Are morphologically tenseless clauses only superficially tenseless? The view from Washo

**Main claim.** I argue that morphologically tenseless clauses (MTCs) in Washo are also semantically tenseless. In particular, Washo, being an optional tense language (Jacobsen 1964, Plungian & van der Auwera 2006), gives us new insight into the question posed in the title.

**Temporal reference of MTCs.** Like many other languages, MTCs in Washo are incompatible with future time reference in most matrix clauses. Future time reference is only possible with the addition of a forward-shifting aspect or modal. This is shown in (1)-(2).

(1) *wá:díty*wálti: háʔaš-i* now/this.morning rain-IND

(2) *wá:díty dëwp`áwid háʔaš-*(aša?-)i* today evening rain-* (prosp)-IND

‘It’s raining now.’ ‘It will rain tonight.’

Such facts have led several researchers to posit a covert non-future tense for MTCs in other languages (Matthewson 2006, Jóhansdóttir & Matthewson 2007, Cable 2015). The non-future tense in (3) presupposes a reference time in the past or present (t<sub>c</sub> = speech time).

(3) [NFUT]<sup>g,c</sup> = λt.t, defined only if no part of t is after t<sub>c</sub> (adapt. from Matthewson 2006)

At the same time, future reference in MTCs is not systematically absent. In (4), a conjunction containing the ‘sequential’ morpheme -ud (≈‘(and) then’) licenses future reference of MTCs.

(4) a. Context: Mother Bear is telling her children what to do while she is gone.


‘You’ll burn those two deer children to death and then pound them up for me.’

However, -ud does not contribute future semantics; witness (5), which has past reference.

(5) a. Context: You’re telling me about yesterday’s crazy weather.

b. *háʔaš-ud-i c’ígögomhë Móyil-iʔ-etíʔ-i* rain-seq-ind hail 3.grow-attr-inch-ind

‘It was raining, and then it started to hail.’

On the basis of similar data in Guaraní, Tonhauser (2011) argues that the non-future tense analysis in (3) is too restrictive, and opts for a tenseless analysis. Contrasting a tensed and tenseless analysis for Washo MTCs, I also conclude that a tenseless analysis makes a better prediction for the data in (4).

To show this, let us assume the semantics for sequential -ud as in (6). It is a modifier of a predicate of times, and encodes the ordering relation t<sub>'</sub> < t. The time t is identified with the reference time of the following clause via the conjunction operator in (7). Assuming existential closure of the open temporal variable, the truth conditions for (4) are given in (8).

(6) [-ud]<sup>g,c</sup> = λt.λtλw.∃t′[P(t′)(w) ∧ t′ < t]

(7) [CONJ]<sup>g,c</sup> = λt.λQ_1(t,s,t).λtλw.P(t)(w) ∧ Q(t)(w)

(8) [(4)]<sup>g,c</sup> = λw.∃t′<t′<t burn.to.death(deer)(add)(t′)(w) ∧ pound(deer)(add)(t)(w) ∧ t′ < t

Under the tenseless analysis, there is no presupposition restricting t or t', and so they can be past, present, or future times. However, the NFUT analysis predicts that both t and t' cannot be in the future of t<sub>c</sub>, contrary to fact. The NFUT analysis thus makes an undesired prediction.

**No MP effects.** In addition to this empirical argument, I advance a novel theoretical argument that MTCs are semantically tenseless. It derives from the observation that Washo is in fact...
not a tenseless language (Jacobsen 1964, Plungian & van der Auwera 2006). The past tense marker -ugil restricts reference times to the past, as in (9), and can be given the analysis in (11). Evidence that -ugil is a past tense (as opposed to an aspect) is shown in (10), where the prospective aspect -aša places the event time in the future of the past reference time.

(9) watl´ı/*w´a:diy/*wát h´a?aš-u`gil-i
morning/now/tomorrow rain-PAST-IND

‘It rained this morning.’/*‘It is raining now.’/*‘It will rain tomorrow.’

(10) a. Context: Steven had the winning numbers in the lottery, but when he went to look for his ticket, he couldn’t find it anywhere.
   b. t´e:k’e? heyé?em-aša?-ugil-aʔ-s git-behúwe? pág-ha-yi

   ‘He was going to win a lot of money, but he lost his lottery ticket.’

(11) [-ugil]g,c = λt.t, defined only if t < t,c

Under the tensed analysis of MTCs, NFUT in (3) occurs in a paradigm with the past tense in (11). Note that the presuppositions of the past tense are a proper subset of those of the non-future tense. This means that sentences S and S’ differing only in their tense should enter into a competition based on the principle of Maximize Presupposition (MP: Heim 1991, Percus 2006, Schlenker 2012). This state of affairs has two consequences (cf. Sauerland 2002).

First, according to MP, if the presuppositions of both S and S’ are satisfied in a context C, and if S carries a stronger presupposition than S’, then S should be preferred in C. That is, the presuppositions of S with the past tense are stronger than those of S’ with NFUT, so S should be preferred whenever its presuppositions are met in C, i.e., whenever the reference time is in the past. Second, and relatedly, this means that S’ with NFUT carries the ‘anti-presupposition’ that the presupposition of the past tense is not met in C. This has the effect that an S’ with NFUT should typically only be used with a present reference time. Clearly this is not the case in Washo: MTCs can have past temporal reference, as in (1) and (5). Thus, the presence of NFUT in MTCs results in predictions that are not borne out based on the signature profile of MP.

This argument crucially relies on the assumption that S with the past tense and an MTC S’ are not the right sort of competitors to enter into an MP-based competition. It is well-known that the scales generating the alternatives must be lexically defined (e.g., Singh 2008). Note for instance in (12) that MP correctly predicts that both but not all is acceptable, in the context where Obama has exactly two children. However, the variant without both is also acceptable, even though the presuppositions of both are satisfied. Thus, the sentence without both is not an alternative to the sentence with both for the purposes of an MP-based competition. This is exactly parallel to what we see in the case of Washo tense: sentences with the past tense are not MP-alternatives to MTCs.

(12) (√ Both/*all/ √) the President’s children were born in Illinois.

A loose end. If MTCs are semantically tenseless, then (2) remains a puzzle – why is future reference not allowed in this case? I follow Tonhauser (2011) in positing a general constraint against future reference (cf. Abusch’s (1997) Upper Limit Constraint). The reasons why this constraint can be suspended in constructions like (4) is a question for further research.