

MEANINGS OF "AND"

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The word "and" has many meanings relative to how much or how little union is intended of two or more things (or of words naming the things) being joined by it.

Concern about the significance of meanings of "and" has been sharpened by the postulation in Principia Mathematica, for example, that precision requires interpreting "and," symbolized by a dot, " \cdot ," as in " $p \cdot q$ " as a completely external relation. "P" and "q" are understood as completely unrelated except as jointly asserted. But the joint assertion is intended to have no effect at all on the natures of "p" and "q" and to introduce no relation between the two other than the external relation of joint assertion.¹

An opposite extreme interpretation can be found in the increasingly studied Advaita Vedanta where the indescribable Nirguna Brahman is nevertheless described as involving (as completely identical) sat (being), chit (awareness), and bliss (ananda) and named, not "sat," "chit," and "ananda," but "satchitananda" to indicate something so completely unified that no difference at all exists between sat, chit and ananda. When "and" is used to join "sat," "chit," and "ananda" in "satchitananda," the meaning of "and" is intended to be that of complete identity.²

Increasing appreciation of Taoism and its yin-yang doctrine of mutually complementary functions of initiation (yang) and completion (yin) in the processes through which things, by nature, come into being, grow to maturity, ripen and wither, and go out of being, provide another significant meaning of "and." The Tao symbol depicts Tao as constituted completely by yang (dark) and yin (light) in such a way that their division appears as a S-curve and such that a diamenter line turning on a central axis will always be covering some of both yang and yin; to make certain that Tao is always both yang and yin, a bit (large dot) of each is depicted in the center of the other. Here we have a meaning of "and," or of "both-and," such that both of the two different ways of being participate with each other equally in constituting what is joined or, rather, what is itself a unity manifesting itself equally in these two ways.³

Today, when entrenched analytical philosophers and cyberneticists encounter more difficulties causing interest in "more holistic" interpretations of the nature of things, issues concerning the nature of whole-part interdependencies are receiving more attention. The history of stages in the development conceptions of the nature of systems is a long one.⁴ Consensus has not been reached, but I have formulated a contrast between emergentistic

ideas as expressed by Arthur Koestler and structuralist ideas as expressed by Ervin Laszlo and then have shown how a more adequate explanation can be stated by organicism which synthesizes constructive ideas from each. Organicism claims that existing organic wholes, which include both all of the parts which are not the whole and the whole as opposed to the parts and their interrelations, interdependencies and interactions, require more complexly integrated conceptions needed to approximate adequately what is being sought by those seeking "more holistic" explanations.

Here "and" is conceived as involving polarity, with two different things functioning as two poles understood as complementary opposites, or antitheses, also sharing a common dimension with respect to which they are related. My favorite examples: Good and bad are different, but are alike in being values.⁵ Whereas relations, interpreted as external, exclude opposites contradictorily, interpreted as internal, identify the opposites as mutually inclusive, organicism interprets all existing relations as double-aspected, i.e., as having both internal and external aspects. Two things must be different (external) in order to be two and also must be alike (internal) in sharing the same relation.⁶

The organicist concept of polarity has been explained in a chapter on "Theories of Polarity" where a "Diagram of Types" facilitates systematic exposition of the complexities involved in polarities and provides a basis for its theory of meanings of "and."⁷ In what follows, the organicist theory of the meanings of "and" is summarized in accordance with its Diagram of Types:

1. Extreme one-pole-ism: "And" means complete mutual inclusion or complete identity, of the two or more things named with it. Each thing completely includes, and is included by, the other(s). Therefore, it is false that "and" does not mean mutual inclusion, or identity in some way, of the two or more things named with it, but means only indication of their coexistence.

2. Extreme other-pole-ism: "And" does not mean mutual inclusion, or identity in any way, of the two or more things named with it, but only indication of their coexistence. Each of the things may completely exclude the other(s) so far as what "and" means is concerned. Therefore, it is false that "and" means complete mutual inclusion, or complete identity, of the two or more things named with it.

3. Modified one-pole-ism: "And" means mutual inclusion, or identity, in some way, more than it does not mean mutual inclusion, in some way, of the things named with it. Therefore, it is false that "and" does mean mutual inclusion, or identity in some

way, more than it does not mean mutual inclusion, or identity is some way, of the things named with it.

4. Modified other-pole-ism: "And" does not mean mutual inclusion, or identity in some way, more than it does mean their mutual inclusion, or identity in some way, of the things named with it. Therefore, it is false that "and" means mutual inclusion, or identity in some way, more than it does not mean mutual inclusion, or identity in some way, of the things named with it.

5. Extreme dualism: The way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" does not mean mutual inclusion, or identity in some way, of the things named with it, are completely different ways. Therefore, it is false that the way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" does not mean mutual inclusion, or identity in some way, of the things named with it, are the same ways.

6. Extreme aspectism: The way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" does not mean mutual inclusion, or identity in some way, of the things named with it, are the same way (completely the same, or non-different, way). Therefore, it is false that the way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" does not mean mutual inclusion, or identity in some way, are completely different ways.

7. Modified dualism: The way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" means does not mean mutual inclusion, or identity in some way, of the things named with it, are more different than alike. Therefore, it is false that the way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" does not mean mutual inclusion, or identity in some way, of the things named with it, are more alike than different.

8. Modified aspectism: The way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" does not mean mutual inclusion, or identity in some way, of the things named with it, are more alike than different. Therefore, it is false that the way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" does not mean mutual inclusion, or identity in some way, of the things named with it, are more different than alike.

9. Extreme middlism: "And" means mutual inclusion, or

identity in some way, and does not mean mutual inclusion, or identity in some way, of the things named with it, equally (exactly equally). These two aspects of the meaning of "and," mutual inclusion, or identity in some way, and not mutual inclusion, or not identical in some way, are equally aspects of its meaning. Therefore, it is false that "and" means mutual inclusion, or identity in some way, and does not mean mutual inclusion, or identity in some way, of the things named with it, unequally.

10. Extreme equalism: The way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" does not mean mutual inclusion, or identity in some way, of the things named with it, are equal (exactly equal) in likeness and difference. Therefore it is false that the way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" does not mean mutual inclusion, or identity in some way, of the things named with it, are unequal (never exactly equal) in likeness and difference.

11. Modified middlism: "And" means mutual inclusion, or identity in some way, and does not mean mutual inclusion, or identity in some way, of the things named with it, unequally (never exactly equally). Therefore, it is false that "and" means mutual inclusion, or identity in some way, and does not mean mutual inclusion, or identity in some way, of the things named with it, equally (exactly equally).

12. Modified equalism: The way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" does not mean mutual inclusion, or identity in some way, of the things named with it, are unequal (never exactly equal) in likeness and difference. Therefore, it is false that the way in which "and" means mutual inclusion, or identity in some way, and the way in which "and" does not mean mutual inclusion, or identity in some way, of the things named with it, are equal (exactly equal) in likeness and difference.

13. Organicism: A. Positive: The organicist theory of the meaning of "and" includes the view that there is (the following statements are jointly asserted):

- (1) a sense in which "and" means complete inclusion, or identity in some way, of the things named with it.
- (2) a sense in which "and" does not mean mutual inclusion, or identity in some way, of the things

named with it, but means only indication of their coexistence.

- (3) a sense in which "and" means mutual inclusion. . . more than it does not mean mutual inclusion. . .
- (4) a sense in which "and" does not mean mutual inclusion. . . more than it does mean their mutual inclusion. . .
- (5) a sense in which the way "and" means mutual inclusion. . . and the way "and" does not mean mutual inclusion. . . are completely different.
- (6) a sense in which the way "and" means mutual inclusion. . . and the way "and" does not mean mutual inclusion. . . are the same way.
- (7) a sense in which the way "and" means mutual inclusion. . . and the way "and" does not mean mutual inclusion. . . are more different than alike.
- (8) a sense in which the way "and" means mutual inclusion. . . and the way "and" does not mean mutual inclusion. . . are more alike than different.
- (9) a sense in which "and" means mutual inclusion. . . and does not mean mutual inclusion. . . equally.
- (10) a sense in which the way "and" means mutual inclusion. . . and the way "and" does not mean mutual inclusion. . . are equal in likeness and difference.
- (11) a sense in which "and" means mutual inclusion. . . and does not mean mutual inclusion. . . unequally.
- (12) and a sense in which the way "and" means mutual inclusion. . . and the way in which "and" does not mean mutual inclusion. . . are unequal in likeness and difference.

B. Negative: The organicist theory of the meaning of "and" includes the view that (joint affirmation of all of the following):

- (1) It is false that there is no sense in which "and" does not mean mutual inclusion, or identity in some way, of the things named with it, but means only their coexistence.
- (2) It is false that there is no sense in which "and" means complete mutual inclusion, or complete identity, of the things named with it.
- (3) It is false that there is no sense in which "and" does not mean mutual inclusion. . . more than it does mean mutual inclusion. . .
- (4) It is false that there is no sense in which "and" means mutual inclusion. . . more than it does not mean mutual inclusion. . .
- (5) It is false that there is no sense in which the way "and" means mutual inclusion. . . and the way in which "and" does not mean mutual inclusion. . . are alike or are the same way.
- (6) It is false that there is no sense in which the way "and" means mutual inclusion. . . and the way in which it does not mean mutual inclusion. . . are completely different.
- (7) It is false that there is no sense in which the way "and" means mutual inclusion. . . and the way in which it does not mean mutual inclusion. . . are more alike than different.
- (8) It is false that there is no sense in which the way "and" means mutual inclusion. . . and the way in which "and" does not mean mutual inclusion. . . are more different than alike.
- (9) It is false that there is no sense in which "and" means mutual inclusion. . . and does not mean mutual inclusion. . . unequally.
- (10) It is false that there is no sense in the way in which "and" means mutual inclusion. . . and the way in which "and" does not mean mutual inclusion. . . are unequal in likeness and difference.

(11) It is false that there is no sense in which "and" means mutual inclusion. . . and does not mean mutual inclusion. . . equally.

(12) It is false that there is no sense in which the way "and" means mutual inclusion. . . and the way in which "and" does not mean mutual inclusion. . . are equal in likeness and difference.⁸

If the reader experiences a bit of weariness in attending to the seemingly repetitious statements and wishes for a more condensed statement (such as that given above: "Every relation, including 'and,' has both internal and external aspects"), he may wish to be reminded of the purpose of expositions assisted by the Diagram of Types. In the interest of comprehensiveness, each of twelve distinctive theories is stated positively in ways making clear how some contradict others, together with a denial ("It is false that 'and' does not mean. . .") of its contradictory in ways making clear how some contradict others. Although some would prefer using "exclusion" as a contradictory for "inclusion," organicism conceives inclusion and exclusion as complementary opposites rather than as contradictory and so presents "does not mean mutual inclusion" as a contradictory for "means mutual inclusion" for present purposes. In doing this it has to select one meaning of "not" (contradiction) from the many meanings exposed in its own treatment of "meanings of negation."

Having stated the twelve theories which, including their contradictions of each other, cannot be true together, organicism then selects and abstracts from each of the twelve theories "a sense in which" a truth about the meaning of "and" is stated and affirms these together without contradiction. It then states and jointly affirms twelve denials of the contradictories of each of the "there is a sense in which" statements without contradiction. In this way organicism exhibits a carefully crafted comprehensive statement of a full range of meanings of "and."

NOTES

1. See Alfred North Whitehead and Bertrand Russell, Principia Mathematica, Second Edition Vol. I, (London: Cambridge University Press, 1925), p. 6.

2. "Brahman is pure identity. It is absolutely undifferentiated." Jadunath Sinha, History of Indian Philosophy, Vol. II (Calcutta: Central Book Agency, 1952), p. 498.
3. See my Tao The King by Lao Tzu (New York: Federick Ungar, 1958), especially p. 73-92.
4. See my "Five Types of Systems Philosophy," Behavioral Science 8 (1983), 204-218. Also "Holons: Three Conceptions," Systems Research 1 (1984), 145-150.
5. See my Axiology: The Science of Values (Albuquerque, NM: World Books, 1980), p. 51-53.
6. See my "Relations," Proceedings of the New Mexico-West Texas Philosophical Society (1972), p. 49-57.
7. See my Polarity, Dialectic, and Organicity (Springfield, IL: Charles C. Thomas, 1970), Ch. II.
8. For a similar treatment of "not," see "Meanings of Negation," Philosophy and Phenomenological Research (1961), p. 179-184.