THE STRUCTURE OF LINGUISTIC ASYMMETRY: EVIDENCE FROM HEBREW AND CHINESE

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1. Introduction

A relation is said to be asymmetric if it holds between a and b but not between b and a: $a\forall, b\forall [R (a,b) \rightarrow \sim R (b,a)]$. Thus the statement 'Ann is Jane's grandmother' illustrates an asymmetric relation between Ann and Jane, the sequence between 'Ann' and 'Jane' being irreversible. However, 'Ann is Jane's neighbour' or 'Ann is the twin of Jane' both illustrate symmetrical relation. Although asymmetry cannot be considered a grammatical relation, it certainly does not fail to have morpho-syntactic and syntactic manifestations. To talk about asymmetry in language is only possible, needless to say, when dealing with two linguistic elements, pertaining to the same form class, placed on an identical level of linguistic analysis, and connected by some link.

We believe that formal and conceptual structures are closely interrelated as Claude Hagège (1975: 24) neatly expressed it: 'La syntaxe n'est qu'un durcissement de la sémantique'. Our main purpose in this paper is to call attention to some formal facts of asymmetric relations in language, and to trace some of the principles governing phenomena where asymmetry is displayed. The nature of lexical-semantic structures may thus be better understood.[1]

Our data, however unexpectedly, are drawn mainly from two such remote and unrelated languages as Hebrew and Chinese. This is the result of two separate studies, one on modern Hebrew and the other on modern Chinese (Mandarin). In each of these investigations we have encountered some relations that struck us as asymmetric in nature. Some of the phenomena we deal with have already been described, others have not yet been treated before. The study of various phenomena in an integrated manner, and the observation of linguistic relations in totally unconnected lan-

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[1] We are aware, of course, that the linguistic forms we will discuss may be reversed in moments of strong emotions or for literary purposes. Our refererences are to the conventional usages of language.

guages, may contribute towards acquiring a typological perspective. In the following sections we deal with asymmetric relations as manifested either syntagmatically or paradigmatically.

2. Syntagmatic aspects of asymmetry

By syntagmatic aspects of asymmetry we mean asymmetry as displayed in the successive order of linguistic elements. Thus a relation (R) is asymmetric if a succession of two elements in the frame a, b is possible, but not a succession of b, a. If, for example, we take English binomial expressions (as in Malkiel 1959), we might see that *sooner or later, here and there, Adam and Eve* are asymmetric in that they very seldom appear in the reverse order *later or sooner* etc. There are however a few other bipolar expressions which exhibit syntagmatic symmetric relations between a and b, as for example the English *on and off* and *off and on, then and there,* and *there and then*. These cases will also be accounted for. In examining syntagmatic aspects of asymmetry we proceed from smaller units to larger ones.

2.1. Bipolar bimorphemic terms[2]

The smallest morphosyntactic units in which the relation of asymmetry can be detected are bimorphemic terms. The following Hebrew expressions composed of bipolar, irreversible juxtaposed terms, display asymmetrical relations between the components:

tov	*ve-ra*		* *ra*	*ve-tov*
good	and evil		evil	and good
saxar	*va-onesh*		* *onesh*	*ve-saxar*
reward	and punishment		punishment	and reward
shamayin	*va-arets*			
heaven	and earth			
xayim	*u-mavet*			
life	and death[3]			

As illustrated by these expressions which represent the great majority of conjoined bimorphemic bipolar terms, the positive, the stronger, the chronologically or

logically prior member of the two tends to precede the negative, weaker, or later member in the sequence of words (see Malkiel 1959). However, some bipolar symmetrical expressions can be found in Hebrew:

etsev ve-simxa	*simxa ve-etsev*
sorrow and joy	joy and sorrow
gdolim u-ktanim	*ktanim u-gdolim*
big ones and small ones	small ones and big ones
'grownups and youngsters'	

The existence of symmetric or reversed pairs of this kind can be mainly accounted for as content dependent and by rhythmic and prosodic considerations.

Chinese bipolar bimorphemic terms might be classified into three groups according to different kinds of semantic and conceptual relations of the bipolar unit as a whole. The first group resembles the Hebrew examples in that, semantically, the whole unit represents the sum of a and b. Here again, we observe the tendency of the so-called positive pole to precede the negative one, and the chronologically or logically prior to precede the latter. As in the following Chinse juxtaposed terms:

shi	*fei*
right	wrong
'right and wrong'	
(and never * *fei shi*)	
jiang	*cheng*
reward	punishment
'reward and punishment'	
gong	*zui*
merits	demerits
'merits and demerits'	
xiong	*di*
elder brother	younger brother
'elder and younger brothers, brothers'	

There are however cases where we observe the reverse order as for example in *yin yang*; *yin* representing the negative, lunar, feminine pole, and *yang* – the positive, shiny, masculine pole. Most of these Chinese cases are accounted for by prosodic factors related to tone sequence (a tendency for the first tone syllables to precede oblique tone syllables, as already observed by Lien 1989).

Whereas the bimorphemic members of this group form semi-compounds, the components of the other two Chinese groups constitute compounds.

The first of these two groups is the group of Chinese antonymous adjectives used as abstract nouns.

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[2] We prefer the term 'bimorphemic' to Y. Malkiel's 'binomials' for two reasons:
   1) the term 'bimorphemic' fully accounts for the Chinese as well as the Hebrew facts,
   2) it rules out any possible misinterpretation of binomials as referring to nouns only.

[3] In the original biblical quotation (Proverbs 18, 21) 'death' precedes 'life': '*mavet vehayim beyad lashon*' meaning 'death and life are in the power of the tongue', but modern Hebrew speakers tend to quote it in the reverse order, thus adjusting it to the general rule of asymmetry we discuss in this paper. (We thank Hadasa Kantor for pointing out this example to us).

Each compound of the following bimorphemic units is composed of two bipolar gradable adjectives, the compound as a whole functioning as an abstract noun which characterizes the whole dimensional scale. For example:

chang duan	*yuan*		*jin*	*kuan zhai*
long short	far near			wide narrow
'length'	'distance'			'width'

gao	*ai*	*shen*	*qian*	*hou*	*bo*	*da*	*xiao*
tall	short	deep	shallow	thick	thin	big	small
	'height'		'depth'		'thickness'		'size'

The asymmetry revealed in the structure of these compounds consists of the fact that the adjective denoting more (of the said property) on the dimension scale precedes the adjective denoting less (*long* precedes *short* etc).

Marie-Claude Paris (1979) observed in her treatment of antonymous adjectives, that the negative term, which is the marked term, will not appear in the first position in these compounds. This observation obviously invites the question: what lies between markedness and asymmetry? To answer this question we might look at some of the criteria used to identify markedness. The two crucial criteria usually applied in identifying the unmarked member, which might also be labelled the impartial member, are:

1. Questions of the type: 'How long is the table?' (with a stress on the adjective, not on the 'how', see Ljung 1974), and
2. Nominalizations of the type 'the length of the table is two meters'.
(See also Greenberg 1966, Bolinger 1977, Lyons 1977, Lehrer 1985 and others).

As far as Chinese is concerned a 'how question' will always contain, as in English, the adjective denoting more on the evaluative scale, which is impartial and unmarked (see also Cruse 1992).

ta	*zai*	*zher*	*zhu*	*le*		*duo*	*chang*	*shijian?*
he	at	here	live	perf. aspect		how	long	time?

'How long did he live here?'

dashiguan   duo   yuan?
embassy   how   far
'How far is the embassy?'

In Hebrew, the neutralizing questions consist of a morphologically derived nominalization of the so-called positive pole. Asymmetry is revealed by the fact that one member, which is the unmarked and the positive, lends its name to the whole scale: *orex* – length, *roxav* – width etc.

ma ha-orex shel ha-shulxan?
'What's the length of the table?'

ma   ha-merxak   la-shagrirut?
what distance   to the embassy
'How far is the embassy?'

True, asymmetry and markedness both imply a binary structure. However, in contrast to asymmetry, markedness also implies that in one of the two elements the distinction is neutralized. Thus, markedness necessarily implies asymmetry but asymmetry does not imply markedness.

The third group of Chinese bipolar bimorphemic terms displaying assymetry consists of directional terms, which are either conceived of as separate elements in an irreversible sequence or as compounds.

Table 1. Chinese bipolar bimorphemic directional terms.

Chinese terms and their English glosses	Basic meaning	Abstract meaning
nan *bei* south north;	'south and north'	'sundry' as in *nan bei* *huo* sundry goods
dong *xi* east west	'east and west'	'things, objects, matters'
heng *shu* horizontal vertical	'horizontal and vertical'	'anyway, in any case'
shang xia up down	'up and down' 'above and below'	'about, more or less'
qian *hou* front rear	'the front and the rear'	'before and after' 'thereabout' (about time)
zuo *you* left right	'left and right'	'nearby, around' (about numbers)

The compounds thus composed express either the whole directional scale (first two examples above), or proximity (four latter examples). The asymmetric relation between the bipolar terms in this group is again demonstrated by the fact that the reverse order is unacceptable, but an attempt to apply the 'how questions' test on these terms does not yield any results as far as identifying the marked and unmarked member of these binary compounds. We do not ask **how left is the table?*, or * *how east is the house?* The first member of each term in this sub-group is thus not unmarked or impartial, which indicates that there is asymmetry here but not markedness. However, one might wonder why *nan* 'south' precedes *bei* 'north', or *zuo* 'left'

precedes *you* 'right' in the Chinese examples. The answer is culturally determined: the Chinese Emperor had his face turned towards the south when he received dignitaries, so that the east, where the sun rises, was on his left. These culturally dependent facts comply perfectly with the data earlier discussed showing the priority of the first element. The semantically positive, more auspicious pole tends to precede the other pole.

Besides the semantic, conceptual and cultural forces that are dominant in fixing the order of the components, some rhythmic-prosodic constraints peculiar to each language also prove to be at work (as observed by Cooper and Ross 1975 and Ross 1982). Whereas Chinese has a prosodic preference for level tones to precede oblique ones (Lien 1989), English and Hebrew manifest a strong tendency for the shorter component to precede the longer one. This might account for some asymmetries as *red and yellow* which is much preferred to *yellow and red*, and such cases as *life and death* as opposed to *dead and alive* in which the rhythmic constraint prevails (Malkiel 1959).

2.2. Bipolar polymorphemic semi-idiomatic expressions

The principles and constraints governing bipolar bimorphemic expressions prove to apply to bipolar polymorphemic expressions as well. These expressions tend to be semi-idiomatic in nature. Consider the following Hebrew examples:

kone	*shamayim*	*va'arets*
owner	of heaven	and earth

et	*ha-tov*	*nekabel*	*ve-et*	*ha-ra*	*lo*	*nekabel?*
dir. obj.	the good	we will accept,	and dir. obj.	the bad	not	we will accept?

al	*ha-dvash*	*ve-al*	*ha-okets*	*al*	*ha-mar*	*ve-ha-matok*
on	the honey	and	on the sting	on	the bitter	and the sweet[4]

bemukdam	*o*	*bi-meuxar*
sooner	or	later

As illustrated in the above asymmetric semi-idiomatic expressions, the whole scale connecting the two poles is suggested.

In Chinese, polymorphemic bipolar expressions are illusrated by antonymous quadrinomials. Such expressions, composed of four morphosyllables, are a unique morphological device forming idiomatic expressions.

These quadrinomials add two elements to bipolar terms (mainly those introduced in the third group of Chinese bipolar biomorphemic directional terms above) (see

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[4] In the Hebrew expression *al hamar vehamatok*, the placing of the negative element first can also be explained by the tendency of the shorter element (here a monosyllabic word) to precede the longer one (Malkiel 1959).

Lien 1989). Whether the order is a X b Y or X a Y b, the asymmetry follows the principles earlier observed:

xie	*tian*	*xie*	*di*
thank heaven		thank earth	
'thank heaven and earth', 'thank goodness'

wen	*chang*	*wen*	*duan*
'ask	long	ask	short'
'to ask many questions (about other people's affairs)'

dong	*zhang*	*xi*	*wang*
east	look	west	gaze
'look everywhere'

It is intriguing to note that while in these expressions asymmetry is manifested syntagmatically as the order of the components is irreversible, conceptually it is the whole dimensional scale that is denoted.

2.3. Interrogative sentences: yes or no questions

Syntagmatic asymmetry is further manifested in interrogative sentences. Note the following English question:

Do you like Hungarian food?

The Hebrew parallel is as follows:

ha'im	*ata*	*ohev*	*oxel*	*hungari?*
interrog. part.	you	like	food	Hungarian?

Chinese presents two options to express the same question.

(a)	*ni*	*xihuan*	*chi*	*xiongyali*	*fan*	*ma?*
	you	like	eat	Hungarian	food	interrog. part.
(b)	*ni*	*xihuan*	*bu*	*xihuan*	*chi*	*xiongyali*	*fan?*
	you	like	don't	like	eat	Hungarian	food?

Whereas yes or no questions are formed in English and in Hebrew by posing the positive option only, Chinese manifests yet another possibility. This other way consists of the positive option succeeded by the negative one (V not V). In Hebrew and English and in the first Chinese pattern the question is unmarked, impartial, while in the second Chinese pattern both extremes of the axis are presented, the positive pole preceding the negative one. Discussing the characteristics of negatives under the theme 'the presuppositional status of negative speech acts' Givón (1979), notes that a speaker using a negative usually assumes that the hearer is familiar with the positive proposition behind the negative statement. If the positive and negative are both

stated, the conventional expectation is to have the presupposed or assumed statement first and the negative new information second. Another confirmation of these observations is the comic effect aroused by questions such as: *Do you hate chocolate cake?* uttered while serving a cake. This joking effect is the result of violating the common consensus about the positive assumption that should have been taken for granted, thus manifesting the priority, unmarkedness or impartiality of the positive over the non-positive member of a contrasting pair.

3. Paradigmatic aspects of asymmetry

By paradigmatic aspects of asymmetry we mean asymmetry as displayed in the behavior of linguistic elements in the same paradigm. Linguistic elements display their paradigmatic relations (be it in morphological, syntactic or semantic paradigms), through substitution and mutual incompatiblity, thus revealing their common linguistic property, as illustrated by various paradigms of parts of speech.

When some elements are equally affixed to members of the paradigm, asymmetric relations between the paradigm constituents might be revealed. Thus a relation R is paradigmatically asymmetric if in a paradigm of $\underline{a}$ and $\underline{b}$, $\underline{a}$ may be affixed or accompanied by $\underline{x}$ but $\underline{b}$ may never yield to such affixation. Asymmetric relations thus found at the morphological level might prove to constitute only the topmost stratum of further semantic, cognitive, sometimes pragmatic asymmetry. Combined with the syntagmatic asymmetries that we have already dealt with, the following data suggest a basic asymmetry between the positive and the negative pole with a clear bias towards the priority of the positive. As a starting point we present some adjectival paradigms already discussed by Zimmer (1964) and others, and then introduce other elements which point to parallel asymmetric phenomena.

·3.1. Prefixation

3.1.1. Neg. prefix + adj.

The asymmetric liability of English adjectives to be prefixed by *un-* or *in-* manifests itself in the following paradigm:

John looks   unhealthy   these last days
              unwell
              *unsick
              unhappy
              *undepressed

Only those adjectives having a positive meaning can be prefixed by *un-*, while those with an unfavorable meaning are usually not prefixed by it. Jespersen noted this phenomenon already in 1917, and in 1927 pronounced it as a general rule:

The same general rule obtains in English and in other languages that most adjectives with *un-* or *in-* have a depreciatory sense; we have *undue, unkind,*

unworthy, etc, but it is not possible to form similar adjectives from *foolish, naughty, ugly* or *wicked*.

As a matter of fact, the first mention of this peculiarity of negative affixation may be credited to Rudolph V. Jhering (1883). This formal phenomenon, namely that negative affixes are used primarily with adjectival stems that have a 'positive' value on the evaluative scales, suggests at a covert cognitive phenomenon. Jhering assumed the priority of linguistic manifestation and conceptualization of the positive pole over the negative one. This claim, naive and elusive as it might sound, finds wide confirmation in other phenomena and in cross linguistic studies as well. As to the question of how the 'positive' or 'negative' value of adjectives is determined, one should refer to Boucher and Osgood (1969) who collected evidence attesting the native speaker's intuitive ability to assign + and − to pairs of antonymous adjectival pairs, which they termed the E+ and E− (E for evaluative scale) members of the said pairs.

The same principle applies not only to adjectives but to other parts of speech in English as well as presented below.

3.1.2. Neg. pref. + verbs and other parts of speech:

to appear   disappear
vanish   *unvanish
*disvanish

There is *appear* and *disappear, agree* and *disagree, like* and *dislike* but there is no derivation from *vanish* to **unvanish* or **disvanish*, or from *hate* to **dishate*. It is even almost impossible to conceptualize what such artificially invented words would mean.

Interestingly enough, the phenomenon of prefixation was quite marginal as a regular morphological device both in Hebrew and in Chinese before the end of the 19th century. Following the enormous influence of European languages and western civilization, prefixation entered these two languages on a large scale. Whereas only a few Aramaic prefixes were used in old biblical Hebrew, since the revival of modern Hebrew in the last century, prefixation became a common means for word formation as illustrated by negative prefixes such as *i-* and *bilti-*. These tend to precede an E+ term.

shfiyut		*i-shfiyut*
sanity		insanity
shiga'on	but	**i-shiga'on*
madness, craziness		*non-madness
hatslaxa		*i-hatslaxa*
success		non success
kishalon	but	**i-kishalon*
failure		*unfailure

However, paradigmatic asymmetry, as shown in the following sections, is not limited to negative prefixation, but is also manifested in affixation of modifiers (intensifiers and quantifiers).

3.1.3. Affixation of *yeter* – over:

The Hebrew word *yeter* meaning 'more' traditionally functions as a prenomic intensifier:

yeter　ahava
more　love

be-yeter savlanut
more　patiently
'with more patience'

be-yeter tipshut
more　foolishly
'with more foolishness'.

However, there is an ongoing modern usage of the suffix *yeter* in post-nomic position, corresponding to the English 'over':

ahavat-yeter
love + suff.
'over-love'

haganat-yeter
protection + suff.
'over-protection'

ye'ilut yeter
efficiency + suff.
'over-efficiency'

Examining the compounds composed of an abstract noun suffixed by *yeter*, we observe that when attached to nouns denoting states or issues which are desirable or positive isues on the evaluative scale such as *ahava* 'love', *hagana* 'protection'; *yeter* actually reverses the positive value of the expression, rendering it negative. Even neutrally evaluated terms such as *mishkal* 'weight' and *mana* 'dose', change their meaning to a negative one when suffixed by *yeter*:

mishkal- yeter
'overweight'

menat- yeter
'overdose'.

However, it is quite surprising to find that when suffixed to nouns evaluated as negative (E–), no reversal of the evaluative meaning is found:

sin'at -yeter
hate + suff.
'over hate'

tipshut -yeter
foolishness + suff.
'over foolishness'

teruf-yeter
crazyness + suff.
'over craziness'.

In these cases *yeter* intensifies the negative value, but by no means reverses it. This formal phenomenon of asymmetry in the affixational properties of some nouns leads us to assume the existence of a sensual and cognitive phenomenon, that of 'thresholds', which accounts for the behavior of the suffixed *yeter* and its parallel in several languages. The idea of a threshold suggests that there are norms or limits or measures of acceptability and preference. Once these limits are crossed, the result is intolerable or at least undesirable. What is the nature of these thresholds? We are aware that the human body's sensitivity to certain stimuli sets thresholds for the amount of heat, pressure or pain that can be endured. Hence *laxats-yeter* 'over-pressure' denotes an unbearable and undesirable situation. Sensitivity to smoothness, softness and other tangible properties determines the limit between situations which are sources of comfort and pleasure and those which yield discomfort and uneasiness. Too much of a pleasant (sweet, nice, polite) thing or behavior crosses this border and is thus evaluated as negative. The same holds true for functioning systems other than the human body and psyche. Mechanical systems and machines as well as living organisms demand optimal conditions for their operation; hence an 'over-load' in electric power causes a breakdown of the whole system. Another area where limits and thresholds can be detected, though less clearly, is the area of norms and conventions in human social behavior and even ethics and aesthetics. Nothing is wrong with efficiency but 'over-efficiency' which naturally tends to be assigned to the other person, is due to a norm determining what is normal for human behavior and hence preferable. Too much of that quality makes the over – efficient secretary, for example, almost a robot, and hence an object of criticism for insensitivity and other non-human traits. The aesthetic and social-educational norms of a community at a certain time will asign a negative value to 'over-weight' or 'over-protection'. Thus we encounter several types of norms and thresholds in various domains of human behavior and wider areas. It is the concept of a threshold, or a norm, that reverses 'sleep', 'love', 'protection', 'weight', 'load', 'dose' etc. into negative concepts, into something that crosses the threshold and hence is harmful or unfavorable, or is doomed to breakdown and malfunction. However, the surprising finding is that the negative pole is not sensitive to such thresholds. Negative concepts can only be intensified but never reverse their value into a positive one.

sin'at -yeter
over-hate
atslut -yeter
over lazyness
tipshut -yeter
over foolishness
rish'ut -yeter
over maliciousness

If such expressions have any meaning they can only be interpreted as more of the same thing, expressing an intensification of the negative quality (extreme hate, or maliciousness) but by no means a reversal of the meaning towards the favorable and positive. This might hint at a broader cognitive phenomenon, whose essential dominant property is the sensitivity of the positive (and the neutral) to thresholds.

When something overruns the positive pole the meaning is reversed into a negative quality. The asymmetry lies in the lack of such sensitivity when the negative, the unfavorable is concerned. The negative is immune to such reversals. What is added to the negative pole magnifies it and its quality, but never reverses its meaning.

This paradigmatic asymmetry is further displayed by affixation of the Hebrew quantifier *ktsat* meaning 'a little', 'somewhat'.

3.1.4. The quantifier prefix *ktsat* – a little, somewhat

Prefixation of *ktsat*, 'a little','somewhat' to E+ and E– adjectives illustrates asymmetry. Non-gradable E+ adjectives such as *pure, clean, straight* can seldom be prefixed by this quantifier, except for ironic purposes:

*ktsat tahor
*somewhat pure
*ktsat yashar
*somewhat straight.

Gradable E+ adjectives such as *tall, long, wide, beautiful* tend to reject such prefixation as well:

*ktsat gavoha
*somewhat tall
*ktsat arox
*somewhat long
*ktsat yafe
*somewhat beatiful.

Asymmetry is revealed again in the very fact that only E– adjectives can be thus prefixed:

ktsat namux
a bit low
ktsat katsar
a bit short
ktsat tipesh
somewhat silly
ktsat tsar
somewhat narrow.

From the conceptual point of view, when an E– adjective is prefixed by the quantifier meaning 'a little' its negative value is actually diminished, reduced, and is brought closer to the midpoint of the evaluative scale. The E+ adjectives are actually immune to such reduction.

The same phenomenon is evidenced in Chinese adjectives, when affixed by *you yi diar* or *you xie* – 'somewhat, a little'. Only E– adjectives are liable to accept such prefixation:

*you yidiar linghuo
somewhat smart

as opposed to:

you yidiar benzhuo
somewhat stupid
*you yidiar qingchu
somewhat clear

but

you yidiar mohu
somewhat blurred

and the same holds true in the following pair:

*you yidiar anquan
somewhat safe

as opposed to

you yidiar jianxian
somewhat dangerous.

Asymmetry is thus manifested by avoiding reductive prefixes with E+ but not with E– terms.

When affixed to E– terms *over* and its parallels intensify their denoted quality but do not reverse their position on the evaluative scale. On the other hand *a little, somewhat,* and their parallels might only be affixed to E– terms, diminishing their

negative value and hence rendering them closer to the positive pole. (See illustration below):

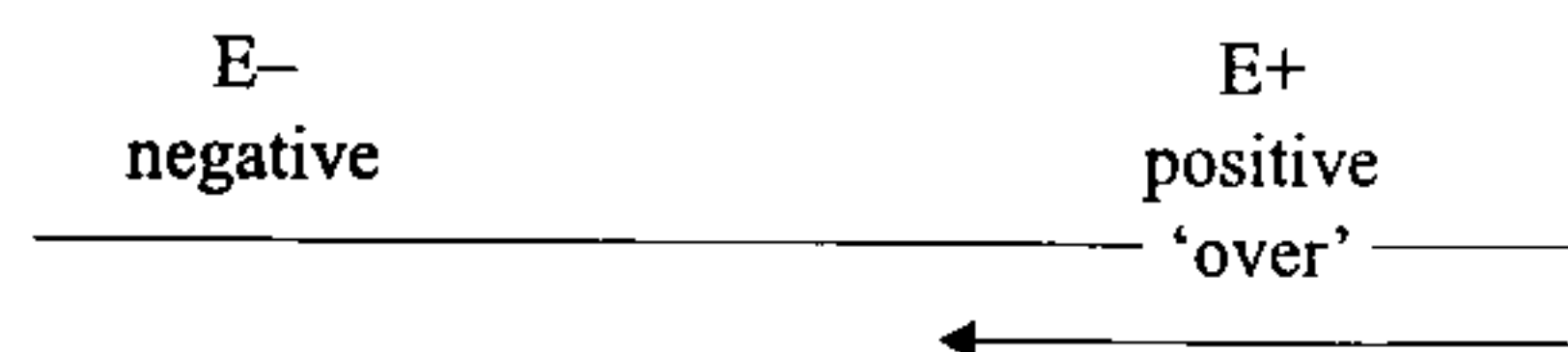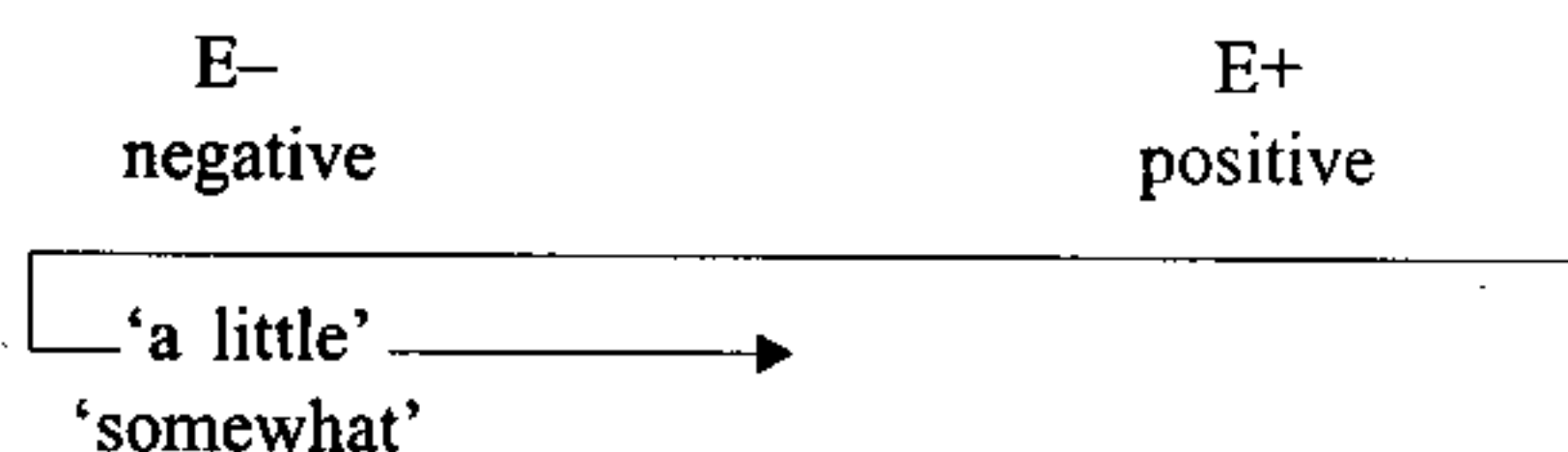Fig. 1: 'Over' and the reversing signs.

E–   E+
negative   positive
─────────────────────────────── 'over' ─────┐
                    ◄──────   │

Fig. 2: 'A little' and the move towards the middle.

E–   E+
negative   positive
┌──
└──'a little' ──────────────►
   'somewhat'

4. Conclusion

We have come across asymmetrical phenomena both in the sequence of words and in affixation. These two sets of findings are not unrelated. They all point to a more general phenomenon, that of the polarity of conceptual structure. We are indeed aware of the fact that polar organization characterizes linguistic constructs at all levels, from the binary distinctive features of phonemes, through the subject and predicates and heads and modifiers in syntax, to the binary semantic features of sememes. The contrast between the positive and negative in linguistic phenomena is a salient aspect of this polarity. Boucher and Osgood (1969) have already pointed out that positively evaluated adjectives have a significantly higher frequency of usage than their negative counterparts, that they are more productive and appear earlier in the process of language acquisition, calling this the Pollyanna Hypothesis.

What emerges from the asymmetric phenomena that we have pointed out, on both the syntagmatic and the paradigmatic level, strengthens the view of the differing behavior of positive and negative terms, and the primordiality of the positive.

All the evidence we looked at concerning word order, the mechanism of word formation including markedness, enabled us to understand in more detail the anatomy of this bias toward the positive. These various linguistic testimonies coming from two unrelated languages and from the syntagmatic as well as the paradigmatic levels, help confirm the assumption that people grasp basically existing positive entities directly, whereas the negatively evaluated counterparts are indirectly derived. Discovering the existence of thresholds and norms in the positive pole and their total absence from the negative one, reflects the fragility and sensitivity of the whole process of conceptualizaton. The negative is indifferent or even immune to value reversal, it can be only diminished i.e., become less negative. The positive, on the other hand, with its sensitivity to thresholds and constraints, is bound to lose its positive value when thresholds are crossed. Portraying the versatile formal grammatical behavior of asymmetry found in seemingly unrelated linguistic phenomena may serve as a further step towards understanding the structure of the conceptual system.

REFERENCES

Bolinger, D. 1977. *Neutrality, norm and bias*. Bloomington: IULC.
Boucher, J. and Osgood, C. 1969. "The Pollyanna hypothesis". *Journal of Verbal Learning and Verbal Behaviour* 8. 1-8.
Chen, Y. 1992. "Kending xing xingrongci yu fei kending xing xingronci de qubie [The difference between positive adjectives and negative adjectives]". *ZhongGuo YuWen* 226. 37-38.
Clark, E. and Clark, H. 1977. *Psychology and language: An introduction to psycholinguistics*. New York: Harcourt, Brace, Jovanovitch.
Cooper, W. E. and Ross, J. R. 1975. "Word order". In: Grossman, R. E., L. James San and T. J. Vance. (eds.). 63-111.
Cruse, D. A. 1986. *Lexical semantics*. Cambridge: CUP.
Cruse, D. A. 1992. "Antonymy revisited: Some thoughts on the relationship between words and concepts". In Lehrer, A. and E. Kittay, (eds.). 289-306.
Givón, T. 1979. *On understanding grammar*. New York: Academic Press.
Greenberg, J. 1966. *Language Universals*. The Hague: Mouton.
Grossman, R. E., James San, L. and Vance, T. J. (eds.). 1975. *Papers from the CLS Parassession on Functionalism*. Chicago: Chicago Linguistic Society.
Hagège, C. 1975. *Le problème linguistique des prépositions et la solution chinoise*. Paris: Sociéte de linguistiqe de Paris.
Jespersen, O. 1917. "Negation in English and other languages". *Kgl. Danske Videnskabernes Selkab: Historisk – Filologiske Meddelelser*. 1/5. Copenhagen. 3-151.
Jhering, R. von. 1883. *Der Zweck im Recht*. Eighth edition [1923]. Leipzig.
Lehrer, A. 1985. "Markedness and antonymy". *Journal of Linguistics* 21. 397-429.
Lehrer, A. and Kittay, E. (eds.). 1992. *Frames, fields and contrast*. Hillsdale, N.J.: Lawrence Erlbaum.
Lehrer, A. and Lehrer, K. 1982. "Antonymy". *Linguistics and Philosophy* 5. 483-501.
Lien, C. 1989. "Antonymous quadrinomials in Chinese". *Journal of Chinese Linguistics* 17/2. 263-305.
Ljung, M. 1974. "Some remarks on antonymy". *Language* 50/1. 74-88.
Malkiel, Y. 1959. "Studies in irreversible binomials". *Lingua* 8. 113-160.
Osgood, C. and Richards, M. 1973. "From *yang* and *yin* to *and* or *but*". *Language* 49. 380-412.
Paris, M.C. 1979. *Nominalization in Mandarin Chinese*. Paris: Université de Paris.
Ross, J. 1982. "The sound of meaning." In: *Linguistics in the Morning Calm*. ed. by the Linguistic Society of Korea. 275-290.
Zhou, X. 1995. "Lun xiandai hanyu de chengdu fuci [Concerning gradable adverbs in modern Chinese]". *Zhong Guo Yu Wen*. 245. 100-104.
Zimmer, K. 1964. "Affixal negation in English and other languages". *Word* 20. 3-105.