An Analysis of Space Created by Human Presence and Performative Behavior in the Streetscapes of the Picture Scroll of Annual Events

年中行事絵巻に描かれる路上パフォーマンスが創りだす空間の分析

学籍番号　47-086844
氏　　名　波形理世（Namigata, Riyo）
指導教員　大野秀敏 教授

Purpose of the Research

This research developed from an ambition to explore environmental design, not only from the perspective of the physical design of our environment – as in the professions of architecture and urban planning – but from that of the design of our experience of space. Take, for instance, a passenger car in a train. Our experience of the train will be completely different based on whether the train is empty, packed full of businessmen in suits and ties, or lively with children going on a school trip.

The perception of space in relation to how we experience it has been explored in anthropology by people such as Edward T. Hall with his study of proxemics[1] (the physical distance between people and the resulting influence on social and cultural relations) as well as in urban planning, with the proposition of such terms as *kaiwai*, or activity space created through the accumulation of individual actions of people (as described in *Nihon no Toshi Kuukan*[6]).

The term "atmospheric" space was coined and used to describe this environment created by everything other than the physical, built environment around us. The purpose of this study was to find the components that define this "atmospheric" space.

1. Introduction

As a means of studying and identifying the components of "atmospheric" space, the streetscapes of the Picture Scroll of Annual Events[3] were taken as the subject for this study.

Chapter 2 establishes the grounds on which the Picture Scroll of Annual Events was studied, including a description of the scroll as well as the methodology used for the analysis.

Chapter 3 offers an analysis of 12 scenes from the Picture Scroll of Annual Events – or all of the streetscapes found in the scroll – extracting 6 factors that create "atmospheric" space in the picture scroll. It was found that the presence and actions of people, with their use of the senses – visual, auditory, tactile, to name a few – is the important factor that creates "atmospheric" space.

Chapter 4 is a discussion of the factors found in the analysis, based on historical studies of human movement, showing how behavior and movement are both culturally and historically bound, suggesting that the "atmospheric" space defined by human activity within the scroll are interesting for their variety, which cannot be found in streets today, and are instead qualified as "performative" behavior.

Chapter 5 discusses human behavior and movement today, in comparison to that of the past, demonstrating the deprivation of sensory quality from our physical environment today (public spaces, in particular). Chapter 6 presents an argument expressing the need for the use of our senses in establishing a connection to our physical environment. Chapters 5 and 6 will be combined here to conclude that "atmospheric" space found in the Streetscapes of the Picture Scroll of Annual Events is created through human presence and action making use of the human senses – which have, perhaps, devolved over time.

2. Picture Scroll of Annual Events[2]

The subject used to identify the components that create "atmospheric" space was the Picture Scroll of Annual Events. The scroll is from c. 1165, and was commissioned by Emperor Go-Shirakawa, depicting the annual festivities that occurred in the Imperial Court. The original scrolls were burnt, and the replicas used for the study were those found in storage

by the Sumiyoshi-ke, and compiled in the Complete Book Of Japanese Picture Scrolls.[2]
The study chose scenes depicting streetscapes – 12 scenes total – for the analysis, as these scenes relied least on the physical environment for the creation of its street space, in contrast to those depicting the interior of courts (the secondary character of the physical environment in the depiction will be discussed in the analysis to follow). Streetscapes also depict both noble and plebian activity, an essential component, as plebian activity generally create a "gay and free" atmosphere, as opposed to the more formal ones of the nobles.[5]

The 12 streetscapes chosen were as follows*:

*Streetscape #. Scroll #, event depicted.

1. Scroll 1, *Choukingyoukou* (朝覲行幸)
2. Scroll 1, *Choukingyoukou* (朝覲行幸)
3. Scroll 1, *Choukingyoukou* (朝覲行幸)
4. Scroll 7, *Gosaie* (御斎会)
5. Scroll 9, *Gion Goryoue* (祇園御霊会)
6. Scroll 9, *Gion Goryoue* (祇園御霊会)
7. Scroll 10, *Daikyou* (大饗)
8. Scroll 11, *Inari Matsuri* (稲荷祭)
9. Scroll 12, *Inari Matsuri* (稲荷祭)
10. Scroll 13, *Kenbiishi no Kenmon* (検非違使の検問)
11. Scroll 15, *Kanpaku Kamo-moude* (関白賀茂詣)
12. Scroll 16, *Gicchou* (毬杖)

3. Analysis: 6 Components that Create "Atmospheric" Space as Determined from 12 Streetscapes in the Picture Scroll of Annual Events

An analysis of the aforementioned 12 streetscapes resulted in the identification of the following 6 factors as components that create the "atmospheric" space in the streets of the picture scroll:

1. The lack of perspective
2. The secondary characteristic of the scenery/ physical environment
3. The low center of gravity, or the instability and movement found in the figures of the scenes
4. The constant presence of onlookers
5. The decentralized sightlines of people on the street
6. The clustering of people into groups moving along the streetscape

The following is a description of the factors:

3-1: Lack of Perspective

Picture scrolls are noted as a distant antecedent of the animated cartoon, for their depiction of the element of time. In comparison to present times, accustomed as we are to the portrayal of the street in perspective, the environment of the scroll is characteristic for its style of perspective-less depiction – a style that puts less focus on the physical environment, and instead, creates movement through its use of the long horizontal landscape.

3-2: Secondary Characteristic of Backdrop

Deconstructing the streetscape into the components of: (1) physical environment, (2) people depicted fully, and (3) people layered behind others, it is possible to conclude that the "atmospheric" space of the streetscape is composed of the presence and activity of a multitude of people.

(a) Surroundings only

(b) People shown completely

(c) All people

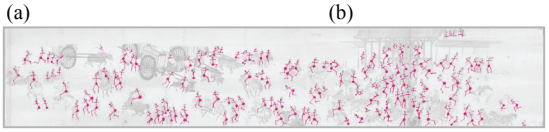
fig. 1 (a-c)
Example decomposition: Streetscape 1[2] (from study)

Further suggesting this secondary characteristic of the physical environment in the creation of the space in the streetscapes is the fact that the built environment depicted is never drawn completely, cut off on the screen or by the use of fog, and with people peering out or sitting in relation to it.

3-3: Instability in Movement of Figures

(a)

(b)



(c)

Fig.2

(a) Tracing of figures, (b) Silhouette, (c) Movement of figures throughout street

The human figures depicted in the painting all have strangely positioned centers of gravity and look unstable, including those who are even simply walking. This characteristic was found in all people (with people drawn only up to the neck even craning their necks to look). The analysis traced the body and its figure through the streetscape, showing the frequency and variety in movement of figures throughout the entire streetscape.

3-4: Presence of Onlookers

The multitude of people who were simply on the street to look at people, finding the street as a "stage" to look on to can be quickly assessed using the number of people sitting as an index. People sitting in the street appear in relatively large numbers on all but 2 of the scenes. Chart 1 below expresses this in fractions of people sitting in relation to the total.

3-5: Decentralized Sightlines

Sightlines head in every which way on the streets of the picture scroll, as can be seen from the mapping of sightlines in the image below:

fig. 3

Mapping of sightlines from Streetscape 1

The roaming sightlines of the large number of the population on the street can be further deduced from the fraction of people displaying the behavior of *wakimi*, or looking away (determined by the body and sightline facing in different directions) as noted in Chart 1 below.

3-6: Clustering of People in Groups

Another notable characteristic creating the "atmospheric" space in the streetscapes of the scroll is the fact that there are noticeable groups or clusters of people on the street. This can be indexed by the number of people who are "layered," in other words hidden behind others and only shown from the waist up. This was counted from the movement diagrams, where the hip dot was not visible on the figures. Figure 4 below shows the "layered" people (smaller circles), within the (larger circles of the) clusters.

Fig. 4

Streetscape 7 shown with clusters

3-7: Chart of Numerical Indices of Activities on the Street

St. #	Total ppl.	Sit (#)	Sit (fr*)	Wakimi (#)	Wakimi (fr.*)	Gr.* (#)	Gr.* (fr.)
1	174	10	.06	46	.26	51	.29
2	192	33	.17	38	.20	82	.43
3	252	21	.08	35	.14	84	.33
4	65	17	.26	7	.11	12	.18
5	158	16	.10	22	.14	48	.30
6	227	18	.08	35	.15	60	.26
7	53	0	0	3	.06	25	.47
8	254	12	.05	36	.14	48	.11
9	312	51	.16	35	.11	108	.35
10	103	8	.08	18	.17	19	.18
11	216	23	.11	53	.25	48	.22
12	34	0	0	3	.09	10	.29

*Fraction abbreviated (fr.)/ People in Groups abbreviated (Gr)

3-8: Conclusions Drawn

The conclusion drawn from this analysis was that the interesting "atmospheric" space as found in the streetscapes of picture scroll is created through the six factors as noted above, pointing to the number and variety of human actions and use of sensory perception (seeing, hearing, touching, smelling and perhaps even

tasting). A notable number of human activities found in the scroll are decentralized -- decentralized positions of the individual figures, decentralized sightlines within the streetscape, *wakimi* and its decentralized positioning of the head turning to look away from the body, formation of clusters scattered across the street. The aspect of decentralization in the creation of space creates movement and animation, making use of the human senses by making us "feel out" the space of the scroll's street.

Summarizing by factor:

1. Perspective: Makes use of the visual movement in experiencing the scroll space.
2. Physical Environment: Human activity animates the scene.
3. Active Positions: Scroll space is created through variety in active body movements.
4. Onlookers: The street was felt by people through use of sight.
5. Decentralized Sightlines: Sight is used to create moving environment.
6. Clustering: Figures in the scene relate to one another's presence.

4. A Historical Study of the Human Body and Sensory Factors in Public Space

A historical survey of sensory factors (focusing mainly on body movement) found that physical movements in space have changed over time.[3, 4] For instance, the low center of gravity found in the figures of the scroll was a common posture for people in the olden days, as well as a style of walking called the *Nanba Aruki*, involving the use of both limbs on the same side (ie. right arm and leg) moving at the same time, resulting in the swaying of the shoulders as one moves.

Another factor found notable in the historical survey was the fact that a variety of movement was acceptable in public space. For instance, squatting on the ground as a form of rest was common – the ground was not a dirty place to sit, nor was it bad manners to do so. Sight was also more animated and "decentralized," as can be seen from the fact that even festival parades back then show the marchers looking every which way (whereas regulations nowadays control the marching of parades into a straight line with everyone facing forward).

5. Conclusion: The Control of Senses in Streets Today and its Implications

The abovementioned sensory qualities of space, requiring the body to move and "feel out" the environment, have become weak and diluted in the public spaces of today – due both to social as well as physical control. As with the advent of the modern day theater with its concentration of views onto the stage, or the separation of automobile and pedestrian traffic to control flow in unidirectional ways, both the physical as well as the social environment has controlled the animated and decentralized physical use of the human body and its senses. All animated movements are now pushed into the realm of the "performative" behavior.

"Atmospheric" space, based on human activity and senses, as seen from the picture scroll has weakened over time. The implications of this analysis are that human action derived "atmospheric" space creates connections to the environment that we now desperately need to bring back into our cities.

Fig. 5
People at a crossing in the Marunouchi Business District of Tokyo

Sources

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