## CULTURAL VARIATION IS PART OF HUMAN NATURE

Literary Universals, Context-Sensitivity, and "Shakespeare in the Bush"

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In 1966, Laura Bohannan wrote her classic essay challenging the supposition that great literary works speak to universal human concerns and conditions and, by extension, that human nature is the same everywhere. Her evidence: the Tiv of West Africa interpret Hamlet differently from Westerners. While Bohannan's essay implies that cognitive universality and cultural variation are mutually exclusive phenomena, adaptationist theory suggests otherwise. Adaptive problems ("the human condition") and cognitive adaptations ("human nature") are constant across cultures. What differs between cultures is habitat: owing to environmental variation, the means and information relevant to solving adaptive problems differ from place to place. Thus, we find differences between cultures not because human minds differ in design but largely because human habitats differ in resources and history. On this view, we would expect world literature to express both human universals and cultural particularities. Specifically, we should expect to find literary universality at the macro level (e.g., adaptive problems, cognitive adaptations) and literary variation at the micro level (e.g., local solutions to adaptive problems).

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More than three decades ago, anthropologist Laura Bohannan wrote a now classic (Fung 2001), widely anthologized (e.g., Angeloni 2000; Podolefsky 2000) essay that many have perceived as a challenge to the supposition that "great literature speaks deeply to all and expresses universally held beliefs about the human condition" (Bazerman 1989:44). Prior to her fieldwork among the Tiv of West Africa, Bohannan had believed that "human nature is pretty much the same the whole world over," and that "the general plot and motivation of the greater tragedies would always be clear" to people everywhere (Bohannan 1966 [1989]:44). When she got to the field, however, this belief was thrown into doubt when the Tiv asked her to tell them about the book she was reading. As she proceeded to relate the story of Hamlet, she discovered—to her great surprise and frustration—that their interpretation of the story was "different" from hers.

This is an odd reaction, especially since she begins her essay by explaining that she was reading Hamlet in the first place was because of a dispute with a friend at Oxford over the proper interpretation of the play: "You Americans," this friend told her, "often have difficulty with Shakespeare. He was, after all, a very English poet, and one can easily misinterpret the universal by misunderstanding the particular" (1966 [1989]:44). If people with a common language and culture can disagree over the interpretation of a work, it should come as no surprise-especially to an anthropologist—that people living on a different continent, speaking a different language, and practicing a completely different way of life bring different experiences and opinions to bear on their judgments of story events and characters.

Although she does not explicitly say so, Bohannan implies that, because the Tiv interpret Hamlet differently from Westerners, there is no such thing as a universal human nature. Certainly, her essay has been received in this spirit. One anthropologist, for example, describes Bohannan's experience as a "failure to get Tiv elders to see Hamlet [sic] as a story about incest, revenge and justice" (Fung 2001). With its suggestion that cultural variation (i.e., cross-cultural differences in literary interpretation) precludes psychic unity, the essay implies that cultural variation and cognitive universality are mutually exclusive phenomena.

An adaptationist perspective suggests otherwise. Throughout their evolutionary history, humans have faced a recurrent set of tasks requisite to

survival and reproduction, such as food acquisition, face recognition, communication, coalition formation, mate acquisition and retention, cheater detection, childrearing, defense against pathogens, and so on. Collectively, these adaptive problems correspond to what humanists often refer to as "the human condition." The psychological hardware that evolved to address these tasks, in turn, corresponds to what in lay terms is referred to as "human nature." Adaptive problems and their evolved cognitive solutions are constant across cultures. What varies between cultures is habitat and historical happenstance. Because humans are able to occupy a wide range of habitats, and because the same set and sequence of events does not occur in every locale, a solution that works in one place may not be available in another. Indeed, local solutions may vary within a culture group if it is dispersed over a sufficiently large area (see, e.g., Birket-Smith 1929:9, 35; Rasmussen 1932:15, 38-39, 50, 92, 102-103, 104; Wilbert and Simoneau 1990). Complex adaptations are expected to be sensitive to environmental variation—that is, to calibrate themselves to local conditions. Specifically, cognitive algorithms are expected to consist of contextsensitive rules that generate different psychological and behavioral outputs in response to different inputs (Tooby and Cosmides 1992). We experience the effects of this context-sensitive design as cultural variation.

We are compensated for our mistakes whenever we can profit by them, and "Shakespeare in the Bush" is a case in point. Bohannan's examples of cultural difference demonstrate how the concept of context-sensitivity can be applied to the study of world literature. This, in turn, can help lay the foundations for an adaptationist model of the complex, species-typical, universal behavior whereby humans use words to create a facsimile of their environment.

To understand how psychological adaptations interact with local environments to produce cultural variation, we need look no further than cross-cultural standards of female beauty. An important mate-choice criterion is good health, and several studies show a correlation between female beauty standards and reliable cues of good reproductive health, such as symmetrical morphology, unblemished and unwrinkled skin, lustrous hair, white teeth, and sprightly gait (Buss 1994; Symons 1979, 1995). Another such cue is body weight. Fat deposition is an important indicator of a woman's reproductive health because female fertility requires the accumulation of sufficient body fat to support pregnancy and lactation (Ellison 1990; Frisch and McArthur 1974). Moreover, fat reserves affect an individual's ability to survive periodic food shortages, illnesses, and injuries (Anderson et al. 1992; Brown and Konner 1987; Marlowe and Westman 2001). Tellingly, Anderson et al. (1992) have found that preferred female body-fat level increases with risk of local food shortages, and preference for "pleasingly plump" women is reportedly common in non-Western societies with a subsistence-based economy (Brown and Konner 1987; Ford and Beach 1951; Sobal and Stunkard 1989). This tendency is echoed in more recent studies: Hadza (Westman and Marlowe 1999), Matsiguenka (Yu and Shepard 1998), and Shiwiar (Sugiyama 1996, forthcoming) men all express preferences for high-weight female figures.

In industrialized cultures, where food shortages are virtually nonexistent, daily activity levels are not sufficient to burn off large quantities of calories, and advanced medical technology reduces the strain put on bodily reserves by illness and injury, it is not necessary to store fat for a rainy day. Indeed, under such conditions, excess body fat is a liability, contributing to heart disease, diabetes, high blood pressure, and many other health problems. We would thus expect fat to be considered unattractive in such populations, which—judging by the women who are held up as paragons of beauty—it is. Because the level of body fat that is healthy varies according to local conditions, it would not be useful for mateselection mechanisms to specify an ideal female weight. Rather, such mechanisms must use local cues (e.g., frequency of food shortages, frequency of disease) to determine the local body-fat optimum and then identify the opposite-sex individuals who come closest to meeting that optimum. Evidence suggests that preferences for skin tone, facial features, and height also operate in this context-sensitive way (Langlois and Roggman 1990; Symons 1995).

The principle of context-sensitivity is an important stepping stone on the path to understanding cross-cultural differences in literary interpretation. Literature can be seen as a verbal facsimile of human experience (Scalise Sugiyama 1996, 1997, 1999, 2001), composed largely of representations of human beings (e.g., "characters") and human habitats (e.g., "setting"). Because it is impossible to depict a human character without also depicting the human psyche, we would expect any given literary character to consist of at least a partial representation of our evolved psychology ("human nature"). And because all habitats present the same basic set of obstacles to survival and reproduction, we would expect any given literary setting to represent one or more adaptive problems ("the human condition"). However, because literary settings are representations of human habitats, and human habitats vary, we would expect local solutions to adaptive problems to vary in literature as they do in real life. On this view, then, we would expect literary art to express both human universals (e.g., adaptive problems, cognitive adaptations) and cultural variation (e.g., local solutions to adaptive problems).

Like its solution, the material expression of a given adaptive problem may vary from region to region. The story "Little Red Riding Hood" is a case in point. The tale appears in two cognate forms worldwide, known as "The Glutton" (AT 333) and "The Wolf and the Kids" (AT 123) (Aarne and Thompson 1961); the chief difference between these types is whether the

animal threat comes to the potential victims or the potential victims come to the animal threat (Dundes 1989:202-203). The common plot elements of these tale-types are as follows: (1) a child (or children) unaccompanied by an adult is threatened by a predatory animal posing as a non-threatening familiar (e.g., mother, aunt, grandmother); (2) the child becomes suspicious and tests the familiar's identity; (3) the child discovers the truth and devises an escape. These variants all evoke the adaptive problem of predator avoidance, but the precise form of the threat and the identity test vary from culture to culture. In a Chinese variant of the tale (Eberhard 1970), for example, the children are threatened by a tiger who comes to their home, posing first as their mother and then as their grandmother; the features targeted in the identity test are the voice, hands, and face. In the French variant of the tale recorded by Delarue (1956), the child is threatened by a wolf in the woods and again by the same wolf (this time pretending to be her grandmother) at her grandmother's house; the characteristics targeted in the identity test are body hair and the nails, shoulders, ears, and mouth. Solutions to the problem vary slightly as well. In the Chinese variant, the child who escapes does so by going outside on the pretense that she has to urinate, climbing a tree, tricking the tiger into bringing her a pot of boiling oil, and pouring the oil down the tiger's throat. In the French variant, the child escapes by going outside on the pretense that she has to defecate, then running home.

Tellingly, the most salient difference between these variants—namely, their animal antagonists—corresponds to a difference in their environments of origin. Chinese variants typically feature a tiger, a predator that ranged throughout China well into the previous century (Schaller 1967). In contrast, tigers are not known to have ranged in France in historical times (Schaller 1967), and French variants do not feature a tiger. In Europe, the salient predator was the wolf, which was known to consume human corpses and was widely believed to attack live humans for the same purpose (Marbot 1891, cited in O'Connell 1989:184; Summers 1933). Not surprisingly, in French variants of the tale, the wolf is the villain.

Geographical, technological, economic, and demographic differences between cultures all affect local expression and solution of adaptive problems and, hence, narrative content. Kirtley, for example, notes that the subject matter of Polynesian, Melanesian, and Micronesian folklore "is conditioned by the omnipresence of the sea" (1980:11): many of the uniquely Oceanic motifs he documents in his index pertain to sea journeys, typhoons, and fishing, which evoke the constraints local geography imposes on life in the region. Life as a forager requires detailed knowledge of local terrain and resident flora and fauna; tellingly, the folklore of several forager groups in the Americas (e.g., Crow, Greenland Eskimo, Selknam, Tehuelche, White Mountain Apache, Yanomamo) contains an abundance of information regarding orientation and geography, environmental

hazards, plant and animal characteristics and uses, and hunting, gathering, and processing techniques (Scalise Sugiyama 2000, 2001). In contrast, survival in industrialized, hierarchical, state societies depends on access to capital and influence; we would thus expect the literature of such peoples to prominently feature strategies for socioeconomic advancement. Consider the classic British novel: Fielding, Richardson, Austen, Dickens, Thackeray, and their peers do not tell us how to track a tapir or what wood to use for a bow; rather, they recount the mores and manners, the *bon mots* and *faux pas* of a wide spectrum of social climbers.

Context-sensitivity affects literary interpretation in the same way it affects literary production. It stands to reason that, when an individual is presented with an adaptive problem, the solution that comes to mind is the local one. When I'm hungry, I don't go out hunting or gathering; rather, I go to the refrigerator, the cupboard, or, if those avenues fail, the grocery store. When we experience a literary work, we are often presented with a habitat that is unfamiliar to us—ancient Greece, Saxon England, 1920s Paris, etc. This situation is analogous to visiting a foreign country and being unacquainted with local customs and history. "Misinterpretation" may be said to occur when we apply our local solution to a given problem instead of the solution local to the setting of the work. In literary terms, this is known as the error of not situating a work in its historical context.

This is precisely what happens in "Shakespeare in the Bush." Being unacquainted with the political, economic, and intellectual terrain of Hamlet's (or, perhaps more accurately, Shakespeare's) world, the Tiv respond to Hamlet's difficulties by consulting their own cultural map. For example, they object to the ghost's choice of Hamlet as his avenger because, according to Tiv custom, important matters such as revenge and punishment are handled by chiefs and elders. As one man explains, "If your father's brother has killed your father, you must appeal to your father's age-mates; they may avenge him. No man may use violence against his senior relatives" (Bohannan 1966 [1989]:51). The interpretive difference that occurs here does not stem from cognitive differences between the Tiv and Westerners. The Tiv do not lack the concept of revenge; rather, they have somewhat different rules for exacting it. I say "somewhat" because these rules are fairly consonant with Western practice: our judges and advisors tend to be people with considerable life experience—that is, "elders" rather than youths—and guilt and punishment are typically determined not by the plaintiff but by a neutral third party (i.e., a judge or jury).

Although the Tiv do not believe Hamlet should be the one to avenge his father's murder—"'For a man to raise his hand against his father's brother and the one who has become his father—that is a terrible thing'" (Bohannan 1966 [1989]:51)—they nevertheless believe that Claudius deserves punishment if he is the cause of Hamlet's "madness." As they explain, "if his father's brother had indeed been wicked enough to bewitch Hamlet

and make him mad that would be a good story indeed, for it would be his fault that Hamlet, being mad, no longer had any sense and thus was ready to kill his father's brother" (Bohannan 1966 [1989]:51). The notion of fair play expressed in this passage is quite consonant with Western ideas of justice. Because the Tiv believe that madness can only be caused by witchcraft, and that one can only be bewitched by one's male relatives, they conclude that "it had to be Claudius who was attempting to harm him [Hamlet]. And, of course, it was" (Bohannan 1966 [1989]:49). Both cultures agree, then, that Claudius is responsible for his nephew's "madness" and that he should be punished for his actions. Two different cultures, same conclusion.

Another interpretive difference identified in the essay is the Tiv reaction to Gertrude and Claudius' marriage. The Tiv are a levirate-practicing society, so when Bohannan tells them that the dead chief's brother has become the new chief and married the dead chief's widow, they commend Claudius' actions: he has performed his duty to his brother, his brother's widow, and his brother's orphan, and has boosted his own status in the process. Bohannan is "upset" and thrown "off balance" (1966 [1989]:46) by this reaction. But, by her own admission, the Tiv lack a crucial piece of information regarding Hamlet's uncle—she has not told them that Claudius murdered his brother: "I decided to skip the soliloguy. Even if Claudius was here thought quite right to marry his brother's widow, there remained the poison motif, and I knew they would disapprove of fratricide" (Bohannan 1966 [1989]:47). When she finally does tell the Tiv Claudius's dark secret, they do not disagree that he has committed a crime and, indeed, specify the proper means of redress: "If your father's brother has killed your father, you must appeal to your father's age mates; they may avenge him" (Bohannan 1966 [1989]:51). The Tiv clearly understand the concepts of kinship, familial obligation, homicide, and justice. Indeed, their attitude toward murder accords with Western practice: as Bohannan herself admits, the Tiv "disapprove of fratricide." Again, the interpretive difference identified here is attributable to environmental differences rather than psychological ones: both cultures agree on the nature of the crime and the necessity of punishing it; they merely disagree on administrative details.

Bohannan is also frustrated by the Tiv's apparent failure to appreciate the heartlessness of Gertrude's actions and tries to explain to them that Hamlet is upset because his mother has remarried so soon. To persons unfamiliar with the political and economic workings of feudal society, however, the implications of Gertrude's hasty remarriage (i.e., adulterous relationship with Claudius, complicity in her husband's murder) are not at all evident. The demands of life in a subsistence economy are not compatible with long periods of mourning. As one Tiv wife explains, "Two years is too long. . . . Who will hoe your farms for you while you have no husband?" (Bohannan 1966 [1989]:47). With her vassals and revenues, a

widowed queen in an agrarian kingdom need not worry where her next meal is coming from and can thus afford to mourn her husband in a leisurely fashion. The Tiv, however, respond to Gertrude's actions in the context of their own political and economic realities, which make prompt remarriage a necessity.

Another interpretive difference concerns the ghost of Hamlet's father. The Tiv do not believe in ghosts (Bohannan 1966 [1989]:48), so they claim that the apparition must be an omen sent by a witch. However, this alleged "difference" is undermined (a) by the long Western tradition of belief in witchcraft and (b) by the fact that, like the Tiv, many Westerners do not believe in ghosts either. Which brings us to a serious problem with Bohannan's analysis: it is not clear which Western culture her essay makes reference to—1960s America, Elizabethan England, the world of the play, or something else. What is overwhelmingly clear is that both Tiv and Western peoples (past and present) have the cognitive ability to imagine and believe in the existence of supernatural beings. Moreover, each culture attributes the same motivation to these beings: ghosts and witches alike seek to influence the behavior of the living and are often malevolent.

Indeed, it is fair to say that Bohannan's essay is bursting with cultural convergences. For example, one elder comments, "Polonius sounds like a fool to me," to which Bohannan concedes, "Many people think he was" (1966 [1989]:49). As with foolishness, the Tiv understanding of madness— "'no longer ha[ving] any sense'" (Bohannan 1966 [1989]:51)—is for all practical purposes the same as the Western one. Similarly, in terms of their qualities and duties, Tiv leaders bear a striking resemblance to their Western counterparts. Ideally, a Tiv leader is a man skilled in discussion, a man who acts and speaks quietly but firmly, and a man of sincerity and integrity (Bohannan and Bohannan 1953:32-34). However, it is also the case that, as in Western society, some men achieve positions of power through "intimidation, a talent for intrigue[,] and bribery" (Bohannan and Bohannan 1953:32). The duties of a Tiv compound head include admitting new members to and/or expelling troublesome members from the compound, arbitrating disputes, halting punishment deemed too harsh or unwarranted, provisioning compound members in times of hunger, collecting food for rituals and feasts, and serving as the spiritual head of the compound. At higher levels of influence, Tiv leaders furnish safe-conduct to passers-through, arbitrate quarrels, and act as spokesmen and representatives in both external and internal affairs. Many of these duties and powers echo those of our own government to grant and revoke citizenship, negotiate with foreign powers, collect and dispense revenues, resolve civil conflict, and punish infractions.

Perhaps the most striking convergence is found in the Tiv reaction to the relationship between Hamlet and Ophelia. Bohannan introduces Polonius

as an important advisor to the chief and member of his household, whose daughter Hamlet has been courting but is unlikely to marry. When a Tiv wife asks why, her husband retorts, "They lived in the same household" (1966 [1989]:48). Bohannan quickly explains, "That was not the reason. . . . Polonius was a stranger who lived in the household because he helped the chief, not because he was a relative" (1966 [1989]:48). The "reason" to which both parties allude here is incest, yet neither has made an explicit reference to it. There is no need to: both parties understand that members of the same household tend to be related and that sexual intercourse between relatives is undesirable.

In sum, when we look closely at the Tiv response to *Hamlet*, we see that the same issues that resonate with Western audiences also resonate with Bohannan's audience: kinship, fratricide, revenge, justice, madness. The few genuine interpretive differences identified in the essay can be attributed to differences in local custom and economy rather than differences in cognitive design. Thus, rather than contradicting the claim that "human nature is pretty much the same the whole world over," Bohannan's observations support the hypothesis that cultural variation and universal cognitive design are complementary phenomena.

An important question remains: How do we test the hypothesis that variation in literary content and interpretation is caused—at least in part—by context-sensitivity in action? If the common bond among the world's literary works is the representation of adaptive problems and our evolved psychology, we would expect two things: (1) the subject matter of literature should be consistent across cultures, and (2) the subject matter of world literature should correspond to adaptive problems and/or their solutions. Tellingly, though few if any stories are completely universal, many themes or motifs are virtually so. This point can be seen most effectively in the plethora of folklore collections and indexes that successfully utilize Thompson's (1932) folklore classification system (e.g., Choi 1979; Cross 1952; El-Shamy 1995; Ikeda 1971; Kirtley 1980; Ting 1978; Waterman 1987; Wilbert 1975; Wilbert and Simoneau 1982, 1984, 1988, 1990). The cultures whose folklore corpuses have been classified according to Thompson's system comprise a wide variety of habitats and lifeways.

Furthermore, the categories Thompson uses to classify folklore provide strong support for the hypothesis that recurrent themes in world literature are rooted in adaptive concerns. Of a total of twenty-two categories, nineteen expressly deal with adaptively relevant issues and/or domains of information: Mythological Motifs (e.g., cosmology, topography, world calamities, the natural order); Animals, Tabu, The Dead, Ogres (e.g., cannibalism, hero overcomes devastating animal), Tests (e.g., identity, marriage, prowess), The Wise and the Foolish, Deception, Reversal of Fortune (e.g., triumph of the weak), Ordaining the Future (e.g., bargains and

promises), Chance and Fate (e.g., valuable secrets learned, accidental killing or death, hasty killing or condemnation, helpers), Society, Rewards and Punishments, Captives and Fugitives, Unnatural Cruelty, Sex, Religion, Traits of Character, and Humor. These categories reflect a preoccupation with the challenges of daily subsistence and life as a social animal. As Luthi observes,

The motifs of which the folktale consists do not originate in the folktale itself. Many are realistic motifs drawn from the sphere of social life (*Gemeinschaftsmotive*): courtship, wedding, poverty, orphanhood, widowhood, childlessness, abandonment of children, fraternal conflict, or loyalty of brothers and sisters, of friend and friend, of servant and master. They reflect relationships between two people, between a person and an animal, or between a person and his environment, and they originate from everyday events (1982:66).

Luthi is of course referring to European folklore, but the stories of contemporary hunter-gatherer and hunter-horticulturalist peoples express similar adaptive concerns (Fock 1982; Turnbull 1965; Wilbert 1975; Wilbert and Simoneau 1982, 1988, 1990). Ju/'hoansi folklore, for example, deals with problems such as "uncontrollable weather, difficulty in procuring game, danger from carnivore attacks, and correct relations with in-laws" (Biesele 1993:13).

In its preoccupation with interpretive differences, Bohannan's essay overlooks the most impressive literary universal of all: despite the linguistic, political, economic, and other cultural obstacles between Bohannan and the Tiv, she effectively communicates the story of *Hamlet* to her audience. In other words, her essay overlooks the astounding psychological fact that all people everywhere are capable of telling and processing stories, and that this ability develops reliably without any special education. This is the real lesson of Bohannan's experience: storytelling would be impossible if human minds were not fundamentally the same in design and function. We must therefore take care, in the words of Bohannan's colleague, not to "misinterpret the universal by misunderstanding the particular"—that is, we must not mistake local solutions to adaptive problems for differences in human cognitive design.

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