Pretend Act Has the Potential to Inhibit Children's Exploration: What Happens When Children Encounter Undefined Artworks in the Playground?[1]

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This study examined how young children encounter undefined materials and the tension between make-believe play and exploring materials. It has been repeatedly argued that make-believe play offers children the opportunity to learn, thus promoting their cognitive and emotional development (Golinkoff et al., 2004; Piaget, 1952; Singer & Singer, 1990). However, pretending may weaken the exploration of materials by framing their meaning. Vygotsky (1967) suggests that the original meaning of materials disappears in make-believe play. This formative experiment (Vygotsky, 1997) adopted a post-positivist view to investigate children's recreational activities when encountering undefined objects. This study focused on the creative play of 5-year-olds when encountering undefined objects that were difficult to name in advance: two metal artworks and hemp strings between trees on the playground. It was executed in 2019 as a Playshop project (Ishiguro, 2017) in collaboration with kindergarten teachers. Children's behaviors were guided by material affordance (Gibson, 1979) and the culturally conventional usage of materials, such as treating a metal square as a house. Once children identified undefined objects as familiar with pretending, they stopped exploring the potential of the materials, even more so when teachers gave a clichéd name to the children's act of pretending. Teachers must be conscious of this tendency and strive to make them aware of many facets.

keywords: undefined object, artworks, make-believe play, exploration, formative experiment

1　The paper was a revised version of the report presented at the EECERA annual conference in Estoril, Lisbon, Portugal, August 31, 2023. The data resources analyzed in this paper are the same as those reported in the 2020 Annual Conference of the Japanese Psychological Association, but the research questions and focus of the analysis are different.

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Introduction

This study examined how young children encounter undefined materials and the tension between make-believe play and exploring materials. It has been repeatedly argued that make-believe play offers children the opportunity to learn, thus promoting their cognitive and emotional development (Golinkoff et al., 2004; Piaget, 1952; Singer & Singer, 1990). However, pretending may weaken the exploration of materials by framing their meaning. Vygotsky (1967) suggests that the original meaning of materials disappears in make -believe plays. I examined the potential of pretending acts to constrain children's exploration. This study is a reanalysis of data from field research (Ishiguro, 2020), attempting to capture the process of young children's art experiences using experimental field research methods. Experimental field research refers to bringing something external to the target site without internal necessity and observing changes in the field. More specifically, we placed three unfamiliar artifacts in the schoolyard, where children usually spend their time, and observed their activities in the field. This field research was conducted for five-year-old kindergarten children in 2019 as part of the Playshop project (Ishiguro, 2017), a collaborative work between kindergarten teachers and outside researchers to design play activities that enrich children's play. It is based on the idea of a formative experiment (Vygotsky, 1997) in which adults design an environment for play. However, it takes a post-positivist view, where the results are not predicted in advance, but children's reconstruction activities are investigated when they encounter undefined objects. Ishiguro (2020) examines the quality of young children's experiences by describing the process of environmental change. The new artifacts included two metal works made by the artist and a spider web-like string stretched between the trees set up by the main facilitator (the author) on the day of the event. What is meant by "artistic experience" here is the "creation of artworks" found in the process of reconfiguring the environment, using the three new artifacts and the existing environment as resources. This study aims to confirm the production characteristics of how children use the resources available to them to recreate "artworks." The results were examined regarding the quality of voluntary play, an important aspect of children's development.

This study focuses on the creative play of five-year-old children for two consecutive days when encountering unidentifiable objects that are difficult to name in advance: two metal works with silver colors, hemp strings between trees in the playground, and improvised pieces created by the artist in response to the children's requests. The Japanese metal sculpture artist Rie Kawakami, who participated in the Playshop, made the metal works.

Method

As an event-based workshop called "Playshop," an afterschool program (Ishiguro, 2017) was conducted in collaboration with a kindergarten. Researchers, artists, and volunteers who do not usually meet together participate in the programs. It was executed on Monday, July 22, and July 23, 2019, at 15:00–17:00. The filed for the Playshop was the second playground "Koguma no Mori Play Hall Gulliver" owned by Miharu Kindergarten of Azuma Gakuen School Corporation. Fifteen five-year-old children—five girls and ten boys —were enrolled in the Playshop.

Research agreement: Information and consent forms were distributed to all participants for audiovisual recordings, subsequent analyses, and descriptions in the research report to maintain their privacy and to hide personal information. The author obtained consent from all participants and children's parents. The children were briefed by their parents and teachers. All the participants could withdraw from the study at any time. Preschoolers whose parents agreed to participate were to actually participate in the Playshop.

The roles of participating staff members were as follows: The author planned the entire activity, implemented undefined crafts in the field, and managed the activity. Kawakami, the artist, made two undefined crafts in advance and supported the author's facilitation. In addition to them, one university faculty member and three graduate students supported the author's management, and Shigemitsu Azuma, the principal of Azuma Gakuen Miharu Kindergarten, advised on planning and supporting the activities. The teachers worked with the children as they usually do.

Procedure: After their usual daycare on both days, children and teachers arrived by bus from the main kindergarten building. The children were accustomed to playing in the playground. We greeted each other when they left the bus and I instructed them to play freely as they deemed fit. In the beginning, some children started running around the field while the remaining started playing with their teachers. The author and the artist could talk to and play with the children without any constraints. Teachers' behaviors were not regulated. They were attentive to the children's safety and everyday work but seemed to enjoy field play with the children. On the second day, a video recording of the children's activities held on the first day was presented continuously and automatically on the walls of the school building. A photo exhibition of the first day's activities was held on the other side of the wall. However, the documentation did not attract the children on either day. After each day's workshop, a review meeting was held with all adult staff members to discuss the day's activities.

Recording: We recorded the activities by fixed cameras and one action camera. The author often captured the activities using a still camera and an iPad tablet. Teachers also set up their video cameras for the recordings. Participants were recorded from various angles using fixed video cameras. The artist wore a GoPro action camera on the first day, and the author did so on the second day.

Field of play: The pictures in Figure 1 are from a YouTube video created by the Miharu Kindergarten. The red circle represents the central area of the activity. The kindergarten's second playground is located 10 minutes by bus from the main kindergarten building, which is quite large compared to most play grounds of Japanese kindergartens. It has a symbolic building in the center and unprocessed natural trees, weeds, dirt, and cliffs surrounding the playground. From the outsider's point of view, it seems very spacious and rich in nature compared with the number of children playing there.

Figure 1
Playground and Kindergarten Building

Undefined materials: Figure 2 shows spider web-like strings strung between trees, which the author set before the children arrived. Metal sculpture artist Rie Kawakami created the two metal sculptures, as seen in Figure 3. She prepared them before the day and brought them to the playground. They are abstract artworks that anyone cannot call using the name of a familiar object. This playground was the second school playground that children visited regularly. On these days, we placed an unfamiliar exhibit on a part of the playground that was familiar to the children.

Figure 2
Spider Web-Like Strings Stretched between Trees Set by the Author

Figure 3
Two Metal Sculptures Made by Rie Kawakami in Advance Set in the Field

Results

Based on two days of observation and video and photographic documentation, the children's activities were divided into two main categories: playing using resources already in the yard (Type 1) and involving unknown artifacts (Type 2) in their play. Type 1 refers to children's customary behavior, including the following three subtypes: A) physical activities, such as playing tag and climbing up a slope; B) domestic activities, such as building a hut and playing around it; and C) processing plants growing nearby.

Figure 4
Type 1A - Playing on the Cliff Slope Behind the Building

Figure 5
Type 1B - Activities around the Tent Hut Made of Tree Branches and Leaves

Figure 6
Type 1C - Children Pretending to Cook and Eat Seeds

For Type 1A (Figure 4), the boys mainly ran around the building. Some children played on natural slopes. These physical exercises were based on the pre-existing resources of the playground and children's

customized ideas and behaviors. In Type 1B (Figure 5), the children used pre-existing resources, as well as in Type 1A. However, they improved or remade pre-existing resources, such as renovating a tent hut for their domestic work play. During this time, they developed their ideas. In Type 1C (Figure 6), children also played with pre-existing resources but used natural resources to build their pretend play. Their pretension gave the resources a new meaning, such as pretending to cook and eat real redcurrant fruits from the playground. In this situation, they placed the redcurrant seeds on a wooden board or the bark of a tree and, stretched them out with a stick, and then pretended to make jams, eels, and radishes, among others. In Figure 7, the teacher made a bamboo boat and the children imitated it. The teacher then filled a nearby washtub with water, and everyone floated the bamboo boats on the water.

Figure 7
Bamboo Leaf Boat Play

Figure 8
Metal Frames on which the Japanese Knotweed Was Placed Was Treated as a House.

The new assemblages, called Type2, were created using undefined artifacts and existing resources around the playground. These can be divided into the following three sub-categories:

Type 2A: Assemblage of metal frames and natural objects.
Type 2B: Assemblage of metal edges and natural objects.
Type 2C: Assemblages of hemp twines stretched between trees and natural objects.

Figure 8 shows an example of Type 2A. Japanese knotweed, which had thrived on the playground, was installed on top of the metal frame. When the top was closed, it looked like a house. Children used it as a roof under a grass roof. Figures 9 and 10 show examples of Type 2B. Children placed a plant of the playground in the hole in Figure 9. They also wrapped shortcut aluminum wires around the holes of the undefined metal edge. Kawakami cut and distributed them. Figures 11 and 12 show images of a Type 2C. The strings connecting the trees invited the children to hang them. The children hung tree bark (Figure 11) or princess apple with aluminum wires attached to them (Figure 12) on the strings and moved them between the trees like a ropeway.

Figure 9
Type 2B - Garden Plants Inserted in Holes in the Metal Work

Figure 10
Type 2B - Aluminum Wire Wrapped around Holes in the Metal Work

Figure 11
Type 2C - Bark of Tree Pressed into the String and Hung

Figure 12
Type 2C - A Wire Pierced with the Fruit of a Princess Apple in the Garden Was Hung on a String and Moved between the Trees.

As noted above, unfamiliar artifacts seemed to evoke affordances in the children based on their shapes, and the assembled artifacts, which were new combinations of artwork and natural materials, further evoked everyday actions with which the children were familiar. Children did not explore the possibilities of metals

and strings during their play after looking at the newly combined materials as something they already knew. This may be because the first artwork we set up was of a stationary type, which limited the children's freedom of activity. Therefore, Kawakami, a plastic artist, cut an aluminum wire that could be easily bent even by a child, into a suitably short length and handed it to the child. It was challenging for the children to increase the possibility of exploring the materials themselves. By holding the aluminum wire directly in their hands, we hoped the children would experience the softness of the metal wire. However, the children attempted to use the metal wire according to their pre-existing images, asked Kawakami to make fish and fishing rods in the sea on a blue sheet (Figure 13). One boy made a toy airplane (Figure 14) by wrapping leaves by a wire. That is a common use of wire. Their softness may trigger their use as a string for wrapping.

Figure 13
Children and a Teacher Used the Metal Wire as a Fishing Rod.

Figure 14
Airplane Made by a Boy

Discussion

Children's behavior was initially guided by material affordances (Gibson, 1979). The combined artwork made of undefined artworks and pre-existing natural objects recalled the culturally customary uses of materials. For example, metallic square frames were treated as houses with leaves. The shape seemed to invoke the action of placing grass on the top, and the top with grass seemed to invite an image of a house roof. The image of the house appeared to force the children to go into it. Image chains for children can easily be invoked based on the affordability of the material. Once children identify undefined objects as familiar by pretending, they stop exploring the potential of the materials. As Vygotsky (1967) described, the material's original meaning disappears in make-believe plays. The ready-made appearance of an object, which is easily associated with its shape, makes the various functions and characteristics of the object invisible, and the combination of an artificial object (e.g., metal frames) with natural objects (e.g., leaves) also becomes a pre-existing, already-named object (e.g., "house").

Although it is believed that pretending is connected to figurative thinking, ready-made pretending is

nothing more than a conventionalized act. The ability to make such conventionalized pretending is also an essential mental development from the viewpoint of the symbolic function of the child. However, repeating the same images and actions through conventional pretending can also hinder children's creative thinking and creative actions. Make-believe play is not crucially important; instead, it is genuinely imaginative and creative play that is important. Children, by nature, have the ability to break preconceived images and behaviors through play.

What disrupts children's free thinking and action? It is important to note that teachers' clichéd naming of children's customary acts of pretending may reinforce their pre-existing perceptions. According to the Japanese Course of Study for Kindergarten (Ministry of Education, Culture, Sports, Science and Technology of Japan, 2008), developing language skills allows for the development of imagination through pretend play. However, this study revealed that pretending often forced children to view the pre-framed meaning rather than the material itself. Taro Okamoto (2023), a Japanese avant-garde artist, said that pure intuition is necessary to appreciate art. However, the vast amount of knowledge and education people have seen and heard about without realizing it has led to prejudice and stereotypes that dull such natural intuition and cause people to view things conventionally based on their own common sense. Teachers must pay more attention to the fact that children are prone to playing with individual-specific objects as if they are known objects. For this to occur, teachers must encounter the material honestly and value their intuition. It is not easy for adults to eliminate their framed judgments based on their pre-existing knowledge of the materials and works of art encountered. Teachers must have repeated experiences of encountering materials and works of art, not with their minds, but through their physical senses. Professional artists do not only process materials according to preconceived notions of what they want to create, but by interacting with the material and learning about its characteristics, they create works of art that they had not previously thought of.

What environmental setting is necessary for children to fully interact with objects and create objects not bound by their existing, that is, already developed knowledge and skills? I think that children can obtain many ideas by interacting with materials. However, it is easy to hide newborn discoveries, such as evoking strong existing images by touching materials. Teachers should manage the time required for children to interact deeply with the materials. For example, by slowly touching the material one can evoke an awareness of what one finds about it. Seeing the same object from various perspectives allows anyone to break familiar ideas, as Klee (1956) examined rail lines. According to Debora Harcourt, quoted in Clark (2003, p. 49), "slow knowledge is understanding that is built over time." Our slow encounters with others, including human beings and nonhuman materials, can bring us to know others, ourselves, and their interfacing planes. It is vital for a pedagogue to have the experience to take such a slow encounter with children.

Japan is often considered a society that faces intense peer pressure. In kindergartens, teachers usually prepare the same template and try to get every child to complete the same work. This is based on egalitarianism, which assumes that being the same is be in equal and suitable for both children and their parents. However, each child has different sensibilities, preferences, and speeds of feelings and thinking. Each child's right to feel, think, and express themself must be guaranteed. A pedagogical approach that emphasizes social justice tailored to each child's characteristics is required in early childhood institutions.

Conclusion

This study examined how children react when encountering a work of art they do not know beforehand. The results showed that children used undefined artwork, introduced for the first time based on its affordance characteristics, such as stuffing grass in a hole or hanging something from a string. The assembled objects, created by combining materials already in the garden and newly introduced artifacts, were used as easily recalled common objects based on children's customary knowledge. Teachers also named the resulting assembled objects with familiar everyday names and facilitated their commonsense understanding of them. Based on these results, this study proposes that children should be encouraged to encounter objects slowly to respond to their sensibilities. To do so, teachers need to experience rich physical encounters. When adults try to listen carefully to the voices of objects when they encounter them, this is the first step toward listening to the voices of children involved with the objects.

Conflicts of interest

I have no known conflict of interest to disclose.

Acknowledgments

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