

## Chapter 5 DISCUSSION

### **Discussion of Why Japanese Children Draw in Their Own Particular Ways**

As the result of quantitative and qualitative methods used in this study, it was found that there are some socio-cultural factors in Japanese children's creative techniques in the spatial presentation in their drawings that are seldom found in other cultural groups of children. Why and how Japanese children start to create such unique ways to express space on two-dimensional surfaces is the next discussion. Based on findings of this study, I would like to discuss the possibilities of four factors of socio-cultural influences in Japanese children's drawings: 1) educational system factors, 2) environmental factors, 3) traditional aesthetic factors, and 4) popular cultural (pop-culture) factors. Particular characteristics which appeared in children's drawings were sometimes influenced by a single socio-cultural factor, but other times influenced by the interaction of a number of factors. Which factor dominated children's artistic ability totally depended on each child's background, the circumstances that each child is in.

#### **Educational System Factors**

At the beginning of this research, the main assumption of why Japanese children draw in their particular ways in the spatial presentation in their drawings was in terms of the Japanese national art curriculum. It is well known that the Japanese national curriculum is helpful in supporting children's cognitive development and, in fact, their artistic skill in the process of making art shows higher levels than children of other cultures (Wilson, 1997).

In addition to this effect of the system of the national curriculum, which is offered to all Japanese children regardless of the differences of the children's background including cultures, regions, religions, status, and gender, during the compulsory educational period from first through ninth grades, it was assumed that the content of national art curriculum strongly influenced children's creativity in their drawings. However, although the system of national curriculum itself is supportive of children's artistic development (for example, the length of art class, 2 class periods, which equal about 90 minutes per week), findings show at least three problems in assuming that the national curriculum causes Japanese children's characteristics which appeared in spatial presentation in their drawings.

First, the content of the art curriculum does not always directly help children's artistic ability according to the observations, interviews, and questionnaires employed in this study. Rather, children seemingly develop their artistic skills through conversation with peers and by imitating others' artworks regardless of the content of the art curriculum. Secondly, the results prove that the content of the national art curriculum does not include the teaching of the concept of space during the compulsory educational period; no explicit instruction in how to create space on two-dimensional surfaces with the concepts of relative size, relative position, and linear-perspective is prescribed. Even though some teachers may have a chance to give some instruction on how to create space in responding to students' requests, this instruction is not part of the content of the national curriculum. Thirdly, the teaching method of the art curriculum based on the

same national text book is different with each art teacher depending on the interpretation of the concept of the national art curriculum. As long as art education is not required to be taught by specialists in art education in Japan and some classroom teachers teach art education, teaching approaches and the attitudes toward art education will differ. Then what is the benefit of the national curriculum in supporting children's artistic development? Is it possible to find any factors that influence children's characteristic methods of spatial presentation which appear in their drawing?

Before discussing these questions, I would like to briefly explain the system and the content of the national art educational curriculum in Japan.

Japan has experienced two major reforms in its educational system, both occurring simultaneously with major quantitative expansions, the Meiji restoration (1868) and World War II (1945).

In 1872, five years after the Meiji restoration, the government enacted the "Gakusei," or Fundamental Code of Education, which introduced a primary educational system in a democratic context in Japan. The significance of this event was that it declared support for the principle of education by the new Meiji government. A code was also enacted to declare the ideal of the educational policy, "education for all people." The main purpose of education was to foster a strong national power through education to catch up with the Western world. Unlike England or the U.S. at that time, the government had not adopted a compulsory education system, although the Code recommended six years of primary education for any child regardless of gender, social status, or means. By 1886 three or four years of elementary education were made compulsory. In 1900, the length of compulsory education in elementary school was extended to four years nationwide, and the tuition-free public elementary school system was adopted by law.

In 1947, after World War II, the new Constitution of Japan provided the Fundamental Law of Education and the School Law. Under these laws, the government began reforming the old education system and developed a 6-3-3-4 structured system under the supervision of the GHQ (General Headquarter of Allied Power). In addition, compulsory education was expanded to include tuition free lower secondary school education (junior high school).

The fundamental Law of Education designated certain subjects as compulsory. In the elementary schools (first through sixth grades), there were nine required subjects, *Japanese Language, Social Studies, Arithmetic, Science, Life Environment Studies, Music, Drawing and Handicrafts, Homemaking, and Physical Education*. In the lower secondary schools, the junior high schools or the middle schools (seventh through ninth grades), eight subjects were required: *Japanese Language, Social Studies, Mathematics, Science, Music, Fine Arts, Health and Physical Education, and Industrial Arts* (for boys) and *Homemaking* (for girls). Since then, Fine arts has become one of the required subjects throughout the compulsory educational period (Nakabayashi, 1993).

The Ministry of Education has changed the art educational curriculum six times (1947, 1951, 1958, 1968, 1977, and 1989) in theory and practice since World War II.

The first two programs, 1947 and 1951, presented a tentative curriculum in a short period under the control of the general headquarters of the allied forces. Although U.S. influence appeared in the contents, these programs were based on the practical matter of how to make and create works of art rather than stressing aesthetic attitude.

Fundamentally, it shifted from the traditional manner of Japanese art education to those that mixed the appreciation of the Japanese tradition and Western art education.

The third program presented in 1958, took a stand for a “student-centered” curriculum, and focused on cultivating creative and practical attitudes through basic techniques of art-making and viewing works of art.

The fourth change in 1968 was the development of a “teacher-proof” curriculum. For reinforcement through systematic study, the content was divided into five categories: painting, sculpture, design, craft, and appreciation (critique).

In 1977, the content of art education programs was drastically cut and reformed into two main concepts of “expression” and “appreciation (including critique).” The goal of this curriculum was a synthetic creative-activity through works of art.

The final revision in 1989 was a reform based on the concept of the 1977 curriculum with added ideas of playing and enjoying the making of works of art in addition to learning the technique of making art products. The goal of art education was to develop the basic ability of productive and creative activity through expression, appreciation, and critiques, while at the same time encouraging pleasure of expression and cultivating rich sentiments in children. The contents fall into three categories of expression: 1) creative activity with the different kinds of materials, 2) expressive activity in 2-D and 3-D, and 3) productive activity with functional purpose. The details of the program are presented in three levels in elementary school: the lower grades (first and second grades), the middle grades (third and fourth grades), and the higher grades (fifth and sixth grades).

Likewise, theory and practice in the field of art education in Japan have been changed to encourage the development of children’s artistic ability in response to the needs of society in Japan. Even though there are some debates about the content of the art curriculum, the system of art education has been stable these 50 years and its removal from the required subjects has never been considered.

However, the next big reform including not only a change in the content of the curriculum, but also a change in the system of the national curriculum itself, is planned for 2003. Art education is facing a crisis where it might be removed as one of the required courses in compulsory education and become an elective course. For the restructuring of the national curriculum in 2003, art educators and researchers are struggling to retain art education as a required course while finding another direction for art education in Japan.

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(The Time Table and Content of Curriculum of art education: Expression and Appreciation)

What factors in the national art educational curriculum directly influenced children’s characteristics which appeared especially in spatial presentation, if the art curriculum itself does not teach the concept of space to children?

Since the art curriculum is implemented and taught differently depending on the interpretation of each teacher, even though teachers use the same national art textbooks, it is hard to believe that all students have an equal chance to develop their artistic abilities and their appreciation for works of art. What is the benefit of the system of national art

education? The main benefit of the national art education curriculum is its existence itself rather than its content. Regardless of children's preferences, as long as art education is a required subject, they have to take art courses through compulsory education from first through ninth grades. Also, the art course is offered two times a week and children spend at least 90 minutes (2 class periods of 45 minutes each in the case of elementary schools) to take art education. What happens to children after nine years of taking art education through compulsory education? Even if the content of the art curriculum is taught differently depending on each teacher's attitude toward art education, the benefit of the length of art education is outstanding since the required materials and art tools are strictly mentioned in the national art textbook. Also, the art curriculum is designed to support the development of children's artistic ability sequentially from lower to higher grades. As a result, even if some children are not interested in art, they still learn more than they expected. It is easy to imagine the benefit for Japanese children in contrast to U.S. children who do not have a required art course and the system differs depending on each district or community, where some children grow up without any experiences with art.

Another benefit of art education in Japan is the style of the classroom setting. Many educators misunderstand the Japanese classroom as strictly set, without opportunity for discussion with peers, and the style of education as teacher-centered with art education implemented based on the teacher's lecture. This is an incorrect understanding of the style of the art classroom in Japan.

Unlike the art classroom in the U.S., in which individual problem solving is encouraged in the process of art-making, Japanese children are encouraged to share their problems with their peers in the group-oriented classroom. Students often work together with peers and discuss how to create works of art. As a result, students tend to imitate peers' artwork when they like it and also when they need to know an advanced technique for problem solving. Imitating art is never discouraged by adults, but rather is recognized as a necessary process for younger children in the middle of learning process before development their originality and creativity in art. In terms of such a group-oriented classroom in which children work together in art class, the art classroom in Japan is often incredibly chaotic and noisy especially in the lower grades (first and second). Such a group-oriented art classroom is very helpful for children to solve any problems they face in creating particular works of art since they can talk with peers and mimic children who have already solved particular problems. Vygotsky (1976) mentions that children need adult support to develop their knowledge for problem solving; however, not only adult help but also peer support are helpful to develop children's techniques of problem solving in creating art. Thompson (1990) says that children develop their artistic abilities more through dialogue with peers than through adult support. Thus, conversation with peers is often more helpful and useful for children in developing their own artistic abilities than the lecture and instruction of teachers since children always enjoy talking with peers more than listening to teachers' lectures.

### **Environmental Factors**

When I found that Japanese use a technique of bird's-eye view more than children of other cultures, I simply assumed that the reason must have been either the influence of mass-media such as TV or computer games. Like U.S. children, Japanese children are strongly exposed to the influence of modern techniques of mass-media. Through these

techniques, children can create and see kinds of spatial situations through the TV screen and computers that we cannot normally see through our eyes. By using such a technological tool, it becomes possible to create and see visual situations beyond our imagination. However, this brings up another question. Are Japanese children influenced by visual technologies more than U.S. children? According to the pilot study comparing drawings by Japanese and U.S. children (1993-1995), U.S. children did not often use the technique of bird's-eye view in their drawings in spite of the fact that they were also strongly influenced by visual media. Did the influence of visual media affect just Japanese children when they created space in their drawings? It is unlikely. It would be hard to explain that Japanese children are more influenced by visual media to create space in their drawings than U.S. children.

Because of these questions, I rejected the assumption that visual mass-media is the main factor influencing Japanese children's use of the technique of bird's-eye view. Then what was the main social-cultural factor in the use of the particular technique?

Through additional research with the qualitative method of observation, interviews, and questionnaires implemented in summer, 1997, I found a simple answer to the question. It might be the environment in the school where the children are studying. As everyone knows, Japanese are condensed in narrow, small areas due to the size of the land and the population (imagine half of the U.S. population living in the state of California). People might imagine that Japanese schools are smaller in size than those in the U.S. In fact, despite the limited land, elementary schools are often built relatively big, with at least 3 to 6 classes in each grade; each class has 30 to 35 students for a total of 700 to 1,000 students in a school. Also, schools are often built with 4 or 5 floors due to limited availability of land, but each school has a big playground with running tracks and sport gym by the school building. The reason Japanese schools always have such a big playground is that Japanese education requires a sports day as a part of the school's annual events. To show children's healthy physical and mental growth, sports activities involving all grades of students, teachers, parents, and the community are offered by each school, at least once in fall and sometimes twice a year in spring and fall. Due to the big sports day event, all schools in Japan tend to have a big playground

Do such environmental factors influence children's artistic ability? Actually, the school environment strongly affects children's visual thinking and artistic abilities. Japanese children spend almost all day in school from Monday through Saturday (6 days a week, although Saturday is only a half day). In the school schedule, class times are divided with five minutes recess time. Children are encouraged to go out to playground to play with peers every recess time and lunch time. Likewise, through school, children have a chance not only to play in the playground, but also to look down at the playground from their classrooms or the hallway unconsciously. The view looking down at the playground from their classroom or hallway is imprinted in their memory and the memory appeared as the technique of bird's-eye view when they had to draw the playground scene for the research. Remember, the research drawing task was implemented in the classroom or art classroom without directly observing the playground, based upon their memory of playing with peers in a playground scene. As a result, the technique of bird's-eye view appeared in three different types: front and side view, open-box view, and top view, depending on their level of artistic ability in solving the problem of how to create space on the two-dimensional surface.

### **Aesthetic and Traditional Factors**

If it is true that a part of the cultural tradition is produced by the cultural aesthetic, Japanese traditional art must reflect such a Japanese aesthetic. Or it can be restated that the peculiar cultural aesthetic tends to appear in art. In fact, Golomb (1992) states that the balance of spatial arrangement differs in each culture depending on the concept of the aesthetic that each culture holds. However, she does not mention why and how each culture has a different aesthetic. It is easy to say that each culture has its own aesthetic; however, it must be very difficult to define what each culture's aesthetic is. For instance, how should I respond to the question of what the traditional Japanese aesthetic for spatial arrangement is? When children create space in their drawings, do they have some particular aesthetic influenced by Japanese culture, especially by Japanese traditional art?

Reaching a conclusion by using the words "cultural tradition" or "aesthetic" as a reason is an easy and reasonable way to explain a particular phenomenon in a particular cultural art. In fact, many people including artists and art educators, still use the word "tradition" when they find some interesting characteristics in art, as if they know that there are always cultural traditions behind cultural arts. People's critical attitudes toward children's artworks are no exception. In the process of finding reasons for particular characteristics in children's art, it is very dangerous to conclude that the main reason is the cultural and traditional differences. Before reaching this conclusion, researchers have to look carefully at children's artworks to see whether the characteristics are stable over a long period of time. To do so, researchers have to collect data to prove cultural tradition as a factor of influence in children's artworks, for example, when the characteristics start to appear and how long they appear in children's artworks. Without such data, it is very hard to persuade that a particular cultural tradition is a main reason for children's artistic characteristics.

For example, when I found the technique of bird's-eye view ("Fukan-hou" in Japanese) in Japanese children's drawings of the playground scene with peers, I assumed that one of the reasons for the appearance was the influence of Japanese traditional art, in particular a famous technique used in screen paintings in the seventeenth century (Edo period). This technique was spread all over Japan to decorate screens in houses or castles in high society, Bushi society (soldier society). Although this technique depicted a way of looking down obliquely from the sky unlike the children's way of looking straight down, it seemed that children were strongly influenced by this Japanese traditional art technique.

In addition to the traditional technique of bird's-eye view in screen paintings, another technique, the exaggerated view, found in children's drawings seemed to be influenced by another famous Japanese traditional art, Ukiyo-e (pictures of the floating world) and Kabuki-e (Kabuki actors' pictures) from the Edo period (seventeenth through the beginning of nineteenth centuries). Unlike the screen painting technique of bird's-eye view which was popular among soldier society, this technique became popular in ordinary society as a citizen culture ("Choo-nin bunka") with the popularity of theater ("kabuki") and these kinds of pictures often depicted Kabuki actors' faces as exaggerated with poses in expressive postures. Also, it is well known in art history that these Ukiyo-e paintings strongly influenced European Impressionist and post-Impressionists artists in

the early nineteenth century with their characteristic technique of exaggerated views, which were seldom used in European art society in those days.

Thus, it is not difficult to find resources which might have influenced Japanese children's artistic expression in their drawings. However, it is still too easy to conclude that Japanese children's characteristics in their drawings result from the influences of Japanese traditional arts. To think about it another way, if Japanese children's characteristics including "photographic views," "exaggerated views," and "bird's-eye views" are due to the influence of traditional Japanese arts, the same kinds of phenomenon would have been seen in Japanese children's drawings for a long time. Did we find the same kind of characteristics in Japanese children's drawings, for example, about 30 years ago? It is difficult to say clearly "yes" or "no" to the question since there is no concrete research based on Japanese children's drawings 30 years ago. However, I could not find any data to show Japanese children using such techniques in their drawings in the past. When I was an elementary student, no one used such techniques when they drew. As long as we cannot find any proof that Japanese children have been using these kinds of techniques to create space in their drawings, it is doubtful that Japanese children's characteristics in spatial presentation are influenced by Japanese traditional arts. Of course, these traditional arts may influence Japanese children's artistic creativity; however, these cannot be a main influence in children's drawings. As long as children do not have many chances to be exposed to traditional art in their ordinary life, this art cannot be a major influence in their drawings. For example, unlike other countries in Europe and the U.S., Japanese children are very limited in exposure to fine arts. Even though they may have a chance to go to museums, how often do they go to museums to see such traditional arts? The national art textbook may show some traditional art as a part of the study of art history; however, how often do children see such a page? It must be reasonable to think that there is another strong socio-cultural influence in children's artistic creativity in the past 30 years.

### **Popular Cultural Factors**

Lastly, I would like to discuss the influence of popular culture in children's creativity. It is well known that Japanese comic books (called "Manga" in Japanese and pronounced "Mahngah") have a strong status as a part of Japanese culture for at least three decades, more than in any other country (Schilling, 1997; Schodt, 1983; Yang, 1997). Due to the popularity of Manga all over Japanese society, it is also well known that the influence strongly dominates children's artistic creativity, appearing throughout their drawings (Gardner, 1980; Hardiman & Zernich, 1988; Wilson, 1997).

Before starting to discuss how and why the influence of Japanese comic books appears in children's graphic presentation, it may be necessary to clarify the process through which Japanese comic books (Manga) became an essential part of Japanese culture. In the U.S., the popularity of the American comic book has declined dramatically since the 1950s due to overregulation and competition from television. American comic books have a monthly circulation of 300,000, but there are no weekly comic books any more. On the contrary, Manga are popular and the influence will not stop soon in Japan. For example, over 5 billion books and magazines were produced in Japan in 1984, making it one of the most print-saturated nations in world. About 27% of these publications (about 1.4 billion) were comics, Manga, in magazine and book form. In the

1990s, it is said that the proportion of Manga among all publications is almost 50% in Japan. Manga are read not only by children but also by adults in Japan. Most Manga are divided into boys' comics ("shoonen manga") and girls' comics ("shojo manga") and each comic has a kind of gender characteristic in the cartoon and the story itself that the other does not have. Both boys' and girls' comics are published weekly and monthly and each comic includes more than 10 stories by different cartoonists (authors); as a result, the typical volume exceeds 350 pages and sometimes reaches 600 pages, unlike comic books in the U.S. (where each generally has 10 to 20 pages with one story) (Schodt, 1983, p. 12).

What is the origin of the word "Manga"? What is the origin of Manga in Japan? Why are Manga so popular in Japan that not only children but also adults read them?

First, "Manga" means caricature, cartoon, comic strip, comic book, or animation. The Japanese woodblock-print artist, Hokusai, used the Chinese ideograms "man" ("involuntary" or "in spite of oneself") and "ga" ("picture") in 1814. Hokusai was evidently trying to describe something like "whimsical sketches," but it is interesting to note that the first ideogram has a secondary meaning of "morally corrupt." The term "Manga" did not come into popular usage until the beginning of the 20th century. Before that, cartoons were called "Toba-e (Toba pictures)," after an 11th century artist, then "Giga (playful pictures)"; then "Kyooga (crazy pictures)"; and in the late 19th century, "Ponchi-e (punch pictures)." In addition to the word "Manga," one will often hear today the word of "Gekiga (drama pictures)," to describe the more serious, realistic story-comics (Schodt, 1986, p. 18).

Secondly, no one knows exactly the origin of manga, although some art historians say that it must have started in 6th or 7th century to communicate a sense of humor in drawings. However, it is well known that Japan's first undisputed masterpiece of cartooning was created at the beginning of the 12th century by a priest, Bishop Toba. The cartoons are called "Choo-juugiga (animal scrolls)," a series of four monochrome scrolls painted with brush and ink. In the scrolls, animals and birds are ironically described as humorous personified creatures (Akiyama, 1990). Thus, like many other countries, although the Japanese manga also started in the role of sarcastic caricature, it was the beginning of the 20th century after World War I before manga became popular as the story-comic books.

Thirdly, responding to why Japan alone developed a comics phenomenon of this magnitude is not so easy. One possibility is that Japanese are predisposed to more visual forms of communication owing to their writing system. The Japanese writing system is a combination of logographic (or pictographic, ideographic) and Japanese characters (originally Chinese characters) and phonetic syllabary (like an alphabet). The individual ideogram, in its most basic form, is a simple picture that represents either a tangible object or an abstract concept such as an emotion or action. The earliest ideograms in China looked much more like what they were meant to represent than they do today. They were, in fact, a form of cartoon (Pickard, 1996; Toku, 1996).

However, manga could not have become an integral part of Japanese culture unless there had been a genuine need. To be sure, younger children read comics for the same reason children everywhere do - they are immediately accessible when still learning to read, and fun. But for older children, teenagers and adults, manga are faster and easier to read than novels, more portable than television sets, and provide an important source

of entertainment and relaxation in a highly disciplined society. Also, it should not be forgotten that the educational system is set up in response to the highly competitive society in Japan. Because of such a competitive society, children are not allowed to have their own free time and they are forced to study for a grueling cycle of exams that determines their scholastic and vocational futures. Only reading manga can give children their own free time and can release them from such a tough reality since manga allows children into their imaginative world. Likewise, the reason manga has become an integral part of Japanese culture is in response to Japanese needs. The needs of Japanese for manga seems to be stronger than other cultures due to the above reasons.

Finally, how does the influence of manga appear in children's graphic presentation in their drawings? As mentioned earlier, there are some gender differences in children's drawings since there are girls' and boys' comics books in Japan and the characteristics differ in each comics.

On the one hand, it must be easy to find the influence of manga in pictures that children draw. In boys' pictures, there are cartoonistic and humorous figures out of proportion with real human figures, with a short bodies and exaggerated facial expressions or ideal figures with muscular bodies. In girls' pictures, the characteristics of figures are more obvious than in figures drawn by boys. The proportions of the human figure are of course, ignored and depicted as a ideal, slender body with long, skinny arms and legs, and big eyes, and sometime the nose is depicted as a dot in the center of the face. No one will be at a loss to find the influence of manga in figures depicted in children's drawings (Schodt, 1983).

On the other hand, most people tend to overlook the influence of manga in spatial presentation in children's drawings. Although Japanese manga have many characteristics that other comic books do not have in other countries, one of the characteristics is the detail and the complexity of the background. Not only figures but also the background of the story is often carefully depicted with the techniques of linear-perspective view. Also, figures are often drastically cut off by the edge of picture frame and exaggerated in the picture space without any depiction of background. Such dramatic techniques used in manga seem to have strong impact on children's visual thinking. As a result, the influence appears in children's drawings to satisfy children's aesthetic in spatial presentation. Thus, the influence of manga appears not only in figures but also in spatial treatment in children's drawings.

### **Limitations and Future Plans**

There are some limitations in this present study, particularly in the method.

One limitation is in the drawing task which was implemented slightly differently by each school, not by the researcher, due to the different situations and the time constraints that each school had. Although the researcher explained and discussed the framework of this research to the chair person (who was in charge of the experimentation) in each school before the research, including the limited time (thirty minutes), the limited materials (paper, pencil and eraser, and five colors of crayon), and the limited place (in the classroom or the art room), the rest was totally up to each school. As a result, the manner in which the drawing task was completed was different. For example, in one school, the drawing task was implemented at the same time in all grades in each classroom under the instruction of the chair person of the research. In another

school, the task was done separately with the instruction of three first grade classroom teachers in each first grade classroom and one art teacher of lower grades (second through fourth graders) and another art teacher of higher grades (fifth and sixth graders) in each art room. In another school, the task was implemented separately by each classroom teacher in the art class period. In the future, the task might be presented by the researcher directly.

Another limitation in the drawing task is that the subject of “Me and my friends in playground” was drawn from students’ memories, not from their direct observations. When the subject was given to students, they recalled the playground scene from their memory and translated the image onto the drawing paper. Therefore, there is one more step in students’ activity than direct observation in their drawings, which was the translation from memory to the drawing. To see children’s observation skills in the process of creating space in their drawings, in addition to their knowledge of the concept of space, collecting drawings based on direct observation is necessary.

There was a limitation in the process of classification of children’s drawings in both Eisner’s and Toku’s spatial categories. Although the spatial categories were developed based on the careful observation of children’s drawings, it was hard for art educators who helped with the classification to judge in which category a drawing should be placed since some drawings showed some characteristics related to more than one category. After the lecture on the main concept of the classification of spatial treatment in children’s drawings (for about thirty minutes in each of the two weeks), the researcher supervised each pair of art educators (three pairs, or six art educators) so as to minimize any confusion over classification. However, the researcher found some misunderstandings of the concept of classification in one pair and decided to check all drawings after classification by each pair. Two other pairs’ classifications were almost the same as the researcher’s judgment; however, since one pair showed some deviation from the researcher’s judgment, especially in the higher categories (from category fifteen through nineteen in Toku’s categories), the drawings were reclassified by the researcher. Spending enough time training art educators before, during, and after the classification will be important to make sure they understand the concept of spatial categories. Another possibility could be to hire volunteers from the public and train them in the classification of children’s drawings. Since they are not professional art educators, they might be trained without having preconceptions of children’s drawings.

The fourth limitation was in the observation of each school. To judge whether teachers followed the national curriculum with the national art text book when they taught art, observation of the art classroom was used as the qualitative method. However, it might have been too early to reach a conclusion since the researcher observed two classes of different grades in each school under the limited time of each class period of 45 minutes. Ideally, sequential observations of each class through all grades might be necessary if the purpose of observation is to judge the dependability of the national art educational curriculum in elementary schools in Japan. However, I still believe that the length of the observations was not a major problem and it was sufficient to reach some conclusions in the research. The purpose of observation in this research in art classrooms in each school for such a limited time was to see whether the national curriculum was used in teaching art.

Finally, to draw a map of the influence of Japanese culture in children's drawings in other Asian countries, I suggest that research needs to be undertaken in other Asian countries and areas, since it is well known that Japanese manga are widely exported to other Asian countries, especially Korea, Taiwan, and Hong Kong. It is easy to imagine that Japanese manga's influence will appear in those children's drawings. Furthermore, it appears that the prevailing traditional aesthetic in children's drawings is filtered through the influence of manga.