Chihiro Boards a Train: Perceptual Modulation in the Films of Studio Ghibli

Kate Weedy
University of Edinburgh

This paper examines the ability of Studio Ghibli animated films to perceptually modulate their audiences. Working from Hayao Miyazaki’s suggestion that if a filmmaker wants to stay true to empathy they need only quieten things down, this paper seeks a technical explanation for this process. It will examine how the interplay of simple character designs and the sliding sensation of the animation stand induce a certain cognitive state. Through this process, the onlooker is more likely to imbue a two-dimensional character with a multidimensional, metaphysical presence.

About halfway through Spirited Away the protagonist, Chihiro, boards a train. The journey is practical, she is going to Zeniba to return the stolen golden seal, but rather than cutting between locations, director Hayao Miyazaki chooses to show the entire trip. As she sits there, seemingly lost in thought, the audience find themselves unable to look away. The moment feels important but, upon reflection, it is difficult to pinpoint why. During a panel at the 2001 animation festival ‘Nouvelles images du Japon’ Miyazaki tells the audience that, while directing this scene, he was remembering ‘the first time [he] took the train alone and what [his] feelings were at the time’ (Mes). The scene is constructed as an attempt to ‘bring those feelings across’ (Mes). This paper will look at how Miyazaki’s aesthetic choices bring about these feelings, and how his company, Studio Ghibli, turn moments of quiet reflection into tools for the enhancement of viewer empathy.

Moments like Chihiro’s train ride occur frequently in the Studio Ghibli oeuvre. Collectively they are known as Ma scenes, a term Miyazaki supplies in a 2002 interview with Roger Ebert. From the Japanese word for ‘emptiness’, ‘Ma’ in Studio Ghibli is defined as any instance in which a character ‘will just sit for a moment [...] not to advance the story but only to give the sense of time and place and who they are’ (Ebert). The primary object of this study is to ascertain how Ma scenes exploit the onlooker’s gaze to modulate their perception, compelling them to sense feelings that aren’t necessarily being explicitly demonstrated in facial expressions or dialogue. Predominantly, Ma scenes take place on varied forms of transportation. As this paper will show, it is the train-like motion of these animated vehicles that perceptually modulate the viewers. Their gaze is then focused on the character’s simple face, and the combination of these two elements creates this specific empathetic response resulting in characters that feel multidimensional, despite the flat, two-dimensional art style.

This paper’s discussion of perceptual modulation and film is influenced heavily by Scott C Richmond’s book Cinema’s Bodily Illusions. Richmond is primarily concerned with ‘cinema as a technology for the modulation of perception’ (6). He argues that watching a film can modify the viewer’s gaze, causing them to view the onscreen world with a different perspective to how they might view the world around them. His specific focus is in what he calls ‘proprioceptive aesthetics’ (6), how a free-
Moving camera can engender ‘the illusion of bodily movement through onscreen space’ (2). Nevertheless, his study is driven by the core belief that perception is porous and its modulation is ‘a fundamental aesthetic affordance of cinema’ (4). This study is grounded in the same belief, but focuses on a different kind of onscreen movement, ‘animetism’ as defined by Thomas Lamarre (6), and a different form of perception, Schivelbusch’s ‘panoramic’ (40) perception.

In his study, Richmond places a particular importance on the viewer’s perception of the camera, and how that camera moves within the filmic space. Using the film Gravity as his case study, he suggests that the way the ‘camera movement [...] takes the form of relentlessly disorientating rotational figures’ (1) disorientates the viewer to the extent that they become partially disconnected from reality, submitting to a movement that is ‘radically other’ (3). This works in Gravity because the ‘nearly constant movement’ (2) of the camera follows the same laws of physics that the character Dr Ryan Stone is experiencing, a zero-gravity world. The camera is a believable spectator, despite its situation differing significantly from the actual experience of the viewer. For perceptual modulation to occur the viewer must have the sense that their gaze, directed by the camera, is realistic. However, the difficulty of realism in animation comes from the nature of the medium. The camera, acting as the viewer’s gaze, cannot physically move through the onscreen world in the same way the camera in Gravity can literally swing around the actress. Mechanically, the camera is static, above the animation stand, while animators slide and change the cels upon which characters and scenery are drawn. However, this does not mean the viewer is limited to a detached bird’s-eye view of the film. Miyazaki’s creative philosophy is that ‘at its core [anime] must have a certain realism’ (Starting Point 21). He achieves this quasi-realism through a careful consideration of the viewer’s gaze, always placing the spectator, or simulated camera, in a naturalistic viewing position. Using the example of a film about an insect, he explains that ‘such a film shouldn’t show the world from the perspective of a human using a magnifying glass, but a world where each blade of grass becomes a giant tree’ (21). This construction of a live action aesthetic necessitates the use of terms such as ‘shot’ and ‘movement’ where appropriate. We can see this perspectival consideration in the Spirited Away train scene, where the camera appears to occupy the space of the train carriage (See Fig. 1). Chihiro is positioned opposite the spectator and, because a passenger’s back is visible to the left of frame, the camera appears to be either sitting on the bench, lent slightly backwards, or sitting on the window sill as Boh and Tiny Bird are shown doing to Chihiro’s right. The camera/spectator is not outside the carriage for, if it were, the view would be partially obstructed by vertical window frames, mirroring the ones behind Chihiro. By taking perspective into such careful consideration, Miyazaki creates worlds that the audience feels as physical spaces. This counteracts the difficulties of the medium and gives him the tools to affect the audience as is possible in live action film. ever.
The placement of the simulated camera is an important facet of the quasi-realist method of Studio Ghibli animation, but in scenes of animated train travel this effect is enhanced by the ‘animetic’ (Lamarre 6) depiction of movement favoured by Studio Ghibli. Thomas Lamarre suggests that animated film can simulate movement in two ways. The first is movement into the landscape which he calls ‘cinematism’ (5). The second, animetism, is movement past the landscape, creating a ‘sliding sensation of speed’ (42). Animetism is a natural side effect of the animation stand as a piece of apparatus. When stacking the cel layers in the stand, one creates an ‘animetic interval’ (7) or gap between the different layers which is noticeable to the audience. The effects of the animetic interval can be negated by binding the layers closer together, what is known as closed compositing, or they can be allowed to remain, through open compositing. If the composition is left open, the sensation of multiple layers is more apparent and it creates a dioramic effect that Lamarre calls the ‘multiplanar image’ (33). As Studio Ghibli’s ‘animations are a marvel of open compositing’ (38) they are actively choosing the animetic form of movement. This effect relates directly to the quasi-realistic depiction of train travel because, as Lamarre notes, one can easily equate animetic movement and the view from a real world train window. When one travels by train, the landscape seems to separate into multiple layers which are perceived at different speeds, the foreground blurring and the horizon moving more slowly. Likewise, a ‘characteristic of animetism is the separation of the image into multiple planes’ (6). By placing the multiplanar effects of the film into the context of transport, as Ghibli does in the train scene in Spirited Away, the studio is leaning into the already present sensation of animetism, creating a more realistic sensation of train travel.

A comparison between the Spirited Away train scene and Wolfgang Schivelbusch’s description of being a train passenger further elucidates the quasi-realism of the film’s visuals. Schivelbusch writes
that, for a train passenger, ‘visual perception is diminished by velocity’ (59). As the foreground blurs with speed, the passenger is forced to ‘ignore the objects and portions of the landscape that are closer to him, and […] direct his gaze to the more distant objects that seem to pass by more slowly’ (59). The train scene cuts between the inside of the train carriage (see Fig. 1) and the moving landscape, designating the landscape shot as the view from the train. In one shot, a partially-submerged path with two figures at the end swings past the simulated camera (See Fig. 2). The train moves too quickly for the figures to be regarded in any detail and, moreover, a consideration of the individual frames shows that they are painted without facial features. Their lack of physiognomy actualises the ‘difficulty [in] recognising any but the broadest outlines of the traversed landscape’ (59), a sensation that, for Schivelbusch, epitomises train travel. So, like Schivelbusch’s passenger, the Studio Ghibli viewer must direct their gaze to ‘the more distant objects that seem to pass by more slowly’ (59), in this case a small town on the horizon. The experience of train travel and the experience of watching this scene become practically indistinguishable.

Schivelbusch writes that the experience of one’s visual perception being diminished by velocity results in their cognitive emancipation from the landscape, a state of mind he calls ‘panoramic’ (40) perception. He argues that the velocity and viewing positions of train travel are so peculiar that the passenger’s perception of the world starts to transform, they experience ‘the dissolution of reality and its resurrection as panorama’ (66). Once this viewing position is established within the passenger, Schivelbusch suggests that they start to feel disconnected from the landscape. At high velocity, the foreground becomes indistinct but never invisible. In the panoramic state, it starts to be perceived as a barrier between the visible background and the moving spectator. This results in a feeling of detachment which eventually becomes an experience of ‘total emancipation from the traversed landscape’ (66). As the animetic, quasi-realistic train journey of Spirited Away induces the same panoramic state, the viewer feels a similar sense of detachment and emancipation from the filmic landscape. Again, the aesthetics of the scene contribute to this effect. One landscape shot shows a house on an island (see Fig. 3). In the flooded landscape the house stands alone with no visible boats or bridges. There appear to be paths on the island, but they end in the sea. The presence of the washing line suggests life, but it is a life wholly separate from Chihiro and the spectator as they move past on the train.
For Schivelbusch’s passenger, this ‘emancipation from the traversed landscape’ (Schivelbusch 66) results in a cognitive gap that needs to be compensated. Lamarre, summarising Schivelbusch, writes that as the train passenger gains ‘a sense of separation from [the landscape]’ (Lamarre xv) one can observe attempts ‘to fill in, or compensate for, the perceptual rupture that rose between the modern traveller and the world’ (xvi). Schivelbusch explicitly connects the discomfort of this perceptual rupture and the desire to develop an activity within the space of the train carriage that ‘will engage one’s attention’ (Schivelbusch, 66). This then leads him to conclude that ‘reading while travelling becomes almost obligatory’ (66). In lieu of a book, Spirited Away offers its audience a character to engage their attention: Chihiro. In the final shot of the scene, Chihiro is shown looking out of the window (see Fig. 4). The simulated camera tracks in on her face, turning mid-shot into a close up. Once the panoramic perception has been achieved, with the perceptual rupture causing a heightened sense of focus, the viewer is presented with the protagonist of the film. Viewing Chihiro becomes the ‘new [mode] of consumption’ (Lamarre xv) and the viewer starts to consider her more deeply. However, this only accounts for the audience’s attention, not the empathy and depth of interiority associated with Ghibli’s Ma scenes. Once this perceptual shift causes an increased focus on Chihiro, a new effect takes over, the effect of ‘amplification through simplification’ (McCloud 30) theorised by Scott McCloud.
In *Understanding Comics*, McCloud suggests that the lack of detail in cartoon faces encourages the viewer to assign the image a subjective identity rather than merely seeing it as the face of another. He argues that, upon observing a photograph or hyper-realistic drawing of a face, one cannot help but ‘see it as the face of another’ (36). However, in a simplified cartoon style, faces become vacuums ‘into which our identity and awareness are pulled’ (36). He suggests that this subjective projection of the viewer’s own identity onto the cartoon is a natural by-product of directing the viewer’s gaze onto an abstracted face; ‘we don’t just observe the cartoon, we become it!’ (36). In McCloud’s theory, the more simplified a face is the more amplified a viewer’s personal response will be. In *Spirited Away*, Chihiro is often shown to be highly expressive (see Fig. 5) but in the train scene her facial features have been simplified, causing her to resemble McCloud’s example of a blank cartoon face (See Fig. 6). Consequently, as with McCloud’s cartoon, viewers start to assign Chihiro their own identity, ‘filling up’ (37) the iconographic form. However, in the instance of animated film, rather than a cartoon face presented without context, the character is not wholly
perceived as an extension of the viewer. The panoramic perceptual shift causes a focus on Chihiro’s whole form, not just her blank expression, but also her specific clothing and shoes. This character’s specificity reminds viewers of the film thus far, causing them to construct an identity that is partially based on the narrative and partially based on themselves. The intricacy of the landscape compliments the simplicity of Chihiro’s face as the audience is given ‘one set of lines to see. Another set of lines to be’ (43). ‘Icons demand [one’s] participation to make them work’ (59) and the heightened focus of panoramic perception means that the viewer is concentrating fully on that participation. When presented with her impassive face, the viewer fills Chihiro with not just their own identity, but a metaphysical life informed by both the viewer’s own experience and the context of the film. The human desire to assign ‘identities and emotions where none exist’ (33) encourages the viewer to project part of their identity, an act made possible through their focused contemplative state, onto Chihiro, thereby giving her a cognitive depth with which they can empathize.

[Fig. 6]

This effect is not unique to a single scene in Spirited Away. In Whisper of the Heart and The Wind Rises, there are train scenes that function in the exact same way. The early shots of the scenes emphasise the animetism of the movement and the quasi-realism of the simulated train travel (see Fig. 7).

[Fig. 7]

Then the scenes start to concentrate on the blank expressions of the characters (see Fig. 8).
The films modulate perception to its panoramic form, directing this heightened focus at a simplified face, and the viewer’s contemplative state gives the character a sense of depth.

Studio Ghibli films also achieve this effect through fantastical vehicles that function in the same way as the trains. For example, the cat bus in *My Neighbour Totoro* looks nothing like a train and does not move on rails, but the scene where the protagonist, Satsuki, first boards it (see Fig. 9) functions comparably to the previously mentioned examples. First, the simulated camera is positioned within the vehicle, locating the spectator within the same space as Satsuki. The viewer is then shown shots of Satsuki’s face framed by a background that suggests animetic movement, with the clouds moving laterally. The interplay of the animetic background and the iconographic cartoon character shifts the onlooker into a contemplative state, giving the scene its sense of wonder and poignancy. Nevertheless, there are some slight deviations from the contemplative train formula. The viewing position of the spectator is sometimes repositioned outside the vehicle to emphasise the fantastical nature of the cat bus. However, the primary emphasis is still on lateral, animetic movement as Satsuki sits parallel to the sliding landscape, and therefore the scene still primarily mimics realistic train travel experiences, which allows for the panoramic perceptual shift. Another deviation is Satsuki’s joyful facial expression, further from McCloud’s example of a cartoon face than Chihiro’s blank expression. Still, the simple art style of *My Neighbour Totoro* is a long way from photorealism, and this minimalism ensures that Satsuki’s smiling face is abstracted enough that viewers will still find themselves imbuing it with their own sense of identity.
of the contemplative power of animated trains. At first it appears the train scenes will function identically to the one in *Spirited Away*. Each scene starts with animetic landscape shots from a simulated camera inside the train carriage and then cut to the blank expression of the protagonist, Taeko. However, the sequence is taken a step further when Taeko is joined on the train by her younger self. This is a strong manifestation of her memories, showing the audience what has been occupying her thoughts during the journey [see Fig. 10]. Up until the point that her younger self arrives, the scenes in *Only Yesterday* perform the same perceptual modulation that the previously described scenes do. This means that, instead of undermining the work of the train scene, the demonstration of Taeko’s interiority after the viewer has been induced into the contemplative state means that the scene is supplying more information to aid in the viewer’s projection of a strong identity onto the character. The fact that Studio Ghibli chose trains to be the site of this metaphysical work, where past meets present, suggests the studio’s awareness of the value of trains in constructing characters’ contemplative cognisance.

![Fig. 10](image)

By inducing a conceptive state in the onlooker through the moving perspective of transportation, the films of Studio Ghibli are able to perceptually modulate their audience. This allows the studio to position their audience more carefully, giving them the freedom to create subtle, sentimental films. Miyazaki’s insistence on traditional forms of hand drawn animation has always been framed as a product of his age, but the implications of this study suggest that his style is essential in the construction of sympathetic and complex characters. A sign posted on the wall of the studio during the creation of *Spirited Away* reminded his team to ‘do everything by hand, even when using the computer’ (Solomon). On the rare moments he was forced to use CGI, for example when creating the titular castle in *Howl’s Moving Castle* he flattened the image and reduced its movements to blend it in with the rest of the hand drawn film. This emphasis on reduced, flattened, and simplified images directly relates to the various processes by which the studio induces the viewer’s contemplative state and heightened empathy. If vehicles could move in every direction, within a computer generated 3D space, the sliding sensation of animetism, and by extension the viewer’s panoramic perception, would be lost. If animators didn’t need to redraw characters thousands of times they could be drawn with more detail, and this would shift characters away from McCloud’s simplified cartoon face to a level of detail that undermines subjective, personal engagement. Miyazaki’s traditional techniques, which could be seen as limitations, are uniquely able to modify the viewer’s gaze, and achieve affecting, emotional engagement through the simple choice of having a character board a train.
Works Cited


Author Biography

Kate is a first year American Literature MSc student at The University of Edinburgh. Previously she graduated from the English and Related Literature BA at The University of York.