

## THE LEBZELTER PRINCIPLE: A GENERATIVE IDEA

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*Lebzelter observed that a wide variation in physical appearance is often found in small groups of people living in comparative isolation, accompanied by a marked conservatism in cultural development. The cause for this variation in physical type is well understood and results from inbreeding: the reason for the cultural conservatism lies in the community's small margin of survival. Early human remains bear ample witness to both, a fact which precisely reflects just such a situation as must have existed immediately after the Flood and the subsequent rapid dispersion.*

### Introduction

In 1932 Viktor Lebzelter made the following proposal: "When man lives in large conglomerates, race tends to be stable while culture becomes diversified; but where he lives in small isolated groups, culture is stable but diversified races evolve."<sup>1</sup>

Stated in more general terms, this means simply that when population is small (as it must have been for some time after Adam and Eve began to multiply, and again after Noah's household emerged from the Ark), members of a single family may vary widely in physical appearance, but the group tends to remain highly conservative in culture and social behaviour. When the population is large, physical type becomes more or less stable and characteristic of the group, but considerable cultural variability appears.

Small pioneering groups of necessity live somewhat precariously and are accordingly more cautious about innovation. As V. G. Childe puts it, "The force (of resistance to change) in a community seems to be inversely proportional to the community's economic security. A group always on the brink of starvation dare not risk change."<sup>2</sup>

The precariousness of the situation would fluctuate. As each settlement finally become established with growth in population, more freedom in cultural behaviour would be allowable; but in each new fragment which broke away and assumed the role of fresh pioneers the cycle of conservatism would be repeated.

Such a pattern of dispersion would thus account for two things: first, the remarkable uniformity of cultural artifacts in every part of the world where early man has been found; and secondly, the extraordinary resistance to change which is characteristic of contemporary primitive people whose margin of survival has remained very slim.

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### Variability and Inbreeding

Meanwhile, in all such small inbreeding populations, genes for odd characters, because they have a far better chance of being expressed homozygously, contribute to the emergence of a marked variability in physical type. In isolated villages in the Highlands of Scotland a few generations ago, the high incidence of deaf mutism and other pathological conditions was attributed to this circumstance.<sup>3</sup>

This principle of variability of physical type in any small inbreeding population, especially when introduced into a new environment, has been observed very widely in the plant and animal kingdoms as well as for man. Sir William Dawson, the Canadian geologist, in 1903 had remarked that "new species tend rapidly to vary to the utmost extent of their possible limits and then to remain stationary for an indefinite time."<sup>4</sup> Dawson was not clear as to the mechanism, but the fact itself was commonly to be seen in the geological record.

We now know why. In 1952 Willard Hollander wrote: "The quickest way to expose lethal traits is by intensive and continual inbreeding."<sup>5</sup> And in 1963 Dahlberg was even more specific when he wrote: "When a recessive gene arises by mutation, it will only after some time occur in a *double dose* by means of intermarriage—soonest by a marriage of cousins. . . ."<sup>6</sup> And presumably sooner still by brother-sister marriage. The fact has been held by some authorities, notably by Ralph Goldschmidt, to account for the "explosive diversification" of new phyla, classes, orders and even families which appear "suddenly and without transitions" in the geological record.<sup>7</sup>

### Variability in Fossil Man

Remarkable variability in physical appearance is observed in fossil man in the Upper Cave at Choukoutien, at Obercassel, and in the Palestine caves at Tabun and Skuhl. The range of skull types is amazing.

Speaking of the Choukoutien finds, Weidenreich reported that "the conditions in which the skeletons were found indicates that these individuals were members of one family." Yet he continues, "the surprising fact is (the existence of) the assemblage in one place, and even in a

single family, of types found today settled in far remote regions."<sup>8</sup> Represented at Choukoutien were ancient Neanderthals, and modern Mongoloids, Melanesians and Eskimos.

At Obercassel the same authority notes the finding of two skeletons from a single grave "so different in appearance that one would not hesitate to assign them to two races if they came from separate localities."<sup>9</sup>

And in the Palestine finds, William Howells described the skeletal remains as "an extraordinary variation."<sup>10</sup> Neanderthal and Cromagnon types were discovered in Palestine that clearly belong to the same group.

#### Cultural Innovation Conservative

In the matter of cultural innovations, it can never be predicted precisely how the total living situation will be affected. Once a solution to the immediate problems of survival has been found, low level cultures with small reserves of energy tend to guard the old ways jealously. Goldenweiser speaks of culture change as being one of involution rather than evolution in all such cases,<sup>11</sup> where established patterns of decoration, weapon design, and ritual are permitted to be elaborated slightly but not in any basically novel direction.

A weapon, once designed, tends to be passed on from generation to generation virtually unchanged. One such weapon which is quite exceptional, namely the boomerang, seems to have been a *very* early development and is found in essentially the same form in almost every part of the ancient world.

The boomerang is found in the very lowest levels in Tel Halaf in northern Palestine;<sup>12</sup> it is found at the lowest levels in Egypt;<sup>13</sup> and it is found in Europe during the Magdalenian times.<sup>14</sup> It is found in the New World among the Hopi Indians;<sup>15</sup> and in Africa it seems to be reflected in the shape of some of their throwing knives, which thus form an iron version of the wooden original.<sup>16</sup>

And, of course, it has persisted among the Australian aborigines; which means that this unique weapon was carried around the world by early man. And it does not seem likely that such a remarkable weapon was independently re-discovered or re-invented on a number of occasions. This is diffusion, in conservative hands.

The use of red ochre to paint the dead is another example of such diffusion for it hardly seems likely that such an idea would arise independently in the many places scattered around the world where it was evidently customary.<sup>17</sup> The practice was continued in Europe from at least Cromagnon times, in North America by native people until approximately 1100 A.D., and

in Australia among the aborigines into the twentieth century. This is conservatism indeed, tied to a ritual which surely did not survive because it had any practical value. Nor does it seem sufficient to argue, as some authorities did once, that such similarities can be accounted for by the fact that man's minds work pretty much everywhere the same.

#### Conclusions

In short, Lebzelter was surely correct in saying that, where population is small, widely divergent physical types should be expected, but with a high degree of cultural uniformity. And this should be expected particularly if the human race is derived from a single pair, and if some circumstances forced upon their immediate descendants an unnaturally hurried expansion into a world that was often either difficult or even inimical to human settlement. Such a circumstance accounts for the wide diffusion and long persistence of non-essential ideas to which history gives abundant testimony.

Such a scattering did occur after the world's human population had been reduced to eight souls by the Flood. Those who were thus scattered abroad would naturally continue to be driven into the more peripheral and less hospitable areas simply because those who commanded the more favourable areas would multiply more rapidly and therefore be more powerful.

Fossil man, as commonly conceived, may very well be the *remnant* of this first wave and not the antecedents, a circumstance which would then very nicely account for physical diversity and cultural uniformity of early man. Lebzelter merely stated a principle for which the Biblical record provides the background, and modern scientific researchers the evidence and the mechanism.

#### References

- <sup>1</sup>Lebzelter, Viktor. 1932. *Rassengeschichte de menscheit*. Salzburg, p. 27.
- <sup>2</sup>Childe, V. G. 1948. *Man makes himself*. Thinkers Library, Watts, London, p. 99.
- <sup>3</sup>Ballenger, W. L. 1943. *Diseases of the nose, throat and ear*. Lea and Febiger, Phila., Eighth Edition, p. 823. See also E. B. Dench, *Diseases of the ear*. Appleton, N. Y., 1921, p. 694.
- <sup>4</sup>Dawson, Sir William. 1903. *The story of the earth and man*. Hodder & Stoughton, London, p. 360.
- <sup>5</sup>Hollander, Willard. 1952. Lethal heredity, *Scientific American*, July, p. 60.
- <sup>6</sup>Dahlberg, G. (in) Ernst Mayr. 1963. *Animal species and evolution*. Bellknap Press, Harvard, p. 518.
- <sup>7</sup>Goldschmidt, Ralph. 1952. Evolution as viewed by one geneticist, *American Scientist*: 40 (Jan.), p. 97.
- <sup>8</sup>Weidenreich, Franz. 1948. *Apes, giants and man*. Chicago University Press, p. 86, 87.
- <sup>9</sup>Weidenreich, Franz. *Ibid*, p. 88.
- <sup>10</sup>Howells, William. 1945. *Mankind so far*. Doubleday Doran, N. Y., p. 202.

- <sup>11</sup>Goldenweiser, Alexander. 1945. *Anthropology*. Crofts, N. Y., p. 414.
- <sup>12</sup>See *American Journal of Archaeology*, April-June, 1933, p. 314.
- <sup>13</sup>Childe, V. G. 1935. *New light on the most ancient east*. Paul Trench & Trubner, London, p. 65.
- <sup>14</sup>Wendt, Herbert. 1955. *I looked for Adam*. Weidenfeld & Nicholson, London, p. 356.
- <sup>15</sup>Murdock, G. P. 1951. *Our primitive contemporaries*. Macmillan, N. Y., p. 328, 329.
- <sup>16</sup>Encyclopedia Britannica, under *Boomerang*.
- <sup>17</sup>On the widespread use of red ochre or hematite, see

for Europe: V. G. Childe, *Dawn of European Civilization*. Routledge & Kegan Paul, London, 1957, pp. 6, 208, 254, 259, and in the New World: Sir William Dawson, *Fossil Men and Their Modern Representatives*. Hodder & Stoughton, London, 1883, p. 143. In Illinois from about 700-1100 A.D. so much red ochre was used in burials that the period has been termed "the Red Ochre Culture."

Red ochre was used on the living also in many parts of the world, perhaps as a kind of *ersatz* life-giving blood: in the New World, by the Crow Indians (G. P. Murdock, *Op. cit.*, p. 275); in Australia, by the aborigines (C. S. Coon, *General Reader in Anthropology*. Holt, N. Y., 1948, p. 226).

## IS THE BIBLE A BOOK OF SCIENCE?

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It is sometimes argued that the Bible is not a book, or a textbook, of science. Such statements should be investigated.

Certainly the Bible is a book; and it deals, in many places, with things which might be considered under science. What is a textbook? According to a common dictionary definition: "a manual of instruction in any branch of study, work recognized as authority."<sup>1</sup>

According to scripture: "All scripture is given by inspiration of God, and is profitable for doctrine. . . ."<sup>2</sup> The Greek word translated "doctrine" could also be translated "teaching" or "instruction." So the Bible could be called a manual of instruction; and, in so far as it has occasion to touch on matters considered under science, it is a book, and by the definition a text-book, of science.

Of course, no one claims that it is primarily that. But just as the foolishness of God is wiser than the wisdom of men, so the incidental mention in Scripture may tell more than the long treatises of men. And the authority is there; who would say that a work inspired by God is not authoritative?

Again, by the text, all Scripture is profitable. No falsehood is profitable, in the true sense. So we have a syllogism in the second figure: no false thing is profitable, all Scripture is profitable, therefore no Scripture is false.

There are those who would abandon the Bible as a book of science, but retain it as a book of theology. After a little thought, is it not a strange proposal? For surely the matters dealt with in theology are more difficult than those considered in science. There are matters of sci-

ence that are understood fairly well. But who would claim to understand the Atonement? Is it not strange to say that a book is reliable in complex matters, but not in much simpler ones?

Two points should be mentioned here, because of the way in which some recent versions have handled the verse mentioned. In the first place, Scripture is not just "inspired," as one sometimes sees; it is "inspired by God". The word "God" is definitely in the Greek, admittedly in a compound.

Again, the verse is sometimes (mis-) translated: "all inspired scripture is . . . etc." This might imply that some Scripture is not inspired. Now the same Greek construction is used in several other places in the New Testament; and, in many, the translation parallel to the one first quoted, (which is the rendition in the King James Version) is obviously the meaning.

A striking example is Hebrews 4:13. If one were to give, for the parallel Greek construction, an English parallel to the mentioned (mis-) translation, something like the following would be stated: ". . . all naked things are also opened unto the eyes of him. . . ." It is quite clear that that is not what is meant in Hebrews 4:13.

Other passages which have a parallel construction in the Greek are: Romans 7:12; I Corinthians 11:30; II Corinthians 10:10; I Timothy 1:15; I Timothy 2:3; I Timothy 4:4; and I Timothy 4:9. In all of these places it is fairly apparent that the reading parallel to the construction of the verse quoted is what is intended.

### References

- <sup>1</sup>The Little Oxford Dictionary, Fourth Edition, The Oxford University Press, 1969.
- <sup>2</sup>II Timothy 3:16.

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