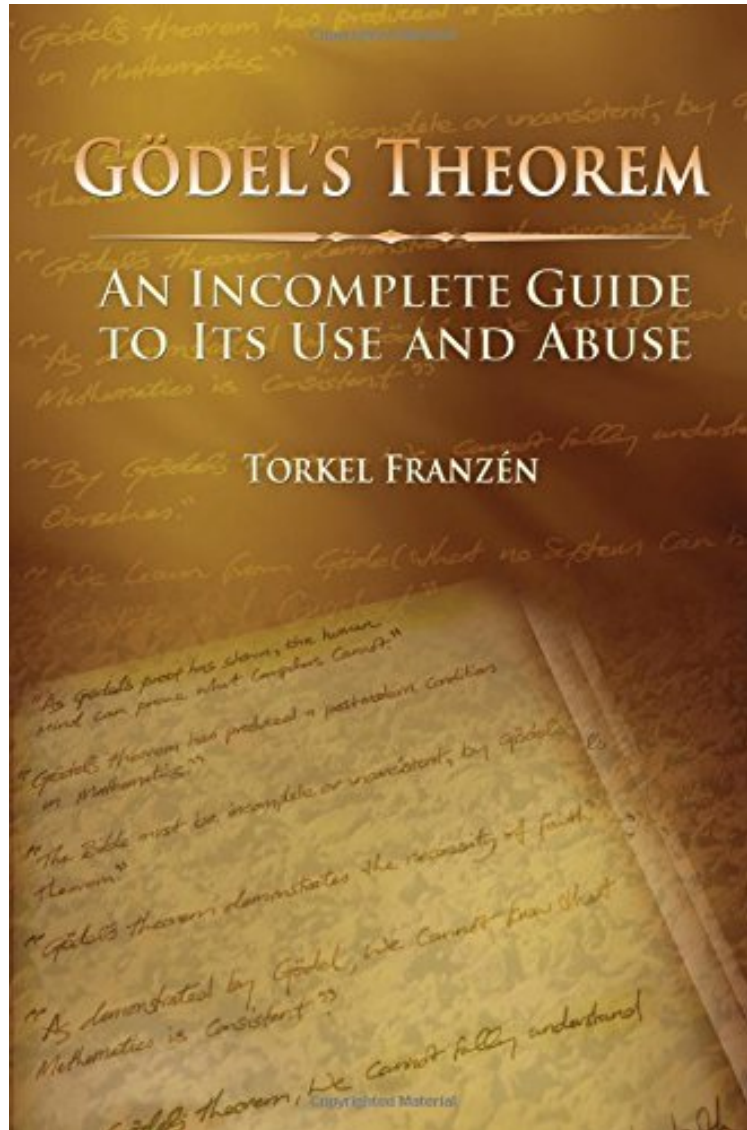


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Gdel's Theorem: An Incomplete Guide to Its Use and Abuse

Torkel Franzn

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Torkel Franzn : Gdel's Theorem: An Incomplete Guide to Its Use and Abuse before purchasing it in order to gage whether or not it would be worth my time, and all praised Gdel's Theorem: An Incomplete Guide to Its Use and Abuse:

2 of 2 people found the following review helpful. Gdel's incompleteness theoremsBy Newton da CostaFranzn's book constitutes a well-written and interesting exposition of Gdel's incompleteness theorems for the general reader. It is a masterpiece of pedagogical skill; it contains not only a non technical outline of the incompleteness theorems and related ideas, but also numerous subtle elucidations and important critical comments on the subject. In addition, the

author analyses, giving a judgement of, several common but erroneous uses of the incompleteness theorems in numerous domains of knowledge such as various areas of philosophy, science and theology. Scientists, philosophers and the layman will equally profit by the reading of Franz's book.

0 of 0 people found the following review helpful.
Great book! By Steve Reina
In glancing over everyone else's reviews I noticed that no one wants to actually describe the situations where Godel's theorem is wrongly used. And I guess I can't blame them because the last thing you'd want to do in a review talking about the wrongful use of Godel's theorem is to wrongfully use it yourself! That being said, I'll cast aside caution and just say that chapters 4 and 6 in regards to Rucker and Penrose are helpful reading along with the book's cautionary message to be mindful in invoking theorem, well, only where it actually applies. Because the book is so short (just 170 pages), it's a pretty quick read. Reader's new to Godel's theorem may wish to read the excellent Ernest Nagel book entitled simply "Godel's Theorem."

6 of 7 people found the following review helpful.
Incomplete Guide or Complete Guide: Undecidable
By Dmitry Vostokov
This is a book I bought a few years ago and started reading immediately but put aside and only this summer read it fully from cover to cover. In order to appreciate its content you need some degree of mathematical and computer science maturity. For example, if you have never heard of his theorems and only read *Incompleteness: The Proof and Paradox of Kurt Godel* or similar popular book then you would have difficulty going through the book and it would appear boring. It is not an entertaining or bedside reading. This is why I put it aside on the first reading although I knew about this theorem since I read *Mathematics: The Loss of Certainty* more than 25 years ago being a schoolboy (in Russian translation). Just before writing this review I ordered *There's Something About Godel: The Complete Guide to the Incompleteness Theorem* and the latter looks like less heavy reading judged from excerpts from its publisher website. Putting all these reminiscences aside I really enjoyed second reading of "Godel's Theorem". It really clarified some points from B-A or PA Con(PA) perspectives and made me curious about fixpoints. I even borrowed the latter term and introduced them for crash dump analysis and debugging: "a dereference fixpoint". I also liked chapters 4 and 6 about using Godel's theorems outside mathematics and clarifying misconceptions in Rucker's and Penrose's books. However, after a few months I cannot recall anything definite what I read from that book although I felt good that I understood everything while reading so perhaps the book requires the 3rd reading for me I'm going to give it another try after "There's Something About Godel" and update this review. Thanks, Dmitry Vostokov
Founder of Literate Scientist Blog

"Among the many expositions of Gdel's incompleteness theorems written for non-specialists, this book stands apart. With exceptional clarity, Franz gives careful, non-technical explanations both of what those theorems say and, more importantly, what they do not. No other book aims, as his does, to address in detail the misunderstandings and abuses of the incompleteness theorems that are so rife in popular discussions of their significance. As an antidote to the many spurious appeals to incompleteness in theological, anti-mechanist and post-modernist debates, it is a valuable addition to the literature." --- John W. Dawson, author of *Logical Dilemmas: The Life and Work of Kurt Gdel*

" "Franz's book is accessible, well written, and often funny..." -Richard Zach, *History and Philosophy of Logic*, July 2005
"Ich möchte allen meinen Lesern . . . ein Buch ans Herz legen, und zwar "das Neue" von Torkel Franz: *Gdel's Theorem - An Incomplete Guide to Its Use and Abuse...*" -Altpapier, October 2005
"If the reader is serious about understanding the scope and limitations of Gdel's theorems, this book will serve them well." -Don Vestal, *MAA Online*, November 2005
". . . This is an excellent book, carefully considered and well-written. It will be read by layman and expert alike with pleasure and profit." -Peter A. Fillmore, *CMS Notes*, Volume 37 No. 8, December 2005
"... a welcome tourist's guide not only to the correct but also to many incorrect interpretations of the theorems, both in their immediate contexts and in wider circumstances." -I. Grattan-Guinness, *LMS*, February 2007
"This is a marvelous book. It is both highly competent and yet enjoyably readable. ... At last there is available a book that one can wholeheartedly recommend for anyone interested in Gdel's incompleteness theorem one of the most exciting and wide-ranging achievements of scientific thought ever." -Panu Raatikainen, *Notices of the AMS*, February 2007
"This is a marvelous book. It is both highly competent and yet enjoyably readable. ... At last there is available a book that one can wholeheartedly recommend for anyone interested in Gdel's incompleteness theorem one of the most exciting and wide-ranging achievements of scientific thought ever." -Panu Raatikainen, *Notices of the AMS*, March 2007
"... an extraordinary addition to the literature. ... The book is ideal reading for people with a basic logical background, be they computer scientists, philosophers, mathematicians, physicists, cognitive psychologists, or engineers ... and a real desire to understand quite deeply one of the intellectual gems of the 20th century." -Wilfried Sieg, *Mathematische Annalen*, March 2007
"... lively and a pleasure to read ... provides remarkably sharp formulations of the usual confusions. There is no doubt that readers of this journal should recommend this book to any friends or colleagues who ask about the ramifications of incompleteness." -Stewart Shapiro, *Philosophia Mathematica*, June 2006
"Dawson's biography of Godel is provocative and interesting on several fronts, and is highly recommended to anyone with an interest in logic, the foundations of mathematics or the history of mathematics." -Samuel R. Buss, *Buss*, December 1998
"This book presents an exceptional exposition of Gdel's incompleteness theorems for non-specialists ... a valuable addition to the literature." -EMS, March 2006
"The book explains fully, without using any

technical logical apparatus, Gdel's two theorems about the incompleteness of any formal system which includes elementary arithmetic ... It is a great success in the way that the proofs of the theorems, while not given in full, are outlined in sufficient detail to make a discussion of the different versions that have been given worthwhile. I do not think there is any non-specialist exposition comparable for clarity and thoroughness." -Clive Kilmister, The Mathematical Gazette, March 2007 ""Franzen touches upon contemporary issues in logic that otherwise only rarely find their way into books of an introductory character like this one." -The of Modern Logic, March 2007 ""Torkel Franzen's ""Goedel's Theorem"" is a wonderful book, destined to become a classic ... In ""Goedel's Theorem,"" Torkel Franzen does a superb job of explaining clearly and carefully what the incompleteness theorem says and its implications as well as skewering much of the nonsense that has been written about it. ... However, while ""Goedel's Theorem"" should be accessible to a general audience, ""Inexhaustibility"" may be rather rough going for a reader who has not seriously studied mathematical logic." -Mathematics and Computer Science, March 2008"About the AuthorA philosopher by training (PhD, University of Stockholm), Torkel Franzen has for the past twenty years been active working in computer science (at the Swedish Institute of Computer Science) and teaching programming (at Lulea University of Technology). He is the author of a number of books, among them Inexhaustibility: A Non-Exhaustive Treatment.