Donald E. Brown

# *Human universals, human nature & human culture*

Human universals – of which hundreds have been identified – consist of those features of culture, society, language, behavior, and mind that, so far as the record has been examined, are found among all peoples known to ethnography and history. After presenting some of the basic conceptions and problems concerning such universals per se – their kinds and causes and the methodological and disciplinary considerations that have shaped their study – I will explore some of the issues in how human universals relate to human nature and human culture.

I will begin with some examples. In the cultural realm, human universals include myths, legends, daily routines, rules, concepts of luck and precedent, body adornment, and the use and production of tools; in the realm of language, universals include grammar, phonemes, polysemy, metonymy, antonyms, and an inverse ratio between the frequency of use and the length of words; in the social realm, universals include a division of labor, social groups, age grading, the family, kinship systems, ethnocentrism, play, exchange, cooperation, and reciprocity; in the behavioral realm, universals include aggression, gestures, gossip, and facial expressions; in the realm of the mind, universals include emotions, dichotomous thinking, wariness around or fear of snakes, empathy, and psychological defense mechanisms.

Many universals do not fall neatly into one or another of these conventional realms, but cut across them. Kinship terminologies (in English, the set of terms that includes 'father,' 'mother,' 'brother,' 'sister,' 'cousin,' etc.) are simultaneously social, cultural, and linguistic. The concept of property is social and cultural. Revenge is both behavioral and social. Lying and conversational turn-taking are simultaneously behavioral, social, and linguistic. Many behavioral universals almost certainly have distinctive, even dedicated, neural underpinnings, and thus are universals of mind too.

A distinction among universals that figures large in anthropological thought is that between 'emic' and 'etic.' These words (derived from the linguistic terms 'phonemic' and 'phonetic') distinguish

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features that are overtly or consciously represented in a people's own cultural conceptions from features that are present but not a part of the overt or conscious local cultural conceptions. Thus every people has a language with grammar, but not all peoples have an overt cultural representation of the idea of grammar. Merely having grammar is an etic fact. If it is culturally represented as well, then it is an emic fact too. Etically, everyone has a blood type, but the cultural practice of distinguishing between blood types (as in the case of those Japanese beliefs that link blood type with marital compatibility) is far from universal. Emic universals are probably much rarer than etic universals.

Many universals subdivide into yet others. Thus tools are a universal, and so too are some general kinds of tools (pounders, cutters, containers, etc.). The facial expression of emotion is a universal, and so too are smiles, frowns, and other particular expressions.

While some universals are or seem to be relatively simple, others are complex. Ethnocentrism and romantic love are examples: both are best understood as complexes or syndromes rather than simple traits or behaviors.

Many universals have a collective rather than individual referent. Thus music and dance are found in all societies, but not all individuals dance or make music. Yet other universals are found in all (normal) individuals, although sometimes only in one sex or the other or in particular age ranges. Thus women everywhere predominate in child-care and on average are younger than their mates. Children everywhere acquire language with prodigious skill, but adults do not. On the other hand, above the age of infancy everyone employs gestures and such elementary logical concepts as 'not,' 'and,' 'or,' 'kind of,' 'greater/lesser,' 'part/whole,' etc.; everyone classifies; everyone has likes and dislikes.

It is important to distinguish between kinds of universals. The formally distinct kinds include absolute universals, near universals, conditional universals, statistical universals, and universal pools.

The universals I listed at the start of this essay are absolute universals – they are found among *all* peoples known to ethnography and history. A near universal, by contrast, is one for which there are some few known exceptions or for which there is reason to think there might be some exceptions. Fire making and keeping domestic dogs are near universals, as there are good reports of a very few peoples who used fire but did not know how to make it, or who did not possess dogs. Many traits are described as 'universal or nearly universal' to express a note of caution (given the sampling problems to be described below). Thus the emphasis of percussion or deep-noted instruments and of the colors red, white, and black in rituals around the world should probably be described as 'universal or nearly universal.'

A conditional universal (also called an implicational universal) is an if-then universal: if a particular condition is met, then the trait in question always accompanies it. Such universals are analogous to the facultative adaptations of evolutionary biology, of which callusing is an example: not all individuals have calluses, but if there is sustained friction on particular locations of the hand, say, then calluses develop. An example from culture of a conditional universal is that if there is a cultural preference for one hand over the other, then it will be the right hand that is preferred (as in Western culture, where the right hand is used



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in greetings and taking oaths). It is the rule or underlying causal mechanism that is the real universal in such cases.

A statistical universal is one that may be far from absolutely universal but that occurs in unrelated societies at a rate that seems well above chance. An example is the name different peoples give to the pupil of the eye. In a surprisingly large number of unrelated languages, it is a term that refers to a little person; the apparent explanation for this is the common experience of seeing a small reflection of oneself in other people's eyes. Although it is something of a stretch to think of such phenomena as universals, the explanation for them is drawn not from cultural particularities but from universal experience.

A universal pool refers to those situations in which a limited set of options exhausts the possible variations from one society to another. The international phonetic alphabet, which does not really cover all the possibilities, nonetheless serves to express the idea: it consists of a finite possible set of speech sounds or sound contrasts, from which a selection is found in each distinct language. An early-twentieth-century analysis of kinship terminologies showed that a quite small set of semantic contrasts accounts for the differences in kin terms in all or nearly all societies (a few further contrasts have been added since).[1] Examples of the semantic contrasts are sex, which distinguishes 'brother' from 'sister,' 'father' from 'mother,' etc.; and generation, which distinguishes 'son' from 'father,' 'father' from 'grandfather,' etc.

There are severe methodological limitations on what can be known about universals in general. No one can really know the conditions in all societies, so any statement about universality is based on some sort of sampling. In most cases this sampling has not been rigorous. Furthermore, the precision with which a real or alleged universal has been described often leaves much to be desired, in part because the original reports or descriptions were provided by different observers, sometimes at widely spaced intervals in time. Thus the confidence one can have in particular claims of universality is quite variable. Given the costs involved in studying even a single society, this range of problems will persist.

However, it should be noted that a sample as small as two societies – so long as they are very different – can be highly suggestive. Thus one can view the documentary film *First Contact* and make observations about what is common to two highly diverse societies: one's own modern society and a previously uncontacted highland New Guinean society. Australian prospectors took the footage for this documentary in the 1930s, when they were the first outsiders to enter a high and isolated valley.[2] The differences between the Australians and the isolated New Guineans are striking, and yet the two groups also have a lot in common, much of which would be difficult to trace to cultural borrowing.

In spite of anthropology's professional charge to study all cultures, which uniquely qualifies the discipline to both identify and verify universals, some anthropological practices have not been congenial to the study of universals. Notably, anthropological attention has been riveted more surely by differences between societies than by their com-

1 Alfred L. Kroeber, "Classificatory Systems of Relationship," *Journal of the Royal Anthropological Institute* 39 (1909): 77 – 84.

2 The making of this documentary is described in Bob Connolly and Robin Anderson, *First Contact: New Guinea Highlanders Encounter the Outside World* (New York: Penguin, 1987).



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monalities. Moreover, that attention has tended to be limited to surface or manifest universals, those readily available to observation or readily expressed by their informants. Innate universals have tended to be neglected (in extreme cases, their existence was even denied). This neglect was to a large extent overt and principled, seeming to follow logically from the view of culture that anthropologists held throughout much of the twentieth century, a view that seemed to be supported by exaggerated (and in some cases false) reports of the extraordinary extent to which cultures both differ from one another and yet decisively shape human behavior, a view that was construed to indicate that there must be few, if any, universal features of the human mind. As a result, the anthropological study of universals has been spotty at best, unified neither by theory nor by sustained inquiry. There is thus ample reason to suspect that a great many universals have yet to be identified.

In contrast to anthropologists, psychologists have been much more open to the discovery of presumably universal features of the human mind. But only rarely have psychologists conducted their research outside the modernized Western world, so the cross-cultural validity of the numerous mental processes and traits they have identified has often been in doubt. Some cross-cultural research has indeed shown that psychological phenomena that one might think are unaffected by cultural differences – the perception of certain optical illusions, for example – are in fact not universal.

A relatively small number of causal processes or conditions appears to account for most if not all universals. These processes or conditions are: 1) the diffusion of ancient, and generally very useful, cultural traits; 2) the cultural reflection of physical facts; and 3) the operation, structure, and evolution of the human mind.

Some universals (the well-authenticated examples are tool making, the use of fire, and cooking food) seem to have existed in the very earliest human populations and to have spread with humans to all their subsequent habitats.[3]

As for the cultural reflection of physical facts, I have already mentioned the case of terms for the pupil of the eye, as well as the cultural preference for the right hand, which probably reflects the observation that in all societies most people are right-handed. I have also mentioned kin terms, which everywhere reflect the relationships created through sexual reproduction – parent-child, sibling, and marital/mate relationships, as well as the various compounds of these relationships. Kin terms often include more than, or sometimes partially omit, what such relationships entail, but in every language there is a substantial mapping of the locally named (emic) relationships onto the actual (etic) kin relationships. In all these cases, the 'world out there,' so to say, is reflected in the cultural conceptions of each people – even though the reflections vary in many ways from one society to another.

Finally, there are those universals whose causes lie more or less directly in the nature of the human mind, or that are features of the human mind. The latter in turn trace causally to the evolutionary past of humanity as a species. These universals of mind require a more extended discussion.

3 It is sometimes suggested that there are some beliefs that have been with humans from the earliest times not because they are obviously useful, but because there was little or nothing to expose their falsity and thus to hinder their spread.



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Recalling what was said earlier about disciplinary differences, it should be noted that those sociocultural anthropologists who are most qualified to document universals are not as a rule well qualified to explain them. By training, most sociocultural anthropologists are neither psychologists nor biologists. But psychobiology and evolutionary psychology surely are crucial in explaining many innate universals (and in providing guidance in the search for further such universals). The reasoning is simple: whatever is constant through all human societies must be due to something that goes with people wherever they go; that would certainly include human nature – and psychobiology and evolutionary psychology are the tools for understanding human nature.

Examples of universals of psyche or mind that have been identified through broad cross-cultural studies are dichotomization or binary discriminations, emotions, classification, elementary logical concepts, psychological defense mechanisms, ethnocentrism or in-group bias, and reciprocity as a mechanism for bonding individuals to one another.

Among the universals formulated more recently (and more tentatively) in the light of psychological-evolutionary propositions are a social-cheater-detecting mechanism, a mental mechanism for thinking about 'human kinds,' and a facial-template-constructing mechanism that averages the facial features in the observable population as a baseline calibration from which optimums of attractiveness for each sex and age are calculated. Among the apparent projections from the latter mechanism is a preference in males for skin colors in females that are lighter than the observable average (because in the past relative lightness of skin correlated with female fecundity).

The concept of incest *avoidance* – a phenomenon now shown to be present in many animal species as well as humans – is an evolution-minded rethinking of what had long been one of the most frequently discussed and prototypically cultural human universals: the incest *taboo*. Similarly, most anthropologists long recognized the sentiments generated by kinship and reciprocity as universal, but they only received a sound theoretical understanding when evolutionary biologists illuminated their crucial role in providing solutions to the Darwinian puzzle of how altruism could evolve.

The determination and causal explanation of innate universals, predicted or illuminated by evolutionary theory, is probably the most active area in the study of universals at present. But a pursuit of causation in the other direction is vigorously underway too: since it follows that features of human nature must provide a continuous and pervasive structuring of human thought and activity – and hence of society, culture, and history, however much variation they exhibit – the findings of psychobiology and evolutionary psychology have clear implications for sociocultural particulars too. In the next section I will discuss analysis that involves partitioning or breaking down sociocultural particulars into the universal elements of which they are compounds.

In turning now to culture in relation to universals, I will ignore those universals that presumably *are* cultural (such as the ancient and useful inventions and the cultural reflections) and will focus instead on those that are or may be innate universals. Hereinafter, 'universals' will refer to those only.

Anthropologists usually define culture in terms that distinguish it from nature,



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often in radical contrast: culture *versus* nature. Definitions of culture generally stress patterns of behavior, thought, feeling, and artifact that are passed on extrasomatically from individual to individual, group to group, generation to generation – meaning patterns that are not in our genes, patterns that must be learned. In this vein, culture has often been associated with variability, indeterminacy, arbitrariness – all in contrast to the fixity of nature. In extreme views, there is virtually no human nature: culture is the overwhelming determinant of human behavior, and can be studied with little or no attention to the human mind.

Other definitions of culture correctly acknowledge a continuous intermixing of culture *with* nature. The philosopher-anthropologist David Bidney, for example, argued that culture should, at least in part, be understood "as the dynamic process and product of the self-cultivation of human nature."[4] Others speak of culture *within* nature – that is, as a product of human nature. Some see culture as a control or correction of certain features of human nature. Yet others see culture as an extension of the human mind and body.

There is good reason to distinguish the cultural in human affairs – but in almost everything that humans do it is as useful to insist on *either* culture *or* nature as the source as it is to insist that water is either hydrogen or oxygen.

But how can the constants of human nature be reconciled with the manifest variability of cultures or, for that matter, with the manifest variability of human behavior? Let me give five answers.

First, in any discussion of human nature a particularly crucial distinction must be made between functions and effects. The set of mental mechanisms that comprise the human mind, and that are thus fundamental to human nature, were designed by natural selection to solve particular problems that were recurrent in our evolutionary past and that are presumably finite in number. However, a mechanism designed to discharge a particular function may have side effects or by-products. Thus, the shape of the outer ear was designed to gather sound waves but may also be used to support glasses or pencils. The anthropologist Lawrence Hirschfeld has proposed, on the basis of experimental evidence, that there is a mechanism in the human mind dedicated to processing information on human types, such as kin types, the sexes, and occupational types.[5] While this mechanism must have evolved in conditions where racial differentiation was rarely if ever perceived (due to the short distances our Stone Age ancestors could have traveled), it has left the human mind effectively 'prepared' to think about races in particular ways. Thus racial thinking has flourished in recent times because it 'parasitizes' a mechanism that was designed for other purposes.

Human mental mechanisms are numerous and their effects – which presumably include a great many emergent properties stemming from the interaction of the various individual mechanisms – are either potentially infinite or infinitely divisible. In spite of the infinity of possible behavioral effects, the mechanisms leave traces of their existence: some are relatively obvious (as in the uniformity of smiles and frowns), some possess enough observable irregularity to fuel the nature-nurture debates (as with many sex differences), and some

4 David Bidney, "Human Nature and the Cultural Process," *American Anthropologist* 49 (1947): 387.

5 Lawrence A. Hirschfeld, *Race in the Making: Cognition, Culture, and the Child's Construction of Human Kinds* (Cambridge, Mass.: MIT Press, 1996).



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reveal themselves only through unusual observational situations (as in extensive cross-cultural comparison or in psychological experimentation). At any rate, the range of effects that may become culturally patterned is thus large.

Second, many mental mechanisms motivate us toward goals (mating, ingesting food, etc.), which we may meet through a potentially infinite variety of means. While the many means are observable, the few goals must be inferred. The range of means that may become culturally patterned is, again, large.

Third, some mental mechanisms involve calibration to environing conditions. The resulting behaviors are variable by design, though the underlying mechanism is unitary. These variable responses may well appear to be cultural. For example, as mentioned earlier, there is evidence to suggest that humans have an evolved mechanism for detecting and preferring faces that are projections from the average of what one sees. Since that average may vary from one population to another, the resulting standards of beauty would vary too, and this could easily be interpreted as cultural difference.

Fourth, many adaptations may in some circumstances conflict with each other, so that the resulting behaviors are compromises. Purely local conditions may favor compromises in one direction rather than another. Various peoples thus ignore the pangs of hunger and thirst for a time, in order to maintain the approval of their fasting fellows.

Fifth, as wondrously precise as genetic replication is, the genes that program the structure and operation of our minds and bodies do so in interaction with the genes' environment, which can and does vary. This, in turn, results in structures and operations that differ in varying degrees from one individual to another and from one population to another. In this context it is important to note that recent human environments, in almost all parts of the world, present many conditions that are quite unlike those that prevailed over the long period in which human nature evolved. Many modern behaviors – epidemic obesity in environments rich in processed foods comes to mind as an example – may have their analogues more in the bizarre behaviors of animals in zoos than in what the same animals do in their natural habitats. Clearly, local environments account for many of what are seen as cultural distinctions between one society and another.

In sum, observable variation in behavior or culture is entirely compatible with a panhuman design of the mind (barring, of course, sex and age differences that are equally likely to reflect evolutionary design).

Finally, let us return to the notion that innate human universals continuously and pervasively structure human culture. To the extent that this is so, we should be able to do a sort of back engineering on features of society or culture that allows us to break them down into their component elements and to trace their roots back to the aspects of human nature that gave rise to them. What is the alternative, for example, to concluding that writing, the printing press, the telegraph, the telephone, and the word processor are extensions or augmentations of speech?

And what would be the alternative explanation for literally millions of songs, poems, stories, and works of art, from many parts of the world and over long periods of time, that celebrate the attractions between men and women – except the mind's preoccupation with the topic? Perhaps the entire cosmetics



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industry flows from the same cause. Ronald Hyam, a historian of colonialism, has even argued that the sexual drive was as potent a motivator of colonialism as was economics.[6] The virulent nationalisms and racisms of modern times may well be 'hypertrophies' of an ethnocentrism that for many millennia played itself out on a much smaller scale.

What I believe was one of anthropology's great achievements – an assembly of information about where and when cultural inventions arose around the world – appeared in Ralph Linton's mid-century book on culture history, *The Tree of Culture*.[7] Missing there, however, were the roots of that tree in human nature. The task of tracing those roots – in literature, the arts, history, and human affairs in general – is now well begun. We can look forward to the time when a great many cultural features are traced beyond the time and place of their invention to the specific features of human nature that gave rise to them. The study of human universals will be an important component of that task.[8]

6 Ronald Hyam, *Britain's Imperial Century, 1815 – 1914 : A Study of Empire and Expansion* (London : B. T. Batsford, 1976). See also Hyam, *Empire and Sexuality : The British Experience* (Manchester : University of Manchester Press, 1990).

7 Ralph Linton, *The Tree of Culture* (New York : Alfred A. Knopf, 1955).

8 This paper has benefited from comments by Donald Symons. References for the assertions made here may be found in Donald E. Brown, *Human Universals* (New York : McGraw-Hill, 1991) ; Brown, "Human Nature and History," *History and Theory* 38 (4) (1999) : 138 – 157 ; Brown, "Human Universals and Their Implications," in Neil Roughley, ed., *Being Humans : Anthropological Universality and Particularity in Transdisciplinary Perspectives* (Berlin : Walter de Gruyter, 2000), 156 – 174.



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