Understanding the Human Mind: Cognitive Approaches to Linguistic and Cultural Diversity

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Overview of the bloack

- Different languages, different minds
  - Introduction
  - Warm-up: How many languages do I speak and do I behave differently when speaking them?
  - Grammar– the grammar of indirectness
  - Words– One target, different sources

- In *kavárna* W7:
  - [The social secret of baby's bilingual brain](#)

- Time and tense in human languages
  - Time, tense and the Hopi TIME debate
  - Case study: "Tense shifting" in a tenseless language?
  - Metaphor about TIME

- How different languages talk about food

- In *kavárna* W8:
  - [Tense, future and your savings](#)

How many languages do we speak? (10 min)

- In groups of 4-5 people, discuss the following questions:
  - How many languages does your group speak? Include second languages as well.
  - Do you think you behave differently when you speak those different languages?
  - How exactly do you behave differently when you speak those languages?
  - If you think you behave differently, does that make you suspect that you might THINK differently in that different language?

Student-student Discussion Format

- Create a channel in our group and start a meeting (or simply join a meeting).

- There can be multiple meetings in one channel.

- Each meeting may contain only 3-5 people (so that everyone can get to speak).

- In the meeting, discuss the leading questions given by the teacher.

- The teacher may switch between meetings and be ready to help.

- Be ready to give a summary of your discussion.

- Enjoy!

2 a) Listen to a consultation and complete the doctor's instructions. What do you think the presenting complaint was?

1 _____ for me, please, Julie.

2 _____ your foot down now.

3 _____ lift your left leg as high as you can.

4 (Please), _____ take off your shoes and your tights…

5 _____ your skirt over your knee?

6 _____ if it starts to feel uncomfortable.

1. If you could stand up for me, please, Julie.

2. You can put your foot down now.

3. I'd just like you to lift your left leg as high as you can.

4. (Please), If you could take off your shoes and your tights…

5. Would you mind just lifting your skirt over your knee?

6. I want you to tell me if it starts to feel uncomfortable.

Can/Could you + infinitive …
Would you mind + -ing …
If you can/could + infinitive …
I want / I'd like you to + infinitive …

b) Discuss these questions with your partner.

1 Why do you think doctors tend to use this type of language for instructions in English?

2 Do the doctors use direct or indirect language for giving instructions in Czech/Slovak?

Grammar that Empowers

- Now listen to the conversation again and try to identify the *grammatical* devices that allow a doctor to express "indirectness" in English.

- English features frequent use of:
  - Conditional construction (only the protasis)
  - Questions
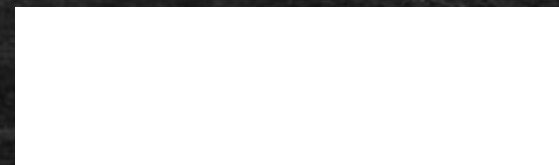 - Past tense

Words to Talk About Human Body

- I will give you examples of how medical terms vary across languages, in particular how different languages use different mental images (source) to create an understanding of the same medical concept (target). *Largely* follow the examples and come up with your own pairs ☺
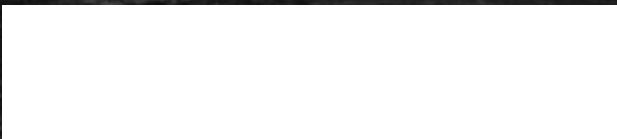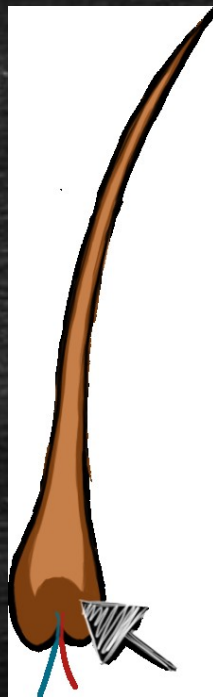
udní koš
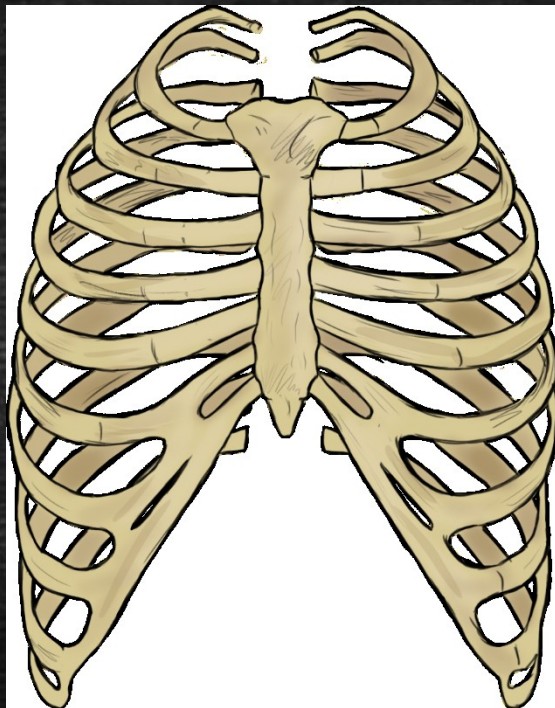
rib cage

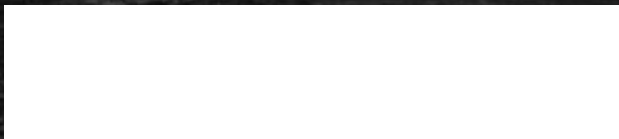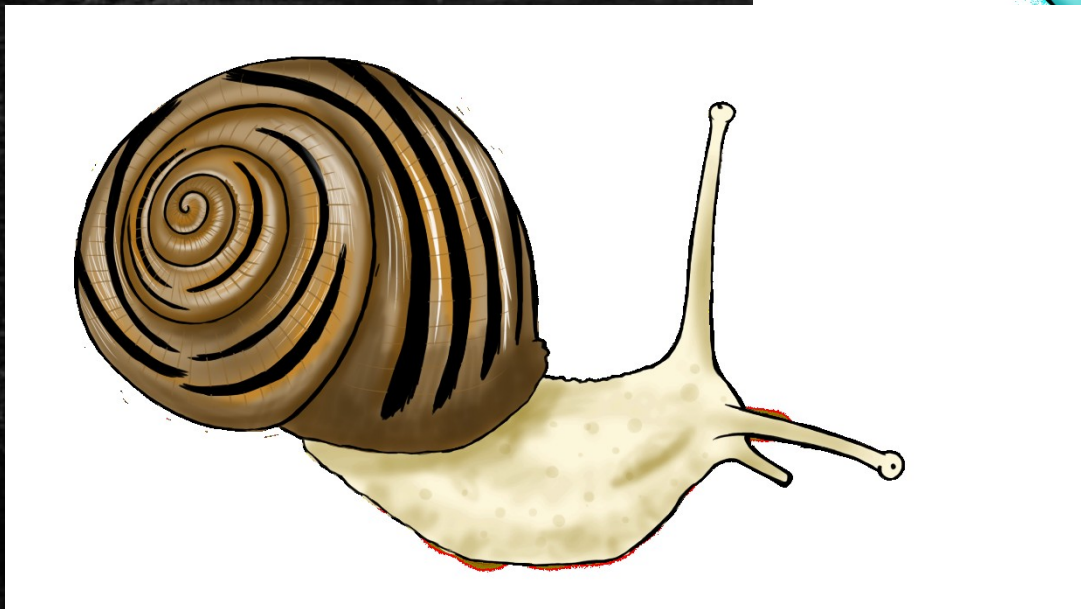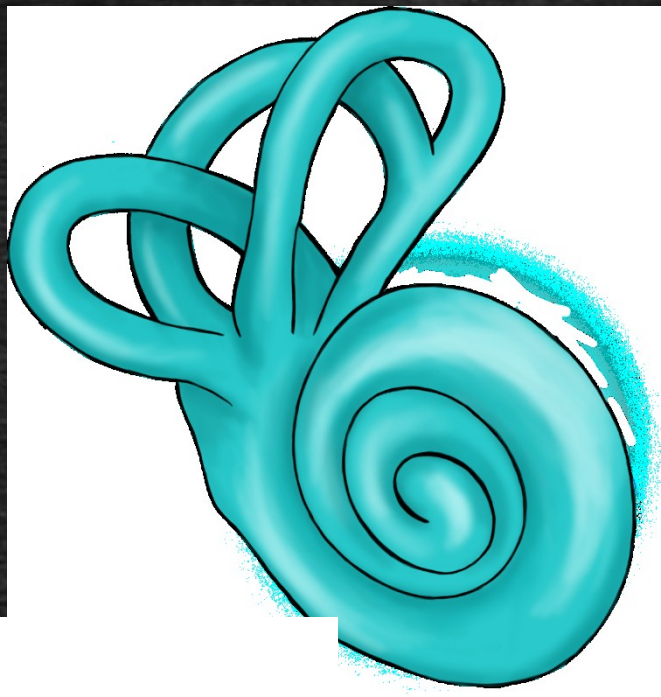vlasová cibulka   hair bulb

hlemýžd́

cochlea

- Now use any bi-lingual resources available to you and try to identify 2-3 pairs of counterparts in different languages. Be ready to justify your choice. (3-5 min)

- In groups of 3 people, show each other your findings and discuss. When you discuss, please state whether you agree with your partner's analysis and why (not). (3-5 min)

Lesson plans (W10-11)

- In W10, we covered:
  - How professional communication varies across languages
    - Linguistic structure
    - Cultural tendency
  - Lexical differences across languages
  - Whether I behave differently when speaking different languages?

- In W11:
  - Debates on "different languages, different thoughts/behaviors"
  - Empirical research

- This week in *kavárna* (10 min):
  - [How tense(s) in your language impacts your savings and health](#)

Different languages, different devic

- Benjamin Lee Whorf

- Hopi TIME debate, starting from:

Whorf, Bejamin L. 1944. The relation of habitual thought and behaviour to language. *ETC: A Review of General Semantics* 1(4): 197-215.

- Question(s) asked: (1) "Are our own concepts of 'time,' 'space,' and 'matter' given in substantially the same form by experience to all men, or are they in part conditioned by the structure of particular languages?" (Whorf 1944: 201)
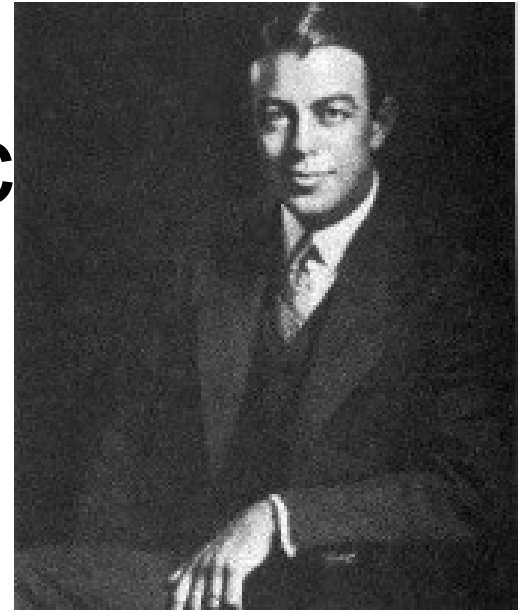
Time and thinking

- "The three-tense system of SAE verbs colors all our thinking about time." (Whorf 1944: 204; SAE for Standard Average European)

- In Hopi however all phase terms, like summer, morning, etc., are not nouns but a kind of adverb, to use the nearest SAE analogy. They are a formal part of speech by themselves, distinct from nouns, verbs, and even other Hopi 'adverbs.' Such a word is not a case form or a locative pattern, like 'des Abends' or 'in the morning.' It contains no morpheme like one of 'in the house' or 'at the tree.'... One does not say ' this summer,' but 'summer now' or 'summer recently'. (Whorf 1944: 203-204)

Malotki's *Hopi Time* (1983)

- Malotki, Ekkehart (1983). *Hopi Time: A Linguistic Analysis of the Temporal Concepts in the Hopi Language*. Berlin: Mouton.

- Hopi contains:
  - temporal adverbs,
  - time units,
  - time counting practices such as the Hopi calendar, etc.

- Considers Whorf's analysis erroneous, and argues:
  - that the Hopi language has an abundance of terms, words and constructions that refer to time,
  - that the Hopi do cognitively conceptualize time in analogy with physical space, using spatial metaphors to describe durations and units of time,
  - and that the English and Hopi systems of tense are different since the English system distinguishes past from non-past, whereas Hopi distinguishes future from non-future.

A summary of the Hopi time debate

- https://www.youtube.com/watch?v=u6eXw0AAKZ8

Remaining issues of the debate

- Question(s) to ask: (1) "Are our own concepts of 'time,' 'space,' and 'matter' given in substantially the same form by experience to all men, or are they in part conditioned by the structure of particular languages?" (Whorf 1944: 201)

- The possibility that Hopi may/does have a tense marking system does not invalidate Whorf's initial question!

- Can we find more ways to test Whorf's idea about TIME using a speeded behavioral task?

TIME for more discussion!

- Question: How does my L1 talk about TIME and how does that different from my L2? Do I think about TIME differently in the two languages? (5-10 min)

On reasoning about TIME

- Fish race experiment (Boroditsky 2001):
- Task: Below you will see a picture and a statement. Based on the picture, please decide whether the statement is true.

You will see a picture and a statement. Raise your left hand if the statement is true. Raise your right hand if the statement is false. Be as fast as you can.

The white fish will lose.

You will see a picture and a statement. Raise your left hand if the statement is true. Raise your right hand if the statement is false. Be as fast as you can.

The white fish will lose.
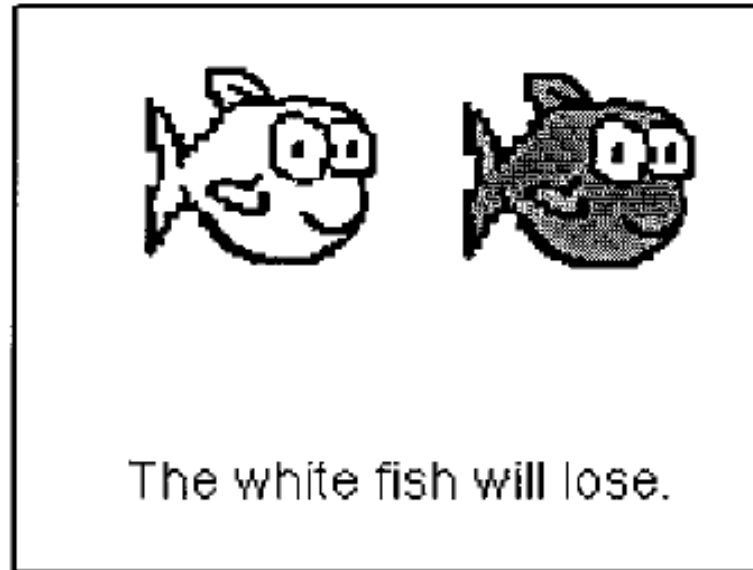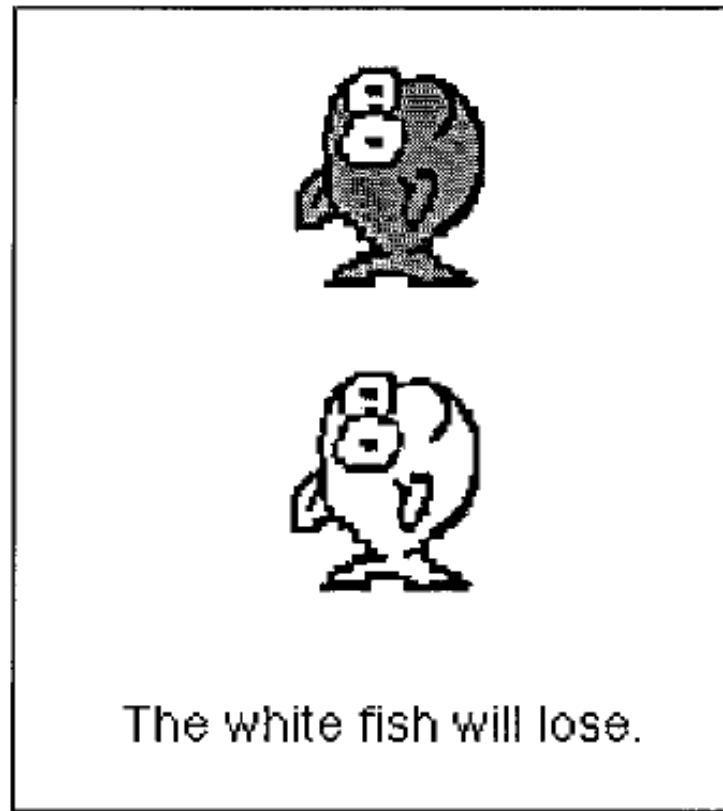
Understanding TIME using UP-DOWN

- English: *last month, next month*
- Chinese:
- 上個月 *shàng-ge-yuè* 'up-CL-month',
- 下個月 *xià-ge-yuè* 'down-CL-month',
- Czech: *minulý měsíc*

- English: *first half of the year, second half of the year*
- Chinese:
- 上半年 *shàng-bàn-nián* 'up-half-year',
- 下半年 *xià-bàn-nián* 'down-half-year'
- Czech: *první polovina roku*
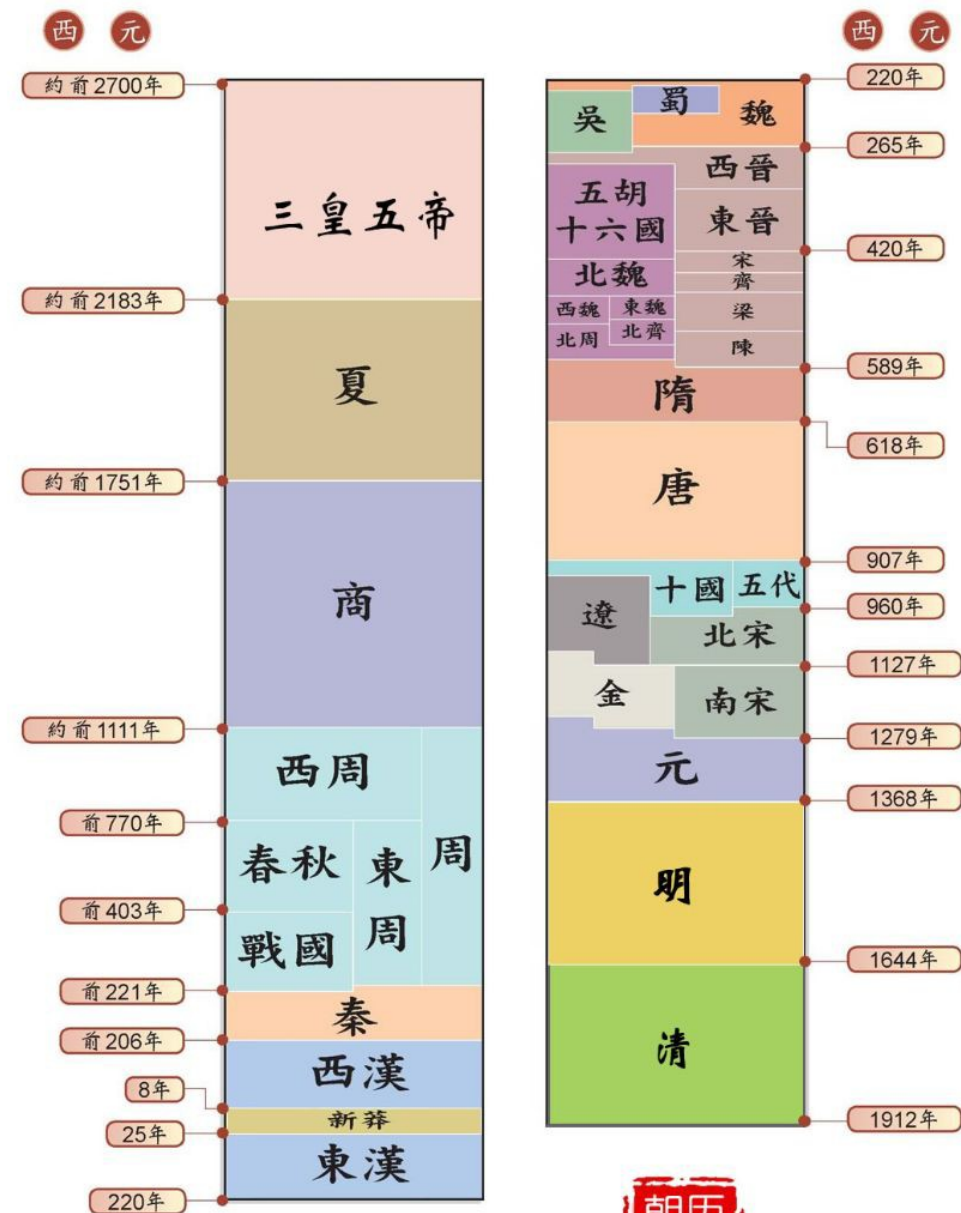
Mandarin-English bilinguals

- Mandarin Chinese as L1, English as L2.
- Strong vertical bias for CN-EN bilinguals who started English late.
- Learning EN gives those CN speakers a "horizontal bias".
- Learning a different language does make one reason about TIME differently.

Remaining issues of the debate

- Remaining issues:
- What else do we do about TIME?
- TIME is a concept, and its linguistic manifestations are
  - Temporal adverbials
  - Tense marking
- What about a language that does not mark tense (a *tenseless* language)?
  - A tenseless lg is a lg that does not have a grammatical category of tense. Examples: Burmese, Dyirbal, Chinese, Malay, Indonesian, Thai, Vietnamese.

How would you communicate without tense?

- In-class Task 1: Try to write a short passage (3-4 sentences) of what you did yesterday/last week/last month, without using tense.

- In-class Task 2: Try to communicate indirectness (which is a tense-related phenomenon) without using tense. Can you come up with a way?

Time, tense and narrative viewpoint

- Dancygier, Barbara, Wei-lun Lu and Arie Verhagen (eds.). 2016. *Viewpoint and the Fabric of Meaning: Form and Use of Viewpoint Tools across Languages and Modalities*. Berlin: De Gruyter.

- Lu, Wei-lun. 2019. Time, tense and viewpoint shift across languages: A Multiple-Parallel-Text approach to "tense shifting" in a tenseless language. *Cognitive Linguistics* 30.2: 377-397.

Case: Tense and Narrative Viewpoint

- Tense in narratives extensively studied in SAE languages.
- Past as narrator's and (historical) present as character's consciousness (Fleischman 1990; Fludernik 2012).

Examples

Byl jednou jeden král…

- *In yesterday's class, he shouted: "From now on I will do the job myself!"*

- *In yesterday's class, he shouted that from then on, he would do the job himself.*

- *In the class, he shouts that from now on, he will do the job himself.*

- Use of different tenses allows different understandings of the same scene.

Research Issue

- Tense shifting is indicative of shifting of narrative vpt in SAE languages.

- What about languages that do not systematically mark tense?

- To what extent does human language rely on tense marking to convey narrative vpt, and how much variation is there, among languages?

- To what extent does human lg reply on the concept of TIME in managing narrative vpt?

Scope and Method

- When we see a pattern in Language A composed of certain linguistic feature that is missing in Language B, how is the effect actually achieved in Language B?

- Suitable data that allows contextualized comparison of languages.

- Use of translation (parallel texts): controlling for most contextual factors (linguistic, physical, social context, production mode, etc.).

- An empirical way of studying the viewpoint options in a stretch of narrative where all text producers try to get across highly similar (if not identical) messages.

Hypothesis 1

- If Chinese cares as much about TIME as English does in managing narrative vpt, in passages where the English switches between tenses, we see elements that invoke TIME in the Chinese corresponding passage.

- In cases where multiple translations exist, the phenomenon should be consistent.

Hypothesis 2

- Chinese has a highly productive aspectual system, where the perfective aspect is reported to play a role of expressing past events (Lin 2012; Liu 2014).

- If we are able to identify constructions that invoke TIME in Chinese, PFV should be an important part of it.

Material Choice

- Published Commercial Translations.
    - *Great Expectations* and its 9 translations.
    - *David Copperfield* and its 5 translations.
    - "A&P" and its 2 translations.
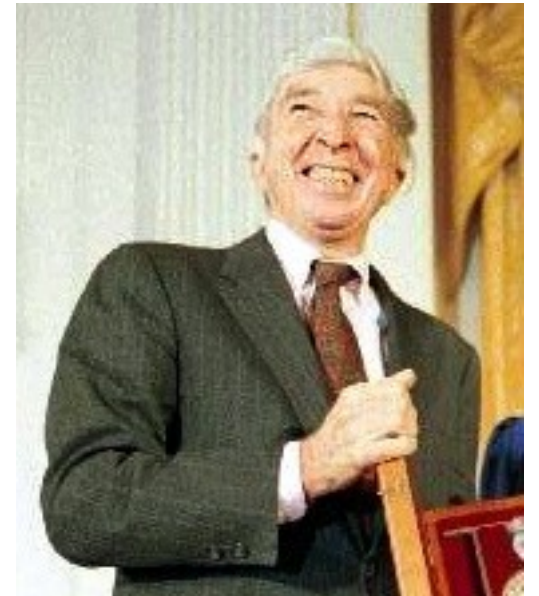
Sample Passage of Tense Shifting

- (1) *In walks these three girls in nothing but bathing suits. I'm in the third check-out slot, with my back to the door, so I don't see them until they're over by the bread. The one that caught my eye first was the one in the plaid green two-piece.* (A&P)

- Accompanying viewpoint strategies:
  - Proximal demonstrative
  - Inversion
  - Ellipsis

Sample Passage from *Great Expectations*

- *(2) The whole scene starts out again in the vivid colours of the moment, down to the drops of April rain on the windows of the court, glittering in the rays of April sun. Penned in the dock, as I again stood outside it at the corner with his hand in mine, were the two-and-thirty men and women; some defiant, some stricken with terror, some sobbing and weeping, some covering their faces, some staring gloomily about. There had been shrieks from among the women convicts, but they had been stilled, a hush had succeeded.*

- S1: Perceptual deixis (Stockwell 2002): elements that refer to the perception of a participant in the text.

- S2: Inversion, perceptual deixis, present participles.

- Interpolation of *as*-clause.

- Smooth transition of vpt, with a mix in S2.

Sample Passage from *David Copperfield*

- *(3) If the funeral had been yesterday, I could not recollect it better. The very air of the best parlour, when I went in at the door, the bright condition of the fire, the shining of the wine in the decanters, the patterns of the glasses and plates, the faint sweet smell of cake, the odour of Miss Murdstone's dress, and our black clothes. Mr. Chillip is in the room, and comes to speak to me.*

- S1: distal perspective.
- S2: perceptual deixis, and past tense.

(3)	我	一	走进	那间	最好	的	客厅，
	wǒ	*yī*	*zǒu-jìn*	*nà-jiān*	*zuì-hǎo*	*de*	*kètīng*
	I	PRT	walk-enter	that-CL	best	LK	living room

屋	里	的	气氛	就	迎面	
wū	*lǐ*	*de*	*qìfēn*	*jiù*	*yíng-miàn*	
house	in	LK	atmosphere	PRT	towards-face	

扑来：		旺旺	的	炉火，	瓶	中
pū-lái		*wàng-wàng*	*de*	*lúhuǒ*	*píng*	*zhōng*
spring-come		blazing-RED	LK	fire	bottle	in

闪闪	发光		的	葡萄酒，		杯盘
shǎn-shǎn	*fāguāng*		*de*	*pútao-jiǔ*		*bēipán*
shine-RED	radiate		LK	wine		dishes

的	式样，	糕饼	的	微微	甜	香，
de	*shìyàng*	*gāobǐng*	*de*	*wéi-wéi*	*tián*	*xiāng*
LK	style	cake	LK	slight-RED	sweet	aroma

默德斯通		小姐	衣服	上	的	
mòdésītōng		*xiǎojiě*	*yīfú*	*shàng*	*de*	
Murdstone		Miss	clothes	on	LK	

气味，	以及	我们	穿	的	黑色	
qìwèi	*yǐjí*	*wǒ-mén*	*chuān*	*de*	*hēisè*	
smell	and	we	wear	LK	black	

丧服。		齐力普	先生	也	在	那里，
sāngfú		*qílìpǔ*	*xiānsheng*	*yě*	*zài*	*nàlǐ*
mourning apparel		Chillip	Mr.	also	LOC	there

并且	走过来		和	我	说话。	
bìngqiě	*zǒu-guòlái*		*hàn*	*wǒ*	*shuōhuà*	
and	walk-come		with	I	speak	

"(Upon the time when) I walk into that best living room, atmosphere come springing towards my face: blazing fire, shining wine in bottle, style of dishes, and slight sweet aroma of cakes, smell on Miss Murdstone's clothes, and black mourning apparel we wear. Mr. Chillip is also there, and come walking to speak to

TIME in the Chinese Renditions

- Out of the 16 Chinese passages (2+9+5), only 1 uses a temporal adverbial construction.

- Only 2 passages have PFV, but where the English passage involves the present tense.

- Chinese does not care about TIME in managing narrative vpt.

- The perfective aspect not used for managing vpt, at least not the way past tense does in English.

What Chinese Systematically Adds

- *Increasing reduplication*: mono-syllabic words and di-syllabic lexical constructions may be reduplicated to increase the degree of liveliness and vividness of the scene elaborated, with the resultant pattern AA for a mono-syllabic construction or AABB for a disyllabic AB construction (Melloni and Basciano, forthcoming).

- Appearing in 9/9 Mandarin renderings of (2) and 4/5 of (3).

- Perceptual deixis: 在我（的）眼前 *zài wǒ de yǎn qián* 'LOC my LK eye front, (lit. in front of my eyes)', identified in all translations of (2).

From Tense to Grammar and Relativity

- What piggybacks the vpt function:
- English: tense (obligatory) and others
- Chinese: reduplication and perceptual deixis (non-obligatory)

- English: vpt marking dictacted by grammar (sentence by sentence).
- Chinese: vpt marking not required.

- English: mixing of distinctively dichotomous vpts.
- Chinese: no need to dichotomize narrative vpt.

Metaphor and TIME

- To fit discourse to manifold actual situations all languages need to express durations... It is characteristic of SAE and perhaps of many other language-types to express them metaphorically. The metaphors are those of spatial extension, i.e. of size, number (plurality), position, shape, and motion.

- We express duration by long, short, great, much, quick, slow, etc... through an almost in-exhaustible list of metaphors that we hardly recognize as such since they are virtually the only linguistic media available. (Whorf 1944: 205)

Another metaphor about TIME

- TIME IS MONEY:
  - You need to *budget* your time.
  - You don't *use* your time *profitably.*
  - You're *wasting* my time.
  - This gadget will *save you* hours.
  - How do you *spend* your time these days?
  - That flat tire *cost me* an hour.
  - I've *invested* a lot of time in her.

In your own languages!

- Now in groups of 4-5 people, go through the English examples together, looking for equivalents in your own language(s).

- With the results, discuss whether and how the reasoning pattern TIME IS MONEY is consistent across all the languages you speak.

- How do your answers help us hypothesize about linguistic relativity?

- TIME IS MONEY:
  - You need to *budget* your time.
  - You don't *use* your time *profitably.*
  - You're *wasting* my time.
  - This gadget will *save you* hours.
  - How do you *spend* your time these days?
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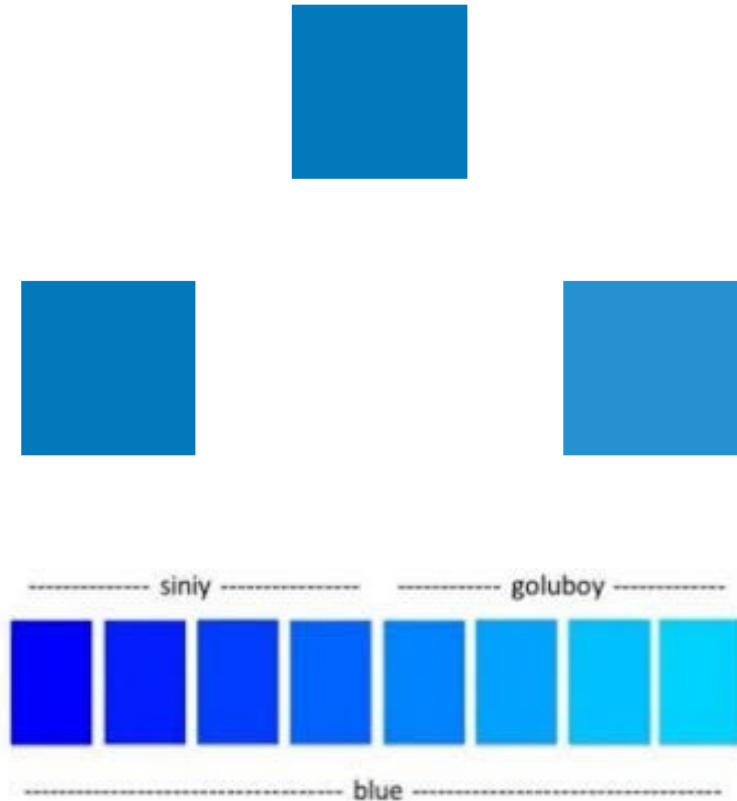 - I've *invested* a lot of time in her.

Some further materials to cover (in the final exam)

- More case studies presented: [Time Is Shaped by Language](#) by L. Boroditsky

- Please read especially [this paper](#) by L. Boroditsky (in the IS).

Russian blues (Winawer et al. 2007)

In English   In Russian
dark blue   *siniy*

In English   In Russian
light blue   *goluboy*
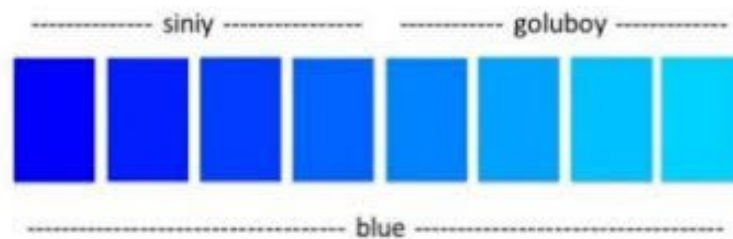
Russian blues (Winawer et al. 2007)

Which one of the two bottom squares matches the color of the top one?

RU speakers faster to discriminate two colors if they fell into different ling categories in RU (one *siniy* & the other *goluboy*) than two colors from the same category; not in EN.

Habitual categorical distinctions made in one's L1 result in language-specific categorical distortions in objective perceptual tasks.

Implications

- Not that EN speakers cannot distinguish between light and dark blues,
- but rather that RU speakers cannot avoid distinguishing them:
- They must do so to speak RU in a conventional manner.
- This communicative requirement appears to cause RU speakers to *habitually* make use of this distinction even when performing a behavioural task that does not require language.
- Language influences (rather than determines) one's thinking patterns.

END OF WEEK 10
Questions? Comments?