From Horizontal Screen to Vertical Screen: Visual Logic Reconstruction and Aesthetic Adaptation in Micro-Dramas

Xu Zhang*

Huanghe S & T University , Zhengzhou, 450000, China
**Corresponding author: m15837300919@163.com*

Abstract: *With the development of mobile Internet and the spread of handheld devices, the vertical screen format has become the main way to present micro-dramas, and thus a serious problem has arisen for the system of film and television language that originated from the aesthetics of the horizontal screen. The vertical screen is not a simple crop of the horizontal screen; rather, it reconstructs visual grammar according to the logic of the vertical frame. The two above will be taken into account in the construction of visual logic and aesthetic adaptation. The main subject of the vertical screen moves from a place to a person, and at the same time, gradually reduces the scale of the shot to medium shots and close-ups to increase the visual focus. Spatial compression reduces the sense of depth and makes things appear flat; the organisation of visual information is vertical, and the path for drawing attention is from top to bottom. The vertical frame is in motion; it is moving quickly and has a sense of verticality; editing can also create a sense of order by setting a new baseline. Finally, the visual grammar of vertical screen shapes an aesthetic form of immediacy; that is to say, the strength of the visual experience at a particular time is the main criterion for aesthetic judgment, and thus shows how media properties can profoundly alter visual language.*

Keywords: *Vertical Screen Micro-dramas. Visual Logic, Aesthetics of Aspect Ratio, Spatial Compression, Aesthetics of Immediacy, Shot Rhythm*

Introduction

The development of visual arts has always been closely related to the physical properties of their materials, and as the aspect ratio has changed, so too have the visual language and aesthetic concepts. With the development of mobile phones and tablets in recent years, they have become the main devices people use for viewing pictures and videos, so vertical-screen videos have been added to the list of production content. A typical example of this change in the media environment is micro-dramas. Most of the existing theories of film and television have long been based on the idea of a horizontal screen, and thus cannot be directly applied to vertical-screen images. The horizontal screen is in line with the visual inertia of lateral extension and aims for spatial exhibition and depth layering; on the other hand, the vertical screen has reduced the amount of information and organised the visual path along the vertical axis—this is a basic break in visual logic between the two. As the aspect ratio moves from wide-screen to tall-screen, how have the basic units of visual narrative been arranged; how has the way attention is directed in the picture frame changed; how have shot rhythm and editing logic been adjusted; and finally, what new aesthetic forms have emerged? The above are the basic problems that need to be solved in the research on vertical-screen imagery. Research on the Construction of Visual Logic and the Process of Aesthetic Adaptation in Vertical-Screen Micro-dramas. Based on the three attributes of the compositional paradigm, that is, space, time and rhythm, this paper will explore how vertical-screen images are constructed in terms of visual language and what aesthetic effects are achieved.

1. Vertical Screen Compositional Paradigm and the Shift in Visual Focus

1.1 Shift of Paradigm from Horizontal Screen Panoramic Narrative to Vertical Screen Central Composition

Horizontal screen film and television creation have long been in line with the visual logic of panoramic narrative; the widescreen form offers a large visual area for spatial arrangement and environmental description, and the extension of the horizontal field can fully present the relationship between the setting and the characters. The appearance of vertical screen micro-dramas has broken this old model, and the vertical frame has changed the basic unit of image composition and how it is organised. The horizontal axis takes up most of the horizontal space, but in the vertical screen, it is replaced by the vertical axis, and the arrangement of visual elements is no longer horizontal; instead, they are organised vertically[1].

The application of the long shot in the vertical screen is very limited; due to the small frame height, all the horizontal information of a long shot cannot be displayed, so creators are forced to use a visual strategy focused on central composition. The human subject is in the centre of the frame, the background space is very small or non-existent, and the main focus of the picture is on the face and gentle emotions of the character. The new composition mode is not only about changing the proportion of the picture; it also indicates that the basic unit of visual narration has shifted from space and environment to people, and more specifically, to small details such as facial expressions. Thus, the essential parts of visual language have changed significantly.

1.2 The Generative Logic of the Visual Guidance Mechanism in Vertical Space

At the bottom of the vertical screen form is a new way to show the technical support for visual guidance. Horizontal-screen content is generally easier to read, so its design should consider how people read from left to right or right to left, and at the same time, all the various elements in the frame need to be distributed reasonably so as not to be too cluttered. At the same time, the vertical space of a vertical screen will cause a shift in the direction of the eye and make top-down or bottom-up vertical scanning the main way of viewing. Therefore, a visual reference system needs to be built by the developers to make good use of the limited time viewers have to learn. The centre of the face of the character is in the beginning of the picture, and other parts, such as the direction of their eyes, the position of their hands and objects, etc., are arranged vertically. At the same time, there are also ways to create a hierarchical structure of visual gravity along the vertical axis in this frame, such as changing the distribution of light and altering colours; thus, one can guide the viewer's attention up and down the picture in a certain order. The swiping mode of the vertical screen also has the attribute of vertical movement, so the usual gesture of moving a finger up can be mapped to the direction in which our eyes move. Both are visual and gestural signs, and they have been arranged vertically to achieve a certain degree of cohesion in the technical aspect of the viewing experience.

1.3 Frame Constraints and the Reorganization of the Visual Information Hierarchy

Some of the constraints on the physical form of the vertical screen have affected the display of visual information. The effective viewing range of a vertical screen is much smaller than that of a horizontal screen, and its ability to display horizontal information is also very limited; therefore, the traditional way of organising on-screen information needs to be changed from the ground up. Compound information that is generally shown in horizontal screen images, such as multiple characters in a single frame, environmental details and depth layering, cannot all be displayed at the same time on a vertical screen; otherwise, there will be a serious problem of information overload. Given the above problems, micro-dramas have developed a hierarchical organisation system for visual information. The foreground layer contains the main story information, such as the faces and important actions of characters; it is generally in the centre of the picture and attracts the attention of the viewer most. The middle ground has more information, such as hand gestures, handheld objects and nearby environments, and is located in the middle part of the picture. The bottom layer is the background of the scene, so it is usually very simple and only contains colours or lights. The three layers are placed one after another vertically, so the main content will stand out and not be hidden by many other pieces of information on the side. The arrangement of information in these vertical-screen images has formed a particular visual language; thus, people do not need to look across a long row but can focus deeply on the various layers stacked vertically, and a fundamental change has occurred in how attention is distributed in visuals[2].

2. Spatial Compression and the Shift in Visual Perception

2.1 Transformation of Shot Scale and Intensity of Visual Focus in Frame Contraction

Given that there is a vertical screen, some modifications need to be made in the system of shot sizes. In the production of horizontal screens, selection of shot sizes can help create a panoramic view of the world of the story and show all kinds of environmental relationships; long shots, medium shots and close-ups are often used alternately to establish the basic structure of visual rhythm. Due to the narrow horizontal field of view of the vertical screen, the expressiveness of a long shot is reduced; it is difficult to show the spatial relationship among people and their environment in full in a small frame. Therefore, the subject of shot size for creators will be medium shots, close-ups and extreme close-ups.

It is not that the focal length has been altered; rather, the power of focus has been increased. When the character's face takes up a larger portion of the frame, the audience will pay more attention to fine details and minor movements of the face, and much of the other information in the picture may be ignored. The first effect of decreasing the shot size is an increase in the sense of focus; thus, more information can be presented in a short time within a single picture. Close-up shots are frequently used to enhance the emotional impact of horizontal-screen films, and now they have become a type of narrative unit in vertical-screen works. Gradual changes in facial expressions, slight movements of the eyes and small openings of the mouth are all visible signs of how the language of imagery moves from broad spatial narration to close expression-based narration.

2.2 The Suppression of Depth Perception by Vertical Composition and the Tendency Towards Flatness

Horizontal screen pictures have long been using depth to create spatial layers, and by placing the foreground, middle ground and background along the length, it is possible to make the viewer feel three-dimensional space. The bottom bar is relatively short in the vertical direction, so very little depth can be shown. Given that the frame height is small, it is not possible to show the whole length of both the foreground and the background, and thus the expressiveness of deep-focus shots will be reduced. A decrease in depth perception will result in a flatter appearance of the picture, and thus the connection between characters and the background will be changed from vertical division to vertical superposition[3].

The background element is no longer an area but is placed outside of the character and arranged vertically to form a system of visuals in the style of planar composition. Light is no longer used to create an illusion of depth; instead, it can be employed to outline the subject, and side-back lighting and rim lighting are used to offset the reduction in three-dimensionality. This trend of flatness is not an absence of visual expression; rather, it is a new visual grammar that has emerged due to the special characteristics of vertical screens. Creators can create a sense of spatial order in a two-dimensional way by means of vertical relationships, contrasts in size and colour, etc. A decrease in depth perception will cause people to pay more attention to the motion of information on the surface of a picture and be less absorbed in a world of deep space.

2.3 Mechanism of Capturing and Maintaining Visual Attention in the Vertical Field of View

The vertical field of view of the vertical screen form has also placed a new demand on how to attract people's attention visually. When viewing horizontal-screen content, the main direction of people's eyes is horizontal; generally speaking, their attention is distributed more evenly, and both the left and right sides of the frame are paid attention to. The vertical field of view alters this balance; that is, the distance covered by the gaze in the vertical direction is increased, but at the same time, its range of movement in the horizontal direction is reduced, so the way visual attention is directed is also modified. The centre of the frame is a natural place for the eye, so it should be used to attract attention, and the main content can be placed in the middle of the frame so that it is noticeable when people look at it.

The continuous supply of attention is determined by how to arrange the flow of visuals vertically. The above ways can be used to grab the attention of the audience in long animations by having characters move vertically, placing props at different heights, scrolling subtitles vertically, and so on; otherwise, people will lose interest due to a lack of change in visual information. Continuous vertical swipe transition for vertical screens is also the same; each swipe is a display update, a new frame

moves into the vertical field of view, and there is continuous vertical visual contact with the previous frame, so attention can be maintained by this technical method. In the vertical field of view, the motion of visual attention is no longer due to the inertia of horizontal scanning; rather, it takes the form of a vertical flow path that goes from top to bottom or from bottom to top. This is in line with the use habits of mobile phone users, and it is quite convenient to view vertical-screen content[4].

3. Visual Rhythm of Vertical Screens and the Formation of Aesthetic Forms

3.1 The Shaping Effect of the Vertical Frame on the Shot Rhythm of Micro-dramas

The vertical constraint of the vertical screen format has had an effect on the shot rhythm of micro-dramas. Generally speaking, the speed of the shot rhythm in the production of horizontal-screen films is determined by the coordination of spatial arrangement, character movement and environmental description; a wide horizontal field of view in widescreen movies can provide a relatively large perception space for slow-motion shots. The horizontal space in the vertical screen area is relatively small, so the number of visual elements that can be shown for a long time is small; thus, to increase the information density per unit time, the speed of scene change must be increased. A vertical frame can change the style of motion in a single take, draw attention to a character's vertical movement and vertical displacement, and determine how long this movement is shown in the picture.

When a character moves vertically at the top or bottom of the screen, its path covers the whole frame; for good Gestalt perception, this movement should be noticeable after some time has passed, so very rapid movement is not suitable. Therefore, the shot rhythm of the vertical screen can be both dynamic and in accordance with the Gestalt of vertical motion, presenting information at a high frequency and showing the whole movement in the vertical field of view. The distribution of shot lengths is bipolar; some shots are as short as a few seconds to create a sense of rhythm, and others are relatively long to show the whole motion of climbing and thus give some flexibility to the rhythm under the constraint of a vertical frame. The same effect can be seen in the coordination of shot transitions and the vertical visual path; when the frequency of transitions is in line with the physiological rhythm of up-and-down eye movement, viewing is more comfortable and a sense of rhythm is created. The length of the shot and how closely the shots fit the rhythm of the content can be controlled by the vertical frame; for instance, serious emotional conflicts are often shown in quick succession, but subtle emotions need more time to be fully felt, and rhythm itself can be used to express emotions[5].

3.2 Adaptation Logic of Visual Continuity in Fast Editing for the Vertical Screen

Micro-dramas are often edited rapidly, and one of the problems in adaptation is how to maintain the visual continuity of the vertical frame. Horizontal screen editing has long been about coordinating horizontal movement and gaze; when the direction of a character's movement is in line with the horizontal axis of the frame, the continuity of transitions can be achieved naturally. To create a sense of continuity, the main direction of motion matching in vertical screen editing should be vertical. When a character looks up and down or moves in other ways, the editing point should continuously be placed along the path of this motion so that the viewer's eyes can move smoothly between the top and bottom of the frames.

A fixed-centre composition can be used for quick editing, and to avoid drawing the audience's attention away with rapid cuts, the character's face can be placed in the middle of the screen, and a stable point of focus should be maintained in all the scenes. The same colours, lights and arrangements are used in all the shots to create an unconscious link among them, so that even at a high speed, the viewer can feel a sense of order. Adjustment of the editing logic for a vertical screen is also indicated by the omission or modification of horizontal movement. Horizontal movement in the vertical screen will likely result in a loss of focus; therefore, the edit will be divided into several continuous vertical scenes or the path of motion will be recreated by taking multiple shots so that the direction of movement is always in line with the vertical orientation of the frame.

At the same time, rhythm can also be used to create a corresponding relationship with the information hierarchy in the vertical field of view; that is, the switching frequency of essential information is relatively slow, and for supplementary information, it can be increased to guide the distribution of attention among viewers by varying the density of rhythm. Continuity of vision in fast-paced editing also needs to be maintained, so fine-tuning the movement of the eyes is necessary; if

the direction of a person's gaze is the same in several shots, it will be easy for the audience to get lost, and if it suddenly changes, a short transition shot should be added to help them readjust. In fact, the editing logic of a vertical screen is a reconstruction of spatial perception; it changes the continuity of space in the horizontal direction into visual continuity in the vertical direction and creates an internal coordination mechanism for rapid changes and vertical composition.

3.3 The Visual Grammar of the Vertical Screen and the Aesthetic Experience of Immediacy in Micro-dramas

A Visual Grammar for Vertical Screens has been introduced to give the micro-dramas a sense of immediacy. Aesthetic habits that have developed over a long period of viewing horizontal-screen images value immersion and continuity; thus, viewers are willing to invest a considerable amount of time to enter the world of fiction and experience the gradual accumulation and release of emotions. At the same time, the visual grammar of vertical-screen micro-dramas is based on immediacy, so many ways have been employed to create an expressive system that is suitable for instant consumption and quick understanding, such as highly focused compositions, extended contraction of shot scale, and rapid acceleration of rhythm. Every frame should have a sense of immediacy, and close-ups of the characters' faces can show their emotions directly; even the most intense moments of action can be shown in a short shot. Now, to get information, one no longer needs to collect context from the previous and next frames; rather, it is affected by the visual strength of a single frame.

The aesthetic experience of immediacy is isomorphic with the working mode of the vertical screen; that is to say, the images produced by swiping up or down are equivalent to rapidly changing emotions, and a full cycle of emotional consumption can be achieved in a single swipe. Simplification and intensification of visual grammar increase the density of the aesthetic experience per unit of time; that is to say, the triggering of emotion, the arrival of climax and the achievement of satisfaction can all be realised in just a few seconds, and thus the length of the aesthetic process is reduced to an instant. Aesthetic experience of immediacy can also be achieved by direct emotional stimulation; the visual grammar of a vertical screen does not need to be based on a story or emotional accumulation, but rather needs to present strong visual symbols that can put the viewer in a state of high emotional arousal very quickly. The new demands for aesthetic form have increased the requirements in encoding the method of visual language; thus, rhetorical devices such as symbolism and metaphor need cognitive processing and have been reduced, and direct presentation and immediate impact have become the main forms of expression. At the same time, the aesthetic experience of immediacy is not only a collection of emotional fragments but also has a certain frequency of emotional resonance due to rapid changes. Several short shots may focus on the same emotion, but each one adds to the development of that feeling and together they form a rich and moving work of art.

The aesthetic form of immediacy produced by the visual grammar of the vertical screen is the result of profound changes in aesthetic modes due to the characteristics of media; thus, the temporal dimension of images has been redefined in the vertical screen, and the visual intensity of the present moment is now the main criterion for aesthetic judgment. Aesthetic experience has formed new viewing habits; gradually, people are used to and expect frequent emotional stimulation, have raised their demand for aesthetics to a high level, and thus promoted the evolution of visual grammar towards even greater density and immediacy.

Conclusion

It is not only that the horizontal screen has been changed to a vertical one, but an entire new system for visual language also needs to be established. With a vertical constraint, the vertical screen is far from the main horizontal mode of display; at the level of composition, it has changed from a panoramic story to a central position, and the basic element of presentation is no longer spatial arrangement but the human figure. Spatial compression moves the focus of the shot-size system to the micro level, replaces depth perception with flat images, and creates a particular way of drawing attention in the vertical field of view. Shot rhythm can be fast or slow, and it can have a clear sense of upward movement; editing can also create a sense of upward movement, and together they can give the whole work a sense of urgency. Therefore, the basic form of visual language is determined by the physical properties of the medium; thus, time in images has been organised differently, and a new criterion for aesthetic judgment is the force of the present moment. The construction of the visual grammar for the vertical screen is not a rejection of the tradition of the horizontal screen; rather, it is an expansion of the

possibilities for visual language in the era of new media. In the future, with the development of display technology and changes in people's viewing habits, the visual grammar of vertical screens will continue to be diversified and enhanced, and the interaction and coordination of the two visual logics will drive the development of visual language.

References

[1] Yuan Laichen. "A Study on Visual Metaphors in AI Micro-Dramas from the Perspective of Cultural Semiotics." Vision, no. 16 (2025): 17-20.

[2] Zheng Jialin. A Study on the Integration and Innovation of Cultural Tourism Micro-Dramas from the Perspective of Reception Aesthetics. 2025. Southwest University, MA thesis.

[3] Niu Muzhi. A Study on Audience Guidance Strategies for Vertical Screen Micro-Dramas. 2025. Southwest University, MA thesis.

[4] Yuan Jingwei. "An Exploration of the Visual Narrative Innovation and Issues in Internet Vertical Screen Micro-Dramas." Journal of Tonghua Normal University, vol. 45, no. 11 (2024): 92-97.

[5] Zhang Xing. "A Study on Communication Strategies Based on the Visual Characteristics of Vertical Screen Micro-Dramas." Media Review, no. 04 (2024): 39-41.