

© 1997-2009, Millennium Mathematics Project, University of Cambridge.

Permission is granted to print and copy this page on paper for non-commercial use. For other uses, including electronic redistribution, please contact us.

Mar 2002 Reviews

'A Beautiful Mind' – film review

reviewed by Andrew Stickland



A Beautiful Mind

A Beautiful Mind is a touching, emotionally charged film detailing the life of a brilliant academic who suffers from schizophrenia. This affliction slowly takes over his mind and we watch as his life crumbles apart around him. He abandons his students, alienates his colleagues and replaces his research with a fruitless and all–consuming obsession. Eventually he is taken into hospital where he is forced, with the help of electric–shock therapy and regular medication, to accept his condition and attempt to repair the shattered fragments of his life.

He succeeds. Of course he succeeds, this is Hollywood and Hollywood likes a happy ending. In this case the happy ending is that, as an old man and after years of struggle, the poor academic is awarded the Nobel Prize. One interesting point though; it's a true story and our hero is none other than John Forbes Nash Jr.

As a young man, John Nash was a mathematical genius. In 1947 he went to Princeton on a Carnegie Scholarship, and after three years had produced a 27–page dissertation for his doctorate in which he greatly expanded the field of Game Theory, transporting it from a position of relative obscurity into one of almost universal relevance.

In the 1920s the father of Game Theory, Hungarian mathematician John von Neumann, had shown that mathematical models could be used to explain the behaviour of players in simple games. His work was limited in scope however, and although interesting, it appeared to be of little practical use.

Nash's dissertation expanded on von Neumann's work, showing how Game Theory could explain complex as well as simple competitive behaviour. It wasn't a comprehensive solution to all game situations, but it did lay the foundations for the huge body of work on Game Theory which has been produced since.

Unfortunately, very little of this comes across in *A Beautiful Mind* because the director (Ron Howard) seems more interested in making a film about a schizophrenic than a mathematician suffering from schizophrenia. At the start of the film we are shown a Hollywood template of a typically obsessive young academic, introverted, socially inept, dismissive of his colleagues' work. If the notes we see Nash scribbling on his windows were chemical formulae or rhyming couplets rather than mathematical equations, the character would have seemed

'A Beautiful Mind' - film review

equally plausible.

This is not to say that Russell Crowe, who plays Nash, does a bad job. Indeed, he succeeds in giving his character a convincing plausibility rarely seen in mainstream cinema these days, and he was certainly a deserving Oscar nominee. It's just that we never see him doing any maths apart from the occasional scribbling on windows.

And when his great breakthrough finally comes, Nash is not poring over his books in the library or gazing fixedly at his glass equivalent of a blackboard, he's in a bar, eyeing up a group of attractive young women. How visually convenient.

But to be fair, this is a dramatisation based on Sylvia Nasar's best–selling book, not a documentary. Its aim is to entertain, not to enlighten, and it does this perfectly well. Russell Crowe produces probably his best performance to date and is equally convincing as both the awkward young genius and the tortured convalescent, struggling to rebuild his marriage and career. Jennifer Connolly (who won the Oscar for Best Supporting Actress) is excellent as Alicia, Nash's long–suffering wife, and there are several strong performances from the supporting cast, most notably Ed Harris as a mysterious character from the military and Paul Bettany as Nash's Princeton roommate.

But Hollywood requires more from its films than a few good performances; it requires drama, action, romance, pathos, excitement. *A Beautiful Mind* makes a fair attempt to include all of these ingredients and the results obviously satisfied producers and film—goers alike — it won Oscars for Best Film and Best Director. But for those expecting to see a film about mathematics it is unlikely to satisfy. Early in the film, John Nash describes himself as having "two helpings of brain and half a helping of heart". *A Beautiful Mind* seems the exact opposite.

Film details:

A Beautiful Mind
Starring Russell Crowe
2001 Universal Studios and DreamWorks LLC

You can buy the book and help *Plus* at the same time by clicking on the link on the left to purchase from amazon.co.uk, and the link to the right to purchase from amazon.com. *Plus* will earn a small commission from your purchase.

About the reviewer

Guest reviewer **Andrew Stickland** is a freelance writer and enthusiastic film–goer. He has written articles on subjects as diverse as travel and war–gaming, but up till now never on a mathematical topic.



Plus is part of the family of activities in the Millennium Mathematics Project, which also includes the <u>NRICH</u> and <u>MOTIVATE</u> sites.

About the reviewer 2