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Intensionality: Words, Pictures, Thoughts

Doctoral dissertation – Summary

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1. Choice of topics and aims of discussion

My dissertation focuses on linguistic intensionality, in particular on speakers' linguistic intuitions underlying intensionality phenomena. An expression is intensional if and only if the sentence containing the given expression has at least one reading in which (i) the principle of *salva veritate* intersubstitutability of co-extensive expressions does not hold, or (ii) the principle of existential generalization does not hold and the sentence fails to implicate or entail existence, or (iii) some non-specific readings are available within the scope of the intensional expression. In the literature of philosophical and linguistic semantics there is no consensus concerning the status of the tests—there is no straightforward answer to the question how many tests of intensionality we should distinguish, how many "marks" of intensionality we should account for, in what ways these „marks" relate to each other, and what linguistic mechanisms are responsible for the occurrence of these "marks". In my dissertation I intend to illuminate some important aspects of this discussion by exproring the speakers' intuitions underlying intensionality phenomena.

The structure of my dissertation follows the opposite direction than the one usually pursued. Instead of testing the success of rival theories of intensionality in grasping and explaining ordinary linguistic judgments, I am rather interested in finding out what kind of intuitions are at work behind the currently used tests of intensionality. To put it more simply: I explore the possible reasons which a native speaker would provide in order to explain why the substitution of co-extensive expressions changes the truth value of the sentence, why existential generalization fails or the sentence does not implicate existence and why determinant phrases generate non-specific readings. I argue that intensional phenomena can be traced back to and explained by two fundamental intuitions about non-substitutability and non-specificity. However, these intuitions are sensitive to different factors in different cases, which makes it necessary to distinguish intuitions governed by the peculiarities of the speaker's perspective ("flexible" or "external" intuitions) and intuitions defined by the semantic content of the uttered sentence ("internal" intuitions). Although these two intuitions often come hand in hand, according to my thesis they are essentially independent from each other. The discussed distinction between external and internal intuitions also implies that we can give more readings to sentences containing intensional expressions than the literature usually supposes.

2. Methodology

According to my analysis rival theories of intensionality take the following two assumptions as their starting point:

(I) Certain sentences possess certain special linguistic properties (or at least one of them); and this fact has to be explained.

(II) These sentences possess these special linguistic properties because they contain at least one so-called intensional expression.

Assumption (I) defines the scope of empirical data the theories have to account for, while assumption (II) claims that the discussed properties should be explained by certain semantic, syntactic or pragmatic properties of some constituents of the sentence. Empirical data are gathered by observation: an expression possesses one of the discussed linguistic properties if it passes the corresponding test of intensionality.

In my thesis I analyze thoroughly the results of the tests. First and most extendedly I investigate the results of the non-substitutability test. I focus on sentences of the structure *x believes that φ*: I explore those cases where the substitution of definite descriptions, proper names and predicative expressions in *φ* with actually or necessarily co-extensive expressions leads to the change of the truth value of the sentence (briefly discussing substitutability of determinate phrases that are not functioning as definite descriptions); and consider the conditions under which the propositional attitude verb 'to believe' can itself be substituted by co-extensive attitude verbs. After the analysis of propositional attitude verbs I examine other verbs with clausal complements in details—laying special emphasis on modal expressions— with respect to the substitutability of expressions within their scope. Than I analyze intensional transitive verbs and intensional adverbial and adjectival modifiers; finally I briefly discuss the connection between tense and substitutability. The second test of intensionality— the failure of existential failure, the absence of existential commitment and the failure of quantifier exportation—I characterize more briefly, since according to my thesis neither formulation of the test can be regarded as an independent test of intensionality. With regard to the phenomenon of non-specific readings I proceed from its versions formulated my Graeme Forbes and Friederike Moltmann and I overview their results in the case of the elements of the previously presented classes of expressions. I claim that our intuitions about non-specificity are much hazier than the ones about substitutability which fact is to be explained by the failure of the test in drawing the distinction between flexible and ontological intuitions about non-specificity.

3. Theses

1. There are two intuitive assumptions which underlie the salva veritate *non-substitutability of co-extensive expressions. Based on this finding we can make a distinction between objective and perspectival intensionality.*

In the case of *objective* intensionality the non-substitutability of actually co-extensive expressions is intuitively based on the fact that the examined statements make reference to several possible states of affair in which it is not guaranteed that the extensions of the expressions remain unchanged. In the case of *perspectival* intensionality, however, the truth of the statements depend partly on whether the constituents within the scope of the intensional expression fits to the subject's (or that of some implied 'abstract' subject's) point of view, and this fitting cannot be guaranteed if the expressions are substituted by actually or necessarily co-extensive expressions.

Within the scope of an objectively intensional expression (expressing conceptual or metaphysical necessity/possibility or tenses) the substitution of necessarily co-extensive expressions remains unproblematic: since necessarily co-extensive expressions refer to the same objects in every possible state, no matter about which state our statement is about, the co-extensivity of the expressions is guaranteed. In the case of perspectival intensionality the success of substitutability depends on what we suppose about the subject's or implied 'abstract' subject's perspective. If we assume that the fact of the co-extensivity of necessarily co-extensive expressions is accessible to the agent, then the substitution of necessarily co-extensive expressions is unproblematic (see deontic modalities); whereas if its accessibility is not guaranteed, then substitutability will fail not only in the case of actual, but also in the case of necessarily co-extensive expressions (see propositional attitude verbs). In my dissertation I argue thoroughly that the intensionality of sentences expressing deontic modalities can be guaranteed only if we interpret deontic 'ought' and 'can' as perspectival intensional expressions.

2. With regard to the salva veritate *non-substitutability of actually or necessarily co-extensive expressions we can draw a distinction between the 'internal' and 'external' ('flexible') usage of the linguistic constituents within the scope of intentional expressions (in the surface structure of the sentence).*

Internal uses of a (non-logical) expression:

If α is an arbitrary expression in φ that occurs in the scope of an arbitrary (objective or perspectival) intensional expression δ, then

– In φ's A_α reading α is not substitutable with (in the case of perspectival intensionality: actually or necessarily; in the case of objective intensionality: actually) co-extensive expressions;

– In φ's B_α reading α is freely substitutable with (actually or necessarily) co-estensive expressions;

– In φ's C_α reading it is not defined whether α is substitutable with (actually or necessarily) co-extensive expressions (φ has a C_α reading only if δ is a perspectival intensional expression).

In my dissertation I examine in details which expressions—given that the appropriate contextual conditions obtain—can be perfectly "de-intensionalized", that is, can be used so that all the constituents within their scope can be substituted with co-extensive expressions. (The distinction between A and B readings mostly coincides with the traditional distinction between *de dicto* and *de re* readings. For the existence of C readings, however, I haven't found evidence in the literature.)

External uses of a (non-logical) expression:

If α is an arbitrary expression in φ that does not occur within the scope of any intensional expression, then

– In φ's $A^R{}_\alpha$ reading α is not substitutable with (actually or necessarily) co-extensive expressions.

The flexible use of expression can be exemplified by the often discussed phenomenon of 'simple sentences' (sentences which do not contain intensional expressions, but still block the substitutability of co-extensive expressions). According to my thesis in these cases the alleged non-substitutability is flexible, that is, defined only by the peculiarities of the speaker's perspective. The non-substitutability can be explained by assuming that the speaker tries to give an ironical perspectival report about an event by means the sentence. (I also explore to what extent this solution differs from other ones in the literature.) This use—just as flexible non-specific uses—has not become linguistically conventional: if certain contextual conditions obtain, the speaker can use any expression in a non-substitutable way, independently of whether it is in the scope of another expression.

3. The absence of existential commitment can always be detected by applying the substitutability test.

If in sentence φ expression α has (actually or necessarily) null extension and α cannot be substituted with an (actually or necessarily) co-extensive expression, then φ does not have existential commitment. (Just think it through: if the substitution of empty names or expressions with null extension can change the truth value of the sentence, then one version of the sentence is true even though it contains an empty name or an expression which has no extension.) However we need to make a restriction: intensional factive verbs pass the substitutability test only if we use expressions which do have actual extensions.

4. Failure of existential generalization is closely connected to our non-substitutability intuitions: failure of existential generalization is detected by virtue of non-substitutability intuitions.

We can make sense of failure of existential generalization only by the assumption of non-substitutability of co-extensive expressions. Since the substitution of co-extensive expressions within the scope of intensional expressions does not guarantee that the truth-value of the whole sentence remains the same, there is (or there can be) such an individual that makes true and false at the same time the open sentence derived from the original sentence by existential generalization—depending on by which expression we refer to the individual. So the test of existential generalization is sensible to exactly the same factors as the test of co-extensive substitution. Failure of existential generalization is a real "mark" of intensionality—but it is detectable only by the results of the first test of intensionality.

5. We use a determinant phrase α occurring within the scope of an arbitrarily complex expression δ ontologically non-specifically (Γ^O-reading), if we cannot assign to α some particular elements of our ontology consisting of particular objects and events in real space-time.

We use a determinant phrase in this manner if δ denotes such an activity which is directed to a particular individual (e.g. *Béla is seeking a philosopher* [*but not a particular one*]); or δ denotes such an activity which is directed to create a particular object denoted by expression α, and δ is a verb of creation which is used in progressive aspect or a modifier referring to the accomplishment of the procedure of creation (e.g. *Béla is building a house*); or δ denotes such an activity which is directed to selecting a particular object denoted by expression α from a fixed set of objects, and δ is a verb of selection which is used in progressive aspect or a

modifier referring to the accomplishment of the procedure of selection (e. g. *Béla is choosing a lollipop*). In my dissertation I overview the debate concerning the non-specific readings of sentences that report activities directed to create objects which are at the time of the report only "things in progress", and I argue that these uses are ontologically non-specific uses. Ontologically non-specific uses differ from each other fundamentally depending on whether the sentences in question admit ontologically specific uses (i.e. Δ^O-readings) or not. While sentences expressing activities which are not directed to some particular objects can be used to express ontologically specific readings, sentences containing verbs of creation or selection in the progressive aspect which express activities that are directed to creating or selecting a particular object can be used only to express non-specific readings.

6. *We use a determinant phrase* α *occurring within the scope of an arbitrarily complex expression* δ *flexibly non-specifically (Γ^R-reading), if by using* α *we do not provide a detailed specification of the appropriate element of the event, activity or process described by* δ.

Flexible non-specific uses, just as flexible non-substitutable uses, have not become linguistically conventional: if the speaker's communicative intentions so demand, or she does not have sufficient knowledge about the relation between the subject's attitude and the object of the attitude, she can use any expression non-specifically, independently of whether it is in the scope of another expression. We need to make a restriction: if the determinant is in anaphoric connection with a noun phrase that is used specifically, then α cannot be given Γ^R reading. If α is given Γ^O reading, then the Γ^R reading of α can raise the level of the non-specific use of the expression ($\Gamma^{R(O)}$ reading).

7. *The failure of quantifier exportation is to be explained by the (ontologically or flexibly) non-specific use of the determinant phrase.*

The failure of quantifier exportation is not an independent test of intensionality: it is sensitive to the very same things as tests of non-specificity.

8. A, B, Γ *and* Δ *readings can be freely combined with each other (with some restrictions), so we have not only three or four types of readings but much more.*

If a determinant phrase in a sentence can be used ontologically specifically, then A and B readings of the sentence can be combined only with the available Γ^O reading (and we have flexible non-specific readings only by the form of some $\Gamma^{R(O)}$ readings)—a reasonable restriction indeed.

As a final conclusion of my dissertation I try to show that the—implicit or explicit— reason for handling together the phenomenon of *salva veritate* non-substitutability and the possibility of non-specific readings is a false assumption, i.e., that retaining the grammatical subject's perspective always goes hand in hand with the suspension of the speaker's upheld beliefs about the object of the subject's activities. This idea is mistaken: if the subject's attitude is directed to a specific, particular subject, then it does not matter at all whether this object is represented by the subject's perspective or not. Retaining the subject's perspective does not make non-specific readings inevitable, just as the application of an external perspective does not make it impossible for the speaker to simply ignore the particular object of the attitude and express this meaning by using a determinant phrase. (Certainly, retaining the subject's perspective and applying a particular speaker's perspective might be closely connected: if by retaining the perspective our aim is to analyze the subject's activity 'internally', that is, to define the agent's mental state at a particular time or to characterize how it is for her to experience that state, then most naturally we use flexible non-specific readings.)