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The Reason for the Incompleteness of Some Theorems in Modern Mathematics: Non Numbers Enter Mathematical Analysis or the Concept Definition Is Incomplete

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Abstract:

The concept of non-number and number is found, and the concept of non-number and number is defined by symbols. The basic theory of number theory is solved; it is proved that {Godel's Incomplete Theorem} are incomplete. and it is also proved that the first number of natural number must be 1, not 0.

Keywords: *non number, number, natural number, completeness, incompleteness.*

Introduction

There are concepts of non-number and number in nature. Animals and ancient apes discovered the changes in nature, and then used symbols to represent the natural number 1. Later, the mathematical man Piano axiom obtained the natural number set N, and then extended the decimal and fraction (Whittaker, 1945). Today's mathematical theory came into being after being perfected by mathematicians (Mordell, 1933; Katz, 1998; Tao, 2016). Human beings differ on whether the first number of natural numbers is 1 or 0.

Because I want to prove that logic will not contradict itself, because the two truths will not conflict with each other, because the propositions that conform to logic are complete.

Therefore, the first number of natural number can only be one of {1,0}.

The Godel's incompleteness theorem is also incomplete, and this incompleteness is artificially caused by Godel, not natural.

The Definition of Science Comes from Being Logical

Scientific standards for logical composition:

1. Every concept must be defined.

2. Every definition must be logical (please prove that your definition is logical, or use logic to define it).

3. Each definition has its own symbol representation (reasoning and argumentation only recognize symbols);

4. It can't conflict with the correct definition of predecessors and ancients;(those conforming to the first three items are the correct definitions).

5. All the relations of definitions constitute a manuscript, the connection between definitions must be logical;

6. All argumentation and refutation can only refer to the concept with logical definition, and cannot introduce new concept (new concept: the concept without logical definition).

According to the six standards of science, all logical theories will not conflict and paradox, and mathematical (all scientific) logic is self-consistent.

Achieving the above six standards is scientific behavior, and not being complete is unscientific.

In order to prevent pseudoscience from quarreling, we must abide by the sixth principle.

Attachment: logical $(a \ngtr a)$, illogical $(a > a)$.

Got: scientific standards are fair truth (because: logical).

Evil ideas against scientific standards always exist, because scientific standards challenge evil ideas.

Opponents of scientific standards will argue that every concept goes back to "the most primitive concept (commonly known as the atomic concept). How do you ensure that the original concept definition is logical?".

Answer: Because it is the most primitive concept and there are no other concepts, the most primitive concept will not conflict with other concepts (see logical definition. Logical equivalent expression: no contradiction; No conflict.).

How to define concepts logically during operation?

Defining $\mathcal{A}$ must also define $\neg\mathcal{A}$.

Define Rational number Irrational number must be defined.

To define a number, a non number must be defined.

The definition is finite, and limitless must be defined.

To define an imaginary number, a real number must be defined.

Only in this way can we draw boundaries between each other.

Definition of 'Definition': $\neg\mathcal{A} \Rightarrow \mathcal{A}$

Logic Will Not Contradict Itself

The definition of logic and contradiction (Xie, 2022).

Definition of logic: $\{\mathcal{A} \ngtr \mathcal{A}\}$.

Paradox definition: $\{\mathcal{A} > \mathcal{B}, \mathcal{B} > \mathcal{A}\}$

Theorem: Logic will not contradict itself. $\{\mathcal{A} > \mathcal{B}, \mathcal{B} > \mathcal{A}\} \notin \{\mathcal{A} \ngtr \mathcal{A}\}$

prove:

$$\because \{\mathcal{A} \ngtr \mathcal{A}\}$$

$$\text{Assumptions: } \{\mathcal{A} > \mathcal{B}, \mathcal{B} > \mathcal{A}\}$$

$$\therefore \mathcal{A} > \mathcal{B}$$

$$\therefore \mathcal{B} > \mathcal{A}$$

$$\therefore \mathcal{A} + \mathcal{B} > \mathcal{A} + \mathcal{B}$$

$$\Rightarrow \{\mathcal{A} > \mathcal{A}\}$$

$$\{\mathcal{A} > \mathcal{A}\} \text{ conflicts with } \{\mathcal{A} \ngtr \mathcal{A}\}$$

$$\therefore \{\mathcal{A} > \mathcal{B}, \mathcal{B} > \mathcal{A}\} \notin \{\mathcal{A} \ngtr \mathcal{A}\}$$

(QED).

The Proposition in Line With Logic is Complete

Simple statement: Each concept in the proposition you bring is logically defined, and its conclusion must be provable (proved true or proved false) (Xie, 2022).

Proved to be true: $\{ \mathcal{A} \ngtr \mathcal{A} \}$

The proof is false: $\{ \mathcal{A} > \mathcal{A} \}$

Complete definition: can be proved to be $\{ \mathcal{A} \ngtr \mathcal{A} \}$ or can be proved to be $\{ \mathcal{A} > \mathcal{A} \}$.

Logical proposition definition: proposition known condition $\{a, b, c, \dots, k\}$ each sub-condition satisfies $\{ \mathcal{A} \ngtr \mathcal{A} \}$, and {a, b, c,…,k} arbitrary combination of the conclusion: $\mathcal{X}$.

There must be: $\mathcal{X} \in \{ \mathcal{A} \ngtr \mathcal{A} \}$ or $\mathcal{X} \in \{ \mathcal{A} > \mathcal{A} \}$

prove

Known: $\{a, b, c, \dots, k\} \in \{ \mathcal{A} \ngtr \mathcal{A} \}$

$$\text{If: } \{\textstyle\sum(\mathcal{A} \ngtr \mathcal{A})\ \{a, b, c, \dots, k\} = \mathcal{X}\}$$

$$\Rightarrow \mathcal{X} \in (\mathcal{A} \ngtr \mathcal{A})$$

$$\text{If: } \{\textstyle\sum(\mathcal{A} > \mathcal{A})\ \{a, b, c, \dots, k\} = \mathcal{X}\}$$

$$\Rightarrow \mathcal{X} \in (\mathcal{A} > \mathcal{A})$$

(QED).

Mathematical significance: Godel's incompleteness theorem (Miller, 1986).

It can be concluded that there are mathematical logic errors in the basic theory of human mathematics: non-numbers are regarded as numbers in mathematical logic, and the concept of limitless is regarded as a finite concept.

Logic Will Not Contradict Itself

Truth: a logical theory.

Definition of logic:

$$\{\mathcal{A} \ngtr \mathcal{A}\}$$

Non-logical (contradictory) definition:

$$\{\mathcal{A} > \mathcal{A}\}$$

Therefore, the definition of truth:

$$\{\mathcal{A} \ngtr \mathcal{A}\} \Rightarrow f(x)$$

$$\because \text{(Mathematical theory)} + \{\mathcal{A} \ngtr \mathcal{A}\}$$

$$\therefore \{1 + 1 = 1 + 1\} \in \{\mathcal{A} \ngtr \mathcal{A}\}$$

Got the truth α: $1 + 1 = 1 + 1$

There was a physical man doing the experiment. He said that the experiment got the truth:

$$\{1 + 1 = 1 + 1 + 1\}$$

The experiment of physical man is: (1 man) and (1 woman) give birth to (1 baby).

(1♂)+(1♀)= (1♂)+(1♀)+(1 baby)

$$\Rightarrow \{1 + 1 = 1 + 1 + 1\}$$

He got another truth β:

$$1 + 1 = 1 + 1 + 1$$

truth β Have you denied the truth {1+1=1+1}? Tell you:

No Reason: This experiment stealthily changes concepts and hides conditions.

This experiment β The truth is:

(1♂)+(1♀)+ (Add materials for making 1 baby)= (1♂)+(1♀)+ (Made: 1 baby)

⇒ {1+1+1=1+1+1}

β: 1+1+1=1+1+1

Never: {1+1=1+1+1}

(QED).

Significance:

Logic does not allow for self-contradiction, and truth and truth are unified. In order to prevent the appearance of false truth, each concept should be logically defined, and each definition should not conflict with the correct definition existing in the past (correct definition: concept must be logically defined).

Truth and reality (experiment) are unified, and reality and experiment obey truth. Because the concepts in reality and experiment must be defined, otherwise the expression will be vague and unknown. If the object of reality and experiment is not defined, the experiment has no theoretical basis, and the experiment without theoretical basis cannot explain and verify the theory.

Number Concept and Non-Number Concept

The concept of number and the concept of non-number must be defined at the same time, so that there are boundary restrictions between them, there is no ambiguity, and there is no quarrel.

The concept of number and the concept of non-number must be defined at the same time, which is a logical definition. It avoids circular definition.

Non-number concept: $[\mathcal{NON}]$

$[\mathcal{NON}]$: Logically speaking, $\mathcal{A}$ cannot satisfy $\mathcal{AH}$ with any $\mathcal{H}$.

$$[\mathcal{NON}]:\{\mathcal{A} \ngtr \mathcal{A} \mid \forall\mathcal{H} \ni (\mathcal{H} \ngtr \mathcal{H}) \nRightarrow \mathcal{AH}\}$$

prove:

Create new symbols: $+$

$$\text{Get: } \mathcal{A} \nRightarrow (\mathcal{A}+)$$

Create new symbols: $\mathrm{p}, =, \mathrm{q}$

$$\text{Get: } \mathcal{A} \nRightarrow (\mathcal{A} + \mathrm{p} = \mathrm{q})$$

Create new symbols: $-$

$$\text{Get: } \mathcal{A} \nRightarrow (\mathcal{A}-)$$

Create new symbols: $\mathrm{n}, =, \mathrm{m}$

$$\text{Get: } \mathcal{A} \nRightarrow (\mathcal{A} - \mathrm{n} = \mathrm{m})$$

$$\therefore \mathcal{A} \nRightarrow (\mathcal{A} =)$$

$$\therefore \mathcal{A} \nRightarrow (\mathcal{A} = \mathrm{y})$$

. . . .

$$\therefore \mathcal{A} \nRightarrow (\mathcal{A}\forall\mathcal{H})$$

$$\therefore \mathcal{A} \in [\mathcal{NON}]$$

(QED).

Number concept symbol: $[\mathcal{DN}]$

$$\because [\mathcal{NON}]$$

$$\therefore [\mathcal{DN}]:\ \{\mathcal{A} \ngtr \mathcal{A} \mid \exists\mathcal{H}\ (\mathcal{H} \ngtr \mathcal{H})\ \Rightarrow \mathcal{AH}\}$$

Prove:

Create new symbols: $+$

$$\text{If: } \mathcal{A} \Rightarrow (\mathcal{A}+)$$

Create new symbols: $+, \mathrm{p}, =, \mathrm{q}$

$$\text{If: } \mathcal{A} \Rightarrow (\mathcal{A} + \mathrm{p} = \mathrm{q})$$

Create new symbols: $-$

$$\text{If: } \mathcal{A} \Rightarrow (\mathcal{A}-)$$

Create new symbols: $-\mathrm{n}, =, \mathrm{m}$

$$\text{If: } \mathcal{A} \Rightarrow (\mathcal{A} - \mathrm{n} = \mathrm{m})$$

……

$$\text{If: } \mathcal{A} \Rightarrow \mathcal{A}\exists\mathcal{H}$$

$$\therefore \mathcal{A} \in [\mathcal{DN}]$$

(QED).

Meaning: It defines the number and non-number, gives the theoretical basis for the basic number theory, and prevents the occurrence of $\{\mathrm{A} > A\}$ in human mathematics.

Some people will ask, does the universe have the concept of non-number?

Yes, you define a number a. If $\{\mathrm{a} > a\}$ appears. a is a non-number.

I also tell you that after defining the finite concept and the infinite concept, you can get specific non-numbers (this is my other manuscript. It is omitted here).

Basic Number Theory Logic: 1+1=2

Animals and ancient people (apes) have discovered natural phenomena:

First observe and find ☼, then come back later ☁. It becomes: ☼☁.

{☼} ⇒ {☼ ← ☁} ⇒ {☼☁}.

→ {{☼|∃☁} → ☼☁}

$$\to \{\{\mathcal{A}, |\exists\mathcal{H}\} \to \mathcal{AH}\} \to [\mathcal{DN}]$$

→ $[\mathcal{DN}]$ → ☼ → 1

{At that time, there was only the first number 1

∴ The number 1 naturally adapts to the logic:

$$1 \in (\mathcal{A} \ngtr \mathcal{A})$$

Reason: There was only one 1 at that time, which would not conflict with other numbers.

$$\therefore 1 \in [\mathcal{DN}]$$

It tells us a truth: primitive concepts are defined as symbols and are natural logic.}

∴ $[\mathcal{DN}]$ →natural number 1

1+1=2 is the numerical calculation formula within the range of elementary mathematics.

Why is there 1+1=2 when learning natural number 1 in mathematics from childhood?

I don't mean (Goldbach).

Mathematicians have written a large number of papers citing the Peano axioms to demonstrate the rationality of 1+1=2.

I use real and ingenious methods to quickly prove: 1+1=2.

The number concept $[\mathcal{DN}]$ can also represent stones or lines as the symbol 1, $[\mathcal{DN}] \rightarrow 1$

Verification: 1+1=2

Known conditions: {$[\mathcal{DN}]$,1+1=}

Argumentation skills:

Don't first prove: $1+1=?$

But to prove: $(1+1\ \neq ?) \rightarrow (1+1=?)$

Prove:

Known conditions: $\{[\mathcal{DN}],\ 1+1=\}$

$$\rightarrow \{[\mathcal{DN}],\ 1,+,=,1+1,1+1=\}$$

$$\because\ [\mathcal{DN}]$$

$$\therefore\ 1 \in [\mathcal{DN}]$$

$$\therefore\ [\mathcal{DN}] \rightarrow 1$$

$$\therefore\ [\mathcal{DN}] \rightarrow 1 =$$

$$\therefore\ \{[\mathcal{DN}],\ \ =,\ \ 1\} \rightarrow 1 = 1$$

$$\because\ 1 \in [\mathcal{DN}]$$

$$\therefore\ [\mathcal{DN}] \rightarrow 1 +$$

$$\therefore\ [\mathcal{DN}] \rightarrow 1 + 1$$

$$\therefore\ [\mathcal{DN}] \rightarrow 1 + 1 =$$

Here we need to correct a human thought:

Don't prove $\{1+1=?\}$ first

We should first prove that $\{1+1\ \neq ?\}$,

there was only natural number 1 at that time.

$$\because\ 1 = 1$$

$$\therefore\ 1 + 1 \neq 1$$

$$[\mathcal{DN}] \rightarrow 1 \rightarrow (1 = 1)$$

At that time, there was only natural number 1, and 1=1.

Assumption: 1+1=1

Then:

{1+1=1} conflicts with the previous {1=1}.

$$\because 1+1 \neq 1$$

∴ 1+1=(non 1 symbol, create a new symbol)

People at that time created a new symbol 2,

$$\therefore 1+1=2$$

Similarly: $\{1+1+1 \neq 1, 1+1+1 \neq 2\}$

$$\rightarrow 1+1+1=3$$

With the same logic, we can get:

3,4,5,6,7,8,9,10,……

∴ 1→{1,2,3,4,5,6,7,8,9,10,……

If people at that time created the second symbol 3, the order of human natural number from small to large would be: {1,3}.

Meaning: This is a definition. According to Piano's axiom, it is also (1+1=2). The definition must be logical (not in conflict with the previous correct one).

Tell humans that the proof (1+1=?) must know the conditions at that time ($1+1 \neq 1$).

The same logic obtains the natural sequence: {1,2,3,4,5,6,7,8,9,10, ……

The concept of 0 can only appear for the first time when there is 1: the number 1 has been removed.

Logical symbol:

$$\{0 \,|\, (1-1)\}$$

$$\therefore 1 \rightarrow (1 - 1 = 0)$$

$$\therefore 1 \rightarrow 0$$

Therefore, the number 0 is a new number based on the number 1.

The number is logically expanded to get the definition of 0: any number a meets the following requirements: a−a

Logical symbol:

$$\{0 \mid \forall a \in [\mathcal{DN}], \rightarrow (a-a)\} \rightarrow (a-a=0)$$

The first number problem of natural numbers: 0 or 1?

Number theory researchers define ℕ, habit is 1 as the first natural number,

Other algebraic schools take 0 as the first natural number.

I can get the theorem:

$$\mathbb{N} := \{1,2,3,4,5,6,7,8,9,10 \ldots \ldots$$

$$\because \{1 \rightarrow 1-1=0, 0 \nrightarrow 1\}$$

$$\therefore\ 0 \nrightarrow \{1,2,3,4,5,6,7,8,9,10, \ldots \ldots$$

$$\therefore\ 0 \nrightarrow \{0,1,2,3,4,5,6,7,8,9,10, \ldots \ldots$$

(6.1)

$$\because 1 \rightarrow \{1,2,3,4,5,6,7,8,9,10, \ldots \ldots$$

(6.2)

$$\therefore \mathbb{N} := \{1,2,3,4,5,6,7,8,9,10 \ldots \ldots$$

$$\because\ (6.1)(6.2)$$

$$\therefore \mathbb{N} :\neq \{0,1,2,3,4,5,6,7,8,9,10 \ldots \ldots$$

(QED).

The Incompleteness of {Godel's Incomplete Theorem}

{Godel's incompleteness theorem} n 1931, the Austrian logician Kurt Gödel pulled off arguably one of the most stunning intellectual achievements in history.

Mathematicians of the era sought a solid foundation for mathematics: a set of basic mathematical facts, or axioms, that was both consistent — never leading to contradictions — and complete, serving as the building blocks of all mathematical truths.

But Gödel's shocking incompleteness theorems, published when he was just 25, crushed that dream. He proved that any set of axioms you could posit as a possible foundation for math will inevitably be incomplete; there will always be true facts about numbers that cannot be proved by those axioms. He also showed that no candidate set of axioms can ever prove its own consistency.

I will prove that his theorem is incomplete: the reason is that he did not define "true and false", he did not define "what cannot be proven", he did not define "non numbers and numbers"} (Miller, 1986; Shmahalo, 2020).

A complete definition of fn (Xie, 2022):

$$fn \in (\mathcal{A} \ngtr \mathcal{A}) \text{ , or } fn \in (\mathcal{A} > \mathcal{A})$$

$$\because\ \{f_1, f_2, f_3, \cdots, f_n\} \in fn$$

$$\text{If } \{f_1 \ngtr f_1,\ f_2 \ngtr f_2,\ f_3 \ngtr f_3,\ \cdots,\ f_n \ngtr f_n\}$$

$$\therefore\ fn \in (\mathcal{A} \ngtr \mathcal{A})$$

$$\text{If } \{\exists f_i > f_i\}$$

$$\therefore\ fn \in (\mathcal{A} > \mathcal{A})$$

Three conclusions were drawn:

①Any sub concept of fn has a logical definition, proving that fn is true.

② The definition of a sub concept of fn, as long as there is one sub concept that is contradictory, proves that fn is false.

③ When logically defining the sub concepts of fn, as long as there is a sub concept that is not defined, fn is not provable.

Can be proven as defined as: proving to be true or proving to be false.

Can be proven as defined as: $(\mathcal{A} \ngtr \mathcal{A})$, or $(\mathcal{A} > \mathcal{A})$.

Abbreviation: Confirmation or falsification.

{Gödel Numbering}

Gödel's main maneuver was to map statements about a system of axioms onto statements within the system — that is, onto statements about numbers. This mapping allows a system of axioms to talk cogently about itself.

The first step in this process is to map any possible mathematical statement, or series of statements, to a unique number called a Gödel number.

The slightly modified version of Gödel's scheme presented by Ernest Nagel and James Newman in their 1958 book, Gödel's Proof, begins with 12 elementary symbols that serve as the vocabulary for expressing a set of basic axioms. For example, the statement that something exists can be expressed by the symbol ∃, while addition is expressed by +. Importantly, the symbol s, denoting "successor of," gives a way of specifying numbers; ss0, for example, refers to 2.

These twelve symbols then get assigned the Gödel numbers 1 through 12.

Table 1. Godel Number

Constant sign	Gödel number	Usual Meaning
~	1	not
V	2	or
⊃	3	if…then…
∃	4	there is an…
=	5	equals
0	6	zero
s	7	the successor of
(	8	punctuation mark
)	9	punctuation mark
,	10	punctuation mark
+	11	plus
×	12	times

Next, letters representing variables, starting with x, y and z, map onto prime numbers greater than 12 (that is, 13, 17, 19, ⋯⋯).

Then any combination of these symbols and variables — that is, any arithmetical formula or sequence of formulas that can be constructed — gets its own Gödel number.

For example, consider 0=0. The formula's three symbols correspond to Gödel numbers 6, 5 and 6. Gödel needs to change this three-number sequence into a single, unique number — a number that no other sequence of symbols will generate. To do this, he takes the first three primes (2, 3 and 5), raises each to the Gödel number of the symbol in the same position in the sequence, and multiplies them together.

Thus 0 = 0 becomes:

$2^6 \times 3^5 \times 5^6$, or 243,000,000.} (Miller, 1986; Shmahalo, 2020).

(Gödel Numbering) is incomplete.

True only exists, false is a conclusion obtained under the wrong conditions, it is a pseudo concept.

So fake doesn't exist.

Obtained the certainty of existence: $\mathcal{A} \ngtr \mathcal{A}$

Definition that does not exist: $\mathcal{A} > \mathcal{A}$

{Arithmetizing Metamathematics

$$\sim(0 = 0)$$

$$\Rightarrow 2^1 \times 3^8 \times 5^6 \times 7^5 \times 11^6 \times 13^9$$

First consider the formula $\sim(0 = 0)$, meaning "zero does not equal zero." This formula is clearly false. Nevertheless, it has a Gödel number: 2 raised to the power of 1 (the Gödel number of the symbol ~), multiplied by 3 raised to the power of 8 (the Gödel number of the "open parenthesis" symbol), and so on, yielding

$2^1 \times 3^8 \times 5^6 \times 7^5 \times 11^6 \times 13^9$.} (Miller, 1986; Shmahalo, 2020).

$\because$ $\sim(0 = 0)$, meaning "zero does not equal zero." This formula is clearly false.

$$\therefore \sim(0 = 0) \in (\mathcal{A} > \mathcal{A})$$

$$\therefore \sim(0 = 0) \in \text{(non existent)}$$

$\sim(0 = 0)$It has been proven that it is false and can also be proven.

Because Godel's theorem is about studying numbers, extend (Table 1) to the next format and add numbers $[\mathcal{DN}]$ to the arrangement:

$\mathcal{DN}$	13	Numbers

Compile $\sim(\mathcal{DN})$ into a Godel number :

$$2^1 \times 3^8 \times 5^{13} \times 7^9$$

$$\Rightarrow \sim(\mathcal{DN}) = 2^1 \times 3^8 \times 5^{13} \times 7^9 = (\mathcal{DN})$$

$$\Rightarrow \sim(\mathcal{DN}) = (\mathcal{DN})$$

$$\Rightarrow \text{Contradiction: } (\mathcal{A} > \mathcal{A})$$

It is proved that any axiom system cannot introduce non numbers for mathematical analysis.

{*Substitution forms the crux of Gödel's proof.*

He considered a metamathematical statement along the lines of "The formula with Gödel number sub(y, y, 17) cannot be proved."} (Miller, 1986; Shmahalo, 2020).

⇒ His rule and statement are incorrect.

If the formula for sub (y,y,17) cannot be proven.

⇒sub (y,y,17)∋{ Incomplete concept: All sub concepts are not logically defined or non numbers are introduced.}

∴ Mathematical analysis cannot be carried out on the basis of {sub (y,y,17)}.

Proof:

∵ The formula for sub (y, y, 17) cannot be proven.

∴ Unable to determine whether sub (y, y, 17) is true (correct) or false (incorrect).

∴ It cannot be forcibly stipulated that the formula for sub (y, y, 17) cannot be proven, but it is also true (correct). This is a fictional clause.

Previously, I proved that propositions constructed by known concepts that conform to logic are necessarily provable.

$$\because \{\text{sub (y, y, 17)}\} \in (\text{unprovable})$$

$$\because (\text{unprovable}) \notin (\mathcal{A} \ngtr \mathcal{A})$$

$$\therefore \{\text{sub (y, y, 17)}\} \notin (\mathcal{A} \ngtr \mathcal{A})$$

{*The formula of sub* (y, y, 17*) has continuity and is another key to Godel's proof.*} (Miller, 1986; Shmahalo, 2020).

Theorem: The concept of contradiction cannot have continuity.

The theorem is defined as a symbol:

$$\text{k} \in \forall$$

$$(\mathcal{A} > \mathcal{A}) \nRightarrow (\mathcal{A} > \mathcal{A})\text{k}$$

Proof:

The definitions of {contradictory, fictional, non-existent, false, incorrect} are: $(\mathcal{A} > \mathcal{A})$

The definitions of logical, existing, natural, real, and correct are:

Defined as: $(\mathcal{A} \ngtr \mathcal{A})$

Allow: $(\mathcal{A} \ngtr \mathcal{A})$

Not allowed: $(\mathcal{A} > \mathcal{A})$

So it is not allowed: $(\mathcal{A} > \mathcal{A})\text{k}$

(QED)

Results

Scientific significance: We cannot use incorrect (false) conditions to reason and argue.

In scientific and mathematical derivation, we do not know if A is true (correct) or false (incorrect). We can only infer logically by assuming that A is true (correct). Cannot set A to be false (incorrect) as a condition for logical reasoning and computation.

When we prove that A is true (correct), we cannot take A as false (incorrect) for logical deduction and calculation.

There is a typical case:

In the 6th century BC, the philosopher Epimenides of Crete famously said (Jc, 2020):

My statement is false.

The reason why this sentence is called the Liar paradox is that it has no answer. Because if Epimenides' statement is true, then it does not correspond to the statement 'My statement is false', then it is false; If this sentence is false, then it is in line with the statement 'My sentence is false', then this sentence is true. Therefore, this sentence is inexplicable. This is a paradox caused by self reference.

Russell attempted to solve the problem by layering propositions: "The first level propositions can be said to be those that do not involve the population of propositions; the second level propositions are those that involve the population of the first level propositions; the rest follow suit, even to infinity." However, this method did not achieve results. During the entire period of 1903 and 1904, I was almost entirely devoted to this matter, but without success. (Hartshorne, 1970).

The solution to this paradox by humans is all wrong, because humans are pestering them and telling the truth? Or a lie?

Human beings always struggle with Language construct, and have not found a real solution.

Solution (proof):

∵ There are liars in humans

∵ There are various types of lies among humans

∴ Don't inquire about the specific lies in this sentence.

∵ It is stipulated that 'this sentence' is a lie.

∴ We cannot assume {"this lie" ≠ "lie"} to discover new theories or paradoxes.

∴ In science and mathematics, {unprovable theories and erroneous theories} cannot be cited as the basis for theoretical extension.

∵ Definition: My statement is false.

∴ (My statement is false.)∈ $(\mathcal{A} > \mathcal{A})$

∵Disallowed:$(\mathcal{A} > \mathcal{A})$k

∴Disallowed: (My statement is false.)k

Conclusion

Proved that the paradox caused by (My statement is false) does not exist.

It is incorrect for Godel to use the condition that he cannot prove sub (y, y, 17) for subsequent analysis of sub (y, y, 17):

① A theory that does not exist (wrong, false, Not allowed): $(\mathcal{A} > \mathcal{A})$

Definitely not allowed: $(\mathcal{A} > \mathcal{A})$k

Meaning: Wrong concepts must not have a follow-up.

② There are some real concepts, and no subsequent elements are allowed.

If $\mathcal{A}$ is a non number, it is not allowed: $\mathcal{A}$k.

Refer to the definition of non numbers.

limitless Elements:3.14159······

Not allowed: 3.14159······k.

③ Godel cited incomplete conditions when proving Godel's incompleteness theorem. Godel's theorem is incomplete, and Godel's incompleteness is artificially caused. It can be prevented.

So Godel's incompleteness theorem is a wrong theory.

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