

## **On mythical Dewaruci, Manunggaling kawula-Gusti and other non-trivial Javanese logic**

Victor Christianto\* Florentin Smarandache\*\*, Sori Tjandrah Simbolon\*\*\*

\*Ekklesia Advanced School of Theology (EAST) - Jakarta, Indonesia.

\*\*Dept. Mathematics & Sciences, University of New Mexico, Gallup, NM, USA.

\*\*\*Graduate Study, Satyabhakti Advanced School of Theology, East Java, Indonesia

### **Abstract**

Discourses on logic have been for a long time predominated by Aristotelian logic, especially that is the case in the West. Although since early 20<sup>th</sup> century there are new development towards many-valued logic, for instance by Lukasiewicz etc, and also fuzzy logic theory by Lotfi Zadeh; and also in recent years there is development by one of us (FS) on Neutrosophic Logic, Plithogenic Logic etc. But still the general public usually are only accustomed to Aristotelian way. More recently, there are growing interests to consider African, Asian and also Native American logic. Nonetheless there is very rare discussion on Javanese logic, except perhaps a report by P. Stange. This article will consider some variations of logic which may show non-triviality of Javanese logic. Hopefully more readers are interested to consider this theme further.

### **Introduction**

Although there are many developments in logic as a field in mathematics, but still the general public usually are only accustomed to Aristotelian way.[1][2]

More recently, there are growing interests to consider African, Asian and also Native American logic.[3] Nonetheless there is very rare discussion on Javanese logic, except perhaps a report by Paul Stange.[4]

This article belongs to study of interpretation of culture, see Geertz [11]. In a similar tone, we agree with Kosuke Koyama on how Christian theologians shall give respect to local cultures, as he wrote:

“Apakah di sana tidak ada kebutuhan untuk penyesuaian atau sedikitnya untuk mengubah ekspresi-ekspresi dengan cara yang fundamental? Seharusnya di sana ada katekismus Toraja-berg sebagai ganti dari katekismus Heidelberg...”[15, p. 46]

In such a spirit of *hermeneutics of respect*<sup>1</sup> towards local cultures, for instance by appreciating Serat Dewaruci, etc., it does not mean to argue for syncretism, but instead for cross-fertilization between Christianity and indigenous cultures especially in Asia, where Christianity were belong in the ancient time (see Acts chapter 16, how St Paul team was moved from going to Asia toward Europe, by the so-called Macedonian calling.) In other words, it is not so exaggerating to say that time has come to receive Christianity to return home to where she belongs. If that can be achieved, we believe that it is a first step to the realization of Eckhart Tolle, *A new Earth*, where he argues that it is not in the future after 1000 year kingdom reigns (cf. *The book of Revelation* chapter 21:1), but a state of consciousness:

“So the new heaven, the awakened consciousness, is not a future state to be achieved. A new heaven and a new earth are arising within you at this moment, and if they are not arising at this moment, they are no more than a thought in your head and

---

<sup>1</sup> See V. Christianto. *Hermeneutika tanpa Hermes*. Jakarta: Penerbit Bina Warga, forthcoming.

therefore not arising at all. What did Jesus tell his disciples? "*Heaven is right here in the midst of you.*"[16]

This article will consider some variations of logic which may show non-triviality of Javanese logic. Hopefully more readers are interested to consider this theme further.

### **Paul Stange on "ngelmu" in Javanese thinking**

History of ancient civilizations reveals that Pythagoras who found a great theorem in geometry, actually led his own sect which emphasized rationality to the utmost.

But there were also other ancient communities which also try to train their disciples to live in purity, such as Essene sect near Qumran, or John the Baptist's community, and also early Christian churches.

One interesting character of Jesus's way to teach His disciples is that He apparently did not use the "formal teaching" like ancient Greek philosophers, but more informal and experiential style of teaching and discipleship.[6]

In one or another way, Javanese ancient concept of *learning* is not exactly for pursuit of knowledge as we know in the Pythagorean sense. But more like discipleship in ancient East, as we can learn in Jesus's method of discipleship.

Stange wrote on the meaning of ngelmu and rasa in Javanese spiritual practice:[4]

"In the Javanese traditional context, and among those now still experiencing a continuity with it, "knowledge" in its significant form is "*ngelmu*." Though in Indonesia "ilmu" now closely approximates Western senses of "knowledge," the Javanese term clearly refers to gnosis, to a mystical or spiritual form of knowledge which is not just intellectual but also intuitive. Another way of clarifying what is meant by "ngelmu" is that, in the end, it is the whole body, and all organs within it, rather than just the mind that "knows." This sense of knowledge underlies Javanese mystical theory not only of consciousness, but also of its relationship, which is essentially reflexive, to social and political power. "Rasa," my focus in this paper, is among other things the cognitive faculty which, as Javanese mystics understand it, we use to "know" the intuitive aspects of reality.

"The Javanese high road to insight in reality is the trained and sensitive *rasa* (*intuitive inner feeling*). In mysticism, the essence of reality is grasped by the *rasa* and revealed in the quiet *batin* (heart).... It is only by training the *rasa* that man can bridge the distance to "God."\*

As part of *rasa* in Javanese logic, we can also consider why aesthetical elements such as harmony etc are essential in Javanese gamelan. An example is this writer's favorite Javanese gamelan song by Ki Narto Sabdo (a then-famous Javanese *dalang*; *dalang* means storyteller of Javanese *wayang*). The following is lyric of the *Prau Layar*:

## **Prau Layar<sup>2</sup>**

by Ki Narto Sabdo

Yo konco ning nggisik gembiro  
Alerap lerap banyune segoro  
Angliyak numpak prau layar  
Ing dino minggu keh pariwisoto  
Alon praune wis nengah  
Byak byuk byak banyu binelah  
Ora jemu jemu karo mesem ngguyu  
Ngilangake roso lungkrah lesu  
Adik njawil mas, jebul wis sore  
Witing klop katon ngawe awe  
Prayogane becik balik wae  
Dene sesuk esuk  
Tumandang nyambut gawe

English version:

## **Sailboat**

by: Ki Narto Sabdo

---

<sup>2</sup> Source: <http://liricampursarinan.blogspot.com/2014/01/lirik-lagu-campursari-prau-layar.html>. Note: Referring back to this writer's days in Surakarta, each Tuesday evening, he and four other friends at work, went to central town at Surakarta, where we practice gamelan music. *Prau layar* was one of his favorite song by *Ki Narto Sabdo*.

Yo behind the rubbing of joy  
the morning water  
On weekdays a lot of tourism  
Slowly the boat had calmed down  
Don't get tired of smiling and laughing  
Eliminate the feeling of lethargy  
My younger brother smiled, apparently it was evening  
It's a good idea to go back  
As for tomorrow morning  
We will continue working

Moreover, in the past few years, these writers have published three papers discussing the role of intuition in "real" epistemology; in fact we can say that several major discoveries have displayed intuition as guiding role, before the left-brain thinking come into play to verify and develop them further. We called that method as "intuilytics." In our scheme, intuilytics can be thought as Neutrosophic Logic contribution in the philosophy of discovery, which is a bit different from Popperian or Kuhnian scheme. (See our recent paper submitted to this journal, IJNS).

**Mythical Dewaruci story: meaning of Manunggaling Kawula Gusti**

As an example, a common practice for Javanese spiritual students is to teach the story of mythical Dewaruci.

As the story goes (based on Indian legend, Mahabharata, but it has been modified by Javanese teachers): One day, Bimasena was sent to seek the living water (Tirta Perwitasari) deep into the sea. After he fought and won over the sea dragon, he went into the bottom of the sea, where he met with Dewaruci, who actually is his "microcosmic consciousness" version of Bimasena himself. After giving lecture to Bimasena, Dewaruci invites Bimasena to come into Dewaruci, to be One with the Divine. But later on, Bimasena felt he did not want to go outside from the innerside of Dewaruci. But Dewaruci told him, that there are still things that Bimasena should accomplish in his life, therefore Bimasena should go down again in real world. Then Bimasena stepped out from inner side of Dewaruci. Thereafter, Dewaruci came into Bimasena and be in unity with him. "

That is the summary of the story of how Bimasena became one with Dewaruci, that is God within himself.

While at first glance, we can say that the mythical basis of this Javanese teaching may not have parallelism with Christianity or other formal religious tradition, nonetheless there are indeed some elements that can find homage to Christian's concept of unio mystica, for instance: tirta

perwitasari (or sometimes called "Tirta Amrita") can be compared to the dialog on living water between Jesus and the Samaritan woman (John chapter 4). And also Jesus often claimed that "I and Father are One." That indicates perfect unio mystica, which is known in other mythical tradition as "enlightenment" (Buddhist), or makrifat (Moslem).

Nonetheless, in the context of study of logic, how can we understand that process of unification between human as creature and God, the Creator? Certainly. Aristotelian logic which differentiates [A] and [B] without any possible merging cannot offer much help.

### **How to consider Unio mystica from non-Diophantine perspective**

As far as we can consider, there are 2 possible explanations to consider the aforementioned spiritual union, i.e. Rupert Sheldrake's morphic resonance, and also non-Diophantine arithmetics.

Sheldrake introduced morphic resonance to represent memories which can include both the element as well as the larger entities. In other word, that concept of morphic resonance can also be thought of as a solution to Russell's paradox, i.e. the largest set that comprises all other subsets, is also a set (at least that is what we can understand on meaning of morphic resonance.)

Now we will explain the second argument, as follows.



In other papers, we argued that it seems like insurmountable task if we want to reach God in His richness, with simple binary logic (Aristotelian way), because the binary logic cannot capture the complex nature of human mind. [10][11][12].

Therefore we argue that the eastern philosophical systems, such as Manunggaling Kawula Gusti in classic Javanese belief, suggest neither nor logic, which is often called "*ngono yo ngono ning ojo ngono*." (you can do that, but don't do like that.) That neitherness or bothness position can be considered paradoxical in terms of classical Aristotelian logic but not in sentential logic.

In other words, we can hypothesize that any system of logic which can convey neitherness or bothness situations can be considered better in order to explain the Divinity Realm.

After discussing such a logical proposition, let us consider again Iain McGilchrist.[9] As a psychiatrist, his argument on left and right function of human brain can be captured in essence as follows: the left hemisphere which usually processes in detailed manner any problem (logically) should not predominate the right brain, which capture holistic and spiritual process.

In the words of Blaise Pascal:

"The heart has its own logic, which reason cannot understand."

In that sense, both heart as spiritual brain function should not be governed by the left brain function. In other words, in spirituality realm especially in worshipping God, we should not let the emissary (Logical thinking process) to lead the master (holistic/spiritual thinking process). It should be the other way around.

This problem of choosing between Logic or going beyond Logic, or from rationality to go beyond rational thinking can be traced back even to classical history of mathematics. It is known that Pythagoreans pupils worshiped rationality and Logic in mathematics, up to the point when they were shocked when one of their disciples found an irrational number, those Pythagoreans left that disciple to drowning in the sea.

So we know that what McGilchrist described is a real issue, and not just a joke.

Similarly, several inventions in mathematics were not easily accepted at first, such as transcendental numbers, complex numbers, transfinite set, Cantor sets, or non-Diophantine arithmetics.

Let us give some examples of non-Diophantine arithmetics. From primary school, all of us learn that  $1+1=2$ ,  $2+2=4$  and so on. But if we put a cat into a room (1), then we put a tiger into the same room, then we learn that in that case,  $1+1=1$ . That is a good example of non-Diophantine arithmetics.

And also the arithmetics of giving follows non-standard Logic. For instance, basic arithmetics says that if you have 2 in your pocket then you give 1 to the poor, then you got  $2-1=1$ . But God do not sleep, so He Will bless you more, therefore from experience we learn that  $2-1=2$  or may be  $2-1=3$ . That is another case of non-Diophantine arithmetics.

Another example is from management studies, we learn that good team work needs synergy, where  $1+1=3$ . That is the value of synergy is much more just addition of the members.

Finally, we can also point out that Trinitarian Logic cannot be reconciled with Aristotelian Logic or Diophantine arithmetic, as we learn that Trinity means that  $1+1+1=1$ .

That is also a case of non-Diophantine Logic in Theology. That non-standard Logic in understanding Trinity can be compared with the notion of uncountable noun in English grammar.

It is known that countable nouns mean  $1+1=2$  and so on, like addition of two apples, two oranges, two potatoes etc.

But that arithmetic operation does not follow for uncountable nouns, for example we cannot call  $\text{water} + \text{water} = 2 \text{ water}$ . Because water is uncountable noun.

But we shall call it "a glass of water" or "a cup of coffee."

That is another metaphor for better understanding of Trinity from non-Diophantine arithmetics.

If we follow that reasoning, we can understand Unio mystica (Manunggaling Kawula Gusti in Javanese belief) in terms of similar non-Diophantine arithmetics, that is: adding one person to the Trinity will still be One:

$$(1+1+1)+1=1$$

That is what mystical person refers to uniting with God.

And even Church Fathers refer to Church members are unity with God. Let say a church members having 1000 persons as members, we can write:

$$(1+1+1)+1000=1$$

They are still United in One through Christ. That is why St. Paul refer to this case as unity "in Christ." In our opinion, such an interpretation could be the best way to understand Jesus's prayer in John chapter 17, see especially John 17:22.

### **Concluding remark**

In this short review article, we discuss several notions in Javanese tradition, like *ngelmu*, *rasa*, and *Manunggaling Kawula Gusti*, which hardly can be explained from Aristotelian perspective.

As with integrating intuition and logical faculty of human thinking process, from Neutrosophic Logic viewpoint, we come up with a new term:

"intuilytics." (see a recent paper we submit to this journal).

And for describing *unio mystica*, there are two possible ways to explain:

Sheldrake's morphic resonance and also non-Diophantine arithmetics.

This paper is an early discussion on this non-trivial Javanese logic.

In such a spirit of hermeneutics of respect towards local cultures, for instance by appreciating *Serat Dewaruci*, etc., it does not mean to argue for syncretism, but instead for cross-fertilization between Christianity and indigenous cultures especially in Asia, where Christianity were belong in the ancient time (see Acts chapter 16, how St Paul team was moved from

going to Asia toward Europe, by the so-called Macedonian calling.) In other words, it is not so exaggerating to say that time has come to receive Christianity to return home to where she belongs. If that can be achieved, we believe that it is a first step to the realization of Eckhart Tolle, *A new Earth*, where he argues that it is not in the future after 1000 year kingdom reigns (cf. *The book of Revelation* chapter 21:1), but a state of consciousness.

Version 1.0: 13 Nov. 2021, pk. 16:31

Version 1.1: 21 March 2022, pk. 19:50

VC, FS. STS

## References:

- [1] Mark Zegarelli. *Logic for Dummies*. Indianapolis: Wiley Publ. Inc., 2007.
- [2] Florentin Smarandache. *A UNIFYING FIELD IN LOGICS: NEUTROSOPHIC LOGIC, NEUTROSOPHY, NEUTROSOPHIC SET, NEUTROSOPHIC PROBABILITY AND STATISTICS*. 4<sup>th</sup> ed. Url: <https://arxiv.org/ftp/math/papers/0101/0101228.pdf>
- [3] Elizabeth Hoppe & Ronald Weed (eds.) FROM ANCIENT GREEK TO ASIAN PHILOSOPHY. *Athens Institute for Education and Research*, 2007. url: <http://www.atiner.gr/docs/2006PhilosophyBook.pdf>
- [4] Paul Stange. The Logic of rasa in Java. *Indonesia* No. 38 (Oct., 1984), pp. 113-134 (22 pages). Published by: Cornell University Press. Url: <https://www.jstor.org/stable/3350848>
- [5] Susan Pratt Walton. Aesthetic and Spiritual Correlations in Javanese Gamelan Music. *Global Theories of the Arts and Aesthetics*. Url: <https://deepblue.lib.umich.edu/bitstream/handle/2027.42/75272/j.1540-594X.2007.00235.x.pdf;sequence=1>
- [6] Allan G. Harkness. De-schooling the Theological Seminary: An Appropriate Paradigm for Effective Ministerial Formation. *Teaching Theology and Religion*, ISSN 1368-4868, 2001, vol. 4 no. 3, pp 141-154

- [7] Andi Harsono. *Tafsir ajaran Serat Wulangreh*. Yogyakarta: Pura Pustaka, 2010.
- [8] Purwadi. *Babad Tanah Jawa*. Yogyakarta: Panji Pustaka.
- [9] Iain McGilchrist. *The master and his emissary*. London: Yale University Press, 2015.
- [10] Paul G. Hiebert. *The flaw of excluded middle*. *Missiology*, 1980. Sage Publ.
- [11] V. Christianto. Neutropsychology and beyond. A chapter contribution in V. Krasnoholovets, V. Christianto, F. Smarandache (eds.) *Old problems and new Horizons in World Physics*. New York: Nova Science Publ., 2019.
- [12] V. Christianto & Florentin Smarandache. *The World within Us. Indonesia*. Eunoia Publ., 2020.
- [13] Clifford Geertz. *The interpretation of cultures*. New York: Basic Books, 1973.
- [14] Hamid Nasuhi. *Serat Dewaruci*. Jakarta: Penerbit Ushul Press, 2009.
- [15] Kosuke Koyama. *Tidak ada Gagang pada Salib*. Jakarta, Gunung Mulia, 1996, p. 46
- [16] Eckhart Tolle. *A new Earth*. Penguin; Reprint edition (January 30, 2008). url: <https://eckharttolle.com/>
- [17] V. Christianto. *Hermeneutika tanpa Hermes*. Jakarta: Penerbit Bina Warga, forthcoming