

"Shakespeare and the 'multiple-drafts' model of consciousness" by Gabriel Egan

Preamble The following thoughts arise from a book that I am writing on the twentieth-century history of editorial theories in respect of Shakespeare. The New Bibliography that emerged from the work of A. J. Pollard, W. W. Greg, and R. B. McKerrow in the first decades of the century assumed a relatively unproblematic application of Platonic idealism for the relationship between the play as conceived in the mind of the dramatist and the play as performed or written down. Such idealism has in recent critical work (especially from the schools of New Historicism and Cultural Materialism) become decidedly unfashionable and associated with political conservatism. Coming to textual theory from the angle of Marxist ecocriticism, I wish to rehabilitate Platonic idealism as a reasonable way to unite progressive literary scholarship with the latest work in cognitive science. As any materialist must accept, ideas have a basis in the organization of matter in the human mind--ideas are to that extent physically real--and the new scientific studies of consciousness (especially memetics and the 'multiple-drafts' model of cognition) show that the Platonic analogy provides a good way to conceptualize the distinction between the play as abstract thought and its various extant physical embodiments in manuscript and print textualisations.

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Theories of Mind

Twentieth-century thinking on the nature of the mind has been notably resistant to unity. Sigmund Freud's division of the mind into conscious and unconscious parts remains popular in literary studies although recent research into the operations of the brain posits other, more significant bicameral divisions such as left and right hemispheres and many more smaller, modular units at work. The twentieth-century concern with the fragmented is in stark contrast to the most important work of philosophy since the ancients, Rene Descartes's Meditationes de Prima Philosophia (Meditations on First Philosophy) (Descartes 1641). Descartes responded to the radical scepticism of those such as Michel de Montaigne by asserting that while one could doubt the accuracy of one's sensory experiences, and hence doubt the existence of the world (including one's body) known from those experiences, one could not doubt the existence of the thinking mind that was, in that moment, doing the doubting. The thinking mind, at least, had to exist, and for Descartes this special status set the mind off from the rest of the body and the wider universe, all of which was made from matter; the mind, for Descartes, had to be immortal and (in his terminology) unextended and impossible to fragment.

Most people report that their mind does indeed feel unitary and immaterial, and asked to consider its physical location in the brain many of us respond that it seems as though the sensory perceptions of the body were being delivered to a single, central location--a command centre--where the visual images are played on a screen and the sounds delivered through speakers for the benefit of the real self operating the controls. (Descartes thought he has found this command centre in the pineal gland, located in the third cerebral ventricle along the midline of the brain; although now longer considered a likely site for consciousness, the purpose of the pineal gland in humans remains obscure.) The Cartesian Theatre model of the self as a homuncule observing

the senses' inputs and operating the body's controls has the distinct problem of infinite regression: how does the inner self watching the screen and listening to the speakers gain its consciousness, unless we posit yet another smaller homuncule inside the first, and so on? Although the singular and unified Cartesian mind has long been rejected by materialists, most especially since the publication of Gilbert Ryle's devastating attack on it in The Concept of Mind (Ryle 1949), there remain distorting effects from this longstanding model of consciousness. Even in cognitive science one finds vestigial assumptions betraying an unacknowledged Cartesian Theatre model, although experiments have shown the impossibility of our apparently unified selves having such a physical correlate. In Daniel Dennett's description of the mind, the singular interior experiencer of our senses is replaced by a 'multiple drafts' model in which distinct modules in our brain have for millennia worked more or less independently to do the important work of keeping us out of danger, and the singular, conscious self arose only quite recently after the invention of language (Dennett 1993). Dennett's account is controversial among philosophers but it usefully puts language at the centre of its explanation of consciousness.

Just what language itself is for remains a tricky anthropological question. The obvious answer might seem to be that it aids social cooperation, and so arose as an evolutionary innovation that enabled our ancestors to out-compete rival animals for the control of resources. However, our oversized brains (presumably needed for big thinking) are something of a physical disadvantage, consuming considerable energy even when apparently doing nothing useful for us and making birth considerably more dangerous than it ought to be. One of the best reasons for taking seriously Richard Dawkins's only half-intended invention of the meme, the cultural equivalent of the gene (Dawkins 1976, 189-201), is that it gives an explanation for such a peculiar fact about our bodies. As Susan Blackmore showed a memetic pressure to increase brain size could have overwhelmed the genetic pressure to keep the brain small (Blackmore 1999, 67-81). Once imitation became useful to Homo habilis, about 2.5 million years ago, good imitators (that is, those whose brains happened to be good at copying others' behaviour) benefitted from a genetic-selection pressure in reproduction. The memes that were imitated might be genuinely useful (the making of sharp tools or the fashioning of clothes) but since it made sense, from a survival point of view, to mate with any good imitators in preference to poor imitators, non-useful memes (say, singing or decorating caves) could flourish too.

At this point, according to Blackmore, the memes took over and were able to drive up brain size as if for their own ends. The large claims that the new science of memetics makes about the origin of human physiology and culture have recently gained weight from neurological science with the discovery of the so-called mirror neurons, first in monkeys (Gallese et al. 1996) and then in humans (Arbib 2005). These neurons fire not only when we perform an activity (say, reaching for a piece of fruit) but also when we watch someone else performing the same activity. They appear to be the reason that it is difficult to watch someone yawning or laughing without joining in, and equally why it is difficult to watch Lear's agony at the death of this daughter without sharing in the emotion. In the latter case, our mirror neurons make us feel his pain even though we know we are watching only an imitation, and so are at two removes from the event. One could imagine the principle being adapted to account for Hamlet's conviction that watching a representation of a crime is all the more acutely painful for those who have committed the like action.

The memeticians' claim that we are merely the conduits for self-replicating practices and ideas is difficult for some to accept, but it has been around for quite a while in the humanities and social sciences. A correlative of the structuralist view of language and literature was that order exists in language and in storytelling as extra-personal structures that, as it were, speak through us in individual utterances and texts. Thus the structuralist anthropologist Claude Lévi-Strauss claimed that his aim was not "to show how men think in myths but how myths think in men, unbeknownst to them" (Lévi-Strauss 1970, 20). The new gene-centered perspective on life offered by W. D. Hamilton and his followers (most famously, Dawkins himself) shows that when you think not of individuals but about the success or failure of replicating units, animal behaviour that is otherwise inexplicable (such as altruism) starts to make sense. From my point of view as a human individual, helping my sister or my child feels like an expression of selfless emotion, but from a gene's point of view--bearing in mind that one's siblings and children each share 50% of one's genes--promoting this action gives the gene an even chance of helping of copy of itself. The same act is selfish or selfless depending on whose point of view you take up. In the famous memeticians' example, we can take up the books' point-of-view and say that the scholar is just the books' way of making more books.

According to Julian Jaynes in The Origins of Consciousness in the Breakdown of the Bicameral Mind, consciousness is a fairly recent phenomenon (no earlier than 3000 BCE) arising by cultural evolution (Jaynes 1976). Prior to consciousness, Jaynes argued, the right side of the brain generated internal audio hallucinations that were 'heard' and acted upon by the left side of the brain. This simple internal split in the mind is not taken seriously by scientists now working on the brain, and most accept versions of the modular account proposed by Jerry Fodor that built upon Noam Chomsky's rejection of B. F. Skinner's behaviourist model of language acquisition and Chomsky's assertion that key aspects of our capacity for language are innate (Chomsky 1959; Fodor 1983). Daniel Dennett explored Fodor's model in Consciousness Explained but elsewhere he also gave credence to Jaynes's explanation for its innovative claim that the bridging of isolated, semi-autonomous brain modules is the key to consciousness (Dennett 1993, 195-97). Simple question-and-answer language used between hominid individuals ("cave clear?", "where food?") would have conferred upon them a survival advantage, and Dennett imagined a moment when a hominid inadvertently asked a question while no-one else was around, and found that it could answer itself. It is demonstrable from experiments on those with tissue damage that one part of the brain can contain the answer to a problem needed by another, but with no means of internal communication the modules cannot cooperate.

We have all experienced a form of this internal division in dreaming, of course. Think of a dream in which a surprising event occurs: say, you open a door and see something you do not expect. Since what was behind the door was as much a product of your dreaming brain as was the door and the 'you' in front of it, it appears that the part of the brain creating the internal illusion of 'you' was not informed of what another part of the brain was assembling behind that door. The first route by which the isolated modules of the brain were connected was, according to Dennett, highly indirect in going via the mouth, the air, and the ears, and over time more direct, internal routes were formed. The indirect mouth-to-ear route is one we still use, of course: poor readers find it helpful to read aloud, and many writers find that vocalizing a sentence in composition helps clarify it. Who has not found that her ideas became more coherently organized in the

act of articulating them to another, and indeed is not our seminar itself partly concerned with that process?

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The Shakespearian Application

What consequences has all this for Shakespeare? My approach to the matter of textuality comes from work on original staging of Renaissance drama, and regarding our seminar topic, awareness, and the original performance practices it is a considerable loss to scholarship that Humphrey Gyde's PhD thesis "The formation and exploration of character through the aside and soliloquy in Elizabethan and Jacobean drama" has not appeared in book form (Gyde 1990). Gyde argued that the implied injunction to a character who steps onto the Renaissance stage is 'tell us how you feel' and in responding to this call--especially in soliloquy where deception is not possible--dramatic personality is created. Gyde produced a elegantly simple model of the audibility of asides and soliloquies that he called 'represented awareness', and I have been unable to find violations of it in the extant Renaissance drama. Gyde's claim is that a character speaking an aside or soliloquy can, as it were, deafen those characters that she knows are on the stage at the time, invoking the convention of deafening by taking a step towards the edges of the stage to confide in the audience. However, a character cannot deafen those of whose presence she is unaware, and hence the fear of being crept upon shown by soliloquizers: "[RICHARD GLOUCESTER] Dive, thoughts, down to my soul: here Clarence comes" (Richard 3 1.1.41¹), "Soft you, now [ie, hushing himself], | The fair Ophelia!" (Hamlet 3.1.90-1), and "BANQUO Thou hast it now: King, Cawdor, Glamis, all . . . But hush, no more" (Macbeth 3.1.1-10). In response to these cues, and others that answer the 'tell us how you feel' injunction, the audience or reader infers a relatively unified and stable (albeit changeable) dramatic self, and as Bruce Smith showed--and Gyde independently confirmed--this process is most obviously logocentric (in Jacques Derrida's sense) in the soliloquies, and more acoustically social in the ensemble scenes (Gyde 1997; Smith 2001).

Smith, however, was concerned with the disorder--what he called green sound--that encroaches upon the edges of logocentric order, and did not address the more philosophically fundamental problem of what we are doing when we infer a character from its utterances. Even the most postmodern of us does not feel entitled to treat what a character says as genuinely self-contradictory. To illustrate this, we make take a simple problem such as how many men Miranda thinks she has met before Ferdinand in The Tempest. In an aside Miranda implicitly counts Caliban among humankind: "This [Ferdinand] | Is the third man that e'er I saw" (1.2.447-8). Obviously, Prospero and Caliban were the first and second. However, speaking to Ferdinand she excludes Caliban from the count: "nor have I seen | More that I may call men than you, good friend, | And my dear father" (3.1.50-2). Rather than treat this as a fundamental rupture in the coherence or consistency of the dramatic world, we quite naturally treat such discrepancies as examples of a singular, unified character being in possession of imperfect knowledge of herself, of her selfhood perhaps changing over time, and, whether consciously or not, of selves shaping their accounts of reality to suit their hearers. Thus, we might say that in her own mind--and presumably her near-rape is significant in this regard--Miranda considers Caliban a potential, albeit revolting, sexual partner, but she would not want Ferdinand to think so.

We treat ourselves as likewise partially self-divided when we say "I forced myself to do it", or "I did not mean it". Such moments of self-division are among the markers of realistic dramatic character, and this fact itself corroborates the claim that consciousness--in dramatic characters as much as in real people--is an overarching phenomenological illusion of mental continuity that sutures the differences in our behaviours across time and space. (Thus, although I do not feel that I am wholly the same person I was 20 years ago, I can hardly claim to be someone else entirely; at the very least the law may hold me to account for what I did back then.) And yet there is a distinct fear of such continuities in much modern criticism and theorizing about Shakespeare. Foucauldians such as Margreta de Grazia would have us believe that before the Enlightenment people were simply more comfortable than we are with the discontinuous, the contradictory, and hence that (to take her example) when in Shakespeare the same letter is read aloud twice to produce seemingly different words, a problem emerges for us (with our unity-loving post-Enlightenment minds) that simply did not exist for them (De Grazia 1991, 222-26). As I argue elsewhere, De Grazia misreads the historical evidence and in fact an enabling fiction of characterological and textual unity was as important for them as for us, and this should inform our textual theory (Egan 2008). At the very least, the singularity of performance scripts (normally only one text was licensed by the Master of the Revels) and, press correction notwithstanding, the singularity of printed texts belie the textual multiplicities favoured by postmodernism.

In our current dramatic practices, we grant coherent singularity to dramatic characters within a single text or performance, but withhold it when there exist multiple, seemingly distinct, early printings. We no longer feel entitled to consider the Hamlet found in Q1 to be the same as the Hamlet found in Q2 or in F, and hence the new Arden3 edition of the play contains edited texts of all three versions (Shakespeare 2006a; Shakespeare 2006b). And yet we treat the Hamlet at the end of the play (in each version) as effectively the same as the Hamlet at the beginning, despite him having quite a different outlook and, as Roger Lewis pointed out, having answered his own question "To be or not to be" (3.1.58) with a definitive and conclusive "Let be" (Lewis 1978; Shakespeare 1604, N3v). I would argue that just as we do not construct a different person to account for how the character has altered over the course of the play (and we do not, as Dennett showed, do that with real people either), so we should not construct a different play each time we come across a variant version.

In a preface to Blackmore's book on memes, Dawkins gave a cogent reason for distinguishing between variations that matter and those that do not, using Blackmore's distinction of imitations that 'copy-the-product' and those (much more important, and mostly human) imitations that 'copy-the-instructions'. Imagine a Japanese master carpenter teaching an English apprentice:

The apprentice would not copy obvious mistakes. If the master hit his thumb with a hammer, the apprentice would correctly guess, even without understanding the Japanese expletive '** **** **!', that he meant to hit the nail. He would not make a Lamarckian copy of the precise details of every hammer blow, but copy instead the inferred Weismannian instruction: drive the nail in with as many blows of your hammer as it takes your arm to achieve the same idealized end result as the master achieved with his--a nail head flush with the wood. (Blackmore 1999, 12)

This, of course, is pure Platonism, even down to the use of an analogy from woodwork, allied with a view of genetics that rightly dispenses with Jean-Baptiste de Lamarck's notion of inheritance--that each generation's particularities (the ironsmith's large biceps, the cycle-courier's powerful calves) are passed on to descendents--in favour of August Weismann's assertion of the continuity of the germ line: your genes are not, in fact, altered by your behaviour. The Lamarckian/Weismannian distinction works well for memes too. Using Blackmore's example, we may notice that a person's recipe for a new soup could be disseminated by repeated imitation of the soup by those who tasted it (Lamarckian, copy-the-product dissemination), in which case slight alterations might accumulate quite quickly as each chef chooses to add more salt (Blackmore 1999, 60-61). But if the recipe circles the world as a text on the Internet, such local variations will not accumulate because the text (like the germ line, DNA) is not altered by the variations (thus Weismannian, copy-the-instructions dissemination). The analogy works well for Shakespeare: most of the early textual reproduction was monogenetic (Q1 was copy for Q2) and, now that the memorial reconstruction theory is largely discredited, we believe that there was relatively little copy-the-product dissemination.

If we think the Dawkins/Blackmore/Dennett line on Platonism and the dissemination of cultural knowledge is reasonable in its distinction between variations that matter and those that do not, and if we think that human character is an example of where we should permit considerable latitude (such as variations of behaviour and beliefs) before we conclude that we are dealing with more than one person, there seems little reason to accept the current textual theorizing that finds in each textual variant (apart from those that are egregious errors) the branching off of a new version of the play. Recast in terms of human labour, playwrighting tends towards the singular not the plural and to accord a distinct line to each textualization that happens to survive is as mistaken as asserting that there is no singularity called 'Coca-Cola' because (contrary to the corporation's official line) we know that its sweetness is varied when it is sold in different markets across the world. It is true that we do not possess a manuscript 'recipe' for Shakespeare's Hamlet, only 3 copies of it that differ markedly. But we are entitled to treat these as three approximations of one thing, the Platonic ideal of Hamlet as it existed (in material form, as configurations of neurons) in the mind of Shakespeare. If, over time, Shakespeare changed his mind about Hamlet, it is still essentially Hamlet even if a text closely representing the state at time T_1 is quite different from a text closely representing the state at time T_2 .

It is not that there was actually a pure and unembodied form of the play in the mind of Shakespeare and that all textualizations are fallings-off from this perfected state. Rather, the new cognitive science shows that even in our minds experiences and intentions exist in multiple and inchoate forms, never coming together at one place (the now-dismissed Cartesian Theatre):

We don't directly experience what happens on our retinas, in our ears, on the surface of our skin. What we actually experience is a product of many processes of interpretation-editorial processes, in effect. They take in relatively raw and one-sided representations, and yield collated, revised, enhanced representations, and they take place in the streams of activity occurring in various parts of the brain. (Dennett 1993, 112)

The written state of the plays (existing in multiple textualizations) rather spookily matches the neurological state inside our heads (the 'multiple-drafts' model of

consciousness). In Dennett's view, the feeling that the experiences and intentions come together, are coherent and persistent over time, comes from the combination of memes that we call consciousness: the simplified version of oneself that the various modules of the brain collectively generate for the purpose of managing the whole. (A useful analogy would be the 'My Computer' icon that the Microsoft Windows operating system presents to its user: like the Cartesian homuncule this exists within the hardware that it purports to represent, and it hides from the user the messy detail of the modules that make the real system.) The editorial work performed by the mind to generate and perpetuate the useful fiction of me (to me) or you (to you) is precisely like the editorial work formerly undertaken by editors to generate and perpetuate the useful fiction of a singular, coherent Shakespeare play for his readership and theatre practitioners. As that singularity and coherence breaks down in modern editorial practice, the plays become at worst impossible to speak of at all, or at best they become identified with, and constrained by, their extant early textualizations. This is not how Shakespeare would have thought of them, nor how the early actors would have thought of them, because it is not really how the human mind works. Conflating multiple drafts to create usable fictions of self, of textuality, of existence, are what our minds have evolved to do.

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¹ All quotations of plays are from Shakespeare 1989 unless otherwise stated.

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