ON THE IDENTITY OF SIGHT(S)
IN SOME WESTERN AND EASTERN
PROJECTIVE REPRESENTATIONS

COCCHIARELLA Luigi (IT)

Abstract. In the book *Vie et mort de l'image,* literally *life and death of the image* [1], the French journalist and writer Régis Debray proposed a challenging overview on iconographies and their native cultural contexts. Which calls into question the identity *behind* the image [2]. In this paper we will focus on some aspects of the adoption of axonometric and perspective representations in the Western and in the (Far) Eastern world, in search for clues or evidence revealing *identities behind*.

Keywords: geometry and graphics, symbolic forms, perspective, axonometrics, eastern and western representation, iconography, image

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1 Introduction

As a part of language, graphic representation is related to the conditions under which it appears, for instance, a specific place at a specific time. Its graphic style reflects this connection. In our discussion we will consider an image as a *medium*, or a kind of bridge, between two subjects (or groups of subjects): the author(s) who makes it, and the spectator(s) who admires it. They both, together with the image, are immersed in a communication context. In order to be understood, pictorial codes embedded *inside the image* have to match the cognitive codes of the spectator *in front of it* (Fig. 1). The fact is that, since author and spectator normally live in different geographic and historical situations, the communication context is not stable, rising a barrier between those *behind the image* (authors) and those *in front of the image* (spectators). By the way, barriers are also frequent when author and spectator belong to the same community. Arthur Edwards [3] has pointed out the psychological and aesthetic recurrences among genetics and cognition, as well as their links with the collective unconscious, including visual and spatial archetypes generated and accepted in the various places and times, which form the main focus of this work. These recurrences seem the only stable point in the communication process, therefore we will try to take advantage of them, starting from the representational forms and styles here considered.
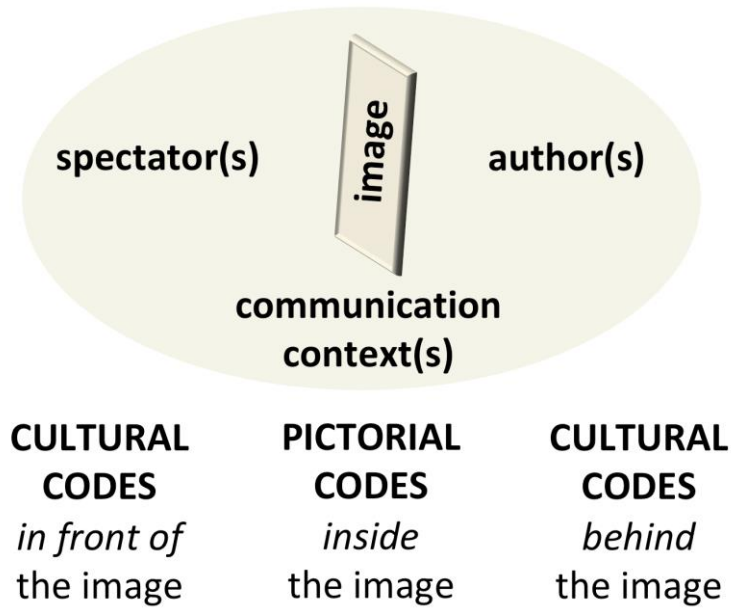
Fig. 1. The approach (Drawn by author).

2 Patterns

We all know how perspective and axonometric patterns look (Fig. 2). From former times they have been stable graphic references, intuitively used in various regions of the world, far before Projective and Descriptive Geometry were developed. In this sense, they are visual archetypes for human beings. Despite the drastic reduction of the three-dimensional space into bi-dimensional diagrams, the objects, spaces, and scenes represented are easily recognizable.
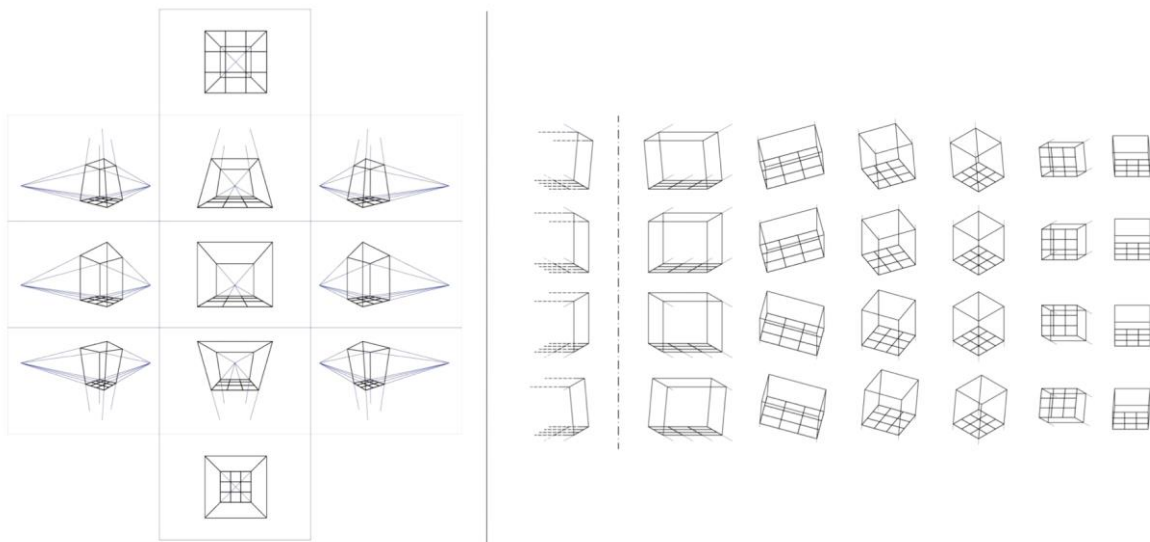

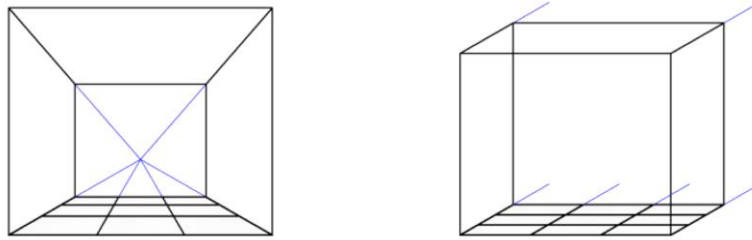Fig. 2. Some variations in the patterns involved (Drawn by author).

Fig. 3. The graphic sets among the most frequently used (Drawn by author).

A close comparison between the most familiar graphic sets used in perspective and axonometric representations, shows some strong peculiarities (Fig. 3). Both the patterns produce efficient images, but with different distortions. Generated by a conic projection, perspective shows a polarized graphic system aiming at replacing, as much as possible, the human visual pattern, at the expenses of 'euclidean' metrics. To correctly perceive a perspective image and the full spatial illusion it can provide, one should look at it with one eye from the designated point only. Any other viewpoint offers approximated views. Generated by a cylindrical projection, axonometrics preserves the parallelism of the lines, keeping angular distortions constant, at the expenses of similarity to visual perception. Strictly speaking, an axonometric image should be perceived from the infinity, where the projective centre is located. In praxis, due the parallelism of the projector rays, any position of the viewpoint is aligned with the centre of projection, therefore any viewpoint is supposed to be correct.
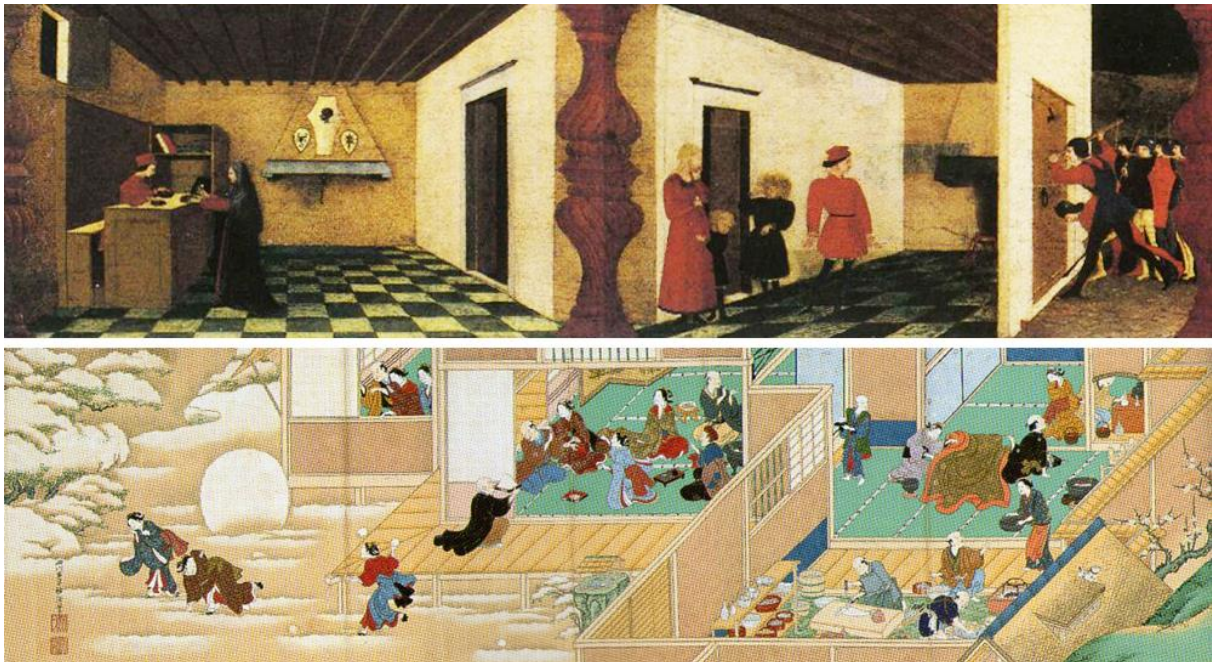
3 Symbolic forms

Fig. 4. Narrating by images: two paradigmatic cases.
Image above: Paolo Uccello (1397-1475), *Miracle of the Desecrated Host* (perspective, about 1468, detail, squared painting; source:web). Image below: Nishikawa Sukenobu (1671-1751), *Scenes in the four seasons* (axonometrics, detail, hand scroll painting; source: [5]).

However, the implications of these differences involve not only Geometry. They seem to deal with two distinguishable visions and approaches to the world. Although in the long term history both the forms have been used either in Western or in Eastern areas, perspective has been a real obsession in Italy and Europe, as well as axonometrics in the Eastern countries. Starting from Euclid, who developed Optics as a new math's branch inspired by the geometry of vision, and thanks to Filippo Brunelleschi, who formalized its projective principle, in Western Art perspective has been more than a mere representational form, it has worked as a metaphorical way of seeing the world, putting emphasis on the role of a designated human point of view in the process of knowledge. Spatial properties are forced according to the coercive graphic distortion appearing in the image, which represent a visual shot, instantaneous and ephemeral, mathematically calculated. For centuries people have been used to perceiving visual art with perspective eyes, reason for the well-known opinion by Erwin Panofsky [4], who defined perspective as a *symbolic form*. Moreover, the use of mathematics (objective system of properties) to correctly represent the visual perception (that is a subjective field) suggested Panofsky to consider perspective as *an objectification of the subjectivity*. Which is consistent with the Renaissance idea of mankind as the centre of universe, very well symbolized by Leonardo Da Vinci in the *homo ad circulum* diagram. Based on a similar reasoning, considering the wide predilection of axonometric representations in the Eastern countries, we should consider axonometrics as the *symbolic form* of the Eastern Art, reflecting a different approach. Axonometrics does not need a designated viewpoint, and due to more regular distortions occurring in the image, it suggests a visual experience more similar to the one that people can have in the real world. Perception can start from any point and proceed in any direction, changing distance of sight at any moment according to the positions of the spectator. Eastern paintings indeed, are normally painted as hand scroll paintings. Perceptual time is called into question, since the objective world represented remains independent of any prefixed optical distortion, allowing any subjective experience. For this reason, opposite to perspective, the use of axonometrics in Eastern Art seems to show the aim at *a subjectification of the objectivity*. The above mentioned arguments should be clarified by the comparison between the two artworks appearing in Figure 4. Both the paintings tell a story, but while Paolo Uccello proceeds by separate shots, hard to connect graphically, Nishikawa Sukenobu shows a continuous graphic environment, allowing a video camera effect. As proof of the fact that these representational strategies can be regarded as symbolic form, let us look out of the canvases at the real world. Just to refer to very well known paradigmatic examples, we can compare the Italian and Japanese gardens appearing below in the Figure 5.

Fig. 5. Symbolic forms beyond the canvas (source: web).
Image on the left: *Gamberaia Garden*, Florence (Italian garden, XVIII and XX Centuries).
Image on the right: *Taizo-in Temple Garden*, Kyoto (Japanese garden, XX Century).

4 Projective insights in retrospect

Fig. 6. Shadowing or (apparently) not shadowing. Image on the left: Caravaggio (1571-1610), *Saint Matthew's vocation*, 1599-1600 (squared painting; source: web). Image on the right: *Feast at the Kiyomizu Temple*, about 1615 (squared painting; source: [5]).

The story of perspective and axonometrics between Western and Eastern cultures has been sometimes controversial, sometimes characterized by cross fertilization [5]. However, the two cultures keep their profound specificities. An intriguing point is the relation between symbolic forms and religious aspects, since symbols provide iconographical support to the sacred, as clearly stated by Mircea Eliade [6]. Of course we will not enter this huge topic, but the two coeval images in the Figure 6, both realized at the beginning of the XVII century, could help us. On the left we see a masterpiece painted by Michelangelo Merisi, that is, Caravaggio. The vocation of Matthew is there masterfully symbolized by an apotheosis of light and shadows, where light means the presence of God touching and converting Matthew. The scene is perspective, showing the specific moment and the specific place of the event, from a designated viewpoint. The image on the right shows a feast in the Kiyomizu Temple, and people along a dizzy timber structure, emphasized by the axonometric pattern adopted. As usual in the Eastern paintings [7], no shadows are represented in the scene, which seems to conflict with the aim at making reliable images of the world. Many hypotheses have been proposed about this apparent lack of an important natural element. Among those, in an interesting volume on the Eastern representations, Agostino De Rosa [8] suggests that in these images the light source coincides with the centre of projection, therefore shadows exist but are hidden to the spectator, since they are formed beyond the visible objects depicted. As far as the hypothesis is convincing from a projective point of view, the proposed sacred meaning is simply astonishing. If we suppose deity be at infinity (human beings could never reach that position), therefore god himself is the projective source producing the images. Consequently, these images without shades can be seen as divine emanations. Nothing can be more different from Western perspective. There, man is in the centre, here god is in the centre.

5 Conclusions

Karl Kraus [9] stated that any painting shows its author, that is, it reveals who is *behind* the canvas. We also saw that it shows a specific cultural identity and aesthetic sensitivity [10], that is, who and what is *around* the author. At the end of this discussion, the thesis proposed by Regis Debray is clearly confirmed, since looking at history and geography we recognize some specific *visual ages* or, if we prefer, some *ages of sight*. On his opinion, indeed, the Western perspective generated a *graphosphere*, where image is considered a unique result of the work of an author, inspired by the *cult of beauty*. In the Eastern Art, instead, a *logosphere* arises, where image aims at representing the essence of things regardless of the specific author, and following a pre existing style, as in a ritual inspired by the *cult of saint*. These ideas are clear if we compare two representative icons of the two worlds: the mentioned *homo ad circulum* diagram by Leonardo Da Vinci, consistent with an anthropocentric sight, and the *Taijitu* diagram, consistent with a naturalistic sight. That is, two *identities of sight* behind the image.

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Current address

Cocchiarella Luigi, Architect, PhD., Associate Professor
Department of Architecture and Urban Studies (DASTU), School of Architecture Urban Planning Construction Engineering (AUIC)
Politecnico di Milano, Campus Leonardo
Via Bonardi 9, Bld. 14 "La Nave", 20133 Milano, Italy
E-mail: luigi.cocchiarella@polimi.it