Renaissance art historian Yvonne Yiu of the University of Basel finds no surviving textual evidence for the procedure: "the silence of this considerable body of texts on the concave mirror projection method is deafening." To Yiu it seems inconceivable that "well-informed contemporaries" would not have described a method that, according to Hockney and Falco, "revolutionized the art of their time". Filippo Camerota, a historian of Renaissance scientific instruments at the Istituto e Museo di Storia della Scienza in Florence, points out that in the second half of the sixteenth century, when appropriate projections were first documented, Giambattista della Porta wrote: "If you are incapable of painting a portrait, this is a method you should know." This is hardly support for the claim that tracing projections sparked a revolution in painting more than a century earlier.

The scientist Witelo's *Perspectiva*, from about 1270, has previously been used as evidence that Renaissance scientists and possibly artists knew about appropriate projections. But Mark Smith, a historian of Medieval and Renaissance optics at the University of Missouri, provides an object lesson in the importance of expert knowledge when judging such a claim. Hockney and Falco take Witelo as saying that the image literally floats in space or is somehow projected to a location outside the mirror. "What Witelo really means," says Smith, "is that the image will be located behind the reflecting surface". The public might have concluded that Witelo was describing a projection of a real image and hence is closely related to Hockney's method. A student of basic optics might have concluded that Witelo described a real image in space, not on a screen, and hence only distantly related to Hockney's method. But after analysing the Latin text, context and contemporary thinking, Smith argues that Witelo was describing instead a virtual image, unrelated to Hockney's method.

It seems that Hockney has recently retreated from his claim that artists actually traced projected images to a weaker view that artists merely saw and were influenced by such images. Philosopher of science Christoph Lüthy of the Radboud University of Nijmegen has read contemporary texts and concludes the former claim is "fairly implausible" and the latter "still awaits corroborating evidence".

The volume's editor, Sven Dupré, a historian of Renaissance optics, summarizes the conclusions of the contributors. It makes the Hockney–Falco theory "extremely unlikely as far as its application for the period before the first textual reference to image projection around 1550 is concerned", he writes.

This well-written volume may close the door on the Hockney–Falco tracing thesis. But it should also prove a good resource, especially for optical scientists lacking a background in the history of art or science, from which to explore optics in the early Renaissance. ■
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Who am I? Alex (Elliot Levey) searches for a sense of self.

M. HARLEN

THEATRE

Self deception

On Ego
Soho Theatre in London, UK, until 7 January 2006.

Lucy Odling-Smee

What is this phenomenon that we call our sense of self? Is it the secular equivalent of the soul? Or is it just loops of wiring within the wet, grey stuff of our brains? Inspired by neuropsychologist Paul Broks' book *Into the Silent Land* (Atlantic, 2003), theatre director Mick Gordon examines this dilemma in his new play *On Ego*.

The play opens with a lecture by a neurologist, Alex, who explains why the mass of neurons behind the face annihilates the myth of the soul. Equipped with slides of scalpels probing brain tissue, and a dripping human brain lifted from a bucket, he argues that the self is no more than an aggregate of an individual's thoughts, feelings, perceptions and actions.

To make his point — that the 'I' is an illusion, and that we are no more than bundles of information — Alex enters a teleportation machine that vaporizes his physical body. The procedure involves scanning every atom of his body and transmitting the information by radio waves to a new destination. It should automatically eliminate the original Alex, but it goes wrong, leaving two versions, who immediately start acquiring different experiences and memories. When faced with the prospect of being eradicated, however, his original 'self' resists and an intuitive sense that he is an 'I' after all kicks in with a vengeance.

Meanwhile, the duplicate Alex is unaware of his status and carries on as normal. But as the play proceeds he finds himself rejected by his wife, Alice, who is struck down with the psychological disorder Capgras' syndrome — a condition that makes her believe that her husband is an impostor.

Physical duplication dances with illusion and delusion. Just as Alice's perception of Alex changes, so does his perception of himself. The original Alex is confronted with two polar views of himself: his objective scientific view and his subjective view as he reacts to his experiences.

The many layers of the play, which stretches from the fantastical to a chilling portrayal of lives blighted by brain disease, is saved from chaos by being anchored to a carefully thought-out philosophical discussion about the nature of the self. While Alice struggles with her loss of self through lost love, her husband — and the audience — are left contemplating the space between what we rationally think we are and what we intuitively believe ourselves to be.

The stripping back of illusions to reveal the true self has long been the fodder of dramatists — think of King Lear peeling off his robes in the wind and the rain to reveal the "bare, forked animal" beneath. But in pushing against the boundaries of science, Gordon creates a tale that is both disturbing and curiously liberating. Perhaps we will never succeed in scientifically stripping back the intuitive sense of self, and perhaps, as Broks says, this is the "beautiful paradox" of being a human trying to understand itself. ■
Lucy Odling-Smee is a subeditor for Nature.