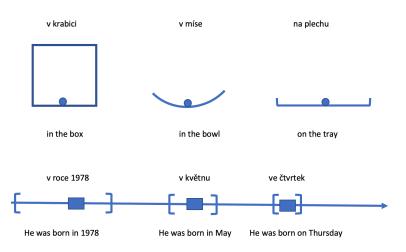
Time and Space VIII

Pavel Caha

April 17 2023

- (1) before = in front of
 - a. Auto bylo před dom-em car was in.front.of house-INS'The car was in front of the house.'
 - Odjezd byl před poledn-em departure was in.front.of noon-INS 'The departure was before noon.'

- (1) before = in front of
 - a. Auto bylo před dom-em car was in.front.of house-INS
 'The car was in front of the house.'
 - b. Odjezd byl před poledn-em departure was in.front.of noon-INS 'The departure was before noon.'
- (2) simultaneous = in
 - a. I visited my uncle in Odessa.
 - b. I visited my uncle in the spring.





- (i) The observer moves from the past to the future (and this determines her inherent front)
- (ii) All events have inherent fronts (=start) and backs (=end), perhaps derivative of (i)

Ve 4 pršelo



At 4pm, it was raining.



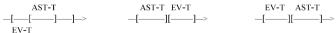
- (3) Reichenbach (1947), Demirdache & Uribe-Etxebarria (2007)
 - a. Event time = time interval when the event takes place
 - b. Assertion time = time interval for which the claim is made
 - Speech time = time interval in which the sentence is uttered





c. Retrospective/Perfect







a. Progressive b. Prospective c. Retrospective/Perfect

EV-T



a. At 4 pm/When I arrived, it was raining (4)

- a. Progressive b. Prospective

c. Retrospective/Perfect



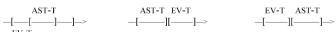




- (4) a. At 4 pm/When I arrived, it was raining
 - b. When I arrived, he had eaten

- a. Progressive
 - b. Prospective
- c. Retrospective/Perfect







- (4) At 4 pm/When I arrived, it was raining a.
 - h. When I arrived, he had eaten
 - When I arrived, he was about to leave

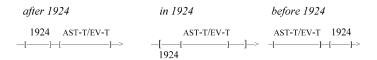
(5) WWI ended ...

- (5) WWI ended ...
 - a. before 1924

- (5) WWI ended ...
 - a. before 1924
 - b. in 1924

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 - a. before 1924
 - b. in 1924
 - c. after 1924



Subordinate tense

Conclusions





(6) He arrived before Christmas in December

(6) He arrived before Christmas in December

d. before Christmas in December



e. after Christmas in December



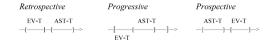
Subsequence	Coincidence	Precedence
AFTER	WITHIN	BEFORE
Past 'Passé composé'5	Present	Future
Retrospective	Progressive	Prospective
(perfect, 'passé composé') after DP / CP	at, in, during DP; when CP	before DP / CP
	AFTER Past 'Passé composé' ⁵ Retrospective (perfect, 'passé composé')	AFTER WITHIN Past Present 'Passé composé' 5 Retrospective Progressive (perfect, 'passé composé')

	Subsequence	Coincidence	Precedence
	AFTER	WITHIN	BEFORE
Tense	Past 'Passé composé' 5	Present	Future
Aspect	Retrospective (perfect, 'passé composé')	Progressive	Prospective
Locating adverbs	after DP / CP	at, in, during DP; when CP	before DP / CP

a. Tense

Past	Present	Future
AST-T UT-T	UT-T	UT-T AST-T
—[——]—[——]—>	─[——[——]—>	-[]-[]-
	AST-T	

b. Aspect



c. Time adverbs



Subordinate tense

Conclusions

- (7) relative clauses = independent tenses
 - a. V roce 2003 jsem potkal člověka, který obe- plul In year 2003, I met a guy who around sailed svět na jachtě the world on a yacht

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 - e. V roce 2003 jsem potkal člověka, který se stane papežem In year 2003, I met a guy who will.become the Pope
 - f. MET > UT > BECOME POPE
 - The tense inside the relative clause is evaluated in relation to the time of speaking

(8) indexicals:

'linguistic expressions whose meaning remains stable while their reference shifts from utterance to utterance'.

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Indexicals

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- (9) a. Pronouns such as I and you
 - b. demonstratives, such as this or that
 - c. temporal and spatial locutions, such as *last month, here,* now, yesterday, tomorrow
 - d. TENSE
 - All these items can be assigned a reference only if we know who is talking, when, and where.

- (10) Petr odešel Petr left
- (11) Když jsem tam volal, Maruška mi říkala, že **Petr odešel**. when I there called, Mary to.me said, that Petr left 'When I called there, Mary told me that Petr had left.'

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 LEFT > CALLED > UT

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Monsters

Monsters and the theoretical role of context*

Brian Rabern[†]and Derek Ball[‡]

- forthcoming in Philosophy and Phenomenological Research -

In his seminal work on context-sensitivity, Kaplan (1989) famously claimed that *monsters*—operators that (in Kaplan's framework) shift the context, and so "control the character of indexicals within [their] scope"—do not exist in English and "could not be added to it" (1989: 510). Kaplan pointed out that indexicals (like the English words "I" and "you") seem to be interpreted in the same way no matter how they are embedded, so that (for example) if David utters a sentence like (1), "I" picks out David (rather than Otto):

(1) Otto said that I am a fool

Kaplan claims that the lesson of this example generalises: "I" always picks out the speaker; one just cannot find, or even stipulatively introduce, operators that shift the interpretation of "I".

Uyghur, Shklovsky & Sudo (2014)

(14) a. Ahmet [profesor-ning kit-ken-lik-i-ni] di-di.
Ahmet [professor-GEN leave-REL-NMLZ-3-ACC] say-PAST.3
'Ahmet said that the professor left.'

Uyghur, Shklovsky & Sudo (2014)

- (14) a. Ahmet [profesor-ning kit-ken-lik-i-ni] di-di.

 Ahmet [professor-GEN leave-REL-NMLZ-3-ACC] say-PAST.3

 'Ahmet said that the professor left.'
 - b. Ahmet [profesor ket-ti] di-di. Ahmet [professor.NOM leave-PAST.3] say-PAST.3 'Ahmet said that the professor left.'

(15) a. Ahmet [mening kit-ken-lik-im-ni] di-di.
Ahmet [1SG.GEN leave-REL-NMLZ-1SG-ACC] say-PAST.3
'Ahmet said that I (=speaker) left.'

(15) a. Ahmet [mening kit-ken-lik-im-ni] di-di.
Ahmet [1SG.GEN leave-REL-NMLZ-1SG-ACC] say-PAST.3

'Ahmet said that I (=speaker) left.'

'Ahmet said that he (Ahmed) left.' (NO)

- (15) a. Ahmet [mening kit-ken-lik-im-ni] di-di.
 Ahmet [1SG.GEN leave-REL-NMLZ-1SG-ACC] say-PAST.3

 'Ahmet said that I (=speaker) left.'

 'Ahmet said that he (Ahmed) left.' (NO)
 - b. Ahmet [men ket-tim] di-di.Ahmet [1SG leave-PAST.1SG] say-PAST.3 'Ahmet said that I (speaker) left.' (NO)

- (15) a. Ahmet [mening kit-ken-lik-im-ni] di-di.
 Ahmet [1SG.GEN leave-REL-NMLZ-1SG-ACC] say-PAST.3

 'Ahmet said that I (=speaker) left.'

 'Ahmet said that he (Ahmed) left.' (NO)
 - Ahmet [men ket-tim] di-di.
 Ahmet [1SG leave-PAST.1SG] say-PAST.3
 'Ahmet said that I (speaker) left.' (NO)
 'Ahmet said that he (Ahmet) left.'

(16) Tursun Muhemmet-ke [xet jaz-ghan-lik-ing-ni]
Tursun Muhemmet-DAT [letter write-REL-NOM-2SG-ACC]
di-di.
say-PAST.3
'Tursun told Muhemmet that you (hearer) wrote a letter.'

(16) Tursun Muhemmet-ke [xet jaz-ghan-lik-ing-ni]
Tursun Muhemmet-DAT [letter write-REL-NOM-2SG-ACC]
di-di.
say-PAST.3

'Tursun told Muhemmet that you (hearer) wrote a letter.'
'Tursun told Muhemmet that he (Muhammet) wrote a letter.' (NO)

- (16) Tursun Muhemmet-ke [xet jaz-ghan-lik-ing-ni]
 Tursun Muhemmet-DAT [letter write-REL-NOM-2SG-ACC]
 di-di.
 say-PAST.3
 'Tursun told Muhemmet that you (hearer) wrote a letter.'
 'Tursun told Muhemmet that he (Muhammet) wrote a letter.' (NO)
- (17) Tursun Muhemmet-ke [xet jaz-ding] di-di.
 Tursun Muhemmet-DAT [letter write-PAST.2SG] say-PAST.3
 'Tursun told Muhemmet that you (hearer) wrote a letter.' (NO)

- (16) Tursun Muhemmet-ke [xet jaz-ghan-lik-ing-ni]
 Tursun Muhemmet-DAT [letter write-REL-NOM-2SG-ACC]
 di-di.
 say-PAST.3
 'Tursun told Muhemmet that you (hearer) wrote a letter.'
 'Tursun told Muhemmet that he (Muhammet) wrote a letter.' (NO)
- (17) Tursun Muhemmet-ke [xet jaz-ding] di-di.
 Tursun Muhemmet-DAT [letter write-PAST.2SG] say-PAST.3
 'Tursun told Muhemmet that you (hearer) wrote a letter.' (NO)
 'Tursun told Muhemmet that he (Muhamet) wrote a letter.'

(18) a. Mehmet said: "Mary invited me."

- (18) a. Mehmet said: "Mary invited me."
 - b. Did Mehmet say: "Who did Mary invite?"

- (18) a. Mehmet said: "Mary invited me."
 - b. Did Mehmet say: "Who did Mary invite?"
 - c. Who did Mehmet say that Mary invited?

- (18) a. Mehmet said: "Mary invited me."
 - b. Did Mehmet say: "Who did Mary invite?"
 - c. Who did Mehmet say that Mary invited?
- (19) Tursun [men kim-ni kör-dim] di-di?
 Tursun [1SG who-ACC see-PAST.1SG] say-PAST.3
 'Who did Tursuni say he (Tursuni) saw?'

- (20) Negative polarity items
 - a. *He saw anyone

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 - a. *He saw anyone
 - b. He didn't see anyone

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 - c. I don't think he saw anyone there

- (20) Negative polarity items
 - a. *He saw anyone
 - b. He didn't see anyone
 - c. I don't think he saw anyone there
- (21) Tursun [men hichkim-ni kör-dim] di-mi-di.
 Tursun [1SG nobody-ACC see-PAST.1SG] say-NEG-PAST.3
 'Tursuni didn't say that he (Tursun) saw anyone.' (Tursun didn't say: I saw someone)

- (20) Negative polarity items
 - a. *He saw anyone
 - b. He didn't see anyone
 - c. I don't think he saw anyone there
- (21) Tursun [men hichkim-ni kör-dim] di-mi-di.
 Tursun [1SG nobody-ACC see-PAST.1SG] say-NEG-PAST.3
 'Tursuni didn't say that he (Tursun) saw anyone.' (Tursun didn't say: I saw someone)
- (22) *Men hichkim-ni kör-dim.

 1SG nobody-ACC see-PAST.1SG

 'I saw no one.' (lit. *I saw anyone)

(23) Context: Ahmet and Muhemmet are two students who took a test in class today. After the test, I met Ahmet. He said, "(I) passed the test" (men) imtihandin öttim. A while later, I met Muhemmet, who said exactly the same thing. I can report on this situation to Aygu as follows:

(23) Context: Ahmet and Muhemmet are two students who took a test in class today. After the test, I met Ahmet. He said, "(I) passed the test" (men) imtihandin öttim. A while later, I met Muhemmet, who said exactly the same thing. I can report on this situation to Aygu as follows:

Ahmet we Muhemmet [(biz) imtihan-din öt-tuq] di-di.
Ahmet and Muhemmet [(we) test-ABL pass-PAST.1PL] say-PAST.3
'Ahmet and Muhemmet said that they passed the test.'

Table 2: Hierarchy of shifty indexicals: 1st > 2nd > Here

	Shifty 1st	Shifty 2nd	Shifty HERE
Matses	✓	✓	✓
Uyghur	✓	✓	
Tamil	✓	_	_
English	_	_	_

(24) Ali says to Hasima:

Vizeri Rojda Bill-ra va ke $\boxed{\epsilon z}$ to-ra miradiša Yesterday Rojda Bill-to said that I you-to angry.be-PRES

LIT. 'Yesterday Rojda said to Bill that I am angry at you.'

READING 1: \checkmark Yesterday Rojda said to Bill that I_{Rojda} am angry at you_{Bill}.

READING 2: \checkmark Yesterday Rojda said to Bill that I_{Ali} am angry at you_{Hasima} .

Reading 3: \boldsymbol{X} Yesterday Rojda said to Bill that I_{Ali} am angry at you_{Bill} ."

READING 4: X Yesterday Rojda said to Bill that I_{Rojda} am angry at you_{Hasima} .

- (25) Petr odešel Petr left
- (26) Když jsem tam volal, Maruška mi říkala, že **Petr odešel**. when I there called, Mary to.me said, that Petr left 'When I called there, Mary told me that Petr had left.'

- (25) Petr odešel Petr left
- (26) Když jsem tam volal, Maruška mi říkala, že **Petr odešel**. when I there called, Mary to.me said, that Petr left 'When I called there, Mary told me that Petr had left.'

i. Dependent construal

► The "utterance time" of the subordinate clause is "shifted" to the "assertion time" of the main predicate

Tense

Subordinate tense

Conclusions

clauses are organised around three basic times

- clauses are organised around three basic times
 - utterance time

- clauses are organised around three basic times
 - utterance time
 - assertion time

- clauses are organised around three basic times
 - utterance time
 - assertion time
 - event time

- clauses are organised around three basic times
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- Aspect locates ET with respect to AT (before, after, within)

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- Some subordinate clauses have independent tense

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- Tense locates AT with respect to UT (before, after, within)
- Time adverbs locate AT with respect to a fixed time interval (before, after, within)
- Some subordinate clauses have independent tense
- Some subordinate clauses have 'shifted' tense
- ► This also happens to other indexicals

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