REPRESENTATION OF TIME IN (STATIC) VISUAL NARRATIVES

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The depiction of a story by pictorial means involves the problem of a relationship between literature on the one hand and the representational arts on the other. The protagonist of the story together with elements of space and time are the major components of the visual narrative. The linguistic representation of time or tense is based upon a spatial metaphor: time is a path or a trajectory. This metaphor has an analogy in visual narratives where through certain indicators the readers temporally orient themselves within that narrative. Time is not perceived, but its existence is inferred while viewing the visual. Representation of time plays a key role to differentiate between the modes of visual narrative. This article addresses the technique of presentation of stories, and analyzes the structure of visual narratives with an aim to study how ‘time’ is represented in visual narratives.

Keywords: Visual narrative, Representation of Time, Monoscenic mode.

1. INTRODUCTION

By traditional definition, the representational arts lie outside the time category since they produce static images that are two dimensional (painting) or three dimensional (sculpture). They are therefore structurally distinct from poetry and music, which develop within a physically prolonged time. The limits that have been indicated are physical, it is with respect to this physical limitation that we use the word ‘static’ in our title. That ‘time’ for the visual arts is represented in a symbolic way has been unanimously accepted by scholars is proved by the existence of ‘continuous narrative’, mention has been made of continuous method of narrative as early as 1947 by Franz Wickoff.\textsuperscript{1}

It is traditionally accepted that a narrative has two aspects — a story or content that generally consists of a sequence of events, and the form or expression which is the means by which the story is communicated and its actions presented. The dichotomy between content and form has been expressed by a range of scholars: there is the fibula (raw materials of the story) and syuzet (procedures used to convey them) of the Russian formalists; the histoire and discours of the French structuralists; or the story and discourse proposed by Seymour Chatman.\textsuperscript{2} Stories revolve around actions, human or otherwise, that occur in space and unfold in time.\textsuperscript{3} For the artists, the three major components of narrative are the protagonist of a story, together with the elements of time and space.\textsuperscript{4} Drawing from Chatman’s narrative theory\textsuperscript{5} and the views about visual narratives put forth by George Hartmann and Vidya Dehejia, to which we basically concur, we propose a visual narrative theory that would aid our investigation of ‘Discourse in Visual Narratives’.

Our inquiry into static visual narratives focuses on “discourse”, or the technique by which stories are communicated, with a secondary role given to “story” or subject matter. In this paper, contained by the broader domain of ‘visual discourse’ we shall focus on the representation of ‘time’ in a visual narrative. The linguistic representation of time or tense is based upon a spatial metaphor: time is a path or trajectory. This metaphor has analogies in visual narratives, where a story is to be told and that story unfolds in time.

The story (narration) is the temporal aspect of the visual narrative which when represented on a two dimensional surface is converted to a spatial one. (Visual) Narratives represented not only that which
appeared to the eye but also that which is known to the mind; in which space and time appear side by side featuring figures in their essence (like a child’s drawing of a table with four legs of equal length, rather than in perspective). This essay discusses the issues of unfolding of the story, the problem of time and its representation with reference to the narrative structure in modes of (static) visual narratives. We will be dealing with only one aspect of visual discourse that of the representation of ‘time’ in this paper. As mentioned earlier, given a story it can be visually represented in a number of ways, this is what we refer to as ‘modes’ of visual narratives. We make the differences between the various ‘modes’ based on certain characteristics, for instance, Monoscenic mode is called as such based of the fact that the story is told within one image. Polyscenic modes are where the story is told using multiple images. The aim of this paper is to provide descriptions of an assortment of visual representation of time that will deepen our knowledge of the area under discussion. Our study is based on the assumption that the reader is well acquainted with the story that is represented. We are not including analysis of Polyscenic mode in this paper. Comparisons are made between types of representation of time that appear within the monoscenic mode visual narratives.

2. ‘READING’ A VISUAL NARRATIVE

Artists have to decide how to portray their actors, how to represent the space or spaces in which the story occurs, and how to shape time during which the story unfolds. In the case of monoscenic mode of narrative, because the entire image is exposed at once to the viewer there is a widely held opinion that a visual image is instantaneously perceived. What the eye gives us is the perception of vision in time, because, falling on any surface, the glance following some unknown laws sweeps across the entire field of vision. The image is fixed but the perception of it is mobile. Seeing is an action; the mind is not passive, it registers an image. In the visual arts, a “duration” of images, is based on successive phases either of structure or of perception. What binds the episodes is the intellectual elements that establish relations between places and time.

Visual narratives bank on the spectator’s prior knowledge of the narrative. Only then can he fully enjoy reading the visual narrative, as the intent of the visual narrative is to engage the spectator within itself. It is at his point that ‘perception’ and ‘memory’ comes into play. With regards to this, Professor Hearnshaw refers to what is technically known as ‘temporal integration’, the bundling together in one extended stretch of time of memories and expectations. ‘Temporal integration cuts across boundaries. It implies perception of the present, memory of the past, and expectation of the future — stimulus patterns, traces and symbolic processes — integrated into a common organization.’ It is this cognitive activity, i.e. the phenomenon of memory and anticipation, which make a visual narrative comprehensible. The spectator already knows what has happened (the past) and what is to come (the future) but engages in unraveling the visual narrative that the artist has presented before him. When a viewer ‘reads’ a visual narrative, he moves from the domain of ‘real’ time to that of the ‘story time’ of the narrative. We will analyze our visual narratives keeping in mind Nelson Goodman’s distinction between ‘Order of Occurrence’: it is the original story, in the order of the occurrence of the episodes or events and ‘Order of Telling’: the order in which the events are told. More often than not ‘time of telling’ is indicated in a picture, but the spatial distribution of incidents depicted often varies in many and remarkable ways in relation to the order of occurrence. It is indeed difficult to mark the distinction of ‘time’ from ‘space’ in a visual narrative represented on a two dimensional surface, but we will attempt to do so for
Artists have invented various devices to represent passage of time in visual narratives. What these devices are and how they function will be explored as part of this paper.

In the diagram that accompanies the visual narratives we have demarcated the area where the events unfold within the panel by boxes with numbers e.g. 1, 2, 3 etc. following the order of telling. The numbers that appear in the explanation carry a number e.g. (1), (2), (3) which correspond to the event depicted in the visual narrative. The dotted line marks out the path that a reader would take following the order of occurrence of the story. This helps us to make a comparison between the two orders. The dotted line indicates the direction in which the story moves, where ' ' indicates the start of the story and ' ' indicates the end. The events depicted in the visual narratives are numbered as they appear in the text and in the visual narrative.

3. DEVICES OF REPRESENTATION OF TIME WITHIN MONOSCENIC MODE OF VISUAL

3.1. Monoscenic Continuous Narrative

In the continuous mode of narration, multiple episodes from a story are depicted within a single frame, the temporal sequence is clearly communicated, and there is a consistent formal order of representation. In the instance below, we see the story unfolding against a unifying landscape. The figure of the protagonist is repeated in the course of the narrative. Consecutive time frames are presented within a single visual field, without any dividers to distinguish one time frame from the next. The impossibility of the same person being in different places at the same time notifies us that different spatial positions among scenes is to be interpreted as different temporal positions among the episodes depicted.

Even though we view the whole story at once, we tend to follow a left to right order of reading, as the order of telling is plainly established. Here the painter involves himself with the episode immediately preceding the lifting of the mountain. (1) While we see Lord Krishna advising the people to worship mount Govardhana, at the same time we view the delicacies being cooked and women carrying offerings ready to set out (2) The procession with offerings loaded bullock carts sets out for mount Govardhana. (3) Lord Krishna is seen paying respect to mount Govardhana along with the other villagers. We also see an enlarged figure of Krishna stretching his arm to partake of the offering placed in front of mount Govardhana, thus suggesting that it is he himself in the form of mount Govardhana. The sequence conforms to the linguistic convention. The viewer has to move to the location along with the characters of the story for the episode to take place. The direction in which the story moves is fixed by the orientation of the figures of Lord Krishna and the bullock carts. Three of the figures of Krishna face right and the loaded bullock carts head to the right. The order of telling is established by the dotted line, in the diagram alongside the painting. While we see a clear relationship between the order of occurrence and the order of telling with regards to the first three episodes, the order of telling of the episode represented at the top right hand corner (messengers are shown reporting to Lord Indra about the above narrated incident) is not clear. It could be read as unfolding either before the other set

![Figure 2. Krishna and Mount Govardhana Source: A Bhagavata Purana series.](image-url)
sequence (then the whole visual narrative could be taken be a flashback) or after the set sequence or simultaneously with the third episode.

3.2. Monoscopic Narrative Mode — Key Event in Action
The monoscopic key event mode of narration involves the depiction of the single, most important, easily identifiable episode/event/instant of the story. In the Story of Krishna and sage Akrura, which portrays events from the story the order of telling is not clear. The reader has to first be aware of the fact that, the events are taking place in the water in the foreground. Outside, on the bank nothing appears unusual — a routine scene of cowherds resting under a tree, a nobleman proceeding in a chariot at the extreme left, and the chariot with Krishna and Balarama standing at right. In this case, according to the order of occurrence the visual narrative runs from right to left in the lower half of the image. As they wended their way along the Yamuna and through the forest, Akrura halted and sought permission to take a bath in the sacred river.

(1) Akrura goes into the water knowing Krishna and Balarama are in the chariot. (2) As he dipped his head in water, he "saw" the two brothers in the waters exactly as he had left them sitting in the chariot on the bank. (3) Somewhat confused, he quickly raised his head and saw them seated as before. (4a) Astonished he goes under water again and (4b) sees the Lord Vishnu seated on the serpent Shesha.

The temporal development is to be understood by means of intrinsic criteria, and requires, on the part of the viewer, an integrating effort of mind and eye. Events 1, 2, 3 and 4a occur in the middle of the frame, at the same spot. They occupy the same space but have moved in time. 4a and 4b take place at the same place and time, but the artist is forced to move the entire event to the left to indicate the change in the vision that Akrura experiences. The path the eye would take to follow the story event by event is traced in the diagram alongside the visual narrative. The direction of telling cannot be inferred easily. Even though we see the figure of Akrura facing right, in this case it does not act as a guide for temporal movement. The reason Akrura faces right is to relate to and make comparisons between his visions underwater and the figures of Krishna and Balarama seated in the chariot on the banks. The spatial arrangement of telling departs from the order of occurrence in that an event that does not occur in a different place is depicted as occurring in a different location further in the river. Thus a reader who is not acquainted with the story can be misled and confuse the two episodes happening at the same place to be unfolding at different places and at different times.

3.3. Monoscopic Simultaneous Narrative Mode
The monoscopic simultaneous mode depicts multiple episodes unfolding at the same time in different places. "Rustam’s destruction of the demon, the White Div", presents an interesting case of study pertaining to the order of telling. The scene represented here, is one of seven heroic labors Rustam performed on his way to Mazandaran on behalf of King Kay Kaus, who had been taken prisoner by the White Div.
In this visual narrative, (1) we are presented with the figure of the King is tied by his hands and feet to a tree. Behind him stands Rustam's favorite horse, Raksh. (2) The cave is represented as a pear-shape black area. Distinguishable by his helmet of a leopard head and jacket of tiger skin, Rustam thrusts his dagger into the chest of the monstrous White Dev. The demon's companions surround the cave and attack Rustam in vain. The order of telling is unconnected from the order of occurrence. The artist gives us a simultaneous view of the happening both inside and outside the cave at one single moment of time. Based on the order of occurrence we know that the King was taken prisoner first and it was then that Rustam went to fight the White Dev. The King stands in the right bottom corner waiting to be rescued. We are thus shown the cause (kidnapping of the King Kau Kaus) and effect (killing of the White Dev by Rustam) in the same image.

The reader is given enough cues to narrate the entire story and guess the end. No part of the picture precedes any other in time yet we are told the entire story.

3.4. Monoscenic Conflated Narrative Mode

In conflated narrative mode, while multiple episodes of a story are presented, the figure of the protagonist is conflated instead of being repeated from one scene to the next. On the panel of the Dipankara jataka, while multiple episodes of a story or multiple scenes of an episode are presented, the figure of the protagonist is conflated instead of being repeated from one scene to the next. In order of occurrence, the episodes begin at the left side of the panel and proceeds one placed over the other to the right. On the left side of the panel we the figure of Sumedha repeated three times in different postures. The right half of the panel is occupied by an enlarged figure of Dipankara Buddha followed by a monk. There is a looping relationship between the enlarged figure of Buddha and the three figures of Sumedha.

1. At the extreme left, Sumedha buys lotuses from a young woman.

   (2) He then throws Lotuses at Dipankara they remain suspended around his head.

   (3) The figure of Sumedha is seen stooping on the ground as he spreads out his long hair upon the slushy ground for the Buddha to step upon, and

   (4) rises up into the air upon hearing Dipankara’s pronouncement.

The single large image of Dipankara is to be read as receiving the lotuses, perceiving Sumedha with his hair spread on the floor and as he rises in the air. The direction of the unfolding of the narrative is from left to right, which can be assumed as the first episode unfolds to the right by itself. The enlarged figure of the Buddha prevents the eye from moving beyond it to the right and forces us to review the events that it faces. Events 2, 3 and 4 unfold at the same place but have moved ahead in time. The temporal progression is implicit in this case, the change in posture of Sumedha is the only allusion provided. The reader has to comprehend that the four figures depicted in between the Buddha and
3.5. Monoscopic Synoptic Narrative Mode

In the synoptic mode of narration, multiple episodes from a story are depicted within a single frame but their temporal sequence is not communicated and there is no consistent or formal order of presentation with regard to either causality or temporality. We are confronted with a still stranger representation of time in the circular panel that depicts the Chaddanta Jataka. In this example the gap between the relationship of the order of occurrence and order of telling is the widest. This mode of narration heavily relies on the knowledge of the reader with respect to the story. There is no clue to the temporal sequence so to speak. We are presented with a synopsis of the episodes that occurred. Multiple episodes from a story are depicted within a single frame and there is no consistent formal order of representation with regard to either causality or temporality. The figure of the protagonist is repeated in the course of the narrative. Consecutive time frames are presented within a single visual field, without any dividers to distinguish one time frame from the next.

This is the most compact way of telling a story. Space could have been a reason for such an arrangement of the episodes, but we should not forget that the artist could always have resorted to using the monoscopic — key event mode where he could enjoy the comfort of space. The artist presents the story of Chaddanta Jataka in a total of seven scenes, so tightly pressed together it presents a challenge in decipherment, even to those familiar with the story. We find the first episode of the story unfolding at the right side of the medallion. (1) Chaddanta is seen in the forest, identified with the parasol above him. Three episodes after this occur in the lower part of the medallion. (2) He presents his chief queen Mahasubaddha with the lotus. (3) The offended and jealous junior queen Chulla-subaddha leaves the pond. (4) Her figure is repeated to the extreme left, where we see her lying down to die. The story now moves to the upper zone, where (5) Chaddanta is seen unaware of the presence of the hunter who aims an arrow at him from his hideout. (6) The hunter saws off the tusks, requested by the queen and (7) and is seen departing carrying the tusks. These “illegible” narratives could be read only by those who previously know the story and can hence read the episodes in their correct sequence, supplying the missing narrative elements from their memory. The viewer was given aids recall the story by being presented with more than one image of the same characters in diverse spaces and actions.

Yet the depictions depended for their decipherment on the prior knowledge of the viewer. The modes of visual narratives discussed above illustrate diverse methods to convey the ‘passage of time’ within a single monoscopic image. It engages the reader and involves him in the process of storytelling by inviting him to unravel the story and travel within the ‘story time’. The images in these cases function as true visual narratives in their own right and do not act only as support to the textual or oral narrative. It is the passage of time that dictates the difference in the type of mode.
4. DISCOURSE IN VISUAL NARRATIVES AS A PART OF DESIGN

Discourse in visual narratives is the study of ‘how’ stories are told and what are the various components that come into effect when these stories are represented on a given medium. Visual narratives form a part of visual communication and are therefore a part of design. A deeper understanding of discourse in visual narratives and the knowledge of the factors that affect them can have a profound impact on the function of the visual narratives. This can in turn enable us to have a much richer and contemplative tradition of visual story telling. The artists since ancient times in India and many other places across the world had been following this tradition for a long time. As we have seen their purpose is much more than simple supplementary images. Every time one looks at them one can delight in experiencing the story a fresh. They function like an adventure the mind and imagination can indulge in. A study of discourse in visual narratives therefore could make an impact on the future of visual communication design.

The learning from this study need not be limited only to the area of storytelling but can be productively applied to other design areas such as info graphics, information architecture, information visualization, communication design etc.

Discourse in visual Narratives has been the domain of Art History for a long time. Art historians have debated and suggested a number of theories to do with the same. If we for a moment isolate ‘Discourse of visual narrative’ from its Art historical milieu, from its compositional and stylistic focus, we will find ourselves face to face with a primarily vital design decision making component, a study and closer understanding of which would directly be of immense value to the design domain. There is a dire need for it to be studied and assimilated into the Design domain as it has much potential in providing innovative avenues of thought.

5. CONCLUSIONS

This investigation has brought to the forefront quite explicitly the fact that the artists have a choice with regards to the unfolding of events, which can affect the reading and experience of the visual narrative. As we have observed through this study, a visual narrative could either be told in a way such that the order of occurrence and order of telling go hand in hand or they are not related at all. The story could be widely spaced or can be concentrated into a small area. The above two points are illustrated if we compare the monoscopic continuous and the monoscopic synoptic mode of narrative. The episodes can be piled one over the other as in monoscopic — key event in action or in the monoscopic conflated mode of narrative. In addition to these the episodes can also be seen at one glance as in the monoscopic simultaneous mode. Discourse in monoscopic visual narratives started with the simple direct continuous mode and moved towards a greater complexity.
The point we would like to make here is that Visual Discourse can be enriched and made appealing by using and exploring the various modes of visual narratives. Other than for a few instances, visual narratives today play only a supporting role to the story. Photography and Literacy have narrowed the scope of visual discourse. As Small points out, literacy has a number of effects on artists and their productions, and these effects vary over time and between cultures. The more accustomed we are to reading narratives in sequence the more we expect to find such sequences. The modern inundation of print has forced us to develop not just the ability but also the desire to process sequentially to a far greater extent than antiquity. While we are becoming more accustomed to the concept of hypertext, most of us were raised in a sequential world as far as narrative is concerned.\(^{14}\)

In conclusion we would like to state that the treatment of representation of ‘time’ in visual narratives forms an essential element of ‘Discourse in visual narrative’ which needs to be further explored. Artist in India and across the world have been experimenting with the representation of time and have given us a variety of exhilarating visual narratives. These visual narratives are not only meant for the eyes but go much beyond it. It calls to the reader to be a part of it and brings to life the story telling element. For a designer while designing a visual representation for a given story, he has the choice of representing the temporality/time in many/multiple ways depending on how the designer wants the reader to decipher and experience the content of the representation. The hidden endeavor of this study is to rekindle the flame of visual discourse using modes of visual narratives as fuel to brighten the glow that would engage the viewer and enrich his story comprehension experience.

REFERENCES

\[8\] Francastel, P. Encyclopedia of Art.