**Blind readers and comics -
reflecting on comics' storytelling from a different perspective**

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Summary: This paper discusses comics for the Blind, based on the example of life by Philipp Meyer. It looks into the potential and the restrictions of sequential pictorial storytelling that is accessible for blind readers. Special attention is given to the elements of comics' narratives and the technical background of tactile text and image representation. Due to the process of giving information in tactile comics, these present an extreme challenge for readers who have been born blind, while readers that have grown blind later in life seem able to refer the elements of spatially dispersed information (images) to their memory of visual information.

Let's look at a simple story, told in a highly symbolising manner: A dot grows in size, another dot appears, they circle each other and get closer, they overlap. A third dot appears and grows between them before migrating out o the picture. The one dot fades and vanishes, the other remains for a few frames before it fades and vanishes, too. The title of this comic consists of only one word: *life.* It makes the reader understand the images as stages in a story about life. And suddenly the sequence of images containing those little dots becomes quite profound.

The example is important in an altogether different way, too. *We* see an arty design-comic that lacks all colour and decorative detail that we are used to in comics. It is not printed onto the paper but embossed onto it - not because of some design-manifest oriented stylishness, but because the story is supposed to be read with the fingertips! It is not designed to be seen visually, it is not made to be read with your eyes and therefore does not use colours: the intended readers are blind and would not be able to see colours or standard printing at all. In due consequence, the different elements of the comic are embossed in slightly different height, the filled and the half-filled circles feature a lowering of dots towards its middle to make them more appealing to touch. While reading the different images, the reader learns the logic of this and applies it on the decoding of the medium and its story. At the end of the story the circles fade over the course of several images into the surface of the paper. According to the test-readers, this is understood as a narrative device and not as representations of different circles (Meyer 2013).
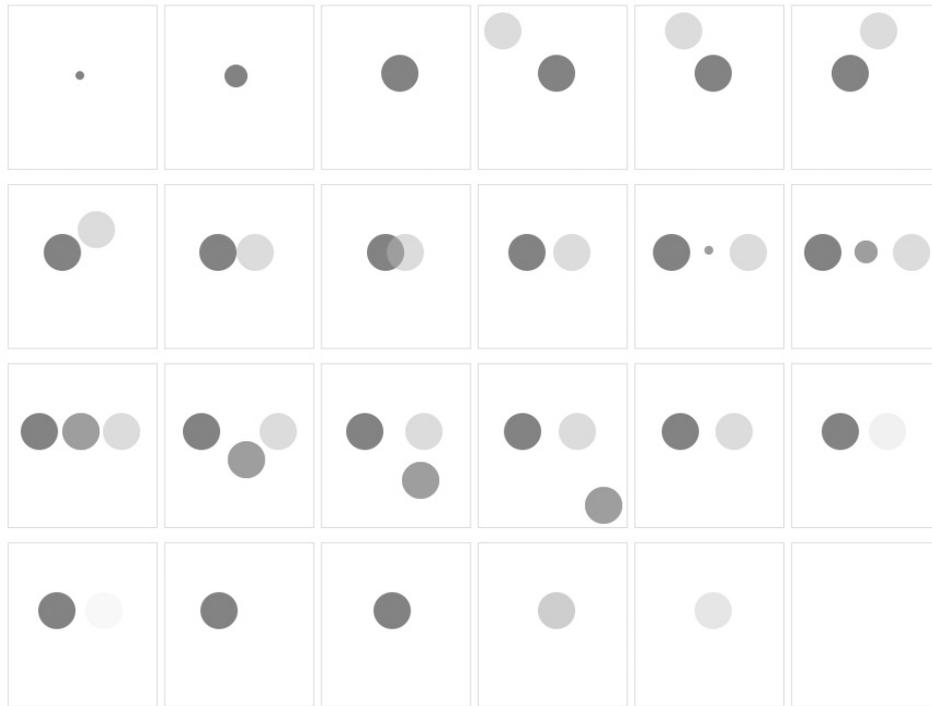

Illustration 1: The story of life *by Philipp Meyer, here depicted on one page in grey tones. The original is told on three double pages, each holding four images, all elements of it are put onto the paper in Braille-embossing. (Illustration: Meyer 2013)*

The story referred to was produced in 2013 by Philipp Meyer on a comics course at Malmö University. He had no previous experience with written communi-cation for the blind, did not know anyone blind, nor did he have a comics-background. He was supported by *nota*, the National Library for the Visually Impaired, Copenhagen, where he met blind readers who were willing to discuss and test his ideas and prototypes, at *nota* the final comics was embossed, as well.

Crucial from a comics-development-perspective is that he did not just transfer visual information into some kind of embossed or relief printing. It is not the standard content of comics that gets transferred into another technique of production. It is not reproducing the forms of people and elements of whatever environments as tactile information, but has managed to use a different pictorial language for the storytelling. In preparatory interviews with experienced blind readers, he was told in no uncertain terms that blind people would not be interested in such a literature. It would fail to represent the world in a way that was referring to their reality. As a consequence of these contacts that introduced him to the existence of a different non-visual reality, he adapted the concept of comics and developed a completely new type of literature for the blind, narrating in sequential images consisting of symbolic forms - all constructed from embossed dots which are the smallest possible unit of pictorial information in writing for the Blind.
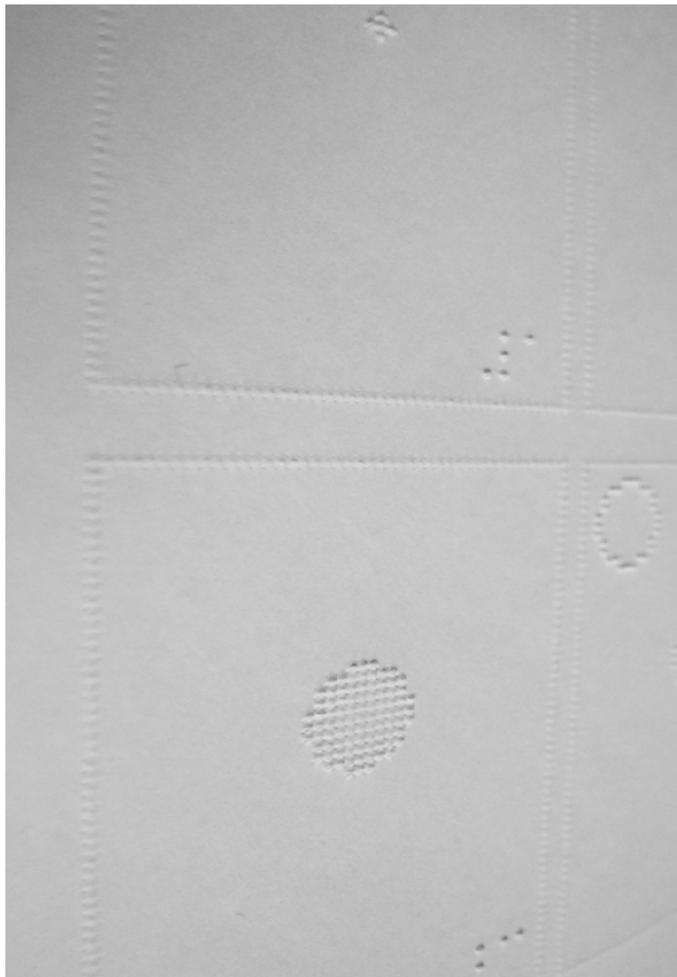
Illustration 2: Philipp Meyer's life in its final form, detailing the layout's style of pages and individual images. Note the different height of dots used for the design of the frames, their numbering, and the circles, which were represented by the grey dots in the previous illustration. (Photo: Dittmar 2014)

Comics' characteristics and blind readers

We all know the various definitions of comics that spin around the central point of comics being visual literature, with all information coded visually - contained in written text and images that are designed to be read by the individual readers themselves (e.g. McCloud 1993; Carrier 2000; etc.). But imagine being blind: what appeal does visual information offer? Imagine someone who has been blind always - all experience of the world did always come via other senses than the visual. The consequence is a different reality from the standard comic-readers' experience.

Existing comics are hardly accessible for blind people. These have been turned into audio books for quite some time, but comics stop being comics and become like all other recorded readings of literature in the process - or even fully dramatized audio plays like the plays based on comics that are marketed as "audiofilms" by e.g. audiocomicscompany.

One of the extremely few comics that have been intended for blind people is "Asterix par touchtatis!" by Olivier Poncer from 1988. But, like all other

examples that precede Meyer's comic, that have been found so far, it does not allow the blind reader to read it on her or his own. Instead, it can only be read with the assistance of a sighted person, as all text is given in flat print - not in braille other otherwise embossed - and thus remains undetectable for the blind reader (s. illustration 3).
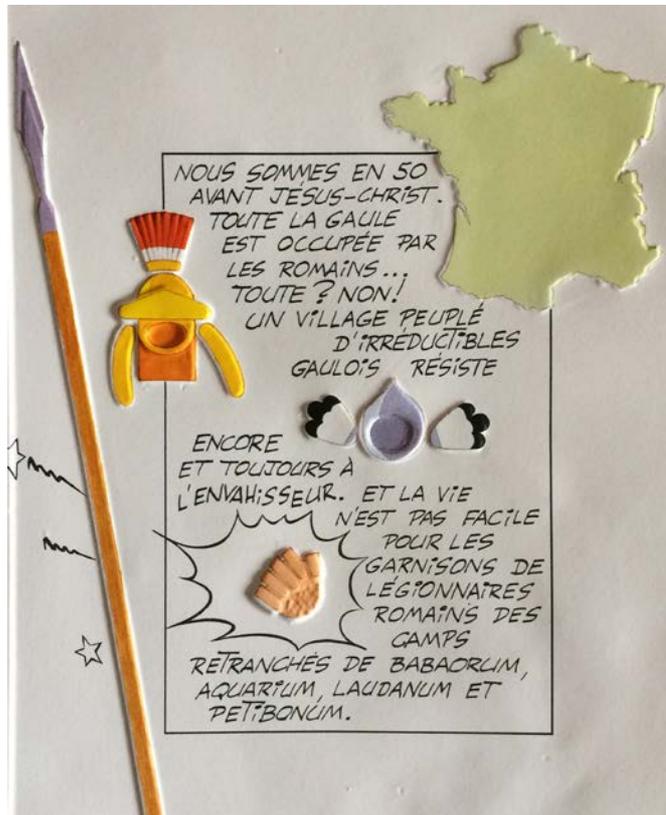

Illustration 3: The introductory text of Asterix par Touchtatis! *by Olivier Poncer that is indetectable and thus unreadable for blind readers: While the helmets, spear, fist and contour of France are embossed onto the paper, the text, its frame, the extra-lingual-signs and action lines are all printed flat on the flat surface of the page. The colouring of the embossed objects is aimed at the sighted reader, as it is rather pointless for the blind. (Illustration: Chardon Bleu Editions et Laurence Olivier Four)*

Of course, the immediate personal contact with pictorial information is not translatable, as the in-take of visual information does not even follow some prescript line, but with seeing readers, the eye jumps between the many aspects of the page and the individual images while the mind makes sense of all information gathered by putting it into chronological and narrative order (Pollack and Spence 1968; Hochberg 1978). In comics, visual information is offered simultaneously for the reader to sequence, interrelate and make sense of her- or himself, when turned into audio-literature for example, it is turned into acoustic information that sets the sequence of description, the listener has to follow, obviously, for there is no other way: how could you verbally offer to the reader several pictorial aspects simultaneously?

In this paper, we are concerned with a different approach. To be true to the nature of comics, they have to allow for individual reading by the (blind) reader her- or himself. Reading comics is an immediate and personal occupation of each reader with the chosen reading material (e.g. Carrier 2000, 65). While this personal reading of sequential pictures and the construction of interrelations

between the images and texts is characteristic for comics, no specific style of drawing is needed, nor is the use of speech-balloons mandatory.

Established reading for the blind
All reading of new forms of narrations is building on previous experiences of reading. This applies to comics for blind people as well, of course. Comics for the blind build on the established forms of literature for the blind: Blind reading is done with the fingertips of both hands placed alongside each other - here, too, the physical sequence of signs on the paper is crucial for the process of reading.

For text, Braille-writing is the established type that gets embossed into the paper or onto all kinds of other surfaces. Typographic variations of Braille exist, but only to a very limited extend as national or international codes set very clear limits to variation:

"For braille to be read by a blind person, the dots of each cell must be easily discernible by touch and the height of the dots must be sufficient to be easily distinguished from the background." (BANA, n.d.)

Slight differences of individual distances between the individual dots and signs exist, but as all have to be tactile to the fingertips, the options for different type styles are very limited. The underlying grid for Braille production equals approx. 20 DPI, in comparison printed matter like the one you are currently reading is printed with a resolution of approx. 170 to 300 DPI. The difference explains the limitations for variation and detail in Braille. In theory, different tools for applying, embossing or piercing dots result in tactile difference. In how far these can be used for the implicit expression of emotions or narrative atmosphere is completely unknown. The logic of the code depends on the regularity of its monospace-characters, each taking the same space on the paper, all based on a six-dot grid. Due to these formal conditions, texts take up quite a lot of room, as type cannot be set very small (s. AFB 2011).

Keep in mind that any description of reality for blind people builds on their distinct experiences of their environment and all meaningful information about it. Depictions of houses or cityscapes do not show the world from a perspective that is relevant for people born blind, as it never could be experienced. Also, for people that became blind later in life, other aspects of reality become much more important and relatable - the aesthetic values ascribed to specific perspectives and pictorial traditions are firmly based on the visual experience of the world. Take a blunt example: a view towards the steeples of Bruges in the distance through the glittering of light in the hot air over the summery fields of Flanders is considered beautiful by a seeing person, but is not met by a comparable experience, is not felt as beautiful by a blind person, as it is impossible to

experience, even though an educated blind person recognises the cultural meaning of the described scene.

This issue is in fact comparable to the meaninglessness of soundwords for deaf people: transcriptions of sounds are partly pointless, as these references are not met by an experience of sound-qualities. Sound-object associations are learned but mostly remain theoretical (Schafer, Plunkett, Harris 1999). Things might do "fffffft" rather silently or much louder, but the written sound does not refer to experiences of specific sounds by deaf people, for whom distinct sounds remain vague vibrations experienced by the body but not connectable to specific audio-qualities like each sound's rhythm, pitch, volume, intensity, or duration. It is quite difficult to describe for example a penetrating sound in its difference from other obnoxious sounds (s. Pidge 2013). To the deaf reader "ffffffft" could be "sssssssssst" - the differences in sharpness or the representation of the resonance of specific objects while emitting sounds etc. are not referring to deaf reality. To explain: For a deaf person it is a matter of learned knowledge to know that the soundword "tick tick" refers to a small clock or watch while "tock tock" represents the darker and deeper sound of a large clock. This knowledge is usually not supported by detailed own experiences of the represented resounding of differently sized objects (Stark, Ansel, Bond 1988). The same principle applies to reality that is based on blind experience: some aspects remain meaningless, as there are no distinct properties applied to their differentiated forms. Blind reality is built on its own experiences, which are partly difficult to understand by the seeing. But then again - and without wanting to promote unlimited constructivism - all world-views and realities are subjective to groups and individuals as they depend on distinct experiences and their interpretation of the real world.

Images are much more difficult to present to blind readers, as their translation into tactile information reduces the options for shadings, depiction of distances in the background, etc. - depending on the scene shown, a pictures description refers to abstract information only (for details on image representation for the blind, s. AEB 2005; for the example of Ed. Hopper's "Nighthawks at the Diner" transferred to embossed representation, s. artagogo 2001). Accordingly, reduction of details is the central feature of all communication of images to blind people. The same applies to images in comics, of course.

First-hand experience (no pun intended) of pictures is best possible where these images have three-dimensional features that can be felt: In children's' books, the forms of objects usually are traced with embossed dots or lines (dots are not mandatory in the representation of images, of course) to introduce their forms, the haptic qualities of the depicted object itself might be experienced, too, but related colours and hues remain abstract, for example. To fathom the different

perspective, think for example of an elephant minus the colour grey and try to focus on its other qualities. Accordingly, works of art and other pictorial information is often represented in relief print that tries to relate the most important features of e.g. a historically important painting. The visual information is translated into three-dimensional tactile information and is accompanied by explanatory written or recorded text.

Comics as new type of reading material for the blind
Blind people have so far not been subjected to a reading-experience of comics: No routines exist for reading several pages that contain a sequence of frames with pictorial information in each of them. But such a new form builds on reading-experiences of highly structured information given in Braille-code and not sequentialised pictorial information given in reliefs and touch-models. It only has to be introduced first.
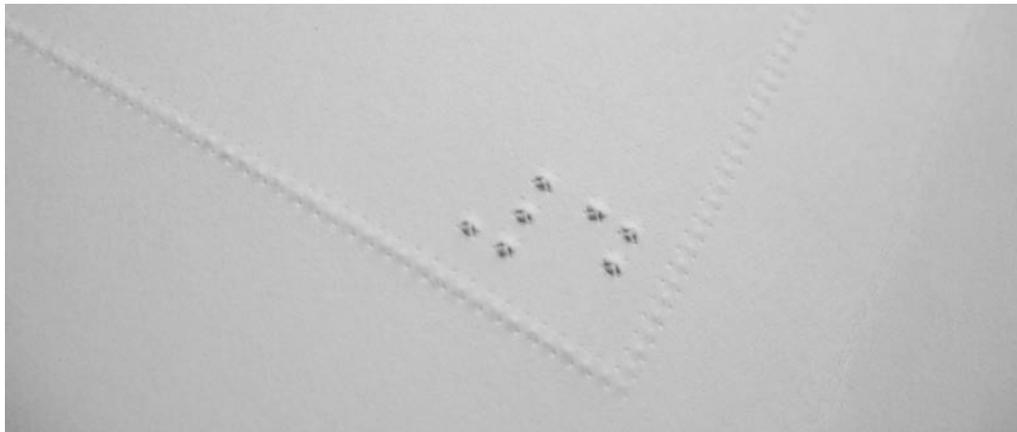

Illustration 4: One example of the numbering of the first four images of the comic in Braille to introduce the idea of sequentiality of juxtaposed images to blind readers who have never before read a comic themselves. Numbers consist of the sign for # followed by letters for individual numbers. (Photo: Dittmar 2014)

Each reader has to understand the logic of the comics' form of narrative - the narrative sequence-building on the one hand and on the other hand its possible meanings: it is a completely new concept in literature for blind people that frames mark the individual units of a narration that is not told in explanatory text but in these units themselves. Not sentences or paragraphs but frames around content constitute narrative units. Each reader has to understand that the content of each unit refers to previous and following units and they have to be willing to de-code the narrative that might be about something they have not been informed on yet, while all information on content is coded in symbolic forms and is dependent on their personal interpretation. Again, a comparison to earlier experiments in comics for blind readers helps to understand the difficulty (s. illustration 5): In "Asterix par Touchtatis!" by Olivier Poncer readers are

introduced to the running gag of the constant punishment of the bard by the blacksmith. The text is only visible to sighted readers and does not help the blind reader to decode the story or its details. The embossed forms and lines on the page are the only information provided then. And while the faces are abstracted into sequential depiction of their details, the action depicted in the sequence of images on the page is reduced into only a few objects - omitting movement lines and para-lingual symbols like the stars showing the hurt of being hit on the head. For readers that do not know storytelling in sequences of images, the sequence of the three images is blurred by the placement of pictorial elements on top of the gutters, making them even more difficult to understand as divisions between states and moments in the progression of events. For readers that do not know comics-storytelling, the example makes it extremely difficult to understand the underlying principle.

Illustration 5: One page from Asterix par Touchtatis! *by Olivier Poncer that introduces the reader to the running gag of the constant bickering between bard and blacksmith. The embossed areas and lines on the page are the only information provided for blind readers. The action depicted in the sequence of images is represented by only a few objects. For readers that do not know comics-storytelling, the sequence of these three images is blurred by the placement of pictorial elements on top of the gutters between images, making it even more difficult to understand that they divide between states and moments in the progression of events. (Illustration: Chardon Bleu Editions et Laurence Olivier Four)*

Comics potential in a nutshell

The logic of sequence building is stripped to its core by the examples: there is a sequence of states in which a set of highly reduced forms is depicted. If the comic is not managing to introduce and separate all its elements in a clear way, the sequence of events is not understandable. In Meyer's comic, distinct shapes are changing form and fade from the page towards the end of the story. Due to the clarity of sequence and narration, this is easily understood as symbolic, but gets

its real drift from the title of the story. Immediately, the reference to the reader's own life becomes clear.

The details of the executed comics show what is needed in a comic: there are the framed stages of the narration, relating with each other in their content. It is understood by readers that a time-sequence is to be read into them. On the cover of his comic, Meyer gives an explanatory sentence, stating that the first four frames of the narration are numbered in Braille to explain the intended sequence of reading (s. illustration 4). That information is not needed if you have read a comic before, as you know and remember how to read those sequences of images. But for blind readers this is a first - there is no experience available of previously reading a story consisting of juxtaposed images beyond childrens' books. As the *Asterix*-example illustrates, previous approaches to comics for blind readers have not enabled readers to re-construct the story from their sequences of images per page without help by sighted readers.
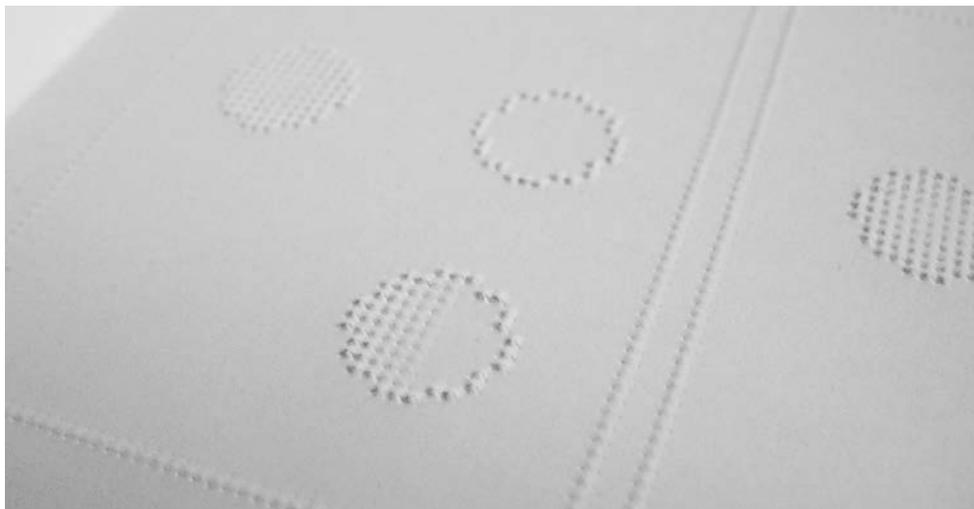

Illustration 6: The different elements of Meyer's comic are embossed in slightly different height, the filled and the half-filled circles feature a lowering of dots towards its middle to make them more appealing to touch. While reading the different images, the reader learns the logic of this and applies it on the decoding of the medium and its story. At the end of the story the circles fade over the course of several images into the surface of the paper. According to the test-readers, this is understood as a narrative device and not as representations of different circles. (Photo: Dittmar 2014)

No text is used in Meyer's story of *life* at all. But still it provides us with a detailed narrative, even carrying emotional address - most readers are touched by life's inevitable conclusion. If text were added, it would allow for references to all kinds of abstract or concrete matters without changing the composition of the figures. But due to the formal requirements on type, it would need comparatively

much space and would result in large images, if the text were not to dominate the image concerned completely.

Understanding comics
One side-effect of this new comics-format is that it tells us a lot about the way comics narrate: the reader gets a comics narration which is as gripping as other comics while it is built from simple forms that are put in relation towards each other.

Imagine a comic-narration as constructed using elements that are placed on various structural layers that are placed on top of each other - like transparent sheets that contain e.g. pictorial information on the placement of figures in whatever surrounding, or either sounds, thoughts, direct speech, or narrator's comments (s. Dittmar 2011, 179-182). In Meyer's *life*, only the pictorial base-layer of comics-content has been used. The superimposed layers remain empty: no sounds, thoughts, no speech, no comments of a narrator are shown. But still the comic succeeds in telling its intricate story.

Apart from the title and an explanatory sentence on the cover, written text is omitted, leaving the narrative free from all language-references, which might be matter for interpretation. Each reader constructs the narrative from the sequence of the images only. Words are neither used as pictorial elements nor as references to whatever topics. The pictorial language is open to interpretation and invites to contemplate on the human condition, luckily without getting pathetic or kitschy. The pictorial language comes with cultural background, like all narrations do. Also, the narrative form builds on cultural knowledge: Each element of the current picture needs to be compared to earlier or later pictures after putting into relation the elements of each image, seeing readers of comics do this, too. But the eye reads much faster than fingertips do, and especially the need to memorise the relation of pictorial details to each other asks for a lot more concentration than reading comics does of sighted readers. For blind readers that have no recollection of visual qualities each image presents a hide and seek-experience in some representation of space that has to be related to meaning in the first place.

While standard comics are not readable by blind people, comics for the blind like this one are readable by seeing readers alike, especially as no Braille-writing has been used in the narration itself. It might appear simple in its way of narration, but it introduces the way comics work to a completely inexperienced audience. A very complex story would not be ideal for that purpose - imagine, to go for a stereotype once again, the first comic you had ever read had been one of the advanced Chris Ware charts, would you have understood or would it more likely have ended your foray into new fields of literature?

To experienced comics readers, *life* appears very stylish as it lacks all colour and decorative detail that we are used to from most comics. It is not even printed in black and white, but the whole comic is white on white as the story is embossed onto the pages - for the seeing reader all visual information becomes visible according to the current lighting conditions. For somebody used to standard comics, this appears as quite artistic in its design, devoid of ornament, clean and clear in its forms. A reduction of the narrative to its bare necessities. To the blind reader, there is no lack of colours or line work. Instead *life* is focussed on what it was intended to do: It introduces sequential storytelling in juxtaposed images that are to be read individually and have to be related to the previously read units of the same story. To the inexperienced comics-reader that is quite a challenge and for readers who have been born blind, the challenge of deducting information from a sequence of framed units that present information in a non-linear way, is extreme.

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