A phenomenon in Gödel's incompleteness theorems

S.Kalimuthu

SF 211 & 212/4, Kanjampatti P.O, Pollachi Via, Tamil Nadu642003, India

Email : effulgence07@gmail.com, Mobile : + 91 8508991577

Abstract

According to James R. Meyer, In mathematics, a theorem is intended to be a term for a very precise and definite concept - a theorem is a statement that is proved, using *rigorous* mathematical reasoning, to follow according to a set of logical rules, from a set of initial statements. These initial statements are usually called axioms, and these are statements that are accepted without being proven. The set of logical rules which determine how one statement can follow from another are usually called the rules of inference . And basically, Gödel's incompleteness theorem is any statement that says that for every formal mathematical system, there are sentences that cannot be proved to be true or false in that system.

Gödel's incompleteness theorems

Reputed Austrian American mathematician Kurt Gödel formulated two extraordinary propositions in mathematical logic. Accepted by all mathematicians they have revolutionized mathematics, showing that mathematical truth is more than logic and computation. These two ground breaking theorems changed mathematics, logic, and even the way we look at our Universe. The cognitive scientist Douglas Hofstadter described Gödel's first incompleteness theorem as that in a formal axiomatic mathematical system there are propositions that can neither be proven nor disproven. The logician and mathematician Jean van Heijenoort summarizes that there are formulas that are neither provable nor disprovable. According to Peter Suber, inn a formal mathematical system, there are un decidable statements. S. M. Srivatsava formulates that formulations of number theory include undecidable propositions. And Miles Mathis describes Gödel's first incompleteness theorem as that in a formal axiomatic mathematical system we can construct a statement which is neither true nor false. [Mathematical variance of liar's paradox]

Let us recall what the experts say on Gödel's incompleteness theorems:

In any formal system adequate for number theory, there are formulas that are neither provable nor disprovable. **[1]** There exist mathematical statements for which no systematic procedure could determine whether they are either true or false. There exist undecidable propositions in mathematics.**[2]..** there is either a statement "X" and a statement "not X" that can both be proved (inconsistent) or there is a meaningful statement X that can neither be proved not disproved (incomplete) within that system. **[3] I**n any consistent axiomatic system (formal system of mathematics) sufficiently strong to allow one to do basic arithmetic, one can construct a statement about natural numbers that can be neither proved nor disproved within that system**.[4]**In any consistent formalization of mathematics that is sufficiently strong to define the concept of natural numbers, one can construct a statement that can be neither proved nor disproved within that system. **[5]**In any consistent formal system S within which it is possible to perform a minimum amount of elementary arithmetic, there are statements that can neither be proved nor disproved. **[6]** In any logical system one can construct statements that are neither true nor false (mathematical variations of the liar's paradox). . **[7] ….** it will be possible to construct an arithmetic proposition G, such that neither G, not its negation, is provable from the axioms. **[8] ….**If all the theorems of an axiomatic system can be proven then the system is inconsistent, and thus has theorems which can be proven both true and false.**[9]** …within any given branch of mathematics, there would always be some propositions that couldn't be proven either true or false using the rules and axioms… of that mathematical branch itself.**[10] . ….** there exist certain clear-cut statements that can either be proved or disproved.[**11]** His fundamental results showed that in any consistent axiomatic mathematical system there are propositions that cannot be proved or disproved within the system . **[12]** "[My] own work no longer means much, I came to the Institute merely…to have the privilege of walking home with Gödel."**Albert Einstein [13]**

So, beyond all the mathematical fetter and doubt, we can conclude that Gödel's incompleteness theorems simply state that, *in a formal axiomatic mathematical system, we can construct a statement and its denial* .

The studies and probes devoted to the fifth Euclidean problem gave birth to a number equivalent proposition to the fifth postulate and created two fields of non Euclidean mathematics namely hyperbolic and elliptic geometries. These two branches have wider physical and cosmological applications. Also, Beltrami, Cayley, Klein, Poincare and others proved that it is impossible to deduce Euclid V from Euclid I to IV. But Kalimuthu has proved the fifth Euclidean postulate from the first four postulates of Euclid**.[14-21]**

To repeat in another sentences,

Euclidean fifth postulate can not be deduced from the first four axioms of Euclid

(Theorem proved by Beltrami, Cayley, Klein, Poincare and others)

Euclidean fifth postulate can be deduced from the first four axioms of Euclid

(Theorems proved by Kalimuthu)

A brief analysis of the above two theorems confirms Gödel's incompleteness theorems.

Discussion

Thousands of and thousands of TOP mathematicians unsuccessfully tried their best to prove the fifth postulate of Euclidean geometry to prove as a special theorem only by applying the first four postulates introduced and applied by Euclid. 2300 years old attempts were yielded more than thirty equivalent propositions to the fifth postulate. Those investigations created two branches of non Euclidean math. Namely hyperbolic and Riemannian geometries. These two discoveries were successfully and beautifully applied by Albert Einstein to formulate his special and general relativity theories.

Professor Sennimalai Kalimuthu worked on this problem and found several consistent results. Since the fifth postulate was proved as a mathematical impossibility in the later decades of eighteenth century by Beltrami et all, Kalimuthu compared his inventions with Gödel's incompleteness theorems and concludes that his results re confirms Gödel's discoveries. Kalimuthu has published nearly 3o papers on this topic. Out of those 30, eight papers are outstanding and masterpieces of Kalimuthu.

I must admit that two papers authored by Kalimuthu were retracted. Now days, people are severely criticizing Kalimuthu for his retracted papers. Einstein was a great genius. He never accepted quantum physics. He opposed both Freedman and Lemaitre who found from Einstein's equation that the Universe is expanding. The noted physicist Stephen hawking challenged that the Higgs Bosons discovery would be impossible. He even entered in to a bet with Professor Gordon for a sum of 100 US Dollars. He lost 100 US Dollars after CERN announced the inventions of Higgs particle.

Hyperbolic and elliptic geometries proposed by Lobachevski and Riemann respectively were NOT , NOT and NOT accepted by the mathematical community. When Einstein assumed these two geometries for the formulation of his special and general relativity theories, the mouths of rival mathematicians were shut once and for all.

Einstein's relativity theories have been experimentally verified again and again. Please and please note that scientists are not letting Einstein's soul to rest in peace. They are making fun of him**.[See the references]**

Let us note that the opponents of Lobachevski, Riemann, Einstein and Kalimuthu have found NOTHING extra ordinary. They are zealous and lazy people.

References

[1] http://philosophyreaders.blogspot.in/2013/01/godels-incompleteness-theorem.html

[2] http://abyss.uoregon.edu/~js/21st_century_science/lectures/lec08.html

[3] http://www.mysmallboat.info/?p=152

[4] http://www.fact-index.com/g/go/goedel_s_incompleteness_theorem.html

[5]http://www.bioreference.net/encyclopedia/wikipedia/g/go/goedel_s_incompleteness_theorem.html

[6] Torkel Franzen, «Godel's Theorem: An Incomplete Guide to Its Use and Abuse»

A K Peters, Ltd. | ISBN: 1568812388 | 2005-05-25

[7] http://milesmathis.com/godel.html

[8] http://www.philocomp.net/home/hilbert.htm

[9] http://www.sscc.edu/home/jdavidso/math/goedel.html

[10] Kurt Gödel, On Formally Undecidable Propositions of Principia Mathematica and Related Systems, Kurt Gödel, Dover, New York, 1992

[11] http://aleph0.clarku.edu/~djoyce/hilbert/problems.html

[12] http://www.jamesrmeyer.com/aboutme.html

[13] http://katachriston.wordpress.com/2010/12/27/godels-incompleteness-theorem-the-most-important-mathematical-theorem-in-the-twentieth-century/

[14] S. Kalimuthu, Pretty Algebra**,** Int. j. of app.maths. and applications, Volume 2. No.1, 2009, pp. 41-43

[15] S. Kalimuthu, On Applied Algebra**,** Advances in Algebra, Volume 2. No.1, 2009, pp. 41-43

[16] S.Kalimuthu, Two findings for the origin of third non Euclidean geometry,

National Academy Science Letters , December 2013, Volume 36, Issue 6, pp 621-623

DOI 10.1007/s40009-013-0179-2

http://www.ams.org/mathscinet-getitem?mr=3144871 Kindly Visit

[17 S.Kalimuthu, A new concept in spherical geometry for physical & cosmological applications

National Academy Science Letters ,Volume 36, Issue 6 , pp 625-628

DOI 10.1007/s40009-013-0180-9

http://www.ams.org/mathscinet-getitem?mr=3144872 Kindly visit

[18] S.Kalimuthu, Pretty Set Theory, http://vixra.org/abs/1305.0181

[19] S.Kalimuthu, An algebraic journey in to geometric forest, viXra:1309.0155

[20] S.Kalimuthu, On the fifth Euclidean postulate, viXra:1308.0076

[21] S.KALIMUTHU, ON KURT GÖDEL AND HYPERBOLIC MATH, VIXRA:1504.0189

References against Einstein

https://en.wikipedia.org/wiki/Criticism_of_the_theory_of_relativity

https://www.quora.com/What-criticism-skepticism-or-opposition-did-Albert-Einstein-face-when-presenting-his-theory-of-physics

http://www.renewamerica.com/columns/hutchison/050128

https://en.wikisource.org/wiki/Dialog_about_objections_against_the_theory_of_relativity

http://r.search.yahoo.com/_ylt=A2oKmMqqVEBXphcA1K7nHgx.;_ylu=X3oDMTByZGc4ZjBvBHNlYwNzcgRwb3MDOARjb2xvA3NnMwR2dGlkAw--/RV=2/RE=1463862570/RO=10/RU=http%3a%2f%2fwww.wow.com%2fwiki%2fCriticism_of_relativity_theory/RK=0/RS=aehLn5d2ID9eeBCf5pINZTxmMy0-

http://bernardhlavenda.com/?q=node/71

http://physics.stackexchange.com/questions/16465/what-is-are-the-primary-criticisms-against-einstein-cartan-evans-field-theor

http://r.search.yahoo.com/_ylt=Awrxgvl2VUBXIWYAsnznHgx.;_ylu=X3oDMTBzc2ltMzE1BHNlYwNzcgRwb3MDMTEEY29sbwNzZzMEdnRpZAM-/RV=2/RE=1463862774/RO=10/RU=http%3a%2f%2fwww.jstor.org%2fstable%2fpdfplus%2f10.1525%2fhsps.2004.34.2.311.pdf/RK=0/RS=oAescsyHmFhvPtV.w4CcfrF7UKU-

http://www.gsjournal.net/old/weuro/anderton63.pdf

http://www.brainyquote.com/quotes/keywords/criticism.html

https://sites.google.com/site/socialcapital1/Home/criticism-of-the-general-theory-of-relativity

http://r.search.yahoo.com/_ylt=A2oKmMiUVkBX_I8AoAjnHgx.;_ylu=X3oDMTBza2cxcWI4BHNlYwNzcgRwb3MDMTcEY29sbwNzZzMEdnRpZAM-/RV=2/RE=1463863060/RO=10/RU=http%3a%2f%2fwww.thetruthseeker.co.uk%2f%3fp%3d13400/RK=0/RS=CB6rrqrfNERLaKDYQC8ybWgVQIM-

http://gsjournal.net/Science-Journals/Essays-Relativity%20Theory/Download/3914

http://r.search.yahoo.com/_ylt=A2oKmNHcVkBXflYAi4TnHgx.;_ylu=X3oDMTBzNzZkZzVjBHNlYwNzcgRwb3MDMjUEY29sbwNzZzMEdnRpZAM-/RV=2/RE=1463863132/RO=10/RU=http%3a%2f%2fwww.archive.org%2fstream%2fcriticismofeinst00readiala%2fcriticismofeinst00readiala_djvu.txt/RK=0/RS=bPDVX2sjJ2DgRBpg8pbJZ_m9boA-

https://www.researchgate.net/post/Einsteins_relativity_what_is_eternal_questionable_and_erroneous_in_the_starting_points_of_the_theory_and_in_the_subsequent_conclusions_from_it

http://r.search.yahoo.com/_ylt=A2oKmMqqVEBXphcAy67nHgx.;_ylu=X3oDMTByMjhxODA5BHNlYwNzcgRwb3MDMwRjb2xvA3NnMwR2dGlkAw--/RV=2/RE=1463862570/RO=10/RU=http%3a%2f%2fwww.marxists.org%2freference%2farchive%2feinstein%2fworks%2f1940s%2freply.htm/RK=0/RS=hA8HPZ5sWn2zW2K7DNHlTSs_0C4-