

Hong Kong Shue Yan University Talk

March 16th, 2016

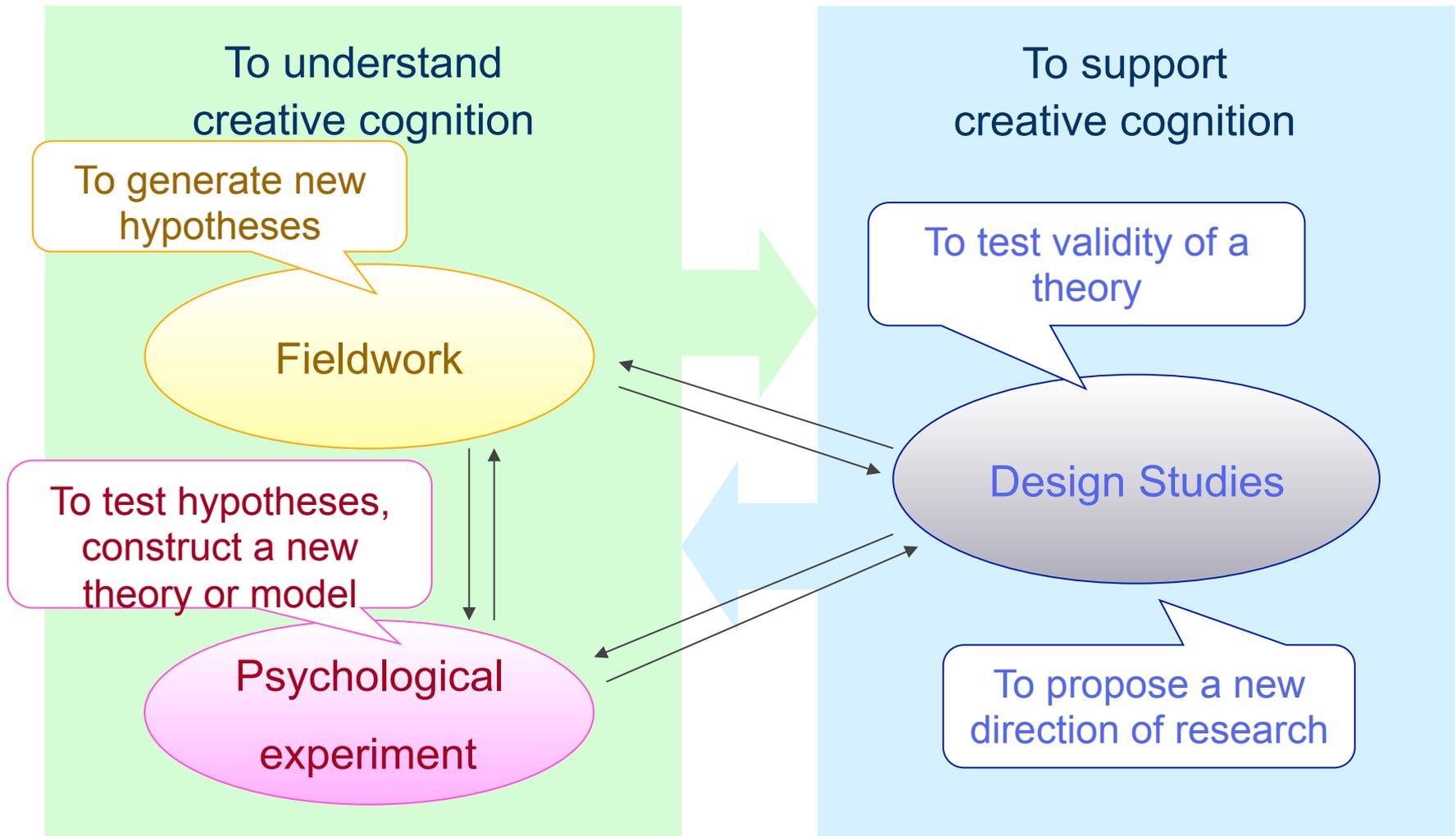
The role of inspiration in artistic creation

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Takeshi Okada

(University of Tokyo)

Our framework for studying creativity



Our lab's research in the past 10 years

■ Research on artistic creativity

- A coordinated set of field studies (**Creativity and Inspiration Processes of Artists, CIPA**) that follow the creative processes of 30 artists and 50 dancers. Some over the course of years. (Interviews, field observations, and field experiments)
 - e.g., Interviews with 30 artists include 13 male & 4 female elder artists, 8 male & 5 female young artists. 8 - 12 hours per person.
- **Psychological experiments** with undergraduates and dancers.
- **Design-based research** on artists', dancers', and actors' workshops and undergraduate courses.
Design-based research on exhibition development and visitor studies at two museums.

Today, as an example of our studies, I will talk about:

- Experimental studies on artistic inspiration
- Interview study with contemporary artists
- A case analysis of an artist's process of creation

- **Inspiration** has a critical role in artistic activities.
 - Artists are often inspired by stimuli in their environment to create a new artistic expression.

- Inspiration is the phenomenon in which people become motivated, experience new emotions, entertain new images and ideas for a new activity when they encounter someone or something outside of them.

How do examples inspire innovation?

The effect of imitating artwork on beginners' creative drawing processes

Takeshi Okada

Collaborator: Kentaro Ishibashi

Ishibashi, K. & Okada, T. (2006). Exploring the effect of copying incomprehensible exemplars on creative drawings. Proceedings of the Twenty-eighth Annual Meeting of the Cognitive Science Society, 1545-1550.

Okada, T. & Ishibashi, K. (under review).

- Goal: To investigate the role of inspiration in the artistic creative process. We pay special attention to imitation (copying) as a way to be inspired.

- It has been suggested that viewing or imitating an example has a negative effect on creativity (e.g., Design fixation by Jansson & Smith, 1991; Lowenfeld, 1957).

- However, many famous artists created their artwork through imitation.

- So, active imitation of other's artwork could stimulate artistic creation.
- But, no empirical study has been done on this issue.

We assume that imitation of others' artwork affects people's artistic creation processes as follows:

- When people imitate other's artwork, they try to interpret it using their own framework.
- When they imitate artwork that does not match their framework, their framework is challenged. Therefore, the power of the framework would be weakened (**constraint relaxation**).
- They try to understand the artist's intention by comparing it with their own. Such a process would force them to reconsider their own framework and contribute to the construction of a new framework (**new perspective**).

Art-lay people's beliefs about painting

- Painting is to depict what they see.
 - They evaluate realistic paintings as good pictures.
 - (Cupchik & Gebotys, 1988; O'Hare, 1976)
 - They often draw realistic sketches.
 - Even if beginning students are asked to draw their own original drawings, they drew only in the realistic style. (Ishibashi, 2003)

⇒ This tendency constrains their ways of drawing.

- Therefore, we assumed that people have a “realistic constraint” as the default value.



Outline of this study

- Exp. 1 To investigate the effect of imitation of artwork on artistic creation.
 - Is artwork produced after imitation more creative?
 - If so, is it caused by the process that we assumed?

- Exp. 2 & 3 To investigate the factors of interaction that affects artistic creation.
 - What kind of artwork has the creative effect when imitated?
 - What kind of interactions including imitation and others have a creative effect?

Exp.1

Does imitation affect artistic creation?

: analysis of product

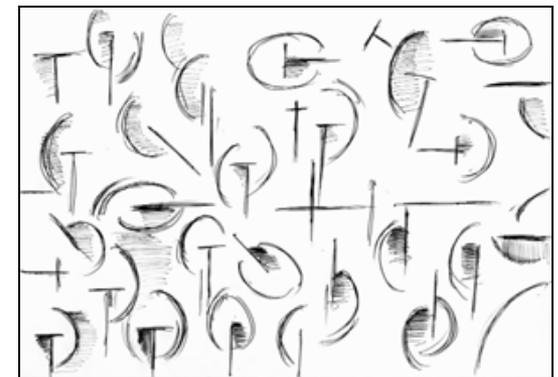
Outline of Exp. 1 (Okada & Ishibashi, under review)

■ Participants

- 30 undergraduates (non art majors)

■ Task

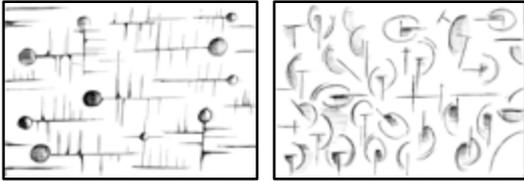
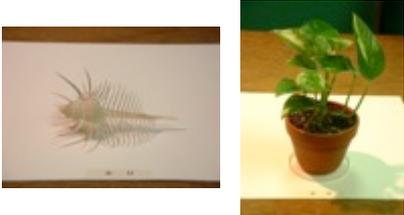
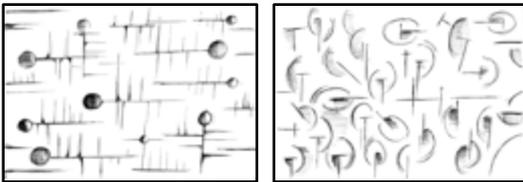
- We asked them to draw their original drawings using objects such as a pine cone and a pepper.
-
- We asked some of the participants to **copy** an unfamiliar abstract drawing.



Experimental design of Exp.1

■ Condition (between) x period (within)

□ order was counter-balanced

condition	Pre (1st day)	Intervention (2 nd day)	Post (3 rd day)
Copy	original drawing 	2 Copies 	original drawing 
control	original drawing 	2 original drawings 	original drawing 
Re-production	original drawing 	2 Copies 	model's style drawing 

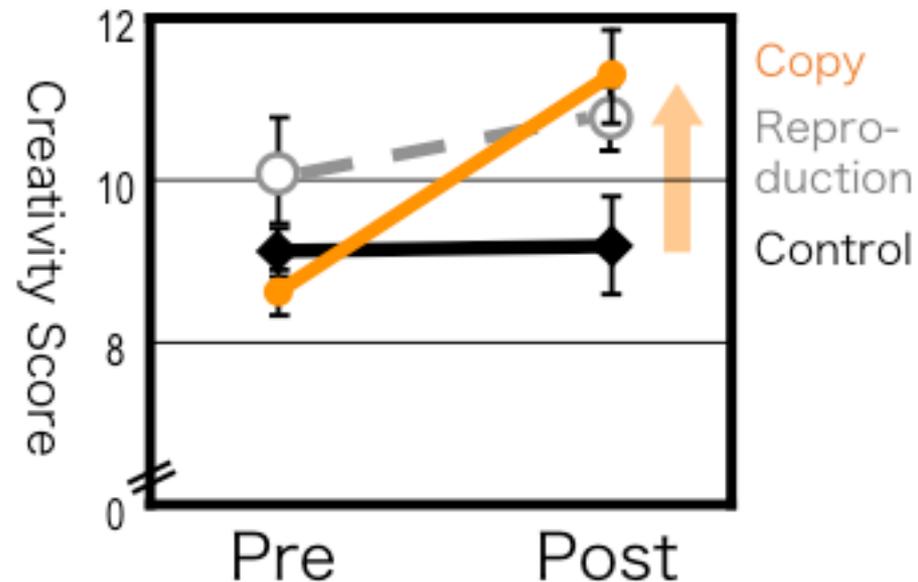
Result of performance

■ Experts' rating

- Two artists independently evaluated drawings.



Only copy group improved creativity scores.



■ Similarity rating between model (abstract drawing) and students' post drawings (7 point scale)

- Copy group $M = 3.3$ < Reproduction group $M = 5.9$

⇒ Through copying, they learned to draw creative pictures different from the model drawing.

II. How does imitation improve creativity?

~ Process analyses ~

①relaxation of realistic constraint

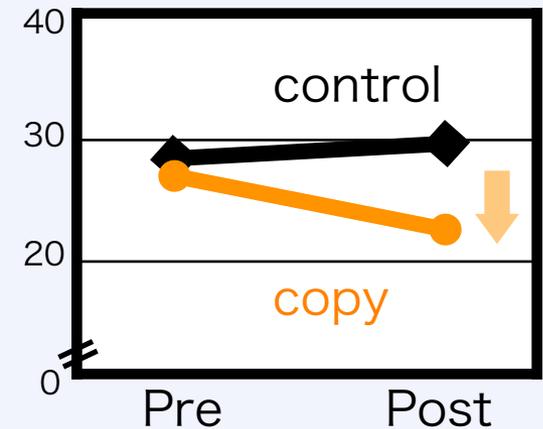
Realistic constraint

(questionnaire)

(e.g. : I intended to depict the exact shape.)



Such intention decreased.



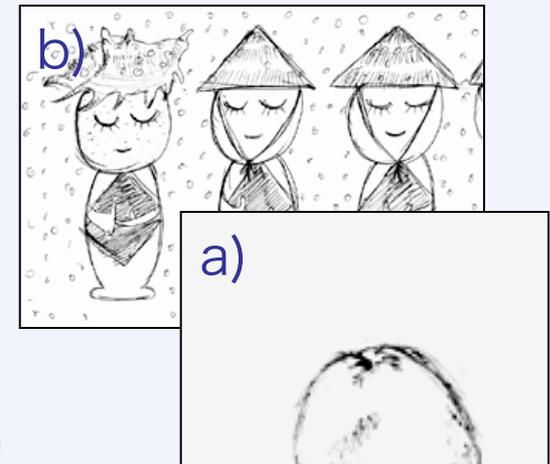
Realistic drawings

a) realistic sketches

b) representational pictures

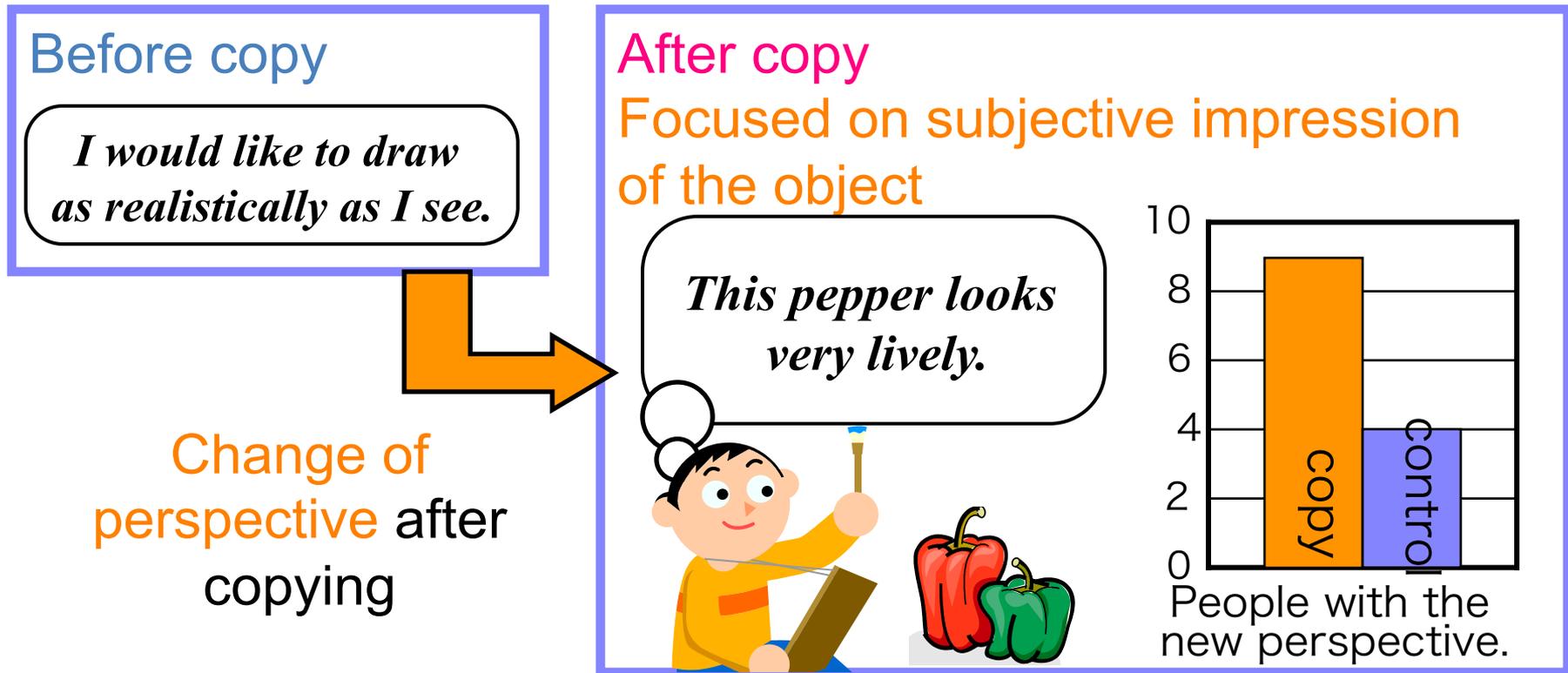


Such drawings decreased.



⇒Realistic tendency decreased after copying.

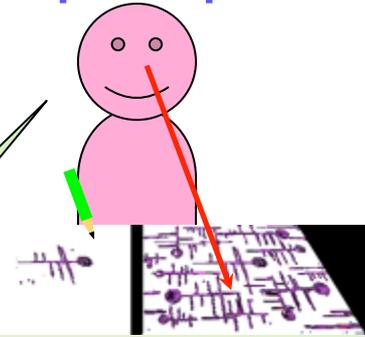
② new perspective (analysis of post interview)



⇒ A new perspective focusing on the impression of the object is formed. However, the content of the impression itself varies depending on each individual.

Copying facilitates the formation of a new perspective.

- Protocol during copying ($n=10$)



Technique level of awareness. $n=10$

e.g., *“The thin shade lines are drawn in equal distance.”* *“This is very dark.”*

Perspective level of awareness. $n=10$

a) Formation of a new perspective

Inferring the artist’s perspective. *“I think he focused on the spiky parts.”*

Subjective interpretation. *“I feel the shell is abandoned and left alone.”*

b) Interpretation from realistic perspective *“This is not a leaf.”*

⇒ Through copying, a new perspective was formed.

Results so far

■ Exp. 1

- Imitation can facilitate artistic creativity.
- Constraint relaxation and perspective formation are involved.

⇒ Deep encounters with something different from their own framework seems to make students aware of the differences between their own perspective and others', and triggers a search for new expression.

III. Exp 2 & 3

Factors underlying the effect of imitation

Exp. 2 Procedure

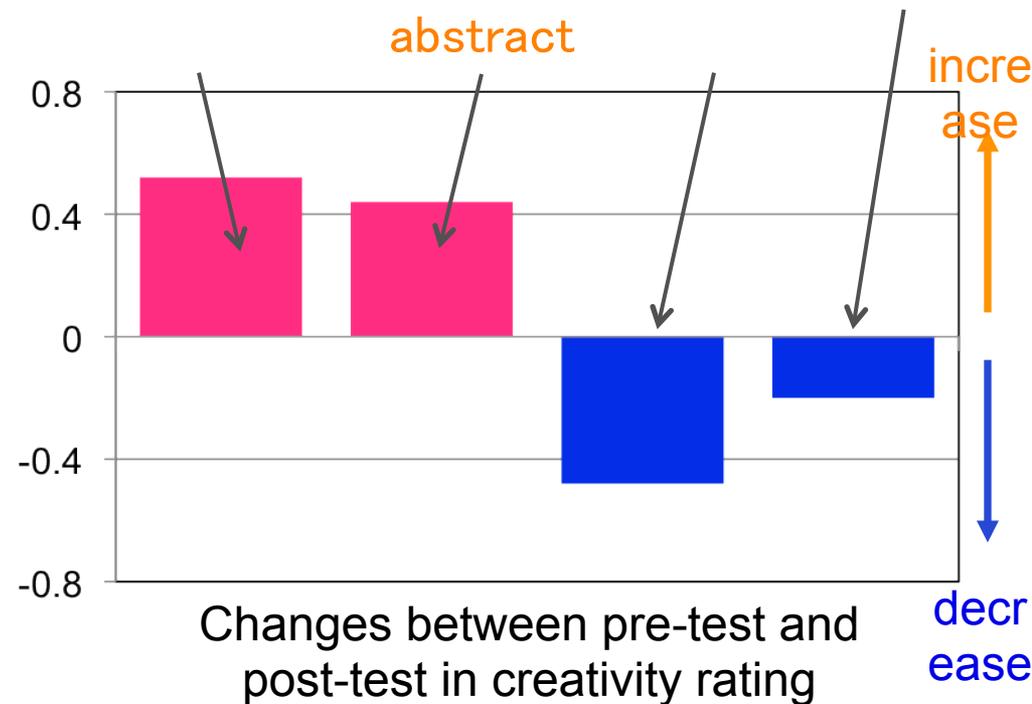
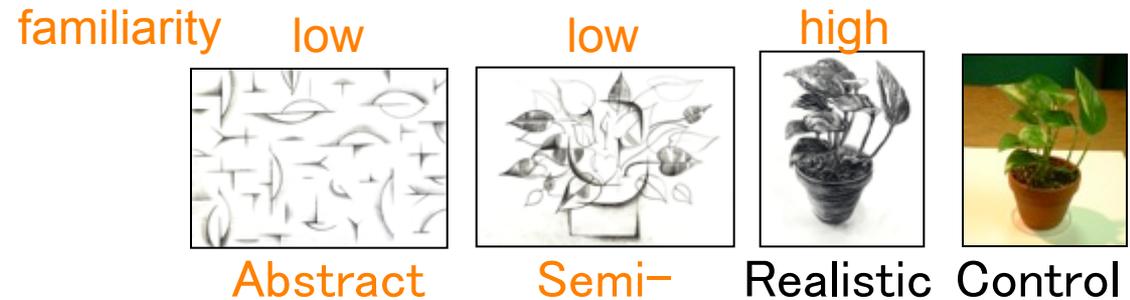
- Familiarity of model × period (Pre, Post)

	Pre-test (day1)	Intervention (day2)	Post-test (day3)
abstract	Draw one's original style of drawings with natural materials as a motif 	 copy	Draw one's original style of drawings with natural materials as a motif 
Semi-abstract		 copy	
realistic		 copy	
control		 Own drawing	

Exp. 2 Familiarity of model

■ Creativity of drawings

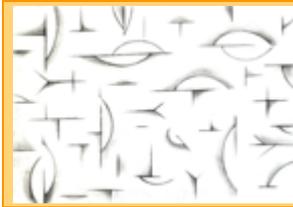
- Low familiarity group increased creativity.
- High familiarity group did not increase creativity.
 - (contrast analysis)



⇒ Copying unfamiliar artwork improved creativity.

Exp. 3 procedure

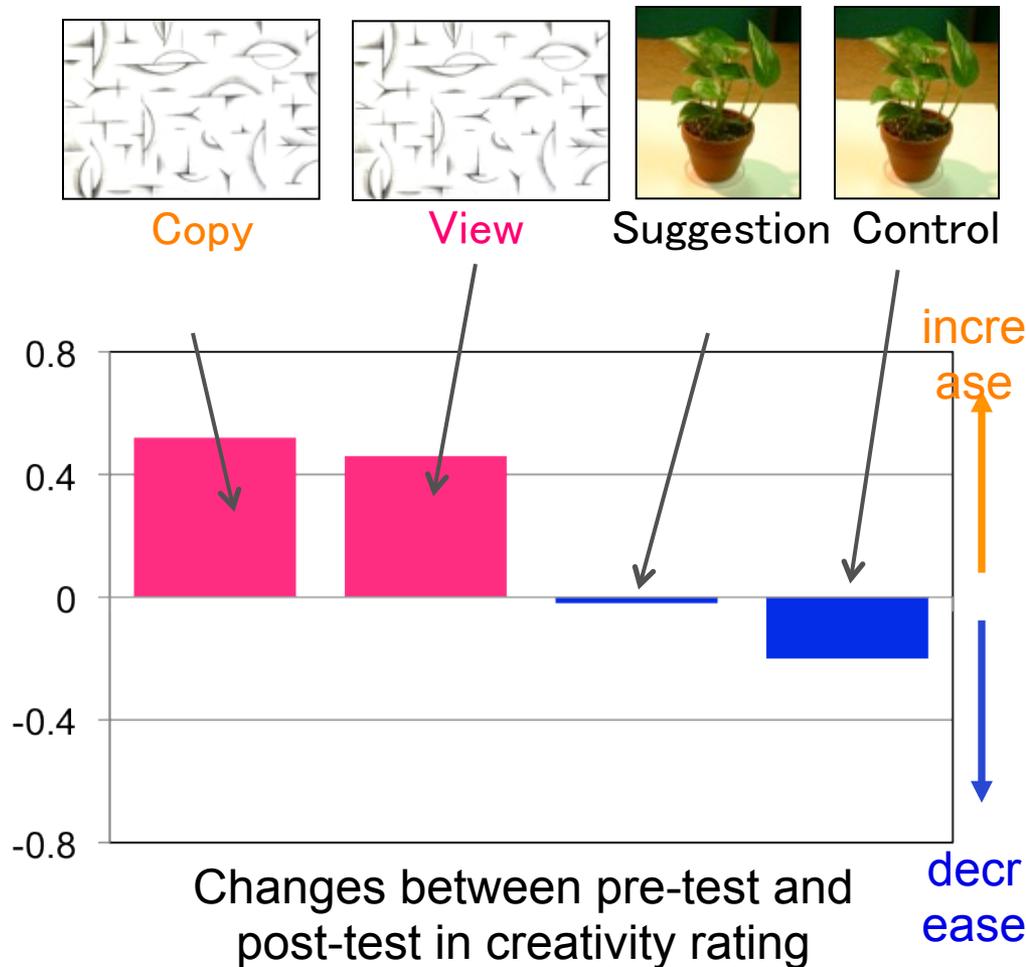
- Way to interact with model x period

	Pre-test (day1)	Intervention (day2)	Post-test (day3)
copy	Draw one's original style of drawings with natural materials as a motif 		Draw one's original style of drawings with natural materials as a motif 
view			
suggestion		 Own drawing + suggestion	
control		 Own drawing	

Exp. 3 Effect of the way to interact

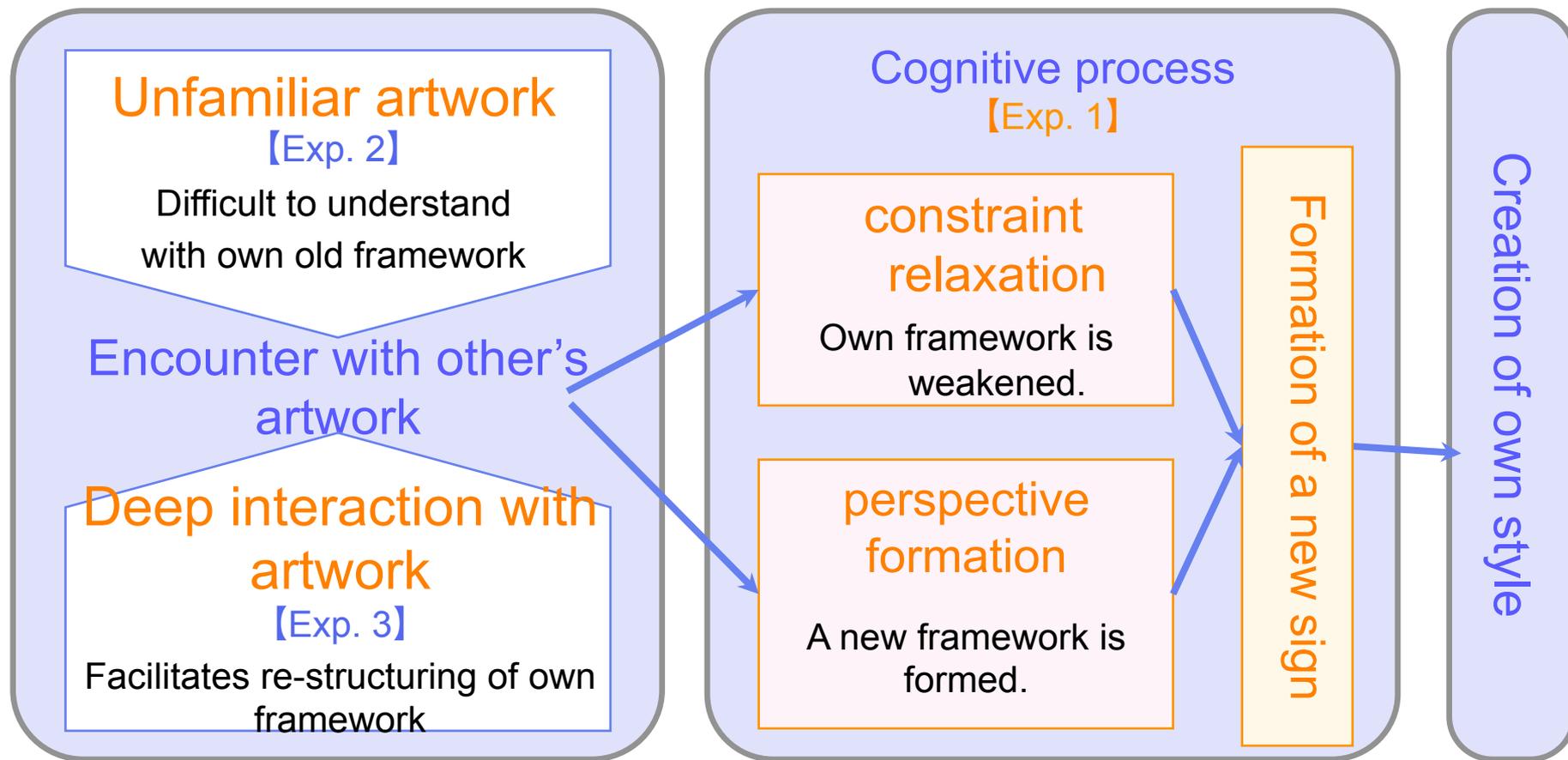
■ Creativity of drawings

- Viewing model long enough had the same effect as copying.
- Verbal suggestion had no effect.
 - (contrast analysis)



⇒ **Deep interaction with other's artwork** improved creativity.

Summary



Deep encounters with *unfamiliar* artwork through *imitation* encourages students to weaken old frameworks and generate a new perspective. This process enables them to search for new configurations and leads to new expressions.

How is an expert artist inspired by
other's work?

Study 2

Artistic creation across a long time span

Takeshi Okada

Collaborator: Sawako Yokochi

Yokochi, S. & Okada, T. (2006). Artists' long-term process for making art. Proceedings of the Twenty-eighth Annual Meeting of the Cognitive Science Society, 2635.

Yokochi, S., & Okada, T. (2007). Creative expertise of contemporary artists. Cognitive Studies, 14, 437-454. (Japanese Cognitive Science Society)

Goals

1. To investigate the differences in creative process and creative vision between young and expert artists.
2. To study the process of creative expertise across a longer time span.

Study 1-1

- Participants : Four contemporary artists with different expertise level
 - Artists who showed their work at Nagoya city art festival exhibition “try to create a human being”
 - 20’s female (7 years of experience)
 - 30’s male (13 years)
 - 40’s male (20 years)
 - 50’s male (36 years)
- Semi-structured interviews (Portfolio interview) : Twice per person. In total about seven hours.
- Period : July, 2004 -March, 2005

Study 1-2

- Participants: Nine contemporary artists
(male, mean age 44.2 yrs old)
 - More than ten years of being artists (average 20.4 years)
 - Exhibited not only in Japan but also in other countries
- Semi-structured interviews (Portfolio interview) : Once or twice per person. In total about eight hours.
- Period : July, 2004 -May, 2005

< Portfolio interview >

We asked each artist to show a portfolio of his/her past works and talk about the time, techniques, materials, and concepts of each artwork.

What happens in the process of creative expertise?

- They created artwork in several series. We divided their process into three stages based on their artwork series.
 - 1. Before the first change
 - 2. After the first change
 - 3. After the second change
- We analyzed the process of creation and their thoughts in each stage.

Study 1-1 Result

Artwork series		Before 1 st change				After 1 st change				After 2 nd change		
		20' s	30' s	40' s	50' s	20' s	30' s	40' s	50' s	30' s	40' s	50' s
external	Art making using existing values	○	○	○	○							
	Art making with comparing with others		○		○							
internal	Reconsideration of self					○	○	○	○			
	Art making with suitable techniques for self					○	○	○	○	○		
	Art making based on awareness of an issue					○	○	○		○	○	○
Vision based	Art making based on creative vision										○	○
	Art making with considering relationship to others									○	○	○
	Art making without being captured by self consciousness										○	
confidence	Art making with vague interests	○	○	○		○	○			○		
	Art making with conviction										○	○
awareness	awareness of impasses		○	○	○		○	○	○			
	explanation					○	○	○			○	

Before 1st change (early 20's)

Artwork series		Before 1 st change				After
participants		20' s	30' s	40' s	50' s	20' s
external	Art making using existing values	○	○	○	○	
	Art making with comparing with others		○		○	
internal	Reconsideration of self					○
	Art making with suitable techniques for self					○
	Art making based on awareness of an issue					○
Vision based	Art making based on creative vision					
	Art making with considering relationship to others					
	Art making without being captured by self consciousness					
confidence	Art making with vague interests	○	○	○		○
	Art making with conviction					
awareness	awareness of impasses		○	○	○	
	explanation					○

When I was making artwork of representationalism, I followed the way that I was taught and tried to be original. (male, 40' s)

When I was a student, I was trying to make an original work by trying to be different from others. (male, 30' s)

My work reflected my fragmented interests. (female, 20' s)

My work looked similar to someone' s. (male, 50' s)

After 1st change (Late 20's)

		After 1 st change			After 2 nd change		
		30's	40's	50's	30's	40's	50's
		s	s	s	s	s	s
external	Art making values						
	Art making with others						
internal	Reconsideration	○	○	○			
	Art making techniques	○	○	○	○		
	Art making awareness of	○	○		●	●	●
Vision based	Art making creative vision					●	●
	Art making relationship				●	●	●
	Art making captured consciousness					●	
confidence	Art making interests	○			○		
	Art making with conviction					●	●
awareness	awareness of	○	○	○			
	explanation	○	○			○	

I started to reflect upon myself. I tried to discover my style, instead of using something taught. (male, 20's)

Though I used iron material as a student, I felt much more natural when I made a work by knitting. (female, 20's)

I felt that I cannot commit myself to social issues. So, I started to focus on the origin of myself and my body. (male, 50's)

I felt that my sculpture era was over. I was not able to create something very interesting. (male, 50's)

After 2nd change (late 30's)

Artwork series		Before			After 2 nd change		
participant		20's	30's	40's	30's	40's	50's
external	Art making using existing values	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	Art making with comparing with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
internal	Reconsideration of self				<input type="checkbox"/>		
	Art making with suitable techniques for self				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Vision based	Art making based on awareness of an issue				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Art making based on creative vision					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Art making with considering relationship to others				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
confidence	Art making without being captured by self consciousness					<input checked="" type="checkbox"/>	
	Art making with vague interests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
awareness	Art making with conviction					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	awareness of impasses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
explanation							<input type="checkbox"/>

I feel that everything comes from one root, my base,,, (male, 40's)

I realized that thinking about myself is related to thinking about others and society. (male, 30's)

I thought about how I can abandon myself. Without doing so, real creation would not start. (male, 40's)

I am confident with my current work. (male, 50's)

Study 1-2 Result

(%)

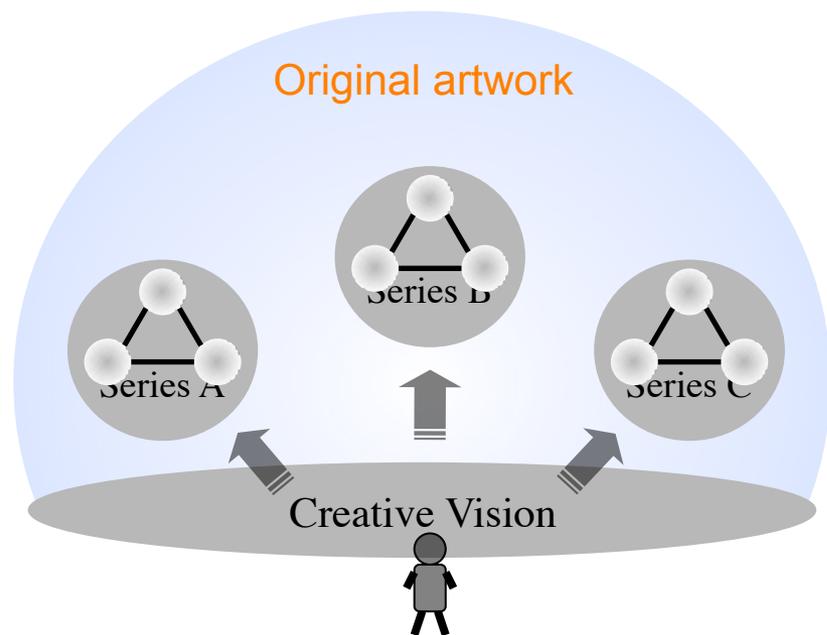
category		First phase	Second phase	Third phase
external	Art making using existing values	100	29	0
	Art making with comparing with others	43	0	0
internal	Reconsideration of self	14	86	0
	Art making with suitable techniques for self	14	71	29
	Art making based on awareness of an issue	29	71	86
Vision based	Art making based on creative vision	0	14	100
	Art making with considering relationship to others	0	14	100
	Art making without being captured by self consciousness	0	0	53
confidence	Art making with vague interests	100	57	0
	Art making with conviction	0	14	100
awareness	Awareness of impasses	86	86	0
	explanation	14	29	57

Creative vision

- Creative vision (a somewhat abstract concept) underlies an artist's creative activities.
- It works as a framework to guide an artist's creation for a fairly long time.
- It becomes clarified in the process of artistic expertise.
- Even after being clarified, it changes in the process of artistic activities.

Roles of creative vision

- Guides an artist to generate his/her original concepts.
- Motivates him/her to continue artistic creation.



Creative vision and artwork series

Study 3

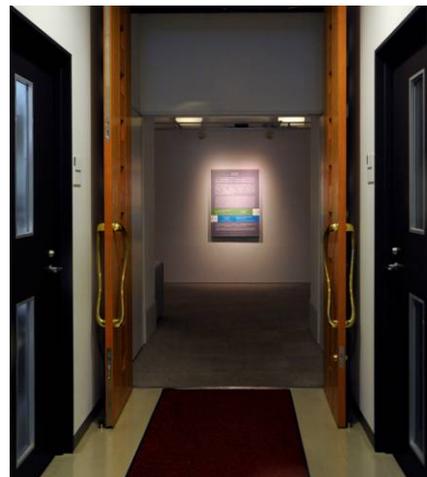
How is an expert artist inspired by other's work?

Takeshi Okada

Collaborators: Kikuko Takagi, Akihiro
Kawase, Sawako Yokochi

Takagi, K. , Kawase, A., Yokochi, S, Okada, T. (2015). Formation of an art concept: A case study using quantitative analysis of a contemporary artist's interview data. Proceedings. The 37th Annual Meeting of the Cognitive Science Society, pp.2332-2337. Pasadena, U.S.A.

Komaba Museum (University of Tokyo) Special exhibition “behind the seen” 2008



When a contemporary artist, Takeshi Shinohara, told me that wants to see Marcel Duchamp's 'Large glass' in Komaba Museum, we asked him to create artwork in collaboration with the Large glass. (Komaba Museum has one of the official replicas of the Large glass.)



■ Participant:

Contemporary artist,

Mr. **Takeshi Shinohara**



(in his fifties when participating in this field study)

- He studied art in Japan and in the USA, and has actively exhibited his artworks domestically and internationally.
- He has more than 30 years of experiences as a professional artist. He has created various kinds of artworks, including two-dimensional, three-dimensional, and video works.

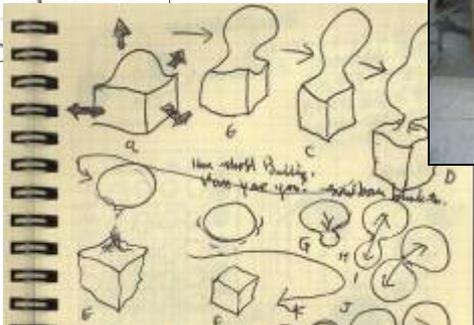
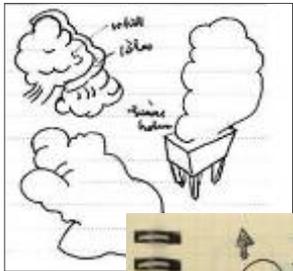
Using idea sketches and photographs, he searched various ideas about his new artwork connecting his creative vision and features of the Large glass. The number of drawings and photographs reached more than 100 in a few weeks.



© 2008,
Takeshi Shinohara

He generated the art concept, 'white noise' and created various types of artworks.

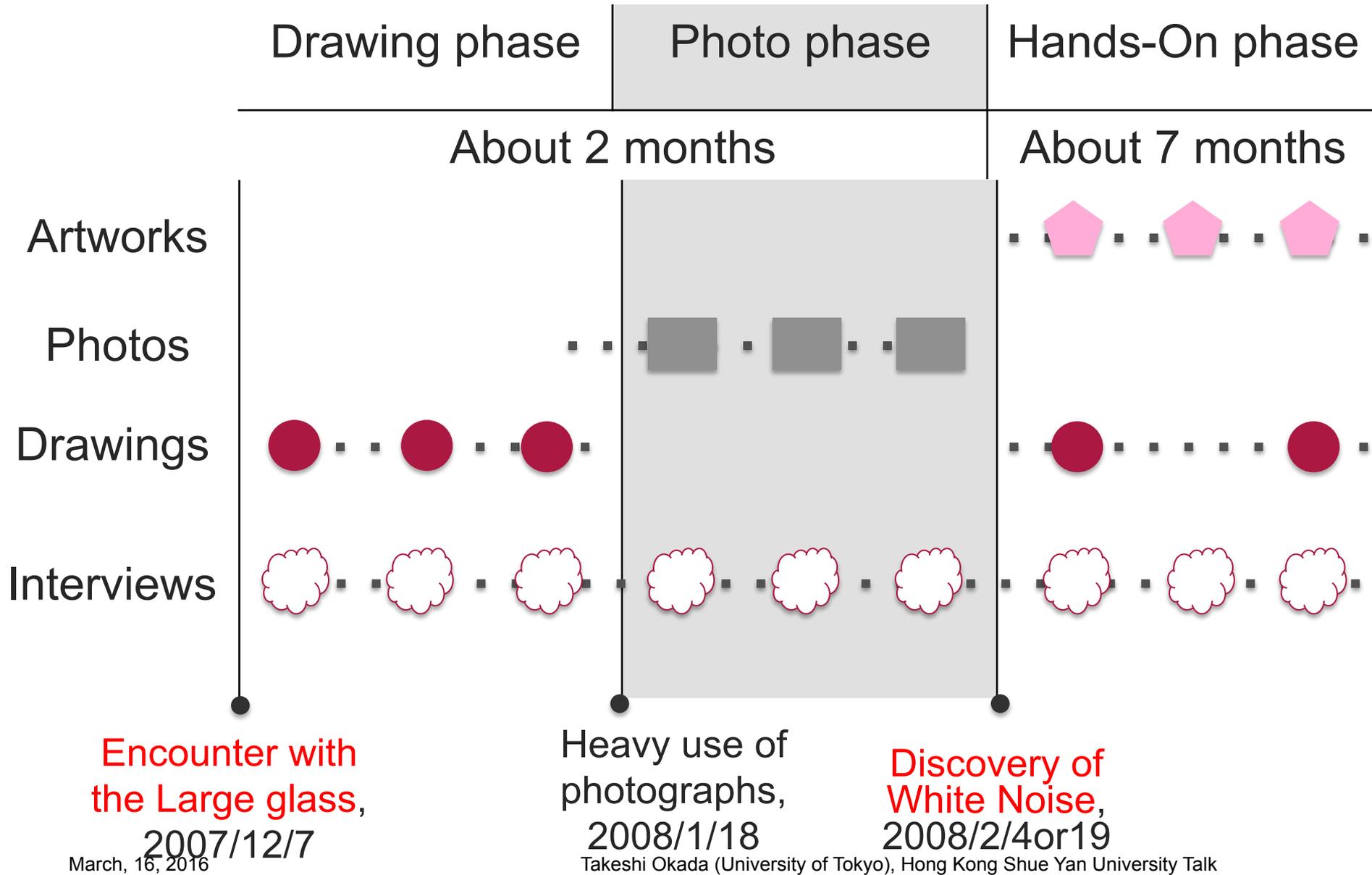
© 2008, Takeshi Shinohara



March, 16, 2016

Takeshi Okada (University of Tokyo), Hong Kong Shue Yan University Talk

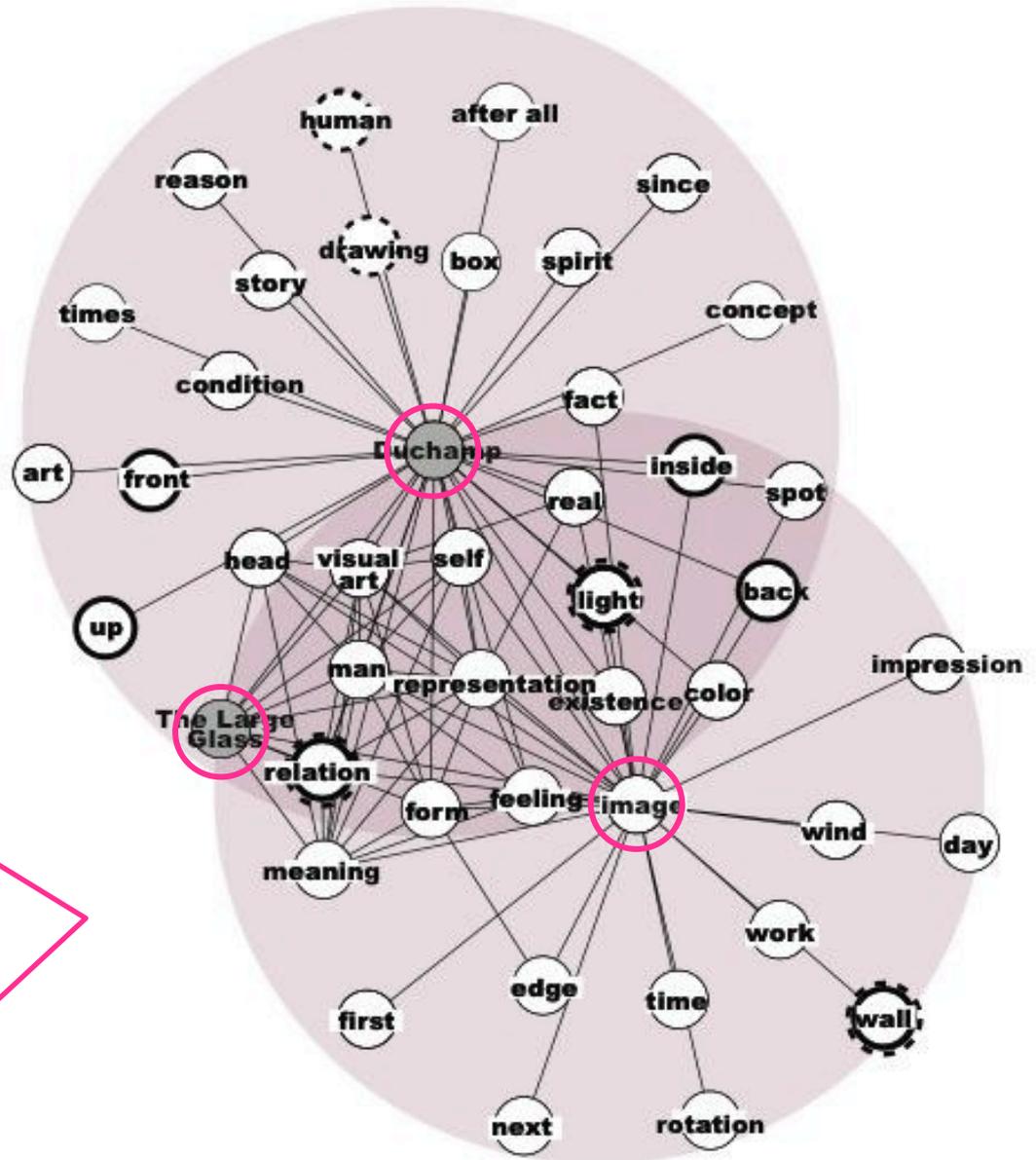
Shinohara's process of art concept formation



- We conducted three-hour interviews with the artist every three weeks for about nine months.
- We conducted quantitative analyses on the interview data.

Network of co-occurrence in each phase (excerpts from top 30 terms)

Two morphological structures are depicted, centered on "image" and "Duchamp", respectively. "The Large Glass" connects the two structures.



A Drawing Phase

Summary of the results

- A contemporary artist, Takeshi Shinohara, integrated his own creative vision with the inspiration from the Large glass by Duchamp and generated the art concept 'White noise'.
- Using this art concept, he created artworks that are different from Duchamp's Large glass.
- If he is in the stage of 'Constrained to external criteria', he might have created new artworks changing just parts of the Duchamp's Large glass.

Conclusion of today's talk

- 1) One's cognitive constraints become relaxed through encountering others' artworks. (**constraint relaxation**)
- 2) S/he forms a new perspective for own art making. (**new perspective**)
- 3) Accumulation of such experiences will lead to developing one's own **creative vision**.
- 4) Through interaction between one's own creative vision and others' artworks, a new **art concept** is formed and new artworks are created.