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Movie Math: Mathematical Talent = Mental Illness

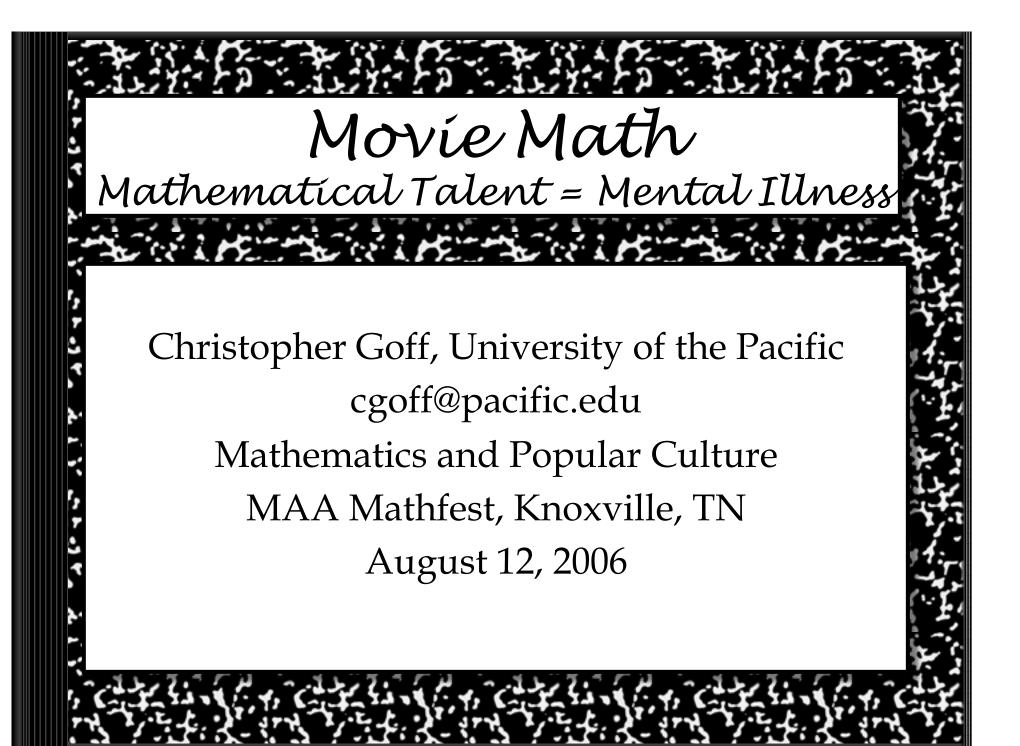
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Recommended Citation

Goff, C. D. (2006). Movie Math: Mathematical Talent = Mental Illness. Paper presented at Mathfest in Knoxville, TN. https://scholarlycommons.pacific.edu/cop-facpres/481

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Disclaimers

- I am only giving my opinion of the messages these movies are conveying.
- I am talking about the movie representation of John Nash.
- I am not an expert on mental illness.

A Beautiful Mind, 2001

- directed by Ron Howard
- starring Russell Crowe
- based on Nasar's biography of John Nash
- grossed over \$170 million

(estimated \$60 million budget)

A Beautiful Mind

- Link #1: Sparkly Visions
 - light interplay from punch bowl to garish tie
 - individual numbers flash in array
 - individual stars jump out to make shapes
 - sparks stop when on medication
 - sparks return when off medication

Message: Nash sees things that aren't there.

A Beautiful Mind

- Link #2: Diagnosis?
 - psychiatrist says schizophrenia usually diagnosed early
 - since Nash was a mathematician, his diagnosis took longer

Message: Mathematicians are expected to be awkward, strange, or "off."

A Beautiful Mind

• Link #3: Rationalizing Hallucinations

- he realizes that Charles' niece has not aged

- ergo, she is a hallucination

Message: Mathematical talent can cure mental illness.

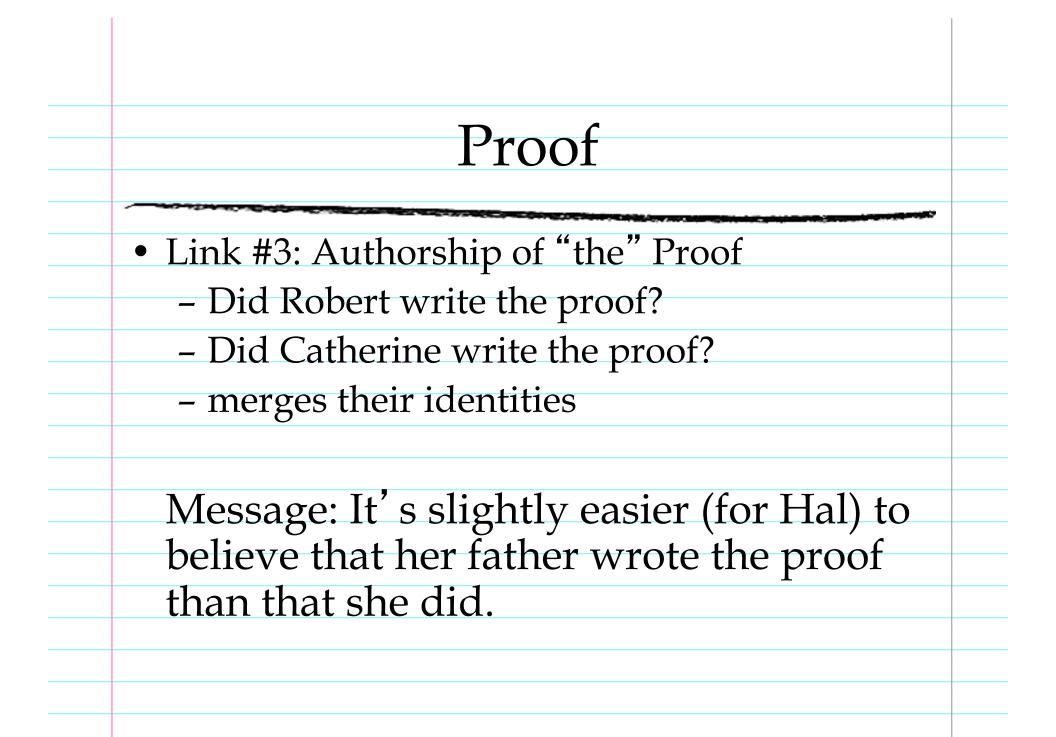
Proof, 2005

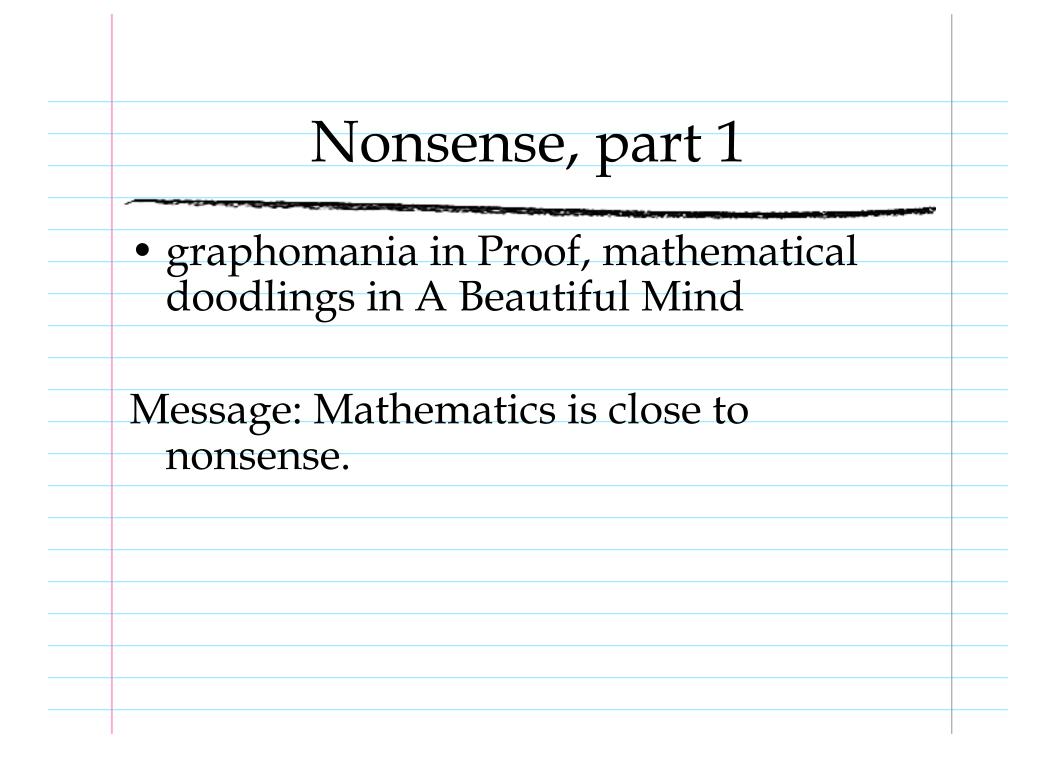
- directed by John Madden
- starring Gwyneth Paltrow, Anthony Hopkins, Jake Gyllenhaal
- based on David Auburn's play
- grossed over \$7 million

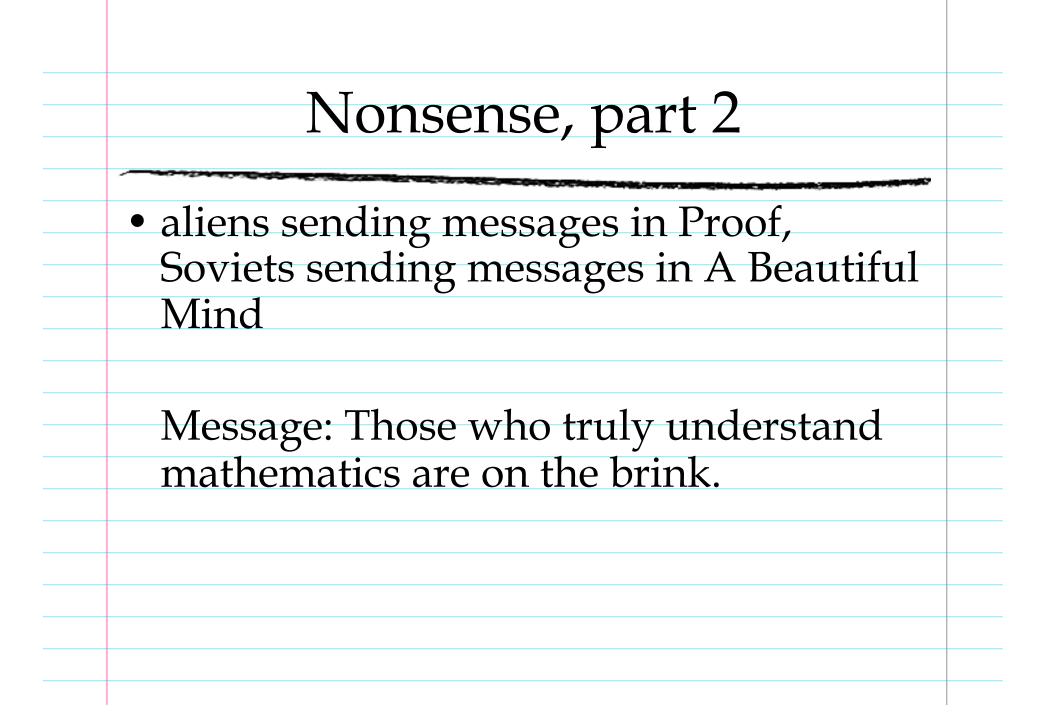
(estimated \$20 million budget)

Proof	
 Link #1: Teaser/Synopsis 	
– Will Catherine inherit her father's	
mathematical talent, his mental illn	ess, or
both?	
Message: There is a battle between	
mathematical talent and mental i	llness

Proof
Link #2: Father and Either/Or
 extremely talented at young age
(revolutionized field twice before 22)
– "got sick" at 26 or 27, never productive again
(he did enjoy a year of clarity - movie unclear)
Message: Mathematical talent and mental
illness are two states of the same binary
system.







Messages to the Audience

- Mathematicians see things that aren't there.
- Mathematicians are expected to be "off."
- Mathematical talent can cure mental illness.
- There is a battle between mathematical talent and mental illness.
- Mathematical talent and mental illness are two states of the same binary system.
- A mathematician (even a mentally ill one) is more likely to write a proof than his daughter (of unknown ability).
- Mathematics is close to nonsense.
- Those who truly understand mathematics are on the brink.

Questions

- What do students take from representations of mentally ill mathematicians?
- How do we address student comments about "crazy" mathematicians?
 - (professionally, sensitively)
- Do discussions of mental illness belong in the mathematics classroom?
- Would a run-of-the-mill mathematician character draw audiences to the box office?

Thank You!	
Any Questions?	