What’s the Design? –Meta–analysis of the question of the design–

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Abstract
This paper tries to inquire the meta-level analysis of the question of the design. This analysis leads to ask about “what is asked about the design?” or the structure of the question of the design. Designs are variously talked about and have only family resemblance. However, what we ask about will decide the directions of the knowledge about the design. A philosophical question about the design can escape our ordinary everyday-understanding and expand our horizon.

1. The type of question
We ask many questions, and there are many types of questions. For example,
“Where is the station?”
“I want to know a way of the demonstration of Pythagorean proposition. How can I know?”
“Who should be given the Nobel Prize?”
“For what should I spend my money and energy?”

About the first two questions:
If we ask a person the way to the station, and the response is, “I don’t know.”, then we ask another person and so on. If we happen to meet a person who knows the way to the station or the way of the demonstration, then the questions are over. To ask another person is meaningless. It is same as the investigation of a book or internet.

The third question:
If we ask a person, and we get one answer, the answer is not still decisive. To answer such a question we collect answers and consolidate them. This is called ‘social or group decision making’ like the voting system. And it has the characteristic of not asking “facts” like the way to the station or the way of demonstration, but asking about “evaluation” or “value”.

The last question:
This is the question about the philosophy of life, or how to live, about which we ask several persons but do not follow one decisive answer or do not consolidate them. This is also concerned with evaluation or value. The question is an ethical problem concerning how I should live. The word “should” is often used as an ethical term [1].

When we ask, “What is the design”, what type of question does it belong to? Of course, it does not have a decisive answer. Indeed, many designers propose themes or opinions, and we can collect and abstract them, but others may deny or refuse them.

And the question “what is the design” seems to ask about the fact of the design. But it implies implicitly “what is a <good> design?” We may not ask “what is the design” giving <not good> or <bad> designs.

But here, when we ask what the goodness of the good design is, then we are perplexed. Some designer’s responses are function, usability, or beautifulness and so on. Dieter Rams, for example, gives the 10 design theses [2]:

- Good design is innovative. Good design makes a product useful.
- Good design is aesthetic. Good design makes a product understandable.
- Good design is unobtrusive. Good design is honest.
- Good design has longevity. Good design is consequent down to the last detail.
- Good design is environmentally friendly. Good design is as little design as possible.

This thesis is understandable or interpretable for some designers, but others not. Or the nature of goodness could not be totally enumerated and could not find a united opinion. Nevertheless, we can distinguish good designs from bad ones. Besides, what we will pay an attention is that value-goodness is ambiguously arranged. Is it intrinsic to the articles or artifacts? Does it belong to the process of the designer’s behavior? Or does it exist in the environment including designers, users and articles? From the point of view of language usage, meta-language is needed to analyze the word “goodness” and systematization of its usage. It may lead us to analyze the goodness of the design.

Well, when we ask “what is a design”, at the same time, we
ask “what is a good design”, and then we fall into the “naturalistic fallacy”, borrowed from ethical term, which reduces ‘value’ to ‘fact’. But pure description of ‘fact’ is, indeed, an ideal and abstract logical description. We can divide ‘value’ and ‘fact’ ideally, but in fact both are continuous.

More important is to awake to implicit meaning of the question ‘what is the design’. When we ask “what is the design”, we have in mind a “good design” as a clue.

2. The formal structure of the question
To ask “what is the good design” as clue, what is it?

Martin Heidegger analyzes the formal structure of the question at the beginning of “Being and Time” before asking what Being is [3].

In presenting the “formal structure” of the question, Heidegger claims to rely on the structure that is common to all questions and that includes three constitutive moments. In every question, we can distinguish three moments:

1) “that which is asked about,” Gefragtes; we intimate it, but without knowing anymore what we are putting into question;

2) “that which is interrogated,” Befragtes, that is, that to which our question is addressed;

3) finally, there is “that which is to be found out by the asking,” Erfragtes: what is being asked, what one wishes to know when one poses the question, the meaning or point of the question-in short, the question behind the question.

When we ask, “Where is the station?”, then “That which is asked about” (Gefragtes) is how to go to the station. “That which is interrogated,” (Befragtes) is, for example, a person whom we happen to meet and our question is addressed. “That which is to be found out by the asking,” (Erfragtes), is the concrete information to the way to the station, for instance, “Along the street to north on foot in 5 minutes.”

Another question: “Does this music sound beautifully?” That, which is interrogated,” (Befragtes) is ‘this music’. And we ask, “Does it sound beautifully?” We answer, for the time being, “It sounds beautiful”, or “It does not sound beautiful.” This question is a question about ‘this music’ and asks “Does it sound beautifully?” We also consider the implicit ‘context’. The same noise made in a street, which is played in a concert hall, we can be taken not as noise but as music, and try to understand the intention of the player or the composer.

In Being and Time, when Being is asked, an entity (Dasein) will serve as the primary example to be interrogated in the question of Being. So here, analogically we may take a means to claim a typical music or prototype music. Prototype, which is often used in Cognitive Science. This question is about “that, which is interrogated,” (Befragtes). We address a question to prototype or typicality and try to answer what the prototype itself is. However, there are many genres of music, as symphony, jazz, rock and so on. It may be true in each genre to have a typical one, but how can we imagine the typical prototype itself?

Rather, such condition remind us of the concept ‘family resemblance’. Wittgenstein introduced language-games to understand language metaphorically as games [6]. Consider, he says, the proceedings that we call ‘games’. I
mean board-games, card-games, ball-games, Olympic Games, and so on. What is common to them all? Tennis and jacks have a ball in common. There is no ball in hopscotch, but there are "jacks". There are no jacks in jump rope, but there is hopping. Leapfrog is child's play (but there is no equipment, e.g. no ball, jacks or rope). In volleyball there are no racquets, but there is a ball and a net. Badminton has no ball, but there are racquets and a net. There is no net in bridge and no playing cards in tennis, but bridge and doubles tennis are played by teams. There are no teams in solitaire, but there are playing cards. There are no cards in chess. Still, just as we cannot give a final, essential definition of 'game', so we cannot find "what is common to all these activities and what makes them into language or parts of language" [7]. Here, Wittgenstein rejects the general explanations, and definitions based on sufficient and necessary conditions. To know the games, we begin to play one game and only this we can do, and cannot make the definition. But to play one game (using language) leads us to know the game (understanding meaning of language), or overlapping relationship of games, that is, family resemblance. When we ask, "What is the music itself?", then Erfragtes, which is not a definition, but to listen to music leads us to know the meaning of the music and there are only family resemblances.

Of course there is no entity of the music.

Well, back to the question: What is the design?

The dimension of the question belongs neither to the dimension of the things which are designed nor to the dimension of the beauty or the goodness. Same as the dimension of the question: "What is the music itself?"

We cannot reach the nature or definition of design by abstraction. We look at buildings, telephones, cars, etc., but cannot abstract the definition from artifacts. Giving designed articles to answer what the design is makes a category mistake.

Here, it is pointed out that we must consider Befragtes, "that which is interrogated," will decide a direction of the questions and answers, and further a point of view. Above said, when we ask the design, we mention good design. But Befragtes is not only good design.

In ordinary studies we may investigate early researches as Befragtes. But we could address a question to designers or designed articles. We point out again that Befragtes will decide a direction of the questions and answers, and further a point of view. Above said, when we ask the design, we mention good design. But Befragtes is not only good design.

Well, among the demonstrations of the existence of God, there is a famous argument, the argument by design, about which William Paley proposes 'watchmaker analogy' in his Natural Theology (1802).

When we walk around in a field and we trip over a stone, we ask "Why is this stone there?" Perhaps there was a stone for a long time. However, when we walk around in a field and found a watch, we easily see that this watch is fabricated by an intelligent watchmaker who has an intention and designed it. So, just like a watch when we look around the nature, we see that this elaborated nature could be designed by the intelligent creator, God. If you do not prefer the word 'the design of God', behavior of the nature of 'evolution' could be designed.

Nowadays behavior of animals concerning evolution is sometimes likely to be explained with the notion 'affordance' that J.Gibson introduced in The Ecological Approach to Visual Perception in 1979. Therefore we could interrogate 'affordance' to understand the design. Then, not the designers' aspect to design functional artifacts on the basis of behaviors assumed to be most appropriate or suitable, but we begin to observe and analyze action possibilities of users. Because action possibilities are latent in the environment and in relation to an actor, we pick up in one special environment some actions, and along the environment and action we may design without any stand-outing artifacts. In this case, for the design it is important to observe how actors derive information-value from the environment while relating perception to action.

How do we relate to the world and perceive it is a clue to understand the design. When an action to an artifact or a natural thing in an environment is done, it is deemed to be 'original' or 'creative', though the artifact or the natural thing may not be deemed original or creative. So, the originality or creativity of the design needs to be reconsidered.

After Heideggerian term; the first thing that we encounter in the world is, Zuhandensein (Readiness-to-hand), which is equipment or tool, the designed thing for some purposes. And the knowledge we have about using equipment is in relation to other equipments. We are in the relationship of equipments or tools. A behavior 'writing' has the knowledge about paper, pen, and ink and so on. And we implicitly consider 'time' (Mit der Zeit rechnen). Ordinarily we do not consider the duration for which a hammer can be used, but sometimes take care for the duration
of the paper, which may be tone. In this case, to discuss the design, relationship of designed articles and time is focused.

These various arguments remind us of the notion ‘family resemblance’, mentioned above. Perhaps we cannot make the definitions of the design based on sufficient and necessary conditions. To understand the meaning of the design we will begin to design or use the designed articles and in the process of circulation of knowing and using, in other words, theory and practice, we need to continue asking, “What is the design?” The direction in the network of family resemblance that the design will make, may be decided with Befragtes, that which is interrogated.

Here we have to pay attention to the following; could the study of the design be possible? “Being is variously talked about” (Aristotle), and the study on Being is approved as Ontology, but could the study of the design be possible?

Indeed design is talked about from various points of view along Befragtes. Or it may be discussed as engineering design or as an artistic design. The design is variously talked about and will not make any species. If the intention of the designer functions well on the artifacts, or a natural thing gives a function to the actor, it is called good design, and the meaning of the good design is so understood. The design is variously talked about, but we could imagine the study of the design that treats the matters which is related to the design.

3. The meaning of the question
A Question is an ordinary speech act, but its end is not only the answer. Indeed, ordinary question or a scientific question will give priority to seek the answer. The answer is a reality and the answer fixes a certain matter. But a philosophical question presupposes interaction between reality and possibility.

The philosophical analyses of the structure of the question teach us that the question of speech act has a power to construct. The consecutive question (Fragen) can make our thinking constructive, or escape our ordinary everyday-understanding and expand our horizon.

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References
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