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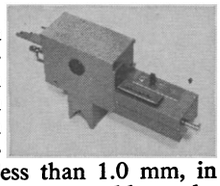
It figures.



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that crossed the Bering land bridge toward the end of the last Ice Age. However, there is evidence of a different kind which surely implies that two small bodies of invaders crossed the Bering Bridge in succession, one a substantial time after the other.

The evidence is the unusual distribution of blood groups (*1*) in the surviving Indian tribes of America. There is no native blood group B on the American continent, and blood group A occurs only north of a line that runs across the continent roughly between latitudes 32°N and 33°N. No plausible form of selection could have produced this distribution from a heterogeneous population in the time available—about 30,000 years at most.

The only tenable explanation seems to be that the Indians of Central and South America are descended from a single kinship, all of blood-group O, that crossed the Bering Bridge during the last Ice Age and found conditions to the south that favored the growth and spread of population. However, this is not enough. A second group must have followed substantially later, and found the north now more hospitable and perhaps sparsely populated. The second group must also have been rather homogeneous and small, containing only blood groups O and A —perhaps mostly A, for there are two northern Indian tribes that have the highest concentration of the gene for A in the world (*2*).

The first invasion fits Martin's hypothesis well; but does he have room in his time scale for a second invasion?

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2. Th. Dobzhansky, *Mankind Evolving* (Yale Univ. Press, New Haven, 1962), pp. 260–261.

In reply to Corbett, "There is, however, no known instance in which an animal population has been entirely eliminated by a new disease . . ." (*1*), including the attempt at exterminating European rabbits in Australia by the introduction of myxomatosis. Possibly a virulent disease like rinderpest played a part in the late Pleistocene extinctions. I see no way to test the idea through study of the fossils.

My attempt at modeling overkill by predation alone led to the conclusion that it was not necessary to postulate side effects. A brief but intense episode of hunting and killing of innocent prey is enough. The historical account conveniently offered by Beddall makes it possible to consider much more rapid rates of killing than the one animal unit per hunter per week which I found could eliminate a high biomass in a few years. Her letter also contributes to the neglected subject of kill site visibility. We know so little about it that I cannot agree with Corbett that there are too few associations between man and extinct mammals for overkill to be the only cause of New World extinction.

In reply to Bronowski, I see no need for concern about multiple invasions, as long as a first invasion of big game hunters 12,000 years ago is not disproved.

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1. R. Fiennes, *Man, Nature and Disease* (Signet, New York, 1964), p. 160.

The Power Wastrels

In a comment by Shannon (Letters, 6 Apr., p. 9) an accusing finger is leveled at the female. It is her "unanalyzable, unscientific, uncontrolled . . . power consumption" which makes the author pessimistic about "retarding the growth of the residential power demand."

Bearing in mind the relation between the size of a population, its material affluence, and the energy it consumes, I would like to pose one question to this concerned citizen. "Were your children, Mr. Shannon, found under cabbage leaves, or was it the stork who brought them?" The matter of biological paternity aside, Shannon's remarks are all too typical of the "buckpassing" which pervades our society. We are seldom responsible; it is the other sex, race, generation, country—whatever. Who is responsible for the upbringing of Shannon's daughters, the power wastrels, and the stocking of their comfortable home with multiple television sets and electrical gadgets? One is left with the impression that their father has washed his hands of any domestic responsibility. If one views household purchasing and the raising of daughters as "women's work," however, Shannon is permitted to go scot-free. Under a thin guise of humor, it

is commonplace in our culture to snipe at the assumed mindlessness and frivolity of women. Quite frankly, when I read *Science* I expect the analysis and humor to be more sophisticated and trenchant than the usual bland, stereotyped fare offered the mass audience.

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R. H. Shannon's letter castigating the housewife and adolescent female for their "unanalyzable, unscientific, uncontrolled" consumption of power is a frivolous attempt to escape acceptance of an equal share of the blame for the westernized world's current energy crisis. At the research laboratory where I work there is an equally appalling waste of power. This includes everything from burning 200-watt light bulbs and running radios throughout the night when there is no one in the building to neglecting to completely shut off faucets after presurgical scrubbing or washing of glassware. After speaking with some of our maintenance personnel, I find that this is a universitywide situation that exists not because of housewives or nubile daughters, but rather because professors, technicians, and graduate students —all supposedly rational women and men—fail to conserve the energy that appears so unlimited to them. Shannon's indictment of only one segment of the population is therefore unfair and unscientific.

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Last night my husband handed me the 6 April issue of *Science* and called my attention to a letter by R. H. Shannon concerning the energy crisis, which he (Shannon) fears has been precipitated primarily by the practices of his wife and teen-aged daughters.

My husband has always been aware of the careless use of our precious natural resources and routinely snaps off the porch lights which I have left on for dinner guests or a late-returning child. (Fortunately, all injuries so far have been minor.) After reading Shannon's letter I realized that I too must face the reality of our dwindling energy supply and do what I can to conserve it. Surely I can do without a washer or dryer when a scrubboard and a clothesline will suffice. The refrigerator will cause something of a problem because I am having difficulty locating a man to deliver ice. The electric stove must also remain because I have not been able to convince my husband to chop wood for a woodburning stove. We will fill the bathtub on Saturday and draw lots for the order of bathing. Think what fun that will be for the family. Of course, the second car must go. I plan a monthly trip to the market to replenish the larder (sugar, flour, and so forth). The rest of our food will come from a home garden—perhaps I can keep a few chickens and a cow.

When I consider how my husband (already a careful consumer) can stave off the energy flow, I meet with greater difficulties. He, of course, must continue to drive himself to work (the bus for the laboratory leaves at an unconscionably early hour, and car pools are so inconvenient). It would be difficult for him to perform his experiments without the use of the cyclotron (that's only a few million watts), vacuum pumps, drying lamps, electronic counters and calculators (whatever happened to the slide rule and a bit of paper?). He could not be expected to work without air conditioning in his office. I know how uncomfortable he is when he leaves the office to come home in the summer.

Since we cannot cut down (energy-wise) in the laboratory, we must concentrate on the home, therefore today I am placing an advertisement in the paper offering for sale his power saw, drill press, lathe, shop vacuum, several power sanders, and paint compressors. Think how much fun he will have now that he is back to basics with just a hand saw and a plane. I know that both he, and Shannon, will be proud of me.

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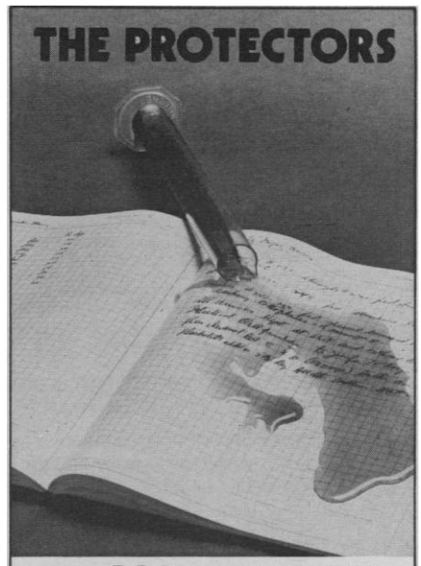
Analysis of Anthropological Data

For the last several years anthropology has been undergoing evolutionary change. One used to be able to analyze data in any way he saw fit, but now it is considered useless to perform an analysis simply because one has available computer time. Because of the debatable value of anthropological data, it is also desirable that any problem-oriented analysis be conducted within as rigorous a scientific, methodological framework as possible. Unfortunately, the article by Alan Lomax with Norman Berkowitz



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