Unit 5 Language and Thinking

Unit Overview

The relationship between language and thinking is the one of the oldest puzzles. It involves a variety of topics such as the nature of language, linguistic and cultural diversity, cross-cultural communication and translation.

Text A

In Text A, Lewis tries to argue that language restricts thinking. According to the Sapir-Whorf Hypothesis, the language people speak determines the way they think. People perceive the world through the language that they speak. People speaking different languages experience different worlds, just like people seeing different things with different eyes. Learning another language can give people a new eye to see the world. In Text A, Lewis compares language to a straightjacket. We are born with a straightjacket, which restricts our thinking. When we take off this straightjacket and put on the straightjacket of another language, you will gain new experiences of the world. Lewis also holds that language is the tool of thinking and thinking is internalized language. Different languages reflect different thinking styles, e.g. the seriousness of German, the casualness of American English and the logic of French.

Text B

Napoli, the author of Text B, holds a different view from Lewis. Napoli argues that Language and thought are separate. She starts by debunking the Eskimo-snow rumor: Nobody has ever produced evidence that Inuktitut (the language of the Eskimo) does in fact, have lots of words for snow. Also, even if English does not have lots of words for snow, English can use adjectives, compound words and other resources to describe different kinds of snow. Moreover, we cannot equal language with thought. For example, even if a language does not have the word for chartreuse, they can still perceive this color, think about this color and even talk about this color (using not a single word but a sentence). The deaf cannot speak, but they have thoughts. Some may use a sign language but don't think in the sign language, because signs generally take about twice as long to produce as words. So do deaf people think twice as slowly as hearing people? The answer is probably no. Napoli concludes that thought is thought, language is language and the two are distinct.

Texts A and B have different views towards the relationship between language and thinking. Lewis holds that language determines thinking, while according to Napoli the two are separate.

Teaching objectives

Reading skill

- Identify the structure of the text
- Use sub-titles to facilitate reading
- Analyze multiple meanings and usages of a word in context

Communicative competence

- Illustrate your points with appropriate examples
- Adopt and argue for a perspective in a pro-con debate
- Interpret a diagram

Critical Thinking

- Question the author's interpretation of a fact and reinterpret the fact
- Critique opinions with pro and con examples
- Examine an issue from different/contradicting perspectives

Intercultural Competence

- Understand the different ways of thinking as reflected in different languages
- Be aware of possible different connotations of seemingly equivalent concepts in different languages
- Understand the Sapir-Whorf Hypothesis about language-thought relationship

Teaching strategies

The relationship between language and thinking is an old puzzle and there is no decisive conclusion. Therefore, the aim is not to provide students with definite answers but encourage them to ponder on this issue. You may start this unit by asking them to answer the question "do we think in the language we speak?" based on their intuition. Then, what do the expressions "言为心声" and "词不达意" imply about the relationship between language and thinking? Or if we do think in the language we speak, what about the deaf and the illiterate? Ask them to bear the questions in mind and reflect on the questions after learning this unit.

Rich sources can found both online and in libraries. The following link connects to the article "Relatively speaking: do our words influence how we think?" carried by the British newspaper the Guardian, which can be provided to students as extended reading.
http://www.theguardian.com/education/2014/jan/29/how-words-influence-thought

Preparatory work

(1) Richard Lewis

Richard Donald Lewis (born 1930) is a British polyglot, cross-cultural communication consultant, and author.

His major publications include: Fish Can't See Water, When Cultures Collide, and Cross-Cultural Communication: A Visual Approach.

The Lewis Model of Culture is a practical theoretical approach to classifying cultures designed for organizations involved in international communication.

His website http://www.crossculture.com/ provides more information about him, his theories and his cross-cultural consulting services.

(2) Sapir-Whorf Hypothesis

This activity provides background information key to understand the two articles in this unit, which hold exactly different views on the hypothesis.

The strong form of the hypothesis is called Language Determinism (语言决定论), i.e. the language we speak determines the way we think. In an extreme version, the hypothesis proposes that people from different language backgrounds effectively live in separate worlds, because of the disparate experiences provided for them by the structures of their languages.

The weak form of the hypothesis, called Language Relativism (语言相对论), merely suggests that language can influence the way we perceive and think about the world.

(3) Language and language families

This activity provides an opportunity to explore the colorful world of languages of the world.

The first five are languages, i.e. Finnish, Inuit, Navaho, Polynesian and Zulu (芬兰语, 因纽特语, 纳瓦霍语, 波利尼西亚语 and 祖鲁语).

The other three are language families, i.e. Altaic, Indo-European and Sino-Tibetan (阿尔泰语系, 印欧语系 and 汉藏语系).

> Languages of the Altaic language family:
> http://aboutworldlanguages.com/altaic-language-family

Languages of the Indo-European language family:
http://aboutworldlanguages.com/Indo-European-Language-Family

Languages of the Sino-Tibetan language family:
http://aboutworldlanguages.com/Sino-Tibetan-Language-Family

An introduction to language families
http://aboutworldlanguages.com/language-families

What is a language family?

Most languages belong to language families. A language family is a group of related languages that developed from a common historic ancestor, referred to as protolanguage (proto– means 'early' in Greek). Language families can be subdivided into smaller units called branches. For instance, the Indo-European family has several branches, among them, Germanic, Romance, and Slavic.

How many language families are there?

According to Ethnologue (16th edition), there are 147 language families in the world. This figure may not be precise because of our limited knowledge about many of the languages spoken in the most linguistically diverse areas of the world such as Africa. The actual number of families, once these languages are studied and relationships among them are established, will undoubtedly keep changing.

World's largest language families

The largest language families (those with over 25 languages) are listed below (Ethnologue). There are 6,523 languages in this group, and together they account for close to 95 percent of all world languages (assuming that there are some 6,900 languages in the world). The remaining families account for only 5 percent of the world languages. In addition, there are 53 languages considered unclassified.

A language family tree can be found on the following webpage:
http://mentalfloss.com/article/59665/feast-your-eyes-beautiful-linguistic-family-tree

Critical Reading

I. Understanding the text

1. Outlining

Thesis: Language restricts thought and thought is internalized language.

Part	Para(s).	Main idea
I Introduction	Para 1	It's increasingly necessary and popular to understand other people's culture.
	Para 2	However, our mind/thinking may prevent us from understanding other people's culture.
	Para 3	According to Benjamin Whorf's hypothesis, people speaking different languages may also think in different ways.
	Para 4	Different peoples speaking different languages may share a common experience but they may understand the experience in different ways.
II The English and Zulu anecdote	Para(s) 5&6	The same concept may be understood in different ways by two people of different cultural and linguistic origins, e.g. "green" for English and Zulu.
III Language straitjacket	Para 7	Language is just like a straitjacket constraining the mind.
	Para 8	Speaking two different languages gives us added dimensions of reality.
	Para 9	The Greeks assumed that language was a universal element of reason and ideas could be translated freely into any language, but this was true up to a point.
	Para 10	For example, some German and French ideas cannot be accurately translated into English.
	Para 11	People speaking substantially different languages, such as English and Navaho, may have

		different worlds.
IV	Para 12	There is a hypothesis that higher levels of thinking depend on language.
Thought = Internalized Language	Para 13	The ideas that we express through language is always affected by our view of reality and by the structure of language.
	Para 14	Example 1: German
	Para 15	Example 2: American English
	Para 16	Example 3: British English
	Paras 17&18	Example 4: Japanese

2. Comprehension check

(1) Lewis tries to "play devil's advocate" and consider how powerful mental blocks of language may hinder our ability to change our attitudes or adopt new approaches.

(2) Lewis addresses two questions, i.e. whether people speaking different language view the world in different ways and how language influences thoughts.

(3) Lewis tries to show that his Zulu friend and he see the world in different ways because they speak different languages.

(4) "Language straightjacket" metaphorically refers to the role that language plays. That is, a language restricts how people speaking the language perceive the world.

(5) The clichés symbolize the casualness of American English and the vagueness of British English.

(6) Lewis highlights the characteristics of the language and thoughts of the Germans, Americans, Britons, French and Japanese.

German: disciplined, serious
American English: casual
British English: vague
French: logically precise
Japanese: polite

(7) This question summarizes Text A. According to Lewis, language restricts thought (Paragraphs 2-11) and thinking depends on language (Paragraphs 12-17).

II. Evaluation and exploration

1. Evaluating the text

(1) "Green" words

- Examine an issue from different/contradicting perspectives
- Question the author's interpretation of a fact and reinterpret the fact

This is an open question. In Lewis view, he does not have the words to describe the various "greens" and does not perceive the "greens" as his Zulu friend does. The lack may be caused by his lack of experience. In his life, he does not have

Others may hold that he does not lack the language resources to describe the various "greens". Although English does not have 39 independent words for "green", he can use phrases or sentences to describe the various "greens".

(2) Language-thought metaphors

This activity provides another approach to grasping the main ideas of Text A. To illustrate the relationship between language and thinking, Lewis uses the following metaphors:

1. "mental blocks" (Paragraph 2)
2. "conditioner" (Paragraph 2)
3. "kaleidoscope" (Paragraph 4)
4. "straightjacket" (Paragraphs 7-11)
5. "iceberg" (Paragraph 13).

These metaphors highlight different aspects of the relationship.

(3) Do you agree?

This activity encourages students to examine the relationship between language and thought from perspectives different from that held by Lewis. It also serves as a good transition into Text B, which holds different views from Text A.

For example, Lewis holds that language restricts thought just like a straightjacket. He supports his view with the example about Zulu words for "green". However, even if Lewis does not have 39 independent words for "green", he can use phrases or sentences to describe the various "greens". Napoli, the author of Text B has a similar view towards the Eskimo-snow rumor, which is similar to the Zulu-green example. According to Napoli, even if English speakers don't have so many words for snow, they can use adjectives, compound nouns and compound adjectives to describe different kinds of snow.

2. Exploring beyond the text

(1) False friends

- Skill: Be aware of possible different connotations of seemingly equivalent concepts in different languages

This activity aims to show that some seeming equivalents in Chinese and English actually have very different meanings. This phenomenon has implications for both language learning and translation.

a. Fair play has many richer meanings than "公平竞赛", a seeming counterpart in Chinese.
A detailed description can be found on the website of the International Fair Play Committee.
http://fairplayinternational.org/fairplay/the-essence-of-fair-play#.VW_lFdJAXlA

b. Liberalism is neutral if not positive, while "自由主义" is mainly negative in Chinese.

c. It is said that "关系" in Chinese is more subjective and relationship in English is more objective. The Chinese society is built upon *guanxi*. Actually, the word *guanxi* has been borrowed into English.

d. There is no exact counterpart in English to "天" as in "天人合一". "天" may be translated as "day" (今天), "weather" (天热), "season" (夏天), "sky" (天际), "heaven" (天堂), "nature" (天职), "emperor" (天朝) and "God" (老天爷).

(2) Internalized Chinese

- Skill: Understand the different ways of thinking as reflected in different languages

This activity encourages students to reflect upon the characteristics of the Chinese language and thoughts. However, it is important to notice that the analysis of Lewis is subject to oversimplification and stereotyping.

One characteristic of the Chinese language and thoughts is the focus on social relationships (guanxi). For example, Chinese has a large number of kinship terms. The English "uncle" has a handful of Chinese counterparts, e.g. "叔叔", "伯伯", "姑父", "舅舅" and "姨夫".

(3) Semantic Triangle

- Skill: Interpret a diagram
- Skill: Understand the Sapir-Whorf Hypothesis about language-thought relationship

The triangle is classical in linguistics and can be interpreted in different ways. In Lewis's view, language restricts thought and serves as a kaleidoscope for human mind to perceive the reality.

If a group of people do not have a certain experience, it follows that they do not have the corresponding concept. Then, it follows that they do not have the corresponding word.

The triangle can be turned clockwise and turns into the Semantic Triangle to interpret the meaning of "meaning". Traditionally, the meaning of a word is understood as the object in the physical world that the word refers to. However, some words do not have a definite referent in the physical world, e.g. unicorn. Moreover, the same word may have different

meanings for different people. For example, a pet lover is likely to understand the word "dog" differently from someone who has been bitten by dogs. Therefore, the meaning of a word should be found in the corresponding concept.

I. Word and phrase

1. Preposition and adverb

(1) In
(2) in
(3) to
(4) from
(5) up
(6) at
(7) in
(8) on

2. Word with multiple meanings

- Skill: Analyze multiple meanings and usages of a word in context

(1) Just as seeing with two eyes gives us stereoscopic vision and a sense of depth, thinking in two different languages gives us added dimensions of reality. The bilingual Swedish Finn is *a good example*.

(2) This is only true *to a certain extent*.

(3) This line of reasoning tends to become somewhat involved, but *to make it clear*, let's take a few practical examples.

(4) Scholars of various disciplines (psychology, sociology) might debate why this happens, but *what matters* for us is simply that the speakers of both languages can understand the concept, regardless.

(5) John beat the eggs *until they are* stiff.

(6) *In a certain sense*, the proposition that differences in structure between languages are evidence of differences in conceptual behavior between peoples leads to nonsense.

(7) Ideally, we should design an experiment to measure the speed of silent language *on this occasion or in this condition*.

(1) At this point it is likely that we may make a second mistake.

(2) On several occasions he was driven to the point of resignation.

(3) The point is, many parents do this habitually.

(4) She had got to the point where she felt that she could not take any more.

(5) This method has worked—up to a point.

(6) He was determined to prove his point.

(7) Of course everyone may do this, but that's not the point.

3. Word set

(1) a involved
b evolved
c revolve
Devolve, convolve, volume, evolution, revolution, convolution

(2) a perceive
b conceive
c deceive
Perception, receive, reception, deception, conception

(3) a transnational
b binational
c Multinationals
International, bilateral, multilateral, transplant, nationalism

(4) a assume
b resume
c presume
Assumption, presumption, resumption, consume, consumption

(5) a intertwine
b intervene
c interwoven
Inter-dental, interplanetary, international, intercom

II. Sentence and discourse

1. Paraphrasing

(1) I do not mean that cross-cultural training is useless—instead, I believe it is useful—but I just want to emphasize the negative side of the issue for a little while and consider how powerful mental blocks may prevent us from changing our attitudes or adopting new approaches.

(2) People in the British Isles act and live in a certain way because their thoughts are affected or determined by Anglo-Saxon traditions which are different from neo-Latin, Japanese or Chinese traditions.

(3) English copes with concepts such as contract deadlines and stock futures, but English has much fewer rich descriptive expressions than African and Native American languages, because these languages have a great number of expressions that can

describe nature, causation, repetition, duration and result in a detailed and beautiful way.

(4) Their clinical words are helpful for quick thinking, the lack of unclear expressions makes their expression very direct and their efforts on logic will often make Anglo-Saxons and Japanese angry, because Anglo-Saxons and Japanese find their solution not by logical thinking but in a more subjective way.

2. Translation

(1) 不列颠人、德国人和因纽特人可能有共同的体验，但是它对每一群人都表现为一组**万花筒式的**印象，需要通过思维进行组织。

(2) 只有学习他的语言并且摆脱我自己的“**束身衣**”，我才能像他一样充分体验他的现实。

(3) 他们相信这是所有人类共有的一种现象，对于受过教育的人群，它可以提供一把标准的**尺子**，用来比较思想、体验和现实。

(4) 每个人说话时，我们只能瞥见语言活动这座巨大冰山的一角，这座冰山从来没有突破听力的水面。

(5) 另一个复杂因素是美式英语深深**陷入**陈词滥调和“心灵鸡汤”式话语中无法自拔。

(6) 但是，这种礼貌涉及的话语机制往往导致表达极度模糊，因此无论他们想传达的是什么信息，都会迷失在无可挑剔行为造成的**迷雾**之中。

(7) 最重要的是，他们数量惊人的敬语**存货**——在日本人之间的沟通中非常有用——由于无法翻译而变得无用，因此他们和外国人的对话尽管语法上是正确的，却显得极其陈腐。

3. Proofreading

An idea fundamental to cognitive science is that it may be possible to describe our thought processes through some representational system. If the appropriate representational system has properties similar to linguistic properties (such as observing similar principles) is an open question that scholars will not doubt be debating for years. Here, however, I'd like to address related questions, one that I believe we can answer together: Do we think in language? Could we think without a language? One way to interpret these questions is as following: Does language construct a mental world that cognitively	1) Whether 2) no 3) ones 4) follows

fence us in? This might well be a familiar question to you since it is frequently debated. One can also interpret these questions in the most mundane way, the way people when they say things such as "It's so noisy I can't hear myself think"—that is, asking whether human beings think in specific human languages. In other words, do people from Italy think in Italian? Or, giving that the Italian language has many dialects, we could break up this basic question into multiple ones, such as these: Do Venetians think in Venetian? Do Neapolitans think in Napoletano? Likewise, do Indians, Australians, Canadians, Americans, and the British think in their own nation varieties of English? We can get nicer: Do Bostonians and Atlantans and Philadelphians think in their urban varieties?	5) fences 6) people do when 7) 8) given 9) down 10) national

4. Paragraph structure
Answer: (4), (2), (1), (6), (5), (3)

Note: This activity provides additional resources to understand the relationship between language and thought.

Intercultural reflection

1. Role play
This activity provides an opportunity to summarize Text A and Text B, which hold different views towards the relationship between language and thought. They can be compared in the following aspects:
(1) Attitude to Benjamin-Whorf Hypothesis
(2) Eskimo words for snow and Zulu words for green
(3) Whether the lack of words leads to the lack of concepts

2. English straightjacket and Chinese straightjacket
This is an open question. It encourages students to reflect the possible influence that learning English has upon their thinking.

You can refer to the following resources:
http://blog.sina.com.cn/s/blog_534d3fe90100soik.html
http://www.cnki.com.cn/Article/CJFDTotal-WXSY200806038.htm

3. TED talk
This TED talk may give students insights into the relationship between language and thought. For example, Chen's example of "uncle" and its Chinese counterparts shows that the language we speak forces us to perceive the world in a certain way. Chen's study is also valuable in that while most studies in this area focus on vocabulary, Chen examines a grammatical feature: future and futureless.

Moreover, this talk provides a good example of the method to control the variables in a research design. Chen and his team tried their best to make sure that the two families are homogeneous except for the future tense of the languages they speak. The purpose to control the variables involved in the experiment.

4. Chinese characters and Chinese thinking
This activity calls for students' attention to the possible influence of digital media on the Chinese writing system (the first article) and the influence of Chinese characters on Chinese thinking (the second article).

Students may approach this issue from a diversity of perspectives, e.g. the thoughts reflected in Chinese characters, restoring traditional Chinese characters, and the popularity of "Chinese spelling bees" on TV.

Creative Response

By doing the two activities, students can review what they learn in the first five units and explore other topics about language.

The Essay Writing activity helps students get familiar with the format of a debate.

After that, they can prepare for organizing the debate. The following procedures are recommended:

- Divide the class into several (say five) groups. Each group will design a debate on a topic about language by modeling The Economist debate.
- Firstly, the group works together to decide on a topic and propose a statement about the topic (the motion).
- Then, the members of each group are assigned to four roles, perhaps with more than one member for each role: the moderator is responsible for making opening remarks to introduce the background of the topic; the proposer is responsible for defending the motion; the opposition is responsible for challenging the motion; the summarizer is responsible for summing up the arguments of both sides and reporting the results to the class. For your homework, each group needs to submit four pieces of writing corresponding to the four roles.

As a variation, you may present the debate to the class by "performing" it as an oral debate. After your presentation, you can invite the class to vote for or against your motion and ask some of your classmates to share their ideas on the topic.

Another variation is organizing the debate online through a blog, *weibo*, wechat or any other social networking services.

You can find a review on the Economist debate on the following webpage:
http://languagesoftheworld.info/language-and-mind/does-language-reflectaffect-thought.html#ixzz2PwTELOFD

A review on the Economist debate
Does language reflect/affect thought?
Jan 20, 2011 by Asya Pereltsvaig

In a recent online debate at The Economist a question was raised as to whether the language we speak shapes how we think. Lera Boroditsky of Stanford University argued for the "pro" position, while Mark Liberman of the University of Pennsylvania argued the "con" side. Several guest experts were featured as well: Derek Bickerton (an expert on creoles), Dan Slobin (who describes himself as "a cognitive/functional psycholinguist who explores the interfaces between child language, cognition, and linguistic typology") and Lila Gleitman (an expert in child language acquisition). The Economist's Robert Lane Greene served as a moderated. Many people have participated with their "comments from the floor" and voted "pro" (78%) or "con" (22%). As you can see, the opinion of the overwhelming majority of those readers who voted is that the language we

speak shapes (and doesn't just reflect) how we think. Interestingly, Lera Boroditsky's arguments seem to be more convincing than those of Mark Liberman, since the "pro" vote went up from 71% to 78% in the course of the 10-day debate.

What do I think of this debate? Overall, I am not a big fan of solving scientific questions in a public forum or subjecting them to — yes, subjective! — vote of people who are not experts in the matter. IMHO, it seems to be like deciding whether Einstein's Theory of Relativity is right or wrong by a simple vote in a townhall meeting. (Actually, this is a theory of relativity of sorts, or rather of "linguistic relativism", whose correctness is discussed in this debate).

Still, some of the arguments presented in support of both "pro" and "con" positions are interesting and worthy of careful study. Much evidence (only some of which has been touched upon in this debate) has accumulated that shows that certain aspects of language (its numeral system, words for colors or kinship relations, spatial terms, etc.) affect how the speakers of these languages perceive, remember and think about objects, cardinalities, spatial relations and events. Most of the studies (although interestingly not all, something I will talk about in future postings) tend to favor the "pro" side that Lera Boroditsky's on.

However, most of these cross-linguistic differences that shape our ways of thinking about the world tend to involve lexical matters: what colors, numbers or spatial relationships a given language chooses to lexicalize (that is, has words for). One of the classical examples of this causal relation between language and thought is the work on color terms: for example, Russian speakers, who distinguish two different basic colors that English speakers classify as "blue" (sinij and goluboj), are better at distinguishing shades of blue. Similarly, whether a language you speak has words for numbers higher than five, or for 'from behind' and 'into under' (separate from 'behind', 'into behind' and 'under') affects whether you pay attention, distinguish or remember higher cardinalities or complex spatial relations.

And take those examples that Boroditsky and her colleagues cite as grammatical patterns that affect how we think: the presence and exact shape of the grammatical gender system, or the way agentive-incoative pairs (such as the English I melted the butter/The butter melted) work. They too involve the question of lexicalization. Are there separate masculine and feminine (and perhaps also neuter) morphemes in the language? Are there separate verb forms for the agentive (I melted the butter) and the inchoative (The butter melted) meanings of the verb (and no, English manages to express both meanings with the same verb).

However, deeper grammatical patterns do not seem to affect our ways of thinking. Is your language polysynthetic? Does it use agglutination or fusion? Is it head-initial or head-final? Does it track reference (who did what to whom) by means of case or agreement (or perhaps strict word order serves that function)? Unless you are a linguist, you probably can't answer these questions even though as a child you figured them out — implicitly! Otherwise, you wouldn't be able to speak you native tongue. Moreover, recent reseach also suggests that these deep grammatical properties are acquired by children very early: some before their 2nd birthday and most before their 3rd.

Yet, most people who do not know much about linguistics tend to think of language (and consequently, of their specific language) as a collection of words and not much else. That's why it was so easy for the non-expert public to vote in support of Lera Boroditsky's position. For someone focused exclusively on words, whether you think of

certain objects as sinij or goluboj or just as blue makes a lot of difference. The crucial point these people miss entirely is that regardless of whether you say “The dog bit the man” or “The dog the man bit” or “Bit the dog the man” or whether any of these is fine because you know who bit whom by virtue of special marking on the nouns (“man” and “dog”) or on the verb — it just does not affect how you perceive the event of the dog biting a man.