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THE NATURAL HISTORY OF ANALOGY.[1]

BY the natural history of analogy is meant the treatment according to the methods of natural science of a type of mental action interesting at once as a psychological process, and again from its practical results as a factor in the anthropological history of the race. While logically an analogy may be defined as an inference of a further degree of resemblance from a given degree of resemblance, it would be well to include in the present survey types of argument diverging somewhat from the standard. It should also be borne in mind that these reasonings may be unconsciously conducted without analysis, and yet be communicable from mind to mind, and influential in the fixation of belief and the guidance of conduct.

It will appear that the progress from the attitude of the savage to that of the civilized man with respect to the understanding of the natural and physical world, may, to a considerable extent, be regarded as a shifting of the position occupied by the argument by analogy. It would appear, too, that this form of argument, used by the scientist of to-day only with the greatest caution, is a predominant one in more primitive forms of thought. For example of such arguments we turn to three departments of mental action, closely related to one another, and each contributing to the value of the general results. We look first amongst the customs and beliefs of primitive people, then amongst the doings and sayings of children, and thirdly amongst that very extensive class of superstitions and folk-lore customs which no nation, however high or low in the scale of civilization, is without. The Zulu chewing a bit of wood to soften the heart of the man he wants to buy oxen from, the Illinois Indian stabbing the figures of those whose days they desire to shorten, the operation upon a lock of hair or the parings of the finger-nails, together with the endless forms of primitive witchcraft, rest upon the notion that one kind of connection will bring with it others. The same idea underlies the customs directing and prohibiting the use of certain food. The Malays eat tiger to acquire the cunning of that animal, the Dyaks refuse to eat deer for fear of becoming faint-hearted, and in the Mexican rite called the "eating of the god" is found an elaborated form of the same belief.

The interpretation of omens among primitive people also proceeds by analogy, the relation between omen and issue being guided by a sense of analogical fitness. To determine whether war is to be upheld or let fall, a stick is set in a bowl of rice, and if it stand the war is continued, and if it fall the war is let fall also. A somewhat less direct form of analogy appears in customs relating to images and names. The name becomes an essential part of the thing, and thus what is done to the name will affect the thing; hence the origin of the taboo, changing of the name in case of sickness, and the like. Even vaguer and more general principles of analogy may underlie important customs, such as that things go by contraries, for example, or that to produce unusual effects, drastic means and rare substances must be employed. The bizarre fancies, the grotesque performances, and the uncanny pharmacopœia of the medicine-men in part derive their character from this source. All these are but partial illustrations of the savage's fondness for the use of arguments by analogy and the naturalness with which he observes and assimilates all phenomena according to this habit.

The study of children reveals evidence of similar arguments, although the earnestness of the belief cannot be so readily tested. Moreover, we have no good collection of children's sayings and doings for such examples. In spite of this, however, their fondness for analogical arguments may be regarded as an additional point of resemblance connecting the infancy of the individual with that of the race.

The superstitions current among us — survivals from a culture which they are of to a culture which they are in — abound in instances of analogy, simple and complex. Especially fertile fields for such instances are the beliefs concerning dream-interpretation, those underlying the practices of folk-medicine, those connected with names and numbers, and, in more systematized form, the doctrine of sympathy, and signatures of astrology and kindred sciences. The modern cheap dreambook is full of quaint arguments by analogy. Whan it tells us that to dream of gloom means imprisonment, that the pine-apple in dreams is the omen of crosses and troubles, that to dream "of being mounted on stilts denotes that you are puffed up with vain pride," to dream of onions indicates the betrayal of secrets, to dream "of a dairy showeth the dreamer to be of a milksop nature," and that a zebra indicates a checkered life, — we see what various and peculiar results may be reached by such logic. The many customs and superstitions connected with such numbers as three, seven, and thirteen need but be referred to to show how thoroughly this variety of thought-habits is permeated with the argument by analogy.

The remedies of folk-medicine easily reveal the analogies through which they originated. The connection of toads with warts is due to nothing more than the warty appearance of the toad's skin; the snail is used for ear-ache because of the many snail-like passages in the ear, red things are used for fevers, yellow things for liver complaints, and many of the peculiar and disgusting remedies of our forefathers clearly imply that out-of-the-way substances must have special efficacy.

[1] Abstract of an address before the Section of Anthropology of the American Association for the Advancement of Science, at Washington, D.C., Aug. 19–25, 1891, by Joseph Jastrow, vice-president of the section.