

A Study in Bi-logic (a Reflection on Wittgenstein)

Tzu-Keng Fu, Bern, Switzerland

tzukeng.fu@gmail.com

1. World, Psychoanalysis, and Mathematical Logic

Proposition 1.1. (Wittgenstein) The world is all that is the case.

Proposition 1.2. (Blanco, 1975) It is reasonable to study the relation between Psychoanalysis and Logic.

Proposition 1.3. (Blanco, 1975) Psychology and Logic deals with a totality.

Argument:

If Proposition 1.1 holds with a clear fact that "both Psychoanalysis (Psychology) and Mathematical logic (Logic) both belong to the world in Wittgenstein's sense", then the task of Logic and Psychology will start with the world and end with the world. Hence, the task of Logic and Psychology are both to deal with a *sort of 'totality'*, that is Proposition 1.3 could hold. Obviously, it follows a reason to support studying the relation between these two disciplines, i.e., Proposition 1.2 holds.

Remark.1.4

Matte Blanco, a psychoanalyst who is interested and works on the reformulation of Freud's theory by means of mathematical logic, named *bi-logic*, provides his reason owning from Wittgenstein's conception on the world to support his own work. By this, he tries to make a connection with "*some concepts which stand at the foundations of modern logic*" (Blanco 1975, p.358), one of which is Wittgenstein's *Tractatus Logico-philosophicus*. Of course, as he states,

"I must say that I do not know whether Wittgenstein would have agreed with these reflections. But the opening phrase of his famous treatise seems to convey this meaning. (ibid.)

2. Reformulate Freud's Unconscious manifestations into logical theory

It is well known that Freud's greatest contribution was probably to show the importance of unconscious process in mental life. We know that there are five characteristics of unconscious, *timelessness, replacement of external by internal reality, condensation, displacement, and absence of mutual contradiction*.

Interestingly, all these characteristics have been re-explained by Matte Blanco's bi-logical point of view. Matte Blanco follows Freud and argues how the main characteristics of unconscious functioning can be seen as arising out of symmetrized thought. We all agree that our human mind follows a conventional logic and it seems to be that part of human mind behaves as it does not be governed by conventional logic but another type of logic, if there is any. What Blanco does is to develop this logic and to argue this is helpful in Psychoanalysis. In fact, we can view Matte Blanco's work as a reformulation of Freudian unconscious logic, even Freud himself also drew attention to the importance he attached to his recognition of the different logic of the unconscious.

Blanco presents a reformulation of Freud's theory by two main principles. Matte Blanco's theory (MBT, thereafter) consists of two parts, one is logical, and the other is set-theoretical.¹ Former is to consider *principle of symmetry*, latter is to consider *principle of generalization*. His idea comes from the individual's experience of infinity. In unconscious system (Unc, thereafter)², it is observed that *part = whole relation* occurs, and it is also well-known that a proper subset of A is equal to set A when A is an infinite set. Because of this, Matte Blanco tries to discuss logic of unconscious by set theory. First of all, he formulated two principles to characterize the logic of Unc.

(i) Principle of generalization

The system Unc. treats an individual thing (person, object, concept) as if it were a member or element of a set or class which contains other members; it treats this set or class as a subclass of a more general class, and this more general class as a subclass or subset of a still more general class, and so on. (Blanco, 1975, p.38)

(ii) Principle of symmetry

The system Unc. treats the converse of any relation as identical with the relation. In other words, it treats asymmetrical relations as if they were symmetrical. (ibid.)

According to MBT, our daily experiences are full of the *part=whole relation*, which is a consequence of these two principles, e.g. given a whole object K and a part of it k, there is a relation o is a part of K, by (ii) we derive K is also a part of k. Hence, 'k is a part of K and K is a part of k'. It seems 'space' disappears. Same argument could be applied to many other concrete examples, such as an arm is a part of a body = a body is a part of arm, furthermore, implies any other part of a body = a body is a part of any other part. Matte Blanco claims,

"Consequently a subclass may be identical with any other subclass of the same class. All these assertions may appear absurd, but according to what we may call the logic of symmetrical thinking they are perfectly legitimate. (Blanco 1975 , p.43)

Remark. 2.1. Although he has defended for this using previously, actually he still makes some mistakes here. For example, given an object A, it must be a member of a set Δ containing other members, i.e. $A \in \Delta$ where \in is an asymmetric relation between A and Δ . However, by principle (ii), even if we get $\Delta \in A$, we still can not conclude $A = \Delta$, unless 'part' here means 'subset'. It seems to be a special case for part = whole relation in MBT. In other words, MBT confuses \in with subset relation.

¹ We won't get involve into debates and the borderline of the relation between set-theory and logic.

² Unconscious system in MBT refers to Freud's unconscious system. We will not discuss whether Freud's unconscious is well-defined.

3. World, Being through Facts

Proposition 3.1. (Wittgenstein) The world divides into facts.

Proposition 3.2. (Blanco, 1975) The fact that the world divides into facts corresponds to something of the nature of the world itself and to something of our own nature.

Remark 3.3. Proposition 3.1 is seen as Wittgenstein's conception of the world. This conception of world could be embedded into Blanco's *principle of generalization*, which describes a mode of being as follow:

P: The world divides into facts. (Proposition 3.1.)

Q: P is a statement about the world, and P is also a way of looking at the world.

R: We see "P".

S: We are part of the world.

T: The fact that "R" must correspond to something of our own nature.

Clearly, Wittgenstein considers the world divides into facts. This statement is a statement about the world. And this statement is also a way of seeing the world. We see *Wittgenstein's consideration*. And we are part of the world. The fact, which states "We see *Wittgenstein's consideration*," must correspond to something of our own nature.

As Blanco states,

"Wittgenstein's divisibility of the world is easily. And it is no wonder shown since man is a part of the world. On the other hand, his principle is also a reflection of a form of reality of the world." (Blanco, 1975, p.359)

We could find an explicitly implication from Wittgenstein's conception of world to a conception of a mode of being, which is in the other side of the worlds.

4. Concluding Remark

It is worth of considering whether to take the concepts of Mathematical Logic is suitable or not to treat the studies of unconscious, as Matte Blanco did (See *Appendix A*). But, undoubtedly, Mathematical Logic plays its role in modern Analytic Philosophy. Moderate using these concepts might make some notions clearer, even on other disciplines.

Matte Blanco makes a connection between Mathematical Logic with Psychoanalysis, that is MBT. Further, we could make MBT be related to some philosophical works, especially those caring about *philosophy of logic* and extremely effecting modern Analytical Philosophy. Studying Wittgenstein is such an example. Moreover, through this study, we cast new light on the possible relationship between Wittgenstein and Psychoanalysis, both of which are belong to a sense in *cure*.

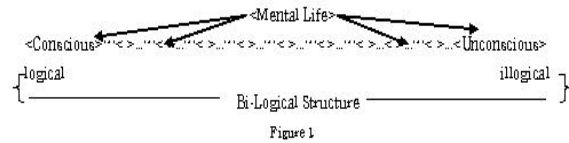
Appendix A: Bi-Logical Structure

0. Structural analysis of mental structure

Reflection 0.1.

Question: How does this theory elucidate mental life (structure)?

Method: Conscious & Unconscious Distinction



Note.

Matte Blanco concluded that the mind can usefully be conceived as partly functioning by the combination of at least two distinct modes of knowing which are often polarized. (Blanco, 1975, 1988; Rayner, 1995)

Remark 0.2.

Freud's contribution is to show the importance of unconscious process in mental life and how they could be understood.

Remark 0.3.

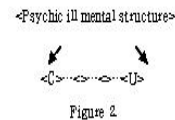
We adopt Matte Blanco's method which follows Freud's analysis on unconscious in terms of the interaction of a very few *precisely* defined fundamental processes to produce highly complex dynamic mental structure.

Remark 0.4

Precisely defined fundamental processes refer to some pure mathematical concepts, such as *sets, numeration, symmetry, asymmetry, dimension and infinity*. Matte Blanco use these concepts to characterize unconscious structure, and then produces the so called *logic*³. Combine with conventional logic he asserts we could describe the whole mental life which is *stratified*.

Note.

All people are assumed having a universal mental structure⁴, including psychic ill.



Note.

It is important for psychoanalysis in realizing patient's mental. It will be helpful if we realize its logical structure. But how to use it clinically is still unknown here.

1. Psychology and Mathematic

Reflection 1.1.

Question: Is there any relation between psychology and mathematic?

Remark 1.2.

This question is raised because of the individual's experience of infinity. In unconscious system, it is observed that there is *part = whole relation* occurs, and it is also well-known that a proper subset of A is equal to set A when A is an infinite set.

³ Logic here means system different form convention logic in conscious.

⁴ This is a common assumption and is a common mistake to view human owing similar or identical mental structure, including the same cognitive processes in western history from Hume, Locke, Mill to modern cognitive scientists. However, it is widely challenged by cultural psychologists these years, e.g., Richard Nisbett (Nisbett et al. 2001; Nisbett, 2003).

Matte Blanco's theory is to discuss logical structure by *set theory*. Hence, it seems to be that we bridge the connection between two subjects.

Matte Blanco's contribution

- 1.) See the psychological importance of asymmetry, symmetry, and symmetrization.
- 2.) Note the frequent presence of part = whole identities in unconscious process to the part = whole property of a mathematically infinite set.

For 1.), we consider 'symmetrized elements', which hold in different mental structures, such as. *emotion, preconscious structure, conscious structure*. In other words, the mind has some sense of the 'proportion' of symmetrization in any experience. From bi-logical point of view, mental life is stratified. It is not discrete but *continuous*. Mental life changes by the increase or decrease of symmetrized elements.

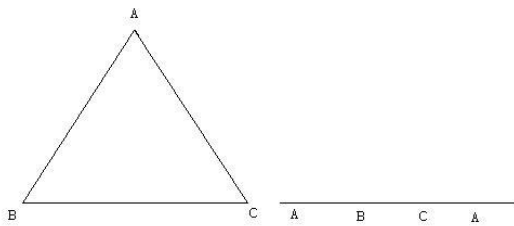
Reflection 1.2.

Question: How do we understand 'symmetrization occurring'?

This question is due to an observation from transferring unconscious state into conscious state. When an individual has a transformation from unconscious state to conscious state, there is *repetition*. (See *Appendix B*.)

Appendix B.

Matte Blanco notes that conscious can only think in 3+1dimensional (3 spatial and 1 time dimensions). Unconscious appears to be able to contain many more dimensions than this, but it cannot consistently combine them together. When unconscious state enters into preconscious or conscious state, there will be repetitions, therefore symmetrization occurs. Mathematical ideas about the consequence of multidimensional spaces to fewer dimensional spaces help overcome the logical difficult when we assert an object can feel at two or more places at once, i.e. such dimensional transformation can produce consequence that are equivalent to 'symmetrization'.



Picture 3.

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