Movements for enjoyment

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Movements for Enjoyment

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The concept of art work with moving parts became most enjoyable in the process of developing and diversifying art with actual physical objects. The intention of the movements has been to provide both visual stimulation and tactile satisfaction while operating the parts, thereby enjoying my metal work. That enjoyment and touch developed into the theme of my art work and that process became a resource of my art work, artistic creativity and practical ingenuity.
Introduction

This thesis narrates a series of metal art works having movable parts that were made during graduate school at Rochester Institute of Technology.

The study of the movements in metal works was started from my first master’s degree at Seoul National University in Korea. At that time I studied transformable jewelry based on basic geometrical form design for my first thesis. Applying movements, I attempted to change the shapes and functions of jewelries to express visual diversity. During that period, I realized the potential value and interest of movements, and eventually it became the current theme of my art work.

The works at Rochester Institute of Technology start from the extension line of my previous work. I have studied movable elements which bring enjoyment and curiosity to people, as well as how to apply and express them in my metal works. In the process, not only were the movements for transformation attempted, but also music, sound, game and other diverse enjoyable movements were researched and adopted for my new works.
Before starting the discussion about my thesis, I felt it is needed to consider Kinetic Art as a trend of using movements for art works. The research of how kinetic artists expressed movement for their works was a necessary process to estimate the location and direction of my concept in contemporary art.

Kinetic Art means art which involves movement. But not all art which involves movement is ‘kinetic’ in the precise sense in which the term is used when we speak of Kinetic Art……Not all works which move are considered ‘Kinetic’ nor do all ‘Kinetic’ works move. In the precise sense in which the term is used, a work of Kinetic Art must have other specific qualities besides that of moving: the movement must produce a particular kind of effect which will be discussed in a moment. On the other hand, it is not essential that the work itself should move. The effects proper to Kinetic Art can be produced by the spectator moving in front of the work or by the spectator handling and manipulating the work (Barrett 212).

From above, the fact can be known that Kinetic Art is not decided only with moving elements. At this point, I wondered how they represented movement without actual movement. Cyril Barrett, an aesthetician, described four methods Kinetic Artists use in their works.

1. Works involving actual movement. Works which actually move may be distinguished from one another by the motive power employed. Since the twenties
technology has sufficiently advanced to make it possible for artists to use a wide variety of electrically powered machines. But some still rely on natural sources of power (Barrett 217).

2. Static works which produce their ‘kinetic’ effect by the movement. In other words a moving object may undergo so radical an optical transformation as to appear to be something quite different. Under certain conditions the same effect may be attained by the spectator moving in front of an object (Barrett 218).

3. Works involving the projection of light. The use of light may be roughly divided into the pictorial and what I shall call the ‘sculptural,’ that is, light projected into space. In some ways light is the most effective means of presenting rhythms and patterns of movement visually. It is the most ‘dematerialized of all the elements at the artist’s disposal (Barrett 220).

4. Works which require the participation of the spectator. Traditionally the spectator has played a more or less, though not entirely, passive role. He has admired works of art as the product of another’s imagination, as something over against, distinct form himself. Now, it is suggested, he can enter into a more intimate relationship with the work by becoming a partner in its production. Spectator participation can range from the limited activity of setting a work in motion and stopping it, to actually constructing it (Barrett 222).

My study has some commonalities with Kinetic Artists to express new shape and motion using movement. Especially at the point of participation of a spectator to art work, there is a threaded connection between them. However, the Kinetic artists are concerned with movement itself, as an integral part of the work (Barrett 212). In my case, I would like to use movement as a method to transmit enjoyment not as a goal of my work.
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Case Study

1. Changing Shapes

The series of transformable jewelry is the study that had been performed at my graduation school in Korea. The intention of this study was to provide both visual variety and tactile satisfaction by giving movement to jewelry that was manipulated by hand. This study was carried out by dividing and restricting basic geometrical forms like a circle or a rectangle, and I came to produce jewelry whose form users can change by manual handling. People have the perception that basic geometrical forms are rational and perfectly shaped, so utilizing these as base design forms resulted in the transformation of jewelry pieces that were more impressive and efficient. In addition, these forms can suggest clear assembly instructions to users without an operating manual.

The reason I chose the category of jewelry pieces for this transformation project is that jewelry has the proper small size for hand operation, and it is easy to recognize the shape transformation. In addition, jewelry pieces have definite visual characteristics through their function. These categories can be classified into three basic forms according to the position of wear and other considerations: front forms which emphasize the front such as a brooch: cylindrical forms which can be put around a part of the body or on a finger: and 3-dimensional forms which can be viewed from various angles (Untracht 13-14). On the basis of this classification, I made an attempt to change forms, functions and dimensions of jewelry.
Fig. 1  Example of former work: Re-Composition 3-1
3.54 X 3.54 X 0.2 in, Sterling Silver, Onyx, 2000
Re-Composition V

This project is on a continuum of transformable jewelry. The difference between earlier works is that the range of shapes became larger than the current works. In this work, texture, color and surface finishing were regarded as parts of the shape. Re-Composition V is composed of three pieces of a pendant, which have rotating movable parts in them. Using an axis, those parts can be rotated 180 degrees, so the surface of movable parts can be reversed entirely and be fixed by magnets. Even though the physical shapes are not changed, through the rotation of movable parts, each pendant could have four different surface or color variations.
Fig. 3  Re-Composition 5-1
1.6 X 0.7 X 0.23 in, Sterling Silver, Magnets, Leather String, 2005
Fig. 4  Re-Composition 5-3
1.6 X 0.31 X 0.23 in, Sterling Silver, Bimetal, Diamond, Magnets, Leather String, 2005
2. Application of Music

I had been concentrating on the movement in small jewelry pieces. I especially was interested in the transformation of shapes and changing their specific function and category using movement. From these works, I started using movement as an efficient and direct element to give enjoyment to an audience. In the first step toward the solution of this project, using music as an additional element, I attempted to create some stories with movements. In order to make them well organized, I considered not only the choice of music and movement, but also the relationship between them, to produce the feeling that I intended.

For this project, I decided to use a hand-operated music box. To run the work, the audience needs to operate a small handle attached to the work. While operating them, the music as well as mechanical movements are made in the music box mechanism at the same time. Starting from these rotation movements, different kinds of secondary movements can be produced in the work. A hand-operating system was considered to be more efficient than an electric operating system to enjoy the movement and music.

To allow the audience to enjoy these works, proper music choice was essential. Every song has its own melody, which accompanied a specific meaning or feeling. I thought that the proper use of music might be effective to create the intended atmosphere as well as to give enjoyment to the audience together with the movement. When designing this project, I put emphasis on the harmony of the final movements and music.
Happy Birthday Box

This is a prototype piece to test the movement using a hand-operated music box and the effectiveness of the music in the work. For the first step of this experimentation, I attempted to choose a very symbolic theme of music and movement, so the concept was adopted from a birthday present box. The moving cycle was set for one measure of music, while the song “Happy Birthday” was being played by hand operation; therefore the lid of the box has one round of slowly opening and shutting. As a result of using music, the audience could become curious and have an expectation that the movement would happen. Through this piece, two possibilities were confirmed: that music could increase the interest and enjoyment to people and that various kinds of movement could be produced with the music box mechanism. However, one problem was revealed: the hatch was so heavy that there was a difference between the speed of opening and shutting. The weight of moving parts and power balance should have been considered for smooth operation and music playing.

Fig. 5  Movement of Happy Birthday Music Box
**Eggs**

For the “Eggs” piece, I attempted to make a story through the incubation process of an egg. This work is composed of three pieces which have same format as the wooden box shape and are formed with copper and silver. In the same shape format, each piece represents a different step of incubation with its specific movement and music. Every piece was considered to have an appropriate relationship between movement and music as well as to compensate for the mechanical problem based on the results of the former test.

For the first piece, “Trembling,” I used the music “Pink Panther.” I wanted the music to represent the feeling of anxiousness that something would happen next. In addition, short and fast trembling movements which repeat countless times, transmits the impatient feeling of something inside the egg to the person who operates the handle.

![Fig. 6 Movement of Eggs – Trembling (left) & Breaking (right)](image-url)
For the second piece, “Breaking,” the movement was that of a broken eggshell moving up and down. This has the audience guessing whether the chick inside wants to come out, but the chick is too weak to hatch entirely yet. With the music “Over the Rainbow” used for this piece, the repeated movements by an imaginary chick express the feeling of expecting an unknown world.

Finally, with the third piece, one small chick in the egg sees the world. The music utilized for this piece, “What a Wonderful World” represents the view of a newborn creature. For this piece, I adopted the mechanism used for the “Happy Birthday Box.” Making the chick and hatch much lighter than first one, the problem that happened with test piece was resolved.
Fig. 8  Eggs – Trembling (left), Opening (middle), Breaking (right)
4.5 X 3.9 X 2.5 in (each), Sterling Silver, Copper, Walnut, Music Box, 2006
3. Application of Rail

Walnut tree

This piece is the biggest piece among those I made for my thesis as a single work. However, it originated from very small thing. While working on the Egg pieces, I became interested in the movements of opening and shutting. I thought this sort of movement could involve diverse ways to express various feelings and transmit enjoyment. Using the shell of a walnut, I attempted to produce various opening systems. Like the concept of the “Eggs” work, the harmony between the formats of the exterior, and the different moving contents of interior was anticipated to arouse curiosity and transmit enjoyment to people, so I decided to use silver-cast walnut shells as exteriors for different opening system.

Fig. 9  Example Movement of Walnut 1
However, only with this opening concept, it was insufficient to attract people’s interest. A more interesting and stronger installation method was needed to emphasize the opening system and to raise viewers’ curiosity. In order to make people want to open these walnuts, I had to consider eye-catching elements which make the spectators feel that the work has play value.

Play value is the essential value of a toy or game for play. The term is frequently employed in the field of child development for the assessment of toys and games. When they are fun and engaging, playthings are said to have play value. Those that are quickly discarded or are considered disinteresting, do not. In short, objects of play must be compelling and encourage the child's involvement in order to have true play value. Classic toys are examples of toys with true play value as they continue to provide new discoveries and adventures in each subsequent session of play (Auerbach, par.1).
At this point, I needed to think about when people have the feeling of play. In my case, when I go to a shopping mall, I always take a look at bubble gum vending machines. Even though I don’t like bubble gum, sometimes I try operating the machine to see the gum rolling in the cylinder. The rail shape in the plastic cylinder lets people anticipate the way to operate it and how it will work with their preconception. Seeing familiar shapes, such as rails, preconception makes the viewer imagine and expect an anticipated situation. With this concept, I imagined a walnut tree which had fruits in it, and the fruits would be rolled to people like the bubblegum vending machine.

I think making the audience imagine and anticipate something happening is an absolutely essential element for work with moving parts to arouse play value. Using their imagination, not only is the audience capable of handling this kind of art work without a manual, but also they can concentrate on the movements until the movements are done. In my opinion, whether they guess right or not is not significant. If their anticipation is right, they can enjoy looking at the proceeding of movements. In the opposite case, they can also feel enjoyment from an unexpected surprise.

In this work, I utilized two kinds of movement. The first one is rolling the walnut from the top to the bottom of the tree and the second one is the opening movement of each walnut fruit. I expected that the former would make people imagine and try the movement, and the latter would give unexpected surprise and enjoyment.
Fig. 11 Walnut tree

20X20X41 in, Brass, Sterling Silver, Walnut, Plastic, Stainless Steel, 2007
Fig. 12  Detail of Walnut Tree
4. Composition of Separate Works

A Grove

The idea of this work was inspired from the two earlier works “Walnut Tree” and “Eggs.” While working on “Walnut Tree,” I wanted to continue to perfect the concept of rail movements in my next work. The object moving on a rail was sufficient for the audience to get interested in it, like a rollercoaster in a theme park; however, there are too many limits and difficulties to apply various movements with the rail system used for “Walnut Tree.” The mechanism of the moving part had to be simplified to express varied rail movements.

While thinking of new methods, I imagined the motion of an egg rolling in a grove from its nest to somewhere else. I decided to express an exploration of eggs using marbles instead of wheels for this work. Using marbles made it possible for movements that were hard to express with the former work. For example, making up various rail structures, adjusting the speed of moving parts with angles, and composing sections of diverse features became possible.

First of all, the distinguished characteristic of this work is the division of sections. Dividing sections made it possible not only to represent the unique character of elements in the grove, but also to add new ideas to sections whenever it is needed. That means this work, “Grove,” is not completed, yet it can evolve any time through adding, subtracting or replacing sections.

So far, this work is composed of five sections. As representative parts of “Grove,” I chose five elements: a pole, a tree, reeds, a trunk, and a stump. The marble, compared to an egg, starts rolling from the nest on top of a high pole. It goes into a tree and rolls over through its branches and passes in the middle of reeds. It falls into an empty trunk and rolls again toward a stump.
After running through the annual ring in a stump, the marbles are gathered in a final place. According to this storyline the sections were named “Pole,” “Tree,” “Reeds,” “Trunk,” and “Stump.” These five sections compose one group of work, “Grove.”

**Fig. 13** Grove at Solo Exhibition, Art & Cultural Council, Rochester, NY
Fig. 14  Grove
Fig. 15  Grove – Pole
5 X 5 X 26 in, Brass, Sterling Silver, 2007
Fig. 16  Grove – Tree

9.5 X 12 X 23.5 in, Brass, Sterling Silver, Walnut, Stainless Steel, 2007
Fig. 17  Grove – Reeds
20 X 5 X 18 in, Brass, Sterling Silver, Walnut, Stainless Steel, 2007
Fig. 18  Grove – Trunk
10 X 10 X 12 in, Brass, Sterling Silver, Walnut, 2007
Fig. 19  Grove – Stump
18 X 14 X 8.6 in, Brass, Sterling Silver, Walnut, Cherry, 2007
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Conclusion

My works were originated from the interest of very small things in real life. Observing moving objects around my environment, I became interested in movement as a concept of my artwork and found the possibilities to be a proper theme to express what I wanted. Utilizing movement in my metal work, I would like the spectators of my work to enjoy them by observing, touching and operating.

In order to convey enjoyment through movement in this project, I used four methods to apply movement. First, changing shapes were attempted in small jewelry pieces for giving visual diversity. Second, by applying music to mechanical movements, I tried to add sound effects to visual and touchable elements. Third, using a rail system, different kinds of movement were attempted in one work. Last, I tested the composition of several independent works having different movements.

One of the most significant reasons I utilize enjoyable movement as a main subject for my work is that I wish the spectator or user to feel similar enjoyment like I experience from movable objects. I think enjoyment through movement in my work is what I want to transmit to people most and it’s also the most effective method to communicate with them.
Work Cited

Auerbach, Stevanne. Toys For a Lifetime: Enhancing Childhood Through Play.


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