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A Beautiful Mind: the queering of mathematics
Christopher Goff
PCA 2006 Atlanta

The 2001 film *A Beautiful Mind* tells the exciting story of real-life mathematical genius John Nash Jr. According to the DVD liner notes, director Ron Howard points out that while “there is a lot of creativity in the story-telling,...we are presenting a real world. We approached this story as truthfully as possible and tried to let authenticity be our guide.” (emphasis in original) Moreover, lead Russell Crowe not only “immersed himself in ... Sylvia Nasar’s acclaimed biography” of Nash, but he also suggested that the film be shot in continuity (scenes in sequential order) to imbue the film with even more authenticity. Howard agreed. The film enjoyed huge box office success, earning over \$170 million, and collared four Academy Awards, including the ultimate: Best Picture.

In this talk, I will argue that the movie is far from an authentic portrayal of Nash. Rather, it relies on stereotypes of mathematicians, it fails to address Nash’s very real bisexuality, and it conflates his mathematical powers with his mental illness. My evidence comes mainly from Sylvia Nasar’s autobiography of John Nash, on which the screenplay was loosely based. I assume the audience has seen the film, but if you have not, then beware: this talk contains spoilers.

The main stereotype employed by the film is that mathematicians are socially awkward.

At the beginning of the film, we see Nash (Crowe) struggling to control his ego while attempting to make friends. When one of his colleagues beats him at a game of Go, he is beyond flustered, claiming that the game is flawed. He lumbers off, bitter. At one point, Nash’s first hallucinated character, his roommate Charles (Bettany), offers, “Maybe you’re just better with the old integers than you are with people,” (0:07:43) to which Nash replies, “The truth is: I don’t like people much, and they don’t much like me.” Later, Nash repeats this sentiment to his second hallucinated character, government agent William Parcher (Harris), when explaining why he doesn’t have many friends. “I like to think it’s because I’m a lone wolf, but mainly it’s because people don’t like me.” (0:33:45)

According to Nasar, Nash was indeed “respected but not well liked.” (72) He was no loner, though. A regular fixture at the department’s afternoon tea, Nash was often found bragging about his accomplishments and pestering others to divulge their unsolved problems. Both as a graduate student and as an instructor, Nash forged intense personal relationships with several of his peers. These relationships hovered somewhere between admiration and competition, infatuation and love.

In the film, however, Nash reserves his sexual desire for women; the film straightens him out. While Nash is certainly presented as socially awkward around women – he opens conversation by asking if he can just go straight to the sex (0:14:45) – his heterosexuality is not in doubt. Indeed, his big “original idea”

is couched in the language of picking up women at the bar. If he and his friends compete, then they do not succeed, whereas if they cooperate, they “all get laid.” (0:20:57)

Also in the film, Nash meets Alicia (Connally) while she is his student at MIT, where Nash teaches her class in his white undershirt on account of the heat. Alicia later comes to his office to show him her solution to his challenging problem and ultimately to ask him out. At the end of their first date, he shows her how he can see any pattern in the stars: a brilliant scene that, as Roger Ebert points out, serves the romantic story, recalls his sparkly brilliance, and foreshadows his bizarre and delusional pattern-recognition skills.

According to the movie timeline, Nash marries Alicia in 1954 and she becomes pregnant soon after. She has him committed this year because of his extremely paranoid behavior. The next year, she decides not to recommit him, despite the obvious dangers he poses to her and the baby. In a tender moment, she moves his hand to her face and to her heart. “This is real.” (1:44:33) Later, after his long, slow recovery from his illness, while receiving the Nobel Prize in Economics, he delivers his “Love Is the Only True Logic” speech to her directly, with little regard for the rest of the audience. In fact, the DVD contains deleted scenes in which director Howard toys with various attempts to partially blur or wholly remove the rest of the audience from the shot. Indeed, Nash’s heterosexual love for Alicia transcends reality.

The film’s only possibly homoerotic moments relate to the hallucinated roommate, Charles (Bettany). Nash sees him early, on his first day at Princeton, when Charles saunters in, his shirt unbuttoned more than modesty would allow. The tall, lean, and fair-haired British roommate then takes off his jacket and shirt before introducing himself to Nash as a D.H. Lawrence scholar and then heading to the shower to improve his hangover. He returns clad in his robe, makes a “cock-tail” pun (“The cock was mine.”) and, when getting no attention from Nash, jumps on the desk. “Is my roommate a dick?” (0:07:04) he asks. Charles is one of the only characters who regularly shares physical contact with Nash, but to call their relationship homoerotic exaggerates the available evidence.

The real life of John Nash, however, contains ample evidence of his fluid sexual identity. In 1950, at age 21, Nash graduated from Princeton with his PhD in mathematics, then spent a year each at Princeton and MIT as an instructor. At both schools, he developed “crushes” on brilliant (male) graduate students, including one John Milnor. In the summer of 1952, Milnor shared an apartment with the 24-year-old Nash and Nash’s sister Martha in Santa Monica, CA, where the two mathematicians were working for a fledgling think tank, the RAND Corporation. At one point, relations between the two men became strained, causing Milnor to move out. As Nasar tells it, “Milnor says ... that Nash made a sexual overture toward him.” (151) Later that August, after his sister had returned home to West Virginia, Nash found in Ervin Thorson someone willing to reciprocate his advances. Thorson, then 30 and an applied mathematician with RAND, had a profound affect on the young Nash. On various occasions, Nash would refer to him obliquely as “T” for at least the next 16 years.

After the affair with T, Nash returned to Boston in the fall of 1952 and soon met 29-year-old nurse Eleanor Stier, courted her, and got her pregnant. Their son, John David, was born in June 1953. In retrospect, Nash never really planned to marry Eleanor nor support the child. In fact, despite his MIT named instructorship salary, he did not pay for the delivery, did not put his name on the birth certificate, and even suggested that she put the child up for adoption. (178)

Also in the fall of 1952, Nash met Jack Bricker, a bright graduate student from New York. They became quite involved, often patting each other and “kissing in front of other people.” (181) Nash even introduced Jack to Eleanor in spring 1953, just weeks before she was to give birth. Nash continued to mention Jack Bricker later in his life, occasionally referring to him as “B.”

The summer of 1954 would prove to be Nash’s last summer at RAND. One night he was arrested for indecent exposure, having been caught in a public bathroom by an undercover vice cop. Nash was fired and his security clearance revoked. He reacted to the news by pulling a picture of Eleanor and John David out of his wallet. “I’m not a homosexual. Here’s the woman I’m going to marry and our son.” (186)

Only a few weeks after his arrest, Nash returned to MIT and met Alicia Larde, a physics student who had taken a class from Nash and now worked in the music library. She was infatuated with him and knew he liked to work there. Nash asked her out the next spring. They began dating regularly, including an occasional lunch date with Jack Bricker.

Nash’s sex life became even more complicated in 1956. In spring, Nash began sleeping with Alicia, even while he was still seeing Eleanor and Jack. In June, Nash went to Seattle for a month and hooked up with openly gay Amasa Forrester, whom Nash would refer to as “F” as much as fifteen years later (205). After Eleanor found out about Alicia that year, she eventually called Nash’s parents to inform them of the existence of their grandson. John Nash Sr. died that September, but not before urging his son to “do right” by Eleanor.

In February 1957, though, Nash married Alicia, and the two led the life of an academic couple. In fall 1958, at age 30, Nash became infatuated with yet another young genius, Paul Cohen, but found that he could no longer intellectually compete as before. It would prove to be a devastating blow to the self-proclaimed mathematical genius.

In the first two months of 1959, Nash “would undergo a strange and horrible metamorphosis.” (240) He started behaving oddly, claiming that foreign governments were sending him messages through the front page of the New York Times, and turning down a job offer “because he was scheduled to become Emperor of Antarctica.” (244) In April, Alicia had John committed (with the help of MIT) to McLean Hospital for a ten day observation period, later extended by 40 more days. On May 20, 1959, while Nash was at McLean, Alicia gave birth to a baby boy.

Clearly, Nash's sexual identity is not categorically heterosexual. How can the filmmakers claim authenticity as their guide when they have omitted portraying such a large portion of Nash's genuine identity? They obviously made a conscious decision to leave out his sexual history. In *Entertainment Weekly*, Crowe stated, "we didn't want to imply that there was any possibility that schizophrenia and homosexuality are related." (in Streitmatter) Nasar writes that such a link may have indeed been cited in Nash's case. She writes, "Freud's now-discredited theory linking schizophrenia to repressed homosexuality had such currency at McLean that for many years any male with a diagnosis of schizophrenia...was said to be suffering from 'homosexual panic.'" (259) And such a link seems to be resurfacing again these days, as evidenced by the recent book, *Schizophrenia: The Bearded Lady Disease*, by J. Michael Mahoney, which lists examples of what the author calls "the basic pathogenic role of bisexual conflict ... [in] mental illness." (Foreword)

But, as Rodger Streitmatter points out [in his review for *Gay Today / Media Matters*], "[Nasar] doesn't suggest a connection between schizophrenia and homosexuality, but one between schizophrenia and psychological stress." He explains that Nasar is clearly talking about the rampant *homophobia* (and its attendant Red Scare) of the 1950's. He also charges that a director of Ron Howard's talent (and salary) could have clarified this distinction, thereby educating the public about the deleterious effects of homophobia and possibly improving the lives of gays and lesbians today. I completely agree. While the filmmakers definitely erred by failing to shine their light on homophobia, I argue that they further compounded this error by instead conflating Nash's mental illness with his mathematical genius.

The film first links Nash's genius and his illness through visual effects. We see Nash's creative spark before he even utters his first words – when he notices another student's garish tie and then discovers and creates the component shapes in the interplay of sunlight with various found objects. Throughout the film, these glinting lights signify Nash's mathematical way of seeing, his literally sparkling genius, especially when formulating his groundbreaking mathematical work. Later, when Nash is on medication, he tells a friend that he finds it difficult to work on mathematics because it is hard for him to see the solutions. (1:24:20) The spark is gone. When he shows the friend some of his recent work on the Riemann zeta function, which is still unsolved today, the notebooks are filled only with mathematical doodlings. Hence, the drug that impedes his hallucinations also impedes his mathematical abilities. And, just as Nash's mathematical spark resurfaces after he takes himself off his medication, so do his paranoid visions involving an impending Russian attack.

In real life, Nash's mathematical talent and mental illness were more negatively correlated. Nasar explains, "[a] predisposition to schizophrenia was probably integral to Nash's exotic style of thought as a mathematician, but the full-blown disease devastated his ability to do creative work." (19) Nash himself debunks the myth that his medication impeded his ability to do mathematics. In an autobiographical essay penned for the Nobel Prize, he writes that "In these

interludes of ... enforced rationality [between hospitalizations], I did succeed in doing some respectable mathematical research." To critics who may claim that the medications might have ruined his beautiful mind, psychiatrist Raquel Gur points out that cognitive difficulties have been found in patients who had never been put on neuroleptic medications (Online Forum), thus pointing out that perhaps the disease, and not the medication, is to blame for any changes in a schizophrenic patient's mental identity.

Perhaps the clearest evidence that the film ties together mathematical ability and mental illness lies in its overarching message: that Nash ultimately rationalizes that his hallucinations are, in fact, hallucinations. He understands the irrationality of his visions when he deduces that Charles' niece is not real because she has never aged. (1:38:00) Surely, the film argues, only a hyper-logical mathematical genius can think his way out of schizophrenia.

Unfortunately, science paints a more desolate picture. Recovery from schizophrenia to such an extent as Nash's is rare – so rare that it often makes scientists question the original diagnosis. (Nasar, 21) Psychiatrist Irving Gottesman dismisses a possible link between genius and mental illness in response to a viewer of a PBS documentary of Nash (American Experience: A Brilliant Madness), when he writes, "I cannot say, after 45 years of close experience with schizophrenia, that it has any redeeming features...[It is a] scourge of the mind." (Online Forum)

By choosing to ignore Nash's nontraditional sexuality, *A Beautiful Mind* categorizes Nash too simply as a straight man that suffers from mathematical-talent-cum-mental-illness. As a result, the film unqueers the real-life Nash, opting rather to make his mathematical talent the source of his schizophrenia, as well as the ensuing strain on his marriage. Instead of proposing that his schizophrenia is precipitated in part by his struggle to rectify his identity with societal norms of sexual behavior, the film reduces its message to one that mathematical ability is a form of mental illness, which in turn can disrupt, though never quite conquer, true (heterosexual) love.

The movie certainly tells an interesting story: one of a brilliant mathematician who suffers from elaborate schizophrenic hallucinations but eventually overcomes them with his mind and the love of a beautiful woman. The film is many things: a love story, a spy tale, a commercial success, and the Oscar winner for Best Picture. But it is not the authentic story of John Nash.