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Source: *Current Anthropology*, Vol. 20, No. 4 (Dec., 1979), pp. 845-846
Published by: The University of Chicago Press on behalf of Wenner-Gren Foundation for Anthropological Research
Stable URL: http://www.jstor.org/stable/2741704
Accessed: 24/03/2014 07:10

In certain countries with currency restrictions, the existence of centres, with international backup and the support of institutions in the country concerned, might make it possible to negotiate with the authorities to liberalize exchange controls for scientific journals imported through the centre. A further stage might be the direct importing of journals by centres, with even, on occasion, the possibility of making bulk air shipments economically viable. This, however, should not be an immediate preoccupation.

Questions

The following questions are intended to be sent to members of this association, to national associations and institutions which are members of the IUAES, and to journals which are not yet members of this association. They are designed to elicit information which would give a more concrete idea of the possibilities of getting the above system, or something like it, in operation:

1. If a journal editor, would you seek to have your journal cooperate with such centres?
2. Do you think a centre would operate effectively in your country?
3. What special problems might arise in your country in operating such a centre, and to what extent could these be overcome?
4. Whom, or what institution, would you suggest to take responsibility for such a centre in your country, bearing in mind that financial and administrative reliability is essential?
5. Are there other countries which could cooperate with yours in running a single centre for the countries cooperatively (e.g., Australia and New Zealand? U.S. and Canada? Venezuela and Colombia?)?
6. Your name, address, and affiliation:

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The research reported here investigates East-West differences in the way people view uncertainty and assess probabilities or, generally, think probabilistically. Our hypothesis was that people brought up in "fate-oriented" cultures, in which causation is viewed in terms of intuition and context rather than in terms of cause-and-effect sequences, will deal with uncertainty in ways fundamentally different from our own.

Wilson (1970) supports the view that Asian culture is, in general, fate-oriented: "In most Asian philosophies and religions man appears as a part of nature rather than as an antagonist against it. . . . hence the reservation which many Asians feel about the thrusting Western urge to gain control of the environment." Similarly: "Astrology is taken very seriously in many parts of Asia. . . . when a foreigner asked President Suharto's Western-educated economic advisers whether they felt themselves to be competing with the guru, or mystical sage, whom he frequently consults on important matters, they replied, 'It's easy, Suharto asks us about economics and he asks the gurus about the timing.' "

That East-West differences in probabilistic thinking exist has been established in recent work by Phillips and Wright (1977) and Wright et al. (1978). Using college and university students from Britain, Hong Kong, Indonesia, and Malaysia, we have studied three aspects of probabilistic thinking: tendency to adopt a probabilistic set, discrimination of uncertainty, and realism or "calibration" of assessments of probability. The largest difference in probabilistic thinking was between the Asians and the British. The British students were found to adopt a more finely differentiated view of uncertainty than the Asian students in response to uncertain situations. These differences were not predictable on the basis of the relative abundance of probability expressions in the Indonesian language or the Malay sample's ability to discriminate English probability words on a meaningful probability-discrimination dimension. In assigning numerical probabilities to almanac questions, the British students were more realistic than the Asians. Comparable differences between British and Asian expressions of uncertainty have been reported by Phillips and Wright (1977) using Hong Kong Chinese managers and nurses as subjects.

Wright et al. conclude:

> At present two major implications can be drawn from our work; any extrapolation of the technology of decision analysis to Asian cultures should be approached with caution—the subjective probabilities required as inputs may be meaningless. Secondly, intercultural communication of uncertainty whether by governments, businessmen or whoever could lead to misunderstandings about the other party's view of an uncertain world.

They go on to caution, however, that, while the Asian samples studied generally show less probabilistic thinking than the British sample when using verbal and numeric response modes, "it must be remembered that these measures are *response modes* and as such are means of *communicating* uncertainty rather than of dealing with it. Perhaps Asian ways of dealing with uncertainty do not involve the verbal or numeric response modes studied here."

Alternatively, Wright and Phillips (n.d.) have suggested that probabilistic thinking may be related to "generalized authoritarianism," since the literature on authoritarianism, conservatism, dogmatism, and intolerance of ambiguity assumes that people who are high scorers on scales measuring these concepts see the world in "black or white" or, as Souief (1958) conceptualizes it, make extreme judgements or responses. As Bochner (1965) notes, the primary characteristics of an individual who is intolerant of ambiguity are "premature closure" and "need for certainty." An item from Budner's (1962) Tolerance-Intolerance of Ambiguity Scale illustrates this; a negative response to "people who insist on a yes or no answer just don't know how complicated things really are" characterises a person intolerant of ambiguity. Frenkel-Brunswik, writing in *The Authoritarian Personality* (Adorno et al. 1950:480) about high F-scale scorers, notes that "a simple, firm, often stereotypical cognitive structure is required. There is no place for ambivalence or ambiguities. Every attempt is made to eliminate them. . . ." Rokeach (1960:56) notes that there is "relatively little differentiation within the disbelief system" of the high D(dogmatism)-scale scoring person. Indeed, Ertel (1972) has developed a measure of dogmatism based on the content analysis of publications; dogmatic writers are expected to use such quantifiers as "always," "never," "nothing but," "completely," "must," etc., whereas nondogmatic writers will use such quantifiers as "often," "rarely," "greatly," "considerably," "can," etc. However, Wright and Phillips (n.d.) found little association between these personality/cognitive measures and probabilistic thinking using a sample of the general British population. Extending this finding, we should expect no relationship between cultural differences in probabilistic thinking and previous mappings of mean cultural authoritarianism and dogmatism scores.

Recently we have extended sampling within Southeast Asia and Britain (Wright and Phillips 1979). The cultural differences in probabilistic thinking reported above have been found to outweigh any influence of subculture, religion, occupation, arts/science orientation, or sex. However, we also present evidence against a "cognitive-deficit" hypothesis and argue that there are qualitative cultural differences in ways of dealing with uncertainty. Specifically, we argue that the Asian way of dealing with uncertainty may follow a certainty-versus-total-uncertainty model which we have called "nonprobabilistic thinking," whereas the British way follows a certainty-versus-probability model which we have labelled "probabilistic thinking." Following the nonprobabilistic model, we argue in a real-life decision-

making situation an Asian faced with uncertainty will attempt to keep "options open" and remain "flexible" in the face of an unpredictable future. Redding (1978) and Redding and Martyn-Johns (1978) note that such a decision-making strategy may be prevalent in Chinese business decision making.

Our current research is attempting to test the two models of decision making in Asia and Britain by using a variety of decision-making tasks derived from the decision-theory literature. Included in these tasks are measures of set to obtain probabilistic information, valuation of probabilistic information, acceptance of the normative axioms of probabilistic decision theory, dynamic probability revision, and risk taking. In the next year we hope to establish whether or not probabilistic and nonprobabilistic thinking are distinct cognitive styles and, further, to test whether these modes of thought are identifiable with Britain and Asia, respectively.

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Our Readers Write

It astonishes me to see that an innocuous comment about the history of Africa (CA 20:227–29) is labeled "controversial" and "significant." Research in African history along the general lines advocated has been going on in Africa for two decades or more. On the problems of method, the general (now slightly out of date) text has been MacCall's (1964) *Africa in Time Perspective*.[1] On oral traditions, the more recent findings have been incorporated into Vansina (1977, chap. 8; see also Bernardi, Poni, and Triulzi 1978). Another volume edited by J. C. Miller is now in press. On language, one can look at *Language and History in Africa* (Dalby 1970) as a sample of what was done in the 1960s. Readers of CA will presumably be familiar with the archaeology.

Some points in Mulira's contribution are overstated (e.g., the oral "experts" everywhere and the accuracy of tradition) or show misunderstanding (genetic ties of languages), but basically his points are obvious. Once one goes beyond this level, however, difficult questions do arise when these disparate sources have to be brought to bear on each other, and there are no easy solutions there.

At this point the precolonial history of Africa has been sufficiently explored to allow for the publication of two multivolume series that deal with the topic. One is the *Cambridge History of Africa*, edited by R. Oliver and J. Fage. The other is the UNESCO *General History of Africa*, of which there will eventually be eight volumes, six dealing with the precolonial period. The first volumes of this latter series should be published this year.

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Why is the pig such a maligned beast? The descriptions cited in the quotations in CA 20:248 seem to be written by urban-born, urban-bred men who have never spent any time looking at pigs, much less pursuing a basic literature on pig physiology and behavior. I raised pigs for a number of years, during which time I had an opportunity both to watch pig behavior and to engage in pig slaughter. In addition, I have at times read materials on pigs. These experiences together suggest that practically all the assertions by Harris and Coon are false, basically derived from Western stereotypes about pigs, glorified folk images rather than either observational or technical knowledge.

First, the pig is one of the most efficient and economical of all farm animals (see Vayda, Leeds, and Smith 1961).[2] One of its by-products, used even until recently—indeed, until the advent of nylon—is pig bristles, from whence came the toothbrushes of my childhood as well as other sorts of brushes. Coon says the pig "is hard to flay and its skin is not available for use." This is simply nonsense. I have flayed pigs. Since there is usually a considerable fat layer between the skin and the muscle tissue, pigs are fairly easy to flay. Further, any red-blooded American who knows football ought to know about the pigskin. Pig skin, in fact, makes a very fine leather known as pigskin. Even as to usage as a food, the pig is more versatile than most animals: pigs' knuckles, pigs' feet, fatback, chitterlings, head cheese, pigs' ears, even the tail, as well as all the more usual cuts, fresh, salted, and smoked.

Second, Coon is contradictory. He says keeping pigs is an extravagance, then says pigs "can be fed on materials not otherwise used"—clearly an economy. This was a central point in our argument about the efficiency of pigs in Melanesian subsistence. In fact, pigs I have known ate *everything* except citrus fruits and banana peels: all garbage, roots, fruits, nuts, etc. I have seen them catch snakes and frogs and eat these too. Their diet is, in fact, wider than that of dogs or goats, both of which we generally conceive to be, in our folk view, practically omnivorous. The pig dentition shows that pigs can manage a very wide variety of foods—perhaps wider than the variety humans can handle. Has either Harris or Coon examined a pig's teeth? Feeding on human leftovers makes them doubly effective from a human-subsistence or ecological point of view—as garbage disposal and general clean-up systems and as absorbers of complementary food supplies *not* competing with human food sup-

[1] References cited are as follows:

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