Arp research report (Stiftung Arp e.V.,Berlin)

"Introduction"

This research aims to analyze the creation of the shape of abstract sculpture by Hans Arp who opened up a new modeling world, to create an abstract sculpture education method based on this. I started with analyzing his sculpture production. From this analysis I will find a way to build an abstract sculpture education model for school education. In the educational model, two educational methods of beginner level and advanced level are going to be created. Among these studies, and my researches during my stay in Berlin and my journeys in Europe in 2017, I collected photographic an other material on Arp's sculpture.

1. "Arp Sculpture - Towards an Elementary Education Model"

In the study of elementary abstract sculpture education, I advanced research based on modeling research of Gyorgy Kepes's visual language study (Note 1) and Laszlo Moholy-Nagy, Wassily Kandinsky, Johannes Itten, Paul Klee. (Note 2). In this study, form is formed from modeling language and modeling grammar.

・Arp Sculpture Photo Archive

Initially, I made a sculpture photo archive of Arp's sculpture works from the viewpoint of visual language. For this reason, I took photographs at the Stiftung Arp e.V., Berlin.

Then, I ask what the modeling language of sculpture is. Regarding the modeling nature of sculpture, Auguste Rodin says it is light and shadow, but the modeling shapes emerging in sculpture by light and shadow are form (mass) and space, and in these conceptions it is possible to integrate the sculptural visual language.

In addition, Moholy-Nagy strongly insisted on the importance of tactile values in sculpture expression. "faktura" produces this tactile expression and can also be added to the sculptural visual language. In this research, I want to explain sculptural modeling language form (mass), space and "faktura" (surface treatment).

I performed multiple viewpoint photographs of the sculptures and of details of them. These photos come into the sculpture photo archive of Arp.

The Arp's sculpture photo archive collected in this research consists of about 9500 pictures taken at the Stiftung Arp e.V.,Berlin. These will be attached to the report as additional material.

・**Modeling grammar of Arp's sculpture**

In a next step I create a modeling grammar that produces sculpture from sculptural elements. For modeling grammar making, I proceed in reference to methods such as Kandinsky, Itten, Klee.

As a modeling grammar for paintings, Kandinsky considered the tense relationship (spannung) (Note 2), for Itten it is the comparison of large and small, light and dark etc. (Note 2), Klee thought of a growth process (Note 2). I would like to establish a modeling grammar in sculpture in "relationship to energy" which integrates them. Conversely, "relationship of energy" is a tense relationship, a contrast, and a growth process. The modeling language is constructed and represented by these modeling grammars. Arp's work is about grammar modeling, he raises the "contrast" in his own words. This has also be integrated into the "relationship of energy".

Using the visual language (modeling language and model grammar) as mentioned above, I would like to try to create an abstract sculpture teaching method at the beginner level.

2. "Modeling of Arp - Towards the creation of a senior educational model -" 3

In advanced level of abstract sculpture education method research, I analyze the production process of Arp in detail. Arp, while involved in various avant-garde art movements at the time, established his own modeling. Particularly deeply involved in Dada, he is performing expression activities in a wide area, and also writes many poems and essays. I investigated and analyzed this related materials of his works including his other artistic creations. For that purpose, I gathered data at the Stiftung Arp e.V.,Berlin, Zurich Art Museum, etc.

● **Arp's art / modeling theory**

I classified many of Arp's words about items whereof Arp wrote in regard to the purpose of this research, items classified as "art", "modeling". The reason for providing these two items is based on the idea that how to understand art is an important problem in form creating. Arp's words gathered in this research have enormous significance. For that reason, I will attach them as a separate document to the report. Below I will introduce some of them from "On My way" (Note 3):

・**ARP's theory of art**

Below I will introduce the words about Arp's artistic thought.
"Die Schönheit versank nicht unter den Trümmern der Jahrhunderte"
Als sich die Person, der Intellekt, die Philosophie aus der sagenumwobenen Tiefe der
mythischen Menschheit löste, als die Natur vom Menschen entdeckt wurde, als "die Erde,

das wogenreiche Meer, die feuchte Luft und der Titan Äther feierlich besungen wurden, weilte die Schönheit nackt unter den Menschen.

Jedes Jahrhundert wandelte sich die Schönheit. Die Schönheit versank nicht unter den Trümmern der Jahrhunderte, aber in der Maya, in den Trugbildern. Sie wurde so reich beschenkt mit den seltensten Gewändern, dass sie nicht mehr wusste, in welchen sich zu zeigen.

Welches ist das ursprüngliche Bild der Schönheit? Welches ist das Bild "der Schönheit,die gequollen vom Quell ursprünglichen Bilds"? Ist es die nackte Körperlichkeit der Griechen,ist es die Verkleidung, die Verschleierung, das Schauspiel der Renaissance, ist es die entkörperlichende Sehnsucht der Gotik, ist es der Würfel und die Kugel, ist es die Liebe und die Harmonie von der Empedokles sagt: "Da breiten sich nicht von einem Rücken zwei Arme aus noch sind da Füsse oder schnelle Knie oder zeugende Glieder, sondern es war ein Sphairos, von allen Seiten sich selber gleich." (Note 3)

("Beauty has not vanished beneath the ruins of the centuries. When the personality, the intellect, philosophy arose from the legendary depths of mythical humanity, when nature was discovered by man, when "the earth, the wavy sea, the moist air and the Titan Ether, "were solemnly sung, beauty dwelt naked among men.

In every century beauty changed. Beauty did not vanish beneath the ruins of the centuries, it vanished into the Maya into the mirage. So many rare and priceless garments had been showered upon her, she no longer knew in which to show herself.

Which is the original image of beauty? Which is the image "of beauty's gushing fountain, the picture that flows from the source…"? Is it the naked corporeality of the Greeks, is it the disguise, the veil, the pageant of the Renaissance, is it the disembodied yearning of Gothic, is it the cube and the sphere, is it the love and the harmony of which Empedocles said: "There were no two arms extending from a trunk, nor were there feet or swift knees or organs of procreation; there was a sphairos the same in all its aspects." (Note 3)

"L'art est un fruit"
L'art est un fruit qui pousse dans l'homme, comme un fruit sur une plante ou l'enfant dans le sein de sa mère. Mais, tandis que le fruit de la plante, le fruit de l'animal, le fruit dans le sein de sa mère, prend des formes autonomes et naturelles, l'art, le fruit spirituel de l'homme, fait preuve la plupart du temps d'une ressemblance ridicule avec l'aspect d'autre chose.Ce n'est qu'à notre époque la peinture et la sculpture se sont libèrèes de l'aspect d'une mandoline, d'un président en habit, d'une bataille, d'un paysage. J'aime la nature, mais non ses succédanés. L'art naturaliste, illusioniste est succédané de la nature. (Note 3)

("Art is a fruit"

Art is a fruit that grows in man, like a fruit on a plant, or a child in its mother's womb. But whereas the fruit of the plant, the fruit of the animal, the fruit in the mother's womb, assume autonomous and natural forms, art, the spiritual fruit of man, usually shows an absurd resemblance to the aspect of something else. Only in our own epoch have painting and sculpture been liberated from the aspect of a mandolin, a president in a Prince Albert, a battle a landscape, I love nature, but not its substitutes. Naturalist, illusionist art is a substitute for nature. (Note 3))

"Art concret"
nous ne voulons pas copier la nature. nous ne voulons pas reproduire, nous voulons produire. nous voulons produire comme une plante qui produit un fruit et ne pas reproduire. nous voulons produire directement et non par truchement.
comme il n'y a pas la moindre trace d'abstraction dans cet art nous le nommons:art concret. les oeuvres de l'art concret ne devraient plus être signées par leurs auteurs. ces peintures, ces sculptures, ces objets, devraient rester anonymes dans le grand atelier de la nature comme les nuages, les montagnes,les mers,les animaux,les hommes.oui! les hommes devraient rentrer dans la nature! les artistes devraient travailler en communauté comme les artistes du moyenâge. · · · · · ·
l'art concret veut transformer le monde.il veut rendre l'existence plus supportable. il veut sauver l'homme de la plus dangereuse:la vanité.il veut simplifier la vie de l'homme.il veut l'identier avec la folie la nature.la raison déracine l'homme et lui fait mener une existence tragique.l'art concret est un art élémentaire,naturel,sain,qui fait pousser dans la tête et le coeur les étoiles de la paix,de l'amour et de la poésie.où entre l'art concret,sort la mélancolie,traînant ses valises grises remplies de soupirs noirs.
(Note 3)

("Concrete art"
We do not want to copy nature. We do not want to reproduce, we want to produce. We want to produce directly and not through interpretation.
As there is not the slightest trace of abstraction in this art, we call it: concrete art.
The works of concrete art should not be signed by their creators. These paintings, these sculptures, these objects, should remain anonymous in
The great studio of nature like clouds, mountains, seas, animals, men,
Should return to nature, artists should work in community like the artists of the middle ages. · · · · · · · ·
Concrete art aims to transform the world. It aims to make existence more bearable. It aims to save man from the most dangerous folly: vanity. It aims to simplify man's life. It aims to

identify him with nature. Reason uproots man and causes him to lead a tragic existence. Concrete art is an elemental, natural, healthy art, which causes the stars of peace, love and Poetry to grow in the head and the heart. Where concrete art enters, melancholy departs, dragging with it its gray suitcases full of black sighs. (Note 3))

Important point of Arup's theory of art Art and Nature
Since ancient times art has made nature a norm of production. Nature was the subject of respect for ancient times. Nature was the subject of expression for modern times, art has learned and absorbed many things from nature. This may be said that nature is the master and art is the relationship of the followers. Regarding such a relationship between nature and art, Arp considers art to be in unity with nature and art and being an equivalent to nature. That is a different idea than Mondrian's artistic thinking, his mutually respected friend. He says this as follows.
"Je me souviens qu'en nature discutant avec Mondrian, il opposa l'art à la nature en disant que l'art est artificiel et la nature naturelle. Je ne partage pas son opinion. Je pense que la nature n'est pas en opposition avec l'art. L'art est d'origine naturelle et se sublime et se spiritualise avec la sublimation de l'homme." (Note 3)
"I remember a discussion with Mondrian in which he distinguished between art and nature, saying that art is artificial and nature natural. I do not share his opinion. I believe that nature is not in opposition to art. Art is natural origin and is sublimated and spiritualized through the sublimation of man." (Note 3)

Here, there is a unique artistic view of Arp. From here, he named his art as concrete art (konkrete Kunst) and develops his own theory of art.

Concrete art
Abstract art has a strong meaning that it was extracted from nature. In other words, abstract art becomes a secondary entity of nature, but concrete art is the same primary as natural. As art is the same as nature, it is anonymous as it is not naturally named, and Arp says it should not sign. In fact, his sculpture has no signature. It seems that the idea of Dada has deeply influenced the basis of the idea of concrete art. Dada is an art movement started in Zurich, but in the midst there was also Arp. He himself talks about Dada as follows.
"A Zurich,en 1915,désintéressés des abattoirs de la guerre mondiale nous nous adonnions aux Beaux Arts.Tandis que grondait dans le lointain le tonnerre des batteries,nous collions,nous récitions,nous versifions,nous chantions de toute notre âme.Nous cherchions un art élémentaire qui devait,pensons-nous,sauver les hommes de la folie furieuse de ces

temps.Nous aspirions à un ordre nouveau qui put rétablir l'équilibre entre le ciel et l'enfer.・・・・" (Note 3)

"In Zurich in 1915, losing interest in the slaughterhouses of the world war, we turned to the Fine Arts. While the thunder of the batteries rumbled in the distance, we pasted, we recited, we versified, we sang with all our soul. We searched for an elementary art that would, we thought, save making from the furious folly of these times. We aspired to a new order that might restore the balance between heaven and hell." (Note 3)

In the modern era, the art of natural imitation that depends on the order of the outside world gradually collapses. In this era, some asked for that order in color, others asked for this order in form. Dada wanted a new order of art and insisted on the spread of not only rational world but also irrational world in this world. It can be said that Arp asked for an order in chance by throwing himself in irrationality. Furthermore, Arp thought the role of the artist is that changing coincidence is inevitable. And so Arp thought that concrete art will be related to infinity of the universe beyond nature.

・ **Arp's modeling theory**

Below, I will introduce words on Arp's modeling thinking.

"Der Keim einer neuen Plastik"

Ein kleines Bruchstück einer meiner Plastiken, n der mich eine Rundung, ein Gegensatz reizt, ist oft der Keim einer neuen Plastik. Ich verstärke die Rundung oder den Gegensatz. Neue Formen sind dadurch bedingt. Unter den neuen Formen wachsen zwei besonders stark. Ich lasse diese zwei weiter wachen, bis die ursprünglichen Formen nebensächlich und beinahe ausdruckslos geworden sind. Schliesslich unterdrücke ich eine der nebensächlichen ausdruckslosen, damit die übrigen wieder sichtbarer werden. Die Arbeit an einer Plastik dauert oft Monate, Jahre. Ich arbeite an ihr, bis hinreichend von meinem Leben in diesen Körper geflossen ist. Jeder dieser Körper hat einen geistigen Inhalt, aber erst nach vollendeter Arbeit deute und benenne ich ihn. So erhielten meine Arbeiten Namen wie: "Schwarzer Wolkenpfeil und weisse Punkte," "Pflanzenwappen," "Arabische Acht," "Pflanzenpendel in Ruhe," "Blätter nach dem Gesetz des Zufalls geordnet."(Note 3)

("The germ of a new plastic work"

A small fragment of one of my plastic works presenting a curve or a contrast that moves me, is often the germ of a new work. I intensify the curve or the contrast, and this determines new forms. Among the new forms two grow with special intensity. I let these two continue to grow until the original forms have become secondary and almost expressionless. Finally I suppress one of the secondary, expressionless forms so that the others become more apparent. One work often requires months, years. I work until enough of my life has flowed into its body. Each of these bodies has a spiritual content, but only on completion of the work

do I interpret this content and give it a name. In this way my works have received names such as: "Black cloud-arrow and white points," "Plant escutcheon," "Plant pendulum at rest," "Leaves arranged according to the law of chance." (Note 3))

"Dadaland"

En 1915, Sophie Taeuber et moi, nous avons réalisé les premières oeuvres tirées des formes les plus simples en peinture, en broderie et en papiers collés. Ce sont probablement les toutes premiéres manifestations de cet art. Ces tableaux sont des Réalités en soi,sans significations ni intention cérébrale. Nous rejetions tout ce qui était copie ou description pour laisser l'Elémentaire et le Spontané réagir en pleine liberté. Comme la disposition des plans, les proportions de ces plans et leurs couleurs ne semblaient dépendre que du hasard, je déclarais que ces oeuvres étaient ordonnées "selon la loi du hasard" tel que dans l'ordre de la nature, le hasard n'étant pour moi qu'une partie restreinte d'une raison d'être insaisissable, d'un ordre inaccessible dans leur ensemble. (Note 3)

("Dadaland"

In 1915 Sophie Taeuber and I made in painting, embroidery and collage the first works derived from the simplest forms. These are probably the very first manifestations of this art. These pictures are Realities in themselves, without meaning or cerebral intention. We rejected everything that was copy or description, and allowed the Elementary and Spontaneous to react in full freedom. Since the disposition of planes, and the proportions and colors of these planes seemed to depend purely on chance, I declared that these works, like nature, were ordered "according to the law of chance" chance being for me merely a limited part of an unfathomable raison d'être, of an order inaccessible in its totality. (Note 3))

·Important point of Arp's modeling theory

 Form idea process

Arp says it is the form and contrast of the curve which is the basis of his own modeling. In the process of production, these will be amplified and the form will be determined. And its form is the birth of a form as an existing equivalent to a natural form, completely new, completely different from the natural imitative form of naturalism. What is needed in this study is the modeling theory in his sculpture, but unfortunately, we know only from film or photographs his production process (Note 4). In the scenes his sculpture production has been photographed, it is not possible to see the place which produces the most important form. You only see polishing the gypsum and finishing the ork. It is difficult to find out what is written about the idea of the sculpture form even if examining the remaining essays to the greatest extent. However, it should be noticed that there is a deep relationship between his graphic work and his sculptures. The form of the graphic work of Arp and the appearance of

the sculpture are similar. From here it can be said his sculptures created work is based on the form of his graphic. Therefore, it can be said that elucidating the production process of his graphic process leads to the elucidation of the idea of the sculpture form.

"Chance" and play

In the above-mentioned "Dadaland", Arp emphasizes that, as a modeling approach, the artist does not imitate or describe nature, but rather creates it by "according to the law of chance". Behind this way of organization there is a philosophy that seeks the world of Dada's irrational thinking. Where is the place to meet this coincidence? I think that as a place of "play". In the film showing his production process, it is reflected that he uses a pair of scissors to freely cut out a shape or to make a shape while moving a pencil freely. It seems to me that he looks for playing with shape and production.

He creates a new form by playing with form, and this play leads to chance. In the above-mentioned "Dadaland", Arp writes that the plan form, arrangement, color, etc. were ordered according to the law of chance. It seems reasonable to interpret these as being created and planed by their own sensibilities which entrusted oneself by chance, rather than were ordered according to the law of chance. In fact, in the film, Arp has decided the arrangement of shapes by trial and error. As a method of Arp's form creation found from these materials, there is play and chance, and it can be said that there is play as a basic concept of chance.

I would like to try to create an advanced level of abstract sculpture education method by finding out a form idea developed by Arp based on the above mentioned theory of art and modeling theory.

3. "Arp-based abstract sculpture education method"

This research is still in its infancy. Arp's sculpture photograph archive has just been established, it will take some time to proceed and to classify it. Arp's art and modeling thesis is still collected only from these materials, it will be analyzed from now and will proceed to research on his form creation process.

Under such circumstances, it is too early to talk about abstract sculpture education law. However, abstract sculpture education law is the final goal of this research. I would like to talk about the teaching method, Suggestion obtained in Arp's data collection process. This teaching method will change future research, and it will become a more completed educational method.

I'd like to create a method of abstract sculpture education based on Arp's sculpture photograph archive and the process of form creation derived from Arp's concept of art and modeling. First of all, I want to think about the educational method at the beginner level.

Here, I aim to experience the work of Arp. I want to advance education by Arp's sculpture photos at the archive. The key word in that education is morphological experience (erleben). In other words, while experiencing the modeling of Arp, student learns Arp's modeling language (form, space and "faktura"), modeling grammar (relationship of energy).

● Specific educational procedures

①Look at Arp's sculpture photo archive, and select one sculpture of which you are most interested in.

②Faithfully reproduce the work using clay.

③After the work is finished, tell the story what you felt about Arp's works, modeling languages, modeling grammar.

④ Have them tell you what they felt about the work of Arp.

①~②are intended to experience the work of Arp. ③~④ have the purpose of strengthening experiences by logically evaluating the experiences. By①~④ is cultivated the fundamental power of abstract sculpture production.

Next, I want to think about advanced level education methods.

In this case, according to Arp's idea, form creation is acquired. The key word in this education is "chance and play". I would like to create an abstract sculptural education model based on the results of research on Arp's production process.

●Specific educational procedures

① Using scissors, cut white paper freely and cut form without thinking. Do not use a straight line, cut out with only curve. Cut out forms that are not understood, rather than specific form such as people and animal and plant.

② Arrange the cut out form on black paper and pick out some beautiful and attractive form.

③ Based on these forms of out cut papers, you create a three-dimensional form(sculpture) . Choose one of these graphic forms, or combine several forms to create one form. Make a three-dimensional form with clay. Advance while paying attention to the contrast that the mass is large, when making it three-dimensional. Surface treatment is done freely.

④ Enlarging the form of these clays, and you produce sculptural works with plaster in direct attachment.

①~② aim for discovery of form unconsciously selected using Arp's form creation method.

③~④ have the purpose of strengthening the aesthetic sensibility by logically assembling its form. By ①~④ is cultivated the creative power of abstract sculpture production.

"Final"

While collecting the data of this research, I was strongly drawn to Arp's way of thinking. For a Japanese like me who does not use the alphabet, it is very difficult to read European languages. But it was also accompanied by joy of discovery. Every time I proceeded with these tasks, I was fascinated by Arp's way of thinking. Although there are very few studies of Arp in Japan, this research will become to re-recognize the existence of Arp. Because, as Arp says, "concrete art " is an art that opens the future. I believe that the art of Arp surmounts chaotic current and leads to future.

In addition, the abstract sculpture education method will be derived from the progress of this research and it will be opened a new way for the education of sculpture, and it will produce activation of abstract expression teaching. Activation of abstract expression teaching will strengthen the creative aspect in art education and lead to great expansion of the possibilities of art education. In abstract sculpture education, it is possible to foster logical thinking abilities and image abilities at the same time, in addition to conventional emotional education of art education, I think that this may fosters rich creativity in art education.

1 Gyorgy Kepes : Language of vision, Chicago 1969

2 Laszlo Moholy-Nagy : Von Material zu Arhitektur, München 1929

Wassily Kandinsky : Punkt und Linie zur Fläche.Beitrag zur Analyse der malerischen Elemente,München 1926

Johannes Itten : Mein Vorkurs am Bauhaus,Gestaltungs-und Formenlehre, Ravensburg 1963

Paul Klee : Pädagogisches Skizzenbuch,München 1925

3 Hans Arp : On My Way,New York 1948

4 Michael Mrakitsch : Hans Arp.Weißer Werktag,Musik: Wladimir Vogel, Dauer:35Minuten,Basel 1965