

The Logic of Non-Verbality – Border Regions Between the Language of the Zen Kōan und Formal Logic

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1. Introduction

The subject of this work is a border region between two languages: that of the Zen kōan and that of formal logic. Firstly, I present part of a classic work of Zen Buddhism, the *Hekiganroku* (*Biyen-lu*, 碧巖錄) with some additional commentary. Secondly, I put forward a possible means of translating Zen kōans into the language of formal logic. This exposition is tied to a three-fold problematic: Is it possible to say that the different logics (of the language of Zen and the language of formal logic) agree in their logical essence? If so, in which aspects can we find these points of agreement? Or do they represent only different parallel logics without any points of crossing? What is the definitive difference between their respective ways of thinking? The answers to these questions may provide comparative philosophy with a further perspective: how Zen thought can stimulate and contribute to formal logic. In addressing this question I will treat some selections from Wittgenstein's *Tractatus logico-philosophicus* to illustrate the logical content hidden within the language of Zen kōans and the extent of its similarity to the *Tractatus*.

2. The Language of the Zen Kōan

2.1. The Character of a Kōan – the Kōan as a Vital Issue

A kōan is a kind of examination question used in Zen Buddhism, taking the form of a dialog between a teacher and a disciple. Yet the form and content of the Zen dialog is very different from that of a Platonic *dialogos*. Generally, and as opposed to the essential feature of *dialegesthai*, the explication of categories and concepts is intentionally omitted in Zen dialogs. The kōan uses a different standard of judgment. The most fundamental question implied in every kōan is: What is the relation between the kōan and my life? How can I directly present this relation here and now in

my life? – “my life” being the life of each and every ontological self with a body and consciousness. This acting self is in search of self-cognition and universal truths, irrespective of its environment or status.

The answer to a Zen kōan must be as succinct as possible. A longer answer has the tendency to lead into explanations, comments, deductions and their interpretations, each of them connected to further elaborations in an attempt at verification. From the perspective of Zen such elaboration is only for presentation in the *logic of verbality*. In Zen logic it is considered almost *unimportant*. Of course there is plenty of commentary and explication to be found in Zen language. It can be helpful in interpreting pure insights into the deep dimension of truth, and for this purpose there are many ways to advance word-for-word explanations and interpretations. Yet to the Zen way of thinking these are only *attributes of the truth*, and not the *pure truth itself*. In Zen there is always a question to be answered, namely: What is the unchangeable truth in its own purity? This pureness must be presented directly, in its own immediacy, through *pure insight*, without long explanations or theoretical commentary. Such insight arises from the life of an acting self and is expressed in a concentrated statement or sometimes only a gesture.

A Zen dialog presents a direct relation between an acting self and its insight, illustrated with concrete positive facts of daily life. The phenomena of our lives are always in a state of flux, and in this dynamic phenomenon of change the self is always searching for unchangeable truths. In western philosophy attempts are made to elucidate these truths with metaphysical concepts and their systems of deductions. Zen kōans do not aim at conceptual explanations. Instead, Zen thinking attempts to grasp unchangeable truth within *immanent phenomena in the daily life* of a thinking and acting self.¹ The kōan is the field where the truth is clarified here and now: in Plato’s terms it is a *xora* (χώρα). From here, it is possible to unfold and develop an original truth into a *concrete phenomenon* of existence. But in Zen thinking there is no *demiurgos* in the field of kōans. This place or “*xora*” of Zen truth is developed in relations between each individual and its fellow beings, as well as in the general circumstances of his/her life. The “field of life” includes everything that exists in relation to the thinking and acting self. This kind of self is the “main character” in every scene of its life and carries full responsibility for solving the kōan as a “vital issue” in life.

¹ Hashi, Vom Ursprung und Ziel des Zen. Die Philosophie des originalen Zen-Buddhismus (On the Origin and Aim of Zen. Philosophy of Original Zen Buddhism), Vienna 1997¹, 2004⁵. Cf. Hashi, Zen und Philosophie. Philosophische Anthropologie im Zeitalter der Globalisierung (Zen and Philosophy. Philosophical Anthropology in the Time of the Globalization), Vienna 2009, Part I.

2.2. The Kōan of “Agni’s Child”

The following kōan is presented in the *Biyen-lu (Hekiganroku)*, “Zen Lecture at the Monastery by the Blue Jasper Rock” or *Blue Cliff Record*, as it is commonly known in English. It is one of the most famous kōan collections of the Chinese Song Era.² The original text is translated as follows:³

“Let us listen to the question: What is the essence of Buddha?

As an answer there was the following statement: The child of the fire god ‘Agni’⁴ runs around in search of fire. At last it finds it. What is the meaning of this dialogue as a whole?”

Generally, every kōan implies a further question that should always be kept in mind:

“What does this kōan mean in your own life here and now?

What is the relation between this kōan and your daily life?”

In Abbot Hōgen’s school, there was an intelligent disciple named Gensoku.⁵ He was general secretary of the entire monastery and was well acquainted with a number of Buddhist scriptures. Gensoku immediately comprehended that this kōan was about the question of ‘Buddha Nature’.

‘Buddha Nature’ is one of the most important ideas to have been developed in various schools of Buddhism in China and East Asia. Its basic idea can be summarized as follows: In each individual human there is an original disposition to become a Buddha or Bodhisattva. ‘Buddha’ is a term that originally means the *awakened one*, i. e. awakened to universal truth. As an awakened one the *Buddha* is able to represent this universal truth at every moment of his life. In Sanskrit, Buddha Nature is called *buddhatva*.

In China it was said that the idea of *Buddha Nature* originally derived from the Indian author Āshvagōsha and his concept of *tathāgata-garbha*: the embryo of Buddha.⁶ The philosophical meaning of *tathāgata-garbha* can be interpreted as fol-

² Written with commentary by Hsüedou (Xuedou) and Yuanwu, (Setcho and Engo in Japanese reading).

³ Akizuki, *One Day – One Kōan*, vol. 1, chap. 16. *Biyen-lu / Hekiganroku* (碧巖錄) chap. 7, edited by Iriya, Tokyo 1992, pp. 123.

⁴ In the original text Agni’s Child is written with the characters: 丙丁童子, the child of the fire god. This refers to a well-known theory of ancient China, that of the harmonic organization of five basic activities related to the unity of yīn and yáng: wood, fire, earth, metal and water. 丙 corresponds to an older brother of the fire god, 丁 corresponds to a younger brother of the same: In Zen terminology this means a child in a relationship to the god of fire.

⁵ Hōgen Oshō. Hōgen (法眼) is a Buddhist name which means “the eye of Buddha’s dharma”.

Gensoku (玄則) means “regulation of deep truthfulness”.

⁶ There is debate as to the originator of this concept and whether he was in fact Indian. The fact

lows: Each ontologically embodied self has the potential to become a Buddha or Bodhisattva. Although this potential is present in each and every human, not everyone is able to awaken to it and to develop it him/herself. For most people Buddha Nature exists as a hidden potentiality at various times of their lives. Yet in spite of every difference in individuality there is an essential disposition to recognize Buddha Nature: To what extent is it possible for us to awaken and to develop the hidden nature of Buddha (*tathāgata-garbha*) ourselves? How could we realize this potentiality in our lives?

The disciple Gensoku grasped the analogy between this theory of Buddha Nature and the kōan question. He presented his answer and explanation to his teacher, expecting high praise, but the latter (Hōgen) strictly rejected it:

“It seems to be all right in theory. But you’re missing something of great importance.”

“What am I missing?”

“You must find it yourself.”

Hurt and disappointed, Gensoku went away. He considered that he had thoroughly studied various scriptures and that there was only one possible answer to the kōan. How could he possibly be missing anything? He finally decided it would be better to change teachers and set off into the dark night. But the kōan didn’t leave his mind for a second. After much inner confrontation there was suddenly a moment of clarity in his consciousness – he realized what had been missing. He turned around and walked back to his teacher.

Hōgen was waiting for Gensoku and said:

“Well, what is the solution to the kōan? Now I am ready to hear your mind.”

Gensoku: “What is the essence of Buddha?”

Hōgen: “– The child of the fire god Agni runs around looking for fire. At last it finds it. What does it mean at all – !?”

Abruptly, Gensoku was enlightened. With pure insight he had grasped what had been missing in his answer. He stated loudly:

“The child of the fire god Agni runs around looking for fire. At last it finds it!”

Hōgen nodded in a deep contentedness and said:

“Now the answer is correct in all aspects!”

remains that the concept of Buddha Nature received serious attention in China only after being denoted as an “original source from India”.

2.3. The Logic of Non-Verbality in Zen Kōans

Formally, the same answer to the kōan was given three times. In fact, Gensoku simply repeated the sentence presented in the kōan. Why was his answer rejected by his teacher the first time, in spite of its correct explanation? How could Gensoku finally pass through the gate merely by repeating the same sentence from the kōan?

To someone with no practice in Zen training, it seems that the standards used to judge kōans are quite mysterious. If we try to explain the logic of the kōan with the metaphysical language of philosophy, we immediately recognize that there is a rigid borderline between Zen and philosophy: in the pure dimension of Zen little value is seen in the logical construction of philosophical language. Generally, Zen kōans intentionally omit predicative explanations of philosophical categories. Zen demands *concentrated pure insight* to grasp truths with the *immediate unity of body and mind*. The student should manifest a deep relation between his/her personal life and the truth, grasped in the context of its environment, including the context of the kōan itself. The student must pay attention not only to the context, but also to these further aspects: What is the situation of my life and how does the kōan question influence my speaking and acting self in reality? To understand Zen logic it is necessary to gain insight into both its *semantic* and *semiotic* aspects.

Seen from this perspective it becomes evident that there are different situations and circumstances that can frame the same answer to a kōan. Even if the same statement is repeated, it carries a different message *in a relation to the given time, in the given field and in the given situation*.⁷

There is a further aspect to be noted: Gensoku's last answer was not merely a repetition of the kōan question. Before giving the last answer he had to overcome a great deal of chaotic self-confrontation. At first he had treated the subject of the kōan with only a theoretical explanation, with historical knowledge quoted from several famous works of commentary and interpretation. In his final answer he abandoned his (merely) theoretical knowledge and grasped a fulfilled insight, which arose from the origin of his life and his consciousness. His existent acting self, his consciousness and his self-cognition were joined in total unity to recognize a direct relation between the kōan and his own life.

Let us now attempt to translate the context of Zen kōan language to the symbolism of formal logic. It is possible to present a formalization in the following way:

⁷ Regarding these terms [time, field, situation] ([Zeit, Ort, Situation]) see Hashi, Vom Ursprung und Ziel des Zen. Die Philosophie des originalen Zen-Buddhismus (The Origin and Aim of Zen. Philosophy of Original Zen Buddhism), Vienna 2004³, Chap. VII. Cf. Hashi, Zen und Philosophie (Zen and Philosophy), Vienna 2009, Part I, Chap. VII.

Gensoku, the intellectual disciple, could immediately see an analogy between the concept of Buddha Nature and the story of Agni's Child: Buddha Nature exists in self as an existent body and self-consciousness. Agni's Child embodies fire. It does not need to run around looking for fire, for it is present in its existent body and acting mind. At this point Gensoku was still in the dimension of commentary and interpretations, he had not yet transcended his merely theoretical knowledge. He therefore connected the general category (first subject, S_1 ; *Agni's Child*) to the second general category (second subject, S_2 ; *Buddha Nature*) with the symbol for equality.

The statement of the kōan could be formalized in following system. The symbol marks are as follows: S is the subject of the given sentence. P is the predicate of the same. O is the object of the same. Adv is the adverb of the same:

$$\{(S_1 - P_1 - O_1) \rightarrow (\text{adv} - P_2 - S_1 - O_1)\}$$

Buddha Nature (S_2) is present in each individual person s: $S_2 \subset s$

$$\{(S_1 - P_1 - O_1) \rightarrow (\text{adv} - P_2 - S_1 - O_1)\} (=) S_2 \subset s$$

Hōgen, the Zen teacher, rejected this answer because it treats the kōan with a merely theoretical approach and generalized categories. This kind of speculative logical categorization is rejected by Zen thought as long as the generalized category remains isolated with no relation to empiricism or to the experience of human life. *Every experience comes once in a lifetime; it is special each time for each individual.* In this sense Zen thought considers the experiences of each self, including its individuality and its uniqueness (impossibility of reproduction of the same experience). *The empirical facts of each individual are more important than generalized categories.* Zen demands that the individual aspirant associate the universal general concept presented in the kōan to the empirical dimension of his or her life and experience. Let us formalize the truth presented in the kōan as K , and the dimension of intensive self-experience as I :

$$K \wedge I$$

If this process is lacking, any aspirant, regardless of his/her intelligence, will fail the kōan examination.

At the beginning of the examination Gensoku presented with his intelligence a theoretical interpretation of the kōan in his teacher's examination room:

$$\{K(S_1 - P_1 - O_1) \rightarrow (\text{adv} - P_2 - S_1 - O_1)\} (=) [\text{time}_a - \text{field}_a - \text{situation}_a]$$

After great self-confrontation Gensoku came to the turning point: Up until then he had seen the kōan question as a generalized category unrelated to his own life. In the climax of self-confrontation the *content of his self-consciousness was transfigured to that of Agni's Child*. He had identified with the latter's suffering and finally become "Agni's Child running around looking for fire". The problem presented in the kōan question was *transferred to the problem of his embodied self and life*. Gensoku's existent acting self grappled with the double dimensions of the existent kōan and the existent problematic of his own life. Let us formalize this confrontation:

$$\{K(S_1 - P_1 - O_1) \rightarrow (\text{adv} - P_2 - S_1 - O_1)\} (=) [\text{time}_\alpha - \text{field}_\alpha - \text{situation}_\alpha]$$

$$\wedge \{I(S_1 - P_1 - O_1) \rightarrow (\text{adv} - P_2 - S_1 - O_1)\} (=) [\text{time}_\beta - \text{field}_\beta - \text{situation}_\beta]$$

Only now is it possible to associate both different dimensions, namely the field of the kōan and the field of the empirical problem of human life. Both dimensions are directly united in the thinking and acting self.

3. Border Regions between Zen Language and Formal Logic

3.1. Tangential Horizons of Zen and Formal Logic

The logic of non-verbality in Zen kōans is manifested as questions to practice a truth in the daily life of a thinking and acting self. It is possible to formalize the context of the Zen kōan in the language of formal logical symbolism. This kind of experiment is not rejected by the *philosophy of Zen Buddhism*, for it provides a *possibility* of access within *trans-cultural thought* to anyone who is interested to Zen. But of course we must take caution when attempting a *translation across different cultures*:

If we attempt to translate the self-confrontation involved in solving Zen kōans into formal logical language, the result is valid *only as a purely theoretical schema*. It is true and real *in the framework of formal logic*. This kind of formalization is possible and it results from the translation: To solve a kōan there is a definitive context where the kōan's version (*K*) must be unified with the self's version (*I*) of the truth:

$$K \wedge I$$

However, this formalization is *not helpful* toward achieving a positive result in a kōan examination, for kōan practice is *never directed* at developing speculative logical thought. Zen thinks highly of individual experiences of human life one by one, and the metaphysical generalization of categories in speculative logic is *never encouraged*. If the purpose of our formalization is only in the framework of formal logic, we could say that it is almost totally isolated from the dimension of Zen thinking. The most interesting fact of kōans is the *confrontation between the kōan question and human life*. The solution results from the total process of this confrontation. The way of confrontation and its result are individual and different on each occasion. Without this process of self-confrontation every successful explanation (and its logical interpretation, including a formalization of kōan language etc.) looks like a “*well painted cake in a picture*”. A Zen adept might say in the original manner of Zen speech: The successful formalization of a kōan in formal logic is similar to a *lump of concentrated soup*: We can use it, but it must be cooked with various fresh ingredients and prepared in an appetizing way. Everyone will have their own recipe. And everyone must find it in their own life.

3.2. What results from the conflicting border region of cultures? Zen Contributions to Formal Logic

We can now assert the following: Insofar as an answer to a kōan question is given as a statement that results from theoretical thinking, it cannot pass through the gate of a kōan examination. The candidate may have a great deal of intellectual knowledge, but this knowledge is not helpful because it is orientated toward merely theoretical thinking. Let us try to describe this condition of consciousness with the symbol: I_a

The kōan version must be associated with the problem of the candidate's own life. The question must be considered in the dimensions of both theoretical and practical insight. This expanded dimension of knowledge can be called: I_{ab}

When we have gained expanded knowledge from both these dimensions, there appears a new perspective from which to see an important problem:

At first, the intelligent disciple (Gensoku) saw the problematic of dimensional truth only from a limited periphery: I_a . This was the crux of the problem, and why his answer was rejected by his teacher despite his formally correct theoretical explanations. Yet Gensoku reached a turning point and expanded his knowledge through intense self-confrontation. Through this process his consciousness was expanded to a double dimension: I_{ab}

His self-identity remains formally unchangeable, but the contents of his consciousness have been dimensionally expanded. A formalization in the language of formal logic normally begins with a tacit prerequisite: The person who makes a statement has *an unchangeable self-identity*. This condition is applied to every statement; it is recognized as a general rule for understanding a formula of formal logic by everyone without exception. *This same rule is never valid in Zen*: The acting and thinking self as a body and mind exists in dynamic situations of life, both of which are subject to change at any time. In a dynamic flux of circumstances self-consciousness is altered from one set of contents to the next. In Zen, a person who makes a statement is *never static*. To Zen thinking, the language of formal logic is just *pure formula*. It is separated from the field of the empirical vividness of human life and does not take the existent acting (and *dynamically changing*) self into account. Let us try to remedy this lack with a further formalization. The dynamic process of the changing self can be translated into the new formula: $I_a \rightarrow I_{ab} \rightarrow I_{abc}$

Hypothetically, this perspective could be added to the methods of formal logical language. In the last chapter I established just this point: The kōan version (K) and the self version (I) have to be fundamentally associated in Zen kōans. If we add the symbol (I_a) to every formula, it is possible to arrive at a well formalized schema. Yet through this process alone the relevant problem of Zen is never solved, for the acting self in human life is always located in a dynamic field of experiences. It is subject to a continuous process of successive transformation from moment to moment *before any formalization is established*. The formal symbols (I_a , I_{ab} , etc.) provide a *possible*

scheme for representing the acting self in its *dynamic transformation as itself*. On the other hand it is obvious that *the pure insight of direct experience and the changing self in its living wholeness can never be replaced* by the formal logical schematization: I_a , I_{ab} , I_{abc} .

A Zen kōan is supposed to present and demonstrate these facts in reality. This paper illustrates to what extent the Zen kōan can be formalized in formal logic. Yet these schematizations should be distinguished from the “*function of logic*” as defined by Frege: there is no such “function” in the Way of Zen. Frege had attempted to translate daily language into formal logic by using mathematical formulas. Yet from the Zen perspective it must be remembered that if we realize a successful schematization of Zen language in logical formulas then it is similar to the presentation of a “tasty cake in a picture”: it must be actualized and tasted in real life to really be experienced. This kind of transformation from theoretical cognition to the practice of an acting self is namely the “function” of Zen logic, including its kōans.⁸

The logical “function” of a Zen kōan is connected to the development of new dimensions, including the transformation of a thinking and acting self. In this way of thinking it is better to say that the cognition is a “self-recognition that transforms a thinking and acting self”.

3.3. Logical Statements, their Content and Occasion Case by Case:

The Thinking Self as a Border of the World in Wittgenstein’s Thought

We now consider some additional aspects useful to reflecting on the border regions between Zen kōans and analytical philosophy. From Wittgenstein:

‘The propositional sign and the logical coordinates: that is the logical place.’⁹(*Tractatus*, 3.41.)

The connection “ $p \rightarrow q$ ” was presented by Wittgenstein in a truth-table. (*Tractatus*, 4.442. *Proto-Tractatus*, 4.431.) In a case where the subject of a sentence is false and the predicate is true, we are unable to determine whether the sentence is true or false: “F/W/[]”. (False/True/[...]. *Tractatus*, 4.442.) Despite this lack of clarity one

⁸ The subject of this work must be kept separate from the systematic construction of logic as treated by Frege and Tarski. (Compare Frege, *Funktion, Begriff, Bedeutung*, Göttingen 2002. Tarski, *Einführung in die mathematische Logik*, Vienna 1937.) The “function” of Zen logic as presented in this work is for the purpose of “translating” and interpreting kōan language into the language of formal logic for interested readers, but it should never be seen as the essential purpose of kōans. The primary aim of a kōan is to awaken a pure insight through which the self recognizes a deep relation between the “hidden” contents of the kōan and his/her daily life.

⁹ Wittgenstein, *Tractatus logico-philosophicus*, 3.41. Original text: “Das Satzzeichen und die logischen Koordinaten: Das ist der logische Ort.”

fact becomes evident: Indeterminacy has been established, and the sentence cannot be assigned to the definitive category “*either true or false*”.

A kōan sentence does not aim at defining truth in a logical category, e.g. “*either x or not-x; if x is true, not-x is false*”. A kōan sentence has the character of a protocol. Yet a kōan does not simply record actual statements and empirically verifiable facts, it has a much more important aspect in the context of a kōan examination: What kind of meta-physical or onto-logical experiences are manifested between the examiner and candidate and what insight is gained by the latter? It has already been mentioned that a kōan should be answered in direct relation to a candidate and his/her life. Kōan language is not orientated toward formal logical correctness. A kōan is not meant to establish contradiction-free statements in the dimension of logical language. The central issue of a kōan is the content of the actualizing thought: What is the connection to the thinking and acting Self? How can the kōan’s truth be realized by an acting self in its human life? What can I do to actualize this truth in my life? Understanding this way of thinking in Zen, the following statement is plausible: If someone tries to judge the truth content of Zen language by the intellectual standards of formal logic, the result is a fatal error. In comparative philosophy it is important to pay attention to other aspects as well. Syntactic examination of sentences is necessary, but there is something else of more import: the semantic and semiotic aspects. With the inclusion of these total aspects, *trans-cultural thought* becomes possible and feasible.

Seen from the outside, a kōan sentence looks like a “protocol sentence” of positivism, for a kōan seems to mention only factual and positive empirical data. Of the various superficial interpretations of the kōan this is one of the gravest misinterpretations. The content of kōan language is a direct statement of *meta-physical and onto-logical experiences realized by an acting self*.

Wittgenstein: ‘The sense of a proposition is its agreement and disagreement with the possibilities of the existence and non-existence of the atomic facts.’¹⁰ (*Tractatus*, 4.128, 4.2.)

The logical *topos* is declared in the presentation of a statement, regardless of whether its connection of subject, object and predicate is “true” or “false”. With the symbol “F” (false) logical falsehood is declared. With open indeterminacy, “neither F (false) nor W (truth)”, a *topos* appears that shows an “impossibility of assignment to a category of: ‘either false or true’”.

Wittgenstein claimed that there can be no ‘metaphysical subject’ as such in the world. We should not misunderstand this statement in terms of the “metaphysics” of earlier philosophers (Plato, Aristotle, Hegel, Kant, etc.), nor should we think that

¹⁰ *Tractatus*, 4.128, 4.2. Original text: “Der Sinn des Satzes ist seine Übereinstimmung und Nichtübereinstimmung mit den Möglichkeiten des Bestehens und Nichtbestehens der Sachverhalte.“

Wittgenstein was ignoring the history of philosophy including the *Metaphysica* in the sense of Aristotle's *ontos on*. Wittgenstein had something different in mind. He was presenting the critical tangential horizon between science and the schools of philosophy at the beginning of the twentieth century. For Wittgenstein it was important to show that in spite of all the knowledge of nature and empiricism gained by the positive sciences, a thinking self is still unable to at all decide what is a "metaphysical subject". Wittgenstein negated the existence of such a subject: There is no subject capable of perceiving the entire world in a meta-physical and objective way. Indeed, there is no subject in the world that is valid as a static observer in absolutely fixed self-identity.

Yet Wittgenstein postulated a subject that could *imagine* and *project* the entire "world" (including all of its beings) in a field of its own consciousness. This thinking self thereby maintains that it contains an *objective projection of the whole world* in its own self-consciousness. From Wittgenstein's standpoint this view is false and misleading, because in it *there is no longer any "world" as a thing itself*. The "world" exists only as an *imagined projection* in a field of self-consciousness. The thinking self produces ideas and projections of "the world" in its own way, while the existent self itself represents a *border* of its "world".

Wittgenstein: "The subject does not belong to the world but it is a limit of the world."¹¹ (Cf. *Tractatus*, 5.632.)

The "world" is in fact "my world". In other words, the world is "the world pictured and projected by me", which can be maintained by each individual self.¹²

The limits of my language mean the limits of my world."¹³ (5.5571, 5.6.)

There is no absolutely objectified world in relation to a thinking subject. There are only individual cases of how the "world" is factually experienced by a subject and of how these experiences and cognitions are projected in a field of self-consciousness.

The purpose of a kōan is never fixed to an intention of an ego. A kōan serves to record individual cases of metaphysical experiences of truth. It shows how each subject, through the mediation of the kōan question, solved the aporia of life in his/her own life and way. A premise of Zen is that the "world", and being in general, are nothing other than collected projections in the field of self-consciousness of each thinking/observing/acting person. The thinking self recognizes the strong subjectivity entailed in this collected projection, which shapes and influences its views and attitudes. Yet it is also possible to become acutely aware of one's own subjectivities and to continually correct them.

¹¹ *Tractatus*, 5.632. Original text: "Das Subjekt gehört nicht zur Welt, sondern es ist eine Grenze der Welt."

¹² Compare *Tractatus*, 5.641.

¹³ *Tractatus*, 5.5571, 5.6. Original text: "Die Grenzen *meiner Sprache* bedeuten die Grenzen meiner Welt."

Gensoku's first association of Agni's Child with Buddha Nature was "objectively verifiable knowledge based on historical sources". This was rejected by his teacher, because behind this theoretically correct answer was the *static subject* of the student's *ego*. Gensoku subjectively assumed that he could perceive and grasp the entire world of *dharma* with his knowledge (*dharma*: metaphysical law of truth, metaphysical principles of universal truth, in Buddhism). The "world of *dharma*" was dominated by his own ego in the framework of his own projection. This one-sided assumption was reflected in his first answer in Hogen's examination room. His answer was correct in theory, but it lacked *self-recognition*: Gensoku had not yet considered the problem of Agni's Child and Buddha Nature *as the problem of his own life*.

Wittgenstein:

'The proposition, the picture, the model, are in a negative sense like a solid body, which restricts the free movement of another: in a positive sense, like the space limited by solid substance, in which a body may be placed.'¹⁴ (Tractatus, 4.463.)"

The logical sentence is a *topos*. In a wide and open field of truth we localize our position through the position of our statements. A thinking self thereby positions itself with a sentence as a logical *topos*. We believe that this *topos* represents our existent self. This localization appears as the "possibility and a border line of our projected world". Viewed negatively, this localization is a limited truth, projected through the viewpoint of a subject. Viewed positively, however, it is a stable *topos* or place of truth which can hold its own against various external false positions.

A valid kōan solution shares this character. It is a *xora* (in Plato's sense) in which various principles are cultivated and developed to grasp truth. These principles are actualized by a self in relation to its experiences and cognitions: it embodies the truth through the confrontation with its own life and vital issues, not just theoretically, but through the insight of practical reason (*prajñā*). This self is capable of overcoming occasions of suffering in its life and represents a *topos* of recognition. It is a *xora* in which the truth is revealed as an unlimited universal dimension.

Gensoku's theoretically correct analogy between Agni's Child and Buddha Nature was rejected because self-recognition was missing: he failed to see the kōan as a vital issue in his own life. The "correct" answer was "negated" by his strict teacher; the theoretically "true" statement was marked with the symbol: "∼". Let us examine

¹⁴ *Tractatus*, 4.463. Original text: "Der Satz, das Bild, das Modell, sind im negativen Sinne wie ein fester Körper, der die Bewegungsfreiheit der anderen beschränkt, im positiven Sinne, wie der von fester Substanz begrenzte Raum, worin ein Körper Platz hat."

part of Wittgenstein's *Tractatus*, rich in helpful suggestions:

That, which until now has been judged as "correct" (p), might at a later point in time be judged as "false" ($\sim p$). As a supplement, we must comment that the formula, $s \rightarrow p$, mediated by aspect (x), has been judged as a correct statement:

$$s \rightarrow p (=) \varphi (x)$$

When mediated by a completely different aspect (y) the coordination $s \rightarrow p$ loses its validity:

$$s \rightarrow \sim p (=) \varphi (y)$$

Wittgenstein:

'That, however, the signs " p " and " $\sim p$ " can say the same thing is important, for it shows that the sign " \sim " corresponds to nothing in reality.'¹⁵ (*Tractatus*, 4.062, 4.0621)

'Someone says, 'A thinks that p is the case" or A thinks p ', etc. Here it appears superficially as if the proposition p stood to the object A in a kind of relation.'¹⁶(5.541)

Consciously or unconsciously we assume that a printed sentence in a book corresponds in some degree to a truth. The tacit association of person A with predication p is a typical example. To Wittgenstein, the connection between A and p is an event that is in fact a projected idea in subject A's consciousness of the "World".

'But it is clear that "A believes that p ", "A thinks p ", "A says p ", are of the form " p says p ": and here we have no co-ordination of a fact and an object, but a co-ordination of facts by means of a co-ordination of their objects.' (*Tractatus*, 5.542.)¹⁷

In the logical *topos* of the statement there is never a fixed connection between the "objects (including the subject uttering the sentence)" and their claim to truth. There is, rather, an "assignment" of things (occasions) represented by the structure of "subject, predicate and object". Wittgenstein further sharpens this point by stating that this "assignment" is *not directly related* to the given facts. Specifically, this "assignment" of the presented facts depends on *how the self-subject of the statement has*

¹⁵ Compare *Tractatus*, 4.062, 4.0621. Original text: 'Daß aber die Zeichen p und $\sim p$ beide die Wahrheit aussagen können, ist wichtig.' Compare 4.062. "Denn es zeigt, daß dem Zeichen \sim in Wirklichkeit nichts entspricht." See 4.0621.

¹⁶ Compare *Tractatus*, 5.541. 'Man sagt, daß p der Fall ist.', oder 'A denkt p ', etc. Hier scheint nämlich oberflächlich, als ob der Satz p zu einem Gegenstand A in einer Art der Relation stünde.'

¹⁷ *Tractatus*, 5.542. In the original text, A and p are not set in italics: „Es ist aber klar, daß 'A glaubt, daß p ', 'A denkt p ', 'A sagt p ' von der Form ' $\langle p \rangle$ sagt p ' sind: Und hier handelt es sich nicht um eine Zuordnung von einer Tatsache und einem Gegenstand, sondern um die Zuordnung von Tatsachen durch Zuordnung ihrer Gegenstände.“

received the objects of its concrete experience in its consciousness and how it has assigned the given objects to its own recognized “truth”.

The given truth (W) is not established through the purely logical operation “ $s \rightarrow p$ ”. It is better to say that subject A has used concepts drawn from its concrete experience of truth to formulate s and p and has positioned them through its own recognized aspect (x). Following this arrangement of the facts the *well predicated truth* (W) is positioned via aspect (x) by thinking self A :

$$\{A: s \rightarrow p (=) \varphi(x)\}: W$$

Here it can be seen that a matter (S) may be predicated and judged differently case by case. The key to the emergence of various predications lies in the way A receives the occasion and how A assigns the given facts to its own recognized truth. The connection: “A thinks: $s \rightarrow p$, via verifiable aspect x”, can be formalized as follows:

$$\{A: s \rightarrow p (=) \varphi(x)\}: S_{\alpha}$$

The same matter S could be predicated with non-p when considered via a different aspect y (non-x):

$$\{A: s \rightarrow \sim p (=) \varphi(y)\}: S_{\beta}$$

Zen kōans often feature the following schema, where all self-identity must be doubted by the thinking and acting self: “*X is X. At the same time X is non-X. Precisely because X is non-X, it is called X.*”¹⁸ This is a seeming contradiction, but it includes the contents of the formulas given above:

$$X \supset \{ S_{\alpha}, S_{\beta}, S_{\gamma} \dots \}$$

Zen thinking abstains from complicated word-for-word explanations. The reason is evident, because the primary matter in Zen is direct insight into a deep dimension of truth and the actualization of this insight in the practice of an acting self in its everyday environment. A Zen statement often looks “a-logical”, “ad hoc” or sometimes even “absurd”, but this impression is based on the view of someone with scant specific knowledge of Zen language, who attempts to judge e.g. a kōan by the standards of formal logic. This kind of judgment approaches a different (other) way of thinking with a one-sided mentality and represents a grave error that should be carefully avoided in the field of *trans-cultural thought*. Semantic and semiotic investigation is necessary not only in trans-cultural philosophy, but also in interdisciplinary research in general, as comparative philosophy presupposes having basic knowledge of the philosophical approaches of various cultures. It can also be said that interdisciplinary

¹⁸ Concerning this construction of zen logic see Hashi: *Vom Ursprung und Ziel des Zen. Die Philosophie des originalen Zen-Buddhismus* (The Origin and Aim of Zen. Philosophy of Original Zen Buddhism), Vienna 2004⁵, Chap. VIII. *Zen und Philosophie. Philosophische Anthropologie im Zeitalter der Globalisierung* (Zen and Philosophy. Philosophical Anthropology in the Time of the Globalization), Vienna 2009, Part I, Chap.VIII.

research has an important role to play in comparative philosophy and cultural sciences, precisely because thorough examination of comparisons is indispensable to the integration of various disciplines.

Note

This contribution is the author's translation of the article in German, "Sprachlose Logik – Grenzgebiete der Sprache der Zen-Kōans und der formalen Logik", published in the collected work: Komparative Philosophie der Gegenwart. Transkulturelles Denken im Zeitalter der Globalisierung, Vienna 2007: Passagen. I dedicate this article to Ass.-Prof. Dr. Klaus Dethloff and Ao. Univ.-Prof. Dr. Ludwig Nagl for the analytical philosophy of the University of Vienna.

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