Oana Lungu and Orin Percus, Université de Nantes / LLING EA 3827
Simultaneous analyses for simultaneous present.

1. The question.
Sentences like (1) suggest that present tense is inherently indexical, denoting the temporal coordinate of the context parameter ((2),(3)). A puzzle for this view is that, across languages, embedded present tense can be used to convey "simultaneous" readings ((4)). Two kinds of accounts have been given for this that maintain that present is born as an indexical. On the *Tense Deletion* explanation (Ogihara 1996, cf Kratzer 1998), present can be converted into a simple bound variable when c-commanded by another present tense. On the *Shifting Indexical* explanation (e.g. Schlenker 2003), attitude verbs enable their complements to be evaluated with respect to a context whose time coordinate differs from that of the context of utterance. The former accounts well for simultaneous readings in English-type languages (assuming that *will* in examples like (4a) is a present tense form), but fails to account for Russian data like (4b) where there is no higher present tense. The second fares well for Russian-type languages but not for English data like (4a) where there is no attitude verb. Faced with these two accounts, one wonders: are two different mechanisms needed to account for "simultaneous present" ?

2. The answer.
Yes. A consideration of Romanian shows that both are needed (**3**). Moreover, the Romanian data have important consequences for what the *Shifting Indexical* analysis should look like (**4**).

3. The argument in brief.
In one dialect of Romanian (RA), we find "simultaneous present" in all of the environments where we find it in English, plus all of those where we find it in Russian. In another (RB), we find simultaneous readings in all the English-type environments, but if we look at the environments that permit "simultaneous present" in Russian but *not* in English, we find a complication: simultaneous readings are possible but come with a special condition on their use. On the two-mechanism view, we account simply for this typology, and in particular for the variation in Romanian. RA uses the English mechanism as well as the Russian mechanism. RB uses both as well, but in RB shifting is associated with a restriction that does not exist in RA.

4.Details: The non-commitment condition in RB and its theoretical consequences.
In RB, "simultaneous present" under past attitude verbs is associated with a *non-commitment condition* (*NCC*) which works basically as follows. Suppose a clause with present tense, S_{PRES}, expresses that property P holds of the utterance time. Then a speaker can *sometimes* use a sentence of the form *X verb-ed that S_{PRES}* to express that X attributed P to the time at which X located himself, but *cannot always* do so. A speaker is barred from doing so when she thinks that X was right and that P indeed held of the time at which X was located. Thus, in RB, we do not find "simultaneous present" under past factive verbs like *şti* ('know'), whose use would commit the speaker to the claim that the embedded clause property held at the time of the attitude, but we do find it under verbs like *crede* ('believe'). *Spune* ('say/tell') patterns with *crede* in a situation where the speaker does not know whether the embedded clause property held or not at the moment of saying ((5a)) or when the speaker knows that it did not ((5b)), but it behaves like a factive verb when the speaker considers herself to have evidence that the property held at the moment of saying, as in (6b), uttered by someone who takes Anca to be reliable about the local weather. (Table (7) summarizes. Similar facts seem to obtain in Hungarian and in German, cf. Rau 2009, but we don't have a full description of the data.)

A "shifting indexical" analysis of simultaneous present under past RB attitude verbs crucially must link the presence of shifting to the introduction of the NCC. The link between shifting and the NCC suggests that there is a specific element that is responsible for shifting that fails to appear when there is no shifting, and that also contributes the NCC. Since the NCC concerns the evaluation time of the attitude verb, this element must in some manner "see" the embedding verb's time argument. We thus propose that shifting is accomplished by a silent affix on the verb, which has the effect of "converting" the verb to an element that selects for a property of contexts. (8)-(10) sketches how this affix might work in RB (though we will also consider subtler analyses); the corresponding affix in RA would simply not have the partiality in its semantic value. Facts like the RB facts, we suggest, point to a picture on which indexical shifting is always mediated by verbal affixes. Facts like these cannot be captured naturally on approaches to indexical shifting like Schlenker 2003 (on which no specific element appears if and only if there is shifting) or Anand and Nevins 2004 (on which shifters never take as an argument either the verb or the verb's time argument).

(1) a. I photographed the woman who is dancing a waltz.　　　b. John said that Mary is pregnant.

(2) [[PRES]]^{g,c} = T(c)　(the interval that constitutes the temporal coordinate of c)

(3) a. the boy who is happy　　　b. structure:　[the [boy t_1 w_2] [(who) [3 ... [w_2 PRES t_3 happy]]　]
　　c. [[(3b)]]^{g,c} = the unique boy at time g(1) in world g(2) who is happy throughout T(c)
　　　　　　　　in world g(2)　(if there is one; otherwise undefined)

(4) a. I will photograph the woman who is dancing a waltz.
　　　(can be used to talk about a woman dancing at the time the photograph is taken)

　　b. Petja skazal,　čto on plačet.　(Schlenker 2003: 70)
　　　Petja say-3.pst　that he cry-3s.**pres**
　　　(can be used to express that Petja said "I am crying")

(5) a. **Context A.** I have no idea whether or not Mirela was ever pregnant.
　　b. **Context B**. I know for a fact that Mirela was never pregnant. I was there when the doctor told
　　　her that she cannot have children.
　　c. Acum zece ani, Mircea mi-a spus　că　Mirela așteaptă　un copil.
　　　now ten years, Mircea me has told that Mirela expect.**pres** a baby
　　　✓ "Ten years ago, Mircea told me that Mirela was expecting a baby."

(6) a. **Context**. Two years ago, I spoke with Anca on the phone. She was in Seattle. Anca said: "It is
　　　raining." She obviously knew what she was talking about.
　　b. Acum doi ani, Anca mi-a　spus　că　plouă　în Seattle.
　　　now two years Anca　me　has told　that rain.**pres** in Seattle
　　　♯ "Two years ago, Anca told me that it was raining in Seattle."

(7)

simultaneous pres. under past tense attitude verbs	*spune* 'say'/'tell'	*şti* 'know'	*crede* 'believe'
Romanian A	✓	✓	✓
Romanian B	✓ ♯	♯	✓

(8) a. Notation: SHIFTNOW$_c$ (F$_{<k, <i,st>>}$) = λt_i. λw_s.　F(<W(c), **t**, A(c)>)(t)(w)
　　　(k here is the type of contexts, assumed to be world-time-individual triples.)
　　b. Example: SHIFTNOW$_c$ ($\lambda c'_k$. $\lambda t'_i$. $\lambda w'_s$. A(c') is happy at T(c') in w')
　　　　= λt_i. λw_s.　A(c) is happy at **t** in w

(9) [[AFF$_{RB}$]]^{g,c} = $\lambda P_{<ist, eist>}$. $\lambda F_{<k, ist>}$. λx_e. λt_i: <u>At T(c) in W(c), A(c) entertains as a candidate for the</u>
　　　　　　　　<u>actual world some world w'' such that SHIFTNOW$_c$ (F)(t)(w'') = 0</u>. λw_s.
　　　　　　　　P(SHIFTNOW$_c$ (F))(x)(t)(w).

(10) AFF$_{RB}$-believe [⌃ [ΛT 5 [w_5 PRES Mary happy]]]]　　　(⌃ here is an element analogous to ^
　　　　　　　--------------------------------------　　　　　that "abstracts over the context
　　　　　　　λt_i. λw_s. **Mary is happy at T(c) in w**　　　parameter." ΛT is a type shifter.)
　　　　　　　--
　　　　　　λc_k. λt_i. λw_s. **Mary is happy at T(c) in w**
　　　--
　　　　λx. λt: At T(c) in W(c), A(c) entertains as a candidate for the actual world some world w'' such
　　　　　　that Mary is not happy at <u>t</u> in w''.　λw. For every <w',t'> such that, at <u>t</u> in w, x potentially
　　　　　　locates himself at <w',t'>, Mary is happy at t' in w'.

Anand, P. and Nevins, A. 2004. "Shifty operators in changing contexts," *SALT 14*.
Rau, J. 2009. "Semantic presuppositions and the German tense/mood system," Chronos talk.
Schlenker, P. 2003. "A plea for monsters," *Linguistics and Philosophy*.