

Imagining Human Nature

JOSEPH CARROLL, JONATHAN GOTTSCHALL,
JOHN JOHNSON, AND DANIEL KRUGER

Human Nature and the Arts

Until fairly recently in literary history, most writers and literary theorists presupposed that human nature was their subject and their central point of reference. Dryden following Horace, who follows others, offers a representative formulation. In “Of Dramatic Poesy,” Dryden’s spokesman, Lisideius, defines a play as “a just and lively image of human nature, representing its passions and humours, and the changes of fortune to which it is subject; for the delight and instruction of mankind” (25) (for other such examples, see Carroll, *Evolution* 170; Pinker, *Blank Slate* 404–20). The understanding of human nature in literature is the most articulate form of what evolutionists call “folk psychology” (Boyer, “Specialised Inference”; Dunbar, “Why”; Geary, *Origin*; Mithen; Sterelny). When writers invoke human nature or ordinary people say, “Oh, that’s just human nature,” what do they have in mind? They almost always have in mind the basic animal and social motives: self-preservation, sexual desire, jealousy, maternal love, favoring kin, belonging to a social group, and desiring prestige. Usually, they also have in mind basic forms of social morality: resentment against wrongs, gratitude for kindness, honesty in fulfilling contracts, disgust at cheating, and the sense of justice in its simplest forms—reciprocation and revenge. All these substantive motives are complicated by the ideas that enter into the folk understanding of ego psychology: the primacy

of self-interest and the prevalence of self-serving delusion, manipulative deceit, vanity, and hypocrisy. Such notions of ego psychology have a cynical tinge, but they all imply failures in more positive aspects of human nature: honesty, fairness, and impulses of self-sacrifice for kin, friends, or the common good.

Postmodernists have put all such ideas of human nature out of play. Evolutionary social scientists, fortunately, have taken a different path. While literary theorists were immersing themselves in speculative theoretical systems such as phenomenology, psychoanalysis, deconstruction, and Marxism, the evolutionists were gradually developing an empirically based model of human nature, including childhood development, family dynamics, sexual relations, social dynamics, and cognition.

In the early days of sociobiology, through the 1980s, evolutionary theorists of human nature concentrated on “inclusive fitness”—passing on genes through offspring or other kin (Dunbar and Barrett, “Evolutionary Psychology”; Laland and Brown). In the 1990s, “evolutionary psychologists” distinguished themselves from sociobiologists by emphasizing “proximate mechanisms” that mediate reproductive success, but they still did not produce a whole, usable model of human nature. Instead, they compiled open-ended and unorganized lists of “modules,” dedicated bits of neural machinery that were supposed to have solved specific adaptive problems in ancestral environments. Modules were postulated for sense perceptions, various forms of subsistence activity, categorizing plants and animals, selecting mates, detecting cheaters, recognizing emotions, avoiding predators, “and so on” (Carroll, *Literary Darwinism* 106–7). As a complement to lists of modules in evolutionary psychology, Donald Brown offered a list of “human universals”—that is, practices found in all known cultures and thus presumably constrained by the evolved and genetically transmitted features of human nature. The ideas of human universals and domain specificity have remained important in human evolutionary theory, but over the past decade or so behavioral ecologists and developmental psychologists have finally supplied the crucial idea that had been missing from these lists—a total systemic organization in human nature. A scholar or scientist adopting a systemic perspective envisions all the parts of a system as functionally interactive. Variation in one component affects relations among all the components. As a concept of structure, this idea is essentially the same as that of “organic unity” espoused by Samuel Taylor Coleridge and other Romantics.

The most comprehensive concepts for the systemic organization of the parts of human nature derive from “human life history theory” (Hill; Kaplan and Gangestad; Low, *Why*). All species have a “life history,” a species-typical pattern for birth, growth, reproduction, social relations (if the species is social), and death. For each species, the pattern of life history forms a reproductive

cycle. “Human nature” is the set of species-typical characteristics regulated by the human reproductive cycle. This concept of human nature assimilates the sociobiological insight into the “ultimate” importance of inclusive fitness as a regulative principle, and it accords proximal mechanisms a functional place within the human life cycle. Early models of “the adapted mind,” concentrating too exclusively on “modularity,” had excluded the idea of flexible general intelligence (Mithen). Using human life history as a systemic concept enables evolutionists to integrate domain specificity with a flexible general intelligence (Geary, *Origin*; Kaplan and Gangestad 122; MacDonald).

Human beings have a life history that is similar in some ways to that of their nearest relatives, the chimpanzees, but humans also have unique species characteristics deriving from their larger brains and more highly developed forms of social organization. Unlike chimpanzees and most other mammals, humans display pair-bonded male–female parenting; and unlike all other animals, they combine pair bonding with complex social organizations involving cooperative groups of males (Flinn and Ward; Geary and Flinn). Humans take longer to grow up, allowing time for their brains to mature and their social skills to develop. And, finally, culture has an importance for humans that it does not have for other species. Culture consists of information transmitted in nongenetic ways: arts, technologies, literature, myths, religions, ideologies, philosophies, and science. From the evolutionary perspective, culture does not stand apart from the genetically transmitted dispositions of human nature. It is, rather, the medium through which humans organize those dispositions into systems that regulate public behavior and inform private thoughts. Culture translates human nature into social norms and shared imaginative structures. The genetically mediated dispositions of human nature—survival, mating, kinship, friendship, dominance, cooperative group endeavor, and intergroup competition—have evolved in a reciprocally causal relationship with the cognitive and behavioral dispositions for producing and consuming imaginative representations. That causal interdependence is part of the evolutionary process that evolutionists denote as “gene–culture co-evolution” (Barrett, Dunbar, and Lycett 351–83; Lumsden and Wilson; Richerson and Boyd).

We live in the imagination. No action or event is, for humans, ever just itself. It is always a component in mental representations of the natural and social order, extending over time. All our actions take place within imaginative structures that include our vision of the world and our place in the world—our internal conflicts and concerns, our relations to other people, and our connections to nature and to whatever spiritual forces we imagine might exist. We live in communities that contain not just the people with whom we come directly into contact, but also our memories of the dead, the traditions of our ancestors, our sense of connection with generations yet unborn, and every

person, living or dead, who joins with us in imaginative structures—social, ideological, religious, or philosophical—that subordinate our individual selves to a collective body. Our sense of ourselves derives from our myths and artistic traditions, from the stories we tell, the songs we sing, and the visual images that surround us. We do not have the option of living outside our own imaginative constructs. “Meaning” for us is always part of some imaginative structure, and art works constantly at forming and re-forming those structures.

Human Nature as a Basis of Shared Understanding

Whether traditionally humanistic or poststructuralist in orientation, literary criticism over the past century has spread itself along a continuum between two poles. At one pole, eclectic general knowledge provides a framework for impressionistic and improvisatory commentary. At the other pole, an established school of thought, in a domain not specifically literary, supplies a more systematic vocabulary for the description and analysis of literary texts. The most influential schools have been those that use Marxist social theory, Freudian psychology, Jungian psychology, phenomenological metaphysics, deconstructive linguistic philosophy, and feminist gender theory. Poststructuralist literary criticism operates through a synthetic vocabulary that integrates deconstructive epistemology, post-modern Freudian analysis (especially that of Jacques Lacan), and post-modern Marxism (especially that of Louis Althusser, as mediated by Fredric Jameson). Outside literary study proper, the various source theories of post-structuralism converge most comprehensively in the cultural histories of Michel Foucault, and since the 1980s, Foucauldian cultural critique has been overwhelmingly the dominant conceptual matrix of literary study. Foucault is the patron saint of New Historicism. Postcolonialist criticism is a subset of historicist criticism that employs its synthetic vocabulary chiefly to contest Western hegemony. Queer theory is a subset of historicist criticism that employs the poststructuralist vocabulary chiefly to challenge the normative character of heterosexuality. Most contemporary feminist criticism is conducted within the matrix of Foucauldian cultural critique and dedicates itself to challenging patriarchy—the social and political predominance of males.

Each of the vocabulary sets that have come into prominence in literary criticism has been adopted because it gives access to a significant aspect of the human experience depicted in literature: class conflicts and the material base for imaginative superstructures; the psycho-symbolic dimensions of parent–child relations and the continuing active force of repressed impulses; universal “mythic” images derived from the ancestral experience of the

human race; elemental forms in the organization of time, space, and consciousness; the irrepressible conflicts lying dormant within all partial resolutions; or social gender identity. All these larger frameworks have enabled some insights not readily available through other means. They have nonetheless been flawed or limited in one crucial respect. None of them has come to terms with the reality of an evolved and adapted human nature.

Humanist critics do not often overtly repudiate the idea of human nature, but they do not typically seek causal explanations in evolutionary theory, either. In the thematic reductions of humanist criticism, characters typically appear as allegorical embodiments of humanist norms—metaphysical, ethical, political, psychological, or aesthetic. In the thematic reductions of postmodern criticism, characters appear as allegorical embodiments of the terms within the source theories that produce the standard postmodern blend—most importantly, deconstruction, feminism, psychoanalysis, and Marxism. In their postmodern form, all these component theories emphasize the exclusively cultural character of symbolic constructs. “Nature” and “human nature,” in this conception, are themselves cultural artifacts. Because they are contained in and produced by culture, they can exercise no constraining force on culture. Hence Fredric Jameson’s dictum that “postmodernism is what you have when the modernization process is complete and nature is gone for good” (ix). From the postmodern perspective, any appeal to “human nature” would necessarily appear as a delusory reification of a specific cultural formation. By self-consciously distancing itself from the folk understanding of human nature, postmodern criticism loses touch with both biological reality and the imaginative structures that authors share with their projected audience. In both the biological and the folk understanding, there is a world outside the text. From an evolutionary perspective, the human senses and the human mind have access to reality because they have evolved in adaptive relation to a physical and social environment about which the organism urgently needs to acquire information. An evolutionary approach shares with the humanist a respect for the common understanding, and it shares with the postmodern a drive to explicit theoretical reduction. From an evolutionary perspective, folk perceptions offer insight into important features of human nature, and evolutionary theory makes it possible to situate those features within broader biological processes that encompass humans and all other living organisms.

Emotion and Genre: Getting the Reader into the Picture

The highest level in the formal organization of specifically literary categories is “genre.” Elements of form and content can be combined in different

ways to constitute diverse systems of genre (Fowler). No one system has yet succeeded in establishing itself as a “natural” classification, but most theories incorporate some version of basic emotions. The most influential taxonomy yet contrived is that of Northrop Frye in *Anatomy of Criticism*. The main elements in Frye’s system are social relations and their corresponding emotions. By taking human life history as a theoretical framework, we can assimilate Frye’s insights, place them on a stronger empirical foundation, and locate them in the causal, explanatory context of an evolved human nature.

Novelists and playwrights do not just invent meaningful order in human life. They isolate the basic motives that shape our lives and evoke the subjective feeling states that activate these motives. One central purpose of novelists is to illuminate the deep structures of experience and make them available to our imagination. In the organization of human experience, three basic genres seem to constitute something like “natural kinds”: comedy, tragedy, and satire. Both comedy and tragedy engage affiliative dispositions, enabling readers either to empathize happily with the good fortunes of a protagonist—some character they like and admire—or to feel sorrow for the unhappiness of the protagonist. Satire, in contrast, is designed to ridicule and is thus hostile in intent. It activates contempt and anger, usually modulated by amusement.

These three basic emotional configurations can be integrated with plotlines derived from basic motives. The species-typical needs of an evolved and adapted human nature center on sexual and familial bonds within a community. Romantic comedy typically concludes with a marriage and thus affirms and celebrates the social organization of reproductive interests within a given culture (Frye). In tragedy, sexual and familial relations become pathological, and social bonds disintegrate. *A Midsummer Night’s Dream* ends with reconciliations, multiple marriages, and festivity among the rulers of the land. *King Lear* concludes with an abdicated king dying in anguish amid the bodies of his children and friends. Satire engages a fundamental social disposition for detecting and exposing duplicity and delusion. This disposition evolved in tandem with human dispositions for cooperative behavior and manipulative deceit. Sustaining a cooperative social group depends on being able to expose and punish “free-riders” and cheats (Boehm; Richerson and Boyd; Wilson, *Evolution*).

Very early in any given narrative, authors typically send multiple signals that establish generic expectations. These signals serve as something like an implicit tonal contract with readers. Readers might well feel anxiety about the fortunes of a protagonist in one of Jane Austen’s novels, but they would be truly shocked, even outraged, if one of Austen’s novels took a turn, toward the end, to tragedy. The closest Austen comes to tragedy is the prospect, real enough, that Anne Elliot in *Persuasion* will be condemned to a lonely old age as a spinster. Since that prospect is clearly registered at the beginning of the novel, Anne’s rejuve-

nation at the end has an imaginative effect something like that produced by the magical transformations at the end of some fairy tales—the beast becoming a handsome prince, the old crone turning into a beautiful maiden. It would not be shocking if Anne’s story ended unhappily, but there is not the slightest chance that she would ever be raped or hanged, like Thomas Hardy’s Tess. That would be outside the bounds of the tonal contract Austen establishes with her readers. When Tess’s fate is finally accomplished, few readers are “happy” at the outcome, but most readers feel a specifically aesthetic satisfaction that derives from Hardy’s faithful completion of a tonal contract. The terms of that contract are established very early in the novel, in scenes like that in which Tess looks up at the stars and informs her little brother that, by sheer mischance, the world in which they themselves live is a blighted one.

The tonal signals characterizing genres establish a range of emotional expectations for readers but do not impose cookie-cutter shapes on the thematic and tonal structures of particular works. Novels engage universal themes of human experience, but while depicting basic motives and evoking basic emotions, they organize those universal elements in ways that answer to the distinctive artistic visions of individual writers. As Henry James observes, “the deepest quality of a work of art will always be the quality of the mind of the producer” (64). All human beings have species-typical characteristics, but all also display unique individual differences shaped both by serendipitous recombinations of DNA and by circumstances that necessarily differ, in however slight a degree, for every individual. We can add one further level of distinction. Each writer has a unique identity, and each work by each writer has its own artistic character (Boyd, *On the Origin*). All great novels can be located in one or another genre, but none of them is “generic.” They all display peculiarities of thematic and tonal organization that combine with elements of style to produce unique artistic structures.

The Circulation of an Ethos

Novelists and playwrights present characters as persons intent on achieving goals (Bower and Morrow; Scalise Sugiyama, “Reverse-Engineering Narrative”; Turner, *Literary Mind*). The success or failure of the character in achieving his or her goals is the main action in the story—broadly, the “plot.” Goals are the end-objects of motives—for instance, the desire to survive, to get married, to make friends, to obtain education, or to assist one’s friends. Readers recognize characters as agents with goals and have emotional responses to the characters. In an obvious sense, an author is the first causal force in this sequence. The author creates characters and designates their

features and fortunes. For a main character, the novelist or playwright fabricates a situation, identifies the hopes and fears of the character, invents a sequence of actions organized around those hopes and fears, and determines the outcome for that sequence of actions. In all of this, outside of recognizing what the writer has stipulated, the auditor—reader or viewer—has no part. The auditor must take it as the author gives it. But in giving it, the author does not neglect to consult the auditor, at least prospectively. The author anticipates the effects that his or her designs will have on the minds and emotions of auditors (on cognitive adaptations for perceiving goal-directed behavior, see Premack and Premack; Rizzolatti and Fogassi; Sterelny; Tomasello et al.).

Despite the power exercised by authors, the causal force between an author and his or her auditors does not move in only one direction—from author to auditors. In anticipating the effects that their designations will have on auditors, novelists and playwrights are themselves the cunning servants of their auditors. They are themselves constrained in constructing meaning by their own sense of what auditors expect and demand. Dickens's revision of the end of *Great Expectations* offers a case in point. Having done a little judicious prepublication market testing by consulting a savvy friend, Dickens decided that the original, unhappy conclusion he had written for his novel would not sell nearly so well as a hopefully upbeat ending, and he changed the ending accordingly. The author's ability to manipulate the responses of his or her audience depends on keeping his or her depictions within the range of the audience's expectations or desires. Writers rule, but only because they provide their subjects with what the subjects want. Authors dominate the feelings and thoughts of their audience, but only because they allow the feelings and thoughts of the audience at least partially to determine the parameters within which they work.

Great literary authors do not just passively reflect the established and conventional values and beliefs of their culture. That conception of the inert passivity of the authorial mind is, in our view, an important limitation in Foucauldian cultural theory and the New Historicist literary criticism that flows from it. Great novelists and playwrights tap into the deepest levels of the human psyche, connect their contemporary cultural forms with basic human passions, and give their own idiosyncratic and distinctive stamp to the world they envision. Despite his willingness to play to his audience, Dickens is still "the inimitable Dickens." Great and original authors create new possibilities of understanding, but no matter how original and independent they might be, all writers feed off the meanings that are available within their culture: the literary forms and traditions with which they work and the forms of cultural imagination—ideological, religious, and philosophical—in which they participate. Authors, readers, and the larger culture are all locked into an interdependent relationship.