MEANING AND SYNTAX IN SPOKEN MANDARIN

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CHAPTER 6
VERBAL VALENCES

1. In chapter 7, an analysis of verbal concatenation in Mandarin will be presented. In view of that presentation, the notion of valence, which was briefly introduced in section 5 of chapter 2, requires further discussion. The notion of valence is reintroduced in section 2 below. The remaining sections deal with the definition of a discovery procedure for valences.

2. VALENCES (or VALENCEs, or ARGUMENTS) are subdivisions in the meanings of various lexemes such as verbs, prepositions, coverbs, conjunctions and particles. The question of how to determine the number and the identity of valences has troubled many linguists.17 I will treat the need for valences in the analysis as a corollary of the notion that “even the most subtle semantic aspect can be described as a feature of something” (Ebeling 1978: 109).

In the case of Mandarin mài ‘sell’, an analysis of the meaning of mài ‘sell’ in terms of two valences ‘selling’ and ‘being sold’ implies that this meaning combines projections of distinct features | selling | and | being sold |, carried by two different referents, viz. the seller of the thing sold and the thing sold by the seller. In other words, even though the two features projected as valences are carried by different entities, they do not randomly belong to different acts of selling, but to one and the same selling event.

Valences are strictly internal to the meaning of the expression under consideration. Thus in a sentence such as

(6.1) Tāmān bù mài lǐngjiān.
3.pl. not sell spare.part
‘They don’t sell spare parts.’

the meanings ‘they’ and ‘spare part’ are not valences belonging to mài ‘sell’. The meanings ‘they’ and ‘spare part’ correlate with the forms tāmān and lǐngjiān, respectively, and share referents with the meaning of mài ‘sell’. Between the three meanings ‘sell’, ‘they’ and ‘spare part’, only two referents are shared. The meaning ‘spare part’ is convergent with the ‘being sold’ valence of mài ‘sell’, sharing the intended spare parts as a common referent. The meaning ‘they’ shares its referent, i.e. the persons most likely to have been intended in the speech situation, with the ‘selling’ valence of mài ‘sell’. I follow Honselaar (1980: 11) in reserving the term COMPLEMENT for expressions such as tāmān ‘they’ and lǐngjiān ‘spare part’ in (6.1) whose meanings are constructed so as to be convergent with a given valence. The nature of this convergent syntactic relationship will be considered in the following sections. A complement will be said to REPRESENT (Honselaar’s term, pp. 3, 11) a valence.

3. A given day on which a selling event takes place may be thought of as somehow being characterized by the selling event, viz. as possessing a | selling time | feature. The question is now whether that feature can be projected as a ‘selling time’ valence of mài. In example (6.2), such a valence would be convergent with the meaning of the complement jīntiān ‘today’:

(6.2) Jīntiān mài fāngzi.
today sell house
‘Today the house will be sold.’

This line of reasoning will soon increase the number of valences, as even a preliminary inventory may show. For mài ‘sell’, the valences ‘selling price’, ‘place of selling’, ‘manner of selling’ and ‘result of selling’ appear to be represented in the following sentences by the complements bā mǎo ‘eighty cents’, Hǎiyà ‘The Hague’, xiānrèn ‘obviously’ and guāng le ‘become bare’:

(6.3) Liāng zhī mài bā mǎo.
two single sell eight dime
‘Two pieces sell for eighty cents.’

(6.4) Hǎiyà mài Zhōngwén shū.
in The Hague sell Chinese.language book
‘In The Hague they sell Chinese books.’

(6.5) Xiānrèn mài guāng le.
obviously sell bare PF
‘It’s obviously sold out.’

Note that this provisional list of valences does not include a projection of a feature | selling to | carried by the entity to which something is being sold. The reason is that in Mandarin this meaning is usually expressed by means of gěi ‘give’, as in
(6.6) Mài gěi tā le.
sell give 3 PF
'We sold it to her.'

Here I describe tā 'her' as a complement of gěi 'give'. It is possible to find complements of mài 'sell' correlating with a meaning which refers to the entity to which things are sold, but they are stylistically and regionally marked. They will not be considered here, but may be analyzed in exactly the same way as the valences to be discussed.

In the present treatment of valences, I will have little to say about the position of complements relative to the verb (preposition, etc.) except that the same complement representing the same valence may often occur either before or after the verb. The corresponding difference in meaning does not affect the analysis which follows.

It is not always easy to establish whether features such as [selling time] and [selling price] are distinctive, i.e. whether they are projected in the mind as partaking of the meaning 'sell' correlating with mài in sentences (6.2), (6.3), (6.4) and (6.5). In order to establish the valences of verbs, prepositions, and conjunctions, Wim Honselaar (1980: 10-11) has proposed a detailed discovery procedure. I will discuss some of his arguments and Dutch examples below, not only because the analysis offers interesting approaches, but also because it is available only in Dutch. In addition, since one of my aims is to demonstrate the subtlety of the semantic distinctions involved in this type of description, I am on surer ground in a language over which I have native command.

Given a word for which valences are to be determined, Honselaar's discovery procedure takes the form of successive instructions:

(6.7) 1. Intuitively establish, on the basis of as many sentences in which forms of the word occur as possible, which discrete semantic aspects appear to be required for an adequate description of the set of appropriate referents.
   2. Determine if these aspects are being manifested, and if so, in which phrases.
   3. For the phrases selected in 2, establish whether their occurrence is obligatory.
   4. For the remaining phrases selected in 2, establish whether their meaning can be described on the basis of their own form.
   5. Designate both phrases occurring obligatorily and phrases whose meaning cannot be described on the basis of their own form as REPRESENTATIVES of valences.
   6. Considering as VALENCES only those semantic aspects which have representatives to match, establish the word's inventory of valences.
   7. For phrases which cannot be considered representatives of valences according to criterion 1, describe the conditions prompting any obligatory occurrences. (Honselaar 1980: 10-11)

The discussion below will be restricted to instructions 1 to 6. Note that Honselaar's "representative" is apparently used interchangeably with his "complement" (1980: 11, 46).

Application of instructions 1 to 3 to examples in (6.1) to (6.5) yields the following results:

(6.8) 1. The semantic features in question are projections of the features | selling | | being sold | | selling price | | selling time | | place of selling | | manner of selling | | selling result | , as argued above;
   2. These aspects are represented by tāmén 'they', lǐngjiān 'spare part', jīntiān 'today', bā mǎo 'eighty cents', Hǎiyǎ 'The Hague', xiānrán 'obviously' and guǎng le 'become bare', respectively;
   3. None of the phrases identified in 2 occur obligatorily: Bù mài lǐngjiān. 'They don't sell spare parts.', Tāmén bù mài. 'They don't sell them.', Mǎi fāngzǐ. 'The house will be sold.', Liǎng zhī mǎi. 'Two pieces I'll sell.', Mǎi Zhōngguó shū. 'Chinese books are sold.', Mǎi guǎng le. 'They're sold out.' and Xiānrán mǎi. 'Obviously they sell it.' are all grammatical.

In spite of the absence of obligatory elements in the examples given for mài, instruction 3 of the procedure is by no means trivial in the description of Mandarin. E.g. for the coverb dā 'from', the three instructions will (1) record a tentative semantic aspect 'place or time from which', (2) detect that this meaning correlates with forms following dā 'from', and (3) establish that such forms occur obligatorily.

For mài 'sell', in the absence of obligatory elements, all of the phrases identified in 2 pass on to instruction 4. The question whether their meanings can be "described on the basis of their own form[s]" is a crucial one. If so, instructions 5 and 6 will define these meanings as valences of mài.

In Honselaar's assessment of meanings "on the basis of their own form[s]", a meaning provisionally constructed as a valence of a verb (preposition, etc.) is confirmed as a valence if this meaning can be shown not to belong to the meaning of the provisional complement. The following are some of his examples:18

(6.9) In de voorstelling duur drie uur 'the show lasts three hours', drie uur cannot be left out. Hence I consider it a representative of a valence of DUREN 'last', viz. 'duration' (the other valence being 'that which lasts'). Now drie uur 'three hours' also occurs as a phrase outside the context of duur, denoting a time span just as it does within the context of duur; hij sliep drie uur 'he slept three hours'. Still, drie uur 'three hours' can also denote a point in time: hij is drie uur vertrokken 'he left at three'. Also

18. Honselaar's italics transcribe utterances (1980: 2), i.e. realizations of forms. For the present purpose, the distinction between utterances and forms is irrelevant. Honselaar's capitals indicate lexemes.
compare \textit{dat duurt een zondag} 'that will take up one Sunday' with \textit{hij is een zondag gevallen} 'he fell one Sunday'.

In \textit{de voorstelling duurt drie uur} 'the show lasts three hours', \textit{drie uur} 'three hours' cannot denote anything but a time span. It derives this specific meaning from the fact that it represents the 'duration' valence of DUREN 'last'.

N.B. The fact that few representatives combining with DUREN 'last' behave like \textit{drie uur} 'three hours' and \textit{een zondag} 'a Sunday' does not weaken the argumentation.

An additional argument is that a sentence like \textit{dat duurt een sigaret} 'that will last a cigarette' cannot be taken in any other way than 'that will last as long as a cigarette lasts' (i.e. for the duration of smoking a cigarette).

(Honselaar 1980: 22)

For the last example,

\begin{align*}
(6.10) & \quad \text{dat duurt} \quad \text{een sigaret} \\
& \quad \text{that last, \text{NON1.SG.PRS} a cigarette} \\
& \quad \text{‘that will last a cigarette’}
\end{align*}

the argument runs roughly as follows:

\begin{align*}
(6.11) & \quad \text{given that} \\
& \quad (a) \quad \text{the example presents a cigarette as a time span and} \\
& \quad \text{b) sigaret ‘cigarette’ occurs without this temporal meaning in other collocations,} \\
& \quad \text{hence} \\
& \quad (c) \quad \text{the example refers to the cigarette as ‘cigarette’ by means of sigaret, and} \\
& \quad \text{simultaneously as a ‘duration’ by means of duurt.}
\end{align*}

In short, the analysis prevents an uncomfortable construction of temporality in the meaning of \textit{sigaret} ‘cigarette’. Note, incidentally, that the paraphrase $\ast$‘for the duration of smoking a cigarette’ in (6.9) is an interpretation with respect to ‘smoking’: the meaning ‘duration’ allows it but does not impose it. When a service technician calibrating electronic devices in a cigarette production line says \textit{dat duurt een sigaret} ‘that will last a cigarette’, this may be interpreted as ‘that will last for the time needed to produce a cigarette’.

It seems unavoidable that the meaning mentioned in arguments like that of (b) in (6.11) is less specific than the provisional valence. After all, a search for a meaning ‘duration’, i.e. ‘time span in which something lasts’ would be futile outside of the context of \textit{duurt} ‘lasts’. When this search fails, as it will, and a valence ‘duration’ is assigned on this basis, analogous tests for other valences would render the meaning of \textit{duurt} infinitely polyvalent.

Accordingly we must search for a meaning ‘time span’, not ‘duration, time span in which something lasts’, in other collocations. More generally, the domain of the search is the provisional complement in any collocation but the one under investigation. The object of the search is the projection of a feature, this feature being necessarily redundant with respect to the features projected in the valence to be established.

4. Argument (b) of (6.11) presents the occurrence of a meaning in different collocations of a provisional complement. A provisional valence is confirmed if this meaning can be shown not to belong to the meaning of the provisional complement. Conversely, if the meaning of the provisional valence can be shown to belong to the meaning of the provisional complement, nothing is proven, for the possibility remains that the meaning represented by the provisional valence belongs to both this valence and the verbal meaning simultaneously. This situation suggests a practical amendment to the discovery procedure introduced in (6.7).

Consider once again the meaning ‘selling price’ which was provisionally recorded as a valence represented by \textit{bā māo} ‘eighty cents’ in (6.3). A comparison of collocations with \textit{bā māo} will soon show that the ‘price’ meaning is present in every instance. Also note that \textit{bā māo} does not mean ‘eight ten-cent coins’. That meaning is described peripherically in Mandarin, e.g. as \textit{bā ge yī māo de ‘eight ten-cent ones’}, or, more formally, \textit{bā ge yī māo de yīngbī ‘eight coins of ten cents’}. Compare:

\begin{align*}
(6.12) & \quad \text{Nà nei ge yī māo de qu kǎi,} \\
& \quad \text{take that piece one dime SUB go open} \\
& \quad \text{‘Take that dime to open it.’}
\end{align*}

In short, the meaning ‘eight dimes’ correlating with \textit{bā māo} is a projection of feature(s) comprising or presupposing the feature $|$ price $|$. The test fails to confirm the presence of a ‘selling price’ valence in the meaning of \textit{māi} because the detection of a projected $|$ price $|$ feature may in each case be due to its being contributed by \textit{bā māo} ‘eighty cents’. It also fails to disprove the presence of the valence because the feature may in each case have been projected simultaneously by the complement and the valence.

The question is now whether there are other expressions lacking a ‘price’ meaning which can be constructed so as to allow the occurrence of that meaning in collocation with \textit{māi}. Consider the expression \textit{yī shōu shī} ‘one poem’. The following sentence shows that it lacks a ‘price’ meaning:

\begin{align*}
(6.13) & \quad \text{Měi yī yè yōu yī shōu shī,} \\
& \quad \text{each one page exist one poem poetry} \\
& \quad \text{‘There is one poem on each page.’}
\end{align*}

Now if I were to enter monastic life, I might sell all my books for the symbolic price of one poem. In this context, someone who has heard that the books are on offer may ask:
(6.14) Mài duó qián a?
    sell how much money CP
    ‘For how much do they sell?’

The answer may be:

(6.15) Mài yì shǒu shī.
    sell one poem poetry
    ‘They sell for one poem.’

I conclude that a ‘selling price’ valence should be described for the meaning of mài.

The above considerations suggest the following amendment to the discovery procedure in (6.7):

(6.16) [...] 2. Designate each semantic aspect recorded in 1 as a PROVISIONAL VALENCE. For each provisional valence, select those phrases in whose presence it is manifested, and designate them as the set of PROVISIONAL COMPLEMENTS.

[...]

4. For each set of provisional complements corresponding to the same provisional valence, create a subset in the following way:
   a. Select those expressions in the set of provisional complements which can occur both in collocations where the semantic aspect at issue is present and in collocations where it is not;
   b. If the subset thus far obtained is empty, look for an expression which
      - itself lacks the semantic aspect at issue, yet
      - when substituted for a provisional complement in collocation with the verb
        (preposition, etc.) necessarily leads to the recording of the semantic aspect
        at issue.
      Add this expression to the subset.

The subset contains the φ-phrases whose meaning cannot be described on the basis of their own form” referred to in instruction 5.

[...

Now consider an examination of the ‘selling time’ valence according to the amended procedure. When instruction 1 registers a ‘selling time’, instruction 2 designates this meaning as a provisional valence and may find it to be represented by the provisional complement jīntiān ‘today’ in example (6.2). As before, instruction 3 establishes that the occurrence of this provisional complement is not obligatory. In instruction 4a, the question is whether the ‘time’ meaning can be absent in the presence of jīntiān. It will soon become evident that it cannot. The exception of the name of the magazine Jīntiān ‘Today’ does not affect the argument, because the description needs to deal separately with the special relationship between form and meaning in proper names. In short, the meaning ‘today’ includes the meaning ‘time’.

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The ‘time’ meaning intended here localizes the event on the time axis, i.e. it is, in Honselaar’s (6.9) terms, a point in time, not a time span.

‘In executing instruction 4b, dì yī kè ‘first lesson’ may be taken as an expression lacking the meaning ‘time’. The expression can e.g. refer to the relevant part of a text book: Dì yī kè xiè de hǎo. ‘Lesson One is written well.’. Now consider the substitution of jīntiān ‘today’ by dì yī kè ‘first lesson’:

(6.17) Dì yī kè mài fāngzǐ,
    ord one lesson sell house
    ‘They were selling houses in the first lesson.’

Given a situation in which houses are being sold in an economy class, e.g. in a simulation or as an educational game, and given an occurrence of sentence (6.17) referring to that situation, the question is whether the sentence presents the selling event as occurring at the time identified by the class. The Mandarin sentence does not impose this meaning: the selling event is presented against the background of the economy class in a much less specific way, which may in turn be interpreted e.g. as a local backdrop (‘at the location of the first lesson’), a logical condition (‘in case of a first lesson’), a manner (‘by means of lesson one’), an identification (‘as a first lesson’) or indeed a temporal background (‘at the time of the first lesson’). Grammars of Mandarin usually describe this relationship between the meanings of dì yī kè ‘first lesson’ and mài fāngzǐ ‘sell houses’ in terms of TOPIC and COMMENT (e.g. Chao 1968: 69-72). In the present analysis, the fact that the temporal reading is not imposed makes it a matter of interpretation, invalidating the provisional ‘selling time’ valence.

5. The meaning of a complement is generally convergent with only one valence at a time. Exceptions are of the reflexive type and are easily identified: for zhǒu jíēshào ‘to introduce oneself’, the meaning ‘oneself’ correlating with zhǒu can be analyzed as convergent with an ‘introducing as well as with a ‘being introduced’ valence in the meaning of jíēshào ‘introduce’. In other cases, the convergence of a complement with one valence excludes its convergence with another valence of the same expression. Honselaar (1980: 26-27) reaches a similar conclusion in connection with his example hitch shoot hazen ‘he shot hares’:

(6.18) hitch shoot hazen
    3.MSC.SG shoot.PAST.SG hares.PL
    ‘He shot hares.’ (1980: 26)

He argues that

(6.19) ‘The hares referred to are here meant as the hunting catch. The sentence means: ‘he shot at hares so as to obtain them as catch’.

He concludes that...
In *hij shoot* 'he shot', there is no implicit indication that an intended catch is at issue. On the other hand, the phrase *hazen* 'hares' is not used in a regular meaning of propositionless phrases: it acquires the meaning 'catch' only in the context of *SCHIETEN* 'shoot'. One solution would be to consider *hazen* 'hares' a representative of a semantically optional valence. When the valence is not represented, as in *hij shoot* 'he shot', it is not covered either.

The valence 'being shot [as a projectile]', as represented by *een zware kogel* 'a heavy bullet' in *hij shoot een zware kogel in de richting van de stad* 'he shot a heavy bullet in the direction of the town', is semantically obligatory, but syntactically optional. It is covered in *hij shoot* 'he shot' and in *hij shoot hazen* 'he shot hares'. When the optional valence 'shooting catch' is represented, the valence 'being shot [as a projectile]' can no longer be represented:

- *hij shoot een zware kogel* 'he shot a heavy bullet'
- *hij shoot een zware kogel hazen*

(Honselaar 1980: 26-27)

The analysis rightly leaves open the possibility that the hares referred to in example (6.18) are presented as projectiles. This reading may be strange, but its strangeness derives from the knowledge that hares are not generally used as ammunition. No strangeness is imposed by the language, for there is nothing in the form *hij shoot hazen* 'he shot hares' which decides whether *hazen* 'hares' represents the valence 'catch being shot' or the valence 'being shot as a projectile'. The expression *hij shoot hazen* may be said to be homonymous in this sense, but I will return to this point in section 6. For the present purpose, the point is that the meaning of *hazen* 'hares' can be covered with either valence, but not with both valences simultaneously. A similar argument applies to *Māi yi shōu shū* 'They sell for one poem.' in (6.15) and *Māi yi shōu shū* 'They sell one poem.'

In Honselaar’s reading of example (6.18), which presents the hares as catch, I see no formal or semantic reason to assume a ‘being shot as a projectile’ valence. This is not to say that acts of shooting can do without projectiles being shot. I simply do not think that the thought of projectiles is transmitted by sentences such as (6.18). As argued in chapter 3 (p. 42), it seems advisable that the allocation of unrepresented valences be based on semantic clues. In this respect, my approach may tally with Honselaar’s arguments, but it also allows for individual semantic judgments by different speakers. In the case of (6.18), Honselaar and I may agree as linguists but do not seem to agree as native speakers of Dutch. Likewise in (6.19) “*hij shoot een zware kogel hazen*”, Honselaar’s asterisk in my view indicates only that *een zware kogel* ‘a heavy bullet’ cannot represent the valence ’being shot as a projectile’. The expression cannot be disqualified either formally or semantically, and in one reading the ‘being shot as a projectile’ valence can be seen to be represented. The sentence *hij shoot een zware kogel hazen* means ‘he shot a heavy bullet of hares’. As in the case of hares being shot as projectiles, the strangeness of this example derives from world knowledge, not from restrictions in the language. If the need were to arise to count hares in terms of heavy bullets, then Dutch *een zware kogel hazen* ‘a heavy bullet of hares’ would be an appropriate way of doing so. This means that the sentence *hij shoot een zware kogel hazen* ‘he shot a heavy bullet of hares’ can denote that the man in question shot a heavy bullet of hares as his catch. But if *hij shoot een zware kogel hazen* ‘he shot a heavy bullet of hares’ is used to refer to a heavy bullet of hares being shot as a projectile, the complement *een zware kogel hazen* ‘a heavy bullet of hares’ will represent the ‘being shot as a projectile’ valence.

The following example from Mandarin, mentioned briefly in (6.8) above, does seem to illustrate an unrepresented valence:

(6.20) *Tāmén bù māi.*

3.PL not sell

*They don’t sell them.*

My analysis records for *māi* ‘sell’ a ‘selling’ valence represented by *tāmén* ‘they’ and a ‘being sold’ valence which is not represented, but which is nevertheless needed because sentence (6.20) cannot be interpreted as ‘They do not sell whatever things can be sold,’ or ‘They do not engage in selling.’ In other words, the sentence does not refer to the things being sold as things in general, but specifically as things which the speaker assumes the hearer can identify from the (linguistic or non-linguistic) context. I have transcribed this meaning as ‘*īt*’ (cf. chapter 2, section 3). In example (6.20), the meaning ‘*īt*’ is convergent with a ‘being sold’ valence. Note that ‘...convergent with’ is a rather exaggerated way of describing the relationship between ‘*īt*’ and the ‘being sold’ valence. These two meanings not only project features pertaining to the same referent, viz. what is sold, but correlate with one and the same form /māi/ /i/. For want of a better term, and in analogy with instances in which valences are represented by complements, I will continue to describe this relationship as convergence.

If other meanings besides ‘*īt*’ are found to be convergent with unrepresented valences, they will likewise be reflected in the description of these valences. In Mandarin, convergence of unrepresented valences with ‘*īt*’ happens to be very common, and the phenomenon is attested in other languages as well. Ebeling quotes the following example from Russian:

(6.21) *Ja vīšu*

1.SG.NOM see.PRES.NPF.1SG

'I see'

(1980: 364, my glosses)

For the stem of the verb *vīšu* 'I see', he records the following “semantic alternants” (ibid.) or complementarily distributed allophones of one meaning, separated by vertical strokes. The valences belonging to the same meaning are enclosed in square brackets and aligned vertically.
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(a) semantically optional valences, i.e., those which are present only in the presence of a complement, e.g. ‘selling price’ in (6.15) Māi yì shòu shì. ‘They sell for one poem.’;

(b) semantically obligatory valences, i.e., those which are present even in the absence of a complement, e.g., ‘being sold’ in the case of māi ‘sell’. Unlike Honselaar, I recognize these valences only when they are convergent with other meanings. Unlike Ebeling, I recognize these valences even in the absence of a separate complement. In Mandarin the usual meaning associated with an unrepresented valence is ‘it’. Note that this meaning has been translated as ‘they’ in (6.15) Māi yì shòu shì. ‘They sell for one poem.’

The need for syntactically obligatory valences, which is rather marginal in Mandarin, has been mentioned in connection with dà ‘from’ in section 3.

In (6.15) Māi yì shòu shì. ‘They sell for one poem.’, the presence of both the unrepresented valence ‘being sold’ and the represented valence ‘selling price’ indicates that each of these valences has an independent status. Hence the reading of Māi yì shòu shì as ‘They sell one poem.’ can be treated as a case of homonymy. The same argument would apply to Honselaar’s (6.18) hij schoot hazen ‘he shot hares’ if one were to accept his (6.19) claim that both this example and hij schoot ‘he shot’ cover a ‘being shot as a projectile’ valence. My disagreement with him on this point opens the possibility of a polysemous analysis of the two readings of hij schoot hazen, viz. ‘he shot hares as a hunting catch’ and ‘he shot hares as ammunition’.

A similar possibility of polysemy is available for the provisional valences recorded for example (6.17) Di yì kē māi fāngzi. ‘They were selling houses in the first lesson,’ ‘location of a lesson’, ‘condition of a lesson’, ‘method of a lesson’, ‘time of a lesson’, etc. Instead of an all-out rejection of these provisional valences, a less specific, semantically optional valence may be established. The definition of this valence concurs with traditional analyses in terms of topic, i.e., the valence delineates a rather general ‘situation of selling’.

[References in this chapter: Chao (1968)]


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