensable to develop both production and social systems. At the same time, drawing has not remained impassive to the changes of technological innovation: accepting the broadest meaning of the term image, it continuously reformulates its tools and its meaning, and it absorbs a wide range of production and communication modalities, whose fruition is now almost exclusively mediated by devices and their interfaces.

In this complex and articulated scenario, drawing amplifies the boundaries of its positioning, governing the different phases of the design project and projecting itself towards new methodologies, becoming a seismograph of the present in anticipating the future.

[6] So called by James Elkins [Elkins 2003] and defined as “a field of academic studies that have as their object the visible and the practices of the gaze in culturally organized forms” [Terrosi 2015].

[7] It is the awareness that “a culture totally dominated by images, has now become a real technical possibility on a global scale” [Mitchell 1992, p. 91].

[8] D.M. 4 ottobre 2000, Allegato B.

[9] D.M. 30 ottobre 2015, n. 855, Allegato B.

[10] The revision proposal was approved by the Scientific Technical Committee on 22 March 2021.

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