IMAGE BEYOND THE FORM.
REPRESENTING PERCEPTION OF URBAN ENVIRONMENT

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Abstract

Perception, awareness and appreciation of the built environment are essential skills in urban representation and design. Among the different perceptual dimensions, the visual, or more precisely the visual-aesthetic dimension is the field that better expresses its potential in representation. The study, in an analytical-applicative perspective, addresses the reading of the relationship between forms and uses, symbols and meanings of an urban public space characterized by a recent transformation. The architectural stratifications and practices of use lead to the definition of space, in its tangible and intangible components. In this regard the analysis of the historical drifts, traced back through images and drawings, help us to make visible the mutations and the processes helpful to understand and describe its actual order. The aim of the research is to investigate the visual dimension of an urban space, both in its material and immaterial connotations, and its relationship with the stratified or new uses, explored by multiple and diversified tools of urban representation

K e y w o r d s :   **Built environment; Sequential drawing; Social media; Urban representation; Visual-aesthetic dimension.**

1. INTRODUCTION

"Every picture tells a story and every story has a picture" [1]. Referring to images of architectural books, the title of an essay by Herman Van Bergeijk [1] underlines the close connection between the two terms idea and image. Each image can be understood as the sensitive translation of our mental images: to interpret the content and the meaning of an image, linguistic mediation is necessary, it can be graphic or verbal: graphic image and verbal image found the two categories of material images [2]. Between iconic and verbal there is a discrepancy that springs from the strength and effectiveness of the graphic image to represent and forward thinking. It's the so-called "power of images", understood as that charge that would be lost translating the message into verbal affirmations [3], that makes possible the close relationship between idea and image. This relationship between idea and image can be explained at different levels: the level of images that convey ideas, the level of the images that testify reasoning and the level of images that stimulate and generate thought [4].

The act of imagining and that of perceiving something are analogous experiences in many ways, even though imagining can mean perceiving but not vice versa: the presence or absence of the object distinguishes the two processes. In the experience connected to visual perception, the perceived image is enriched with qualities deriving from the psychophysiological component. Indeed, the mental image can also derive from our sensory experiences related to auditory, olfactory, gustatory, tactile and cenesthetic sensations, which in some cases contribute to the construction or reconstruction

through mental images of an event [5]. Wunenburger [6] distinguishes mental images in three categories: in praesentia, mnesic and anticipatory. While in the images in praesentia, built in real time in direct experience, we carry out a visual-spatial perceptual activity, in the mnesic images (deduced reconstructing memories) and in the anticipatory ones (of prefiguration) the process of representation of reality elaborates an object of knowledge without stimuli actually present in the sense-perceptive system, recalling the mental image. All these categories of mental images come into play in the perception and construction of the image of reality and, consequently, in the experiential dimension of architectural space.

2. NARRATIVE STRUCTURE AND ARCHITECTURE REPRESENTATION

2.1. Sequential drawing

"(…) narrative is a particular form of representation implementing signs bound up with sequence, space, and time. (…) story consists of all the events which are to be depicted. Plot is the chain of causation which dictates that these events are somehow linked and that they are therefore to be depicted in relation to each other. Narrative is the showing or the telling of these events and the mode selected for that to take place" [7]. The architectural space has hierarchies and sequential order: the conceptual and perceptual conditions of organized spaces define a movement or a narrative progression that implies a narrative sequential order, understood as a series of events and actions spatially arranged to trigger an experience. Narrative form meets architecture at different levels. In the architectural representation, sequential drawing tools introduce new additional meanings compared to those of the single image. Apropriately prepared images show and reveal the efficacy derived from their serial juxtaposition: the message emerging from a narrative structure goes beyond that inherited in each single frame. Such characteristic finds obvious analogies in different languages, such as comic-strips, movie language, textual language, and design language.

Referring to the comic strips, Will Eisner considers the sequential drawing as "a distinct discipline, an art and literary form that deals with arrangement of picture or images and words to narrate a story or dramatize an idea" [8]. Still in connection with comic strips, Scott McCloud defines visual sequences as "juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or produce an aesthetic response in the viewer" [9]. The principle that springs

from serial vision of images organized in sequences arranged in a system, finds application also in architectural and urban representation.

2.2. Movement, space and sequential image-making

"Man looks at the creation of architecture with his eyes, which are 5 feet 6 inches from the ground. One can only deal with aims which the eye can appreciate, and intentions which take into account architectural elements. If there come into play intentions which do not speak the language of architecture, you arrive at the illusion of plans, you transgress the rules of the Plan through an error in conception, or through a leaning towards empty show" [10]. The man observes the space "with" and "from" his eyes and he does it by walking. In Le Corbusier, the architectural promenade is one of the central themes of his work of and its exegesis [11]. About of the Villa Savoye, Le Corbusier writes: "We climb up the ramp to the roof of the house, where the solarium is located. Arabic architecture has taught us an invaluable lesson. It favours walking; it is on foot that we can see the unfolding of architectural arrangements" [12].

Graphic image and verbal image are associated by Le Corbusier in the "storyboard" realized in the Lettre a Madame Meyer (1925) to illustrate his project of the villa Meyer. The first drawing chosen by Le Corbusier to start the sequence is an axonometric view that shows the volumes of the villa in a unitary vision taken from above. The sequence proceeds with a series of perspective views accompanied by captions, where the space of the villa is prefigured by simulating the perception of its inhabitants. To present the project idea to its client, Le Corbusier does not choose to represent the villa with plans, sections and elevations but with a sequence that simulates the perception of the man who walks and crosses the architectural space: "An architecture must be walked through and traversed. It is by no means that entirely graphic illusion certain schools of thought would like us to believe in, organized around some abstract point that pretends to be a man, a chimerical man with the eye of a fly and vision simultaneously circular. Such a man simply does not exist, and in consequence of this misconception, the classical era baited the trap for the total destruction of architecture. Instead our own man has two eyes set in the front of his head, and he stands six feet above the ground and looks ahead" [13]. In this "biological" approach to the architectural space, Le Corbusier demonstrates to privilege the visual perception with respect to the other senses [14]. In the Lettre a Madame Meyer,

"moving in the midst of a succession of architectural realities" [13], Le Corbusier adds to the force of the perspective setting the strength of the temporal space sequence that concatenates the individual images, revealing the topological and visual contiguities [15]. The sequential image-making has the greater effectiveness deriving from the serial juxtaposition of appropriately equipped images: the message that emerges from a narrative structure surpasses that inherited in each single "shot".

The principle of serial vision as a tool for interpreting the built space and the visual sense of motion, is expressed by Gordon Cullen in "The Concise Townscape" [16], or by Donald Appleyard, Kevin Lynch and John R. Myer, in "The view from the road" [17]: in both cases, the dimension of experience connected to visual perception and its representation as perspective sequence constitute the basis in reading, respectively, the urban and the highway landscape in terms of sequential images that define a narration.

"Architecture is defined by the actions it witnesses as much as by the enclosure of its walls" [18]. Bernard Tschumi places architecture as a space of the living beings that inhabit it: space, movement and event are the three elements that define architecture. While organized physical space can be interpreted through the recognition of forms defined by signs and the representation of movement can be translated into a sequence of images, the representation of the event defines an image that goes beyond the form. "The event is the place where the rethinking and reformulation of the different elements of architecture (…) may lead to their solution" [18] through architecture our experience is therefore directed by organized events. Movement generates space: this definition of architecture requires specific tools of representation that define sequences that hold together action and built environment [15]. "Architecture is not simply about space and form, but also about event, action, and what happens in space" [18].

In *The Manhattan Transcripts*, Tschumi illustrates a collection of drawings presenting a new approach in architectural interpretations, trying to include new ways of representing movement and event. "The Transcripts are about a set of disjunctions among use, form, and social values. The non-coincedence between meaning and being, movement and space, man and object is the starting condition of the work" [19]. Tschumi develops a cinematographic idea of architecture as a place where space movement and event coexist intersecting each other: he proposes to present an "architectural" reading of reality. The representation

is placed in an intermediate position between objects and events and must give meaning to an architecture made of sequences, movement and functionality. In the representation of space, movement and events, Tschumi resorts to the use of different media and "unconventional strategies that occur in-between the standard conclusions of architectural survey" [19]. In *The Manhattan Transcripts*, Tschumi aims to consider and interpret elements that are usually omitted from conventional architectural representation. Among the components not taken into account, stand out the multifarious relationship between objects and events, connecting spaces and their use. Through a succession of three square panels (Fig. 1), Tschumi returns the reading of the examined points. In these three frames, photography is the chosen medium to represent the action, the traditional means of conventional architectural representation indicates the controlled order of architecture and finally a diagram describing the movement of the users.
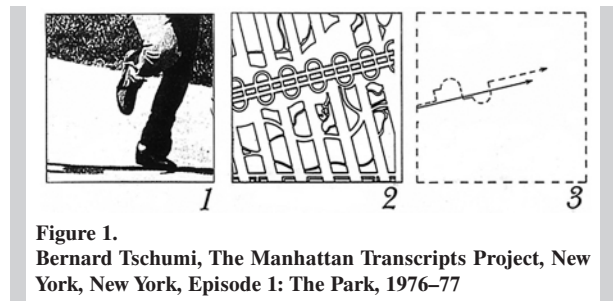

Figure 1.
Bernard Tschumi, The Manhattan Transcripts Project, New York, New York, Episode 1: The Park, 1976–77

"The architectural origin of each episode is found within a specific reality and not in an abstract geometrical figure. Manhattan is a real place; the actions described are real actions. The Transcripts always presuppose a reality already in existence, a reality waiting to be desconstructed – and eventually transformed" [19]. By separating space, movement, and events, it is possible to explain and represent the relationships that are created between them. The decomposition of reality breaks this down into three subsystems. Their reading as disjointed episodes involved in a sequential representation, makes possible new interpretations that make the architectural experience.

The three levels, assessed separately and in sequence, trace and highlight the relationships existing inbetween. The articulation in objects, represented in orthogonal, axonometric or perspective projection (although the latter is comparable to photography), in movements, represented as process flow line movement diagrams, and in events, represented by photography, aims to keep discontinuities and contradictions

between the different levels in a dynamic manner. "In their individual state, objects, movement, events are simply discontinuous. Only when they unite do they establish an instant of continuity. Such disjunction implies a dynamic conception posed against a static definition of architecture, an excessive movement that brings architecture to its limits" [19]. Time and space refer and interrogate each other thanks to the tripartite representation scan that introduces the dimension of experience in reading the urban space. The graphic codes, the rules and the visual communication skills related to the different models of representation encoded by the descriptive geometry institute conformative systems of human thought. Man cannot record what he sees without referring to visual codes, all images are based on conventions [20]. "All art is image-making and all image-making is rooted in the creation of substitutes" [21]. Constructing sequence of space we use the narrative structure to study and represent the phenomena of space. The insertion of the temporal dimension introduces into the architectural representation the possibility of operating on the different levels individually, independently of each other or placing them in relation within a structure that is both narrative and formal.

In *The Manhattan Transcripts*, the photo shoots are placed at the beginning of the sequence, as the origin of the architectural analysis and representation: events are the first level of reading and representation, besides photographic medium brings the viewer closer to the architectural programs, although the choice to represent the action with the sole suggestion of the photographic shot has not always been effective in describing the scene of the event. The second position of the visual sequence is dedicated to the conventional architectural representation of the objects. Finally, the movement notation translates the trajectories of bodies moving, wandering or passing through space, moving bodies "carve unexpected spaces through their fluid or erratic motions" [19] visually revealing its real corridors, explicated as a vector representation, and shaping the continuous contours of volumes often not considered or unexpressed in conventional architectural representation. *The Manatthan Transcripts* should not be considered as an accumulation of events but as a series of frames that, read individually and in sequence, reveal architectural programs in a "frame by frame" technique very close to cinematographic one: each frame is not a self-contained image, it must be considered in its context as well as architecture. When the movement becomes architecture, representing architecture maybe means representing a narrative structure.

3. VISUAL AESTHETIC DIMENSION AND SOCIAL MEDIA REPRESENTATION

3.1. Visual research of the built environment

"That of seeing is not a neutral or objective act but is an act of selection and interpretation of reality" [22]. The images constitute a relevant potential of information that allows the understanding of spatial structures, social dynamics, cultural models of places. If to see and observe are social practices which can be learned, because what or how we see depends on our socio-cultural and personal context, perception, imagination and representation are different but closely related ways through which man visually interacts with built environment. According to Douglas Harper, visual scientific research can be defined through four modes of image interpretation: scientific; storytelling; reflexive and phenomenological [23]. The first two ways presuppose an analysis on the image as a container of data to study or describe social phenomena, it is therefore evident how one can maintain a constant tension between subjectivity of perception and analytical/interpretative potentiality of images, alternating two different approaches to research; a first one that presupposes the analysis of images produced in certain social contexts (from images) and a second one that assumes the production of images by which investigate social phenomena (with images) [24].

3.2. Visual research and Urban design. Perception and representation

For years in urban design have been two different disciplinary approaches. The first, visual-artistic, emphasized the visual qualities of buildings and space, focusing the visual qualities and the aesthetic experience of urban spaces. The second, of social usage, highlights the people's ways to percept, use and colonize space, considering tools for the project and for the definition/construction of the "sense of place" [25]. In the last twenty years the concept of city making has become dominant in urban design; a vision aimed creating places for people "not just a specific space, but all the activities and events that make it possible" [26]. Contemporary urban design aims the project of urban space both as an aesthetic entity and as a behavioural setting. Adopting the articulation proposed by Matthew Carmona in the process of city making, the guiding factors of knowledge and orientation in the design process of urban spaces are made up of six dimensions: morphological,

perceptual, social, visual, functional and temporal dimension [27]. The perceptual dimension is described through multi-sensory coexistence as a skill to interface with the urban environment. Although the visual dimension is, as previously defined, the stronger one, it is only by the coexistence of all the sensorial forms that the experience of the urban environment can be defined. Perception concerns more than seeing or sensing the urban environment. It refers to the more complex processing or understanding of stimuli. Four dimensions of perception are identified, which operate simultaneously:

– *Cognitive*: involves thinking about, organising and keeping information. It enables us to make sense of the environment.

– *Affective*: involves our feelings, which influence perception of the environment – equally, perception of the environment influences our feelings.

– *Interpretative*: encompasses meaning or associations derived from the environment. In interpreting information, we rely on memory for points of comparison with newly experienced stimuli.

– *Evaluative*: incorporates values and preferences and the determination of "good" or "bad" [28].

Although "architecture and urban design are often described as the only truly inescapable, and therefore public, art forms because its experimentation and perception are essential in urban experience" [29], the relationship with urban environments involves all our senses; in some situations, hearing, smell and tactility can be characteristics that pervade urban space more than vision itself. With reference to the visual-aesthetic dimension, some evaluation criteria have been identified, understood as diffused aesthetic preferences [29] which, through visual perception and interpretative reading of the objective qualities of the urban environment, can explain the individual representative choices:

– *Naturalness:* environments that are natural or where there is a predominance of natural over built elements.

– *Upkeep/civilities*: environments that appear to be looked after and cared for.

– *Openness and defined space*: the blending of defined open space with panoramas and vistas of pleasant elements.

– *Historical significance/content*: environments that provoke favourable associations.

– *Order*: in terms of organisation, coherence, congruity, legibility, clarity [29].

3.3. Social media and representation of the urban environment

As part of urban studies, social media are recognized as an instrument of participatory practice that allows a cross-dialogue between the various stakeholders and the multivocal representation of the urban environment, providing large quantity of data that communicate important aspects of the urban landscape, daily practices, personal experiences and construction and social definition. As a result, this enables users to become active co-creators of a shared environmental image. Participation can take place in two ways: users upload and share their representations and narratives related to a place or they publish their comments about a place [30].

Today more and more geocoded information of text, images and videos are inserted by users in social media and multimedia platforms. In the classification of spatial social media, there are two kinds of platforms: *photographic* platforms, which use photography as the main way of expressing the *spatial self* [31], focusing on performing and sharing geocoded and photographic images, and *mixed-use* platforms which employ various ways of communication combining photography, video, text, links, graphics and position sharing in the individual profiles. Although various operational methodologies that systematize representative data on social media have been developed, the choice of criteria that analyse the visual content of the images collected is, to date, rarely applied [30]. To the growing development of this phenomenon it is possible to attribute two different research indicators. The first one refers to the practices and meanings that each user attributes to his own physical-digital representation. From this point of view, the homogenization of place-based visibilities seems inescapable in a digital age. Camera phones make it much easier to take photographs in a variety of settings, while mobile and online photo-sharing applications make it cheaper and more convenient to share them [32]. The massive and widespread uptake of digital and "networked photographs" has produced new, still emergent modes of photographic engagement. Not only people are taking and sharing more photos, more often they are engaging in expressive and communicative modes as well as commemorative mode of photographic practice [32].The second criterion regards the individual choice of images to include in social profiles, certainly determined by impulses that are variously conscious of affinity with the built environment. This derives from a corpus of images whose different genesis, however, does not

conflict with the specific representational purposes that connote it: that is to meanings that the photographic images assume in the apparently immaterial context of social networks. In support of this principle there is the concept of *spatial-self* [31]. People through social media represent contextualized activities, connoted by the dual nature of figure/background and represent geographically themselves. In the instantaneous dimension of the "cheap data" [33], the instinctive modality is considered as the foundation of the interpretative criterion of the research object.

4. CASE STUDY: PIAZZA GARIBALDI IN CAGLIARI

4.1. Historical-descriptive framework

Located on the edge of the historic district of Villanova in Cagliari, Piazza Garibaldi has always been both caesura and hinge between different urban situations; originally between the countryside and the city and now between the historic centre and the twentieth century expansion.

The space of the square served as a hub from which the main suburban roads branched off. With the development of the district and the subsequent building, new roads were realized, which have gradually been incorporated into the urban tissue.

The first public building in the district was the school named after Alberto Riva, built between 1912 and 1930. As well as for the district, the Riva school immediately became a particularly significant presence enriching and distinguishing the architectural and urban space, so much so that the Civic Administration decided to further enhance it, realizing in 1932 the new Piazza Garibaldi.

The current aspect of the square dates to the work carried out in the post-war period in conjunction with the reconstruction of part of the Riva school building, hit by bombing.

The present layout of the square is of recent construction: it was completed at the end of 2017. It is part of the plan aimed at improving the quality of life and the urban spaces of the historic centre of Cagliari in favour of sustainable mobility, which is affecting the entire journey that goes from Piazza Garibaldi to other important historical squares of Cagliari such as Piazza Costituzione and Piazza Yenne, up to the pedestrian section of Corso Vittorio Emanuele.

4.2. The analysis of the social-media images of Piazza Garibaldi

The research proposes a framework of analysis and interpretation of the images of Piazza Garibaldi coming from social networks. To define the corpus of photographic representations, have been selected the four most common social networks in the Italian context, which are characterized by a snapshot of the communicative interaction (Facebook, Instagram, Twitter and Flickr). Visual contributions, both photographic and video, are analysed in relation to the nature of the considered multimedia portal (photographic or mixed-use), to the time references (date of insertion in the social media platforms) and to the textual content. The research aims to a preliminary interpretation of images, determining the ways in which they are produced; otherwise, it is in the semantic dimension of visual products and contents that research seeks to construct an interpretative key of the visual dimension considered in its dual material-immaterial connotation.

A second skill adopted in the research was that of the graphic representations produced by the students of the first year of the Faculty of Architecture in Cagliari. Students have to produce a photographic sequence and some sequential on-site drawings that reproduced some serial views of the urban environment of the square (Fig. 2).

The research aims to define an interpretative criterion that may suggest a critical reflection on the dynamics of perception and care of the restitution of the image, on the definition of meanings and ways in which these can be classified, in the representational-visual dimension of social media, by systematizing:

– the static and/or dynamic dimension of the perception and construction of the representation;

– the choice of the represented subject (self-representation of the users or selfies, spatial, architectural and monumental elements of the square, events and moments of sociability);

– the analysis of metadata (temporal and spatial) and of textual contributions placed side by side with each image. The meanings of the intrinsic messages of the representations, emerging with variable force, are related to the previously defined classification concerning the preferential nature of the urban landscape about the visual-aesthetic dimension. With this aim, it was intended to propose a model for the classification and grouping of photos by scene-view. And then the spatial distribution of the photos is analysed to differentiate the preference between the parts of the study area. Secondly,
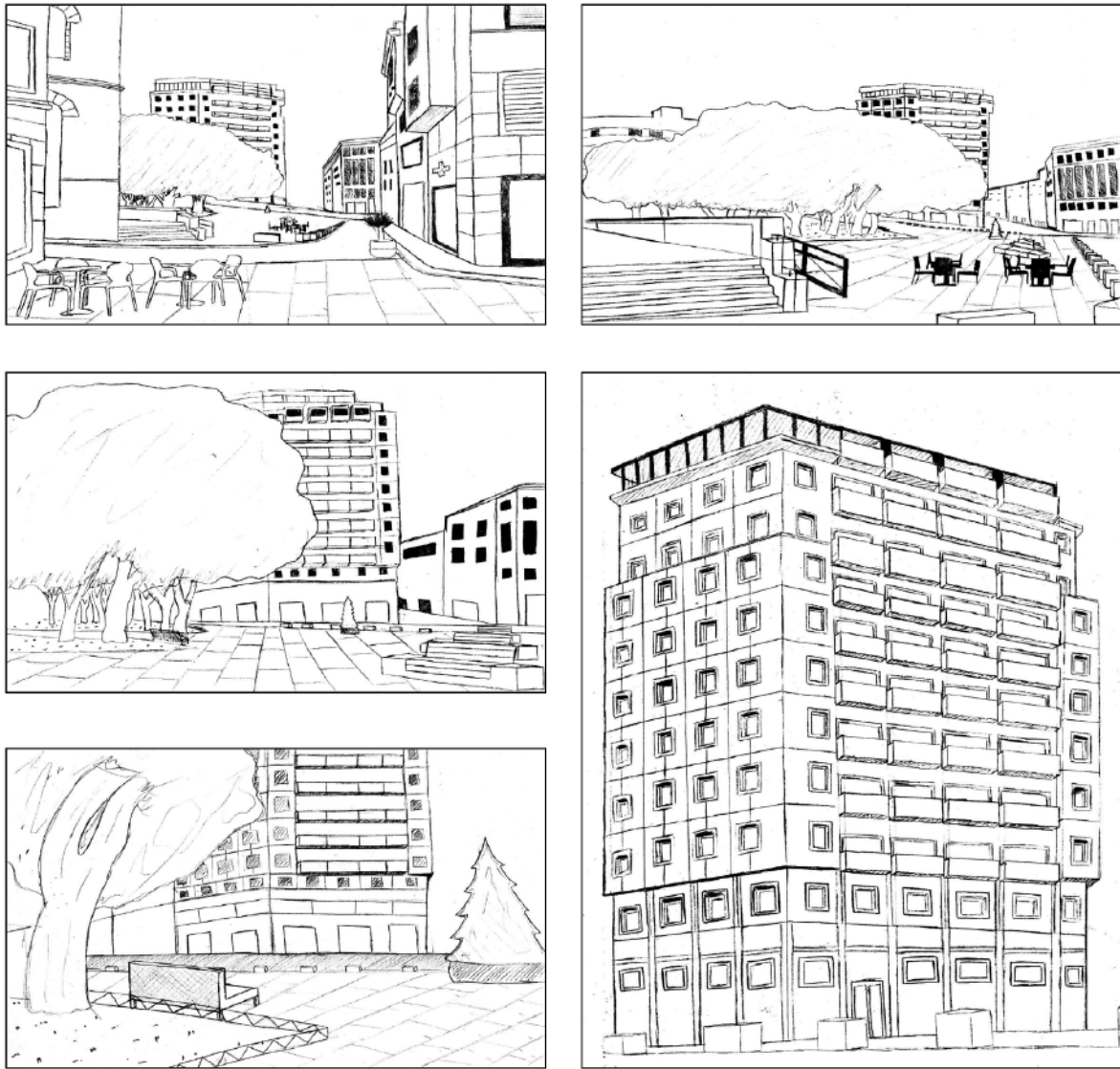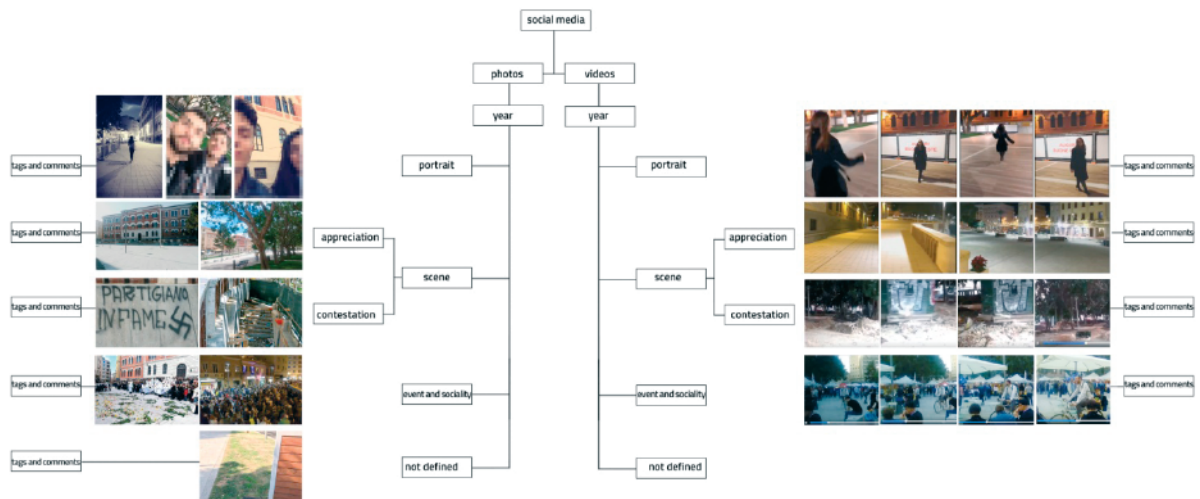
Figure 2.
Serial visions in Piazza Garibaldi (Cagliari, drawing by M. Lai)

textual contents and metadata are evaluated to determine the importance of the square by visualizing texts, tags and the range of activities, feelings and expressions associated with different places in the city. The combination of these analyses allows the identification of urban landscape preferences. The research being in progress, the methods of sorting the material have preliminarily been chosen using semantic verbal classifications that show a will to bind to the specific place.

According to the user interaction characteristics of each social media portal, the collection was determined as follows:

1 – Facebook: the data have been identified starting from the inclusion of the word: *piazza garibaldi cagliari*.

2 – Instagram: the data were identified starting from the insertion of the words: *Piazza Garibaldi Cagliari; Piazza Garibaldi; Piazza Garibaldi, Cagliari; #piazza-garibaldicagliari*

3 – Tweeter: the data have been identified starting from the insertion of the words: *piazza garibaldi cagliari*

4 – Flickr: the data have been identified starting from the insertion of the words: *piazza garibaldi cagliari* and *Piazza Garibaldi Cagliari*

Figure 3.
Classification model of social media images and videos (Graphic processing by A. Manca)

The first distinction is made regarding the nature of the representational contribution, be it photographic or videographic. The classification was first divided into the year of insertion. For each of these two categories, four discriminating criteria have been defined based on the character of the shown subject or the intrinsic visual message of the photograph:

– portrait (including selfie)

– scene (image of the square with the two sub-categories discriminating appreciation and contestation);

– event and sociality (addressed to the representation of events or actions);

– non definable (Fig. 3).

Each catalogued contribution was supported by comments and temporal metadata.

The analyses were performed individually for each representation. This allowed to discern and consider exclusively the contributions with the subject as the square. The images were subsequently analysed considering the scene displayed (the view depicted in the photo), the position of the observation point (privileged position), and the metadata of the photos published on four media social in order to obtain the meanings, attributes (what) and values (why).

5. CONCLUSIONS

The analysis of static and dynamic visual contents from social media (photo and video) shows how the immediacy of images allows us to consider the multi-layered information deriving not only from intentional messages but also unintentional messages of the image conveyed by the user. This double reading is essential in order to relate scene and user getting information about the "eye" of the man's eye. When the message is totally declared and unequivocally aimed at denouncing a square fault or misuse, it rarely leads to further joints beyond intentional ones. The analysis of the metadata related to the images shows us how events and uses are articulated within a time frame. An important discriminating factor is the one relating to the two phases, pre and post redesign of the square, implemented with the architectural project and urban regeneration. Before the intervention the images are in minor number and tend to have a contestation dimension; as a result of the intervention, there are numerous images that express appreciation. The reflections can therefore be defined on two different levels of content:

– the construction of images (in static or dynamic way) presupposes a cure, deriving from the suggestions that the widespread iconographic apparatus define. In this respect, we can state that both static and moving images intrinsically possess the narrative function to represent events, spaces and movements (in the case of static images, these are determined by the desire to portray the social dimension of activities) (Fig. 4).

The immediacy does not preclude the polysemic nature of the representations, presented through the overlapping of gradient messages of variable intentionality. The shots, in fact, show with a variability of the back-
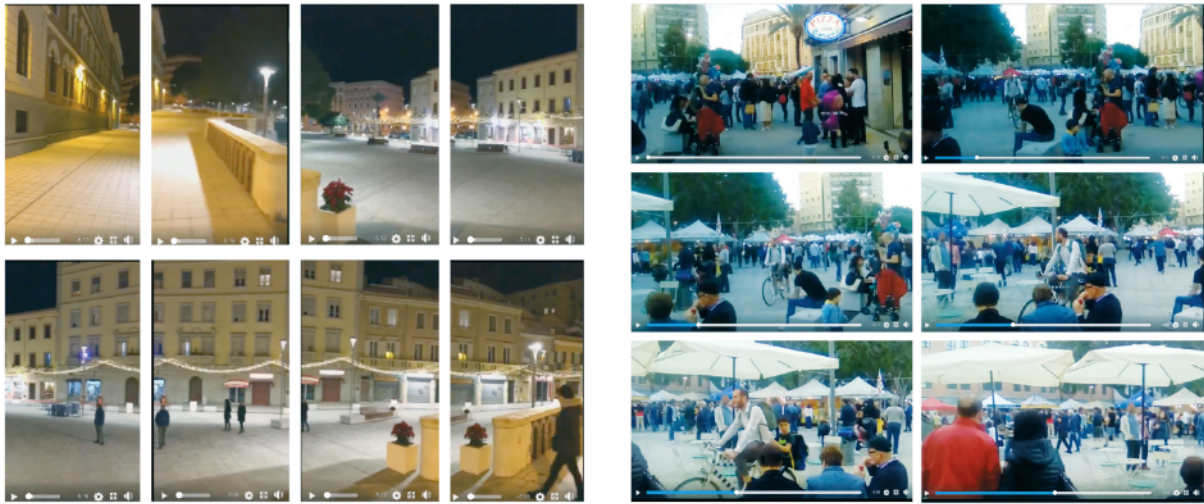
Figure 4.
Some frames from the sequences of two videos from Facebook.
https://www.facebook.com/search/str/piazza++garibaldi+cagliari/photos-keyword?epa=FILTERS

Figure 5.
Dissemination of shooting points (Graphic processing by A. Manca)

ground figure, spatial or architectural elements of the square that are repeated with constancy. This demonstrates how the preferential criteria defined in the research (paragraph 3.2) are also pursued in the social media photography dimension (Fig. 5).

REFERENCES

[1] Van Bergeijk, H. (2012). Every picture tells a story and every story has a picture. In O. Carpenzano (Ed.), Idea immagine architettura: Tecniche d'invenzione architettonica e composizione (Idea image architecture: Techniques of architectural invention and composition). Roma: Gangemi editore.

[2] Colistra, D. (2011). Novantanove idee in attesa di layout. In R. Salerno, Teorie e tecniche della rappresentazione contemporanea (Theories and techniques of contemporary representation). Santarcangelo di Romagna (RN): Maggioli Editore.

[3] Brandt R. (2003). Filosofia della pittura. Da Giorgione a Magritte (Philosophy of painting. From Giorgione to Magritte). Bruno Mondadori, Milano.

[4] Matteucci G. (2008). L'immagine che appare (The image that appears). *Aisthesis*, 1, 173–185

[5] Di Nuovo S. (ed.) (1999). Mente e immaginazione. La progettualità creativa in educazione e terapia (Mind and imagination. Creative design in education and therapy). Milano : Franco Angeli.

[6] Wunenburger, J.J. (1999). Filosofia delle immagini (Philosophy of immages). Torino, Einaudi.

[7] Cobley, P. (2001). Narrative. London, U.K.: Routledge.

[8] Eisner, W. (1985). Comics & sequential art. Florida: Poorhouse press.

[9] McCloud, S. (1993) Understanding comics, The invisible art. New York: Kitchen Sink Press.

[10] Le Corbusier. (1959). Towards a new architecture. London: Architectural Press, 154.

[11] Gubler J. (2003). Motion, émotions. Thèmes d'histoire et d'architecture (Motion, emotions. History and Architecture themes). Gollion: Infolio.

[12] Le Corbusier., Jeanneret, P. and Boesiger, W. (1935). Le Corbusier et Pierre Jeanneret. Zurich: Girsberger.

[13] Le Corbusier. (1961). Le Corbusier talks with students. New York: The Orion Press, 44–45.

[14] Pallasmaa, J. (2014). The eyes of the skin. Chichester: Wiley.

[15] Paviol, S. (2011). Progetto architettonico/proiezione cinematografica. La villa Meyer di Le Corbusier e la Manhattan Transcripts di Bernard Tschumi (Architectural project / cinema projection. The Villa Meyer by Le Corbusier and the Manhattan Transcripts by Bernard Tschumi). In R. Salerno, Teorie e tecniche della rappresentazione contemporanea. Santarcangelo di Romagna (RN): Maggioli Editore.

[16] Cullen, G. (1968). Townscape. London: Architectural Press.

[17] Appleyard, D. Lynch K., Meyer, J.R. (1971). The view from the road. M.I.T. (Massachusetts Institute of technology).

[18] Tschumi, B. (1994). Architecture and Disjunction. Cambridge, MA – London, UK: The MIT Press.

[19] Tschumi, B. (1994). The Manhattan Transcipts. Academy Editions.

[20] Gombrich, E. (2000). Art and illusion. Princeton: Princeton University Press.

[21] Kitson, M. (1964). Gombrich's Hobby Horse. Encounter, 22, May, 65–6.

[22] Bignante, E. (2011). Geografia e ricerca visuale. Strumenti e metodi (Geography and visual research. Tools and methods). Bari: Laterza.

[23] Harper, D. (1988). Visual Sociology: Expanding Sociological Visions in The American Sociologist, 19.

[24] Collier J.J. (1957). Photography in Antropology: a Report on Two Experiments, in American Anthropologist, 59.

[25] Jarvis, R. (1980). Urban environments as visual art or social setting in Town Planning Review, 1.

[26] Buchanan, P. (1988). What city? A plea for place in the public realm in Architectural Review, 1101.

[27] Carmona, M. et alii (2003). Public Places-Urban Spaces. The dimension of Urban Design. Oxford: Architectural Press.

[28] lttelson, W.H. (1978). Environmental perception and urban experience in Environment & Behaviour, 10.

[29] Nasar, J.L. (1998). The Evaluative Image of the City. London: Sage.

[30] Ginzarly M. et alii. (2018). The Historic Urban Landscape approach to urban management: a systematic review in International Journal of Heritage Studies.

[31] Schwartz, R. (2014). The spatial self: Location-based identity performance on social media in New Media & Society, 17.

[32] Cruz, E. G., MeyeR, E.T. (2012). Creation and Control in the Photographic Process: iPhones and the Emerging Fifth Moment of Photography in Photographies, 5.

[33] Castells, M. (2009). The Rise of the Network Society. New York: Blackwell Pub.