Narrator: It takes an exceptional mind to cross the frontier between sanity and madness at will.

John Nash: Insanity when you’re really in it, it's, it's like a dream which you can't wake up. Nowadays, as the dream is ending, I realize that it is a dream, and then I wake up.

Narrator: John Nash, Jr., represents two of the greatest extremes of the human mind: a Nobel Prize-winning mathematician and a long-time victim of schizophrenia. As a graduate student in 1950 at Princeton University, Nash helped pioneer an entirely new field of mathematics called game theory. His groundbreaking ideas are at the root of modern economic theory. But it would take over 40 years before Nash was rewarded the Nobel Prize in Economics for that very theory. Forty years because, in 1959, at the age of 30, his remarkable mind short-circuited and John Nash, Jr., was hospitalized against his will for schizophrenia.

John Nash: The first time I was taken to the McLean, which is a very highly rated hospital, there were police and I; I struggled with them a little at the doorway. But resistance was futile, and I re—realized I had been captured like a chess man on a chessboard.

Narrator: For the next 30 years, Nash's life swung back and forth from the depths of insanity to the heights of intellectual reasoning, from homelessness in the streets of Europe to an honorary position at Princeton. His brain was subjected to insulin treatment, electroshock, high doses of medication. And still today, Dr. Nash is in a constant struggle between irrational and rational thinking.

John Nash: Ultimately, I managed to get beyond hospitalization, but without actually being sane. But it was in a sense it was sort of a forced lucidity. I was forced to accept normal thinking, but I didn’t have—when I came out—when I returned to the delusional thing, I felt like I was escaping from having been under, uh, uh, thought police that were forcing me to behave normally.

Narrator: John Nash had two sons before he developed schizophrenia. Nash has passed on both his genius and his schizophrenia to his youngest son, Johnny. Doctor Nancy Andreasen has come to meet with Nash, his wife Alicia, and their son, as she pursues her research in the links between creativity and mental illness.
Johnny Nash: So, you're a psychiatrist?

Dr. Nancy Andreasen: I am a psychiatrist, yeah.

Johnny Nash: What's your name?

Dr. Nancy Andreasen: My name is Nancy—

Johnny Nash: Nancy.

Dr. Nancy Andreasen: Andreasen is the last name. I'd like to talk to you, you know, a little bit about what you were interested in when you were growing up, uh, your experiences playing chess ... 

Johnny Nash: OK, you leave me with questions, I'll try to answer them.

Dr. Nancy Andreasen: OK. Um, when you first started having symptoms, as we would say ...

Johnny Nash: I was in my teens.

Dr. Nancy Andreasen: You were in your teens.

Johnny Nash: I was a born-again Christian. I was, I was a fanatic. I was a religious fanatic. And the, the voices I heard, I interpreted them all as God, you know?

Dr. Nancy Andreasen: What kinds of things did the voices say?

Johnny Nash: I walked out into the middle of the highway, you know. And they, they wanted me to stand there in the middle of the highway. That sort of thing, you know. Pretty severe.

Dr. Nancy Andreasen: Pretty severe.

Johnny Nash: Yes. I didn't realize that my father had passed on anything to me and I—I was just caught up by surprise. I was not savvy, like you psychiatrists, to know that that sort of thing runs in the family. Instead, you know, I was completely caught by surprise. I was flipped out at the time, you know. I had given up my chess and my math but I di—didn't really suspect that I was headed for a mental hospital.
Dr. Nancy Andreasen: So you were in your teens, but you also managed to recover enough so that you were able to go back and eventually get a Ph.D. in math.

Johnny Nash: That's the remarkable thing, yeah. That—that during my religious insanity, I lost all ability to do mathematics. I had been a mathematical genius, you know. Eight hundred on the SAT, on the achievement test. But, uh, I lost all ability to do mathematics. I couldn't add a column of numbers. But then I went back to school. The voices disappeared and I took up math again. And I regained all my mathematical—all the mathematical abilities that I had lost. And I went on to get a Ph.D. I published and I taught, yeah. I followed in my father's footsteps, to—to do honor to my father, you know.

Dr. Nancy Andreasen: Yeah, yeah.

Narrator: Johnny Nash, like his father, often experienced periods where he was able to regain his full intellectual capacity. But the psychosis would always reoccur, making life a roller coaster between insanity and lucidity.

Johnny Nash: But I'm still, uh, suffering, you know, the symptoms of mental illness, you know. I hallucinate, I still hallucinate, you know, but I can function. I function despite the mental illness. Function through schizophrenia.

John Nash: Well, you mention hallucinations. What do you mean explicitly? Do you mean the voice or what do you mean?

Johnny Nash: Both, uh, auditory and visual.

John Nash: You see something?

Johnny Nash: Yes. Didn't you know that I have, that I have visual hallucinations?

John Nash: Well, you claimed it once in the hospital. I remember one time ... 

Johnny Nash: Look, Dad, you're not keeping up with me at all if you don't know that I have visual hallucinations.

John Nash: What is it, what's happening?
Johnny Nash: I have visual hallucinations, Dad.

John Nash: What do you see?

Johnny Nash: I see things in the air that aren't there, you know.

Alicia Nash: How do you know? Are they like ghostly figures or what? You see shadows?

Johnny Nash: I see, you know, in the air.

Alicia Nash: So mostly shadows, right. What do you see in the air?

Johnny Nash: You could call them shadows. Well, he hasn't even kept up with me.

John Nash: Well, you haven't—you haven't said that you see—when you see it, you have to tell us that you see it.

Dr. Nancy Andreasen: It's, uh, you know, your parents are not your doctors, and so, th—they don't want to intrude on your life.

Johnny Nash: That's too bad. Well, it's been a pleasure.

Dr. Nancy Andreasen: It's been very nice talking to you. Thanks very much.

Narrator: Anger, withdrawal, isolation, denial. The symptoms of the disease and the reaction to them make treatment only more difficult.