

Affirmation-Negation: New Perspective

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Abstract: The general aim of the present paper is to eliminate negation entirely from logic and display a new mapping of affirmative-negative pattern. Here we examine negation in the purported presuppositional symmetry and asymmetry and reveal the polemic warefare between symmetricalists and asymmetricalists in the history of negation.

It should be noted that the principle of one-to-one correspondence can only apply to propositions, not to sentences. So, formal logic is entirely flawed or at least totally inadequate to describe the behavior of natural language. Some affirmative sentences have no directly corresponding negation, while some negative sentences lack any affirmative counterpart.

In symmetrical concept affirmation and negation are defined as units of the same level, while in asymmetrical doctrine they belong to different levels. Affirmation and negation function as two poles that are distantly located from each other and there can't be made a bridge between them. Even in dictionaries we find the following definitions of "pole": one of the two things that are completely opposite (*Macmillan English Dictionary For Advanced Learners*, 2002), either of two opposed or differentiated forces, parts or principles (*Webster's New World Dictionary*, 1988).

Then we come to the conclusion that affirmation and negation are two sides of the same coin. Though they are opposed to each other but negation, being a logico-grammatical category, presupposes affirmation and affirmation presupposes negation. Negation and statement are logically equivalent but communicatively uninterchangeable.

Key words: affirmative-negative pattern, presuppositional symmetry and asymmetry, conception of negation

Firstly, we trace a variety of attempts seeking to eliminate negation entirely from logic and secondly we try to display a new mapping of affirmative-negative pattern.

It is quite acknowledged that the form and the function of negative statements in ordinary language are far from simple and transparent.

We shall proceed to examine negation in the purported presuppositional symmetry and asymmetry. There has been a polemic warefare between symmetricalists and asymmetricalists in the history of negation.

The earliest extant version of the doctrine that negatives necessarily presuppose affirmatives come down to

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us from Aristotle. In Aristotle's theory, firstly, conception of negation represents a mode of predication, a rule for combining subject and predicate, and secondly Aristotle states that every proposition is either true or false. For all propositions whether positive or negative are either true or false, then any given predicate must either belong to the subject or not, so that if one man affirms that an event of a given character will take place and another denies, it is plain that the statement of one will correspond with reality and that of the other will not (Aristotle, pp. 18, 33). Hence, positive statements are true whereas negative statements are false. "*Every sentence has meaning.... Yet every sentence is not a proposition; only such are propositions as have in them either truth or false*" (Aristotle, 1961, p. 66).

According to Aristotle, only declarative may be true or false and express propositions. There are propositions that are neither true nor false but intermediate: when it is a future contingent or past unknowable.

Firstly, what has been subsumed under the term "presupposition"?

There is a view that every negative statement (judgment, proposition) presupposes affirmation but not vice versa. Hegel interprets it in the following way:"*If the rose is not red, it is assumed it has a colour — some other colour*" (Hegel, 1929, p. 275). For Hegel, every negation either has a positive basis or insignificant. Of the view that negation presupposes an affirmation "A is not B" presupposes the affirmative "A is B". We think that every negative judgment of the form "A is not B" can always be analyzed as "A is not B but C".

Thus, we can't regard negative judgment as a species equally primitive with the positive judgment and coordinate with it.

If a positive statement refers to a positive fact, to what does a negative statement refer? Clearly not to a negative fact.

This question sparkled a flurry debate. The following thesis on the purported asymmetry between affirmation and negation are considered in linguistics thought:

"Affirmation is logically prior, negation secondary".

"Affirmation is ontologically prior, negation secondary".

"Affirmation is objective, negation subjective".

"In terms of information, the affirmative sentence is worth more, the negative worthless" (L. R. Horn, 2001, p. 45).

It is clear that logicians sought to relegate negation to a secondary and inferior status: negative statements are about positive statements, while affirmatives are directly about the world. One more remark on Aristotle's conception: no proposition can be determinately true or determinately false.

Presuppositional thesis finds its reverberation in pragmatics. This thesis is reflected in Givon's claims that: "Negatives in general are uttered in a context where the corresponding affirmative has been discussed, or else where the speaker assumes that the hearer's bias toward or belief in — and thus familiarity with — the corresponding affirmative" (Givon, 1979, p. 139). This untenable form of the thesis yields to the idea that negative sentences communicate in terms of actual communication: all negatives are reduced to the speech act of denial. But the doctrine that a special negative speech act is always or generally equivalent to speaker's denial, has met with the respected resistance. Indeed, it was Frege who first stressed that negation cannot be reduced to a denial: "When a sentence P may be truly asserted, the corresponding negative sentence not-P may be truly denied and vice versa" (Frege, 1919, p. 129). Frege points out that negation may occur in unasserted contexts, such as the antecedent of a conditional where there is no notion of speaker denial, like this in:

Either he isn't going to the opera tonight or he is going to miss the first act.

Some scholars argue that there is no significant asymmetry between affirmation and negation; they think of it from the opposite standpoint:"*There is one negative sentence corresponding to every positive sentence and vice versa*" (Kraak, 1966, p. 89).

There is a grammatical and objective symmetry between affirmation and negation. A quite different symmetrical view of negation is suggested by Toms (1972): negative is not the result of performing an operation on a positive "source"; rather, both negative and affirmative propositions result from performing separate operation on a basic entity which is rather positive nor negative per se.

Both the negative and affirmative descend from a common universal, rather than the latter deriving from the former in any direct way: "A negative fact does not relate to the opposite position fact, but ... to a universal distinct from both positive and negative facts" (Toms, 1972, p. 12).

Thus, according to symmetrical concept both negation and affirmation are objective. Every negation presupposes affirmation and every affirmation presupposes negation.

Convincingly R. Lakoff stood against this assertion: performative utterances cannot be directly negated as seen in:

I hereby inform you (I do (not, hereby inform you).

Similarly, the quasiperformative *I guess, it'll rain* or *I would* (n't) *rather be in Moscow. She's* (not) *pretty tall* allows a parenthetical sense or use which is lost under negation for those speakers who can't neg-raise over guess (R. Lakoff, 1969, p. 144).

It should be noted that the principle of one-to-one correspondence can only apply to propositions, not to sentences. So, formal logic is entirely flawed or at least totally inadequate to describe the behavior of natural language. Some affirmative sentences have no directly corresponding negation, while some negative sentences lack any affirmative counterpart.

We reject the strong asymmetrical and the strong symmetrical position and take an intermediate position.

In symmetrical concept affirmation and negation are defined as units of the same level, while in asymmetrical doctrine they belong to different levels. Affirmation and negation function as two poles that are distantly located from each other and there can't be made a bridge between them. Even in dictionaries we find the following definitions of *pole: "one of the two things that are completely opposite"* (Macmillan English Dictionary for Advanced Learners, 2002), *"either of two opposed or differentiated forces, parts or principles"* (Webster's New World Dictionary, 1988).

The concept of polarity is based on the oppositional theory put forward by the Prague School. According to them the asymmetrical relations between affirmation and negation is manifested in *semantics*, in *morphological structure* and in *functioning*.

Morphologically negation is marked whereas affirmation is unmarked. Generally, unmarked member is semantically more neuter and less likely to undergo neutralization.

The function $y = \frac{1}{x}$ is an excellent starting point from which to build an understanding of affirmation-negation.

The relation living between affirmation and negation is equivalent to rational function $y = \frac{1}{x}$, where Y and X axes correspondingly stand for affirmative and negative. The Figure 1 shows how the function looks:



Figure 1 Rational Function of Affirmation and Negation

As we can see the graph line appears to be heading toward the edge of the diagram but is cut short of that. For this function a small positive input value yields a large positive output value. A complementary situation occurs for negative values: a small negative input will output a large negative value, and a large negative output will output a small negative value.

Let us look at this function as it leaves the graph at the top and bottom. You should notice the function line approaches, but does not touch the Y-axis. If you graphed the function on a set of X, the function line would still not touch the Y-axis, though it would get very close.

This type of behavior about the x-axis is called asymptotic. And, in this case the Y-axis would be called a vertical asymptotic of the function and correspondingly X-axis would be called a horizontal asymptote of the function.

Similarly Y-axis is a vertical asymptote and its X-axis is a horizontal asymptote. As the Y-axis (negation) function line stretches out to the left or right it gets closer and closer to the X-axis, but it never touches it.

This is the concept of vertical and horizontal asymptotes. This is our concept of affirmation and negation. No matter how close they are they never break the border between them. Each of them has its own territory and reigns there. But as geographically they are good neighbours, they always get in touch with each other still pertaining their independence.

To sum up, affirmation and negation are two sides of the same coin. Though they are opposed to each other but negation presupposes affirmation and affirmation presupposes negation in logic. Negation and statement are logically equivalent and communicatively uninterchangeable. In language works asymmetrical theory: negation presupposes affirmation but not vice versa. Negation is a logico-grammatical category.

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