

REVIEW OF JOSEPH CARROLL,  
*EVOLUTION AND LITERARY THEORY*

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Joseph Carroll, *Evolution and Literary Theory*

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Commenting on Durkheim's claim that the only legitimate explanation of social facts is in terms of other social facts, the author of this work, the first extended monograph on the importance of contemporary darwinism for literary study, observes that "declarations of disciplinary autonomy stultify the disciplines they are meant to protect" (29). Few would now dissent, but, as Carroll adds, much of this agreement would be lip-service:

The frequent manifestos in favour of "interdisciplinary" study are not usually recommendations that literary critics actually assimilate the information and methodological principles available in other disciplines; they are more often claims that the kinds of knowledge available in other disciplines can readily be translated into the principles of rhetoric or textuality. (30)

The point is of broad application, ranging from those on the one hand who conceive of interdisciplinarity as the study of the impact of science on literary production, a well-established tradition, ranging from Lionel Stevenson to George Levine, to those who wish to bring the materials of other fields beneath the jurisdiction of the literary scholar, such as Gillian Beer. On all these views the critic is an end-user, a final arbiter, the divine event to which the whole creation moves. Understandably this attitude irritates those in the areas which are being treated with such lofty condescension. Look into that strange and very interesting anthology of interviews with leading scientific researchers collected by John Brockman, *The Third Culture* (Simon and Schuster: New York, 1995) and even the amiable Stephen Jay Gould can be found detecting "something of a conspiracy among literary intellectuals to think they own the intellectual landscape and the reviewing sources" (21), while the pugnacious Artificial Intelligence specialist Roger Schank remarks bitterly that "We got pushed out of the intellectual circle for reasons that aren't interesting" (28). Richard Dawkins may be allowed to speak for all of them:

I noticed, the other day, an article by a literary critic called 'Theory: What Is It?' Would you believe it? 'Theory' turned out to mean 'theory in literary criticism.' This wasn't in a journal of literary criticism; this is was in some general publication, like a Sunday newspaper. The very word 'theory' has been hijacked for some extremely narrow parochial purpose – as though Einstein didn't have theories; as though Darwin didn't have theories. (23)

Joseph Carroll's book is laudably different, in its modesty, and in its brave attempt to take interdisciplinarity seriously, to avoid parochialism whatever the costs for the institutional prestige of departments of literature. Rather than tamely track the courses of influence into the arts, or dispense a comforting dismissal of scientific pretensions to superior cognitive value, he sets out to locate the academic study of literature within the naturalistic world-view of scientific materialism, and to theorize its relationships with the darwinian biological approach to human behaviour. His timing is excellent, for that approach is now entering a phase of sophistication which at last matches the enthusiasm of its proponents. The "sociobiology" of the late 1970s and early eighties, which was founded on the importance of the developments in evolutionary theory during the 1960s and 1970s, particularly the work of G. C. Williams, W. D. Hamilton and Robert Trivers, has been united with cognitive science and is now giving rise to a fresh constellation of concepts for the study of our own species. The range of activities within the new field of "evolutionary psychology" is large, but broadly speaking any approach to human psychology which recognizes that the brain, that is to say the mind, is the product of natural selection, and that inferences about its information processing characteristics must be made in the light of this fact, lies within the pale. The governing principles of the position have been laid out in great detail by Leda Cosmides and John Tooby, whose edited volume, *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (Oxford U.P.: New York, 1992), is the most convenient place to survey the fundamentals and promise of this research program, whose ramifications for linguistics, anthropology, and ethics, areas of obvious importance for students of literature, can be sampled, respectively, in Stephen Pinker's *The Language Instinct* (Penguin: London, 1994 and recently translated by Naoko Mukuda for NHK Shuppen), and Pascal Boyer's *The Naturalness of Religious Ideas: A Cognitive Theory of Religion* (Univ. of California Press: Berkeley, 1993), and Robert Wright's *The Moral Animal: Evolutionary Psychology and Everyday Life* (Pantheon: New York, 1994, and now available in a Japanese translation from Kodansha). This explosive resurgence of evolutionary naturalism often surprises those outside biology, as Daniel Dennett, the American philosopher in the forefront of naturalistic approaches to philosophy of mind, reports in his recent *Darwin's Dangerous Idea: Evolution and the Meanings of Life* (Simon & Schuster: New York, 1995):

Much of the controversy and anxiety that has enveloped Darwin's idea ever since can be understood as a series of failed campaigns in the struggle to contain Darwin's idea within some acceptably 'safe' and merely partial revolution. Cede some or all of modern biology to Darwin, perhaps, but hold the line there! Keep Darwinian thinking out of cosmology, out of psychology, out of human culture, out of ethics, politics, and religion! In these campaigns, many battles have been won by the forces of containment: flawed applications of Darwin's idea have been exposed and discredited, beaten back by the champions of the pre-Darwinian tradition. But new waves of Darwinian thinking keep coming. (63.)

Their principal attraction, the reason that they keep returning, is that they permit the human sciences to be brought into connection with the rest of the sciences, that is to say they bring the study of human activities within the range of a rigorously articulated causal explanation, which is compatible with the causal explanations available in other disciplines. Tooby and Cosmides contrast this approach, the Integrated Causal Model, with the currently dominant Standard Social Science model, which as they caustically say, “mischaracterizes important avenues of causation, induces researchers to study complexly chaotic and unordered phenomena, and misdirects study away from areas where rich principled phenomena are to be found” (*Adapted Mind*, 23). Their own approach facilitates integration by taking the human mind to be a set of evolved information processing mechanisms many of which are functionally dedicated to the solution of problems found in ancestral environments. This content-specific mind is responsible for the generation, and accounts for much of the particular content, of cultural representations, which are then transmitted, carried, and edited by others in a social group:

On this view, culture is the manufactured product of evolved psychological mechanisms situated in individuals living in groups. Culture and human social behaviour is complexly variable, but not because the human mind is a social product, a blank slate, or an externally programmed general-purpose computer, lacking a richly defined evolved structure. Instead, human culture and social behaviour is richly variable because it is generated by an incredibly intricate, contingent set of functional programs that use and process information from the world, including information that is provided both intentionally and unintentionally by other human beings. (*Adapted Mind*, 24)

Carroll’s project is, in large part, an attempt to come to terms with this new wave of darwinian, naturalistic, thought, and if his interests seem so odd to us in the literary critical world that is not so much because he is ahead of the times, but rather because we in the literary academy are so far behind them, and because English departments, world-wide, are, as Carroll notes, “the last refuge of mystical indeterminacy” (469), the last hide-out of transcendental idealism, where “the political and disciplinary motives that animate post-structuralist thinking form an uneasy alliance with a quasi-religious desire to preserve an area of human subjectivity or spirituality that is somehow, mystically, distinct from the objective world that can be known by science.” (31) Carroll rejects this as a craven escapism, and seeing human existence, and human behaviour, as explicable, natural, facts, turns to literary material as the explicable product of explicable causes.

After a fifty page introductory orientation, which conveniently summarizes the whole, this book is divided into two sections, the first of which, “A Darwinian Critical Paradigm”, presents the core arguments against the post-structuralist world-view, and in favour of a naturalistic approach. In chapter 1 Carroll begins by rejecting the “Semiotic Transcendentalism”, the textualisation of the world, of contemporary theory, and having recovered a real world goes on to present literature as a means by which human organisms articulate and communicate their

knowledge of that reality. Chapters 3 through to 8 examine some of the broader principles governing the means by which literature comes to deliver knowledge, illustrations, designed to establish literary criticism as an empirical activity, being given in discussions of George Eliot's *Middlemarch* and *Daniel Deronda*, and of Walter Pater's *Marius*. The second part of the book, which is ancillary to the first, is openly a set of "Polemical Engagements", some following up the attacks on post-structuralism in the first part, others taking on philosophers, such as Rorty and Kuhn, or biologists, such as R. C. Lewontin, whose positions with regard to science are incompatible with Carroll's own.

It is a dense, discursive, and serious study, with a quality of deeply interested sincerity that stands in admirable contrast to the cynical playfulness, the theatrical moralism and professional opportunism of so many other products of the literary academy, but it will make few friends, for in the good sense described by Empson when he said that the honest man neglected tact as a matter of principle, this is a tactless book, and Carroll lays his position out with uncompromising ferocity:

If my polemical contentions are basically right, a very large proportion of the work in critical theory that has been done in the past twenty years will prove to be not merely obsolete but essentially void. It cannot be regarded as an earlier phase of a developing discipline, with all the honour due antecedents and ancestors. It is essentially a wrong turn, a dead end, a misconceived enterprise, a repository of wasted efforts. (468)

Such a paragraph might, of course, delight as well as irritate, yet there is no comfort, or not much, for the anti-theoretical *littérateur* who wants to be given excuses for neglecting rigorous abstraction:

I would argue that the essential problem in such school criticism [Marxism, psychoanalysis, Heideggerian phenomenology, and deconstruction] is not the use of systematic critical terminology; it is, rather, the defective character of the systems at work. (45)

Carroll, then, rejects "theory" in order to prosecute an alternative systematic literary philosophy, one organised around darwinism, which will be as repugnant to the conservative, or the liberal, critical intelligence as any other radical critique, indeed in so far as it is a practically stronger opponent it will, in the long-run, be more repugnant. However, so much of the book is given over to the rejection of various manifestations of post-structuralism that readers might wonder if darwinism is more important to Carroll for its power to displace theories that he dislikes than for any degree of positive understanding it delivers, and his polemic is unlikely, actually, to change anyone's mind. Consequently his views will not stand or fall with the remarks on Jameson and Greenblatt, but with the evolutionary, naturalistic, theories of ontology and epistemology that he espouses, that is to say with "the view that knowledge is a biological phenom-

enon, that literature is a form of knowledge, and that literature is a biological phenomenon” (1).

The main principle in this position is the interaction between organism and environment, a principle to which Carroll assigns fundamental status, and proposes as the “matrix concept” (2) which must replace those of other schools. Subsidiary to this are various other positions, that the mind is composed of “innate psychological structures – perceptual, rational, and affective” which have evolved by a process of natural selection, that all “immediate human motives are regulated by the principles of inclusive fitness as ‘ultimate cause’”, and, most promisingly, that “representation, including literary representation is a form of ‘cognitive mapping’”, and is therefore assimilable to our understanding of the organism’s adaptive response to its environment. Carroll’s own discussion of what he calls “literary figuration” is straightforwardly organised between the poles of realism and symbolism, indeed it is in many senses a recovery of rhetorical analysis:

To designate the total set of affective, conceptual, and aesthetic relations within a given literary construction, I shall use the term *figurative structure*. Any element that can be abstracted from a figurative structure is *ipso facto* a figurative element. Thus, representations of people or objects, metrical patterns, rhyme schemes, overt propositional statements, figures of speech, syntactic rhythms, tonal inflections, stylistic traits, single words, and even single sounds are all elements of figuration. (130)

With justice Carroll chooses to concentrate on what he believes is “the level of analysis at which elements form meaningful units”, but disappointingly this results in a discussion of higher level units, characters, settings, and plots, that is, given the scientific context in which it is placed, unsatisfyingly vague. It must of course be granted that contemporary psycholinguistics is not itself sufficiently developed to be able to give much of an account of the way that texts are implemented on the human bio-computer, or of the way in which that computer programs text, yet more attention to the details of linguistic analysis, particularly metaphor and the construction of narrative might have greatly strengthened Carroll’s position here. Rather than trying to rehabilitate elements of Frye and Watt it might have made much more sense to win over theorists such as Mark Turner, whose work, *Reading Minds: the Study of English in the Age of Cognitive Science* (Princeton Univ. Press: Princeton, 1991) for example, is only linked to biology by the most cursory of references, but contains nothing of importance incompatible with darwinian thought and much that might work remarkably well in that context. The same could be said of many other linguistically oriented theorists in poetics and stylistics, and even, comically enough, of some structuralist tenets. As it is, the potential for a literary theory integral with human biology has been made to seem less impressive than in fact it is, and indeed the actuality of that theory has been understated.

This over-cautiousness is a consistent trend in the book, and one which darwinian hot-heads will undoubtedly find frustrating. In formulating his organising principles, for example,

Carroll never extends the logic of darwinism to the replication of cultural particles themselves. Admittedly, such approaches, of which Richard Dawkins's "meme" theory is the best known (see *The Selfish Gene*, 1976, 2nd ed. 1989), are controversial, but elaborations on the general principle, such as Pascal Boyer's studies of the transmission of religious ideas, and Daniel Sperber's arguments for the study of the epidemiology of cultural representations (for example his "The Epidemiology of Beliefs", in George Gaskell and Colin Fraser, eds., *The Social Psychological Study of Widespread Beliefs* (Clarendon Press: Oxford, 1990), 24–44) show that this view is both strong and rewarding and can usefully handle the proliferation of signs and cultural objects by considering them within a framework that assumes the population dynamics of cultural representations to be constrained by the evolved psychology which forms its substrate. Carroll's position, in contrast, seems to be leaning towards a denial of any independent replicatory 'life' to cultural material:

literary works reflect and articulate the vital motives and interests of human beings as living organisms. This assumption answers to my own deepest convictions about the nature of literature, and it conflicts fundamentally with the currently pervasive disposition to regard all motives and interests as merely self-reflexive linguistic or cultural functions. I shall argue that innate biological characteristics provide the basis for all individuality and all social organization, that authors exercise originary power in the construction of literary figurations, and that literature represents objects that exist independently of language. (3)

Not even the most convinced memeticist would want to deny that by and large cultural objects will indeed reflect the interests, and even the genetic interests, of the bodies that generate, transmit and edit them, but the logic of a far-reaching darwinism would have forced Carroll to leave more room for the sort of semiotic play that he is so dedicated to rejecting elsewhere in his book. In this respect he resembles, in fact, those students of human behaviour who have been satirically characterised by the anthropologist Donald Symons as Darwinian Social Scientists, researchers who, though evolutionists, regard the mind, as social scientists tend to, as a reliable all-purpose calculator. Against such a position are ranged those who propose that the human mind is a collection of content-specific modules, and therefore is an "adaptation executor" which in a novel environment, such as that around most living humans, is liable to produce behaviour both odd and genetically maladaptive. The difference can be restated as one between those who have a more commonsensical, unitary, rationalistic conception of the psychological subject, and those who, rejecting everyday intuitions, regard it as a bundle of heuristically powerful fragments. A similar division, and a similarly unfortunate one, separates Carroll, who, almost an essentialist, posits culture as a fairly straightforward and definite product of definable selves, from the memeticists, those who envision selves and cultures formed in ways so muddled and singular that they may be beyond discussion except as populations of objects.

From an external viewpoint this question may seem almost vanishingly insignificant. Both views rest on a refusal of transcendent absolutes, both are deeply physicalistic in their orientations. However, there is for Carroll good reason to choose between them, for the position which he adopts creates a satisfying polemical distance between his ideas and those of the post-structuralist critics he feels have drained the rich experiential world of its real content and replaced it with “a thin and hectic play of signs” (466). This choice also allows him to posit a stronger place for the study of literature within the university. By defining self and culture in the common-sense way that he does, Carroll allows himself to retain many of the interpretative functions of an old-style critic. Literature is the product of fairly stable individualities and is a record of their cognitive mapping, while study reveals the best of it to be a storehouse of accumulated wisdom. The opposing position would see literary material as an informational product generated and carried by evolved psychologies. Much of it would, in terms of the cognitive mapping it offers, be obsolete at a university level, however functional elsewhere, and much would consist of the proliferation of information replicating parasitically. Study of literature would not be able to claim status on the basis of the wisdom in its texts, and its students would hardly constitute an independent, end-user, discipline. On this view literary scholarship would be one branch of many within a psychology which itself lay inside a fully integrated human science. Scholars of literature would be psychologists and historians, or service-industry workers for those fields, differentiated merely by the data area which they studied. Carroll’s project, on the other hand, appears to be directed towards evaluation and criticism, and designed to protect those activities in relation to literature within the university. This is to dodge the most distressing implications of the theory of evolution for those whose livelihoods depend on reading poems and novels and plays and writing about them. In his haste, his anxiety, to put as much ground between his own pitch and that of disciples of post-structuralist thought he has overshot, and instead of acknowledging the fragmentation of the self, the quasi-independence of cultural material, and the ideological nature of much literary production, as interesting and important subjects, he sweeps them away with all the rest of the post-structuralist set-up. The truth is that these areas of investigation are already present in evolutionary thought, as modularity psychology, one of the main planks of Tooby and Cosmides’s work, as the epidemiology of representations, and as the study of the extremely intricate ways in which one organism may manipulate another, say a mother influencing the sexual behaviour of a daughter, when genetic interests diverge. The difference is simply that evolutionists can give detailed observational and causal descriptions of these phenomena, descriptions which are physicalistic and integral with the rest of scientific knowledge, whereas post-structuralists cannot do any of these things. It is this poverty of explanatory power which must ultimately mitigate against much of the production of the literary academy, traditional as well as “radical”. As Carroll himself ominously says, “even in literary theory the need for understanding must ultimately take precedence over beliefs that depend on obscurantism and intellectual obstruction”. His own thought is neither obscurantist

nor obstructive, but he is here, in spite of good intentions, misleading, and has to some degree blunted his own case.

All reservations aside, this is an extremely significant book. The term path-breaking, usually applied to works that better merit the term carpet-sweeping, is for once entirely deserved. Carroll is modest, and realistic, in estimating his likely influence on the bulk of his colleagues, but, properly, this disturbs him less than it might, for, true to an admirable sense of intellectual responsibility, he perceives that academic discussion of books is only a small part of the human endeavour, and that events within this profession hardly, after all, constitute intellectual disasters:

Whatever happens within the critical institution as a whole, the pursuit of positive knowledge is available to anyone who desires it. Within this pursuit, the opportunities for real and substantial development of our scientific understanding of culture and of literature are now greater than they have ever been before. (469)

For those who accept the validity of this promissory note, and Carroll seems to be suggesting that traditional literary scholars who do not, post-structuralists included, may be self-deselected from the future of the disciplinary study of literary material, there is the enormous obligation of delivering the nominated goods. This book goes a long way to showing how the work can be forwarded, but there is still much to be done by way of developing methods that are sufficiently compatible with the sciences to deserve a place within the university curriculum. As an incentive for any who feel inclined to take up the work it may be as well to remark that the integration of literary study with the sciences will ensure that scholars around the world, particularly those in English and American literature, will find themselves for the first time playing internationally on a level field, and this will be, by any standards other than narrow sectarian ones, highly desirable.