

■ The Smooth and Striated Spaces of Hiroshige

Mark Donoghue
University of the Arts London

Abstract

The following paper examines the pictorial space in the work of the Japanese print artist Utagawa Hiroshige (1797-1858) with regard to the concepts of territory, and striated and smooth space in Deleuze and Guattari's *A Thousand Plateaus*. Hiroshige is one of Japan's best known artists, and I believe his enduring appeal lies in part with his dynamic and exciting compositions. It is the depiction space in Hiroshige's compositions, in particular images from the "One Hundred Views of Edo" series, that is examined here. The notion of pictorial space as a territory generated out of a particular artistic milieu is suggested as a means of examining Hiroshige's work. These compositions are indebted to various techniques for depicting space rooted in different milieus of art practice. These techniques are broadly categorized as the "floating field," "axonometric projection" and "linear perspective." Each technique is a striation or ordering of space according to a unifying principle. Hiroshige is able to combine these techniques, but when used in combination they are irreconcilable and do not create a holistic pictorial space. I contend that this fractures the striation of space in the image and reveals the smooth surface space that underpins the image's construction. The tension this creates in the image ensures our engagement with the work as we are constantly drawn into a tangible pictorial space only for it to shatter and reform again. I am suggesting it is this form of anamorphism that lies at the heart of Hiroshige's compositional dynamism and contributes to his enduring appeal.

Keywords: territory, striated, smooth, space, Japan, art

Mark Donoghue is Ph.D. candidate at the University of the Arts London. The main focus of his research is comparing the landscape prints of Hokusai and Hiroshige, to those of their contemporary J.M.W. Turner through Deleuze's work. In particular, he examines the similarities in pictorial space regarding a tension between two and three-dimensional space. How these works share this despite the differences in historical context and what sort of sensation this tension engenders is the crux of his research. He was initially trained in 3D computer graphics, and this interest in constructing virtual spaces has carried over into his current research. E-mail: m.donoghue@gmail.com.

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Introduction

The artist Utagawa Hiroshige (1797-1858) is one of the best known Japanese ukiyo-e (floating world) artists. This reputation relies almost exclusively on his landscape print series. A fascinating aspect of some of these images is how they merge different modes of depicting pictorial space. Hiroshige utilizes techniques of spatial representation that either derive from various forms of Japanese academic painting, which ultimately has its roots in forms of Chinese painting, or from linear perspective imported through trade with the Netherlands. By doing so, Hiroshige is able to make compositions that generate a dynamism through pictorial tension. I believe Deleuze and Guattari's work in *A Thousand Plateaus*, particularly the concepts of smooth and striated space, and the concept of territory can aid in understanding Hiroshige's compositions.

Hiroshige's time witnessed the burgeoning of recreational travel. Most of this took place along the Gokaidō, the five official highways administered by the Shogunate. Pre-eminent amongst these was the Tōkaidō or Eastern Sea Road running between Edo (now Tokyo) and Kyoto. Featured in many guides, novels and prints, the Tōkaidō's iconic status was immortalized in Hiroshige's best known print series "The Fifty-three Stations of the Tōkaidō." The road network was developed and administered to ensure the Shogunate's power could be projected into the provincial domains. The fabric of these domains was determined over two hundred years before Hiroshige's time following the Tokugawa clan's victory at the battle of Sekigahara in 1600 ensuring their dominance over the whole realm. Japan was a patchwork of domains split between lands administered by the Tokugawa or their retainers, lands administered by feudal lords allied to the Tokugawa (*fudai*), or domains controlled by lords forced to accept the Tokugawa's supremacy but too powerful for the Tokugawa to dislodge (*tozama*) (Jansen 37-38). The road network facilitated the Tokugawa's control by allowing the dispatch of troops, the movement of administrators and aided efficient communication.

The road network also played a vital role in the *sankin-kōtai* system of alternate attendance. To ensure against rebellion fermenting in domains, the Tokugawa forced feudal lords to spend alternate years in Edo. In addition, feudal lords' families were required to be in permanent residence in Edo where they could be used as potential hostages. Maintaining residences in Edo, and funding travel with an accompanying retinue between Edo and the domains diverted funds that could be used for insurrection. A similar power structure can be observed in the individuals domains which were administered from a central castle town with a lord's retainers in residence there. This fuelled urban

growth to provide services for the main metropolises of Edo, Kyoto and Osaka, and the regional castle towns. By the nineteenth century, Japan had three of the world's twenty cities with populations over 300,000, and Edo had grown to be the most populous city in the world with over one million inhabitants (Jansen 245-46).

This urban growth created a merchant and artisan class of people to provide services and goods to the flourishing urban centres. This also had an effect on literacy rates as more people had access to education and the means to afford it. This in turn led to more demand for books and printing flourished. Woodblock prints of the sort Hiroshige is known for are a product of this print and publishing industry and were dependent on consumers with disposable income to purchase them.

Such disposable income could also be spent on recreational travel. The Gokaidō were appropriated for more non-official travel, often under the guise of pilgrimages is although the authorities strictly controlled travel and discouraged frivolous journeys, travel for ostensibly religious purposes was hard to object to. This travel often took the form of *meisho* (lit. famous place) or appreciating a place for its scenic beauty, historical associations or poetic value, and Although strictly it did not necessarily mean visiting an actual place, with the growth of recreational travel, *meisho* became increasingly associated with actual travel destinations, and this was reinforced through the publication of guides, gazettes, maps and of course woodblock prints (Traganou 68-75).

Hiroshige's reputation is almost exclusively due to his landscape prints or *meisho-e* (lit. pictures of famous places), particularly "The Fifty-three Stations," but it is prints from his "One-Hundred Views of Edo" we shall examine here. In this series Hiroshige illustrates the sights and scenes of the bustling metropolis. Undertaken late in his life, before the project was fully realized, Hiroshige would die and a few of the images would be left for his successor to complete. However, this series includes some of his most daring compositions and they rank amongst some of the most engaging and exciting he ever created. I believe the success of some of his compositions lies in his ability to synthesize several different techniques for illustrating pictorial space.

Pictorial Space as Territory

Before turning to Hiroshige's compositions, I shall introduce the notion of territory from *A Thousand Plateaus* as an analogy for the creation of pictorial space (Deleuze and Guattari 311-50). The notion of territory is connected with

animal behaviour and why animals operate in a particular locale. Take for example a wolf pack and how they determine their territory. The pack does not have a solid boundary separating their domain from another pack's, but they do form a malleable locale of activity. This locale is formed by repeated behaviour over the control of resources. Activity will naturally coalesce around access to resources, such as good sources of food and shelter. Thus behaviour tends to a particular milieu, and when it is accompanied by a function expressing this, a territory is formed. A wolf pack can scent mark its territory or howl to demonstrate their presence, for example. In a sense this expressive function creates territory through a framing of the chaotic world in which milieus coalesce (Grosz 17).

This expressive function is perhaps most evident in animals sexual reproductive behaviour. Colourful markings, elaborate calls, and decorating a nest are the creation of intensities of sensation with the aim of reproducing. Energies that could otherwise be spent on survival get channelled into an excess of sensation with the hope that it will result in increased reproductive success. Deleuze and Guattari make a direct connection between this territorial expression and art stating, "Can this becoming, this emergence, be called Art? That would make the territory a result of art. The artist: the first person to set out a boundary stone, or to make a mark. . . . Property is fundamentally artistic because art is fundamentally *poster, placard*. As Lorenz says, coral fish are posters" (316, italics original). Art is the ordering of material to generate sensations that make a mark, form a frame of the chaotic work, mark a territory.

Perhaps it is possible to consider artistic styles and techniques as expressions of territory as they order matter to engender sensation. Styles are formed from repeated behaviour attempting to manipulate matter to produce particular kinds of sensations. The material conditions of different mediums have inherent tendencies, and in a sense, the artist's role is to navigate this space of tendencies. For example, painting with brushes and ink tends to have certain expressive effect by virtue of an assemblage of brush, ink, paper and artist that ensures certain forms are more likely than others. Of course these material conditions are augmented by wider historical and social processes, but it should be possible to comprehend how a milieu of artistic practices can develop, shaping a formal stylistic consistency. If, as Deleuze and Guattari claim, territory is a result of art, then perhaps when considering pictorial space we can regard this as a kind of territory formed through the creation of sensation. The delineation of a milieu through the creation of a territory creates an interior and exterior space, and in the same fashion, the creation of an image generates a pictorial interior space distinct from the exterior surface. In this way, artistic tendencies can be-

come an institutionalized style supported by schools, and to belong to a school means applying these styles, with their accompanying territorial form of pictorial space, by conforming to institutional rules.

However, one should be wary of reducing art to purely the application of stylistic codes on materials as repeatedly applying these rules will eventually lead to unoriginal academism. There is a danger that an artistic style can become over-determined, becoming stale or relying solely on conventions. Art is capable not only of creating territory but of destroying territories too. It is this destruction of territory that ensures artistic innovation. This territorialization and accompanying deterritorialization is the process through which art evolves in the search for new compositions of material, seeking new intensities of sensation (Grosz 13). The artist is free to become the lone-wolf, the nomad, to leave the pack and to seek a new territory.

Each of the techniques for representing space in Hiroshige's work form a territory deriving from different artistic milieus that are the product of a particular artistic evolution. These territories were formalised in the form of artistic academies, but one could argue that woodcut artists, including Hiroshige, were well placed to navigate new trajectories into new territories. Although they developed in the shadow of official academies (many were trained in such institutions), woodcut artists did form schools of their own. Because they were not dependent on official patronage, they were more free to incorporate new stylistic innovations to feed demand from print consumers with an interest in novelty. This search for new modes of expression while still being sustained by previous artistic development can be observed in Hiroshige's compositions. His dynamic combinations of spatial techniques combine traditional modes of depicting space from Japanese painting, with the newer mode of spatial depiction, linear perspective, imported from the West.

The Smooth and the Striated

In *A Thousand Plateaus* Deleuze and Guattari describe two kinds of space, smooth and striated (474-500). The most concise way to explain the distinction between the two is to explain the different geometric methodologies that the two are indebted to, namely Descartes and Fermat's Cartesian geometry and Gauss and Riemann's differential geometry. René Descartes and Pierre de Fermat developed the technique of embedding a curve or surface in a space one dimension higher than the shape in question. For example, a one-dimensional curve would be embedded in a space defined by two axes, a two dimensional

surface would be embedded in a space defined by three axes, and so forth. Numerical values can be assigned to the axis and every point on the curve or surface can be assigned coordinates according to the values assigned to the axis. The relationship between these points could then be expressed algebraically. Descartes and Fermat's method essentially involves encapsulating a curve or surface into a global space that can be used to assign values to any point on the curve or surface. By contrast, Friedrich Gauss and Bernard Riemann's differential geometry utilizes differential calculus to analyse a curve or surface. Differential calculus deals with calculating instantaneous rates of change so the gradient (rate of change) of any point on a curve or surface can be calculated and compared with any other point. By repeatedly comparing points, the topology can be studied. The advantage of Gauss and Riemann's method is, unlike Cartesian geometry where points on a curve or surface are assigned values according to the space it is embedded in, differential geometry allows us to analyse a curve or surface without the need for an encapsulating global space (DeLanda 11-12). Deleuze and Guattari develop this stating, "Riemann space at its most general thus presents itself as an amorphous collection of pieces that are juxtaposed but not attached to each other" (485). In this context Cartesian geometry is a form of striated space where space is structured using a higher dimensional or higher order framework to unite the curves or surfaces in question. Gauss and Riemann's differential geometry, on the other hand, is a form of smooth space where curves or surfaces are not united within a higher dimensional framework but can be analysed by comparing rates of change.

It should be pointed out that the smooth and the striated are not mutually exclusive categories; they always have the potential to undergo a transformation from one into the other. This is evident in an alternative example of this striated and smooth distinction, and perhaps the most relevant for our purposes is what Deleuze and Guattari describe as "The Aesthetic Model," which deals with how visual perception builds a striated space out of smooth intensive colour sensations (492). Here they describe smooth and striated space in terms of haptic, or tactile, viewing versus optical viewing. Haptic viewing takes place at a close range where the eye acts as an organ of touch and distinctions between subject and object are lost. Deleuze and Guattari describe how objects are not recognizable in haptic viewing and how, "Cezanne spoke of the need to no longer see the wheat field, to be too close to it, to lose oneself without landmarks in smooth space" (493). Optical viewing, by contrast, takes place at a distance where distinctions are drawn between subject and object, a field of wheat can be discerned out of the colours that form a scene. An alternative conception to this could be O'Regan and Noë's distinction between awareness

and perception (943-44). O'Regan and Noë use the analogy of putting your hand into an opaque bag and feeling an object inside. We are aware of an object through touch as we examine its texture and shape through differences in surface qualities. Once we have sufficient information we can unify these differences and perceive an object. Likewise with vision, we can be aware of an object's differential surface qualities through a haptic smooth viewing, but these can be unified to perceive a distinct object through optical striated viewing.

In vision we see things through differences in surface colour. The common misconception that colour is a purely subjective quality is open to debate. Hyman describes a "qualified objectivism" in which colour is logically independent but not epistemologically independent of our perceptions (56). In other words, we see by seeing colours, but we cannot separate our knowledge of colour from our own perception. Colour is not merely a product of our perception but the fundamental constituent of our perception (Hyman 45-56). Colour forms the sense data from which we "make sense" of the world, and this data is in the form of differences in colour value. Like Deleuze and Guattari previous comments on Riemann's smooth space, this is an "amorphous collection of pieces that are juxtaposed"; our vision consists of differences between colour values in the smooth space of awareness (485). However we transform these differential relationships into a striated higher order system of objects nested in space by comparing these values to our knowledge, produced from experience, to perceive objects in the world. For example, we could be aware of an intensity of red differentiated from the surrounding intensities of colour to form a discrete red area. This area of colour intensity may correspond to our experience of what colour an apple is like, so we may conclude we are looking at an apple.

Related to colour is occlusion shape, or the outline of an object. Like colour, these are often regarded as subjective appearances, but they are in fact real objects (Hyman 325). They are objective in the sense that they can be calculated given an object's form and observer's point-of-view. However, in our everyday experience, we perceive occlusion shapes through our awareness of colour intensities. As we navigate our environment, we are flooded by changing colour intensities. Through this sensori-motor scheme, we extract what Gibson refers to as invariants (but what in Deleuzian terms we could consider singularities) (Gibson 73-76). We can embed these in a higher order, striate them, and compare them to known occlusion shapes to construct space. So although we can calculate an object's occlusion shape based in its position and a viewers position, this assumes the existence of a global striated space; conversely this striated space can be generated from our intensive smooth space of colour differences, in combination with our sensory-motor scheme and knowledge. For example, suppose

the apple from our previous example is on a table, and as we walk around it the intensive colour area changes shape. From this amorphous variable shape, we striate it to form the environment to perceive a space inhabited with an apple.

In one sense, the role of art is to manipulate material to create certain sensations that mimic our sensations in the world. As we extract invariants from sensations in the real world to generate a perceptual space populated with objects, likewise we extract invariants from the intensive surface colour to generate a striated pictorial space (Gibson 267-91). However, one should be wary of reducing art to a purely mimetic function as, given what was just outlined, it could suggest the role of art is merely the creation of artworks that resemble the sensations of our everyday experience.

When Cézanne no longer saw the wheat field, he was moving in the opposite direction towards the smooth space of sensation or awareness, rather than the striated space of a higher level perceptual judgement. Deleuze and Guattari on Paul Klee state, “It is now a question of elaborating a material charged with harnessing forces of a different order: the visual material must capture non visible forces. Render visible, Klee said; not render or reproduce the visible” (342). This rendering visible is the exposing of the smooth space of colour that underpins our vision and the creation of art. Representational visual art does have a mimetic or illustrative function, but this is paired with the ability to reveal the smooth space of intensities from which our perceptions are constructed. Whereas in everyday experience we may not reflect on our perception, visual art can accentuate or “render visible” sensation that underpins our perception. I believe it is this double movement between the striated pictorial space that resembles objects of experience and the smooth intensive surface of the image that stimulates our engagement with a work of art. As fluctuation between striated space and smooth surface is enhanced, this renders visible the process of our own vision and how we build perception from awareness of sensation. There are parallels here between the transformations of striated and smooth space of the work of art, and the territorialization and deterritorialization of developing art practice mentioned previously. Hiroshige’s navigation of the territories of Edo-period (1603-1867) art practices allows for this transformation back and forth between the striated and smooth that renders visible these forces behind perception.

Origins of Ukiyo-e Space

Some of Hiroshige’s compositions combine several different types of spatial projections but because these techniques are antithetical, when used in combi-

nation with one another, they prevent the formation of a homogeneous pictorial space. Each of these projections by themselves regulates the arrangement of the medium to produce an interior striated space beyond the surface of the image into which objects can be composed. In the same way that a curve or surface is embedded in a higher order space in Cartesian geometry, a projection system creates a pictorial space into which objects can be embedded. However, because these projections form a global ordering system, an image should be wholly constructed according to this global striating system to generate a consistent space. By combining several projections in a single image, Hiroshige is able to undermine the formation of a homogeneous global space. In the same way that Deleuze and Guattari describe Gauss and Riemann's smooth space as, "an amorphous collection of pieces that are juxtaposed but not attached to each other," Hiroshige's smooth compositions are composed of juxtaposed spaces that shatter the formation of a single homogeneous interior to the image (485). Hiroshige's images by embodying this tension between different spaces generates a pictorial dynamism that ensures our engagement with the image.

Before dealing with these smooth space prints specifically, it is necessary to consider each technique for depicting space separately. Broadly *ukiyo-e's* spatial aesthetic is a combination of the spatial principles derived from the two main orthodox artistic academies of the period, the Kanō and Tosa schools, and Western linear perspective. Bell describes the primary spatial technique in the Kanō school as the "floating field" (150). The Kanō school had an artistic lineage back through to the Chinese painting techniques of the Song and Yuan dynasties that were imported with the cultural interchange following the introduction of Zen Buddhism to Japan after the twelfth century. Of particular importance here are ink-wash landscapes (*suibokuga*). The application of ink washes naturally leads to a very flat style, although there is still a definite sense of depth in the picture. Generally, the point-of-view is located in a high position so the picture plane suggests a receding ground plane, thus picture primitives placed higher in the picture plane will be further back in the scene space. Given the nature of ink-washes, picture primitives are constructed in stacked planes and planar occlusion together where the planes location in the image acts as a cue for depth. The nature of ink-washes can also be ideal for atmospheric perspective affects with distant objects less distinct. These features work in favour of conveying depth, despite the planar nature of ink washes. However, overall the nature of the representational space is quite insubstantial, although there is a definite ordered interior here.

Let's take this opportunity to look at how Hiroshige uses a similar spatial arrangement in his practice. We should keep in mind Hiroshige's "One Hundred

Views” images are woodblock prints not ink paintings, so as colours are applied in blocks to build up the image, it cannot replicate the varied tonal effects of ink-wash painting. However, a pictorial space constructed out of stacked receding planes is an arrangement that can be transferred to woodblock prints quite effectively. For example, “Benten Shrine at the Inokashira Pond” (Illustration 1) clearly shows this form of spatial arrangement with landscape features, such as mountains, illustrated high up on the picture plane, denoting they are furthest back in the scene space. While there is scaling between the different planar elements, it is not consistent, hence the impression of depth coupled with the sense that the picture elements are floating on the surface of the paper. This flatness can be observed particularly in the shrine at the bottom of the image as it has been illustrated completely in orthographic projection, that is, only one side of the structure is projected onto the picture plane in parallel projection. This parallel projection means there is no depth distortion and creates a flat image. Orthographic projection offers an idealistic view as it generates a true object-centric shape without distortion relative to the point-of-view, but it is an abstraction as solely seeing a single side of an object is extremely rare in everyday experience. This leads to an unreal quality in such images. There is also a conflict between the shrine and the ground on which it is placed. Only one face of the shrine is illustrated, but the island it is built on, is illustrated obliquely with two faces, adding to the impression of the shrine floating on the surface of the image. So, in short, this particular mode of pictorial space, the “floating field,” forms a striated territory (the interior space of the image) out of this particular artistic milieu.

The other main institutional art academy of the period was the Tosa school and had a lineage going back through Japanese court painting (*yamato-e*). Tosa, despite often being characterised as the “native style” in opposition to the “Chinese style” Kanō, ultimately has its roots in Tang dynasty painting. This is evident in, what Bell considers, the most quintessential feature of Tosa’s spatial characteristic, axonometric projection (150). Axonometric (lit. measurement along axes) projection is a method of projective geometry where objects are projected using parallel projection onto the image plane. This can include isometric projection, where the object is rotated to the image plane, or oblique projection, where the image plane is at an oblique angle to the object. As far as the observer is concerned, both of these produce similar results where objects are illustrated with more than two, usually three, faces. This technique was developed in both China and the West; however, in China it remained the primary technique for illustrating three dimensions until the modern period (Scolari 1). Axonometric projection was ideal given the nature of Chinese painting, executed on the floor

onto large scrolls or panels, where the eye is free to wander over the surface of the image. Axis may be foreshortened, but the key point is this foreshortening is constant. In this sense, it does not respect the position of the viewer, and the artist is free to place objects anywhere on the surface of the image as there is no depth distortion, that is, objects do not reduce in scale according to distance.

The three distinct dimensions give the axonometric projection a far more substantial spatial aesthetic than the “floating field” technique but this is countered by the lack of depth distortion, which inhibits the naturalism of the scene. The lack of distortion is achieved by the projection rays being in parallel. A similar effect is produced by viewing a distant scene through a narrow angle zoom lens. Rays of light from distant objects tend toward becoming parallel (although in real life they are never completely parallel). Hence axonometric-like views are rare in real life, which contributes to the ephemeral quality of this technique. Overall, although axonometric projection does have a more defined spatial aesthetic over the “floating field” due to having three distinct dimensions, this tends to impose a grid-like structure on the pictorial space which tends to counteract the impression of three dimensional depth (Willats 225).

An example of axonometric projection can be observed in Hiroshige’s “Hall of Thirty-Three Bays” (Illustration 2). The composition is dominated by the long hall of the lumber yard at Fukagawa. As can clearly be seen, although the hall is depicted in three dimensions, there is no convergence, no distortion due to depth. The building is uniformly the same scale leading to a relatively flat impression. Technically, axonometric projection should not include a horizon but Hiroshige here has used a colour gradient on the surface of the water to suggest a horizon. Accordingly, axonometric projection forms an alternative striated territory from different artistic milieu.

The third technique for spatial representation that should be considered is linear perspective. Although there is some evidence that in China there were some developments towards linear perspective (Tyler and Chen 371-91), the introduction of linear perspective to Japan was primarily through associations with Western art. Despite Japan being under a government policy that limited interaction with the outside world, there had been plenty of opportunity for exposure to Western images since the shogun Yoshimune relaxed controls on foreign books in the mid-eighteenth century (Jansen 238). Often this took the form of copperplate landscape prints or *Vue d’Optiques* designed to be used in conjunction with an optical device, a Zogrscope, to enhance depth perception (Screch 94-100). Not only images in linear perspective but an increasing amount of optical technology in the form of items such as, telescopes, microscopes and spectacles were making their way into Japan. Linear perspective as

an artistic technique and optics as a science both work on the principle of converging rays, either projection rays converging on a vanishing point or light rays converging through the pupil of the eye onto the retina. The influence of linear perspective and optical devices led to what Screech describes as a “new regime of viewing,” more concerned with fidelity and naturalism and a departure from more abstract images of traditional painting (94).

The key point of difference between linear perspective and the other spatial systems discussed previously is that the projection rays are convergent. As opposed to the parallel projection systems where receding lines are parallel, in linear perspective receding lines (orthogonals) converge on a vanishing point. While theorists, such as Panofsky, are correct to point out the culturally relative nature of the development of perspective, this does not entail that the realism of linear perspective images is culturally relative. Linear perspective being based on converging projection rays means it more accurately depicts an object's shape as we observe it in everyday experience (Hyman 73-112). Gibson describes parallel projection schemes, like the “floating field” and axonometric projection, as containing invariant information only about the objects in the scene, whereas linear perspective includes invariant information about the viewing position as well (Gibson 283-91). Parallel projections are a sort of abstracted viewing of an object from a non-place, but linear perspective has the viewing position encoded into the image.

Linear perspective produced more naturalistic images due to the technique more accurately simulating the vision of our everyday experience. This does not mean images constructed in linear perspective are necessarily accurate depictions, but they do deliver a visual grammar that denotes fidelity. This commitment to naturalism is evident in Hiroshige when he accused his contemporary Hokusai of engaging in excessive compositional contrivances while he produced “true records of the landscape” (Bell 164). The founder of the Utagawa school, Toyoharu (1735–1814), was an innovative pioneer of linear perspective, and no doubt Hiroshige was influenced by this legacy; but Hiroshige was also associated with the Maruyama-Shijō school of painting, which aimed to synthesize western-influenced naturalism and traditional Asian painting technique (Clark 143-61).

Hiroshige's command of linear perspective can be observed in “Night View of Saruwaka Street” (Illustration 3). Here there is a strong depth effect with orthogonals converging to a single point but this is tempered by the lack of tonal shading due to the print's application of colour in blocks. Hiroshige has even placed the cartouches with the title and artist's name in accordance with perspective, so they appear, at a glance, as if they are street signs existing in the picture space, rather than sitting on the image's surface. The sense of recession is

also complimented by the inclusion of cast shadows, which are relatively rare in ukiyo-e, but helps generate a consistent interior space to the image with a single light source.

I am arguing these techniques generate different varieties of striated spaces that organize the material to create effects of depth. Hiroshige is capable of applying techniques from different art practices to achieve different scenes of space in his images. However, we must not reduce art merely to the application of techniques. If art can create territory through the making of a mark or the planing of a stone, art can equally well deform a territory. Hiroshige achieves this deterritorialization by composing images that juxtapose the antithetical striating systems mentioned above to arrange pictorial space to revile the intensive smooth surface space.

Tension

The artistic milieus described previously did not form exclusive categories, rather there was considerable interchange between them. This can be observed in Hiroshige's compositions that utilize several of the techniques for creating pictorial space. However, as these striating systems form a global system of reference, using more than one will not produce a rational homogeneous space. Bell states, "If ukiyo-e can be associated with a particular spatial characteristic, it can be located in this tense relationship between three and two-dimensionality" (147). In general, there is a tension between the "floating field" and axonometric projection which tend to produce a flat two-dimensional space and linear perspective that tends to produce a recessional three-dimensional space. This is not only a tension between two and three dimensional space but between parallel projection systems with no fixed viewpoint (the "floating field" and axonometric projection) and converging linear perspective, with a fixed viewpoint. In Gibson's terms, there is contradictory invariant information. Thus combining these systems results in a spatial tension as these systems are irreconcilable; in other words, they cannot be combined to produce a holistic pictorial space (Kalkofen 355-78).

Despite Hiroshige's proclamations regarding his naturalism, he does create extremely contrived compositions. Hiroshige is able to combine irreconcilable spatial systems to create dynamic compositions, and how he integrates these systems is worth consideration. For example, take, "Moon Viewing Point" (Illustration 4). Here Hiroshige has combined several methods of depicting space which, while conveying a sense of depth, temper this with a flatness, and

the combination leads to an intangible quality to the space. In contrast to the previous examples which construct homogeneous pictorial spaces using a single striating spatial system, here Hiroshige combines several systems. In the bottom right of the image, the veranda is illustrated in axonometric projection and consequently the lines do not converge. However, on the upper left of the image we can observe convergence between the lines depicting the edge of the ceiling and roof, and convergence between the railing and floor. There is a contradiction here as it should be impossible to observe the ceiling of the room if the axonometric projection on the right were applied throughout the whole image. Depth is also conveyed by the horizontal lines on the ceiling and floor as these are spaced closer together the deeper they are in the scene. We can observe Hiroshige's virtuoso handling of the transition between axonometric projection and linear perspective in the lines on the floor receding into the space. In order to join these two spaces, these receding lines diverge, in effect warping the space between the two to fuse them together. In addition, the legacy of the "floating field" can also be observed as the image is composed of three layered planes.

Broadly there is the impression of depth in the image but two forms of striated space are integrated. However, they are irreconcilable and the pictorial space thus is ruptured by the contradictory nature of the space which offers a glimpse into the smooth space of the image and the intensive colour differences that are the basic components of the image. We are caught in a flux between seeing an interior space and having this space dissolve before we can fully grasp it, caught in a circuit of striation and smoothing. It is this that gives the image a certain spatial dynamism.

An equally dynamic composition can be seen in the "Asakusa Ricefields and Torinomachi Festival" (Illustration 5). Again we can observe a contradictory nature to the pictorial space. The interior is illustrated in axonometric projection, so the ground-plane should extend across the whole of the picture plain, but a horizon can be seen outside of the window, which is technically inconsistent with axonometric projection. Placing the horizon about halfway up the vertical axis is a consequence of linear perspective's influence. In addition, Hiroshige has illustrated the houses in a different form of axonometric projection. The spatial tension derives here from the discordance between the axis of the interior and the axis of the exterior. In other words, there are two conflicting ground planes giving the impression that the rear left of the interior structure must be impossibly high, and the whole building is tilted. An issue with axonometric projection is that without depth distortion all the parallel and perpendicular lines can make the space confusing, but we can observe how Hiroshige must have been aware of this as he has draped a cloth over the window

ledge to clearly indicate a change in elevation. Overall there is a judicial balancing here between constructing and de-constructing a picture space.

As in the previous image, there is a definite sense of depth in the image, but as we are striating the depth of the image, we find it collapsing back into the space of the smooth intensive surface colour. Possibly the notion of anamorphism can offer some insight as to why this dynamism proves so engaging. Lambert describes anamorphosis as, “(the technique of in-completion, or the distortion of the figure) which calls for the spectator’s direct intervention and participation in the completion of the picture-event” (34). Baroque paintings, in a break from the Renaissance, would often opt to illustrate objects extremely foreshortened so the occlusion shape did not produce an easily understandable object (Dubery and Willats 44). The observer is forced to engage with the image to comprehend it. As anamorphism works to breakdown form, it also works to breakdown our own perception into a state of pre-preceptive awareness. I would contend that is exactly what is happening here. This tension between the irreconcilable techniques for depicting space demands our investment in the image, tempting us with a striated interior space while dismantling or smoothing this space.

Conclusion

The spatial dynamism of Hiroshige’s prints is due to his ability to synthesize several antithetical techniques for composing pictorial space. By forcing together several modes of striated space, this ruptures their unifying order and decomposes the pictorial space of the image to reveal an alternate smooth heterogeneous space. This does not entail a completely flat space; there is a definite sense of depth in the images, but the space of the image is never fully resolved. On viewing these images, we are caught in a constant fluctuation between a striated structured interior space and intensive unstructured smooth surface.

What is fascinating is how the compositional spatial structure of these images reflect a wider social context. The inhabitants of pre-modern Japan (that is before the formation of the modern state following the Meiji Restoration in 1868) would not have conceived of the country as an all encompassing territory (Traganou 210). The administration structure supported this with the country being split into numerous domains governed by various feudal lords with their own hierarchy of retainers, regulations, customs and dialects. Travel between domains was highly regulated. Traganou describes the materials that document this travel as demonstrating, “a space perception that is related to topological or

‘movement-oriented’ space. . . . Movement space is characterized by irregularity, indeterminacy and absence of a single system of reference” (186). So the fragmented smooth space of Hiroshige’s images, the result of an intermingling of different artistic milieus and their associated spatial principles, resonates with the movement-oriented deterritorialized space of actual travel. However, deterritorialization is always accompanied by reterritorialization. Machotka describes the work of Hiroshige’s illustrious contemporary Katsushika Hokusai as striving, “to form a new sense of community that united disparate places, with or without specific cultural associations, into a single geographical entity and unified the people living there [who] . . . felt a new sense of belonging to a common space and culture” (227). I would argue Hiroshige does the same, and his images this becoming. Therefore, the fluctuation between striated and smooth space reflects a process of deterritorialization and reterritorialization in Japan at that time.

Hiroshige would live to witness the end of centuries of state enforced isolation with the arrival of Commodore Perry’s squadron in 1853 and would die the same year as the signing of the “Treat of Amity and Commerce” between Japan and the United States in 1857. Soon after this, the Meiji Restoration would usher in the end of the Tokugawa’s patchwork state of “centralized feudalism,”¹ and the country would be striated around the unifying principles of the modern nation state. Likewise art education was striated and homogenized separating “native” Japanese art traditions from Western traditions.

However we are left with the effect of Hiroshige’s images. The fluctuation between striated and smooth space in Hiroshige’s images highlights the creation of pictorial space from the an intensive coloured surface. In doing so, it unveils the nature of our own perception, as the striated pictorial space fractures to reveal the smooth intensive surface; we are caught in a dynamic flux between the perception of objects and awareness of colour difference that uncovers how we make sense of the world. I believe it is this that assures the vitality of Hiroshige’s compositions and contributes to their enduring appeal.

¹ This phrase was first coined by Edwin O. Reischauer (64).

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Illustration 1: Utagawa Hiroshige, Benten Shrine Inokashira Pond, One Hundred Famous Views of Edo, no. 087, 1856



Illustration 2: Utagawa Hiroshige, Hall of Thirty-Three Bays Fukagawa, One Hundred Famous Views of Edo, no. 069, 1857



Illustration 3: Utagawa Hiroshige, Night View of Saruwaka-machi, One Hundred Views of Edo, no. 90, 1856



Illustration 4: Utagawa Hiroshige, Moon-Viewing Point, One Hundred Famous Views of Edo, no. 082, 1857



Illustration 5: Utagawa Hiroshige, Asakusa Ricefields and Torinomachi Festival, One Hundred Famous Views of Edo, no. 101, 1857/58

安藤廣重繪畫中的平滑空間與條紋空間

摘要

本篇論文以德勒茲與瓜達希在《千重台》中提出之領域、平滑空間以及條紋空間等概念，來檢視日本浮世繪畫家安藤廣重(1797-1858)作品中的繪畫空間。安藤是日本最著名的藝術家之一，其作品生動活潑的構圖是其持續受人喜愛的原因。本文將繪畫空間視為從特定藝術中域萌生的領域，並以此檢視安藤作品構圖中的空間表現，特別是〈江戸名所百景〉中的圖像。安藤的作品構圖使用了多種藝術傳統中描繪空間的技巧，例如「浮地」、「等角投影」以及「直線透視法」等等。每種技巧都是以一種統整原則來切割、調控或組織空間的方法；安藤在畫作中結合了這些技巧，但一起使用時，各種技法並不相調合，所呈現的結果因而並非一統整的繪畫空間。作者認為如此一來，圖像的條紋空間產生了裂面，顯露出做為構圖基礎的平滑空間；由此所產生的圖像張力讓觀畫者仿如被拉進一個可觸摸的繪畫空間，而此空間則因而碎裂開來並再度轉變。作者認為，這種持續質變的過程，正是安藤作品構圖動能的來源，也是其作品魅力持續不墜的原因。

關鍵字：領域，條紋，平滑，空間，日本，藝術