

The Hard Problem
By Tom Stoppard
Directed by Charlie Newell



Synopsis

Hilary is a young psychologist working at the prestigious Krohl Institute for Brain Science. She struggles to bear the burden of her regrets as she works through a troubling issue in her research. Where does our biology end and our personhood begin? If there is nothing but matter, what is consciousness? Will the computer someday answer all questions psychology can ask? This “hard problem” sets Hilary at odds with her colleagues, but she prays for a miracle to lead her to the solutions.

Setting

The Hard Problem is set in present-day London. About halfway through the show, the play jumps ahead 5 years from its starting point. Spike and Hilary go to a psychology conference in Venice after Leo invites them to join him. Then, Hilary and Bo get significant results from a psychology paper they’ve been working on and doing research for, which gains notoriety for its subject matter. The location switches from Hilary’s flat (apartment), the Krohl Institute (a lab room, a reception area, and Hilary’s office), a hotel room in Venice, and Jerry’s apartment.

The Krohl Institute is based on existing privately funded brain institutes. Microsoft billionaire Paul Allen created the Allen Institute in 2003. In 2006, the estate of billionaire Howard Hughes established the Janelia Institute. Both the Allen and Janelia centers are places where “leading

scientists pursue high-risk/high-reward research into emerging areas of neuroscience, behavioral psychology, evolution, genetics, brain imaging and artificial intelligence.”

Characters

Hilary: Initially 22, later 28 in the show. Gave up her child for adoption after becoming pregnant at 15, a decision which still haunts her. Hilary is a psychologist preoccupied with morality, altruism, and other philosophical questions which she is determined to explore and find her own answers to.

Spike: Initially Hilary’s tutor, later her lover. Very rational and stubborn, always willing to argue his point.

Amal: Indian, Hilary’s age. Often rude, usually in a way demonstrating that he thinks he knows more than the people around him.

Leo: A powerful member of the Krohl Institute. Imaginative and ambitious, determined to be a pioneer in his field. In love with Hilary.

Julia: Went to high school with Hilary. Ursula’s partner. Pilates instructor. Good-natured, caring.

Ursula: Works at Krohl Institute. Julia’s partner. Gruff and often snide, but protective of those she cares about.

Jerry: Head of the Krohl Institute. Confidant and extremely entitled, he is primarily concerned with his own and his company’s success.

Cathy: 11 years old. Adopted child of Jerry and his wife. Empathetic and precocious.

Bo: Chinese-American. Seeing Amal. Hilary’s partner on a research project for the Krohl Institute. Quiet, warm, and can get suddenly emotional when she’s put under pressure. Also in love with Hilary.

Important Figures

These people do not appear on stage, but they greatly impact the topics and discussions that the other characters have throughout the play.

David Chalmers: An Australian philosopher and cognitive scientist specializing in the areas of philosophy of mind and philosophy of language who coined the phrase “the hard problem of consciousness” (for more explanation, see the Themes and Concepts section).

Daniel Dennett: A philosopher who denies that mental states exist entirely. For Dennett, elements of consciousness—like a sense of self, or finding meaning in things—are actually just accidental consequences of some other effect. He uses the analogy of the redness of blood: blood’s redness serves no actual purpose, it is simply the consequence of iron in the blood, which does have a function. At its extreme, this view can lead to the hypothesis that consciousness is essentially an illusion that we live within.

Richard Dawkins: An evolutionary biologist whose book *The Selfish Gene* (1976) argued that human beings are “survival machines—robot vehicles blindly programmed to preserve the selfish molecules known as genes.” Dawkins popularized the view that we are genetically hard-wired to have as many descendants as possible in order to spread our genetic material to the next generation. Because humans act to maximize the survival rate of their offspring, Dawkins claimed, their social behavior is inherently selfish. He argued that altruism, or the selfless action in support of others’ needs, is a myth.

Charles Darwin: English naturalist who determined that all life on earth was descended from a common ancestor. In his 1859 book *On the Origin of Species*, Darwin proposed the evolution of species occurred through the process of natural selection—or, “the survival of the fittest”—in which the organisms that are best adapted to their environment are more likely to survive and reproduce, ensuring their traits are passed on to the next generation. Darwin’s ideas are the foundation of the study of evolutionary biology.

Hillary, however, believes that evolutionary biology’s explanation for human behavior is wrong. She does not deny the claim that we evolved because of natural selection, but she thinks evolutionary biology extends Darwin’s ideas too far, making disturbing claims about what it means to be human. What kind of world would we live in if human emotion was not real, or if maternal love was just egoism? Such a world would be unrecognizable to most humans.

Themes and Concepts

The “hard problem” of consciousness

Consciousness is the internal awareness we all have of being awake, of thinking and feeling, of our beliefs and desires, and of perceiving the world around us. Consciousness is something we know from inside ourselves: our understanding of consciousness comes directly from experiencing it ourselves individually. To be conscious, for humans, is to be alive in the world.

Scientists have long been obsessed with the idea that there must be something mechanical happening inside the brain that produces consciousness. The hard problem arises because it seems impossible that studying anything physical or chemical about the brain could explain the nature of consciousness.

Stoppard wants us to understand that science goes on a fool’s errand when it looks for a physical basis for consciousness. He would rather examine consciousness using philosophy. He believes we will never understand the mind through studying the brain. As Hilary jokes, “Consciousness? It’s a no-brainer.”

Altruism

Altruism is the belief in selfless concern for the well-being of others. Many scientists believe that true altruism is impossible, and that any act that appears to be altruistic is actually done for selfish reasons. For example, it could be argued that a parent only cares for their child because they are hard-wired to do so in order to ensure that their genes are later passed on by their child.

In the play, Hilary believes in altruism, partially due to her own experience loving and giving up her child. However, characters like Spike strongly disagree with Hilary, and believe in evolutionary biology’s theory that altruism does not exist, and any act that seems altruistic is really self-serving.

There is also a type of altruism called “reciprocal altruism”, which refers to actions done because they are in someone’s long-term interest. For example, imagine you and your friend are eating pizza and there’s only one slice left. If you will be eating pizza with your friend every night for a long time, you know what you do now will be remembered, and that that memory will affect your friend’s future actions. You split the last piece of pizza with your friend, so that the next night, if he gets to the table first, your friend will share the last piece with you. What appears to be altruism is therefore actually self-interest, calculated to pay off in the long run.

Religion

For evolutionary biologists, the origin of all human behavior is explained by the force of natural selection. In their view, we do not feel what we think we feel, or mean what we think we mean. Religion is a fiction, emotions like love are not real, and the expressions of art and literature are illusory. Altruism and empathy do not exist. We are motivated by the same hard-wired impulses

that drove our prehistoric ancestors, the ape-like hunter-gatherers, 3.5 million years ago.

SCENE ONE: The Prisoner's Dilemma

The Prisoner's Dilemma is a game that was created during the Cold War in an attempt to analyze the predictability of human behavior. The game assumes that all the players are selfish, and that they will always act to secure the best outcomes for themselves.

Prisoners A and B have committed a crime together, are in separate cells, and cannot communicate. A sheriff tells each prisoner that his jail time depends on whether he confesses or keeps quiet. Each prisoner is given until the next morning to decide what to do.

There are four possible outcomes to the game:

- If both A and B confess, they both go to jail for 5 years.
- If both A and B keep quiet, they both go to jail for 1 year.
- If A confesses, and B keeps quiet, A is set free and B goes to jail for 10 years.
- If A keeps quiet and B confesses, A goes to jail for 10 years and B is set free.

		Prisoner B	
		Confess	Keep Quiet
Prisoner A	Confess	Both go to jail for 5 years	Prisoner B goes to jail for 10 years, Prisoner A goes free
	Keep Quiet	Prisoner A goes to jail for 10 years, Prisoner B goes free	Both go to jail for 1 year

The point of the game is to show that for both prisoners, no matter what the other person does, they are better off confessing because the odds are higher that they will be set free. The game assumes total selfishness, and no altruism.



Tom Stoppard

About the Playwright

Tom Stoppard is an internationally acclaimed writer, known not only for his plays but also for his journalism, essays, radio plays, and screenplays as well. Among many other successes, Stoppard co-wrote the screenplay for *Shakespeare in Love*, which won the 1998 Academy Award for Best Original Screenplay. A few of his many noteworthy plays include *Rosencrantz and Guildenstern Are Dead*, *Arcadia*, and *Travesties*.

History of the Play

When *The Hard Problem* was published in 2015, it was the first play Stoppard had written in nine years. It's world premiere took place in 2015 at The National Theatre in London, directed by Nicholas Hytner. The US premier was produced in 2016 by Philadelphia's Wilma Theatre and was directed by Blanka Zizka.

Discussion Questions

1. What is altruism? Who believes in it in the play, and who doesn't? Why or why not?
2. The primary characters in *The Hard Problem* all have very strong personal ideologies. Did you identify with any character more than another? Why or why not?
3. Do you think that a true scientist can also be religious?

More Resources

Tom Stoppard: <https://literature.britishcouncil.org/writer/tom-stoppard>

David Chalmers' Ted Talk on consciousness:

https://www.ted.com/talks/david_chalmers_how_do_you_explain_consciousness#t-112670