The Construction of Space in Comics

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This chapter seeks to give a concise theoretical overview of the various types of "space" a reader encounters in a comic: diegetic space (the fictive space in which the characters live and act) versus extradiegetic space, visualized versus non-visualized space, etc. Furthermore the aim is to describe briefly how a flat medium can suggest a three-dimensional space and how readers (re)construct the diegetic space of a story. This approach is clearly inspired by research in other domains as visual perception, art history, and film theory.[1]

Before dealing with the various aspects of construction of space, let us recall the several goals of diegetic space in fictional comics (Lefèvre, 1996). In the first place a particular space is necessary to situate the action. Therefore a lot of artists use stereotypical icons (like the Statue of Liberty for New York or the pyramids for Egypt) because such famous buildings or monuments can be easily recognized by the readers. Moreover most buildings can already by their form indicate which function they have (e.g. farms, airplanes, houses . . .). Space can also suggest other meanings: the way a person has decorated or organized his room can suggest something about his personality (orderly or messy, classic or modern, etc.). Furthermore space can express a certain mood or be a symbol for an underlying concept or a scene or even a complete story. For example the rigid, monumental forms of the architecture of Urbicande (in Schuiten and Peeters's *La Fièvre d'Urbicande*, 1984) suggest an authoritarian system that suppresses its inhabitants as insignificant parts. No wonder that the authors found their inspiration in Stalinist and fascistic buildings and in futuristic architectural projects of the early twentieth century. Schuiten and Peeters use this architecture in a metaphorical way in their *Dark Cities* series.

VISUALIZED VERSUS NON-VISUALIZED SPACE

The reader constructs the diegetic space in various ways: both by elements that appear inside the frame of a panel and by elements that remain unseen (in French called *hors champ*). This non-visualized space does not only refer to the virtual supposed space outside the frame (in French called *hors cadre*) of a certain panel, but also to the supposed

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"hidden" space within the borders of the panel itself (in French called *hors champ interne*): for instance figures can overlap one another and hide parts from the eye of viewer. While some elements may not be visualized, they can be suggested by direct and indirect means: an element can directly indicate its presence outside the visualized space (e.g., a shadow or a balloon inside the frame that indicates the presence of someone outside the frame), or indirectly unexpected elements can pop up in a later panel: e.g. while the first panel shows us a close-up of a person, the second panel by enlarging the frame can show that this close-up is just of photograph on a wall and not an acting character in this scene (for example in the opening sequence of *City of Glass* the first telephone we see, turns out to be a drawing on a telephone directory). The artist has thus a powerful tool, namely framing, at his hands: by limiting the scope for the viewer and therefore the available information, the artist can cause a reader to make wrong inferences.[2]

Furthermore not all comics rely on the same amount of visualized space: in funny comic strips (e.g., *Peanuts* or *Garfield*) the backgrounds are quite minimal or even absent, while in adventure stories (e.g., *Tarzan*) lavish backgrounds of exotic places can be prominent and detailed.

THE CONSTRUCTION OF SPACE IN SEPARATE PANELS

The construction of space is a dynamic process, not only for each individual panel, but also for sequences and the complete comic. Several cues can help or obstruct the reader in this process. In the first place every flat image has to deal with its fundamental two-dimensional aspect: the picture can try to deny the flatness by suggesting an illusionary depth or, on the contrary, can accentuate this flatness (like Trondheim's *Bleu*, 2003). In most comics a two-dimensional composition represents a three-dimensional space in which the action occurs. In the course of history visual artists have developed several means to suggest a voluminous space on a flat surface. Spatial relations between figures or objects in a picture can be described by projection systems. Willats (1997) following Booker (1963) defines projection systems in terms of primary and secondary geometry. Primary geometry is viewer-centered and describes pictures in terms of projection rays: "The geometry of projection of lines or rays from objects in the scene and their intersection with the picture plane to form an image or picture." (Willats, 1997: 369). Most technical drawings can be described by primary geometry, but other formal projection systems as the reversed perspective cannot be described by primary geometry. In those cases an object-centered system is needed, like secondary geometry, which Willats (1997: 369) like Booker (1963) defines as: "The two-dimensional geometry of the picture surface, obtained without recourse to the idea of projection." From the Renaissance till the end of the nineteenth century, linear and aerial perspective was the most used projection system in European art, but in other periods and other places other projection systems were used: for example the reversed perspective in Byzantine and Russian icons (Willats, 1997: 12) or the forty-five degree oblique in East Asian paintings and drawings. Each method has its possibilities and limitations, so the choice of a certain projection system has many consequences. While linear perspective offers only one possible view on an object, object-centered projection systems can offer various views on the same object

(e.g., cubist effects) or respect the relative distances (e.g., forty-five degree oblique). The intrinsic qualities of the object to represent can play a role in the choice of the projection system (Palmer, 1999: 370). Objects that appear on a flat surface can never show the complete reality of such three-dimensional objects. The flat and unmoving image can only use monocular cues to suggest depth: interposition or overlapping, convergence, relative size, density gradient. Not all depth cues were everywhere and in all times used (for an historical overview see Solso, 1994: 192).

While various depth cues can lead to the same conclusion, sometimes they can contradict each other, which can cause tension (Arnheim, 1971: 126).[3]

A drawer does, of course, a lot more than just deliver depth cues: the style of his drawing is also of paramount importance in the construction of space. A drawer does not only depict something, but expresses in his drawing at the same time a philosophy, a vision: implicit in every drawing style is a visual ontology, i.e., a definition of the real in visual terms (Rawson, 1987: 19). Consequently the form of the drawing does influence the manner the reader will experience and interprete the image: the viewer cannot look at the object-in-picture from another point of view than the one the picture offers; he is invited to share the maker's mode of seeing, not only in the literal, but also in the figurative sense (Peters, 1981: 14).[4]

Furthermore, the visualized space appears within the borders of a single panel, which itself can have various sizes, dimensions, and locations on a page. All these aspects can be important for the construction of space: for instance a high vertical panel is of course better suited to represent a tall building, while a long horizontal panel can be ideal for a landscape.

CONSTRUCTION OF SPACE IN A SEQUENCE

In general the reader expects that the diegetic space of a comic is sufficiently coherent: he expects—in analogy with daily life—a consistent space, because he tries on the basis of cues (given in the panels) to form a global image of the complete space. Some authors such as the French François Bourgeon dedicated great attention to the (re)construction of a diegetic space: for his story about the Middle Ages, *Le Dernier Chant des Malaterre* (1989), he even built scale models and drew plans of his locations (Thiebaut, 1992: 57–68).

The reader knows the cues to construct a space: he recognizes the linear perspective depth cues, he is conscious of the unseen but virtual space outside the panel borders, and to link the fragments together, the reader is looking for overlaps. Without the necessary overlaps, the readers can only guess that the various fragments belong to the same and consistent space. By and large, readers will not check every diegetic space in all its details for its degree of contingency: he knows that the diegetic world is not completely the same as his daily reality and he has to accept the existence of fictive worlds with their own rules and principles (e.g., imaginary worlds as cities on other planets). Some contradictions of the diegetic space remain unnoticed; usually the suggestion that the various fragments belong together is sufficient for the reader. Scores of comics suggest a coherent diegetic space without giving sufficient proof. Seldom in a sequence are all

the corners of one room shown or is a global view of the space presented. The reader's expectation of a consistent diegetic space is often wrong. Berthomé (1990: 44) argues that the décor changes according the needs of the moment, and he gives the example of the Asterix village (the same houses occupy different locations in various stories of the series). Also Donald Duck's fictional city Duckburg is not a stable place but can change fundamentally from one story to another.

One has to make a distinction between changes that do not affect the illusion of a consistent diegetic space and those changes that weaken this illusion or belief. Readers accept that not in each panel every detail of the décor is repeated: the décor might disappear temporally from the reader's view to accentuate the actions of the characters. By and large, readers do accept these codes; they are not surprised that elements disappear and reappear. Aside from these temporal disappearances of the décor, there may be also more unexpected changes in the diegetic space that affect the represented space intrinsically. Even in series like *The Dark Cities* (*Cités Obscures*) an attentive reader may notice such inconsistencies: for instance, in *La Fièvre d'Urbicande* (1983) the big world map (on the wall of Robricks office) changes; in *Brüsel* (1991) the same window of Wappendorf's house is drawn with different numbers of panes (51 and 54); also Wappendorf's invention, the *solenoïde* (52–53), does not carry always the same number of rings.

Such inconsistencies do not have to surprise us, because unlike in cinema there is no camera that registers a material décor or existing place, in comics every panel has to be composed again on the blank page. Characters and décor can only exist in comics if they are represented in some way or another. Even if panels seem to offer the same view on a certain space, everything that is not drawn again will be absent. Small changes will not obstruct the reading, because they are not considered as radical inconsistencies of the represented world (Baetens and Lefèvre, 1993: 31–32). Usually these are details of lesser importance and their visibility may depend both on the comic and the reader: if a comic pretends to be a realistic depiction of our world, the reader will expect a sufficient degree of consistency. In a humorous drawn comic the reader will accept more voluntary inconsistencies in the representation of the diegetic space. In some comics the changes are a little more visible, but even then they mostly remain unnoticed by the average reader. Not only in more experimental comic strips as *Krazy Kat*, but also in mainstream comics (e.g. Duckburg in *Donald Duck* or Captain Haddock's castle of Moulinsart in *Tintin*) the décor can be volatile. The characters themselves never do notice the bizarre changes of their space: for them their environment seems to be stable and consistent—but the attentive reader knows otherwise. If such a very attentive reader notices these inconsistencies, he may both become frustrated that his realistic expectations were fooled and delighted because he found some "mistakes."

EXTRADIEGETIC SPACE

In addition to the diegetic space every comic has also an extradiegetic space, namely the space outside the fictive world of the comic. The extradiegetic space is the material space that surrounds the individual panels: not only the whites between the panels, but also the real space in which the reader is located. Of course characters are not expected to be

aware of this space; only in self-referential exceptions characters deal with that aspect: for instance the frame of a panel crumbles upon Little Nemo, and in Martin Vaughn-James's *The Cage* (1975) the white is used as a kind of mat placed over the drawings (Baetens and Lefèvre, 1993: 35–36). Furthermore the extradiegetic space can be integrated by means of a character seemingly looking the reader straight in the eyes and addressing the reader in his speech balloon; but the extradiegetic space can never be directly represented in the comic—except when a real mirror would be pasted on the page.

The space of the page is essential in comics because it is the space where various panels are organized in a layout and related to each other: from a strict grid pattern (as in *Peanuts*) to a very loose organization (as in many *shojo* manga). Usually the order of the panels respects the normal reading direction in a culture (from left to right in the U.S.A. and Europe, from right to left in Japan).

The (white) extradiegetic space between the panels can be used in various ways: in the past artists used a regular and constant distance between the panels, but an artist can vary these distances to various effects. For instance Chester Brown in *I Never Liked You* (1994) does not only use black for this extradiegetic space, but he also plays with the distances between the panels: by placing sometimes only one (relatively small) panel on a black page, he accentuates that panel. Also various Japanese authors, especially in *shojo* manga, are using extradiegetic space very creatively.

Moreover, the size (small versus big) and the form (upright, oblong, square) of the page's space can be of importance. In *Le Triangle Rouge*, the oblong format is well suited for the drawings of the horizontally extended building inspired by Frank Lloyd Wright.[5] Another example is Fantagraphics reformatting of the tenth *Love & Rockets* collection in the square format (and a six-panel grid) to imitate the look of a record cover (originally it was published in the traditional format of a nine-panel grid).

Space in comics can thus exist in many various shapes (types of representation) and levels (diegetic vs extradiegetic). Each reader is confronted with a particular extradiegetic space of the comic book itself, with a particular organization of the space on each page, and with a particular representation of the fragmented diegetic space in a series of panels. During his reading process the reader tries to cope with these various aspects of space and to make meaning of it all.

NOTES

1. This is a revised and expanded version of the article published in *Image and Narrative* 16 (February 2007), which was already based on parts of my Ph.D. dissertation, *Willy Vandersteen's* Suske en Wiske *in the dailies (1945–1971): A Theoretical Framework for the Formal Analysis of Comics* (originally written in Dutch in 2003), and on some earlier publications in Dutch and French such as *Het hors champ in de strip* (Lefèvre, 1989), *Pour une lecture moderne de la bande dessinée* (Baetens and Lefèvre, 1993), *Architecture dans le neuvième art* (Lefèvre, 1996).
2. Leaving elements outside the frame is regularly used in cliffhangers.
3. An author can deviate from the normal proportions between the figures or objects: in the Middle Ages the most important figures like Christ or Maria were painted a lot bigger than the other figures. Also in comics disproportions are often used: for instance to make a character more visible in a car his body and head can be enlarged in comparison to the car.

4. Nevertheless the reader is not just a passive agent: he or she looks at images with prior knowledge and activates the images. The individual context is thus also of considerable importance.
5. Andreas (Lacroix and Sohet: 43) explains that the idea of the oblong format came from an oblong book with drawings of Frank Lloyd Wright.

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