

ROLES OF WORDS  
IN  
MANDARIN CHINESE DISCOURSE

-A tentative pragmatic approach-

FUMIYOSHI MATSUMURA  
KOBE UNIVERSITY OF COMMERCE

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# Roles of words in Mandarin Chinese discourse (\*1)

- A tentative pragmatic approach -

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## 0. Introduction

When we read or write sentences, we are intuitively conscious of the following fact. That is, if we are those who have an experience to write persuasive sentences, we should have at least one element which is a semantically relevant referent to the one in the preceding sentence.

An investigation of the discourse is basically an exploration of the constraints between two sequential sentences(\*2). These constraints are supposed to be different from those of syntax. The majority of them are not obligatory, but optional. So these constraints are similar to those of stylistics(\*3).

From the former syntactic point of view, nouns and personal pronouns are discussed as sentence elements, but functions/roles of them in a sentence-sequence are rarely discussed. Going out of the strict frame of syntax and semantics, from a discourse point of view, it should be noted that nouns, personal pronouns and demonstratives have important roles.

As for an existence of a semantically relevant referent in the second sentence, it may be predicted that one is easy to have an objection to it. The simplest and strongest objection is sentences of an enumeration of facts. For example, in a news program, if a political news is followed by a sports news, a common element between two sequential sentences does not syntactically or semantically exist. Here we explain the enumeration of facts as a kind of subroutine, that is, there is an obligatory 'Return'-command at the end of one sentence-group, every subroutine should go back to a main routine. Therefore, in case of the enumeration of facts, such an explicit division of some sentence-groups as "First, Secondly, Thirdly, ....." has a very important role from a discourse point of view.

### 0.1 Previous studies

Discussing a "legal discourse", Brenda Danet(1985:273-291) takes up a "Cohesion" in "Discourse-level Features", and said that, in a legal discourse, cohesive devices are not used so often, especially anaphoras are rarely used. She maintained that it is a general view. Furthermore, in 1. Anaphora, she said: "The dominant pattern in the assignment is certainly to avoid pronouns and to repeat debtor, creditors and trustee, presumably to

avoid ambiguity. She pointed out that pronouns were rarely used in such legal sentences as written contracts. She also described in 2. Conjunction, that such expressions as “first …secondly…thirdly, hereinafter, aforesaid” contribute to make up cohesions (p. 285).

Gordon H. Bower and Randolph K. Cirilo (1985:71-105) discussed “Distance in a Coherence Graph” in “Cognitive Psychology and Text Processing”, describing that “coreference is only one form of textual coherence relevant to comprehension. Unfortunately, relatively little psychological research has been done with connected devices in text other than coreference.” (p.92).

On the other hand, in Chinese linguistics, Mary Ellen Okurowski presented a discourse analysis of Mandarin Chinese in her paper, “Textual Cohesion in Mandarin Chinese” (presented to the 19th International Conference on Sino-Tibetan Languages and Linguistics, 1986, The Ohio State University). Okurowski analyzed Chinese data on the framework of Halliday and Hasan (1976), concluding that their model is effective in English, but not in Mandarin Chinese. Okurowski’s analysis is supposed to be appropriate in general remarks, nonetheless, the linguistic data for her concluding remarks is not enough. She did not pay attention to the degree of context sensitivity.

## 0.2 New contributions found in this investigation

1. High or low degree of context sensitivity is introduced as one of criterions.
2. Strong or weak power of words’ concatenation is used as a criterion which decide a semantic relation between two words in one sequential sentences.
3. An enumeration of facts is interpreted by introducing a concept of sub-routine from computer science.

### 1. Sentence-sequences which have high degree of context sensitivity

#### 1.1 Sentence-sequences which have high degree of context sensitivity and a strong power of words’ concatenation

##### 1.1.1 Demonstratives

###### 1.1.1.1 “这”

【Independent use of a demonstrative “这”】

The referent of “这” in 10100 is [人感叹说：“这个人记性多么好！真聪明！”] in the preceding sentence 10090. Therefore, as for sentence 10100, an existence of sentence 10090 is obligatory. In this case, semantic completion of sentence 10100 depends upon a discourse, therefore we can say that sentence 10100 has high degree of context sensitivity.

On the other hand, when there are same words, words which have a same referent or semantically relevant words in two sentences which are sequential,

if we call a relation between these two elements as a words' concatenation, "这" in 10100 and [人感叹说：“这个人记性多么好！真聪明！”] in 10090 have a same referent, so we could say that the two sentences have a strong power of words' concatenation.

10090 常常听 [人感叹说：“这个人记性多么好！真聪明！”]。

10100 这是从记忆能力角度去理解智力的。

We observe same kinds of examples such as the following:

10110 还听 [人称赞某人料事如神，智力过人]。

10120 这是从思惟能力角度去理解智力的。

10440 第一是 [记忆的敏捷性]。

10450 这是指识记的速度。

10460 第二， [记忆保持的持久性]。

10470 这是指记住的东西保持时间的长短。

10480 第三， [记忆的正确性]。

10490 这是指能够把识记的东西准确无误地再现出来。

10500 第四， [记忆的备用性]。

10510 这是指能够把记忆中所保存的东西在需要的时候很快的回忆起来。

10900 他指出， [有人认为只有诗人才需要幻想]。

10910 这是没有理由的。

10920 这是愚蠢的偏见。

11330 [王亚南把他调回母校从事数学研究]。

11340 这使陈景润避开才能劣势转向发展才能的优势，使他迅速成材。

In examples above, [……] and “这” have a same referent. In the following example, we not only find a relation of the same referent caused by a demonstrative and its antecedent but also a words' concatenation, that is, a noun phrase “各种人材” is used in both sentences.

11300 因此 [各种人材都要扬长避短，发挥自己的智力优势]。(A subject word)

11310 这也是因材施教，量材使用各种人材的心理学依据。(An object word in an attributive of a subjective complement)

[Attributive use of a demonstrative “这”]

“[智力结构是由哪些能力构成的呢?]” in 10140 and “[思惟的广阔性]” in 10610 have the same referent with “这个问题” in 10150 and “这种品质” in 10620 respectively.

10140 那么, [智力结构是由哪些能力构成的呢?]

10150 心理学家对这个问题的认识不完全一致。

10610 一是[思惟的广阔性], 表现在善于抓住问题的广泛范围, 在不同的知识和实践的领域中创造性地进行思考。

10620 在天才人物身上这种品质得到了高度的表现。

In the following two pairs, we not only observe a relation of the same referent caused by a noun phrase containing a demonstrative as an attributive and its antecedent represented by [……] but also a words' concatenation of each noun phrase “智力结构” and “思惟” respectively.

10160 我们认为, 智力结构主要是由[观察能力, 记忆能力, 思惟能力, 想像能力, 实际操作能力等基本能力]构成的。

10170 这五种基本能力可以叫做智力结构的五个要素。

10580 人们的思惟虽然具有一般的规律性, 但是每个人的思惟又具有[各自的特殊性]。

10590 这种特殊性表现在思惟品质上。

1.1.1.2 “那”, “它” and “它们”

Such demonstratives as “那”, “它” and “它们” also contribute to a textual cohesion by forming high degree of context sensitivity and a strong power of a words' concatenation.

“那”

11230 但是是不是[从事某项活动所需要的各种能力中, 有一种能力很薄弱就没有希望作好这种活动]呢?

11240 那也不是的。

“它”

10260 在智力结构中最为重要的是[创造性能力]。

10270 它主要是由创造性思惟和创造性想像能力所组成的。

10410 [记忆]是对经验过的事物能够记住, 并且能够在以后再现实或者在它重新呈现

时，能再认识的过程。

10420 它包括“识记”，就是“认识”的“识”，“记忆”的“记”，识记，保持，再现，再认四个方面。

10720 十七世纪以来，人们都认为 [牛顿力学] 是整个物理学乃至整个自然科学的牢固基础。

10730 对于它顶多在细节上有所补充而不可能再发展了。

10930 甚至在 [数学] 上也是需要幻想的。

10940 甚至没有它就不可能发明微积分。

11030 [创造性活动] 是独创性的活动。

11040 它给人们带来新的具有社会价值的产物。

11070 创造性活动需要独创性解决问题的能力，也就是 [创造性能力]。

11080 它是一种比较高级的能力，是保证创造性活动完成的必要条件，而在创造性活动中创造性能力也得到发展。

11150 [智力结构中的五个要素] 是各种各样的人材，包括政治家，思想家，科学家，教育家，艺术家，体育家，军事家等都必须具备的。

11160 它是各种人材成功所需要的基本的智力条件。

We not only observe a relation of the same referent formed by noun phrases [各种能力] in 10180 and 它们 in 10190 but also a words' concatenation of a noun phrase “智力结构” between two sentences.

10180 在智力结构中，[各种能力] 之间是相互联系，相互制约的。

10190 它们在智力结构中各有一定的作用。

### 1.1.2 Personal pronouns

[Independent use of such personal pronouns as “他” and “他们”]

Following examples make a textual cohesion by using a relation of the same referent formed by a personal pronoun and its antecedent.

10950 [郭沫若同志] 精确地概括了科学工作者的特有风格，是既一思想天开又实事求是。

10960 他说：“科学也需要创造，需要幻想。”

11320 [陈景润] 不具备从事教师所需要的教学才能。

11330 王亚南把他调回母校从事数学研究。(an object word of the preposition

“把” )

10690 [科学上创立新学说的人] 都具有思惟的独立性。

10700 他们敢于破除迷信, 敢于向科学权威的错误结论挑战。

In the following two paired examples, we not only observe a relation of the same referent caused by a pronoun and its antecedent but also a words' concatenation of each word “记忆力” and “幻想” respectively.

10540 [马克思] 很注意发展自己的记忆力。

10550 他甚至故意用自己生疏的外国语来背诵诗歌, 借以锻炼记忆力。

10890 [列宁] 认为最严格的科学也不能否认幻想的作用。

10900 他指出, 有人认为只有诗人才需要幻想。

[An attributive use of a personal pronoun]

We also observe both a relation of the same referent caused by an attributive use of a pronoun and its antecedent and a words' concatenation of each word “观察” and “观察能力” respectively.

10380 [巴甫洛夫] 非常重视观察在科学研究中的作用。

10390 他的名言是: “观察, 观察, 再观察”。

10320 [科学家, 艺术家, 劳动模范和技术革新能手] 都有高度的观察能力。

10330 他们的成就和这种高度的观察能力有着密切的关系。

1.1.3 A sentence-sequence which has an explicit logical relation between sentences(including conjunctions obligatorily in the second sentence)

1.1.3.1 A Sentence-sequence which has a contrary relation between sentences

In the following three paired examples, we not only observe such conjunctions of a contrary relation as “但是” and “可是” by which high degree of context sensitivity are composed, but also a words' concatenation of each word “它”, “能力” and “视觉记忆能力” respectively. So the following three paired examples also have a strong power of a words' concatenation respectively.

10730 对于 [它] 顶多在细节上有所补充而不可能再发展了。

10740 但是爱因斯坦却极大地发展了牛顿力学, 把 [它] 推进到相对论的崭新阶段。

11220 要成功地从事某项活动, 需要许多 [能力] 的结合。



11230 但是是不是从事某项活动所需要的各种 [能力] 中, 有一种 [能力] 很薄弱就没有希望作好这种活动呢?。

11250 比如 [视觉记忆能力], 也就是看过东西之后记住它的形状的能力, 是画家必备的能力之一。

11260 可是有些在少年时代 [视觉记忆能力] 很差的人后来却成了著名的画家。

1.1.3.2 A sentence-sequence which has a cumulative relation between sentences

There is an adverb “还” in the second sentence of the following example. The adverb “还” has a role of connection between a subordinate clause and a main clause. It can also connect two sentences which are in a cumulative relation. If we delete the adverb “还”, the sentence 10110 cannot exist. So there is high degree of context sensitivity in the following pair. The following paired example has a words' concatenation of a word “智力”. So it has a strong power of a words' concatenation.

10100 这是从记忆能力角度去理解 [智力] 的。

10110 还听人称赞某人料事如神, [智力] 过人。

1.1.3.3 A sentence-sequence which has a confessional relation between sentences

In the following paired example, a conjunction “其实(in fact)” of which a confessional relation is obligatorily composed realizes high degree of context sensitivity. A relation of the same referent made of a word “思惟能力” expresses a strong power of a words' concatenation.

10120 这是从 [思惟能力] 角度去理解智力的。(an attributive in a prepositional phrase)

10130 其实记忆能力, [思惟能力] 都只是智力的一个方面, 而不是全部。(a subject word)

1.1.3.4 A sentence-sequence which has an extreme-exemplificational relation between sentences

In the following example, a conjunction “甚至(go so far as to, even)” of which an extreme-exemplificational relation is obligatorily composed brings high degree of context sensitivity. A relation of the same referent made of a word “记忆力” expresses a strong power of a words' concatenation. In fact, the following paired example also has a relation of the same referent caused by a pronoun “他” in 10550 and its antecedent “马克思” in 10540. So the fol-

lowing example has three devices of textual cohesion, that is "a words' concatenation of the same referents to a pronominal", "a logical relation" and "a words' concatenation."

10540 [马克思] 很注意发展自己的记忆力。(a head word of an object word in an objective clause)

10550 他 甚至 故意用自己生疏的外国语来背诵诗歌, 借以锻炼记忆力。

1.2 Sentence-sequences which have high degree of context sensitivity and a weak power of words' concatenation

1.2.1 A sentence-sequence which has an explicit logical relation between sentences (obligatorily including a conjunction in the second sentence)

1.2.1.1 A sentence-sequence which has a conditional relation between sentences

The following sentence 10140 describes a result of a condition which is presented in a preceding sentence 10130. So as for a semantic and pragmatic completion of the sentence 10140, an existence of the sentence 10130 is obligatory, that is, a completion of the sentence 10140 depends upon a context. A conjunction "那么(then)" obligatorily needs an existence of a preceding sentence which expresses a conditional proposition. So we conclude that the following paired example has high degree of context sensitivity.

On the other hand, as for a word's concatenation between sentences, we suppose that either a pair of a noun phrase "思维能力" in 10130 and a noun phrase "哪些能力" in 10140 or a pair of a noun phrase "智力" in 10130 and a noun phrase "智力结构" in 10140 contribute to a formation of a relation of semantic relevant referents respectively. "思维能力" in 10130 makes a words' concatenation of the same word with "思维能力" in 10120, but does not appear after the sentence 10150. However "智力结构" in 10140 is referred to as a part of the referent of a noun phrase containing a demonstrative "这".

"这个问题" in 10150 is referring to the question "智力结构是由哪些能力构成的呢?" in 10140. Furthermore "智力结构" forms a words' concatenation of the same word in the following four sentences from 10160 to 10190. It contributes to a formation of a strong power of words' concatenation. So it is supposed to be appropriate to conclude that "智力" in 10130 and "智力结构" in 10140 bring a words' concatenation of semantic relevant referents. But "智力" and "智力结构" is not a same word, they are semantically relevant words. So we consider that these two words make a weak power of a words' concatenation.

10130 其实记忆能力, 思维能力都只是 智力 的一个方面, 而不是全部。

10140 那么, 智力结构 是由哪些能力构成的呢?。

(Supplemental data)

10150 心理学家对 这个问题 的认识不完全一致。

10160 我们认为, 智力结构 主要是由观察能力, 记忆能力, 思惟能力, 想像能力, 实际操作能力等基本能力构成的。

10170 这五种基本能力可以叫做智力结构的五个要素。

10180 在智力结构中, 各种能力之间是相互联系, 相互制约的。

10190 它们在智力结构中各有一定的作用。

(The end of supplemental data)

In the following paired example, a conjunction “那么” in 11280 contributes to a formation of high degree of context sensitivity. A noun phrase “所需要的多数能力” in 11271 and a noun phrase “这些发展起来的能力” in 11280 make a words' concatenation of semantically relevant referents.

11271 在一种活动中所需要的多种能力, 其中所需要的多数能力得到了充分的发展而某一种能力发展比较差,

11280 那么只要勤奋地从事这种活动, 这些发展起来的能力, 就可以代替或补偿那些没有发展起来的能力, 。

1.2.1.2 A sentence-sequence which has a causal relation between sentences

In the following paired example, a conjunction “因此” in 11300 of which a causal relation is obligatorily composed realizes high degree of context sensitivity. A noun phrase “智力结构” in 11290 and a noun phrase “智力” in 11300 form a relation of semantically relevant referents. So the following pair has a weak power of words' concatenation.

11290 每个人的“智力结构”的特点是各有所长, 各有所短的。

11300 因此各种人材都要扬长避短, 发挥自己的“智力”优势。

1.2.1.3 A sentence-sequence which has an exemplificational relation between sentences

In the following two paired-examples, we find a conjunctive phrase “比如说” in 10060 and a conjunction “比如” in 11180 which make an exemplificational relation explicit. So each pair has high degree of context sensitivity. The first pair has a relation of semantically relevant referents formed by a noun phrase “智力” and adjectives “灵” and “笨”. The second pair also has a relation of semantically relevant referents formed by a noun phrase “特殊的能力” and a noun phrase “曲调感能力, 听觉表象能力和音乐节奏感能力”. So both pairs have a weak power of words' concatenation.

10050 人们在日常生活中经常谈论“智力”问题。

10060 比如说，这个孩子“灵”，那个孩子“笨”等等。

11170 各种人材除了要具备智力结构中的五个要素以外，还需要具备某些“特殊的能力”。

11180 比如音乐家需要具备“曲调感能力，听觉表象能力和音乐节奏感能力”。

The following example only has a conjunction “比如” in the second sentence. It only has high degree of context sensitivity. It has no power of words' concatenation.

11240 那也不是的。

11250 比如视觉记忆能力，也就是看过东西之后记住它的形状的能力，是画家必备的能力之一。

1.2.1.4 A sentence-sequence which has a new development of an argument in the second sentence

In the following pair, there is a conjunctive noun phrase “下面” in the second sentence which form a new development of an argument. So we admit high degree of context sensitivity in the following paired-example. However there is no power of words' concatenation in the following pair, because we do not find words which are semantically relevant between two sentences.

10270 它主要是由创造性思维和创造性想像能力所组成的。

10280 下面我们对智力结构的五个要素做个简要的介绍。

1.2.1.5 A sentence-sequence which has an extreme exemplificational relation between sentences

We find a conjunction “甚至” in the second sentence of the following pair. It forms an extreme exemplificational relation. So we find high degree of context sensitivity, but no power of words' concatenation in the following pair.

10920 这是愚蠢的偏见。

10930 甚至在数学上也是需要幻想的。

1.2.1.6 A sentence-sequence which has a supplemental relation between sentences

In the following pair, we find a conjunctive adverb “只是” at the top of the sentence 10360. It has a role to show that the two sentences are in a supplemental relation. So we can say that the following paired-example has

high degree of context sensitivity. We observe a words' concatenation of the same word composed of a pronoun “我”.

10350 英国生物学家进化论的奠基人达尔文说过：“我既没有突出的理解力，也没有过人的机智。

10360 只是在察觉那些稍一放松就要消逝的事物，并对它进行精细观察的能力上，我可能在众人之上。

2. Sentence-sequences which have low degree of context sensitivity

2.1 Sentence-sequences which have low degree of context sensitivity and a strong power of words' concatenation

2.1.1 A sentence-sequence which has a same word/same words between sentences

(1) A subject word~A subject word

(1.1) A subject word~A subject word

In the following examples, there is no demonstrative or personal pronoun in the second sentence which form a relation of the same referent with its antecedent in the first sentence. There is no conjunction which decides a logical relation between two sentences. So the sentence 10080 is supposed to be a morphologically, syntactically, semantically and pragmatically completed sentence. In this case, we conclude that the two sentences have low degree of context sensitivity.

On the other hand, we find a word “智力” in both sentences. A reader or a hearer easily and directly recognizes a words' concatenation. So we conclude that the following pair has a strong power of words' concatenation.

10070 智力，智能，智慧，虽然用词不同，但它的含义都是指人的聪明才智。

10080 智力是指人的认识能力和活动能力所达到的水平。

We observe low degree of context sensitivity and a strong power of words' concatenation in the following four sentences.

10830 想像就是在人的头脑中把过去感知过的形象进行加工所产生的一种新的形象。

10840 想像是人所特有的，对客观世界的一种反应形式。

10850 想像能够冲破时间和空间的限制而思接千载，视通万里。

10860 想像在人的社会实践中是不可缺少的。

The following examples from (1.2) to (16) show low degree of context sensitivity and a strong power of words' concatenation.

(1.2) A subject word~A head word of A subject noun phrase

10570 思惟是人脑对客观事物间接的和概括的反应。

10580 人们的思惟虽然具有一般的规律性，但是每个人的思惟又具有各自的特殊性。

(2)An object word~A subject word

10590 这种特殊性表现在思惟品质上。(a head word of a spatial object)

10600 思惟品质主要有四个方面。

(3)A complement~A subject word

10750 四是思惟的敏捷性，表现在迅速而正确地解决问题的能力。(a head word of a subjective complement)

10760 对于军事指挥工作，思想的敏捷性是最需要的。(a head word of a subject noun phrase)

(4)An attributive word~A subject word

11160 它是各种人材成功所需要的基本的智力条件。(An attributive of a subject word in an attributive modifier of a subjective complement)

11170 各种人材除了要具备智力结构中的五个要素以外，还需要具备某些特殊的能力。

(5)A subject word~An object word

(5.1)A subject word~A head word of an object noun phrase

10520 记忆能力在各种人才的成长中都起了重要的作用。

10530 历史上不少有所建树的科学家和艺术家都具有惊人的记忆能力。

(5.2)A head word of a subject noun phrase~A head word of an object noun phrase

10640 二，思惟的深刻性，表现在善于深入地思考问题，抓住事物的规律和本质，预见事物的发展进程。

10650 伟大的思想家都是以思惟的深刻性为其思惟特征的。

(6)An object word~An attributive word

11210 球类运动员需要准确凝视的视觉知觉能力，球感能力和反应的迅速和准确等能力。

11220 要成功地从事某项活动，需要许多能力的结合。(An attributive of an object noun phrase)

(7)A complement~An object word

11000 第五个要素，实际操作能力。(A subjective complement)

11010 只有认识能力而缺乏实际操作能力，人材是难以成功的。(An object word in a subordinate clause of condition)

(8)An attributive word~An object word

- 11100 创造性的程度也各有不同。(An attributive of a subject noun phrase)  
11110 科学家在科学上的突破,革新家的发明,艺术家的创作,劳动模范的新工作方法等等是具有高度创造性的活动。(A head word of an object noun phrase of an attributive in a subjective complement)

(9)A subject word~A subject word~An object word

- 10670 三是思维的独立性,表现在善于独立思考,根据客观事实,冷静地考虑问题,而不为他人的观点所左右。  
10680 思维的独立性是人们进行创造性活动的必要前提。  
10690 科学上创立新学说的人都具有思维的独立性。

(10)A subject word~An attributive word~An object word

- 10880 幻想是想像的一种。  
10890 列宁认为最严格的科学也不能否认幻想的作用 (An attributive of an object noun phrase in an embedded sentence placed in the object position)。  
10900 他指出,有人认为只有诗人才需要幻想。(An object word in an embedded sentence placed in the object position)

(11)An attributive~A subject word~An adverbial

- 10210 观察能力是智力结构的“眼睛”。(An attributive of a subjective complement)  
10220 记忆能力是智力结构的“储存器”。  
10230 思维能力是智力结构的“中枢”。  
10240 想像能力是智力结构的“翅膀”。  
10250 实际操作能力是智力结构转化为物质力量的“转换器”。(A subject word of an embedded sentence placed in the attributive position of a subjective complement)  
10260 在智力结构中最为重要的是创造性能力。(A head word of an adverbial)

(12)A subject word~A subject word~An object word~An adverbial

- 10300 观察能力是有一定目的的,有组织的,主动的知觉。  
10310 观察能力在人的一切活动领域都是必须的。  
10320 科学家,艺术家,劳动模范和技术革新能手都有高度的观察能力。  
10330 他们的成就和这种高度的观察能力有着密切的关系。(A head word of a prepositional phrase)

(13)A subject word~an attributive~an adverbial~an adverbial

- 10160 我们认为,智力结构主要是由观察能力,记忆能力,思维能力,想像能力,实际操作能力等基本能力构成的。(A subject word in an embedded sentence placed in the object position)

- 10170 这五种基本能力可以叫做智力结构的五个要素。(an attributive of an object word expressing result)
- 10180 在智力结构中,各种能力之间是相互联系,相互制约的。(a head word of an adverbial)
- 10190 它们在智力结构中各有一定的作用。(a head word of an adverbial)

(14)An object word~An object word~An object word~A subject word

- 10960 他说：“科学也需要创造,需要幻想。”
- 10970 有幻想才能打破传统的束缚,才能发展科学。(An object word of a subordinate clause)
- 10980 科学工作者同志们,请你们不要把幻想让诗人独占了。(an object expressed by BA-construction)
- 10990 嫦娥奔月,龙宫探宝,封神演义上的许多幻想通过科学今天大都变成了现实”。(a head word of a subject noun phrase)

(15)An object word~a verb~an attributive~a complement

- 10360 只是在察觉那些稍一放松就要消逝的事物,并对它进行精细观察的能力上,我可能在众人之上。(An object word of an embedded sentence placed in the attributive position of the head word in an adverbial)
- 10370 俄国杰出的生理学家,高级神经活动学说创始人巴甫洛夫就是从深入细致地观察唾液分泌等问题入手,获得了辉煌的成就。(a verb used in an attributive clause in an adverbial)
- 10380 巴甫洛夫非常重视观察在科学研究中的作用。(an attributive of an object word)
- 10390 他的名言是：“观察,观察,再观察”。(a part of subjective complement)

(16)An attributive~An object~A subject~An attributive~An attributive

- 11050 正常的智力发展水平是创造性活动的基础。(an attributive of a subjective complement)
- 11060 智力落后的人是难以进行创造性活动的。(An object word of an embedded sentence) (=智力落后的人进行创造性活动是难的。)
- 11070 创造性活动需要独创性解决问题的能力,也就是创造性能力。
- 11080 它是一种比较高级的能力,是保证创造性活动完成的必要条件,而在创造性活动中创造性能力也得到发展。(an attributive of an object word used in an attributive clause of a subjective complement)
- 11090 创造性活动的形式是多种多样的。(an attributive of a subject word)

2.2 Sentence-sequences which have both low degree of context sensitivity and a weak power of words' concatenation

2.2.1 A sentence-sequence which has a semantically-relevant-words-concate-



nation between sentences

In the following two sentences 10060 and 10070, we not only find neither demonstrative nor personal pronoun of which a relation of the same referent is composed, but also find no conjunction which decides a logical relation between two sentences. So the second sentence 10070 is morphologically, syntactically, semantically and pragmatically completed. In this case, we conclude that the two sentences show low degree of context sensitivity.

On the other hand, we observe no word of the same referent between two sentences. However we find semantically relevant words between two sentences, that is “灵”·“笨” in 10060 and “智力” in 10070. We suppose that semantically relevant words have a weak power of words' concatenation. So in the second pair, among sentences from 10080 to 10110, “智力” in 10080 and “记性” in 10090 form a relation of semantically relevant words, nevertheless their power of words' concatenation is weak. So in sentence 10100, a demonstrative “这” appears to show high degree of context sensitivity and a strong power of words' concatenation, in sentence 10110, an adverb “还” which decides a logical relation appears to show high degree of context sensitivity. We also observe same words between sentences 10100 and 10110, that is a word “智力” of which a strong power of words' concatenation is composed.

灵、笨 < 智力

10060 比如说，这个孩子灵，那个孩子笨等等。

10070 智力，智能，智慧，虽然用词不同，但它的含义都是指人的聪明才智。

智力 > 记性

10080 智力是指人的认识能力和活动能力所达到的水平。

10090 常常听人感叹说：“这个人记性多么好！真聪明！”。

(10100 这是从记忆能力角度去理解智力的。)

(10110 还听人称赞某人料事如神，智力过人。)

Here we present a way how to describe a relation of two words which are semantically relevant referents. We merely describe an outline of rules. At first, when “观察能力” in 10330 and “观察” in 10340 form a words' concatenation, we consider that the lexical meaning of “观察” is supposed to be more generalized than that of “观察能力”. We call this transition of the lexical meaning “GENERALIZATION OF THE LEXICAL MEANING”. Secondly, as “记忆” in 10510 and “记忆能力” in 10520 make a words' concatenation, we observe that the lexical meaning of “记忆能力” is more specialized than that of “记忆”. We name this transition of the lexical meaning “SPECIALIZATION OF THE LEXICAL MEANING”. Thirdly, in case of the following paired sentences 10530 and 10540,

“记忆能力” in 10530 and “记忆力” in 10540 form a words' concatenation, we recognize that the word “记忆能力” is synonymous with the word “记忆力”. We call this transition of the lexical meaning "PARAPHRASE OF THE LEXICAL MEANING".

Conventions used in collected examples are such as the following:

“<” denotes "GENERALIZATION OF THE LEXICAL MEANING". “>” denotes "SPECIALIZATION OF THE LEXICAL MEANING". “=” denotes "PARAPHRASE OF THE LEXICAL MEANING".

观察能力<观察

10330 他们的成就和这种高度的观察能力有着密切的关系。

10340 许多历史上著名的学者都非常重视观察。

记忆>记忆能力

10510 这是指能够把记忆中所保存的东西在需要的时候很快的回忆起来。

10520 记忆能力在各种人才的成长中都起了重要的作用。

记忆能力=记忆力

10530 历史上不少有所建树的科学家和艺术家都具有惊人的记忆能力。

10540 马克思很注意发展自己的记忆力。

Examples of "GENERALIZATION OF THE LEXICAL MEANING" are such as the following:

记忆能力<记忆

10400 第二个要素, 记忆能力。

10410 记忆是对经验过的事物能够记住, 并且能够在以后再现或者在它重新呈现时, 能再认识的过程。

记忆力<记忆

10430 衡量人的记忆力好坏, 主要有四个指标。

10440 第一是记忆的敏捷性。

思惟能力<思惟

10560 第三个要素, 思惟能力。

10570 思惟是人脑对客观事物间接的和概括的反应。

思惟品质<思惟

10600 思惟品质主要有四个方面。

10610 一是思惟的广阔性, 表现在善于抓住问题的广泛范围, 在不同的知识和实践的领域中创造性地进行思考。

想像能力<想像

10820 第四个要素, 想像能力。

10830 想像就是在人的头脑中把过去感知过的形象进行加工所产生的一种新的形象。

微积分<科学工作者

10940 甚至没有它就不可能发明微积分。

10950 郭沫若同志精确地概括了科学工作者的特有风格，是既一想天开又实事求是。

(10960 他说：“科学也需要创造，需要幻想。)

实际操作能力<手脑并用

11010 只有认识能力而缺乏实际操作能力，人材是难以成功的。

11020 现代社会的发展更需要手脑并用的人材。

创造性活动<创造性

11090 创造性活动的形式是多种多样的。

11100 创造性的程度也各有不同。

创造性活动<智力结构

11120 创造性活动的产物是人材成功的重要标帜之一。

11130 全面发展人的智力主要是指智力结构中的五个要素都要有一定的水平，。

Examples of "SPECIALIZATION OF THE LEXICAL MEANING" are such as the following:

节目>讲座

10010 现在是学习节目。

10020 今天播送 “人材问题广播讲座” 第十七讲。

题目>稿

10030 题目是 “智力结构与成材”。

10040 由王极盛写稿。

智力>灵，笨

10050 人们在日常生活中经常谈论智力问题。

10060 比如说，这个孩子灵，那个孩子笨等等。

天才人物>马克思，恩格斯，列宁，斯大林，毛泽东，周恩来

10620 在天才人物身上这种品质得到了高度的表现。

10630 马克思，恩格斯，列宁，斯大林，毛泽东，周恩来都有巨大的思维的广阔性。

伟大的思想家>马克思

10650 伟大的思想家都是以思维的深刻性为其思维特征的。

10660 马克思是善于透过现象抓住本质的典范。

### 智力结构>人材

- 11350 承认人的智力结构存在差异, 决不意味着承认人有高低贵贱之分。  
11360 社会主义建设需要有多种多样的人材

Mixed examples of "GENERALIZATION OF THE LEXICAL MEANING" and "SPECIALIZATION OF THE LEXICAL MEANING" are such as the following:

### 军事>军事家

一分钟<分钟>丝毫的迟缓

当机立断·<敏捷性

- 10760 对于军事指挥工作, 思想的敏捷性是最需要的。  
10770 卓越的俄罗斯军事家苏沃洛夫说: 一分钟决定战局。  
10780 我不是用小时来行动, 而是用分钟来行动的。  
10790 飞行员, 汽车驾驶员也需要当机立断, 不允许丝毫的迟缓。  
10800 没有思想的敏捷性, 就难以胜任这种工作。

### 智力结构<智力>智力结构

- 11131 防止单纯追求某一要素的发展, 而忽视其他要素的发展, 造成智力结构的失调, 形成智力畸形。  
11140 当然全面发展人的智力并不意味着要求各种人材都发展同样的能力。  
11150 智力结构中的五个要素是各种各样的人材, 包括政治家, 思想家, 科学家, 教育家, 艺术家, 体育家, 军事家等都必须具备的。

### 视觉记忆能力<某一种能力

所需要的多数能力>这些发展起来的能力<智力结构

- 11260 可是有些在少年时代视觉记忆能力很差的人后来却成了著名的画家。  
11270 实验研究证明,  
11271 在一种活动中所需要的多种能力, 其中所需要的多数能力得到了充分的发展而某一种能力发展比较差,  
11280 那么只要勤奋地从事这种活动, 这些发展起来的能力, 就可以代替或补偿那些没有发展起来的能力,  
11281 保证人在这种活动中取得成就。  
11290 每个人的智力结构的特点是各有所长, 各有所短的。  
(11300 因此各种人材都要扬长避短, 发挥自己的智力优势。)

### 3. A tentative synthesis (Sample text analysis)

[Conventions]

Conventions used here are such as the following:

- (1) "same words" means "a words' concatenation of the same words".
- (2) "semantically relevant referents" means "a words' concatenation of se-

mantically relevant referents” .

“semantically relevant referents” is subcategorized by using such marks as listed below:

(i) “<” denotes “GENERALIZATION OF THE LEXICAL MEANING”.

(ii) “>” denotes “SPECIALIZATION OF THE LEXICAL MEANING”.

(iii) “=” denotes “PARAPHRASE OF THE LEXICAL MEANING”.

(3) “same referents to a pronominal” means “a words’ concatenation of the same referents to a pronominal” .

(4) “same referents to an original nominal” means “a words’ concatenation of the same referents to an original nominal” .

【The data】

The following data were recorded at Tianjin city in the People’s Republic of China in 1981. Later it was included in the published book, “Chéngcái zhī lù 成材之路 (A way how to cultivate men of talent)” (pp. 101-107). We observe differences between a radio broadcast and the published book. In the present paper, the investigation is based on the radio broadcast which I wrote down.

学习节目01

An opening statement :

10010 现在是学习节目。

↓semantically relevant referents>

10020 今天播送 ” 人材问题广播讲座” 第十七讲。

↓semantically relevant referents>

10030 题目是 ” 智力结构与成材” 。

↓semantically relevant referents>

10040 由王极盛写稿。

↓top of mainroutine

A main issue (mainroutine)

10050 人们在日常生活中经常谈论智力问题。

↓semantically relevant referents>

10060 比如说, 这个孩子灵, 那个孩子笨等等。

↓semantically relevant referents<

10070 智力, 智能, 智慧, 虽然用词不同, 但它的含义都是指人的聪明才智。

↓same words

10080 智力是指人的认识能力和活动能力所达到的水平。

↓semantically relevant referents>

10090 常常听人感叹说: ” 这个人记性多么好! 真聪明!” 。

↓semantically relevant referents<

10100 这是从记忆能力角度去理解智力的。

↓same words

10110 还听人称赞某人料事如神, 智力过人。

↓same words

10120 这是从思惟能力角度去理解智力的。

↓same words

10130 其实记忆能力, 思惟能力都只是智力的一个方面, 而不是全部。

↓semantically relevant referents>

10140 那么, 智力结构是由哪些能力构成的呢? 。

↓same referents to a pronominal

10150 心理学家对这个问题的认识不完全一致。

↓same referents to an original nominal

10160 我们认为, 智力结构主要是由观察能力, 记忆能力, 思惟能力, 想像能力, 实际操作能力等基本能力构成的。

↓same words

10170 这五种基本能力可以叫做智力结构的五个要素。

↓same words

10180 在智力结构中, [各种能力] 之间是相互联系, 相互制约的。

↓ same words, same referents to a pronominal

10190 它们在智力结构中各有一定的作用。

↓ (same words)

10200 为了便于理解 (它们在智力结构中各有一定的作用), 我们不妨打个比方。

↓ (same words)

10210 观察能力是智力结构的“眼睛”。

↓ same words

10220 记忆能力是智力结构的“储存器”。

↓ same words

10230 思惟能力是智力结构的“中枢”。

↓ same words

10240 想像能力是智力结构的“翅膀”。

↓ same words

10250 实际操作能力是智力结构转化为物质力量的“转换器”。

↓ same words

10260 在智力结构中最为重要的是创造性能力。

↓ same referents to a pronominal

10270 它主要是由创造性思惟和创造性想像能力所组成的。

↓ Gate of subroutine(to 10280)

↑ Exit to mainroutine(from 11020)

↓ a new development of an argument, same referents to an original nominal

10280 下面我们对智力结构的五个要素做个简要的介绍。

↓ subroutine(1)

↓ semantically relevant referents >

10290 第一个要素, 观察能力。

↓ same words

10300 观察能力是有一定目的的, 有组织的, 主动的知觉。

↓ same words

10310 观察能力在人的一切活动领域都是必须的。

↓ same words

10320 [科学家, 艺术家, 劳动模范和技术革新能手] 都有高度的观察能力。

↓ same referents to a pronominal, same words

10330 他们的成就和这种高度的观察能力有着密切的关系。

↓ semantically relevant referents <

10340 许多历史上著名的学者都非常重视观察。

↓ semantically relevant referents >

10350 英国生物学家进化论的奠基人达尔文说过: “我既没有突出的理解力, 也没有过人的机智。”

↓ same words

10360 只是在察觉那些稍一放松就要消逝的事物，并对它进行精细观察的能力上，我可能在众人之上。

↓ same words

10370 俄国杰出的生理学家，高级神经活动学说创始人巴甫洛夫就是从深入细致地观察唾液分泌等问题入手，获得了辉煌的成就。

↓ same words

10380 [巴甫洛夫] 非常重视观察在科学研究中的作用。

↓ same words, same referents to a pronominal

10390 他的名言是：“观察，观察，再观察”。

↑ return to 10280

↓ subroutine(2)

↓ semantically relevant referents >

10400 第二个要素，记忆能力。

↓ semantically relevant referents <

10410 [记忆] 是对经验过的事物能够记住，并且能够在以后再现或者在它重新呈现时，能再认识的过程。

↓ same referents to a pronominal

10420 它包括“识记”，就是“认识”的“识”，“记忆”的“记”，识记，保持，再现，再认四个方面。

↓ semantically relevant referents >

10430 衡量人的记忆力好坏，主要有四个指标。

↓ subroutine(21), semantically relevant referents >

10440 第一是 [记忆的敏捷性]。

↓ semantically relevant referents >, same referents to a pronominal

10450 这是指识记的速度。

↑ return to 10430

↓ subroutine(22)

↓ semantically relevant referents >

10460 第二， [记忆保持的持久性]。

↓ semantically relevant referents >, same referents to a pronominal

10470 这是指记住的东西保持时间的长短。

↑ return to 10430

↓ subroutine(23)

↓ semantically relevant referents >

10480 第三， [记忆的正确性]。

↓ semantically relevant referents >, same referents to a pronominal



10490 这是指能够把识记的东西准确无误地再现出来。

↑ return to 10430

↓ subroutine(24)

↓ semantically relevant referents>

10500 第四, [记忆的备用性]。

↓ same referents to a pronominal, semantically relevant referents>

10510 这是指能够把记忆中所保存的东西在需要的时候很快地回忆起来。

↑ return to 10430

↓ semantically relevant referents=(, (from 10430)

10520 记忆能力在各种人才的成长中都起了重要的作用。

↓ same words

10530 历史上不少有所建树的科学家和艺术家都具有惊人的记忆能力。

↓ semantically relevant referents=

10540 马克思很注意发展自己的记忆力。

↓ same words, an extreme exemplificational relation

10550 他甚至故意用自己生疏的外国语来背诵诗歌, 借以锻炼记忆力。

↑ return to 10280

↓ subroutine(3), semantically relevant referents>

10560 第三个要素, 思维能力。

↓ semantically relevant referents<

10570 思维是人脑对客观事物间接的和概括的反应。

↓ same words

10580 人们的思维虽然具有一般的规律性, 但是每个人的思维又具有 [各自的特殊性]。

↓ semantically relevant referents>, same referents to a pronominal

10590 这种特殊性表现在思维品质上。

↓ same words

10600 思维品质主要有四个方面。

↓ subroutine(31)

↓ semantically relevant referents>

10610 一是思维的广阔性, 表现在善于抓住问题的广泛范围, 在不同的知识和实践的领域中创造性地进行思考。

↓ same referents to a pronominal

10620 在天才人物身上这种品质得到了高度的表现。

↓ same referents to an original nominal, semantically relevant referents>

10630 马克思, 恩格斯, 列宁, 斯大林, 毛泽东, 周恩来都有巨大的思维的广阔性。

↑ return to 10600

↓ subroutine(32)

↓ semantically relevant referents>

10640 二，思惟的深刻性，表现在善于深入地思考问题，抓住事物的规律和本质，预见事物的发展进程。

↓ same words

10650 伟大的思想家都是以思惟的深刻性为其思惟特征的。

↓ semantically relevant referents>, semantically relevant referents>

10660 马克思是善于透过现象抓住本质的典范。

↑ return to 10600

↓ subroutine(33)

↓ semantically relevant referents>

10670 三是思惟的独立性，表现在善于独立思考，根据客观事实，冷静地考虑问题，而不为他人的观点所左右。

↓ same words

10680 思惟的独立性是人们进行创造性活动的必要前提。

↓ same words

10690 〔科学上创立新学说的人〕都具有思惟的独立性。

↓ same referents to a pronominal

10700 他们敢于破除迷信，敢于向科学权威的错误结论挑战。

↓ semantically relevant referents>

10710 爱因斯坦是一位不受传统观念束缚，敢于创立新说的杰出人物。

↓ semantically relevant referents>

10720 十七世纪以来，人们都认为牛顿力学是整个物理学乃至整个自然科学的牢固基础。

↓ same referents to a pronominal

10730 对于它顶多在细节上有所补充而不可能再发展了。

↓ same referents to an original nominal

10740 但是爱因斯坦却极大地发展了牛顿力学，把它推进到相对论的崭新阶段。

↑ return to 10600

↓ subroutine(34)

↓ semantically relevant referents>

10750 四是思惟的敏捷性，表现在迅速而正确地解决问题的能力。

↓ same words

10760 对于军事指挥工作，思想的敏捷性是最需要的。

↓ semantically relevant referents>

10770 卓越的俄罗斯军事家苏沃洛夫说：一分钟决定战局。

↓ semantically relevant referents <

10780 我不是用小时来行动，而是用分钟来行动的。

↓ semantically relevant referents > (分钟→丝毫的迟缓)

10790 飞行员，汽车驾驶员也需要当机立断，不允许丝毫的迟缓。

↓ semantically relevant referents < (当机立断→敏捷性)

10800 没有思想的敏捷性，就难以胜任这种工作。

↓ same words

10810 培养和发展思维的广阔性，深刻性，独立性，敏捷性是各种人材成长的最重要的心理条件之一。

↑ return to 10280

↓ subroutine(4)

↓ semantically relevant referents >

10820 第四个要素，想像能力。

↓ semantically relevant referents <

10830 想像就是在人的头脑中把过去感知过的形象进行加工所产生的一种新的形象。

↓ same words

10840 想像是人所特有的，对客观世界的一种反应形式。

↓ same words

10850 想像能够冲破时间和空间的限制而思接千载，视通万里。

↓ same words

10860 想像在人的社会实践中是不可缺少的，

10870 在科学创造和艺术创造中占有特别重要的地位。

↓ same words

10880 幻想是想像的一种。

↓ same words

10890 列宁认为最严格的科学也不能否认幻想的作用。

↓ same words, same referents to a pronominal

10900 他指出，[有人认为只有诗人才需要幻想]。

↓ same referents to a pronominal

10910 这是没有理由的。

↓ same words

10920 这(有人认为只有诗人才需要幻想)是愚蠢的偏见。

↓ same words, an extreme exemplificational relation

10930 甚至在数学上也是需要幻想的。

↓ same referents to a pronominal

10940 甚至没有它就不可能发明微积分。

↓ semantically relevant referents <

10950 郭沫若同志精确地概括了科学工作者的特有风格，是既一想天开又实事求是。

↓ semantically relevant referents <

10960 他说：“科学也需要创造，需要幻想。

↓ same words

10970 有幻想才能打破传统的束缚，才能发展科学。

↓ same words

10980 科学工作者同志们，请你们不要把幻想让诗人独占了。

↓ same words

10990 嫦娥奔月，龙宫探宝，封神演义上的许多幻想通过科学今天大都变成了现实”。

↑ return to 10280

↓ subroutine(5)

↓ semantically relevant referents>

11000 第五个要素，实际操作能力。

↓ same words

11010 只有认识能力而缺乏实际操作能力，人材是难以成功的。

↓ semantically relevant referents>

11020 现代社会的发展更需要手脑并用的人材。

↑ return to 10270

↓ main issue (mainroutine)(from 10270)

↓ semantically relevant referents<

11030 创造性活动是独创性的活动。

↓ same referents to a pronominal

11040 它给人们带来新的具有社会价值的产物。

↓ same referents to an original nominal

11050 正常的智力发展水平是创造性活动的基础。

↓ same words

11060 智力落后的人是难以进行创造性活动的。

↓ same words

11070 创造性活动需要独创性解决问题的能力，也就是创造性能力。

↓ same referents to a pronominal, same words

11080 它是一种比较高级的能力，是保证创造性活动完成的必要条件，而在创造性活动中创造性能力也得到发展。

↓ same referents to an original nominal, same words

11090 创造性活动的形式是多种多样的。

↓ semantically relevant referents<

11100 创造性的程度也各有不同。

↓ same words

11110 科学家在科学上的突破，革新家的发明，艺术家的创作，劳动模范的新工作方法等等是具有高度创造性的活动。

↓ semantically relevant referents>

- 11120 创造性活动的产物是人材成功的重要标帜之一。  
 ↓ semantically relevant referents <
- 11130 全面发展人的智力主要是指智力结构中的五个要素都要有一定的水平,  
 ↓ same words
- 11131 防止单纯追求某一要素的发展, 而忽视其他要素的发展, 造成智力结构的失调, 形成智力畸形。  
 ↓ semantically relevant referents <
- 11140 当然全面发展人的智力并不意味着要求各种人材都发展同样的能力。  
 ↓ semantically relevant referents >
- 11150 [智力结构中的五个要素] 是各种各样的人材, 包括政治家, 思想家, 科学家, 教育家, 艺术家, 体育家, 军事家等都必须具备的。  
 ↓ semantically relevant referents >, same referents to a pronominal
- 11160 它是各种人材成功所需要的基本的智力条件。  
 ↓ semantically relevant referents <
- 11170 各种人材除了要具备智力结构中的五个要素以外, 还需要具备某些特殊的能力。  
 ↓ semantically relevant referents >, an exemplificational relation
- 11180 比如音乐家需要具备曲调感能力, 听觉表象能力和音乐节奏感能力。  
 ↓ semantically relevant referents >
- 11190 画家需要鉴别色彩的能力。  
 ↓ semantically relevant referents >
- 11200 体操运动员需要动作表象能力, 发达的平衡觉能力, 动作的节奏能力, 和形式的美感能力。  
 ↓ semantically relevant referents >
- 11210 球类运动员需要准确凝视的视觉知觉能力, 球感能力和反应的迅速和准确等能力。  
 ↓ semantically relevant referents <
- 11220 要成功地从事某项活动, 需要许多能力的结合。  
 ↓ same words, a contrary relation
- 11230 但是是不是从事某项活动所需要的各种能力中, [有一种能力很薄弱就没有希望作好这种活动] 呢?。  
 ↓ same referents to a pronominal
- 11240 那也不是的。  
 ↓ semantically relevant referents >, an exemplificational relation
- 11250 比如视觉记忆能力, 也就是看过东西之后记住它的形状的能力, 是画家必备的能力之一。  
 ↓ same words, a contrary relation
- 11260 可是有些在少年时代视觉记忆能力很差的人后来却成了著名的画家。  
 ↓ semantically relevant referents = (视觉记忆能力 → 某一种能力)
- 11270 实验研究证明,  
 11271 在一种活动中所需要的多种能力, 其中所需要的多数能力得到了充分的发展而

某一种能力发展比较差,

↓ semantically relevant referents = (所需要的多数能力 → 这些发展起来的能力),  
a conditional relation

11280 那么只要勤奋地从事这种活动, 这些发展起来的能力, 就可以代替或补偿那些没有发展起来的能力,

11281 保证人在这种活动中取得成就。

↓ semantically relevant referents >

11290 每个人的智力结构的特点是各有所长, 各有所短的。

↓ semantically relevant referents <, a causal relation

11300 因此 [各种人材都要扬长避短, 发挥自己的智力优势]。

↓ same referents to a pronominal, same words

11310 这也是因材施教, 量材使用各种人材的心理学依据。

↓ semantically relevant referents <

11320 陈景润不具备从事教师所需要的教学才能。

↓ same referents to a pronominal

11330 [王亚南把他调回母校从事数学研究]。

↓ same referents to a pronominal

11340 这使陈景润避开才能劣势转向发展才能的优势, 使他迅速成材。

↓ semantically relevant referents <

11350 承认人的智力结构存在差异, 决不意味着承认人有高低贵贱之分。

↓ semantically relevant referents >

11360 社会主义建设需要有多种多样的人材。

↓ same words

11370 关键在于量材使用, 使各种人材各得其所, 各尽其能。

The end of main issue

A closing statement

↓ same words, (from 11370)

11380 刚才播送的是“人材问题广播讲座”第十七讲, “智力结构与成材”。

↓ semantically relevant referents >

11390 由王极盛写稿, 林田播送。

↓ same words

11400 十二号和十三号, 播送第十八讲。

↓ semantically relevant referents >

11410 题目是“兴趣, 情感, 意志与成材”。

↓ semantically relevant referents >

11420 各位听众! “人材问题广播讲座”的全部讲稿将由广播出版社和中国社会科学出版社联合出版。

↓ semantically relevant referents >

11430 书名是“成材之路”。

↓ semantically relevant referents >

11440 全书共约十一万字。

↓ semantically relevant referents >

11450 每册订价四角五分，不另收邮费。

↓ semantically relevant referents >

11460 如读者要求挂号邮寄，请加寄一角二分。

↓ semantically relevant referents <

11470 预订本书的同志请把书款寄到“北京，日坛路，六号，中国社会科学出版社，发行科”。

↓ semantically relevant referents <

11480 开户银行是中国人民银行，北京东四，南分离处，帐号四六六零。

↓ semantically relevant referents >

11490 订购日期从现在起到五月三十一号截止。

↓ semantically relevant referents >

11500 预订本书的同志，请把地址，姓名书写清楚。

↓ semantically relevant referents <

11510 这次学习节目播送完了。

#### 4. CONCLUSION

Division of words' concatenations		Number of examples	percentage %
Same words		55	36.9
Same referents to a pronominal		14	9.4
Same referents to an original nominal		4	2.7
Semantically relevant referents	>	49(*4)	75
	=	4	
	<	22	
Logical relation only		1	0.7
Total		149	100

#### NOTES

1) Lyons(1977:590) suggested such as the following:

....., it must be accepted that a comprehensive theory of linguistic semantics will need to be based upon, or include, a theory of contextual appropriateness. It is arguable, however, that, at a present time at least, the construction of such a comprehensive theory of linguistic semantics is too ambitious a task.

2) van Dijk(1985:107-108) discussed discourse coherence as follows:

A first aspect that requires our attention is the fact that discourses usually consist of sequences of sentences that express sequences of propositions..... In other words, how are the propositions of a discourse linked up in a sequence, and how do they add up to more complex meanings? And conversely, how



does the meaning of one sentence depend on the meaning of sequence as a whole?.....Hence a discourse is not just a set of sequences but an ordered sequence, with conventional constraints on the possible orderings if it is to be meaningful and if it is to represent certain fact structures, for example, episode.

3) Halliday(1985:54) described such as the following:

....., a text analysis is a work of interpretation. There are relatively few absolute and clearcut categories in language; there are many tendencies, continuities, and overlaps.

4)van Dijk(1985:109) commented as follows:

There seems to be a principle requiring that the sentence or proposition ordering may reflect the general-particular ordering of facts.

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