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The following Paper was read by the Secretary :—

An apparent PARADOX *in* MENTAL EVOLUTION.

By HON. LADY WELBY.

TWO facts seem to be indispensable to the idea of evolution :—

(1.) Appropriate reaction to stimulus, direct or indirect.

(2.) The invariable tendency of such reaction on the whole in the direction of the development, preservation, and reproduction of life.[1]

If, therefore, we suppose a general and grave departure from, and even in some cases an actual reversal of this order, we become responsible for a tremendous leap. We are bound to justify this by irresistible evidence that the facts on which we

[1] "Each acquirement serves as a stepping-stone to the next and each new response is made easier by those previously rendered possible. In this way the correspondence between the organism and the outside world gradually becomes, as Herbert Spencer has urged, both more precise and complex. By slow degrees a more and more harmonious relationship between the two is brought about, the degree of complexity of which we are left to gauge principally by an estimate of the character of the movements executed in relation to the stimuli from which they immediately or remotely proceed." Bastian, "Brain, Organ of Mind." "The tendency at any one moment is simply towards more life, simply growth; but this process of self-preservation imperceptibly but steadily modifies the self that is preserved." Ward, "Psych.," "Encyc. Brit.," p. 72. See also Brown-Séquard, "Forum," August, 1890, p. 643; Maudsley on "Cerebral Cortex and its Work," "Mind," No. 58, pp. 168, 169.

rely are really accounted for by our theory.[1] And we have also to ask whether they could not be as well accounted for on some hypothesis which involved an unbroken continuity from the earliest to the latest phases of development.[2] Looking at mental evolution from this double point of view, and taking such reliable traces or evidences as we have of the working of primitive minds, what then do we actually find? We begin with an "environment," and an organism in perfect "touch," the external world everywhere impressing itself and its practical meaning on the organism, and the penalty of non-survival everywhere attaching itself to the crime of non-response.[3] But suddenly, just when a certain form of organic energy—that which we call brain-power or intelligence—has reached a given point in complexity, this tie apparently breaks.[4] The energies, till then so economically employed and always making for life, become fatally spendthrift and reckless.[5] All the long and severe training in appropriate reaction and orderly adjustment counts for nothing; elimination falls into abeyance; and except in the lowest levels of response—like that of selecting proper food—primitive man has to begin from the beginning to understand the world he lives in, and to act accordingly. The result naturally is that the sub-human animal surpasses the human in the very characteristic which gives the man his point of advance, intelligent reaction to reality. For no animals waste time,

[1] "Of the origin of animism perhaps no perfect account has yet been given. It can hardly be said to be obvious why, in uncultured races or individuals, there should arise that invariable tendency to represent natural forces as conscious and anthropomorphic. There remains, however, the difficulty of understanding by what process this rudimentary doctrine of the soul has grown into the great system of developed animism; a system of thought so comprehensive as to hold all nature in a web of vital action and spontaneity; so multiform as to invent some new spirit-race for almost every fresh order of phenomena; so coherent as to create a perfect plexus of ideas that mutually support and interpret one another; finally, so persistent, that even its more extravagant developments can survive for ages in defiance of accurate knowledge." Oughter Lonie, "Animism," "Encyc. Brit.," pp. 55, 56.

[2] "In this organisation of experiences which constitutes evolving intelligence, there must be that same continuity, that same subdivision of function, that same mutual dependence, and that same ever-advancing consensus, which characterise the physical organisation." Spencer, "Princ. of Psych.," vol. i, p. 388. See also Ward, "Psych." ("Theory of Presentations"), "Encyc. Brit.," p. 192; Max. Müller, "Natural Religion," pp. 162, 163; Ladd, "Phys. Psych.," pp. 18, 19, 199, 618; Foster, "Text Book of Physiology," part 1, p. 8.

[3] Lloyd-Morgan, "Animal Life and Intelligence," pp. 243, 300. See also Darwin, "Descent of Man," pp. 94–96.

[4] Darwin, "Descent of Man," pp. 82, 83.

[5] "To such an extent is this provision for the future life of the deceased carried, as, in many cases, to entail great evil on the survivors. Concerning some Gold Coast tribes, Beecham says, 'a funeral is usually absolute ruin to a poor family.'" Spencer, "Princ. of Sociology," vol. i, pp. 202, 203.

health, energy, hard-earned food, and shelter on the non-existent, much less on the positively "dead." Still less are they so imbecile as to immolate in terror or in honour thereof the finest specimens of their race. But this (under the idea of "ghost" and its equivalents) is just what early man is credited with doing; not fitfully or accidentally, but deliberately and persistently.[1]

Still, it may be objected, there is no doubt of the facts. The imagination of "early man" did really play him false in this wanton fashion. Everywhere we find ghost or spirit, fantastic and grotesque animism, fetish[2] or totem, cult and myth. And so it may be urged, we are justified in accepting this strange anomaly; vaguely referring it, perhaps, to the analogous fact that the human child's muscular adjustments are less developed than those of the young of sub-human animals both at low and high organic levels. But then the baby does not try to suck with its nose, or later, to crawl on its back; and the child does not cringe to its own toys, or feed its own shadow.[3] No doubt it makes great mistakes and requires to have them corrected.[4] But these are not circumstantial, consistent, and elaborate as in the case of ancient superstition, nor do they include a morbid attention to or delusive inferences from the phenomena of death. And so far as children are "animistic," it is distinctly, as Mr. Herbert Spencer points out, on the dramatic ground.[5] They are born mimics and "actors." Still it may be pleaded that as man in his childhood had no elders to teach him better, he stereotyped his fancies, and they have become, like other habitual tendencies, organised and perpetuated. But even thus we have to show why the yet earlier correspondence has become so ineffective as to permit such perpetuation; and why the nascent figurative power should wander so far astray.[6] Mr. Spencer often dwells on "the pertinacity with which the oldest part of the regulative organisation maintains its original trait in the

[1] E. Reclus, "Primitive Folk," p. 304, *et seq.* See also Dorman, "Origin of Primitive Superstitions," pp. 208–13. Ellis, "Tshi-speaking Peoples," p. 171, "Ewe-speaking Peoples," p. 117, *et seq.*

[2] It will, however, be borne in mind that, as Major Ellis shows, "the confusion which has resulted from the improper use of the term 'fetish' is extreme, and is now probably irreparable." "Tshi-speaking Peoples," p. 178.

[3] "A child's mind is like an animal's; it is intensely practical. Ideas, as such, do not appeal to it. The thing, the action, is what the child is after." Dewey, "Logic of Verification," "Open Court," April 24th, 1890. See also E. Reclus, "Primitive Folk," p. xii.

[4] M. Foster, "Central Nervous System," p. 1069. See also Spencer, "Princ. of Psych.," vol. i, pp. 409, 410.

[5] Spencer, "Princ. of Sociology," vol. i, p. 144.

[6] Spencer on "Space Consciousness," "Mind," No. 59, p. 320. See also Maudsley on "Cerebral Cortex and its Work," *Ibid.*, No. 58, p. 179.

teeth of influences that modify things around it"; but here we have to wonder at the fatal ease with which it is lost. The work of the senses is to relate our notions and actions rightly to our environment, and enable us so to respond to it as to accomplish the organic aim. But these senses in man are related to a specially developing brain.[1] Leaving questions of "design" on one side, we find a gradual emergence of ever higher types of activity, depending throughout on unbroken correspondence between thing and thought. We know at least that this is the secret of the optical process; it ought to be that of the "visionary," or at least of the "speculative" process.[2] But the metaphors of seeing often express to us, by a suggestive paradox, the most dangerous forms of blindness. Why? A physical touch goes from the skin-point to the proper nerve-ganglion and back again on another line; appropriate muscular action follows. But a touch of "emotional" experience seems to go to some "imaginative" centre at random, generally therefore setting the wrong mental muscles in motion. Where then does the imaginative message lose its way, strike the wrong line, evoke inappropriate response, and remain unable even to right itself?[3]

The link with nature and fact that the developing gift which we call "mind," seems at one stage to have lost, is the power to pass through appearances to reality, in the sense of ignoring illusory and detecting actual characters.[4] The animal which is deceived by illusion or simulation is in the long run "eliminated." The animal which survives is the one that penetrates all deceptions of appearance and escapes being ensnared by them. And the same is of course true in a more mechanical sense of the plant, and below that again in a purely mechanical sense, of all inorganic substances.[5] Why then did not this primordial order of things translate itself inevitably into the mental process at its first inception, balancing and directing the budding representative power?[6] We have here no question of scientific or logical acumen, or of any of the subtle products which belong to a later stage of mental growth; no question of "knowing"

[1] Foster, "Central Nervous System," p. 1055.

[2] James, "Princ. of Psych.," vol. xi, pp. 179, 180, 306. See also Ladd, "Phys. Psych.," pp. 455, 456; Ribot, "Psych. of Attention," p. 11.

[3] "The process is in fact much less simple than this, and the term 'reflex action' is now complained of on this ground." Comp. Foster, "Central Nervous System," p. 906. See also Crichton-Browne, "Hygienic Uses of Imagination," "Brit. Med. Journ.," Aug. 24th, 1889; Maudsley, "Theory of Vitality," pp. 298, 311, 312.

[4] James, "Princ. of Psych.," vol. ii, pp. 384, 385, 387. See also Ladd, "Phys. Psych.," pp. 464–7.

[5] "Lewes, "Problems of Life and Mind," pp. 69, 118, 119.

[6] Spencer, "Princ. of Psych.," vol. i, pp. 317, 353.

why or how, or knowing a "self," that knows, but simply of organic correspondence with natural fact in full and healthy work.[1] Man is closely related to all nature, and his ancestry does not end with the animal or even with the organic order; "within" him as "without" are found the same vibrations and the same elements.[2] Thus it ought to be difficult for mere appearances to mislead the primitive mind.[3] Everything fosters the tendency to persist in old grooves; a new departure involves a distinct and even painful effort.[4] And the delusive ideas which prompt wasteful or injurious action would always lead indirectly to the non-survival of the false thinker.

Comparing then the respective developments of the individual and the race, it would seem that the lowest and the highest centres are firmly linked to and controlled by natural reality, the influence of which vindicates itself in all their varied forms of activity.[5] Just as the retina gives us a faithful picture of external objects, so the geometrician or mechanician draws us a trustworthy diagram of abstract or concrete forms or paths which "matter" and "force" actually take.[6] But

[1] "There is an ambiguity in the words 'know,' 'knowledge,' . . . 'to know,' may mean either to perceive or apprehend, or it may mean to understand or comprehend. Only when we rise to intellectual knowledge is it true to say, 'no one could understand the meaning of a straight line without being shown a line not straight, a bent or crooked line.'" Ward, "Psych.," "Encyc. Brit." ("Theory of Presentations"). ". . . what is in consciousness is not necessarily in a clear analytic consciousness; and that we may by a process of deductive reasoning be sure that certain elements are present as factors in a given mental state, while we are yet quite unable to call these elements into a clear analytic consciousness, separated from certain other elements bound to them by long association and habit." Fullerton, "Mind," No. 42, p. 192. See also Lloyd-Morgan, "Animal Life," &c., pp. 308, 365; J. Solomon, "Mind," No. 58, pp. 264, 265; Darwin, "Descent of Man," p. 122.

[2] Tyndall, "Fragments of Science," vol. xi, pp. 46, 48, 355–7. See also Fiske, "Outlines of Cosmic Philosophy," vol. i, pp. 403, 415; J. McK. Cattell on "Wundt," "Mind," No. 51, p. 436, 437, 439; Winwood Reade, "Martyrdom of Man," pp. 462–7; Ellis, "Tshi-speaking peoples," pp. 325, 327–8.

[3] "Animate beings are conceived by every individual, at a very early stage, as possessing internal activity similar to his own, but there is no necessity whatever, nay everything speaks against it, for his also investing with such an activity things moved only by animate beings." J. Pikler, "Mind," No. 59, p. 398. "The paramount influence which surrounding nature has on the development of the human being is unquestionable. It is the more powerful the nearer the people is to the uncultured state, and diminishes in proportion as human art and science gain the power over the forces of nature. For this reason a primitive people ascribe spiritual agencies to those results of nature's laws not understood by them." Dorman, "Origin of Primitive Superstitions," pp. 385, 386.

[4] ". . . the origin of attention is very humble, and its primitive forms have actually been bound up with the most exacting conditions of animal life." Ribot, "Psych. of Attention," p. 32. James, "Princ. of Psych.," vol. ii, pp. 415–441.

[5] Lewes, "Problems of Life and Mind," vol. i, p. 145.

[6] "But what we mean by the universe is the sum of our actual and possible

between the two there lies this fatal zone of falsity, of untrustworthiness, of record, and report. Why do the "middle centres," that is, the imaginative, the emotional centres, run wild in unwholesome beliefs and practices, so deeply implanted in the mind-tissue of the race, that we can identify some of them even now?[1] The highest centres at every stage are in some senses centres of control. Relax them and you release the next lower in grade to over-act their part.[2] Do we suppose then that the race has really passed everywhere through a stage of promiscuous and disorderly mental action, out of which or through which it nevertheless has dragged intact the sound root of accuracy and order?[3] Every mental image would presumably be saturated with what we are now told to call "organic memories." No doubt we could not expect that this would carry man far in acquiring knowledge. But surely it would have checked and tended to starve out, after a brief reign, the senseless versions of natural fact which we find stereotyped for long ages in the history of man?[4] Baseless vagaries would of course have arisen, but they would surely have withered for lack of nutriment, either in organic tradition or from external experience, so imperious in those days and so rigorous in its penalties. They would have been essentially evanescent, and liable to clash with and efface each other. They would even lack the favourable conditions for survival that the civilised child's fancies have. He is under no ceaseless danger pressure like that of the primitive youngster, dependent every moment, like his parents, on the keenness of his perception and the

impressions. . . Form and number are mere names for certain relations between matters of fact; unless a man had seen or felt the difference between a straight line and a crooked one, straight and crooked would have no more meaning to him, than red and blue to the blind." Huxley on "Hume," p. 118.

[1] A. Lang, "Myth, Ritual, and Religion," vol. i, pp. 8, 9, 11, 29–30. See also Baldwin, "Handbook of Psych.," pp. 217, 267.

[2] "The doctrine of evolution implies the passage from the most organised to the least organised, or, in other terms, from the most general to the most special. Roughly, we say that there is a gradual 'adding on' of the more and more special, a continual adding on of new organisations. But this 'adding on' is at the same time a 'keeping down.' The higher nervous arrangements evolved out of the lower keep down those lower, just as a government evolved out of a nation controls as well as directs that nation. If this be the process of evolution, then the reverse process of dissolution is not only 'a taking off' of the higher, but is at the very same time a 'letting go' of the lower." Hughlings Jackson, "Croonian Lectures," 1884. "As we rise to higher and higher planes of function we enlarge the office of inhibition. Every higher order of motion regulates, or in other words inhabits, that of the order below. . ." Clifford Allbutt, "Address at Glasgow," 1888, "Brit. Med. Journ.," August 11th, 1888.

[3] Baldwin, "Handbook of Psych.," pp. 158–60, 222, 223.

[4] "A being had arisen who . . . knew how to control and regulate (nature's) action and could keep himself in harmony with her, not by a change in body, but by an advance of mind." Wallace, "Natural Selection," p. 325.

vigilance of his outlook. And he has not got to make his traditions and secure their acceptance and persistance! For the real crux lies in consensus and permanence.[1] The fleeting fancy which comes and goes, incessantly shifting and changing, is a very different matter; and no extravagance in that need cause surprise or question. Further: the pre-intellectual test is first contact, then odour and flavour.[2] Thus if the primitive individual mind has ever so vivid a dream or waking illusion, it must soon begin to fade and die out unless constantly revived by the sense-tests until then all-dominant.[3] Sight is the highest and most intellectual sense.[4] The primitive man, obliged sometimes to search for food and evade enemies and dangers in the dusk, would rely much on smell and touch.[5] How do we suppose then that this condition can be satisfied when the "ghost" comes upon the scene?[6] Let us however, assume this "ghost," and take first the most obvious of the ideas which it indicates, that which the word "spirit" conveys,—Breath.[7] How did early man come by the idea of a "breath" which survived, and could not merely exert force like wind, but for instance, listen, walk, and eat? At what point did this gratuitous absurdity begin? Supposing a tribal "chief" dies

[1] "Up to this point we have only examined, in our investigation of the mechanism of attention, the external impulsion arising from stimuli and surroundings which causes it to pass from one form to another. We now come upon a much more obscure question, namely, the study of the internal mechanism through which a state of consciousness is laboriously maintained in the face of the psychological struggle for life which incessantly tends to make it disappear. . . The whole problem consists in this very power of inhibition, of retention." Ribot, "Psych. of Attention," pp. 45, 46. A. W. Howitt, "Journ. Anthr. Inst.," August, 1886, pp. 26, 52.

[2] "From moment to moment (the untaught human being) sees things around, touches them, handles them, moves them hither and thither. He knows nothing of sensations and ideas—has no words for them. . . His senses make him conversant only with things externally existing, and with his own body; and he transcends his senses only far enough to draw concrete inferences respecting the actions of these things. An invisible, intangible entity, such as Mind is inferred to be, is a high abstraction unthinkable by him, and inexpressible by his vocabulary." Spencer, "Princ. of Sociology," vol. i, p. 147.

[3] Spencer, "Princ. of Psych.," vol. i, pp. 387. 388, 390, 391.

[4] Lewes, "Problems of Life and Mind," vol. i, p. 131.

[5] Spencer, "Princ. of Psych.," vol. i, p. 362. See also Whittaker on "Volkmann's Psych.," "Mind," No. 50, p. 494.

[6] "Of course an insane person may make mistakes; and he is not less liable to do so than other people. But his insanity does not consist in making mistakes; it consists in his inability to recognise that they are mistakes, when the conditions requisite for making such a recognition are afforded him." Mercier, "Nervous System and the Mind," p. 251.

[7] "The act of breathing, so characteristic of the higher animals during life, and coinciding so closely with life in its departure, has been repeatedly and naturally identified with the life or soul itself." Tylor, "Primitive Culture," vol. i, p. 432. See also Croom Robertson on "Siebeck," "Mind," No. 38 pp. 293–5. Ribot, "Psych. of Attention," p. 20.

his "ghost" leaves his "body" as "breath." No doubt the concurrent departure of the "breaths" of his wife and slaves might suggest a breath-community in a breath-world of which individual puffs or sighs might make up wind. And again, the smoke-columns of the funeral pyre, as they were seen to be gradually dissipated, might well be supposed to turn into air.[1] Why then do we not find everywhere a supreme Wind-Deity,[2] and a swinging fetish to represent the sacred breath-rhythm,—and the heart-beat too?[3]

Again. Taking certain features of universal experience as the possible source of the most conspicuous class of these vagaries, we have to distinguish the ideas of:—

(1.) Voice and its echo.

(2.) Object and its shadow.

(3.) Object and its reflection.

(4.) The energy and matter, work-force and stuff of an object; its power to be useful and its tangible mass. All four contrasts are of course reflected in dream.[4]

(1.) Here we have apparent separation in space but complete reproduction in character, although in lessening intensity. Before taking the other points, which are all more or less related to sight, it may be suggested that the primitive ear, rendered acutely discriminative by the constant presence of danger, would be less liable to mistake the echo for an independent voice than the civilised one would be. It could not fail to note the invariable repetition in every detail of sounds which could be accounted for in the usual way.

(2.) Here there is complete distinctness, but the shadow has only the outline produced by obstructed light; no idea of content is given.

(3.) Here we have reproduction in the flat or in the solid; *e.g.*, in the mirror or in an artificial copy. The two are again separable.

(4.) Here we can no longer separate or even distinguish, except mentally.

It follows therefore that while it might well seem possible to distinguish and dedicate to the ghost the meat-shadow or meat-reflection or imitation-meat, the impalpable nourishment of

[1] Dorman, "Origin of Primitive Superstitions," pp. 349, 351.

[2] Since writing this, I find that Professor Max Müller ("Physical Religion," p. 310), contends that we often do find the storm wind prominently deified. But as he himself subordinates it fire and connects it closely with thunder, sky, &c., I leave the passage as it stands.

[3] "The further question as to the comparative non-use of words for 'blood' to express 'soul,' like many other such questions, cannot be here advanced for want of space.

[4] Spencer, "Princ. of Sociology," vol. i, pp. 192–5, *et seq.*

meat could not be so dedicated because it could not be similarly distinguished, nor would it be perceptible as in the other cases by any of the senses. So with the weapon or tool.

But loss of work-power is shown by signs of wear. If the supposed "ghost" deserted his super-sensuous sphere and took to using real weapons and tools and consuming real food, his devotee would find the first worn and blunted; while, if it was supposed that in this one case the ghost (or good) of the food could be taken and all the rest left, the food after use would acquire an abnormal appearance of which the natural analogue would be the waste product after assimilation. This, for practical reasons, would strike the earlier more forcibly than the later mind.[1] For advancing civilisation tends to ignore that side of life; besides which the increase of abstracting power tends to distract attention from the physically concrete. At all events we should expect to find everywhere traces of a simple and clear distinction between tangible things for actual men (or beasts) and intangible things for imaginary ones.[2] In very early times "visions" are procured by fasting or intoxicants; so that the idea of providing visionary food would naturally thus find expression. And would there not be attempts to provide with a dedicated object its shadow or reflection? (the effigy we do find in some cases). But that would not be enough with the food. The most deeply established test of the consumption of food would be its disappearance when devoured. Take a man who devotes part of an animal he has killed to the making of a meal for his dead ancestor, keeping the rest for his own family. Credit him with the supposition that the meat has a ghostly identity or double like that which leaves the body at death, that this is what does him good when he eats, and is what the ghost requires and consumes.[3] But the dedicator cannot help observ-

[1] "In childhood we feel ourselves to be closer to the world of sensible phenomena, we live immediately with them and in them; an intimately vital tie binds us and them together." Griesinger, "Mental Diseases," sec. 50, 98 (quoted by James, "Princ. of Psych.").

[2] "The savage thinks of (life) as a concrete material thing of a definite bulk, capable of being seen and handled, kept in a box or jar, and liable to be bruised, fractured, or smashed in pieces." Frazer, "Golden Bough," vol. ii, p. 296. "It is the doctrines and rites of the lower races which are, according to their philosophy, results of point-blank natural evidence and acts of straightforward practical purpose." Tylor, "Primitive Culture," vol. i, pp. 496–502.

[3] "With regard to solid food, they believe that the gods make use of the spiritual part of it, leaving the material portion behind." Ellis, "Tshi-speaking Peoples," pp. 73–74. "One sequence of the primitive belief in the materiality of the double is the ministering to such desires as were manifest during life. Originally this belief is entertained literally: as by the Zulus, who in a case named said, 'the Ancestral spirits came and eat up all the meat, and when the people returned from bathing, they found all the meat eaten up.'" Spencer,

ing, sooner or later, that precisely the same result happens in the case of the devoted and the undevoted food. The ghost has taken the good of the one, no one has taken the good of the other. Then let him profanely eat (as, under stress of famine, must surely have sometimes happened), and the food is found to feed him still; the food-ghost has not been consumed! The same thing applies to dedicated corn, if planted later under stress of starvation. And are we to suppose that the devotee makes a distinction between the usefulness of the slave and the usefulness of food? Or does he class the life of the one and the feeding powers of the other in the same category? Is he supposed to notice that after "breath" has left an edible animal another kind of "ghost" remains, which is what the ghost-ancestor or chief wants to absorb as a hungry man does?[1] Of course in one case the practical course seems obvious. The ghost-chief wants a ghost-slave. Then, say the devoted survivors, let us kill one, and release the ghost to go to his master. But they do not thereby send his shadow or his reflection to ghost-land. His dead body continues to cast both. How is it then that they jump to the conclusion (of which there is no evidence in the practical sphere) that the life-force, identity, or "breath" are gone there? Why did not these take with them

"Ecclesiastical Institutions," pp. 673–78. See also Huxley (quoting Lippert), "Evolution of Theology." "Nineteenth Century," March, 1885, p. 355, note; and Tregear's "Maoris," "Journ. Anthr. Inst.," November, 1889, pp. 120–21.

[1] I had never seen this point noticed when the above was written. I now find the following passages in Ellis's "Tshi-speaking Peoples." "This word kra, though generally interpreted 'soul,' does not at all correspond to the European idea of a soul; for it is the man himself, in a shadowy or ghostly form, that continues his existence after death in another world, and not the kra. The latter is rather a guardian spirit, who lives in a man, and whose connection with him terminates at his death," p. 149. "We, too, have a very similar notion to this of the kra, and which is probably a survival of such a belief. A living man is believed to be tenanted by another individuality which is termed a soul, and which reasons with man through what is called 'conscience.' When the man dies, however, we make the soul to go to the next world, instead of the shadowy man; but a good deal of confusion exists in our ideas on this point, and the belief in ghosts, the shadowy outlines of former living men, seems to point to a time when each of the two original individualities was believed to pursue a separate existence after the death of the man." *Ibid.*, p. 155. See also his "Ewe-speaking Peoples." "This belief in every animate and inanimate natural object having two individualities besides its tangible one, will perhaps help to explain much that is still obscure as to the origin of Nature Worship. It must be borne in mind that the kra is not the soul, for the soul, in the accepted sense of the word, is 'the animating, separable, surviving entity, the vehicle of individual personal existence,' whereas every kra has been the indwelling spirit of many men and probably will be of many more." (This seems to imply the need for reconsidering the whole subject in the light of fresh observation.) "Europeans, holding as they do the belief in one 'soul' only, are naturally prone to misconceive a native's idea of two 'souls,' unless, which is rarely the case, they are aware that such a belief is known to exist among certain peoples." *Ibid.*, p. 17.

what had always been associated with them and even reckoned in the same ghostly category.[1]

But here we are confronted with the dream theory. The dead ancestor has been seen in dreams, therefore the descendants are sure that he lives somehow and somewhere, and all the rest follows.[2] Yet surely it would sometimes strike the immolators forcibly that it did not invariably follow that next time they dreamt the chief they dreamt the slave, to correspond with the new state of things. Dreams are not now and surely never can have been as coherent, consistent, invariably repeated as such an idea would require them to be.[3] Do we find anything to suggest that when a great chief died, he was dreamt by the dreamers as alone and destitute, while after his funeral with all its attendant ceremonies of provision, he was dreamt surrounded and provided as in life? If not, would not the waste of precious property strike men who had produced or acquired it at much cost of effort, and who had the strongest reasons for laying stress on its absence or presence in all the world they knew of?

The primitive man's digestive process, so far as he was occasionally conscious of it, would surely be his natural "origin" of the "inner." Cultured man connects "dreams" as he does "reflection" with an "inner" which he has acquired metaphysically—in an advanced mental stage.[4] But to early man if not "outer" reality the dream would only be "inner" in the mucous membrane or the "digestive cavity" sense.[5] And this sense of "outer" and "inner" may well be launched with us into the world of mind at its earliest stage, since as ectoderm and endoderm it belongs to the first differentiation of the starting-cell.[6] Therefore, everywhere touch, taste, and smell,

[1] Ellis, "Tshi-speaking Peoples," p. 19. See also "Ewe-speaking Peoples," pp. 105-6; Tylor, "Primitive Culture," vol. i, p. 430.

[2] Howitt, "Journ. Anthr. Inst.," August, 1886, p. 55. See also Tylor, "Primitive Culture," vol. i, pp. 478, 496, 502.

[3] "No class of psychical phenomena has received less illumination from science than dream. Some psychologists pass them by altogether, while others are apt to deal with them in a very hasty and superficial manner. The reason of this neglect is not far to seek. In the nature of the case the facts are exceedingly difficult to reach." Sully on "Delbœuf," "Mind," No. 45, p. 115. "The influence of dreams is so great upon the life of the American Indians that every act and thought is predicated upon this superstition." Dorman, "Origin of Primitive Superstitions," p. 61.

[4] Reville, "Hibbert Lectures," p. 87.

[5] Winwood Reade, "Martyrdom of Man," pp. 171-2.

[6] "The boundary between the internal and external was, no doubt, originally the surface of the body with which the subject or self was identified; and in this sense the terms are of course correctly used. . . . . . Yet, evident as it seems that the correlatives in and not in must both apply to the same category . . . . . . we still find psychologists more or less consciously confused between 'internal,' meaning 'presented' in the psychological sense, and 'external'

would be the tests by which a visual impression would be tried and confusion averted, whether in the case of dream or of spectral illusion.[1]

Again, one of the first traces one would expect to find of the organism's long reflex and automatic training would be an even keener sense in the primitive mind than in ours, of the incongruity of dream-events and objects.[2] Our range of conception has so widened that there is always a vague reservation or suspense in face of the strangest "surprises." The possibilities have so multiplied. But to our early ancestors the utter dislocation of ordinary experience in dreams would have made it difficult deliberately to accept them as fact, except so far as there was disorder of mind.[3] For the more recent the emergence from the automatic level, the more inexorable the demand for the monotony of a normal sequence.[4] Is not this in fact

meaning 'not presented' but corporeal or oftener extra-corporeal." Ward, "Psych.," "Encyc. Brit.," pp. 37–8. "The body becomes, in fact, the earliest form of self, the first datum for our later conceptions of permanence and individuality . . . ." *Ibid.*, p. 56.

[1] "From the day of our birth we have sought every hour of our lives to correct the apparent form of things, and translate it into the real form by keeping note of the way they are placed or held. In no other class of sensations does this incessant correction occur." James, "Princ. of Psych.," vol. ii, pp. 259–60. See also, Frazer, "Golden Bough," vol. i, pp. 121–3; Ward, "Psych.," "Encyc. Brit."

[2] "The fundamental note of mental insanity, as of all errors of thought and feeling, is the want or loss of a just equilibrium between the individual and his surroundings; the disorder marking a failure of adaptation in himself which is often-times a congenital fault that he owes to his forefathers." Maudsley, "Mind," No. 48, p. 510. See also p. 501. "It is experience in the largest sense of that vague term—real apprehension, feeling and acting—that gives us a place among things and indeed makes these things to be for us." Adamson on "Lotze," "Mind," No. 40, p. 587.

[3] "As life is a condition in which an intimate correlation exists between the individual and nature, it is evident that whilst Plato dealt only with ideas of the mind, his system must remain comparatively unprofitable; but it is evident also that since we have learnt to discover the laws or ideas in nature of which ideas in the mind are correlates, it becomes possible to find in nature an interpretation of Plato's true ideas. Once for all, it may perhaps be taken for granted that the ideas of genius can never be meaningless; for its mental life is a reflection in consciousness of the unconscious life of nature." Maudsley, "Theory of Vitality," p. 274. See also Spencer, "Princ. of Psych.," vol. i, pp. 453, 454.

[4] "It is in fact one of the most fundamental truths in biology that the performance of functions, or in other words, the occurrence of actions of any kind in living matter, tends to occasion structural changes therein. . . . . We have at first to do with mere reflex actions; in higher forms of life these actions increase so much in complexity as to become worthy of the name 'instinctive'; whilst in still higher organisms we have what are called 'intelligent' actions in increasing proportion; though always intermixed with multitudes of others belonging to the 'instinctive' and to the reflex categories." Bastian, "Brain, Organ of Mind," pp. 23-5. See also Spencer, "Princ. of Psych.," vol. i, p. 580.

(in some sense) the secret of the "logical consistency" which Mr. Herbert Spencer, Dr. Tylor, and others, point out in primitive inferences.[1] Dreams and delirium alike mean abnormal sequence, and therefore would be less likely by the primitive mind than by ours to be confounded with that real experience of which the secret is continuity. At a later stage we generalise more broadly, and are prepared to allow for larger margins of the possible.[2] If then we find it difficult to accept the ravings of the primitive mind as a natural stage in an orderly and continuous development of mental power, the concomitant of a brain-growth which certainly was that, what in fact should we have expected to find? Surely the reign of the "matter of fact"; a practical attention to material needs and dangers certified by the senses, and a gradual enlargment of its scope.[3] The baby, never dreaming of efforts to turn somersaults or walk on a tight-rope, begins, when it is ready, to run, jump, dance, or climb, after it has achieved walking sedately, which is its first attempt beyond crawling.[4] We nowhere find random or spasmodic action, convulsion or contortion, although these would make admirable metaphors for much early cult- and myth-making. But sight gives us here perhaps the most significant lesson, for therein the ascending series seems especially gradual and unbroken; up to the moment indeed where

[1] "We must set out with the postulate that primitive ideas are natural and, under the conditions in which they occur, rational. In early life we have been taught that human nature is everywhere the same. Led thus to contemplate the beliefs of savages as beliefs entertained by minds like our own, we marvel at their strangeness, and ascribe perversity to those who hold them. Casting aside this error, we must substitute for it the truth that the laws of thought are everywhere the same; and that, given the data as known to him, the inference drawn by the primitive man is the reasonable inference." Spencer, "Princ. of Sociology," vol. i, p. 111, comp. *Ibid.*, pp. 441–2; Tylor, "Primitive Culture," vol. i, pp. 22, 23, 285, 286.

[2] Spencer, "Princ. of Psych.," vol. i, pp. 425, 426.

[3] "When the evolution of the living organism is traced upwards from the simplest forms to the most complex, and it is found that the evolution of mind proceeds *pari passu* with it, following the same laws and passing through the same stages, either evolution being expressed as a continual building up with the same elements, we have actual evidence that the one element goes with the other." Clifford, "Lectures and Essays," vol. i, p. 291. "Incoherences in experience cannot produce perplexity unless they engross attention with sufficient strength and persistency. This depends on the interest which they excite, and such interest for the comparatively undeveloped consciousness is mainly of a practical kind." Stout, "Mind," No. 57, pp. 29, 30. "Emotional excitement—and at the outset the natural man does not think much in cold blood—quickens the flow of ideas; what seems relevant is at once contemplated more closely, while what seems irrelevant awakens little interest and receives little attention." Ward, "Psych.," "Encyc. Brit." (The doctor or healer is thus more primitive than the priest on "practical" grounds.) See Dorman, "Origin of Primitive Superstitions," p. 354, *et. seq.* Cf. also James, "Princ. of Psych.," vol. ii, p. 258.

[4] "Mercier, "Sanity and Insanity," p. 289.

even the eye is helplessly dragged into the whirl of folly and delusion—the point where we people nature with monsters, and *de-naturalise* the world we live in. We are accustomed to marvel at the feats of dawning intellect, *e.g.*, in the use of fire and metals, in the domestication of animals, in the making of weapons and tools, which we all agree in ascribing to the earliest times. Nay, more, we are learning further to wonder at the high æsthetic level sometimes attained in those early days. Take the case of the Cro-Magnon cave-men, whose drawings put most of the more modern art to shame, not (as we might have supposed likely) in freshness of fancy, but in physiological accuracy. So with the precision in measurement and skill in erection shown in very early examples of architecture.[1] But here at once we are brought up short by the motive, the mental impetus to which these were due. Once more we find the rising line of mental development as it were deflected; the upward energy begins, if not to fail entirely, at least to start aside and spend itself in morbid and unfruitful forms. Much indeed is actual "fall," that is, reversal, degeneration. For we have just been following the "cult" of the living, which in fact begins where the organic itself begins. Now we begin to trace the undoing of all this, the "cult" of the dead.[2] And this, be it noted, just after we have begun to feel and express in a newly-acquired sense, the attraction of the one and the repulsion of the other.[3] Modern research seems more and more to emphasize the paradox of elaborate wastefulness, even in cases where the economical bent of nature might be expected to exercise a specially inhibitive power; for example, those brought forward in Mr. Frazer's "Golden Bough" and elsewhere, of unnatural treatment tending to injure the future mothers of a community. And it cannot be said that here natural selection reverses itself, having worked to a point where the up-growth of moral sense and intellectual power makes for the preservation of the physically unfit. In waste of energy and the barren cult not merely of death, but of disease and suffering, nothing is or can be gained; not even, as might be claimed for some mythical conceptions, an extension of true imaginative power. We are rather making that impossible, by substituting for a

[1] "We have to act in conformity with geometrical principles before we have the slightest power of framing a geometrical axiom." Leslie Stephen, "Mind," No. 54, p. 199. See also, Rénouf, "Origin and Growth of Religion," p. 63.

[2] A. Lang, "Myth, Ritual, and Religion," vol. ii, p. 82. See also Dorman, "Origin of Primitive Superstitions," p. 164; Ellis, "Ewe-speaking Peoples," pp. 107, 111, 113.

[3] Spencer, "Princ. of Sociology," vol. i, pp. 142, 145.

healthy imagination an anarchy of practical delirium which demoralises its energies, disorganises its tissues, and taints its very sources.[1]

One more point. We have been dwelling on the idea of the "ghost of the ancestor" as though it were sharply marked off from any idea of a "god" or "gods." But of course this would falsify the best evidence we have, and is indeed impracticable. As a fact, the difficulty is to draw any definite line between ghost, ancestor, parent, hero or tyrant, chief (and later, king), and god.

Professor Robertson Smith, for instance, points out that the relationship between gods and men was primitively conceived in the strictly literal sense of father and offspring. But as such a parentage could not be accepted on the same grounds as all other parentage known (since the main signs of physical reality were all missing), in what sense was the relationship conceived and accepted as "strictly literal?" How did gods and men make up a "natural family"?[2] This thought takes us far

[1] "However simple or complicated the circumstances, and however simple or elaborate the act by which they are dealt with, the same law obtains throughout, viz., every movement that forms a part of conduct, every act that can be considered intelligent, is an adaptation of the organism to surrounding circumstances; or, briefly put, conduct is the adjustment of the organism to its environment." Mercier, "Sanity and Insanity," p. 106. "Insanity, we find, is a disorder of the adjustment of self to surroundings. This adjustment of self to surroundings is effected by the highest of all the nervous arrangements, and the central and primary factor in insanity is the disorder of those arrangements." *Ibid.*, p. 138. "When he (the lunatic) attempts to think out an elaborate course of conduct he falls into a state of confusion. When he attempts to carry out an elaborate course of conduct he gets astray; he does things wrong, he makes mistakes, he fails to appreciate the force, and to estimate the comparative value of circumstances, and his acts are wrongly directed, confused, and muddled." *Ibid.*, p. 383. "The doctrine underlying disease spirits and oracle spirits is the same, however strange it may appear. Many of those most diseased and abnormal and morbid have for the same reason become the great religious and prophetic teachers of humanity." Dorman, "Origin of Primitive Superstitions," p. 52. (From which it would appear that man is an animal which tends to reckon as the best and highest, that which it learns from the representatives of distortion and failure in the race.) See also Maudsley, "Mind," No. 54, pp. 179, 183.

[2] "To the negro of the Gold Coast, Nyankupon is a material and tangible being, possessing a body, legs, and arms, in fact all the limbs, and the senses, and faculties of men. He is also believed to have passions similar to those of man. This, however, is but natural, and to the uncultured mind the conception of an immaterial being is impossible." Ellis, "Tshi-speaking Peoples," p. 29.

"Those tribes that have progressed and remember a former condition of greater savagery always describe that condition as one wherein they were animals. Of course the language is metaphorical at first; but this metaphorical language, in connection with the many animal superstitions that have survived their lower state, tends to make fiction grow into reality. A number of travellers have acknowledged that they never clearly understood whether the Indians believed that at one time all men were in the form of beasts or whether they were in the form of men, but with the nature, habits, and disposition of

indeed from the dream, the shadow, the reflection, the echo, the breath. Where, then, is the missing link? Our very idea of mental and spiritual inter-communion in any exalted sense is among the latest of mental products.

But are we not betrayed even by the ambiguities of language into ascribing such ideas to the primitive sense-bound mind?[1] Where and why do we suppose that early men broke away from the strongest ties they had—those to the actual—and where are we to look for the link which bridges the chasm between the sensuous and the non-sensuous, which in much early animism might well be spelt nonsens-uous? Do not all the theories hitherto advanced really imply that the primordial mind had effaced all signs of its pre-intellectual ancestry and bequeathed to the earliest of its descendants of whom we can find traces, a practical *tabula rasa*?[2] Do they not one and all involve the assumption that primitive men had to begin from the very beginning in their responses to environment, instead of inheriting a tendency to right reaction or correspondence ingrained in them from protoplasmic days and in the protozoic nursery, a tendency, which has but to be carried over and utilised in every fresh departure in development.[3]

animals." Dorman, "Origin, &c.," p. 244, cf. p. 221. "That metaphorical naming may cause personalisation . . . . . we have good evidence." Spencer, "Ecclesiastical Institutions," p. 685. "Literal interpretation of metaphors leads to worship of heavenly bodies." *Ibid.*, p. 692.

The inconsistency of prevailing inferences on this and like points seems curiously exemplified in the above extracts. The first describes what is surely, on the usual premises, indisputable; the only doubt is whether the premises are sound and what further inference is justifiable. But the others apparently reverse it and credit the earliest mind with that power of consciously using the figurative which we usually claim for the highest culture. Did this insight, then, desert the increasing intelligence? Was experience powerless to modify the loss? See also Robertson Smith, "Religion of the Semites," pp. 30, 31, 83.

[1] Dorman, "Origin, &c.," p. 15. See also, Im Thurn, "Journ. Anthr. Inst.," May, 1882, pp. 361, 362, 375; Risley, "Journ. Anthr. Inst.," February, 1891, pp. 238, 250; Max Müller, "Natural Religion," pp. 149–156; Ellis, "Ewe-speaking Peoples," p. 101.

[2] "Differentiation implies that the simple becomes complex or the complex more complex; it implies also that this increased complexity is due to the persistence of former changes; we may even say that each persistence is essential to the very idea or development or growth. In trying, then, to conceive our psychological individual in the earliest stages of development we must not picture it as experiencing a succession of absolutely new sensations, which coming out of nothingness, admit of being strung upon the 'thread of consciousness' like beads picked up at random, or cememted into a mass like the bits of stick and sand with which the young caddis covers its nakedness. The notion, which Kant has done much to encourage, that psychical life begins with a confused manifold of sensations not only without logical but without psychological unity is one that becomes more inconceivable the more closely we consider it." Ward, "Psych." ("Theory of Presentations"), "Encyc. Brit."

[3] Im Thurn, "Journ. Anthr. Inst.," May, 1882, p. 372. See also Romanes, "Mental Evolution in Man," pp. 388, 389; Lloyd-Morgan, "Animal Life,"

No wonder, if we could believe in such a "break" as this, that the most suicidal as well as grotesque and idiotic forms of cult should not merely have prevailed but have persisted, and not mainly or chiefly in theory, but in grim and savage practice. The marvel then becomes that out of such a seething mass of lunacy there should have emerged that very sobriety of exact thought which criticises it.[1] But if we cannot believe in any such "catastrophic" collapse in the face of the overwhelming evidence of continuity throughout the organic ascent, then the checking force would be tremendous, and the follies would be stamped out as fast as they arose.[2] How then did we go astray? Of course it is not suggested that crudeness or vagueness were unnatural in the young mind of the race. Immature thought must needs be both; for it certainly cannot be an elaborate reproduction of an exquisite complexity. But the point is that growing intelligence, instead of flying off the curves of reality at arbitrary tangents and becoming fixed therein, would, in the long run, be broadly true to nature.[3] When we find a "vestigial"

&c., p. 419; Clark-Murray, "Handbook of Psych.," p. 30; Hughlings Jackson, "Croonian Lects.," 1884, pp. 25, 27, 29.

[1] In a true sense, however, "the psychologist who essays to treat mind evolutionally has to begin at the top of the chain and work downwards; he cannot, like the biologist, begin at the bottom and work upwards." Ward, "Psych. Princ.," "Mind," No. 45, p. 47. See also Spencer, "Princ. of Psych.," vol. i, p. 408.

[2] James, "Princ. of Psych.," vol. ii, p. 487.

[3] "So a man, on a road once traversed inattentively before, takes a certain turn for no reason except that he feels as if he must be right. He is guided by a sum of impressions, not one of which is emphatic or distinguished from the rest, not one of which is essential, not one of which is conceived, but all of which together drive him to a conclusion to which nothing but that sum-total leads. Are not some of the wonderful discriminations of animals explicable in the same way?" James, "Princ. of Psych.," vol. ii, p. 351. "Framed as we are, we can have no *a priori* idea of a movement, no idea of a movement which we have not already performed. Before the idea can be generated, the movement must have occurred in a blind, unexpected way, and left its idea behind." *Ibid.*, p. 580. "Such instinctive analogies have, like other analogies, to be confirmed, refuted, or modified by further knowledge, *i.e.*, by the very insight into things which these analogies have themselves made possible. That in their first form they were mythical, and that they could never have been at all unless originated in this way, are considerations that make no difference to their validity, assuming, that is, that they admit, now or hereafter, of a logical transformation which renders them objectively valid." Ward, "Psych." ("Imagination or Ideation"), "Encyc. Brit." The following is surely an instance of the curious inconsistency of some of our interpretations: we suppose that to the primitive man the stars are at once spangles and heroes: "The principle underlying Sabaism is the belief that all the heavenly bodies are inhabited and taken possession of by spiritual beings, which have migrated thither and made them their habitations. Ignorant as they were of astronomical knowledge, they did not see any absurdity in animating a sun, moon, or star with a brilliant hero. In very truth, a primitive people consider the stars as little spangles stuck on the sky as ornaments, and the sky itself as no farther off than the mountain that skirts their horizon. The sun, above all other natural

organ carried on within us, like a gill-arch or a thumb-toe, we don't treat it as an analogue of the hunch-back and the squint.

Even if we could not find a surviving animal which was enjoying swimming or climbing privileges denied to us poor "humans" as we now are, we should still look for their fossil remains, and even for the water and the tree which fitted such organs.[1]

Is not this, then, the gist of it all?

Either (1) we are to suppose an absolute break and reversal in the evolution of mind; a stage of gratuitous incoherence in which the developing imagination has let go all the organised reactive power which up to that stage had made its owner what he was, and proceeds to create a burlesque of the universe,—

Or (2) we have, if not to assume that there is, at least to ask whether there may be in primitive cosmology and natural history an underlying element of true "mental shadow" of outward fact; an unbroken continuity of response in consciousness answering to the unbroken series of structure, function, and organic reactions; a mine, as it were, of valid suggestion, carried on within us and prompting more and more definite expression.[2]

If we choose the former, if the imagination can thus wholly escape from the established grip of responsive control inherited from the first, then what inference are we to make? The beast

objects, has become a mythical being among the most uncultivated tribes. 'The original parent of the Comanches lives, they say, in the sun. The Chichemecs called the sun their father.' The name for the sun in the language of the Salive, one of the Orinoco tribes, is, 'the man of the earth above.'" Dorman, "Origin," &c., p. 336.

[1] "This hypothesis of subconsciousness has been strangely misunderstood, and it would be hard to say at whose hands it has suffered most, those of its exponents or those of its opponents. . . Half the difficulties in the way of its acceptance are due to the manifold ambiguities of the word consciousness. . . There would be no point in saying a subject is not conscious of objects that are not presented at all; but to say that what is presented lacks the intensity requisite in the given distribution of attention to change that distribution appreciably is pertinent enough. Subconscious presentations may tell on conscious life—as sunshine or mist tells on a landscape or the underlying writing on a palimpsest—although lacking either the differences of intensity or the individual distinctness requisite to make them definite features." Ward, "Psych." ("Theory of Presentations"), "Encyc. Brit."

[2] "We as yet understand nothing of the way in which our conscious selves are related to the separate lives of the billions of cells of which the body of each of us is composed. We only know that the cells form a vast nation, some numbers of which are always dying and others growing to supply their places; and that the continual sequence of these multitudes of little lives has its outcome in the larger and conscious life of the man as a whole. Our part in the universe may possibly in some distant way be analogous to that of the cells in an organised body, and our personalities may be the transient but essential elements of an immortal and cosmic mind." Galton, "Human Faculty," p. 301. See also Reville, "Hibbert Lectures," 1884, pp. 231, 253, 254.

teaches us the lesson and law which ought, according to evolution, never to have been lost or violated. As it fears its physical, it obeys its intellectual superior, when by controlling, taming, and training it he has proved his supremacy. But primitive man simply dreads and assiduously endeavours to propitiate the very objects of which his organic inheritance ought to have taught him the unreality, ever suggesting the safety of neglecting the merely fanciful.[1] One can better understand the "civilised" mind doing things of this kind on a higher plane. That we should in some ways have less instinctive power now, after ages of artificial accretions to experience and the consequent weakening of our ties with outward nature; this seems an obvious probability. For instance, the predominance of mechanical inventive power might promote the carpenter or watchmaker idea of a Creator, and lead to His being called Artificer or Architect or Designer, &c. The life of a complex civilisation abounding in mechanical contrivances of all kinds, does tend to divorce us from simple community with nature. And yet we find that it is under these very conditions that we seem first to resume, in a critical or analytical form, the sober senses which had deserted us so cruelly in those early days just when their help was most needed. On the other hand, if we (provisionally) adopt the second alternative and proceed to test it by the materials now accumulating on all sides, we may find that some of the most grotesque parodies of nature, as well as some of the most repellent or ludicrous ceremonies and observances (religious or other) prevailing in early times, are largely failures of "translation"; failures to express worthily things which lie deep down in the centres of human experience, were true then and are true now, form part of natural order, and may soon for the first time be able to find scientific expression.[2] If so, what is first needed, here as elsewhere, is an accession of power rightly to interpret "myth, ritual, religion," and mysticism in general. And this, not according to any dogmatic ghost-theory, dream-theory, sun-myth-theory, or any other preconceived assumption, but on their own merits and in relation mainly—for this is what it is specially desired to urge

[1] "As pleasure and pain are only signs that certain of our tendencies are what is deepest in us; as they express the very depths of our personality, of our character; it follows that spontaneous attention has its roots in the very basis of our being. . . It might be a subject of wonder that so evident and striking a truth . . . should not long ago have been recognised as a common acquisition of psychology, if indeed the majority of psychologists had not obstinately persevered in the exclusive study of the higher forms of attention, that is to say, in beginning at the end." Ribot, "Psych. of Attention," p. 13. Hall and Donaldson, "Motor Sensations," &c., "Mind," No. 40, p. 572.

[2] Burdon Sanderson's, "Address at Brit. Assoc.," Sept. 1889, "Nature," Sept. 26th, 1889.

—to the facts which the newer schools of psychology are collecting for us, and to recent developments of the study of language, its growth and development on the figurative and psychological side.[1]

DISCUSSION.

Mr. F. GALTON: Lady Welby has raised two interesting questions, the one psychological, and the other social, that do not seem to have been directly raised before, and which deserve full discussion. The first question is why barbarians, who may roughly be taken to represent men whose reasoning powers are less developed by evolution than those of the more highly civilised races, should be apparently so much more superstitious and unreasoning than mere brutes, whose order of intelligence is considerably inferior to theirs. Certainly the scientific spirit has been late in making its appearance in the human race. Lady Welby's argument is that brutes are not fanciful, but are practical, and that highly civilised men are much less fanciful than barbarians, and are much more practical; how is it, then, that barbarians are so exceedingly fanciful? Moreover, the fancies of all barbarian races seem to run along parallel lines. Totemism, animism, fetiches, are almost, if not quite, universal among them. This is a psychological question, well deserving careful discussion. Speaking with diffidence, it appeared to him that the power of reasoning at all implies a considerable evolution of the imaginative or re-presentative power beyond the stage in which it is possessed by brutes, and further, that barbarians who possess that power and not much else, were as little competent as children are to distinguish with clearness between the subjective and the objective world. They are very apt to take fancy for fact. They look upon mental

[1] "As then we credit the original people with a stock of religious ideas, it follows that we may assume that certain rites and ceremonies of a religious kind were practised in the primeval period. I must, however, confess that I think their discovery is almost entirely reserved for the inquirers of the future." Schrader and Jevons, "Prehistoric Antiquities of Aryan Peoples," p. 420. Comp. pp. 244, 415. "The creative period of language, the epoch of 'roots' has never come to an end. The 'Origin of Language' is not to be sought merely in a far-off Indo-European antiquity, or in a still earlier pre-Aryan yore-time; it is still in perennial process around us." Dr. Murray, "New English Dictionary," Prefatory Note to Part III. "The investigator . . . learns from the course of growth in each current hypothesis to appreciate its *raison d'être* and full significance, and even finds that a return to older starting-points may enable him to find new paths, where the modern track seems stopped by impassable barriers. . ." Tylor, "Primitive Culture," vol, ii, p. 422; comp. vol. i, p. 24, 25. "All these facts, taken together, form unquestionably the beginning of an inquiry which is destined to throw a new light into the very abysses of our nature." James, "Princ. of Psych.," vol. i, p. 211. See also Macdonald, "Journ. Anthr. Inst.," Nov., 1890, p. 119; Paul, "Princ. of Languages," pp. xli, xlii, xliv; Geiger, "Development of the Human Race," pp. 2-4; Lloyd-Morgan, "Animal Life," &c., pp. 374-6; Croom Robertson on "Munsterberg," "Mind," No. 60, p. 530; A. F. Shand, "Mind," No. 59, pp. 361, 365, 371, 372; Ellis, "Tshi-speaking Peoples," pp. 185, 186.

association as equivalent to physical connection, and they base logically enough upon these erroneous grounds, a vast superstructure of superstition. If we recollect that the barbarian is certainly not more logical than ourselves, and that we are often very illogical, there appears no great cause of wonder at the enormous amount and variety of superstition to which he is subject, and of which the members of this Institute have very frequent opportunities of hearing described.

The second question raised by Lady Welby is why the superstitious races are not crushed out of existence by those who are less so; why it is that natural selection fails to establish non-superstitious varieties of barbarians in the place of superstitious ones?

This is a question that should be answered by means of an historical inquiry. Is it, or is it not a fact, that in conflicts between races, those who are the most superstitious are necessarily at a disadvantage? He was by no means sure on *a priori* grounds that such would be found to be the case. Superstition and illusion are great factors in national life. Among other things they feed fanaticism, of which we have had not a little recent experience among the Arabs in the Soudan. They encourage belief in supernatural aid and in immunity from the weapons of the enemy. A body of men simultaneously penetrated by such feelings as these are formidable foes. Much might be said concerning even the experience of very recent years, and of the present day, such as of occurrences among the Zulus and just now among the Red Indians of North America, who expect a Messiah and are avowedly most dangerous antagonists. A painfully interesting account of the effect of calm superstition will be found in Mr. Jephson's recent book on Emin Pasha, p. 217–250, where he describes the address made to the Pasha's men by the Dervish ambassadors, who were afterwards martyred by those men. There is scope for an enquiry of extreme historical interest into illusion as a factor of society and of government.

In conclusion, it seemed to him that the two questions he had mentioned, as being raised by Lady Welby's paper, the one psychological and the other social, were eminently deserving of discussion and suitable for it.

Sir F. Pollock was unable to agree with the general drift (so far as he was able to collect it) of Lady Welby's paper, or with the particular arguments, for the following reasons (now condensed and re-arranged) :—

(1) The superstitions of archaic societies are not a reversal of the order of evolution. What we now call degradation may, under certain conditions, be as much in the order as anything else, and even, for the time being, the only alternative to extinction. It is so with some animals. Again, these (often elaborate) beliefs are not perverted imagination, but conclusions from false theories consciously held.

(2) The argument from "survival of the fittest" is not admissible except where we know that there is effective competition. Thus, any Greek State whose armies had not troubled themselves about omens, &c., might perhaps have had a sensible advantage in the Peloponnesian War. But, as they were all about equally superstitious in this kind, their superstitions may be taken to have done one side no more harm than the other; though the scruples of Nicias (deemed excessive even then) did, in some measure, contribute to the disaster of the Sicilian expedition. In modern times experience shows that the less superstitious people, so far as there is a field of effective competition, do prevail over the more superstitious. Man, like other species, can afford to make mistakes until the conditions are realised which cause the particular mistake to become fatal or dangerous.

(3) It may be a curious and important question why archaic men should have wanted to make a theory of the universe at all. But, since they did theorise, there is nothing to wonder at in their theories being wrong. It would be much more wonderful if they had not been wrong. Our superiority is chiefly in knowing (when we do know) how far we are from complete knowledge. The belief in ancestral ghosts, &c., was a quite plausible pseudo-scientific theory in its time. We can now make it look absurd; but this is equally true of all disapproved and discredited theories. Doubtless the generic resemblance of belief and custom among widely different races is curious and deserving of enquiry; but that is not the point proposed.

(4) A tendency to right reasoning on complex facts is quite different from a tendency to right (*i.e.*, life- or race-preserving) organic "response to stimulus," and ought not to be admitted or surmised without proof. I see no reason for assuming it.

On the whole, I fail to see that there is any paradox to be accounted for. I am likewise unable to understand the "second alternative" indicated at the end of the paper, or the sense in which the word "translation" is used.

Mr. LEWIS directed the attention of the meeting to the following papers, published in the Journal of the Institute, as showing the extreme vividness and reality which dreams possessed for savages :—

Rev. Canon Culloway "On Divination and Analogous Phenomena among the Natives of Natal." Vol. i, p. 163.

E. Im Thurn "On the Animism of the Indians of British Guiana." Vol. xi, p. 360.

A. W. Howitt "On some Australian Beliefs." Vol. xiii, p. 187.

He doubted whether they knew enough about the ideas of animals and of uncivilised men to say whether the "break" that Lady Welby spoke of really existed, but he thought that so far as they did know the facts they were very much what Lady Welby considered they should be.

Dr. WILBERFORCE SMITH admitted that in the absence of the

authoress, all criticism must be discounted. He would nevertheless question the soundness of a link in her chain of argument, viz., the theory that a primitive savage might regard the benefit derived from his food as being of a "ghostly" or spiritual nature. For if we might permit ourselves to guess at the experiences and mental operations of the savage, we could not doubt, for instance, that he must have experienced times of scarcity or famine which diminished alike his own supplies and those of the surrounding animals. He must have perceived that loss of food involved loss of flesh alike to man and brute, a tangible material result which would disfavour any "ghostly" theory of nutrition. He must have further noticed that in a slight underfed condition, he was, as a rule, no match for a bigger, better fed antagonist. He would thus require no acute observation or reasoning to become persuaded of the advantage of the material substance afforded by his food. Only by an excessive stretch of imagination, could we suppose him to have regarded the benefit derived from his food, as being "ghostly" or spiritual.

As to modern beliefs in the existence of a spiritual condition of being, the speaker was not sure if he correctly understood Lady Welby's paper to assume the absurdity of all kinds of belief in spirit or ghost (Greek "Pneuma," literally "breath" or "air").

Now the field of modern science, within which the authoress arrayed her arguments, included not a few labourers who had done logical scientific work of a high order, whilst their religious views involved in some form a belief in spirit, albeit such belief was not held as a matter resting on scientific demonstration. Considering the existence of such believers, and arguing within the field of modern science, the authoress could not with propriety assume, offhand, that such men's religious belief was absurd.

Mrs. STOPES said there were many interesting points raised in Lady Welby's paper that she would like to have discussed, but she must limit herself to one, that, though modified since she heard the paper at the British Association, evidently still remained the central idea, *i.e.*, the question "Is there a complete break in Mental Evolution?" Mrs. Stopes did not think there was. The conception of the idea of Evolution is that of a series of steps so gradual as to be scarcely recognised as steps, but as mere general progression. The evolution of a race much resembles that of an individual mind. That proceeds through perception and experience to the recognition of itself as a cause. But it soon finds that external to itself and often dominating itself, and other similar creatures, were other greater and more incomprehensible causes. Errors arise from the faulty naming of those causes, through the incomplete mental development that mis-translates signs. So with races at different stages. We, standing upon the experience of centuries of civilisation, translate from the secondary causes the forces of nature, and the truths of science, within which is our conception of the prime cause as Divinity, singular, spiritual,

everlasting; they, with more limited experience and less trained minds, found their external causes many, and rendered false meanings in various superstitions. They do not harmonise their thoughts, but there is the same search after translation. There is no break, but a natural development by longer or shorter paths, through a lower to a higher stage.

The Rev. EDMUND McCLURE also took part in the discussion.

Lady WELBY has made the following observations in reply to the discussion:—

I must begin by expressing my grateful sense of the indulgent attention with which the crude effort of an untrained outsider has been received, and especially of the kind words of the President of the Meeting. I am deeply sensible at once of the gravity and difficulty of the issues raised, of their wide ultimate applications, and of my own inability to do them anything like justice. I shall be more than satisfied if I have succeeded in calling the attention of some who are better fitted to deal with them, to questions which seem to me to lie further back than any ground yet taken on the question of psycho-genesis, with reference to the primitive man's ideas about himself and the world he lives on. For instance, if we accept the view that the first development of imaginative power so overcame the sense of the tangible that the early man's world became subjective, and he took fancy for fact; we are surely assuming a sudden paralysis of what, till then, had been one of the most irresistible of evolutionary factors—the inter-relation and combination of functions, incessantly modified and thus incessantly corrected by the "environment." When we think what a slave the average man is even now to any "habit" which has its roots in some physiological process, healthy or morbid, it seems inconceivable that in days when the abstracting power was still in its infancy, the imagination should have enjoyed a freedom so entirely unhampered by its recent emergence from more "automatic" conditions. Prof. Lombroso's recent plea for physiologically derived "misoneism"—the primitive repudiation of the strange or new—belongs to this ground. And as to the suggestion sometimes made that animals "see apparitions," all that seems to be established is their shrinking from and showing terror at whatever is conspicuously alien to their experience, and thus is to them contra-natural. And that instinctive protest answers to what we might expect to find as a primitive bar to the growth of gratuitous invention in a purely fanciful ghost-world. Sheer fright and literal aversion would tend to prevent the deliberate organisation of rite or elaboration of myth. Such superstition as there was would thus be mainly of a negative character; certain localities or practices would be avoided or ignored as recalling what was puzzling and thus alarming and repulsive. Again, if we admit that superstitions may have had a preservative and even an ennobling effect (as, *e.g.*, in the case quoted, of the Dervishes) are we not altering the value of the word and suggesting that such

"superstitions" were not always so ultimately baseless as they seemed, however mistaken, grotesque, or even monstrous their expression? And in the question of "illusion" which, as the President urges, calls for fresh and historical study and illustration, we must distinguish between a primary illusion—one lurking in the central processes of "mind," and modifying all its activities—and those secondary illusions which, depending on defective interpretation (leading to mistaken inference and consequent action), may nevertheless rest upon irrefragable fact. (This, however, brings us to the further questions: where does "illusion" proper, begin? and, what do we include under the term?)

My friend Sir F. Pollock lays down a series of definite propositions which are virtually able re-statements of the ordinary view. (1) He maintains that early superstitions do not reverse an upward or advancing tendency. But he does not touch the question of a "cult of the dead" which I have ventured to raise as itself the expression of a paradox, and which cannot be denied, and is necessarily a reversal; unless, indeed, he means that there is no question of the "dead" in any such cult, but that the use of the word was then, as it is now, an implicit contradiction (*e.g.*, as in the title of a recent book, "Our dead: where are they?" Answer—If dead, how "ours" and why ask?) (2) Here there is, as yet, a lack of enquiry on the basis suggested, so that we must wait for an answer. (3) Here we come to a question which I venture to think worth more than mere statement. Primitive men, we may surely suspect, did not theorise at all in the modern sense, but strove hard for very good reasons (*i.e.*, the relief of natural craving) to use their budding function of "expression"—in whatever form—in conveying to each other certain primordial impulses running within them as strongly as the nerve or blood-currents, and as insistent in demanding outlet or prompting "explosion" as the most fundamental of organic energies. Thus the "generic resemblance of belief" becomes an important part of the point proposed; that would be the result of its actually generic character or origin, and its intimate links with the very starting points of life. (4) Of course a tendency to right reasoning (in the philosophical or scientific sense) is quite different from a tendency to right organic response to stimulus. But I did not intend to relate the two; what I supposed to be linked in an unbroken continuity was organic, rising to conscious and mental "response to stimulus." The real question seems to me here to be, where does the literal use of the phrase end, and the metaphorical begin? As to "breath" taken to represent and express the "dead" or the "double" it seems, on the usual assumptions, absurd. But question these, and, of course, there may be good reasons for its symbolic selection, as there may be important realities which it symbolises better than anything else within reach could do. Everywhere the question recurs: Are we quite sure that our tacit assumptions are invulnerable? Have we begun far enough up in the stream of "experience," or penetrated

far enough into the secret springs of "mind" to justify them? This remains to be seen. But apart from disabilities, which no one can feel more strongly than myself, it is obvious that within the limits of a single paper, only the barest indication can be given of the line of thought suggested, and but few out of many points even touched upon.

Mr. FRANCIS GALTON exhibited some Patterns of Finger Marks. (See page 360.)

JANUARY 13TH, 1891.

E. W. BRABROOK, Esq., F.S.A., *Vice-President, in the Chair.*

The Minutes of the last meeting were read and signed.

The following elections were announced:—

FRANK PEARCE, Esq., of Lake Road, Landport, Portsmouth.

L. A. WADDELL, Esq., M.B., of Darjiling, India.

The following presents were announced, and thanks voted to the respective donors:—

FOR THE LIBRARY.

From Dr. BEDDOE.—Ethnographie de la France. By Alph. Castaing.
From the AUTHOR.—The Convolutions of the Brain. By Sir William Turner, Knt.
—— L'Atlantide. By Ferdinando Borsari.
—— Censo General de la Ciudad de Buenos Aires, 1887. 2 vols.
From the PUBLISHER.—Folk-Lore. Vol. i. No. 4.
—— Der Hohencultus Asiatischer und Europaischer Volker. By Ferd. Freih. v. Adrian.
From the STATE BOARD OF HEALTH, MASSACHUSETTS.—Forty-eighth Report to the Legislature of Massachusetts, for 1889.
—— Twenty-first Annual Report.
From the GOVERNMENT OF PERAK.—The Perak Government Gazette. Nos. 28, 31, 32, 34.
From Professor AGASSIZ.—Annual Report of the Curator of the Museum of Comparative Zoology at Harvard College for 1889–90.
From the BERLIN GESELLSCHAFT FÜR ANTHROPOLOGIE, ETHNOLOGIE UND URGESCHICHTE.—Zeitschrift für Ethnologie. 1890. Heft 5.