Godels incompleteness theorm proven wrong

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- *From*: "elsiemelsi" <cyprinsam@xxxxxxxxxxxxxxx>
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The Australian philosopher Colin leslie dean argues Gödel is a complete failure as he ends in utter meaninglessness Gödel?s incompleteness theorem ends in absurdity
or meaninglessness, becuase he used invalid and flawed axioms−which either lead to paradox or end in paradox. For example Godels uses the axiom of reducibility but this axiom was rejected as being invalid by Russell as well as most philosophers and mathematicians

Thus just on this point Godel is invalid as by using an axiom most people says is invalid he creates an invalid proof due to it being based upon invalid axioms

"What Gödel proved he proved this with flawed and invalid axioms− axioms that either lead to paradox or ended in paradox ?thus showing that Godel?s proof is based upon a misguided system of axioms and that it is invalid as its axioms are invalid."

This is a case study by colin leslie dean demonstrating his broader claim that all views end in meaninglessness. What do you think

http://gamahucherpress.yellowgum.com/books/philosophy/GODEL5.pdf

GÖDEL?S INCOMPLETENESS THEOREM. ENDS IN ABSURDITY OR MEANINGLESSNESS
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CASE STUDY IN THE MEANINGLESSNESS OF ALL VIEWS
By
COLIN LESLIE DEAN

B.SC, B.A, B.LITT (HONS), M.A, B,LITT (HONS), M.A,
M.A (PSYCHOANALYTIC STUDIES), MASTER OF PSYCHOANALYTIC STUDIES, GRAD CERT (LITERARY STUDIES)

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A case study in the view that all views end in meaninglessness. As an example of this is Gödel?s incompleteness theorem. Gödel is a complete failure as he ends in utter meaninglessness

What Gödel proved was not the incompleteness theorem but that mathematics was self contradictory. But he proved this with flawed and invalid axioms− axioms that either lead to paradox or ended in paradox ?thus showing that Godel?s proof is based upon a misguided system of axioms and that it is invalid as its axioms are invalid.

Godel states ?the most extensive formal systems constructed up to the present time are the systems of Principia Mathematica (PM) on the one hand and on the other hand the Zermel−Fraenkel axiom system of set theory ? it is reasonable therefore to make the conjecture that these axioms and rules of inference are also sufficient to decide all mathematical questions which can be formally expressed in the given axioms. In what follows it will be shown that this is not the case but rather that in both of the cited systems there exist relatively simple problems of the theory of ordinary numbers which cannot be decided on the basis of the axioms? (K Godel , On formally undecidable propositions of principia mathematica and related systems in The undecidable , M, Davis, Raven Press, 1965,pp.5−6)

All that he proved was in terms of PM and Zermelo axioms−there are other axiom systems −so his proof has no bearing outside that system he used Russell rejected some axioms he used as they led to paradox. All that Gödel proved was the lair paradox −which Russell said would happen

Gödel used impedicative definitions− Russell rejected these as they lead to paradox (K Godel , On formally undecidable propositions of principia mathematica and related systems in The undecidable , M, Davis, Raven Press, 1965, p.63)
Gödel used the axiom of reducibility −Russell abandoned this as it lead to paradox (K. Godel, op.cit, p.5)

Gödel used the axiom of choice mathematicians still hotly debate its validity− this axiom leads to the Branch−Tarski and Hausdorff paradoxes (K.Godel, op.cit, p.5)
Gödel used Zermelo axiom system but this system has the skolem paradox which reduces it to meaninglessness or self contradiction
Godel proved that mathematics was inconsistent
from Nagel −"Gödel" Routeldeg & Kegan, 1978, p 85−86

Gödel also showed that G is demonstrable if and only if it?s formal negation ~G is demonstrable. However if a formula and its own negation are both formally demonstrable the mathematical calculus is not consistent (this is where he adopts the watered down version noted by bunch) accordingly if (just assumed to make math?s consistent) the calculus is consistent neither G nor ~G is formally derivable from the axioms of mathematics. Therefore if mathematics is consistent G is a formally undecidable formula Gödel then proved that though G is not formally demonstrable it nevertheless is a true mathematical formula

From Bunch

"Mathematical fallacies and paradoxes? Dover 1982" p .151

Gödel proved

~P(x,y) & Q)g,y)
in other words ~P(x,y) & Q)g,y) is a mathematical version of the liar paradox. It is a statement X that says X is not provable. Therefore if X is provable it is not provable a contradiction. If on the other hand X is not provable then its situation is more complicated. If X says it is not provable and it really is not provable then X is true but not provable Rather than accept a self−contradiction mathematicians settle for the second choice

Thus Godel by using invalid axioms i.e. those that lead to paradox or end in paradox only succeeded in getting the inevitable paradox that his axioms ordained him to get. In other words he could have only ended in paradox for this is what his axioms determined him to get. Thus his proof is a complete failure as his proof. that mathematics is inconsistent was the only result that he could have logically arrived at since this result is what his axioms logically would lead him to; because these axioms lead to or end in paradox themselves. All he succeeded in getting was a paradoxical result as Russell new would happen if those axioms where used. Godel by using those axioms could only arrived at a paradoxical result

Gödel used the Zermelo axiomatic system but this system end in meaninglessness. There is the Skolem paradox which collapses axiomatic theory into meaningless

Bunch notes op cit p.167

?no one has any idea of how to re−construct axiomatic set theory so that this paradox does not occur?

To give detail

Godel uses the axiom of reducibility and axiom of choice

Quote
http://www.mrob.com/pub/math/goedel.htm
?A. Whitehead and B. Russell, Principia Mathematica, 2nd edition, Cambridge 1925. In particular, we also reckon among the axioms of PM the axiom of infinity (in the form: there exist denumerably many individuals), and the axioms of reducibility and of choice (for all types)? ((K Godel , On formally undecidable propositions of principia mathematica and related systems in The undecidable , M, Davis, Raven Press, 1965, p.5)

AXIOM OF REDUCIBILITY
(1) Godel uses the axiom of reducibility axiom 1V of his system is the axiom of reducibility ?As Godel says ?this axiom represents the axiom of reducibility (comprehension axiom of set theory)? (K Godel , On formally undecidable propositions of principia mathematica and related systems in The undecidable , M, Davis, Raven Press, 1965,p.12−13.
(2) ?As a corollary, the axiom of reducibility was banished as irrelevant to mathematics ... The axiom has been regarded as re−instating the semantic paradoxes? − http://mind.oxfordjournals.org/cgi/reprint/107/428/823.pdf
2)?does this mean the paradoxes are reinstated. The answer seems to be yes and no? − http://fds.oup.com/www.oup.co.uk/pdf/0−19−825075−4.pdf)

AXIOM OF CHOICE
Godel states he uses the axiom of choice ?this allows us to deduce that even with the aid of the axiom of choice (for all types) ? not all sentences are decidable?? (K Godel , On formally undecidable propositions of principia mathematica and related systems in The undecidable , M, Davis, Raven Press, 1965. p.28.)
(?The Axiom of Choice (AC) was formulated about a century ago, and it was controversial for a few of decades after that; it may be considered the last great controversy of mathematics?. A few pure mathematicians and many applied mathematicians (including, e.g., some mathematical physicists) are uncomfortable with the Axiom of Choice. Although AC simplifies some parts of mathematics, it also yields some results that are unrelated to, or perhaps even contrary to, everyday "ordinary" experience; it implies the existence of some rather bizarre, counterintuitive objects. Perhaps the most bizarre is the Banach−Tarski Paradox ??
http://www.math.vanderbilt.edu/~schectex/ccc/choice.html)

ZERMELO AXIOM SYSTEM
Godel specifies that he uses the Zermelo axiom system− (K Godel , On formally undecidable propositions of principia mathematica and related systems in The undecidable , M, Davis, Raven Press, 1965,p.28.)

quote
http://www.mrob.com/pub/math/goedel.html

"In the proof of Proposition VI the only properties of the system P employed were the following:

1. The class of axioms and the rules of inference (i.e. the relation "immediate consequence of") are recursively definable (as soon as the basic signs are replaced in any fashion by natural numbers).

2. Every recursive relation is definable in the system P (in the sense of Proposition V).

Hence in every formal system that satisfies assumptions 1 and 2 and is ω−consistent, undecidable propositions exist of the form (x) F(x), where F is a recursively defined property of natural numbers, and so too in every extension of such

[191]a system made by adding a recursively definable ω−consistent class of axioms. As can be easily confirmed, the systems which satisfy assumptions 1 and 2 include the Zermelo−Fraenkel and the v. Neumann axiom systems of set theory,47"

IMPREDICATIVE DEFINITIONS
Godel used impredicative definitions

Quote from Godel
? The solution suggested by Whitehead and Russell, that a proposition cannot say something about itself , is to drastic... We saw that we can construct propositions which make statements about themselves,? ((K Godel , On undecidable propositions of formal mathematical systems in The undecidable , M, Davis, Raven Press, 1965, p.63 of this work Dvis notes, ?it covers ground quite similar to that covered in Godels orgiinal 1931 paper on undecidability,? p.39.)

Godel used Peanos axioms but these axioms are impredicative and thus according to Russell Poincaré and others must be avoided as they lead to paradox.
quote

http://en.wikipedia.org/wiki/Preintuitionism

?This sense of definition allowed Poincaré to argue with Bertrand Russell over Giuseppe Peano's axiomatic theory of natural numbers.

Peano's fifth axiom states:

* Allow that; zero has a property P;
* And; if every natural number less than a number x has the property P then x also has the property P.
* Therefore; every natural number has the property P.

This is the principle of complete induction, it establishes the property of induction as necessary to the system. Since Peano's axiom is as infinite as the natural numbers, it is difficult to prove that the property of P does belong to any x and also x+1. What one can do is say that, if after some number n of trails that show a property P conserved in x and x+1, then we may infer that it will still hold to be true after n+1 trails. But this is itself induction. And hence the argument is a vicious circle.

From this Poincaré argues that if we fail to establish the consistency of

Peano's axioms for natural numbers without falling into circularity, then the principle of complete induction is improvable by general logic. ?

GODEL ACCEPTED IMPREDICATIVE DEFINITIONS
quote

http://www.friesian.com/goedel/chap−1.htm

?recent research [9] has shown that more can be squeezed out of these restrictions than had been expected:

all mathematically interesting statements about the natural numbers, as well as many analytic statements, which have been obtained by impredicative methods can already be obtained by predicative ones.[10]

We do not wish to quibble over the meaning of "mathematically interesting." However, "it is shown that the arithmetical statement expressing the consistency of predicative analysis is provable by impredicative means." Thus it can be proved conclusively that restricting mathematics to predicative methods does in fact eliminate a substantial portion of classical mathematics.[11]

Gödel has offered a rather complex analysis of the vicious circle principle and its devastating effects on classical mathematics culminating in the conclusion that because it "destroys the derivation of mathematics from logic, effected by Dedekind and Frege, and a good deal of modern mathematics itself" he would "consider this rather as a proof that the vicious circle principle is false than that classical mathematics is false."[12]?

Gödel is a complete failure as he ends in utter meaninglessness. His meaningless/paradoxical result comes directly from using axioms that lead or end in paradox. Even if Godel did not prove that mathematics was inconsistent Gödel proved nothing as it was totality built upon invalid axioms; All talk of what Godel achieved is just another myth mathematicians foist upon an ignorant population to beguile them into believing mathematician know what they are talking about and have access to truth.

GODEL IS SELF−CONTRADICTORY
But here is a contradiction Godel must prove that a system cannot be proven to be consistent based upon the premise that the logic he uses must be consistent . If the logic he uses is not consistent then he cannot make a proof that is consistent. So he must assume that his logic is consistent so he can make a proof of the impossibility of proving a system to be consistent. But if his proof is true then he has proved that the logic he uses to make the proof must be consistent, but his proof proves that this cannot be done

Appendix
IMPREDICATIVE DEFINITIONS
AXIOM OF REDUCIBILITY

Poincare outlawed impredicative definitions But the problem of outlawing impredicative definitions vas that a lot of useful mathematics would have to be abandoned ?ruling out impredicative definitions would eliminate the contradiction from mathematics, but the cost was too great " (B, Bunch, op.cit p.134) Also as Russell pointed cut the notion of impredicative definitions was paradoxical as the property applies to itself ?is the property . of being impredicative itself impredicative or not? (this is another analog of Gretling's paradox.) (ibid, p.134.).
Russell tried to solve the paradoxes by his theory of types Russell and Whitehead explained the logical antinomies as Being due to a vicious circle their theory of types 'was means to irradiate these vicious circles by, making them by definition not allowed (E, Carnuccio , Mathematics and logic in history and contemporary thought, Faber & Faber 1964, 344−355.)−[but Godel sayys be disagrees with Russell and uses them in his impossibility, proof] (K Godel , On formally undecidable propositions of principia mathematica and related systems in The undecidable , M, Davis, Raven Press, 1965, p.63) But the theory of types cannot over come the syntactical paradoxes i.e. liar paradox." (E, Carniccio op.cit, p.345.)
Also this procedure created unending problems such that Russell had to introduce his axiom of reducibility (Bunch, op.cit, p,.135). But even though the axiom with the theory of types created results that don't fall into any of the known paradoxes it leaves doubt that other paradoxes want crop up. But this axiom is so artificial and create a whole nest of other problems for mathematics that Russell eventually' abandoned it (Bunch, ibid, p.135.) Godel uses this axiom in his impossibility' proof. (K. Godel, op.cit, p.5) "Thus these attempts to solve the paradoxes all turned out to involve either paradoxical notions them selves or to artificial that most mathematicians rejected them
AXIOM OF CHOICE

Godel used the axiom of choice in his impossibility proof (K.Godel, op.cit, p.5)" But ever since its use by Zermelo there have been problems with this axiom ?Cohen proved that he axiom of choice is independent of the other axioms of set l theory. As a result you can have Zermeloian mathematics that accept the
axiom of choice or various non−Zermeloian mathematics that reject it in one way or another? Cohen also proved that there is a Cantorian

mathematics in which the continuum hypothesis is true and a non−Cantorian mathematics in which it is denied (B, Bunch, op.cit, p.169). If the axiom of choice is kept then we get the BranchTarski and Hausdorff paradoxes Now "mathematicians who have thought about it have decided that the Branch−Traski is one of the paradoxes that "you just live with it? (ibid, p.180.) As Bunch notes "rejection of the axiom of choice means rejection of Important parts of "classical." mathematics and set theory. Acceptance of the axiom of choice however has some peculiar implications of its own i e Branch−Tarski and Hausdorff paradoxes (ibid,p. 169−170).

SKOLEM PARADOX

Bunch notes op cit p.167

?no one has any idea of how to re−construct axiomatic set theory so that this paradox does not occur?

from
http://www.earlham.edu/~peters/courses/logsys/low−skol.htm
Insofar as this is a paradox it is called Skolem's paradox. It is at least a paradox in the ancient sense: an astonishing and implausible result. Is it a paradox in the modern sense, making contradiction apparently unavoidable?

from

http://en.wikipedia.org/wiki/Skolem's_paradox
the "paradox" is viewed by most logicians as something puzzling, but not a paradox in the sense of being a logical contradiction (i.e., a paradox in the same sense as the Banach?Tarski paradox rather than the sense in Russell's paradox). Timothy Bays has argued in detail that there is nothing in the Löwenheim−Skolem theorem, or even "in the vicinity" of the theorem, that is self−contradictory.

However, some philosophers, notably Hilary Putnam and the Oxford philosopher A.W. Moore, have argued that it is in some sense a paradox.

The difficulty lies in the notion of "relativism" that underlies the theorem. Skolem says:

In the axiomatization, "set" does not mean an arbitrarily defined collection; the sets are nothing but objects that are connected with one another through certain relations expressed by the axioms. Hence there is no contradiction at all if a set M of the domain B is nondenumerable in the sense of the axiomatization; for this means merely that within B there occurs no one−to−one mapping of M onto Z0 (Zermelo's number sequence). Nevertheless there exists the possibility of numbering all objects in B, and therefore also the elements of M, by means of the positive integers;

of course, such an enumeration too is a collection of certain pairs, but this collection is not a "set" (that is, it does not occur in the domain B).

Moore (1985) has argued that if such relativism is to be intelligible at all, it has to be understood within a framework that casts it as a straightforward error. This, he argues, is Skolem's Paradox

Zermelo at first declared the Skolem paradox a hoax. In 1937 he wrote a small note entitled "Relativism in Set Theory and the So−Called Theorem of Skolem" in which he gives (what he considered to be) a refutation of "Skolem's paradox", i.e. the fact that Zermelo−Fraenkel set theory −−guaranteeing the existence of uncountably many sets−− has a countable model. His response relied, however, on his understanding of the foundations of set theory as essentially second−order (in particular, on interpreting his axiom of separation as guaranteeing not merely the existence of first−order definable subsets, but also arbitrary unions of such). Skolem's result applies only to the first−order interpretation of Zermelo−Fraenkel set theory, but Zermelo considered this first−order interpretation to be flawed and fraught with "finitary prejudice". Other authorities on set theory were more sympathetic to the first−order interpretation, but still found Skolem's result astounding:

* At present we can do no more than note that we have one more reason here to entertain reservations about set theory and that for the time being no way of rehabilitating this theory is known. (John von Neumann)

* Skolem's work implies "no categorical axiomatisation of set theory (hence geometry, arithmetic [and any other theory with a set−theoretic model]...) seems to exist at all". (John von Neumann)

* Neither have the books yet been closed on the antinomy, nor has agreement on its significance and possible solution yet been reached. (Abraham Fraenkel)

* I believed that it was so clear that axiomatization in terms of sets was not a satisfactory ultimate foundation of mathematics that mathematicians would, for the most part, not be very much concerned with it. But in recent times I have seen to my surprise that so many mathematicians think that these axioms of set theory provide the ideal foundation for mathematics; therefore it seemed to me that the time had come for a critique. (Skolem)

from
http://www.earlham.edu/~peters/courses/logsys/low−skol.htm
Insofar as this is a paradox it is called Skolem's paradox. It is at least a paradox in the ancient sense: an astonishing and implausible result. Is it a paradox in the modern sense, making contradiction apparently unavoidable?

Most mathematicians agree that the Skolem paradox creates no contradiction. But that does not mean they agree on how to resolve it

attempted solutions
Bunch notes

?no one has any idea of how to re−construct axiomatic set theory so that this paradox does not occur?

http://www.earlham.edu/~peters/courses/logsys/low−skol.htm

One reading of LST holds that it proves that the cardinality of the real numbers is the same as the cardinality of the rationals, namely, countable. (The two kinds of number could still differ in other ways, just as the naturals and rationals do despite their equal cardinality.) On this reading, the Skolem paradox would create a serious contradiction

The good news is that this strongly paradoxical reading is optional. The bad news is that the obvious alternatives are very ugly. The most common way to avoid the strongly paradoxical reading is to insist that the real numbers have some elusive, essential property not captured by system S. This view is usually associated with a Platonism that permits its proponents to say that the real numbers have certain properties independently of what we are able to say or prove about them.

The problem with this view is that LST proves that if some new and improved S' had a model, then it too would have a countable model. Hence, no matter what improvements we introduce, either S' has no model or it does not escape the air of paradox created by LST. (S' would at least have its own typographical expression as a model, which is countable.

then the faith solution

Finally, there is the working faith of the working mathematician whose specialization is far from model theory. For most mathematicians, whether they are Platonists or not, the real numbers are unquestionably uncountable and the limitations on formal systems, if any, don't matter very much. When this view is made precise, it probably reduces to the second view above that LST proves an unexpected limitation on formalization. But the point is that for many working mathematicians it need not, and is not, made precise. The Skolem paradox has no sting because it affects a "different branch" of mathematics, even for mathematicians whose daily rounds take them deeply into the real number continuum, or through files and files of bytes, whose intended interpretation is confidently supposed to be univocal at best, and at worst isomorphic with all its fellow interpretations.

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