Renewing Glances. Design and its Practice: Representing, Communicating, Narrating

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Abstract

As 'specialists' or 'public', we are immersed daily in a world of images. This centrality of images has corresponded to a renewal in studies, theories, and methodologies of knowledge that can be derived and transmitted, especially for experiences connected to the means and forms of visualization. This is different in the discipline of drawing, however, which seems to have folded back on itself. About twenty years ago, it seemed that drawing could, or should, unfold over broad territories and that its practices participated in the construction of knowledge according to a system of specific means: heuristic, hermeneutic, referential ones.
Today more than ever, the urgency for a new understanding of logic and illogic, truth and ethics, that is, scientific and aesthetic thought, motivates the reflections and experiences proposed below. These reflections are useful in delineating the context of the need to renew the studies in drawing, along with its theories and methodologies, which can only originate through concrete practice. This is the perspective of the teaching experiences presented. These are experiences in which the exercise of drawing is an unavoidable mode due to the formation of a code of thought that can only be visual, and even more appropriately figural, because it is precisely in its writing that it acquires 'body' and 'manner.'

Keywords: visual communication, visual narration, infographics, video, composition, editing

Introduction

As 'specialists' or 'public,' we are immersed daily in a world of images. A multitude of images that we consume, produce, share, transmit, and spread every day. As far as the term 'civility of images' is worn out, our existence is undoubtedly always more interwoven with experiences overflowing with visual representations and characterized by the availability of continuously changing viewing technologies. To the evident centrality of images in the last thirty years or so, there has been a renewed flourishing of studies, theories, and methodologies for the derivative knowledge and the cognitive transmitted content, but especially for experiences connected to the modes and forms of visualization. This renewal represents only the latest battle between two irreducible strategies of thought in the cognitive relationship with reality.

These battles have been proposed many times throughout the history of Western knowledge, in perennial conflict between philosophy and tragedy, idea and imitation, logic and illogic, need and possibility, truth and ethics.
To hold reason and body, thought and desire together, the conflict aggressively spanned the entire twentieth century to resolve itself in a "language of figures," changing not only the object of knowledge, but also the procedures.
This new knowledge is capable of including the complexities and contradictions of the subject, as well as the experience "introducible in a concept, but figurable in a narration" [Rella 2004, p. 55] [1].
This constitutional conflict in drawing is in perennial tension between science and aesthetics; between thought ba-

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sed on the difference and the rigor of measurement, and thought based on the similarity and even the perceptive homology of the forms. These two epistemological approaches have accompanied the discipline of drawing since the beginning and mark a difference between declared, intangible, rational cognition based on abstraction, and implied, totalizing, natural cognition based on imitation and experience.
Paradoxically, the full awareness of the need to address, understand, and govern this 'multiplication of images' does not seem to be rooted among drawing scholars if it is still necessary to remark how "there are many who think that our specialty is not only architecture, but rather the creation of visual images" [Cardone 2016a, p. 19].
There is no registering of a meaningful quantitative reorientation of research on "transverse themes regarding graphical investigation and communication in the area of design and cognition […] toward cutting-edge sectors in the historical, theoretical, experimental, and applicative fields" [2].
This is a regression referring to twenty years ago, when it seemed established that drawing could, or should, unfold over wide territories and that its practice would participate in constructing knowledge according to a multi-modal system: heuristics, hermeneutics, referential ones.
This reversal is perhaps even more evident, and therefore more worrying, in the context of university education where, with the consolidation of teaching representation oriented at prefiguring and controlling anthropic space, less attention has slowly been given to drawing according to more extended, diverse horizons. Today more than ever, the urgency to include logic and illogic, truth and ethics, that is, scientific and aesthetic thought in the discipline of drawing motivates the reflections and experiences proposed below.
These reflections are useful in delineating the context for situating the need to renew studies in design and the possibility of doing so, along with its theories and methodologies, according to numerous positions.
This renewal in drawing should fundamentally originate from the exercise of concrete practices because they can be "connected with the art of investigating, understanding, communicating and, ultimately, of going on along the road of knowledge and know-how" [De Rubertis 2012, p. 145].
This is the perspective in which the teaching experiences presented should be viewed [3], where the two visual proposed artifacts are expressions of two irreducible but complementary strategies of thought that precisely echo the discipline of drawing and its practices.
These are experiences wherein drawing is practiced as an unavoidable mode of forming a code of thought that can only be visual [Arnheim 1974].
The code is precisely figural and is composed over time through progressive deposits and archiving of visual memories and a thought that unfolds in writing because it is in this representation that it acquires a 'body' and formulates the thought itself [Cervellini 2012]. This means exercising practices that are proposed in the view of a more general reflection on the future of the statute of drawing, which, "finally detached from the seductive vortex of opaque mimetic images, can recover its figurative and conceptual heritage" [Dotto 2016, p. 35].

Renewed glances

There are many disciplines in the field of human and social sciences that, each with their own specificities, have assumed images as the favored object of research. If in the 1990s historical/diachronic criteria still prevailed along with heuristic models deriving from linguistics, in recent years a different perspective has been definitively consolidated, including both iconic objects and the practices of viewing and looking. This different view corresponds to a different methodological approach that involves both the 'making' of images–the different media and places of production and consumption–and the 'using' of images–the visual experience–incorporating, according to a situated view, social interaction and cultural phenomena [Pinotti 2014].
It is a true "iconic turn" [Pinotti 2014, p. 271], where the paradigm of reflections does not reside in the iconic object but in the experience made of it, that is, in the meaning it assumes for the individual and derivative cultural processes and that, simultaneously, support it. A body of research that, from the awareness that the role of images in the cultural process is close to "the idea that the visual can represent a new, important heuristic perspective, 'proposes' the visual culture as a cultural object and guides the visual analysis, assuming both the specifics and centrality in the modern era" [Sassatelli 2011, pp. 150-151].
The work of Jean-Jacques Wunenburger testifies how this 'iconic turn' regards the different areas of knowledge; he, for the first time in philosophy, used the image as a category of investigation in itself.

Aware that "the study of productions rendered in images, of their properties, and of their effects, that is, the imagination, has progressively supplanted the classical question of the imagination" [Wunenburger 2008, p. 16], the scholar retraces "the complex themes of the type, nature, and methodology, pausing on the epistemological orientations, the hermeneutics and phenomenology of images" [Cardone 2016b, p. 7].
According to a broad vision, he embraces imagination and the imaginery, encompassing the inherent double nature of each image–the matter and the mind, the thing and the idea, truth and error–he therefore recognizes in the gap between knowledge and what is represented the propulsion that ensures that each image is both the product of a cognitive operation and the fruit of a reflexive interpretation. Wunenburger makes an effort to culturally reassess the world of images, not only those that seem to need "an interpretational undertaking", but also those where the information seems to meet "the surface of the figures without any obstacles" [Wunenburger 1999, p. 272].
This thinking by and through images has, from the beginning, also accompanied the formation of modern science, contributing, in relation to tools and techniques, to the starting of the experimental method based on the principle of verification through experiment.
The image, the interface between knowledge and the world, is an exploratory practice and observable model of reality that, proceeding through successive accumulations and comparisons, allows the passage "from taxonomic orders to true propositions" [Ugo 1994, p. 40].
But also due to this process of abstraction of the notion of form, that unifies geometry and calculus, the image works to define abstract languages and models that are indispensable to the scientific formalization of theories.
A universe of images that participates in the scientific thought, in the heuristic and operational practice where "sketches, schemes, graphs, synoptic tables and diagrams" confer a visible, and not only abstract, structure to knowledge, favoring a "global cognitive path" [Wunenburger 1999, p. 318]. Images play a central role not so much for their descriptive/mimetic character as for their descriptive/notational feature, becoming available to the scientist's conjectures in gathering, isolating, and fixing some aspects–and only the essential ones–of the observed phenomenal reality through a set of signs.
An openness to 'discovering,' through the progressive elimination of redundancy, that has ensured the 'fortune' of

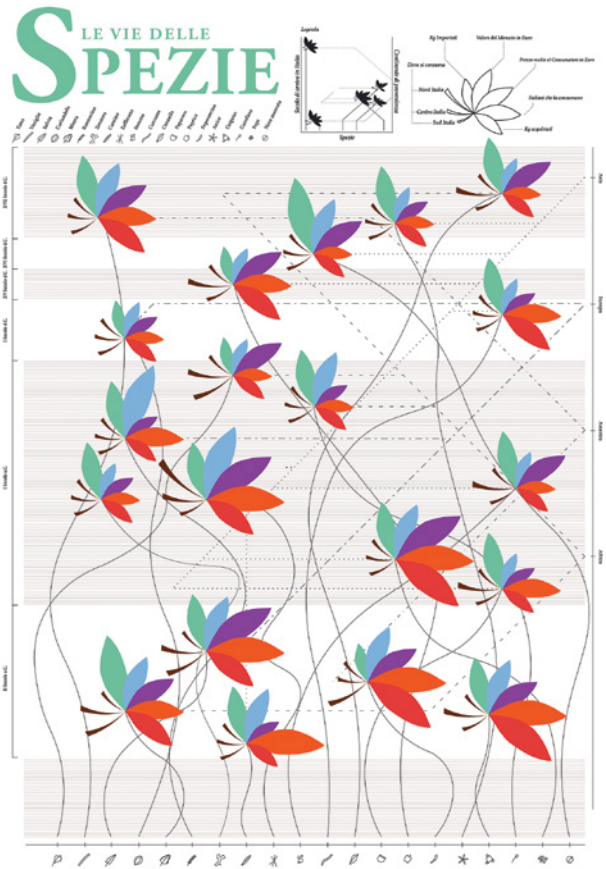
Fig. 1. SpreCO2 at Sapienza University (Students Francesca Romana Pelagallo, Xu Huijie, Marta Jamróz).

images in the scientific method because drawing an image is analogous to the functioning of the brain.
This, in fact, due to the truly impressive capacity for resolution of a glance, must reduce the quantity of visual information. Therefore, if the mental image is a reduction of what is captured by sight, the drawn image is none other than "a further development of this program of synthesis" [Pascolini 2006, p. 138].
The intelligence of images was newly affirmed in science after the crisis experienced in the 1980s [4].
Due to the enormous amount of information produced by instrumental apparatus, it was necessary to "reduce complexity, consolidate the information" newly resolved by direct observation "of 'events' preselected by the apparatus and represented through appropriate codes" [Pascolini 2006, p.141].
These are particular images, the result of complex instrumental mediations produced through 'transduction' that transport what is latent to the perceptual present, the invisible to the sphere of the visible [Anceschi 1992].
But representing theoretical models of both the measurement apparatus and the phenomenal reality, giving existence to what is non-existent, the images are also, and still, representation of hypotheses.
New images of possible reality visualizing concepts of the world, for whose interpretation it is necessary to refer to further visual mediation.
In this scope, scientists should activate chains of associative recalls to other images, looking for them, as with sight, in the memory of their own cultural, figurative repertoire [Pascolini 2006].

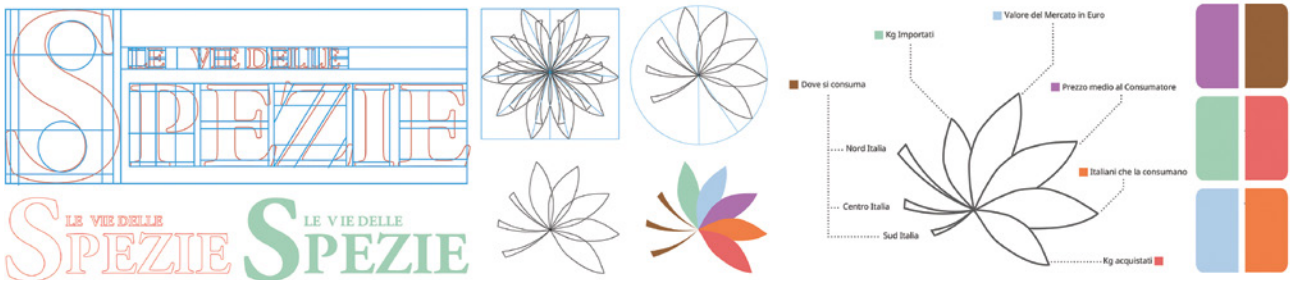
Visual artifacts for representation, communication, narration

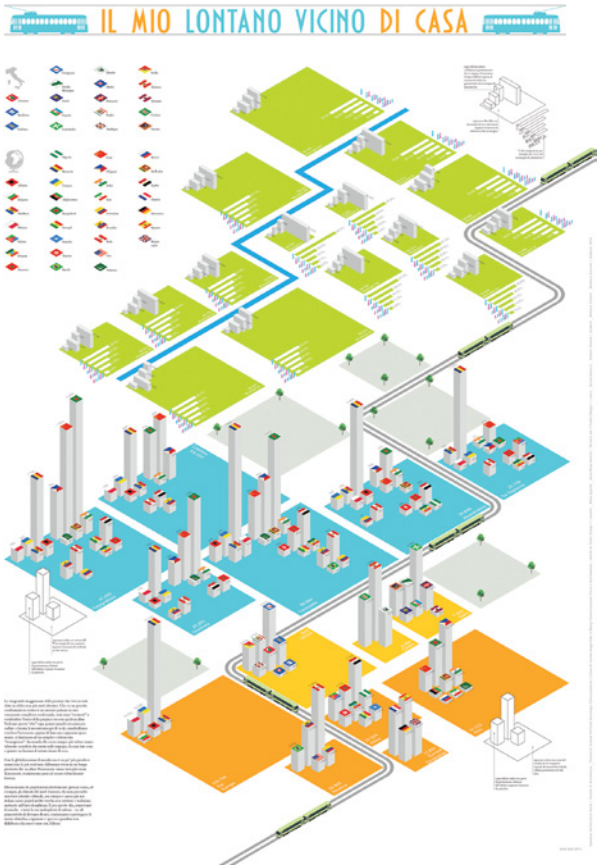
The teaching experiences presented below were proposed to the students as an opportunity to reason about 'what' and 'how,' addressing content and device, measuring informative and aesthetic criteria, updating accuracy and synthesis, balancing clarity and communicational efficacy. According to this goal, some of the visual forms depicting artifacts useful to supporting public communication campaigns on socially and culturally relevant questions, were experimented. 'Sensitive' topics were willingly adopted over time: gender differences and equal opportunity, environmental issues and the resistance to changing daily individual behaviors (fig. 1), the theme of migration and migrants (figs. 2-5; figs. 7-10) and the condition of the Italian university system (figs. 6, 10, 11), etc. These are conflicting, controversial arguments that cannot be 'simply' divulged, where communication cannot be limited in describing the facts, but where the facts should be made understandable, highlighting the plan underlying the events, and available to understanding through experience and participation.
The experimentation was aimed at designing the forms of understanding and communication; it consisted of two types of visual artifacts: an infographic in the form of a map, and a brief 60-second video.
These two modes of visualization were chosen precisely for their differences as expression of two forms of irreducible, complementary thought, capable of combining communication and narration, exercising different enunciative means of 'discourse' about the represented object/subject: the description and the story. In the description, the object is seen simultaneously from all points of view according to an atemporal spatiality with a "simultaneous glance that embraces and understands a stable order of places" [Marin 2001, p. 81].
In the story, the object is narrated through "the glance of a moving traveler that crosses spaces and itineraries" [Marin 2001, p. 82] and the exposition is linked to a spatiality in which the temporal dimension is present.
In the infographic, the 'draftsman' has a higher position and observes the horizon. His gaze is stretched and proceeds sequentially in search of a connective thread in the set of data that will transform it into information.
The construction of knowledge derives from logical/scientific thought and a communicational mode that acts through demonstrative argumentation. It tries to convince due to the reliability of the data and authority of the 'draftsman,' adopting a formalized, concrete, non-contradictory language. In the video, the draftsman is, instead, in the deep of the informational 'forest.'
He is situated at a lower height, there is a reduced field of view impeded by obstacles. Indeed, the close-up view of things allows the translation of the general arguments so that the communication reaches the public more easily, which no longer feels extraneous.
The construction of knowledge derives from narrative thought and a means of communication that acts through similarity and tries to convince through 'good stories' due to the plausibility of the experience and empathy with the character, adopting an expressive, emotional language.

These two products, which, in making a phenomenon/process/story visible and offering it for the observer/spectator's interpretation as a possible experience, differ according to their figural registers, communicational means, and narrative strategies.
The infographic's narrative strategy adopts a rhetoric organized around a central argument as if it were a documentary film [Toti 2009]. The narrative structure is designed for understanding and its scope is to transform data into information, combining them organically in meaningful visualizations, modeling forms and colors that have the power to evoke emotions and to stir up deep feelings, thus transforming the information into construction of meaning and, therefore, the story into narration.
The video narrative strategy adopts a rhetoric organized around a central character as if it were fiction. The narrative mechanism assumes an everyday story to transport the observer/spectator into the scene; it then introduces an anomaly–the extraordinary in the ordinary–to provoke doubts and wonder in order to give "sense to the immensity of things that happened, are happening, and will happen in the real world" [Eco 1994, p. 107].
As if it were a very detailed map, the video allows the trip to enter into the deep of the 'forest,' already knowing the thousand obstacles along the path. It is a detailed map that can be understood only when it is reconsidered referring to the new map of the world, infographics, which will allow the reciprocal relations and dependencies between things to be grasped, that is, to penetrate the system of knowledge. These two ways of constructing knowledge, understanding, and communication collaborate together in the system of visual communication where narration, in "giving shape to what is unclear" [Eco 1994, p. 107], embodies the ethical effort to "give shape to the disorder of experience" [Jachia 2006, p. 65].



Figs. 2, 3. The Spice Routes.
(Students Alessio Caccamo, Roberta Colonna, Claudia Vespiano).

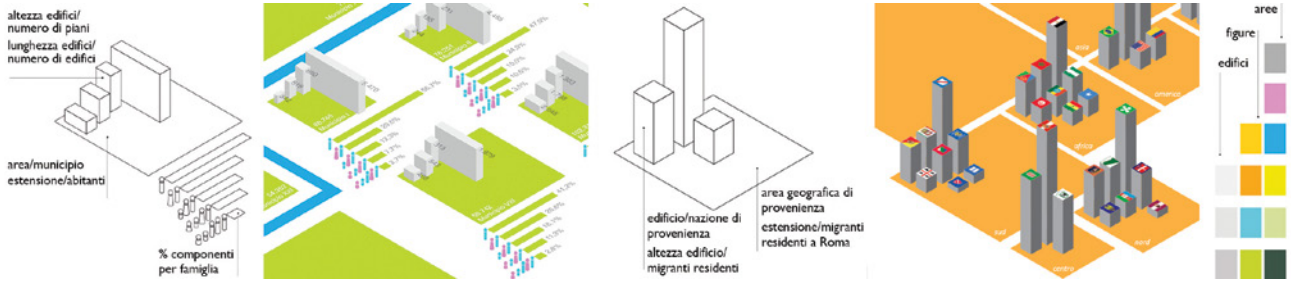




Figs. 4, 5. My faraway neighbour.
(Students Stefania Carlotti, Gaetano Corvino).

Forms, means, and relations for representation, communication, narration

In general, a visual representation or visualization is where "the interpretation of the world by man" is expressed; it is therefore statutorily a "meaningful content" [Gil 1980, p. 551]. In order to involve someone in the content, a conventional system of representation, a metalanguage, is adopted, with a lexicon, syntax, and semantics. The representation is therefore the 'body' and 'means' of communication, but also the interface that, through the 'setting', ensures the 'sharing' of the content between draftsman and observer.
Once any hesitation has been erased, it is possible to act on this inherent potential vocation, that can be found in each representation, to ensure that our 'observer,' "always next to, always on top of, always running after" [Eco 1979, p. 11], is no longer found before the scene. While hesitating and doubting, the observer within the scene advances among hypotheses, conjectures, and predictions.
Having become an actor, the observer participates in interpreting and building meanings, mastering the experience of the story and getting 'pleasure' from it, leading to the effectiveness of the representation/communication/narration.
Effective narration requires plausible stories, that is, coherent, credible sequential logic and space. It is through the temporal and spatial relations that the set of events is acted upon and the narration unfolds between "storyline time, discourse time, and reading time" [Eco 1994, p. 66].
The strategy makes recourse to 'not said' things and 'already said' ones, to 'white space' and 'interstitial space' [Eco 1979] for a narration in which spatial discontinuities and leaps in time are mended by means of non-linear connections. These connections are proposed by contrasting



semantic figures and acting on the *fabula*, that is, on the linear time of the story, in favor of the plot, i.e., the time of discourse.
The effectiveness of the infographic is entrusted above all to the formal/expressive coherence of the 'space' that is resolved in the space around the figure and realized starting from the intimate coherence of the graphical/visual unities that form the visual vocabulary. It is therefore necessary to choose a single path between 'sign' and 'image' [Brandi 1986]: between sign, that is symbolic and, thus, aniconic, and sign, that is an image and, therefore, iconic. The sign/symbol should "increasingly closely connect the semantic content it designs" [Brandi 1986, p. 14], while the sign/image should develop the figurativeness to have "morphological appearances visually similar to what it represents" [De Rubertis 1989, p. 158]. While originating from a common schematic/symbolic root [Brandi 1986], the design of visual unities should therefore be diversified according to the chosen formal/expressive horizon, characterized as it is by an abstract/plastic form (denoted by the lowest figural density) or iconic/analogical form (denoted by the highest figural weight). It is therefore also characterized according to a different knowledge/communicational horizon of our experience, between the abstractness of the concept, which is digital and discontinuous, and the concrete weight of the phenomenon, which is analogical and continuous.
Starting from the visual vocabulary composed of forms and figures, signs and images that act as symbols, icons, and indices, and operating through a generative grammar (structure and recursive rules), one proceeds over time in the design/plan before the visual phrases and then specialized figures.
The visual syntagmata are minimum units, and thus equipped with a complete expressive form, combined according to an internal logic, operating on the eidetic properties (form, size, color, texture) and by simple transformations (displacement, rotation, translation, repetition, etc.).
Then, according to an external logic, one operates in the two-dimensional space of the representation through topological categories (position, direction, orientation, etc.), highlighting the relational properties, that is, building further syntagmatic relationships between the different minimum units.
Highly specialized figures are thus generated, such as schemes, graphs, diagrams, etc., i.e., particular systems of graphical notation specialized in expressing relationships, that is, concepts "concerning quality, quantity, distribution,

Fig. 6. In Italy? (three times four = 13) Comparing research in 4 nations, 3 universities and 3 disciplines. (Students Carolina Petracchiola, Ilaria Pietrantozzi, Daniele Proietto).

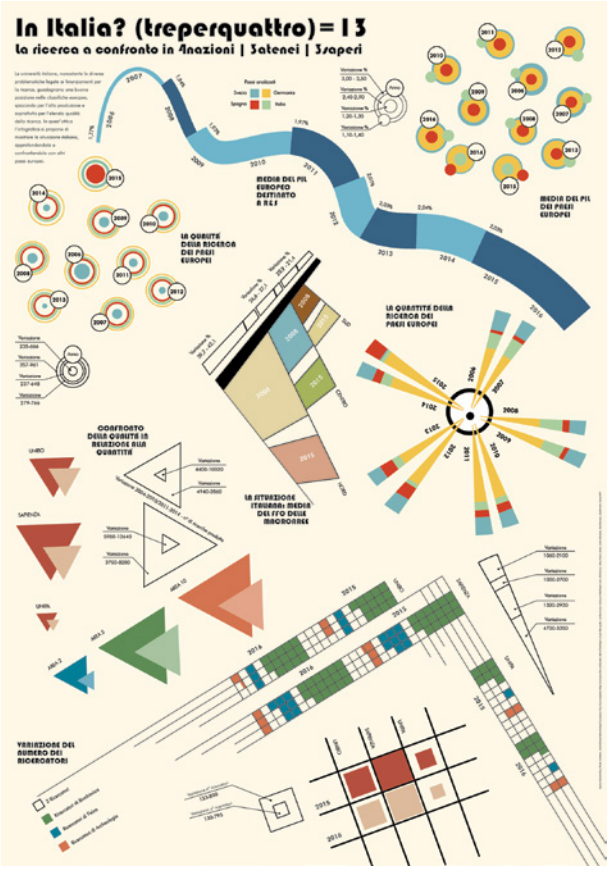
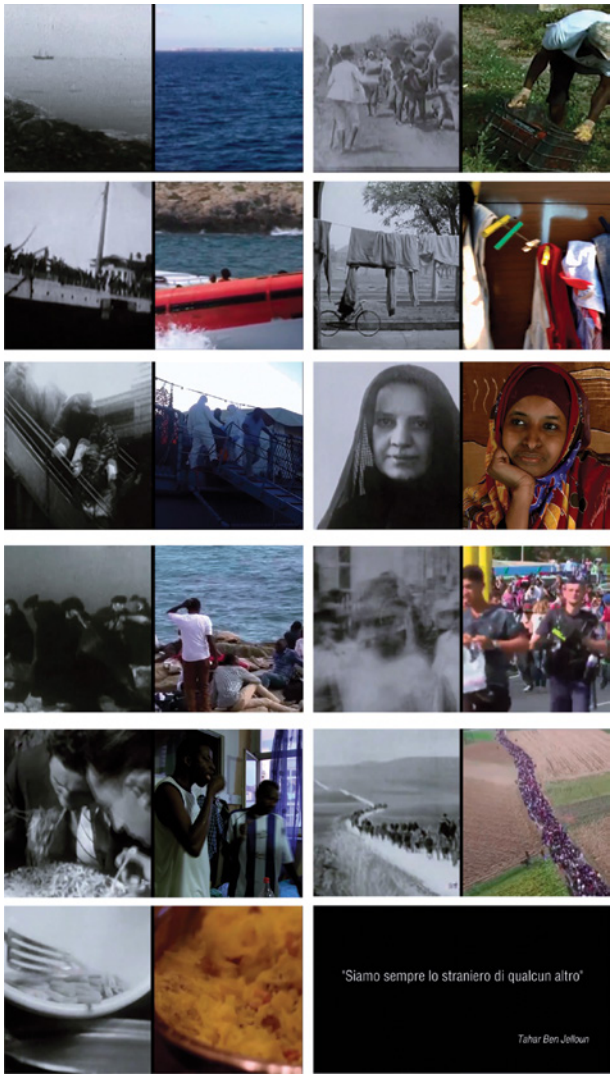


Fig. 7. All the roads that lead to Rome. The storyboard.
(Students Manlio Massimetti, Maria Giulia Nocentini, Angela Testa).

subdivision, and their modifications and variations" that "are formed and derive from acquisitions of an eminently perceptual type" [Massironi 1982, pp. 98-99].
The effectiveness of the video is entrusted above all to the coherence of the space/time composition that is created starting from the intimate coherence of the minimum units, measures of space and of narration time, i.e., the frames. By means of these, the selection is made, including and excluding not "simply 'the things,' but the feature of the object or the framed person" [Arnheim 2009, p. 307].
Through the frames, reality therefore becomes a suggestion of something larger: it first corresponds to the internal logic of the image plane through the relationships established between frame and figure.
It then echoes the external logic expressed by the relationship between visual field and depth, that is, between figure and background, and finally introduces time through the length of the movement that is described there.
The only minimum film unit with a complete narrative form is the scene, which artificially reconstructs "an action that has its spatial and temporal unit" so that only "those moments necessary for the narration" remain [Arnheim 2009, pp. 303-304].
The sequence is a unit that instead represents a complete narrative episode and, in contrast to the scene, is characterized by temporal discontinuity. By means of framing and scenes, 'decomposed' reality is reconstructed by associations and ellipses: the flow of images proposes a plausible spatial and temporal continuity, orienting the spectator's perception and interpretation.
In the ways of conceiving and giving shape, the two different products adopt analogous procedures within the logic of design. For this, they lend themselves well to an experience oriented at forming a code of visual or figural thought that unfolds in its writing.
Both ways, in fact, proceed starting from visual units that are displayed and associated according to pertinent syntactic rules and conventions so that the adhesion to this stringent set of formal norms ensures the recognition of the style and therefore the coherence of the narration.
For each genre this therefore means first defining a metalanguage. This conventional system organizes the disposition of elements (figures or characters, information or events) according to a 'time'–demonstrating the causality of the chain of narrated events–and a 'space'–equipped with characteristics to make it identifiable and recognizable.

While advancing according to "combinations of figural fragments" formative modalities, summative in nature, lead, however, towards a 'unitary *gestalt*' where "the result is something absolutely unitary, indistinguishable, inseparable" [Anceschi 1992, p. 57].
The building of meaning, which is the most authentic experience offered in both infographic and video narrations, proceeds according to an aesthetics of procedure, between the polarities of discontinuous and continuous, punctual and durative, contrast and analogy, according to the means of composition and mounting. It is through these that the narrative syntax is revealed and the "mere reality of existence […] is converted into a configuration rich in sense" [Montani 2004], and offers itself to interpretation in a continuity of emotional recalls and relationships with the spectator's cultural heritage of mental images.
This is not an art of saying, but an art of showing. It is the draftsman who, to orient the spectator's gaze, displays the set, and it is not "important whether it is the act of framing, revealing, exhibiting, or showing, or of highlighting with light, a particular position or disposition on the set, the composition of the setting or the graphical display of the layout" [Anceschi 2003, p. 9].
This way to proceed is all in the context of the "specificity of the visible and its communicational practices" [Anceschi 2003, p. 8].
And it is in this context that the visual exercises have lead the students through the forms of representation, to experience them as different ways of formulating thought itself. While constructing a representation, they highlighted the communication, detaching the object of communication from the surrounding context.
In the representation they communicated an interpretational model of a phenomenon, making it understandable through a visual language. But they also formulated hypotheses with their representation; they therefore depicted the invisible. To be effective, visual communication products should be clear and unequivocal, but also 'memorable,' that is, capable of provoking curiosity and wonder, i.e., they can only be stories told with figures.
These are stories told with figures that future architects and designers have experimented with by knowingly combining and influencing vision and narration, and interpreted as occasions to "responsibly understand the value of visual communication as a means that contributes to change for the better all the worst things" [Steiner 1978, p. 207].

Fig. 8. All the roads that lead to Rome. Split screen technique. (Students Manlio Massimetti, Maria Giulia Nocentini, Angela Testa).

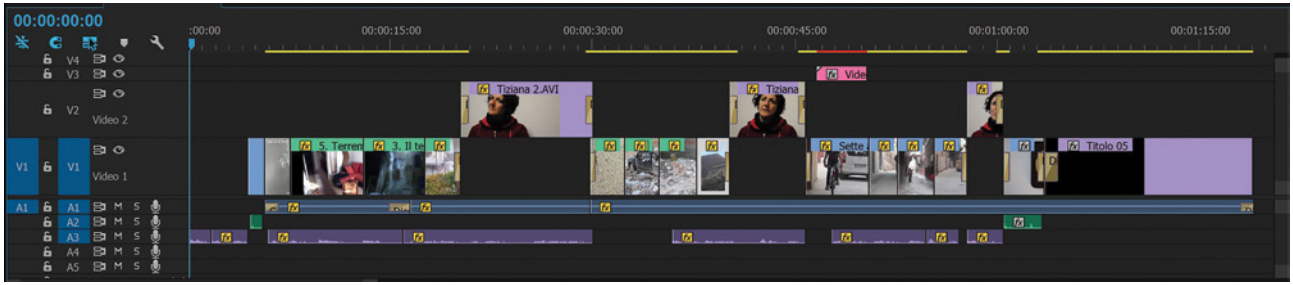


Conclusion

Once again, images have shown themselves to be indispensable and practicable devices not only for constructing knowledge and experiencing the world–nature, society, culture, etc.–but especially for sharing knowledge and experience.
The 'fortune' of images in the modern era is determined by the need to make intelligible a truly impressive quantity of data, this is possible to the measure in which they are analyzed, correlated, and synthesized through visualization. In advanced areas and complex systems in particular, images play a central role in communicating and spreading scientific, social, economic, political themes.
This vast repertoire and a wide range of different types of images has been shown to be the favored place of dialogue and mediation among specialists and between specialists and public.
This is because images are the first way to approach knowledge of the world–which ranges from perceptual imitation to representative thought to logical/formal thought through visual models–and only later it can be structured through numerical and verbal languages.
But it is also due to the emotional effectiveness of the images that, thanks to their 'associative/recall' mechanism, they can trigger wide ranges of emotions and, as a consequence, transmit additional information.

Fig. 9. My faraway neighbour. Framing and type of shots. (Students Stefania Carlotti, Gaetano Corvino).

Fig. 10. Lest a second change your life. Editing and narrative rhythm. (Students Simone Sbandi, Virginia Zoppi).



Graphical schemes, representations, and moving images, or even simple details of them (as historically in bestiaries, inscriptions, medieval imagines mundi, parerga, landscape paintings, etc.) activate chains of memories that relate mental images to the sensory perceptions of the external world and also with visual recollections of internal memory.
But to allow these images to truly speak, to be the place where knowledge and experience are brought together, it is necessary to activate a meta-communicational relationship among interlocutors, that is, presuming to share the same figurative and visual culture.
A culture that would place us, the public, in a condition to orient ourselves in this 'civilization of images,' allowing us to analyze, process, interpret, in other words, dominate them. A solid–but also practical–culture of what we can say figurative and visual, is even more necessary for specialists, so that images do not become "more powerful than the hands that created them" [Pascolini 2006, p. 142].
This is an awareness of the need to address this 'multiplication of images' that drawing scholars should master again. And it is a discipline that from this awareness must be able to reorient research and renew theories, methodologies, and practices, re-establishing the awareness of both the cognitive and the experiential result of the images, knowing how to comprise the figurative and visual world, eye and brain, glance and mind.

Fig. 11. Lest a second change your life. (Students Simone Sbandi, Virginia Zoppi).

Notes

[1] Rella refers in particular to the research of Sigmund Freud.

[2] A deliberate use has been made of the objectives of the historical series of the journal *XY. Dimensioni del disegno* in <http://www.xydigitale.it/la-rivista-xy-dimensioni-del-disegno/la-serie-storica-di-xy-1986-2002.html> (consulted on May 29, 2017).

[3] Active collaborators in the didactic courses were: Giulia Santucci (AY 2014-2015, 2015-2016, 2016-2017), Stefano Volante (AY 2015-2016, 2016-2017) and Mauro Zennaro (AY 2012-2013, 2013- 2014).

[4] Visualizations deriving from the world of perception were "increasingly inadequate and tricky, until, with the advent of quantum mechanics, one has understood that they were not only inappropriate, but also conceptually wrong" [Pascolini 2006, p. 140].

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