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A NOTE ON LIMITS OF PROVABILITY
OF SEMANTIC EQUIVALENCE

А н н о т а ц и я. **Заметка об ограничениях доказуемости семантической эквива-
лентности.** Автор делает попытку показать, что статус того, что Анна Вежбицкая на-
зывает экспликациями выражений, выполняемыми в соответствии с ее исследова-
тельской программой, который он в других своих работах определял как «конструк-
тивистский», т. е. состоящий в установлении непротиворечивости (в отличие от
установления существования, несуществования или противоречивости — в соотно-
шении с четырьмя соответствующими разделами науки по ее логическому делению),
в данном случае состоящий в установлении непротиворечивости конъюнкции экс-
плицируемого и эксплицирующего, а не в *доказуемом* установлении их эквивалент-
ности (которая сводится к определенному противоречию), логически вытекает из ис-
ходных положений самой программы, в частности из ее основы в виде *замкнутого*
списка атомистических несовместимых элементов смысла, единственно допускаемых
как члены эксплицирующих построений.

In his non-generative way of reconstructing the special linguistic (non-
physiological) mechanisms of how speech utterances come into being Igor Mel'čuk
concentrates, most of all, on syntax and its various levels (in this, his genuine and
independent concept of linguistic description is hardly at variance with Chomsky's
central idea). This in no way means that he starts with something neutral with
regard to semantics. In accordance with his overall vantage point in dealing with
language, everything turns on discernibly structuring and incarnating the
primordial «sense» (*smysl*); the result is «text» (*tekst*). What is merely respected
with due care is the fact that there is always, in the *basis* of language, first of all,
and necessarily, one of possible *relational* carcasses of a general character valid for
some definite class of senses. These carcasses must of course be fleshed out with
more detailed functional stuff where ingredients having to do with what is true or
false, i.e. semantic features or components, make up the main layer. An important
separate and comprehensive chapter was dealing with this aspect of description
already in Mel'čuk's classical work of (1974). But in a number of his utterances he

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emphasized the possibility of treating Wierzbicka's «explications» as a viable and important source of semantic material that can furnish much of what is needed when the syntactic carcasses are to be rounded up and made fully «edible», thus yielding a complete account of functioning of a given language (or at least, in a specific study, of a certain fragment of it); as a case in point, I shall refer to Mel'čuk (1995: 11).

In what follows I am going to recall my analysis of Wierzbicka's explications (as presented, more specially, in my 2001; 2011) where I claimed that they amount to statements of the possibility of conjoining given expressions a researcher is interested in with concatenations of elements of her apparatus of «universal and primitive (simple) expressions» in such a way that no internal contradiction is present in the resulting whole while at the same time the respective conjunctions are constrained by certain requirements concerning their membership. These requirements ensure selecting right-hand concatenations, or «explananses», that are able to render certain semantic components already inherent, in a covert way, in the left-hand expressions (expressions undergoing examination), those left-hand expressions representing the relevant «explananda». This claim of mine was opposed to a possible, but, to my mind, failing to be adequate, appraisal of the added concatenations as standing in the relation of *analytic equivalence* to the expressions (utterances) investigated. I have exemplified my claim with a fair number of items of rather varied semantic nature. I also claimed that the theoretical difference under consideration reflects the grand lines of division of science in general, viz. its division into idiographic, nomological, formal and constructivistic studies, the first of them dealing with the question «what exists», the second of them, with the question «what does not exist (among the existing objects)», the third of them, with the question «what contradictories there are», the fourth of them, with the question «what items show lack of contradiction (regardless of whether it could apply to existing objects or whether we prescind from the question of what exists)».

I am recalling all this not to discuss the matter anew, in all its details, but in order to apply to it a reasoning whereby the status in question of Wierzbicka's explications, viz. their status as items belonging to constructivistic studies as just briefly characterized, will be shown to be unequivocally, i. e. logically, *determined* by certain circumstances crucially involved in the scholar's *scheme of investigation* itself. In this way I shall offer a kind of supplement to my previous considerations concerning Wierzbicka's works and research program.

I take it to be clear that the distinction between conjunctions that are self-contradictory and those which are non-self-contradictory is at the heart of language as such — first, in so far as the Reality is all based on contradictory contrasts (i.e. between what has been done and what thereby has been doomed to non-existence, doing always, i.e. intrinsically, involving a choice between incompatible outcomes), and second, in so far as language is called upon, before all its other tasks, to mirror

those contradictory contrasts. Now, equivalence between *different* parts of a conjunction consists in the fact, first, that the conjuncts taken together do not give rise to any contradiction, and second (this is of course crucial), that each of them participates in *the same* (cognitive) *contradictory contrast*, apart from the fact that they possibly differ in some other respects. Thus, equivalence is primarily a part of the realm of contradiction phenomena rather than the realm of non-contradiction phenomena. The most interesting cases of equivalence appear where one of the parts of a possible conjunction represents a syncretic rendering of what is represented, in the other conjunct, by a combination of independent items (i. e. items which are cognitively mutually separable, owing to their jointly satisfying the suitable pattern of open proportion), that is to say, by a combination of independent items that correspond, in addition, symmetrically, to the pertinent partial aspects or components of what is rendered by the former, syncretic, conjunct.

Non-self-contradictory conjunctions include items such as *It's raining and the sun is shining*. These obviously show no traits of similarity between the conjuncts that could remind us of equivalence. But there are also conjunctions that are somewhat similar to cases of equivalence, cf. *The writer is her sibling and the writer is her brother*: assuming that *the writer* stands, in both its occurrences, for one and the same person, and that the same is valid for *her*, we notice that the second conjunct cognitively *overlaps* the first conjunct since it preserves the idea of the writer's having a common father or a common mother with 'her', but, in addition, it states something that has nothing to do with the question of parentship, viz. the fact that the writer is a male. Of course, a similar overlapping will be found in the sentence *The writer is her sibling and the writer is her sister*. Still, the sentences just considered are different, *in the lingusitically most important way*, from the sentence *The writer is her sibling and the writer is one and only one of the following: her brother, her sister*. or from the simpler sentence *The writer is her sibling and the writer is her brother or her sister*. where the conjuncts are not only non-contradictory and not only cognitively overlapping, but (cognitively, unlike stylistically or pragmatically) identical. (A note of caution is necessary here. They are identical to the extent that we assume a certain simplification: first, we disregard the possible case of siblings, one of whom at least is a hermaphrodite, second, we prescind the fact that the non-logical, «ordinary» *or* is by far not identical with the relation of alternative or disjunction which is present in *sibling* where the constituents are in no way ordered, unlike in *brother or sister* where there is, in fact, a definite ordering of the constituents [making it, in any case, pragmatically different from *sister or brother*]. However, *for everyday purposes*, the two expressions: *sibling* and *brother or sister*, ARE cognitively identical.) The last considered sentence can be taken as an at least fair approximation of a conjunction of *equivalent* expressions and a model of *equivalence* as such.

The simplest way of characterizing what analytic equivalence between two expressions amounts to is by saying that there is one full set of the logical consequences that is proper to both the respective partners. In view of the fact that expressions that can at all be considered as *partners in* equivalence are meaningful expressions with a cognitive value that consists (as is always the case) in a contradictory contrast, equivalence itself (as has been stated a while ago) turns on contradiction phenomena. In the case of an explanandum and an explanans (which on pain of an infinite regress cannot replicate the explanandum as a part, proper or improper, of it), a n a l y t i c a l   e q u i v a l e n c e   of the explanans with the explanandum (which is constitutively incompatible with a corresponding negative expression [e. g., 'hope [for *p*]' is incompatible with 'absence of hope [for *p*]']) boils down to the fact that each **negative** expression corresponding to a relevant independent constituent of the **explanans** is, symmetrically, **incompatible** with (or contradictory to) the explanandum (this relation extending to *all* the relevant constituents). In other words, each such negative expression entails inadequacy of the explanandum (to take the example of 'hope' just adduced, 'absence of expectation of *p*' entails 'does not hope', irrespective of the truth or falsity of the other component of the explanans, and so does, *mutatis mutandis*, the *negative* element corresponding to the other component of the explanans, viz. 'absence of [the same subject's] appraisal of *p* as good [from a given point of view]'). (What I have stated here is a way of accounting for what is routinely dubbed '[the set of] necessary and jointly sufficient conditions [of some *p* or of some constituent of *p* [functioning as an explanandum]]' — as the essence of equivalence.)

If we take into consideration all that has been said (in fact, just recalled), we must conclude that it cannot be indifferent to a linguist, *in casu*, to Igor Mel'čuk, whether what is offered to him/her as a purported semantic insight into an expression, in particular, a concatenation of expressions, is of the nature of equivalence or of pure non-self-contradictoriness. And the matter certainly *is not* indifferent to Mel'čuk.

Before I expound my argument concerning the way Wierzbicka's program is intrinsically determined to offer statements of non-self-contradictoriness, rather than statements of equivalence of expressions, I shall illustrate the very fact of her offering statements of that kind with one of her explications (Wierzbicka 1995: 153):

(*forbid*)   I forbid you to do it =
               I say: I want you not to do it
               I say this because I want you not to do it
               I think you can't do it because I say this

In taking this particular example and in my commentary which follows below I am drawing on the text of my (2001) (reprinted in my (2011)).

Imagine someone says what *succeeds* the equation sign in *(forbid)* to a man mowing a meadow, a man s/he, quite coincidentally, sees for the first time in

his/her life; assume also it is clear enough for both parties concerned that «doing it», according to the speaker's intention, refers to the addressee's mowing the meadow. Isn't it obvious that the addressee's appropriate response can be, for example, «So what?»? Or else the addressee could elaborate: «Perhaps you really think I can't do it because of your having said this, but in fact I can do it nonetheless; moreover, I'll be in no danger whatsoever if I keep doing it». Now, it is equally obvious that the addressee's response to the imaginary utterance of the same speaker (the left-hand utterance in *(forbid)* «I forbid you to do it» (the remaining circumstances being preserved) would be quite different; the response would most probably run as follows: «Who are you to tell me what to do?». This difference of responses the utterances on the two sides of the equation sign are likely to release is indicative of some important content distinction that seems to correspond to the distinction between the two phrasings. It is very hard to dismiss the idea that the speaker of the left-hand part of *(forbid)* presents himself as having the right to tell the given addressee what to do, i. e. as being able to at least try to enforce a kind of behaviour on the addressee's part, something which is totally absent from the right-hand part of *(forbid)*. In fact, someone's saying «I, who have no right to tell you what to do, forbid you to mow the meadow any longer» gives a strong impression of self-contradiction. Therefore, 'forbid (x, y)' is an excellent candidate for entailing something like 'have the right (x) to tell (y) what to do'; if no obstacles to the acceptance of this claim are found, the entailment just mentioned (whatever its exact wording would be) has to be ascribed to *forbid* without reservation. This entailment has not been reflected in the right-hand side of Wierzbicka's explication; moreover, it has not even become a problem to be given some thought to. I emphasise that this is not meant as criticism of any kind; this is just a statement of fact. I shall not go here into the details of what real entailments of *forbid* are. It is sufficient, with regard to the issue at hand, to ascertain that Wierzbicka's scheme of work on the expressions she is interested in does not include any program of solving such questions.

We can add the following crucial observation: the speaker of the right-hand part of Wierzbicka's complex expression, under the circumstances just described, can also idiomatically say the following: «[the right-hand part of *(forbid)*]; *moreover, I forbid you to do it»*. Here, *moreover* would be quite appropriate, thus showing that the right-hand part of *(forbid)* does not exhaust the content of its left-hand part. In other words, the right-hand part does not represent the set of the necessary and jointly sufficient conditions of *adequately* saying whatever is conveyed by the left-hand part of *(forbid)*. Alternatively, the same speaker can, equally idiomatically, utter the following non-self-contradictory statement: «[the right-hand part of *(forbid)*], *but it is not the case that I forbid you to do it»*.

I now proceed to discuss the question (signalled already at the beginning of this article) of whether Wierzbicka's actual preoccupation with non-self-contra-

dictoriness of the couples including her explananda and her explananses results simply from her free choice, governed by her interests, her time resources or the like, or whether there are some circumstances concerning her *overall* scheme of research that leave no room for a viable program of *conclusively* providing for equivalences that would be valid for her explananda.

As announced earlier on, my answer favours the latter possibility. That is to say: even if one improves on such statements as illustrated above by cancelling those elements in the explananses whose stipulated absence (falsity) is immaterial to the adequacy of the explanandum (with respect to a situation currently taken into account), i. e. does not undermine the explanandum (is not contradictory to it), *the sum total of explications* as these are comprehended by Wierzbicka cannot *conclusively* claim its right to represent the relevant analytical equivalences; this would be true even if the claim were moderated by admitting some occasional (inadvertent) failures in the process of supplying purported equivalences.

In advance of the argument that follows, I shall point out, in preliminary and general terms, the basic reason why Wierzbicka's doctrine is barred from satisfying the criteria for a result in the shape of a conclusive overall picture of equivalences. The reason lies in the fact that her program aims at supplying explananda *exclusively* with explananses in the form of concatenations of expressions (including certain «syntactic frames») which are on a ***closed list*** of what she calls «simple / primitive and universal items», the items having been elicited — as avowedly semantically identical — from a fair number of languages and, moreover, having been appraised as promising to be found in every language (in some external shape or other, but without losing their semantic identity with the items found heretofore). That this is indeed an inalienable trait of her program is shown by the fact that she is always ready to charitably, even if critically, consider *any* explananses offered by an arbitrary analyst for given explananda, *on the condition*, however, *that the explananses consist of the items on the list* just mentioned and inlude nothing else.

My argument will be shaped as an argument *a contrario*. It is presented below.

I. Assume the program which I shall name *AW* aims at establishing analytical equivalence between an explanans and a given explanandum.

The fundamentals of *AW* are as follows.

1. There is a set of elementary expressions $\{\alpha_i, ..., \alpha_n\}$ indicated in list A which exhausts the comprehension of (the concept of) 'universal and semantically primitive expressions';

the set is such that for any correct concatenation $\alpha_x{}^\wedge...^\wedge\alpha_z$, analytical inequivalence holds for the pair: the concatenation just mentioned, any other correct concatenation of the same kind (e. g., $\alpha_i{}^\wedge...^\wedge\alpha_k$ is analytically inequivalent with $\alpha_i{}^\wedge...^\wedge\alpha_l$, and so on);

the proviso is accepted to the effect that the concatenations made use of are *correct* according to the criteria otherwise (independently) adopted;

the reason why the inequivalence in question is inscribed in the doctrine is that each α is taken to be semantically full, but also unreservedly semantically different from all the other α's (the concepts are taken to be primitive, and primitive concepts are «atomistic»: they share no possible components with any partner in their set).

2. There is a set of expressions B:

$\{\beta_i, ..., \beta_n\}$ such that   (i) for any $\alpha \in A$, for any $\beta \in B$, $\alpha \neq \beta$

                       (ii) for any $\beta \in B$, there are $\alpha_x, ..., \alpha_z$ such that $\beta \equiv \alpha_x {}^\frown ... {}^\frown \alpha_z$

where the equivalence sign in (ii) stands for *analytical semantic equivalence*.

II. Inference from the assumption described in I. concerning a necessary condition of establishing a suitable analytic equivalence.

Recall that all concatenations of α are mutually inequivalent. Therefore, for just any arbitrary pair of analytically inequivalent β_i, β_j, a **necessary condition** of the equivalence, e. g., $\beta_i \equiv \alpha_i {}^\frown ... {}^\frown \alpha_k$, apart from the lack of self-contradictoriness of the conjunction $\beta_i \wedge \alpha_i {}^\frown ... {}^\frown \alpha_k$, is the *lack* of equivalence $\beta_i \equiv \alpha_k {}^\frown ... {}^\frown \alpha_l$ etc., for any further concatenation of αs, and, analogously and complementarily, a necessary condition of the equivalence $\beta_j \equiv \alpha_k {}^\frown ... {}^\frown \alpha_l$, apart from the lack of self-contradictoriness of the conjunction $\beta_j \wedge \alpha_k {}^\frown ... {}^\frown \alpha_l$, is the *lack* of equivalence $\beta_j \equiv \alpha_i {}^\frown ... {}^\frown \alpha_k$ etc., for any further concatenation of αs.

Therefore, establishing an analytical equivalence of the form indicated in 2. (ii) above always requires a proof, to use the example of some β_i, that that form materializes as, e. g., $\beta_i \equiv \alpha_i {}^\frown ... {}^\frown \alpha_k$, rather than as *any other* arbitrary concatenation, e. g., $\beta_i \equiv \alpha_k {}^\frown ... {}^\frown \alpha_l$, the same requirement applying to any other β, i.e., for example, to a possible $\beta_j \equiv \alpha_k {}^\frown ... {}^\frown \alpha_l$.

III. Inference from I., II.: a dilemma.

Since no purported equivalence is privileged, we obtain the following alternative concerning the procedure of establishing suitable equivalences for the whole stock of βs:

either all the equivalences in question (i) are given from the very start, or (ii) they are not; moreover, the necessary condition stated above (in II.) entails, in an attempt to successively establish the equivalences, our facing a destructive infinite regress.

(We may add the following to member (ii) of the alternative: under the circumstances as described above, any withdrawal of a concatenation of αs as being equivalent to a certain β where the concatenation of αs is assumed to correspond to *another* β must exclude a concatenation of αs previously held to be equivalent to that further β from actually being equivalent to it; but since no purported equivalence is privileged, any shift in claims concerning *some* possible equivalences amounts to undermining *all* possible equivalences.)

IV. Solution to the dilemma in III.

Since (i) is non-existent, **(ii) is valid: the relevant circumstances of *AW* exclude any conclusive derivation of equivalences.**

This closes my argument.

While *AW* with its crucial closed set A of elements of admitted explananses actually frustrates any attempt at deriving a provable picture of what βs match which concatenations of αs as their semantic equivalents (in the strict sense of the word), Wierzbicka's program can nevertheless be implemented as a constructivistic enterprise. This is because where no one can show that, for example, $\alpha_i {}^\frown ... {}^\frown \alpha_k$ in conjunction with β_i yields some contradiction, it is unreservedly reasonable to assume that the conjunction is **non-self-contradictory**.

However, one must be aware that there may be more non-self-contradictory conjunctions than one where some particular β joins a concatenation of αs: such a β may enter non-self-contradictory conjunctions with many *different* concatenations of αs even within the confines of more interesting entities that display overlapping content in their relevant parts.

I shall illustrate this with one example. The example will be in English, but it replicates Wierzbicka's Russian explication of the Russian *pošlost'* '≈ triviality' presented by her in her paper during a Moscow conference at the Institute of the Russian Language (2001); I have discussed it in my (2002), reprinted in my (2011). The explication read:

> 'many people think about many things: these things are good
> this is not true
> these things are not good
> these things are like other things
> these other things are good
> these people do not know this
> this is bad'

Clearly, there is another possible explication of the same word firmly sticking to Wierzbicka's regimentation (i.e. to the limits of the set A):

> 'there are some things
> these things are not good
> I know something
> because of this I know this
> many people think about these things: these things are good
> these people know: these things are like other things
> these people do not know: these things are not good
> these other things are good

some people can think:
    these things are like these other things
    because of this these things are good
this is bad'

The two explications are obviously non-equivalent (just to point to one element: 'many' is semantically different from 'some'); but both of them have something in common with the initial Russian word; moreover, «my» explication upholds the main ideas about the word Wierzbicka tried to bring home to us. However, the two explications cannot *both* represent equivalent renderings of the sense of the word. As for a possible choice of one of them in that capacity, I, for one, do not see any possibility of deciding in favour of any of the would-be equivalences. What can safely be claimed is merely non-self-contradictoriness of a bunch consisting of the sense of *pošlost'*, on the one hand, and of the sense of *each* of the cited concatenations of Wierzbicka's αs, on the other.

It is certainly possible to assimilate claims of non-self-contradictoriness of conjunctions to claims of equivalence by *arbitrarily* pointing to **one** such «explication» (with a semantic overlapping) and by excluding other non-self-contradictory combinations. However, as soon as we accept the principle that science only embraces statements that are non-indifferent from the point of view of public concern coupled with the interpretation according to which egocentric statements do not belong to such non-indifferent statements, we must appraise that kind of arbitrary exclusion, which in fact boils down to a report on purely personal experience, as located beyond the realm of science.

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