

Alfred Korzybski Memorial Lecture

TWO KINDS OF COGNITION AND THEIR INTEGRATION

A. H. Maslow

Professor of Psychology, Brandeis University

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My remarks this evening are partly a reflection of a personal struggle to put together in the same skin diverse personality elements, to fuse 'opposites' into unities, and to make incompatibles compatible with each other. This personal non-Aristotelian struggle toward integration and unity I share with you and with all of mankind, and therefore I hope that you will think it to have more than mere autobiographical relevance.

When I began trying to solve this problem I phrased it simply as making a fusion of the artist and the scientist, or rather of the aesthetic way of viewing the world and the scientific-philosophical kind of cognition. In a paper published in 1948 called 'Cognition of the Particular and the Generic' [7, Chap. 14], I tried hard to point out that these two kinds of cognition meant two very different kinds of people, who selected out two very different kinds of worlds. Anything or anybody can be seen in itself as unique, idiosyncratic, raw and concrete, i. e. as different from anything else in the world, or it can be responded to not as unique or per se but as typical, i. e. as an example or sample of one or another class or category or rubric. That is, what is perceived is not it, but the ways in which it is similar to other things, which in turn means that not all of it is perceived but only those abstracted aspects of it which are needed for classifying it. This I called 'rubricizing,' i. e. placing under a rubric, and likened it to the file clerk who has to perceive only enough of the letter to be able to file it under A or B or C.

It seemed clear to me that much of what is called cognition of the world is in fact an avoidance of real cognition, a dodge made necessary by unconscious fears, a safety-device which protects the person from change, flux, and process by making believe they don't exist. Now since change is in fact an im-

portant aspect of reality, any man who denies it or tries to freeze the world is essentially denying reality and blinding himself. In the man who can cognize well only what is static, his attending, perceiving, learning, remembering and thinking deal with staticized abstractions, with theoretical categories and contentless words rather than with reality itself.

But these are not accidental character differences in cognizing. Different kinds of people choose a preferred mode of cognition, or even are forced to a necessary mode of cognition. For instance, to take an extreme case, the compulsive-obsessive neurotic has to rubricize. He has no alternative. This is a way in which he can achieve safety and order, lack of threat and anxiety. Orderliness, predictability, control, mastery are made possible for him by rubricizing and staticizing. Thus nothing new (and therefore threatening) can happen to him if he can order it to his past experience, if he can freeze the world of flux.

But see what we can learn if we understand why he has to do this. What is he afraid of? The answer of the dynamic psychologist is that he is afraid of his emotions or of his deepest instinctual urges which he desperately represses. This internal drama of fear and defense is generalized and projected outward upon the cosmos. And then anything that endangers this precarious victory, anything that strengthens the dangerous impulses or weakens the defensive walls will frighten and threaten him.

Much is lost by this process, for in order to protect himself against the 'dangerous' portions of his unconscious, he must wall off everything unconscious. There was an ancient despot who killed everyone in the city, guilty and innocent alike, in

order to be sure that a few guilty ones wouldn't go free. Similarly our man, along with the dangerous emotions, also kills off his ability to play or to enjoy, to weep, to laugh, to loaf, to be spontaneous, to have fun; he gives up his creativeness, his poetry, and his art; he drowns all his healthy childishness, everything fantastic, nonsensical, or 'crazy.'¹

The two ways of viewing the world and of dealing with it quite clearly have to do with personality and its needs, its fears and its hopes. This can be demonstrated not only from pathology but also positively from health. What can be learned about our subject from our healthiest and most fully evolved people? How do they perceive the world?

I have two preliminary researches upon which to base my answer. One published in 1950 is a study of people selected out as self-actualizing, self-fulfilling people, healthy people satisfied in their basic needs and actualizing their potentialities and capacities [7, Chap. 12]. (Since publication I have been able to find another half dozen cases to study and I feel somewhat more sure of my conclusions than I did then. On the whole they have been confirmed by my additional cases with only one major exception.)

The finding that was most relevant to our present effort was what I described as 'more efficient perception of reality and more comfortable relations with it.' The first form in which this capacity was noticed was as an unusual ability to detect the spurious, the fake, and the dishonest in personality, and in general to judge people correctly and efficiently.

As the study progressed, it slowly became apparent that this efficiency extended to many other areas of life--indeed all areas that were tested. In art and music, in things of the intellect, they perceived more swiftly and more correctly than others.

At first this was phrased as good taste or good judgment, the implication being relative and not absolute. But for many reasons (some to be detailed below), it has become progressively more clear that

this had better be called perception (not taste) of something that is absolutely there (reality, not a set of opinions).

If this is so, it would be impossible to over-stress its importance, for it implies that the neurotic person is not only relatively but absolutely inefficient, simply because he does not perceive the real world as accurately or as efficiently as does the healthy person. The neurotic is not only emotionally sick; - he is cognitively wrong! If health and neurosis are, respectively, correct and incorrect perceptions of reality, propositions of fact and propositions of value merge in this area, and in principle, value propositions should then be empirically demonstrable rather than merely matters of taste or exhortation.

One particularly impressive and instructive aspect of this superior relationship with reality is that self-actualizing people distinguish far more easily than most, the fresh, concrete, and idiographic from the generic, abstract, and rubricized. The consequence is that they live more in the real world of nature than in the man-made mass of concepts, words, abstractions, expectations, beliefs, and stereotypes that most people confuse with the world. They are therefore far more apt to perceive what is there rather than their own wishes, hopes, fears, anxieties, their own theories and beliefs, or those of their cultural group. 'The innocent eye,' Herbert Read has very effectively called it.

The relationship with the unknown seems to be of exceptional promise as another bridge between academic and clinical psychology. Our healthy subjects are relatively unthreatened and unfrightened by the unknown, being therein quite different from average men. They accept it, are comfortable with it, and, often are even more attracted by it than by the known. They not only tolerate the ambiguous and unstructured; they like it. Quite characteristic is Einstein's statement, 'The most beautiful thing we can experience is the mysterious. It is the source of all art and science.'

¹Not only repression and fear lead to rubricizing. Schachtel in a classical paper [11] has made this very clear. So also have the general-semanticists [5, 3]. Many, very funny examples, may be found in 1066 AND ALL THAT by W. C. Sellar and R. J. Yeatman [12] which sets forth the pathetically humorous ways in which young minds rubricize when trying to understand and remember the intricate course of English history. Only so can they impose some degree of unity and structure upon the chaos of disconnected facts. This is what we all do when we don't watch out, but we can see it more nakedly in children. See also Smillie [13].

Since for the healthy people, the unknown is not frightening, they do not have to spend any time laying the ghost, whistling past the cemetery, or otherwise protecting themselves against imagined dangers. They do not neglect the unknown, or deny it, or run away from it, or try to make believe it is really known, nor do they organize, dichotomize, or rubricize it prematurely. They do not cling to the familiar, nor is their quest for the truth a catastrophic need for certainty, safety, definiteness, and order, such as we see in an exaggerated form in Goldstein's brain-injured people [2] or in the compulsive-obsessive neurotic. They can be, when the total objective situation calls for it, comfortably disorderly, sloppy, anarchic, chaotic, vague, doubtful, uncertain, indefinite, approximate, inexact, or inaccurate (all, at certain moments in science, art, or life in general, quite desirable).

Thus it comes about that doubt, tentativeness, uncertainty, with the consequent necessity for delay of decision, which is for most a torture, can be for some a pleasantly stimulating challenge, a high spot in life rather than a low.

It is possible to get another angle on our subject by moving around it, so to speak, and viewing it from the vantage point of a different kind of data. I refer to the efforts particularly of Freud and Jung to understand the cognitive differences between conscious and unconscious, between waking and dreaming life. Much as they may have differed in their theories of conation (urge, instinct, drive), they agreed fairly well in their recognition of two very different kinds of cognizing. And I must emphasize that I speak now of discovery and not of invention, of pure empiricism and not of theory construction. It is possible to argue about Freudian theories and to accept or reject them as good or bad ways of ordering the data; it is not possible to argue about the facts of primary and secondary process cognition [1, 10].

Very briefly, primary processes are the truly intra-psychic processes having nothing to do with external reality. Secondary processes are those that take account of the non-psychic world of physics, chemistry, biology and of external social reality and are cognitions of and adaptations to these extra-psychic necessities.

So far this distinction has pretty well paralleled the distinction between the conscious and unconscious and if it helps you, you may make primary process synonymous with the unconscious, and secondary process with the conscious. But I emphasize that this is

precisely the dichotomy that I am trying to resolve and leave behind me. I believe that the next step in human integration is to fuse the primary and secondary processes, so as to make them both more conscious (more mature) and both more unconscious (more automatic and spontaneous and less self-conscious). As is so frequent in dichotomizing what is intrinsically related and interdependent, the very process itself creates two monsters where none was before.

Briefly then, dichotomized primary process perception looks out at the world through the eyes of wishes, fears, and gratifications. It is alogical, in the sense of having no negatives, no contradictions, no separate identities, no opposites, no mutual exclusions. It is independent of controls, taboos, discipline, inhibitions, delay, planning, calculations of possibility or impossibility, even of the demands of other wishes. It has nothing to do with time and space, or with sequence, order or causality, or other laws of the physical world. When it is placed under the necessity of disguising itself from conscious awareness, it can condense several objects into one (e.g. the dreamer can be simultaneously male and female, or himself and someone else too); it can displace emotions from their time objects to other 'harmless' ones; it can obscure by symbolizing. It can be omnipotent, omniscient, ubiquitous. It has nothing to do with action for it can make things come to pass without doing or acting. For most people it is pre-verbal and concrete, closer to raw experiencing, usually visual. It is pre-valuational, pre-moral, pre-ethical, pre-cultural. It is prior to good and evil.

Because in most civilized beings, it has been walled off by dichotomizing, early in the person's life, it is childish, immature, crazy and dangerous, a hell rather than a heaven. It remains forever a child's unconscious. The adult in whom the unconscious overwhelms the conscious controls, is a schizophrenic, an unhappy, frightened person who can no longer discriminate between his wishes and fears and external reality. He tries desperately to cling to reality as his salvation, but is torn away from it, frightened and screaming. He is certainly no one to envy. Simply giving freedom to a sickened unconscious, which is what most of us have, and to primary processes that we are afraid of and consider 'crazy', is certainly no solution. The conscious must grow up enough and become strong enough to dare friendliness with the enemy. A fair parallel can be found in the relations between men and women. Men have been afraid of women and

have therefore dominated them, for very much the same reasons I believe, that they have been afraid of their primary processes and tried to control and master them. Between a frightened master and a resentful slave, no true love is possible. Only as men become strong enough and self-confident enough themselves, can they tolerate and finally enjoy self-actualizing women. But no man can fulfill himself without such a woman. Ergo, strong men and strong women are both the condition, the cause and the reward of each other. Ergo, healthy primary and secondary processes need each other's health, in order to fuse into a true integration.

The secondary processes, walled off and dichotomized before such fusion, can be considered largely an organization generated by fears and frustrations, a system of defenses, repressions and controls, of appeasements and cunning underhanded negotiations with a frustrating and dangerous physical and social world which is the only source of gratification of needs and wishes but which makes us pay dearly for whatever gratifications we get from it. Such a 'sick' conscious, or ego, becomes aware of and then lives by what it conceives to be the laws of nature and society. This company will understand if I say that these are in general Aristotelian and pragmatic. And as we know, they therefore cost a great deal even in the true perception of the world of nature, of people. We have seen that the compulsive-obsessive person not only loses much of the pleasures of living but also he becomes cognitively blind to much in himself and in other people, and even in nature. It is true he gets things done, but which 'things'? We know now that many of our scientists, especially in the natural sciences, are this sort of person. No wonder that they tend to develop what I may call a 'dichotomized secondary process science', as often dangerous as it is helpful, as often obfuscating as clarifying.

Chronologically our knowledge of primary processes derived first from studies of dreams and fantasies, of neurotic processes and later of psychotic processes. Only little by little has this knowledge been freed of its taint of pathology, of irrationality, immaturity and primitivity (in the pejorative sense). Only recently have we become aware, fully aware, from our studies of healthy people, of the creative process, of play, of esthetic perception, of the meaning of love, of healthy growing to becoming, that every human is both poet and engineer, both rational and non-rational, both child and adult, both masculine and feminine, both in the psychic world and in the world of physical and biological nature [4]. Only slowly have we learned what we lose by trying vainly

to be only and purely rational, scientific, logical, sensible, practical and responsible. Only now are we becoming quite sure that the integrated person, the fully evolved and matured person, the fully functioning and self-actualizing person must be available to himself at both these levels. Certainly it is now obsolete to stigmatize this side of human nature as sick rather than healthy, evil rather than good, lower rather than higher, selfish rather than unselfish, beastly rather than human. No longer can we dichotomize ourselves into a cave man and a civilized man, into a devil and a saint. We can now see this as an illegitimate either-or, in which by the very process of splitting and dichotomizing, we create a sick 'either' and a sick 'or', a sick conscious and a sick unconscious. Once we transcend and resolve the dichotomy, recognizing the dichotomizing itself to be a pathological process, it becomes theoretically possible for our civil war to end.

This is precisely what happens in self-actualizing people and in those self-actualizing moments that I call peak-experiences [8]. This is a phrase I have used to generalize what is common in the love experience, the parental experience, the mystic (or oceanic, or cosmic) experience, the aesthetic perception, the creative moment, the therapeutic or intellectual insight, the orgasmic experience, certain forms of athletic bodily and play fulfillment, and other more idiosyncratic moments of great happiness and fulfillment.

In such moments, all the powers of the person come together in their most efficient and enjoyable integration and coordination. Inhibition, doubt, fear, control, self-criticism, caution, all diminish toward the zero-point and he becomes the spontaneous, effective, fully-functioning organism, performing like an animal without conflict, or split, without hesitation or doubt, in a great flow of power that is so peculiarly effortless that it may become like play, masterful and virtuoso-like.

In these peak-experiences there is a complete, even though momentary, loss of fear, anxiety, inhibition, defense and control, a giving up of renunciation, delay and restraint. The fear of disintegration and dissolution, the fear of being overwhelmed by the 'instincts', the fear of death and insanity, the fear of giving in to unbridled pleasure, emotion and gratification, the fear of punishment, the fear of sin, all tend to disappear or to be pushed aside for the time being.

In the Freudian vocabulary, this may be seen as

a fusion of ego, id, superego and ego-ideal, of conscious and unconscious, of primary and secondary processes, a synthesizing of pleasure principle with reality principle, an enjoyable regression without fear in the service of the greatest maturity, a giving up of the defenses, a true integration of the person at all levels.

This experience may be thought of as pure gratification, pure expression, pure, non-defensive elation, as pure momentary self-actualization, of experience-of-Being. It therefore represents still another instance of the resolution of normally dichotomous concepts at higher levels of psychological functioning [7, p. 232].

What happens to cognition when, in these peak experiences, the personality fuses into a fully-functioning, idiosyncratic whole? Very briefly listed, my findings are that then

1. The percept tends to be seen as a whole, detached from relations, from possible usefulness, from expediency and from purpose.
2. The percept is exclusively and very fully attended to.
3. The world is seen more in itself, and less in its relevance to human concerns.
4. The perception becomes richer.
5. Perception becomes relatively ego-transcending, self-forgetful, egoless.
6. The peak-experience is felt as a self-validating, self-justifying moment which carries its own intrinsic value with it.
7. In such moments, there is a very characteristic disorientation in physical time and space.
8. The world is seen either as beyond good and evil, or as positively good, wonderful and desirable, and is never evil or painful or bad or undesirable.
9. The experience is more absolute and less relative.
10. This kind of cognition is much more passive and receptive than active.
11. Cognition acquires a special flavor of wonder, of awe, or of humility before the experience.

12. If a small portion of the world is seen, it is perceived as if it were for the moment all of the world.

13. Perceiving becomes much more concrete and aesthetic.

14. Dichotomies, polarities, conflicts, contradictions, opposites and inconsistencies tend to fuse and be resolved.

15. The perceiver tends to accept what he perceives completely, lovingly and without condemnation in a godlike fashion.

16. Perception tends very strongly to be ideographic and non-classificatory.

CONCLUSION

The 'Aristotelian' way of viewing the world is less isomorphic with the external world than is the 'non-Aristotelian' cognitive scheme. In large part this is due to the fact that dichotomizing, taxonomizing, identifying words with objects, elementalizing, and atomizing, etc., are very often themselves pathological processes, arising from pathology and expressing it, thereby yielding a view of the world which is 'correctly' pathological. It is not only that we have advanced in knowledge of the external world, of culture, and of language. We have also advanced in knowledge of both the depths and heights of human nature. Each of these advances has put a strain upon the others to advance in proportion, and also none of these advances could have been made if the others were too far behind.

Specifically what I am leading up to is that our new knowledge of psychological health not only validates a non-Aristotelian orientation, but in turn enriches it, makes new demands upon it, makes it more possible to fulfill these new demands. The problem that I have been presenting this evening is a case in point. Language is still mostly a mode of describing the outside world, the 'secondary process world' I might call it. But if health consists partially of a graceful coexistence, or better said, a transcendence of the dichotomy between the primary process world and the secondary process world, of the psychic and physical, the inner and the outer, the aesthetic and the pragmatic, then we must have a science, a mathematic, and a language not only of the primary process world but also of this new world which transcends and includes it.

But observe that these requirements are already partially satisfied by the languages of the dance, of music, of fantasy and dream and free association, of the visual arts and of poetry. To what extent is it possible to fuse these into the English language as we know it today. To what extent can it be enlarged to do everything it now can, plus better primary process communication, for instance, by using the body more, by using tones more, by more use of poetic ways of communicating, by more free association, by being more 'physiognomic' [14]? I suspect that with such changes, we can make our communicating far richer than it now is.

To sum up, I have been talking about the too great schism between the rational and the intuitive, or rather about the damages wrought to both the rational and the intuitive by this illegitimate schism. Rationality is one thing when it is joined harmoniously with intuition; it is another thing, quite different, when it is torn away from intuition and they are made mutually exclusive. So also for science and for mathematics. So also for common sense and for practical living. So also for education and language. Cut off from our psychic depths by fear, they are merely defensive maneuvers, frantic efforts at mastery and control, rigid, inflexible, compulsive, partial rather than whole, anxious rather than enjoying, repressive rather than liberating and enlarging [9].

So also of course for the other side of the coin. Intuition, impulse, wish, emotion, immediate gratification sliced off from intrinsic fusion with the rational and the external--real, also become sickish, uncriticized, uncontrolled, ineffectual, self-defeating, dangerous, frightening, disorderly, unsatisfying. Sheer living and surviving-in-the-world becomes impossible. At this level of functioning, even enjoyment, pleasure, art and play are available only at the most primitive, underdeveloped levels, and growth forward becomes impossible, as does any kind of progress or of learning.

I hope I have made my point clear. Only by resolving and transcending the dichotomy between primary and secondary processes, conscious and unconscious, rational and intuitive, scientific and aesthetic, work and play, abstract and concrete, rubricizing and direct experiencing, can we perceive all of the world and of ourselves. Only thereby can we create whole-science, whole-language, whole-mathematics, whole-art, whole-education, and whole-people.

BIBLIOGRAPHY

1. Freud, S., The Interpretation of Dreams, in The Basic Writings of Freud. New York: Modern Library, 1938.
2. Goldstein, K., The Organism. New York: American Book, 1939.
3. Hayakawa, S. I., Language in Action. New York: Harcourt, Brace, 1942.
4. Kepes, G., The New Landscape in Art and Science. Chicago: Theobald, 1957.
5. Korzybski, A., Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics (1933). Lakeville, Conn.: International Non-Aristotelian Library Publishing Co., 3rd ed., 1948.
6. Marcuse, H., Eros and Civilization. Boston: Beacon Press, 1955.
7. Maslow, A. H., Motivation and Personality. New York: Harper, 1954.
8. Maslow, A. H., 'Cognition of Being in the Peak-Experiences.' To be published.
9. Moustakas, C., The Self. New York: Harper, 1956.
10. Rapoport, D., Organization and Pathology of Thought. New York: Columbia University Press, 1951.
11. Schachtel, E., 'On Memory and Childhood Amnesia,' Psychiatry. 1947, 10, 1-26.
12. Sellar, W. C., and Yeatman, R. J., 1066 and All That. New York: Dutton, 1931.
13. Smillie, D., 'Truth and Reality from Two Points of View.' In Moustakas (9).
14. Werner, H., Comparative Psychology of Mental Development. New York: Harper, 1940.

ABRAHAM H. MASLOW

The author of 'Two Kinds of Cognition' is professor of psychology and chairman of the department, Brandeis University. He was born in New York (1908) and educated at the University of Wisconsin, 1930 BA, Phi Beta Kappa; 1931 MA, Sigma Xi; 1934 PhD. He was research assistant in social psychology at Wisconsin, 1929-35, then spent two years as Carnegie Fellow at Columbia University with a grant from the Social Science Research Council. He taught at Brooklyn College from 1937 until 1951 when he joined the Brandeis faculty. President of the American Psychological Association 1953-56; he was formerly Fellow in the Division of Abnormal and Clinical Psychology, and the Division of Personality and Social Psychology; is now Fellow in the Division of Aesthetics. [Continued on p. 40]