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Research on Curriculum of Design Basis Post-Integration

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ABSTRACT

Under the one-year basic curriculum system, certain professional courses will focus more on the cohesion between courses than before, teachers will also form into a basic teaching group, and curriculum goals will be linked with one another, thereby assisting students in newly developing design literacy to better fit into professional studies in the next three years. In the previous, besides course teaching, teachers would allow students to learn and create things in the comfort zone. The lack of coherence between courses resulted in isolated course assignments, so that many students, when starting professional studies in higher grades, still kept their old habits developed in high school, instead of the basic literacy and thinking habits that designers should have. For this reason, the training content of courses must adhere to the principles from concretization and abstraction, and from plane to three-dimensional, and all training tasks must be based on these two points. One is to train students to master the ability to appreciate and analyze the aesthetic, generalize from the abstract, and think from plane to three-dimensional perspectives; and the other is to exercise their ability to think and solve problems independently, allowing them to grow up under the teaching method of trial and error.

Keywords: *system of design basis, comfort zone, trial and error*

I. INTRODUCTION

Since September 2019, the Design School, Shanghai Institute of Visual Arts (SIVA) has started to implement a new education system of design basis, under which all freshmen, regardless of majors, should uniformly attend professional courses for two semesters, and not until the sophomore year they could select their majors. This is not an initiative originated from SIVA, but a trend; as early as in 2010, China Academy of Art considered the integration of freshmen across all majors, who shall complete their specialized foundation courses in a separate foundation department in the first year. The difference is that the foundation department of China Academy of Art covers students in Fine Arts, Art Theory, and Drama & Film, while SAVA just simply puts together students in Design Studies, which is more targeted and focused. This newly integrated basic education mode will be inevitably embraced by most design schools in China.

At present, China's design discipline exists in the form of two different school systems, one of which is the establishment of a design school under a college of fine arts, such as China Academy of Art and Shanghai Institute of Visual Arts, while the other is the organization of that under a comprehensive university, such as the School of Design, Shanghai Jiao Tong University. Regardless of which form, students must take the national college entrance test for fine art majors, including test subjects like sketching, coloring and quick sketching, in order to be admitted by a school. Before the exam, they have to accept painting training in high school or a social studio for 1 to 3 years, or even longer, which is a tradition that has not changed over the 4 decades since the college entrance examination was resumed in 1978. However, the fact that students need long-term modeling training before entering university never changes amid the varying forms and content of the examination. This one fold selection mode, similar to the academy of fine arts, has not transformed along with the establishment of the design subject, leading to the biggest problem — the conflict between the pre-examination model and the design literacy-encountered by today's design colleges in basic teaching.

II. GETTING OUT OF THE COMFORT ZONE — THE TEACHING METHODS OF THE CURRICULUM

First of all, it's because of the aesthetic and analytical confusion caused by pre-examination training that students often regard themselves as artists, or choose to paint as the first choice for solving problems.

Essentially, these painting techniques are nothing but fixed routines developed during pre-examination training, unable to adapt to new requirements, and short of flexibility. Designers are required to collect, analyze, and solve problems, while artist-like thinking obviously cannot accommodate to training courses of design literacy.

Secondly, through the pre-examination mode, students grasp a set of painting techniques of their own, which is referred to as modeling logic, which easily traps them into a single expression form. Encountering new topic training, if the teacher does not put forward specific requirements on a creative theme, students will surely choose to complete it via the modeling logic they are familiar with. For instance, in the past, for creative sketch and color expression, theme-free self-expression creations were often assigned, and teachers when providing instructions would also suggest students to improvise. In such courses with unclear requirements and casual themes, teachers can get an original work with decent visual effect, and students can also create a creation reflecting their own style with their own skilled techniques.

Fig. 1. A creation by a student in the comfort zone.

The assignment shown in "Fig. 1" is more of an expression of personal style, and is a good work in the art school. In this case, we call it "comfort zone training", where teachers go with the flow and students continue their training and creation in a way that they are good at. However, when it comes to design, which usually faces survey objects varying from previous knowledge systems and with various situations, only a sole method to express oneself is unable to satisfy design requirements; In addition, staying in the comfort zone for too long, one tends not to go out and challenge new ways.

As a result, the curriculum design of the system of design basis should follow clear goals and requirements, thus forcing students to step out of their "comfort zone" to explore unknown knowledge systems, learn to investigate and analyze new objects, and dare to try new representation styles.

III. TRIAL AND ERROR — THE TEACHING METHOD FOR THE CURRICULUM

John Dewey, when discussing creative intelligence, mentioned, knowledge, like other tools, is of no value in itself, but produces usefulness after it is used (Instrumentalism). After a problem occurs, the truth will gradually emerge in the process of observing the situation, anticipating a solution, and slowly approaching an ideal result. At this point, the most important thing is to keep practicing. Dewey mentioned that without hand-on practice and constant exploration, no truth can be obtained, because it won't be conjured up in your mind. The knowledge gained through practice can expand one's horizon, so as to reflect on theories of certain significance and head for new humanities. The intellectuality obtained in this way is creative intelligence, and this teaching method is to let students keep trying and making mistakes.

The Concept of Modular System and Human Stem Cells training project, designed by Rhode Island School of Design, is a course that allows students to get started with a small module, and then study different methods to fold and stitch it, until a modular special composition is finally made. This training, in spite of providing students with creative freedom, is not "comfort zone training", because the freedom is restricted by certain conditions, forms are not, and the final product is limited to something overlapped on onefold abstract shapes. Moreover, the knowledge concerning the formation of space is a new challenge and a blind zone for students, who must constantly observe the shape, propose a solution, and finally complete it through practice.

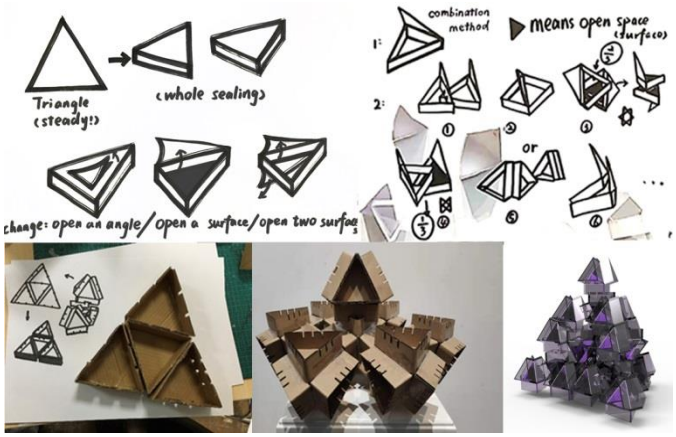

Fig. 2. The process of students' observation, thought, and creation.

"Fig 2" is the process showing how a student concluded a design, starting from the selection of basic elements, then thinking about and analyzing the possibility through sketch, testing the feasibility through paper models, and finally completing the work. In the end, when the work is submitted, a summary report is required as well, in which the creative process and ideas, especially failure cases, must be included. As in the course of course implementation, iteration matters most to students. It is an activity that repeats the feedback process, the execution of a series of computational steps; to put it simply, it is a record of behaviors, steps, and modeling logic as a whole; only in this way could the part with error be unveiled during the final assessment before then going back to the relevant step. This entire activity is called creative act. It's also the core of the curriculum.

IV. TRAINING FROM CONCRETIZATION TO ABSTRACTION: THE KEY POINT AND DIFFICULTY IN CURRICULUM

The Rhode Island case illustrates how to move from a plane to a solid abstractedly, and also validates the Bauhaus declaration that "2D eventually ends up to 3D". But how could the shift from concretization and abstraction be realized? Kant once said, percept without concept is blind, as concept without percept is empty." Especially for the students, who have settled down after the art college entrance examination, how could their aesthetic orientation be transformed and their modeling logic be iterated in a short time?

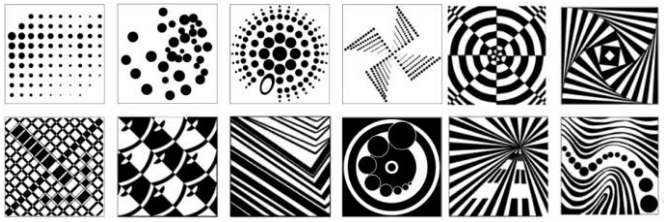

Fig. 3. The early assignment of planes composition.

As shown in "Fig. 3", the training of traditional abstract points, lines and surfaces was previously called plane composition, which together with color and three-dimensional compositions was collectively referred to as the three major compositions serving as basic design in early times. These three compositions often discussed forms from forms, and lacked the training that transits or links concretization and abstraction, during which there was no training for shifting students' artistic conception. As we know, this is exactly the key to the transformation from classicism to modernism in the history of art. Simple training of plane composition often results in students seeing only the rhythm and order between points, lines, and surfaces, but failing to understand neither the reason why such an exercise is necessary nor the meaning of the exercise?

Around 1990, when sketch drawing was renamed to design sketch, an inclination closer to design thinking began, but it was only formal, in which the logical core of the course remained unchanged. Through the training, which extracts the abstract, but does not value the logic behind students' "abstraction", and lacks steps for gradual changes, students can neither establish the relationship between abstraction and concretization, nor understand how the aesthetic changes behind the shift from tradition to modernity, which is not conducive to

the cultivation of modern aesthetic consciousness in them. Therefore, the curriculum must return to the very beginning, get close to these modern art genres, and sort out the relations between them.

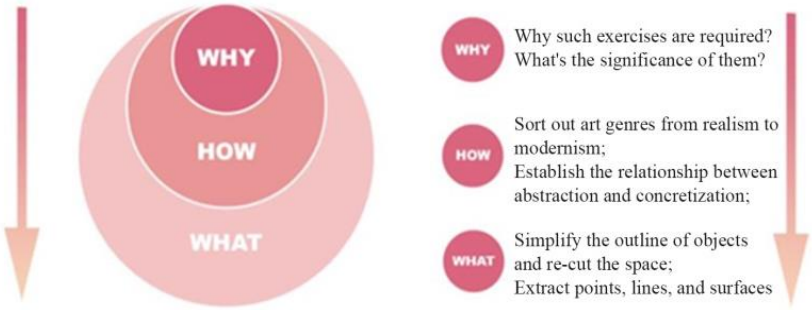

Fig. 4. WHW thinking mode.

How abstraction can be understood? What's the aesthetic consciousness behind it? Removing the complexity while maintaining the rhythm and order in a concrete image is not only the core of training, but also the key and difficult points. Therefore, the training topic on the shift from concretization and abstraction must be accompanied by a complete, systemic training requirement, and to complete it, the WHW thinking model in "Fig. 4" must be implemented; despite its simplicity, what is contained in the act is systematic and scientific. In addition, the subject tested in the curriculum should be fixed, and then designed by changing its formal style. Controlling variables and invariable is the basis for an experiment, and an experimental spirit required in the design.

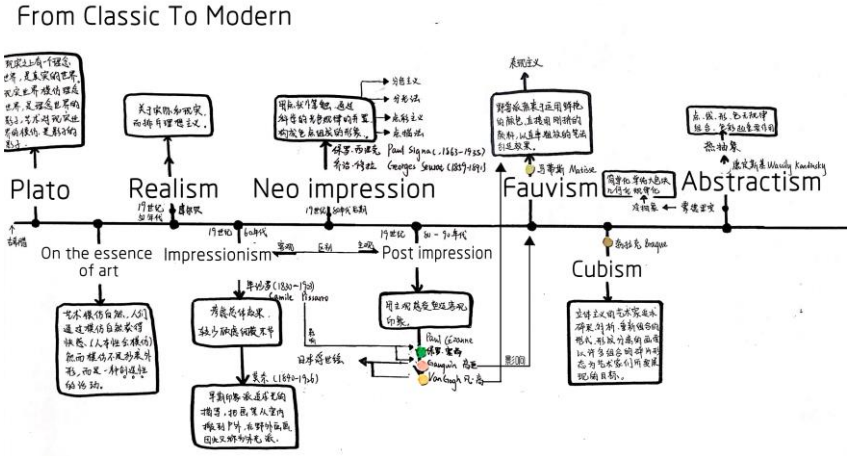

Fig. 5. Timeline of art style changes.

This fixed object can be a figure, landscape, or still life. Before embarking on painting, students should first find the artists specializing in various artistic genres, from impressionism to modernism, and classify them according to the time and artistic concept as shown in "Fig. 5", in order to filter, sort out and analyze their artistic views and the logical relations between various genres. At last, from relevant works of these artists, typical ones should be collected, and analyzed with relevant visual notes. When making an analysis with visual notes, simply extracting text explanations from the internet or books is not permitted, as genres should be analyzed visually.

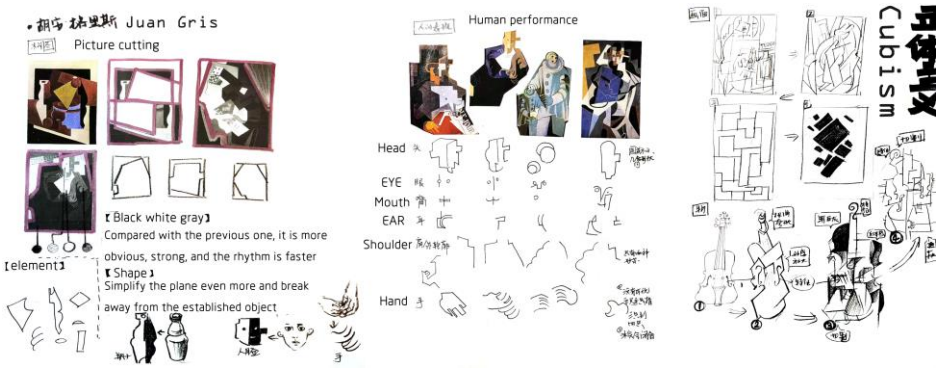

Fig. 6. Analysis based on art genres.

As shown in the visual notes in "Fig. 6", by analyzing the composition of a work, the deformation of individual objects and the overall shaping technique, an artist's artistic viewpoint can be sensed, and finally, on the basis of these notes, the artist's technique can be integrated into your own work, and all works from concretization and abstraction can be completed while simplifying concrete objects gradually. Cubism, created by Picasso, is the key turning point from concretization and abstraction, and also marks the beginning of modern art and design. As a result, it is a key that can help students open the door to modernism and establish the artistic thinking behind the shift from concretization and abstraction.

Fig. 7. Two cases of the assignments from concretization to abstraction.

As shown in "Fig. 7", the assignment is eventually presented in 4 lines, 16 pieces. The columns show the change of the main genre, and the rows show the gradual simplification of a genre. The artistic style from classicism to post-impressionism is presented in Row 1, the shift from complication to simplification of cubism in Row 2, and pure abstractionism, which gradually reduces from surfaces and lines to lines and points, in Row 3 and Row 4. The shift from concretization and abstraction constructed in this manner is noticeably of visual logic. By comparing the first and the 16th pictures, their connection can still be perceived, where only details, instead of the rhythm behind, are highly summarized and discarded. This mindset will play a much enlightening role in the future design of font, LOGO design, and layout.

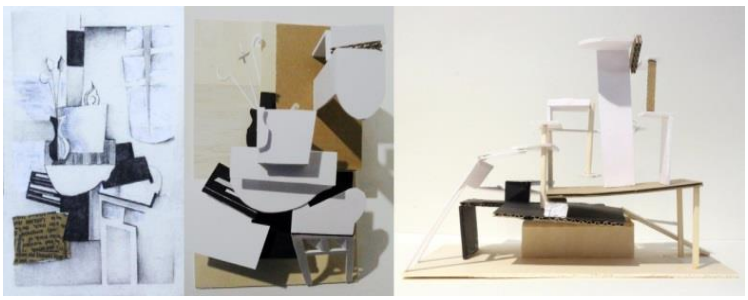

Fig. 8. From two-dimesional to three-dimensional.

V. CONCLUSION

This course is now called Two-Dimensional Form Design Basis in the design basis teaching system, formerly known as *Design Sketch*. After turning to the training content focusing on the shift from "concretization and abstraction", it not only reshapes students' capabilities of aesthetic analysis and modeling logic, but also connects to subsequent courses, such as *Space Modeling*. In the past, the course *Space Modeling* required students to design a space structure by themselves. Now with the training of the shift from "concretization and abstraction", they can directly choose one out of their 16 works. As shown in "Fig. 8", the student chose to make his own work three-dimensional, in which process the illusion caused by different spatial dimensions was utilized to represent the original plane composition; and the spatial depth of planes and the multi-perspective sense experience are also an artistic effect pursued by Cubism. This will increase the cohesion between courses, and in the meantime, allow students, after completing the training, to rethink about their design draft consisting of two-dimensional planes, thus gaining deeper insights into the power hidden in these planes, such as space and depth.

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