

SEMANTICS AND LEXICOGRAPHY:
SOME COMMENTS ON THE WARLPIRI DICTIONARY PROJECT

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1. INTRODUCTION

The Warlpiri Dictionary Project is extremely impressive. The dictionary is clearly going to be superior, in a number of ways, to most other comparable dictionaries. The criticisms in this paper apply to most other dictionaries even more than they do to the present one. They are offered not as criticisms, but as suggestions that might be useful in the further work on a project which is of enormous importance, both from a scholarly and a social point of view.

2. AIMS OF THE PROJECT

The Warlpiri Dictionary Project faces a difficult dilemma. Should it above all produce a scholarly work or a practical reference book? Should it offer definitions which would reveal the real semantic structure of the words defined, or definitions which would be intelligible and therefore useful to the largest possible range of users? Should it aim at 'God's truth' or at practically useful approximations?

The dictionary will probably be judged from both these points of view at once. If it fails to capture the cognitive world reflected in the meanings of Warlpiri words in an accurate and revealing way, it will be a disappointment. If it captures that world accurately and revealingly, but does so through formulae which are intelligible only to specialists, it will also be a disappointment. Difficult as it may be, the dictionary must aim at both goals at once; it must strive for both God's truth (which in this case is the truth about the cognitive world of the Warlpiri, in an unadulterated form), and also for wide accessibility and potential utility for non-specialists of different cultural and educational backgrounds.

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We may ask if it is humanly possible to reconcile these two orientations. My contention is that it is possible to a much higher degree than is generally believed, in particular, than is apparently believed by the authors of the dictionary themselves. Once both goals, the theoretical and the practical one, are clearly stated, and the over-all task (to try to meet both these goals at once, as far as possible) is formulated, many specific problems start to emerge.

3. PROBLEMS OF DEFINITION

Consider the following extracts from the definitions to be found in the preliminary version of the dictionary:

jipirri - 'acting in unison to affect some entity';

lakarn-luwa-rni - 'xERG causes some outer part of yABS to be separated from y by striking with a missile';

liji-yirra-rni - 'xABS is desirous of having yDAT';

lirri-mi - 'xABS increases in size, typically to assume abnormal dimensions';

maya - 'to an extent exceeding that existing at some reference time'.

To many unsophisticated readers, expressions such as 'in unison' or 'be desirous of' or 'assume abnormal dimensions', or words such as 'missile' (here in the less-familiar sense of 'something thrown') will be obstacles and/or irritants: couldn't simple, intelligible words such as 'together', 'throw', and 'want' be used instead? Can't one say 'X gets bigger than it should be' instead of 'X increases in size, assuming abnormal dimensions'? Can't one say 'more than before' instead of 'to an extent exceeding that existing at some reference time'?

But perhaps there are some higher theoretical reasons why those potentially incomprehensible expressions should be used in preference to simple, ordinary ones. I confess I can see none, and I suspect there aren't any. I would say that from a theoretical point of view, as well as from a practical one, 'want' is preferable to 'desirous', 'together' to 'in unison', and 'a thing thrown' to 'a missile'. There is no theoretical justification for the common lexicographic practice of filling statements of meaning with learned, obscure and scientific-sounding words rather than simple and basic ones; quite the contrary. The basic criterion of scientific adequacy of a definition was formulated twenty-five centuries ago, by Aristotle: a definition must reduce what is complex to what is simple, what is obscure to what is clear, what is conceptually 'posterior' to what is conceptually 'prior' (cf. also Boguslawski 1966, Weinreich 1967, Apresjan 1972 and 1979, and Wierzbicka 1972, 1980 and forthcoming). To achieve such reduction to a simpler level is difficult, much more difficult than to create the illusion of analysis through the use of learned words of Latin origin. If in any given case, the lexicographer (who is only human, and whose time is limited) cannot achieve analytic reduction (at least not in the time available), then it is better that he or she should simply admit this fact rather than conceal it behind a facade of 'scientific' language.

As a further example, consider the following definition:

paka-rni - 'xERG produces concussion of surface of yABS, by coming into contact with y'.

I wonder how many users of the dictionary would guess what this definition is really supposed to mean? Luckily, an example shows how the mysterious and incomprehensible concept in question is really used: 'the little boy tried to hit the dog with a stick'. It turns out that the word in question simply means 'hit!' 'Concussion' is not theoretically preferable to 'hit'. On the contrary, 'concussion' is more complex than 'hit', and to define 'hit' (explicitly or implicitly) via 'concussion' must lead to a vicious circle.

It is true that simple everyday words such as 'hit' are often ambiguous, whereas scientific words such as 'concussion' tend to be less so. However, the word 'concussion', as used in the definition quoted above, is ambiguous, and in fact mystifying, because it is not used in its normal sense ('brain injury of a kind that occurs when a person's head hits against something very hard'). Secondly, we understand 'concussion' in terms of 'hitting', anyway. Thirdly, examples such as 'the little boy tried to hit the dog with a stick' make the intended meaning of 'hit' quite clear. Finally, if the dictionary compilers are eager to attempt to define 'hit', they are, of course, welcome to do so (although it is difficult and, I think, unnecessary from their point of view); but a pseudo-definition in terms of concepts more complex than the one defined, does not constitute such a bona fide attempt. It is as pointless and counter-productive from a theoretical as it is from a practical point of view.

Another example is:

larra-paka-rni - 'xERG strikes yABS thereby producing a linear separation in the material integrity of y, typically by means of a bladed instrument'.

Again, I invite the reader to imagine the reaction of an average dictionary user, such as a school teacher, a teacher aide or a high school student to this definition. Luckily, an example shows what is really meant: 'Both of them seized an axe. Each one split open the head of the other'. Again, it might be argued that the difficult formula 'a linear separation in the material integrity of an object' is needed to serve a theoretical purpose. But what theoretical purpose? If a simple word like 'split' has to be defined at all, there is surely still no need to appeal to obscure philosophical concepts such as 'material integrity of an object'; instead, one can say simply 'x strikes y, causing some parts of y to become separated from others, looking as if there was a line between them'.

In trying to avoid simple, 'naive' language and in attempting to define words which perhaps do not need definitions, the authors of the dictionary run the risk of committing the gravest and the most common sin of a lexicographer: the sin of circularity. Admittedly, they usually commit it only in a hidden form; since they don't define 'concussion', the circularity involved in defining a Warlpiri word which means 'hit' in terms of 'concussion' remains hidden. A similar case of hidden circularity is provided by the following definition:

nya-nyi - 'xERG perceives image of yABS, by means of eyes' gaze coming into contact with y'.

Clearly, what the authors are trying to define here is the concept of seeing. But the word 'gaze' is semantically even more complex than 'see'. A definition of 'see' via 'gaze' is a pseudo-definition.

It seems to me that in a dictionary such as this, decomposition should be used as a means to an end; it should give an accurate rendering of the meaning where no monolexic English equivalent is available, and thus explain the Warlpiri concept to the user of the dictionary. A great effort should be made to capture the semantic invariant correctly and to state it in simple language. When simple English equivalents are available, decomposition is not necessary, especially decomposition carried out using complex, technical or obscure terms.

4. TECHNICAL-SOUNDING DEFINITIONS

The use of scientific, technical and learned language in definitions is also misleading and empirically inadequate, for a number of reasons. In particular, it often introduces unintended false presuppositions. An example is:

lalka - 'of entity, being, which ceases to be pliable; solid, hardened, stiff, firm, frozen stiff, frozen solid, congealed.' (e.g. 'Put me near the fire, the cold has frozen me stiff'.)

The long list of possible translation equivalents, as well as the examples given, make the meaning in question quite clear. They correct the false clue given in the definition itself, in the form of the word 'pliable'. People and animals may get 'stiff', but they neither become nor cease to be 'pliable'. The simple word 'stiff' is free of the unfortunate presuppositions of the more technical word 'pliable'. If this is so, then we may ask why the word 'pliable' is used in the definition at all. One further instance is:

wipi-mi - 'xABS is in a position such that a part or parts of x radiate out from the main body of x; stick out, radiate out (e.g. to stretch out leg, arm, finger)'.

Why is 'radiate' given in the definition here? Heat may radiate from a radiator, but do legs, arms or fingers radiate from a body? 'Radiate' is not only more technical and learned than 'stick out', it is also empirically less suitable, because it introduces false presuppositions.

A similar problem arises with:

panti-rni - 'xERG produces indentation or puncture in yABS by coming into contact with y'.

Reading the words 'indentation' and 'puncture', the user would assume that the verb in question is used to refer to metal surfaces and to tyres. Imagine his surprise and confusion when he comes to the examples: 'The man speared the kangaroo' 'The horse kicked me in the stomach'. Is it usual to speak of punctured kangaroos and indented stomachs? A definition phrased in simple language avoids the misleading presuppositions: 'x causes a pointed thing z to move and to come into contact with y so that the pointed part of z starts to be inside y'.

It should be added that technical or simply pompous language in definitions leads to many different kinds of empirical inadequacy; false presuppositions about denotata constitute only one possibility. Consider, for example, the following definition:

jinyi-jinyi-ma-ni - 'xERG causes yABS to act in manner desired by x'.
e.g. 'I will order the child to go and get the water.'

The examples given suggest that in fact it is not a question of acting in a certain manner, but simply of doing what someone wants us to do. (The relevant thing is *what* one does, not *how* one does it.) A definition phrased in simpler, more 'naive' language ('x causes y to do what x wants y to do') reflects the meaning more accurately than one in more stilted phrasing.

Furthermore, simpler language helps achieve a certain vagueness in definitions, which is often necessary in portraying concepts encoded in natural language. A more or less scientific language often introduces excessive precision, which in fact distorts the nature of natural language concepts. An example is:

lirrki-lirrki-nga-rni - 'xERG eats yABS causing the characteristic attached covering particles (flesh) of y to partially or totally diminish in quantity'. e.g. 'The dog ate the bone bare of flesh.' 'Lice nibble away at a person (head of).'

To begin with, the word 'particle' is unsuitable and misleading (human flesh is not normally thought of as composed of particles). The simple word 'part' is much more suitable. The phrase 'partially or totally diminish in quantity' is even more unfortunate: 'partially diminish' is a tautology, and 'totally diminish' is a contradiction. Both the tautology and the contradiction could be removed by the use of simple, 'naive' language, along the following lines: 'x eats outer parts of y, causing y to cease to have outer parts that things of this kind normally have.' At a more idiomatic level, one could say simply 'x eats away outer parts of y', and I think even this simplified formula would be preferable to the scientific-sounding definition quoted above. It is true that a formula of the kind suggested here does not make it absolutely clear that the outer parts may be eaten away either partially or totally. But this loss in precision represents a gain in semantic adequacy. (Lexicographers are often tempted to 'improve' the concepts which it is their job to define - to make them 'more logical', 'more precise', 'more scientific'. But of course real precision in lexicographic work lies elsewhere: in the accuracy with which the imprecise concepts of natural language are portrayed.)

5. THE INTRUSION OF SCIENCE

The traditional aversion of lexicographers to simple language and the (subconscious) desire to sound scientific often leads to an intrusion of science into dictionary definitions. The Warlpiri dictionary project is no exception in this respect, and the intrusion of science - Western science - into definitions purporting to portray an Aboriginal cognitive world is particularly jarring.

A few examples will illustrate this point. Consider firstly:

liirl-nyina-mi - 'xABS reflects light: shine, glow, glisten, sparkle' (Cf. Webster's definition of 'shine': 'to reflect or to emit light').

Can we say that ordinary speakers of English think of shining in terms of reflecting or emitting light? Do the Warlpiri? Granted, the concept of 'shining' is difficult to explicate, but is there really any need to do so in a Warlpiri-English dictionary, if the English word 'shine' seems to be an adequate equivalent of the Warlpiri word? And if the authors of the dictionary insist on doing so, they should try to capture the speakers' viewpoint rather than the Western scientists' theory of the phenomenon in question.

A second instance is:

liwanja - 'vertebrate cold blooded animal living in water in sand: fish'

Do Warlpiri speakers view fish as 'vertebrate cold blooded animals'?

A final example is:

jirri-ka-nyi - 'xERG, being, causes yABS, being capable of self-propulsion, to move along the same path as x by taking hold of y, typically by the hand'.

Fortunately for the user, a more practical definition is also offered: 'to lead by the hand'. But is it the case that the supposed 'theoretical' definition is really theoretically superior to the practical one? Firstly, why use the words 'capable of self-propulsion'? Why not simply say: 'which can move by itself'? Secondly, are there any animate beings that are not capable of 'self-propulsion'? Thirdly, isn't the word 'being' slightly amusing in contexts such as 'A mother takes her little one by the hand' or 'They lead blind people around by the hand'? The normal English word for an unspecified person is 'someone' rather than 'being'. It is very easy (for me, and presumably for most other users of the dictionary) to think of a mother or a child as of 'someone', it is more difficult to think of them as of 'self-propelling beings'. I suggest, then, that if a definition of the word *jirri-ka-nyi* in terms other than 'to lead by the hand' is needed at all, it should start with 'someone (x) causes someone else (y) to move ...', rather than with 'x, being, causes y, being capable of self-propulsion, to move ...'.

6. CONCLUSIONS

Let me reiterate the main point. I am not arguing that the definitions in the Warlpiri dictionary should aim at practical advantages rather than at high intellectual standards; that they should use simple, naive language as a concession to the users, in preference to a truly adequate semantic metalanguage, accessible to specialists. I am arguing that the whole alternative is false. The Warlpiri dictionary must aim at the truth, at empirical adequacy, at the highest possible scholarly standards. I am arguing that *in doing so* it will also become more useful, more widely accessible and more practical, than a compendium written in a complicated, technical and obscure language.

It is true that truly simple and rudimentary 'basic language' may be unfamiliar and even shocking to the educated reader. Some educated readers will no doubt be put off and offended by simple, naive-sounding language in a scholarly work - they may cling to the more complex and more esoteric language as privileged castes usually cling to their privileges and status symbols. But a lexicographer should not give in to the prejudices and pressures of a bad tradition - he or she should struggle against them as much in the name of semantic truth as in the name of social utility or cultural relevance.

In a great enterprise such as the Warlpiri dictionary project, insight should never be sacrificed to practical expediency. The current version of the dictionary does contain many concessions to the mentally inert reader, alongside the many unnecessary obstacles. I would argue against both. In particular, long lists of English translation equivalents may seem to be more useful to the reader, and less demanding, than painstaking definitions. In fact, however, lists of this kind cannot be regarded as a valid alternative to definitions. If the meaning of a given Warlpiri word can be indicated by means of one simple English equivalent (for example, *lani* 'afraid'), then I think there is nothing wrong in saying just that, without necessarily attempting a definition. A long list of quasi-synonyms ('in fright, frightened, scared, in fear') should be dispensed with. If, however, a long list of English translation equivalents seems to be needed because none of the 'equivalents' is really equivalent in meaning to the Warlpiri word, then a definition is necessary - even if the definition requires greater effort on the part of the dictionary user.

For example, the word *nyurunyuru-jarri-mi* is glossed as follows: 'to hate him, despise him, be jealous of, disapprove of'. I presume that the invariant meaning behind these different glosses can be captured by the following formula: 'to feel bad feelings towards someone'. Despite the great simplicity of the words used in this definition (and partly because of it), it may be more difficult to 'take in' than the list of alternative glosses offered in the current version of the dictionary. Yet this list of alternative glosses fails to capture the invariant meaning of the Warlpiri word and as a consequence, it is inadequate. To leave it in the dictionary in preference to a simple but unfamiliar-sounding definition on the grounds that it would be easier for the ordinary reader to 'take in', represents in my view an unjustifiable concession to the reader's inertia. The reader can be expected and required to make a mental effort whenever it is necessary to discover the real meaning of the word defined; he or she should not be expected and required to cope with complicated and obscure language when this language is not necessary and when, in fact, it obscures the semantic structure.

Consider also the following example:

japi-japi - 'entwined, twisted around, folded up, folded under, rolled up, closed up.'

When this is combined with a number of examples, the list of English 'equivalents' is suggestive and may satisfy the reader. Nonetheless, it is clear that this list does not show what the Warlpiri word really means. It fails to capture the invariant. If we do make the effort needed to extract this invariant, we will perhaps state it, roughly, as follows: 'x's position is such that both its ends are close to one another'. To people used to conventional dictionaries, unconventional potential translation equivalents. If the authors of the dictionary want to compromise, they can, of course, offer the reader both a definition and a list. But a list without a definition is not enough: the Warlpiri concept in question has not been captured.

One last example is:

linji - 1. 'emptied of inherent moisture: dry, ripe, cooked, burnt, dried out, dessicated, dead (of a plant); 2. of person covered with dust and of disheveled appearance: dusty, dirty, unkempt, disheveled'.

Here, two different meanings are postulated, but neither of them is stated: each of the two meanings is merely hinted at by means of a long list of possible translation equivalents. These translation equivalents, however, are so different from one another, that the reader does not really have a hint of what the two invariant meanings really are, or how they are related. The examples offered suggest that in fact these meanings can perhaps be stated as follows: 1. 'x was changed because it had been for a long time in the heat'; 2. 'x was changed because it had been for a long time in the heat, it looked bad because of that'. These two definitions, which spell out concepts unfamiliar to native speakers of English (because in English they have not been lexicalized), may indeed be more demanding for the reader than two lists of ready-made translation equivalents. But, of course, cross-cultural understanding can never be achieved without a mental effort. Two lists of apparently disparate translation equivalents are misleading to the reader, in suggesting that the Warlpiri word in question has no underlying conceptual unity. To reveal that underlying conceptual unity, a definition must be given. A list of ready-made translation equivalents may be less demanding, but it is also much less illuminating.

Another, related, issue is that of standardization versus idiomaticity. Consider first the following three definitions:

wangka-mi - 'xABS produces sound (...)'

waarr-paka-rni - 'xERG strikes yABS (typically head of x) and emits a loud wail'

wuyurr-wangka-mi - 'xABS makes sound (...)'

It appears that the three verbs 'produce', 'emit' and 'make' are meant to express exactly the same meaning (causation of a sound) in each of the three definitions. In a standardized semantic metalanguage, there is no room for elegant variation, and the same meaning, whenever possible, must be expressed

in the same way. (Hence the usefulness of versatile rudimentary words such as 'want', 'cause', 'do', 'feel' or 'bad'.)

In general, however, the Warlpiri dictionary project does make an effort towards standardisation of the language of its definitions. Words such as 'cause', 'entity', 'being', 'contact', 'move', 'self-propulsion' or 'perceive' are used very frequently in the definitions, witnessing an awareness on the authors' part that the same meanings should, as far as possible, be expressed in the same way. From this point of view, the Warlpiri project differs very favourably from most other comparable dictionaries. What is lacking is a similar effort towards simplicity of language. Simplicity of language is the best guarantee of its successful standardization. For example, an expression such as 'material integrity' is not only difficult to comprehend, but also deficient from the point of view of standardization: since the word 'part' will reduce not only the obscurity, but also the unnecessary variation in the language of definitions.

In lexicography, there is no real conflict between insight and rigour, as there is none between 'God's truth' and public good. Stylistic variation may have to be sacrificed and conventions of respectable educated language may have to be dispensed with. But the concepts encapsulated in the words defined can be stated accurately, revealingly and intelligibly at the same time.

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