

## **Kinetic Art: Popular Culture, Invisible ‘Transmission’ of Power**

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**Abstract.** Whether the popular culture is formed by the public like the dictionary definition or by the certain power was identified through Antonio Gramsci’s hegemony theory and expressed with the work "Transmission". According to Gramsci, the popular culture is formed by the hegemony. In this study, the topic of 'popular culture, invisible transmission of power' was drawn by analyzing the principle of hegemony and this topic was expressed with the kinetic art composed of motor, gear, circle and canvas. This work shows the generation process of popular culture through the transmission of invisible power through the contrast of the visibles and the invisibles by equipping all the kinetic elements.

**Keywords:** Popular Culture, Kinetic Art, Media Art, Hegemony

### **1 Introduction**

The dictionary defines the popular culture as 'the culture formed by the public' and as 'the culture having premise of mass-production and mass-consumption' [8]. What 'the culture formed by the public means that the group of people has uniformed demand and indeed, the personality of the individual is hardly found in today's popular culture. What the personality of the public is not revealed in the culture formed by the public is contradictory. And then, is the popular culture. Indeed, the culture formed by the public? According to the hegemony theory by Antonio Gramsci, the popular culture is the cultural practice restricted by the ruling power, through which they induce the public to cooperate with the control [1]. Addicted to the freedom and the pleasure come from limited selection, the public do not see the popular culture dragged passively by the ruling class rather cooperate to the ruling class. This is the principle of hegemony transmit the political power invisible hidden behind. By analysing such structure of the hegemony and reflect them in the work, the kinetic art equipped with all the kinetic elements was produced.

## **2 Artworks Background**

### **2.1 Antonio Gramsci's Hegemony Theory**

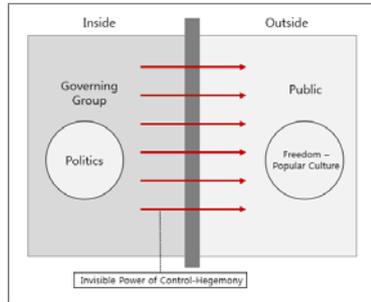
Contrast with the simple compulsory domination, the hegemony suggested by Antonio Gramsci refers to the intellectual and moral leadership to draw the voluntary settlement and agreement from the subjugated class and established by the voluntary settlement of the public [2]. The ruling power uses the popular culture as a means to form the hegemony by drawing agreement and settlement from the public because the popular culture can draw their active participation by stimulating the pleasure of the public, through which suppresses the radical thinking and plays the role to adapt to the social order [3]. Gramsci explained that the popular culture is the space for free settlement of the public but there is doubt whether the settlement referred by him is completely autonomous. According to the interpretation by J. Femia, the settlement should be passive inherently because the voluntary selection among the limited choices is far from the complete autonomy [4]. It seems that it provides the freedom of culture demanding the active selection from the public but smeared every space in the cultural space, the hegemony of the ruling power control the freedom of the public cleverly [5]. After all, hidden from the sight of the public, the hegemony, which is the moral leadership to draw voluntary agreement from the public, is seen as the invisible political power leading the free popular culture.

## **3 Kinetic Art: Transmission**

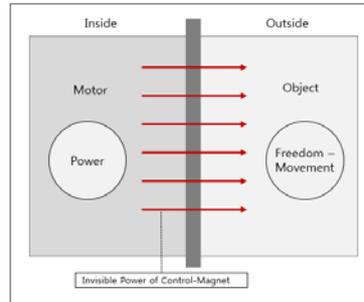
### **3.1 Expression of the Subject through Kinetic Art**

In the hegemony theory by Gramsci, the ruling power seems to provide the space of freedom, popular culture, but dominates the popular culture using the hegemony, the invisible power, after all. The structure of the hegemony was applied to the work "Transmission" by interpreting it, through which the generation process of the popular culture, which is generated passively by the ruling hegemony.

[Figure 1] shows the structure of hegemony. The inside of hegemony is composed of ruling power - political space and outside is composed of public- free space of the popular culture, and hidden from the sight of the public, the ruling class converts the invisible political power to ruling power and pass through the outside. As a result, the hegemony leads the free popular culture of the public. [Figure 2] shows the hegemony reflected in the aforementioned kinetic art 'Transmission' as is. The inside of the canvas is the space of the motor-driving power and the outside was composed of the space of object-free movement. In this work, hidden from the sight of the audience, the motor converts the driving power to invisible ruling power and passes it to the outside. As a result, the magnetic force leads the movement of the free object.



**Fig. 1.** Structure of Hegemony



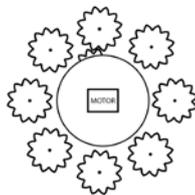
**Fig. 2.** Structure of 'Transmission'

### 3.2 Process of Kinetic Art 'Transmission'

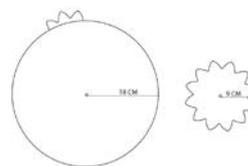
'Transmission' is the work composed of canvas, motor, gear, object and magnet. Canvas has the dimension of 700\*700\*40mm and made with the wood and white Formax (compressed and foam PVC). The circle is manufacture with Ø40mm, 3t of black acrylic. Only the contrast of brightness was given by eliminating the color using the canvas in white and the object in black, which is to draw attention of the audiences to the movement by diving the background and the foreground [6].

Since the motor is rotating only forward direction, no separate program was needed and the voltage was supplied to DC motor by converting 220v to 5v. Since the rotation of motor is important element to imbue the movement to the work, the speed was adjusted to 100rpm by supplying the voltage of 5v.

In this work, the gear was composed of one big gear, which controls the circle at the center, and 8 small gears, which control rest of 8 circles. As shown in [Figure 3], as the big gear is fixed to motor, it rotates by the driving power of motor and rest of 8 small gears received the power of the big gear. Since it had to be designed so that the rests were moved by one driving power, the big gear does not have complete form as shown in [Figure 4]. Since to rotate the small gear having 12 teeth on Ø90mm by 90°, it should have the teeth at 45° on the double diameter, it has such form. Considering the visual effect together, the relations between small gears and big gear were improved. As a result, rotating by the motor, the big transmits the rotation to the small gears and the small gears rotate subsequently by 90°.

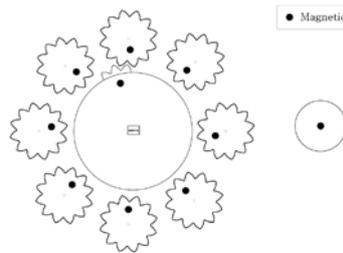


**Fig. 3.** Cogwheel and Motor



**Fig. 4.** Cogwheels

As shown in [Figure 5], the magnets are attached to the internal gear and the objects outside. Between the internal and external magnets, the attractive force works among them and the proper attractive force works using the magnet of Ø8mm, 3t, and 3380G and Formax of 2t.



**Fig. 5.** Magnetic

The work 'Transmission' is equipped with all the elements of driving power inside of canvas but the rotation of gears is transmitted to outside of the canvas by the magnetic force and as a result, it makes the movement of object.



**Fig. 6.** Exhibition of 'Transmission'

## 4 Conclusion

All the circles has it's own axis of rotation and the one circle at the center repeats the constant rotational motion around the center of canvas. The axes of rests of 8 circles are located at uniform distance from the center of canvas and each one is located at distance of  $45^\circ$ . It works in the manner that as the circle at the center is rotating, it rotate the closest one out of 8 axes of rotation. Since all the elements of driving power are hidden, it looks as if the circles are pushing and dragging each other and since the angles of 8 outside circles are random, the irregular forms are made in spite of the motion by uniform rule.

As a result, the audience who appreciates the work sees the motion of such objects and since the sight is blocked by the canvas, he/she sees that 9 circles produce the form freely pushing and pulling each other. However, if he/she may see the inside, the free movement of the objects is that the driving power inside is transmitted to the outside through the invisible power, after all. The process of such movement is coincided to the generation process of today's popular culture. At a glance, it seems

that the public would form the popular culture freely but if look inside, the public are just dragged by the invisible power of hegemony [7]. Through the work 'Transmission', it expressed that the popular culture by the freedom is, indeed, the passive generation by ruling hegemony.

## References

1. Myung Hee Kim, "Contemplation on the Concept of Hegemony by Gramsci", *Communication Society and Culture*, Vol 7, pp. 145-167 (1999)
2. Sung Ro Lee, "The Ideological Hegemony of Ruling Class in Korea the Structure and Operating Principles", *Journal of Korean Social Trend and Perspective*, Vol.80, pp. 143-183 (2010)
3. Chan Hoon Lee, "Popular Culture and Hegemony", *Journal of New Korean Philosophical Association*, Vol 15, pp. 175-201 (1998)
4. J.Femia, Compiled by Lim Young-II, "Hegemony and consciousness in Gramsci's thinking", *National Hierarchy's Hegemony* (1985)
5. Pal Moo Yoo, "Gramsci's understanding of the Civil Society and the problem of the Korean accept", *The Association Of Korean Researchers On Industrial Society*, Vol 12, pp. 37-57 (1991)
6. Ji Ae Lee, "Study of the Expression through Gestalt Theory", *Graduate School of Ewha Womans University Dept. of Information Design* (2000)
7. Sung Kook Kim, "Antonio Gramsci's Hegemony Theory", *Social Critique*, Vol 5, pp.210-247 (1991)
8. Korean Unabridged Dictionary, <http://krdic.naver.com/detail.nhn?docid=9319100>