Washo (Hokan/isolate; USA) has been described as having a graded future tense system, grammaticalizing distinctions in temporal distance from a reference point (Jacobsen 1964). According to Jacobsen, the ‘near future’ -ašaʔ covers a time period up to about an hour in the future; the ‘intermediate future’ -tiʔ/t- and covers an interval up to a few hours in the future; and the ‘distant future’ -gab is used for the following day or any time after. I argue that these graded futures do not form a unified class: specifically, ‘near future’ -ašaʔ has a distinct morphosyntactic and semantic profile from ‘int. fut.’ -tiʔ/t- and ‘dist. fut.’ -gab. I propose that -ašaʔ combines both a temporal and modal semantics, while -tiʔ/t- and -gab have only a temporal semantics and must combine with another operator to form licit claims about the future.

Not members of the same morphological paradigm. As already noted by Jacobsen (1964, 1973), the graded futures occupy different slots in the Washo verbal template: -ašaʔ is classed as a “stem formative” suffix (closer to the verb stem), while -tiʔ/t- and -gab are “prefinal” suffixes (farther from the verb stem). Though rare, suffixes from the different slots in the template can co-occur, as in (1):

(1) háláya k’éšeyes-é:s-aʔ-š hak’-éʔ-ašaʔ-tiʔ-i-ña
still 3-breath-NEG-DEP-SR like.that-NEAR.FUT-INT.FUT-IND-but
‘Still she didn’t die, but it’s going to happen.’ (Jacobsen 1964:645)

Temporal distance not encoded in -ašaʔ. In contexts where the speaker is ignorant about how far in the future something will happen, ‘near future’ -ašaʔ must be used. Evidence comes from ignorance about temporal distance in questions in (2) (adapted from Cable 2013 for graded pasts in Gikyũ). In the same context, speakers find -tiʔ/t- and -gab unacceptable (examples suppressed for space). Futures -tiʔ/t- and -gab are acceptable if the context supports their distance specifications; see (3) for -gab.

(2) Context: Your grandson in Sacramento said he would come over some time, but you don’t know when. He might come in a couple of days from now, next week, or even later today, you don’t know. So you call up and ask him:

huyátéšya hé:š m-i:biʔ-ašaʔ-i
when Q 2-come-NEAR.FUT-IND
‘When will you come?’

(3) Context: Your grandson in Sacramento said he would come over some time next week, but you don’t know exactly when.

huyátéšya hé:š m-i:biʔ-#{ašaʔ/#ṭiʔ/#gab}-i
when Q 2-come-{NEAR/INT/DIST}-IND
‘When will you come?’

This suggests that -ašaʔ is in fact underspecified for temporal distance, with its “nearness” interpretation derived as an inference as a result of a competition with the more specific -tiʔ/t- and -gab forms.

Only -ašaʔ can combine with past tense. A combination of near fut -ašaʔ and past tense -uŋi̱l locates an event in the future of a past time, and often conveys counterfactuality (Bochnak, 2016); see (4). Futures -tiʔ/t- and -gab cannot combine with past tense (Jacobsen 1964).

(4) Context: Steven had the winning numbers in the lottery, but when he went to look for his ticket, he couldn’t find it anywhere.

t’ė:k’eʔ ñ-héyéʔem-ašaʔ-uŋi̱l-aʔ-š git-behúweʔ ñ-páyʔ-ha-yi
much 3-win-NEAR.FUT-PAST-DEP-SR REFL-ticket 3-lose-CAUS-IND
‘He was going to win a lot of money, but he lost his lottery ticket.’

Licensing environments for -tiʔ/t- and -gab. Whereas -ašaʔ can occur freely to convey future meaning, -tiʔ/t- and -gab can only occur in certain licensing environments, namely: under the scope of a modal (shown in (5) for -gab); under the scope of an attitude verb (shown in (6) for -tiʔ/t-); and in questions (shown in (7) for polar questions; constituent questions also license -tiʔ/t- and -gab). Note that negation
is not a licensor for -tiʔ/-t and -gab; these markers thus have a distribution similar to so-called “bagel NPIs” (e.g., Progovac 1994), where non-veridical but not anti-veridical operators are licensors.

\[
(5) \quad [\{l\}-\hat{h}a\hat{m}\-\hat{g}a\hat{b}\-i\-gi]\quad k\’e\hat{t}\-i\quad \hat{w}a\hat{t} \\
\text{3-rain-DIST.FUT-IND-NMLZ 3-MOD-IND tomorrow}
\]


\[
(6) \quad [\{t\}-\hat{a}um\ l\-\hat{g}i\ d\hat{e}\hat{m}\-\hat{h}a\-t\-a\hat{r}]\quad \hat{P}\-\hat{t}\-\hat{e}\-\hat{g}\-i \\
\text{person 1PRO-DU food 3-prepare-CAUS-DIST.FUT-DEP 3-say-REC.PST-IND}
\]

‘He said someone is going to prepare food for the two of us.’ (Jacobsen 1964: 644)

\[
(7) \quad m\-\hat{m}e\hat{e}\-\hat{h}\hat{e}\-\hat{s}\-\hat{t}i\-/gab\-i \\
\text{2-drink-Q-DIST.FUT/DIST.FUT-IND}
\]

‘Are you going to drink?’ (adapt. Jacobsen 1964: 645/651)

**Analytical proposals.** First, ‘near future’ -ašaʔ lexicalizes both a future shifting temporal component and a modal component together, as in (8). Consistent with ignorance questions like (2), there is no temporal distance specification semantically encoded. Furthermore, -ašaʔ in (8) has a relative interpretation, and so can yield future in the past readings when combined with past tense as in (4).

\[
(8) \quad [\{a\hat{s}a\hat{r}\}] = \lambda P_{t,s,t} w. t \in Acc(w, t) \quad \exists t'[t' > t \& P(t')(w)]
\]

The accessibility relations (Acc(w, t)) compatible with -ašaʔ are those describing intention and prediction (cf. Tonhauser 2011 on Paraguayan Guarani future -ta). In contrast to English will however (e.g., Kratzer 2012, Winans 2016), a future interpretation is entailed by -ašaʔ – e.g., a present-oriented epistemic interpretation is not possible; see (9).

\[
(9) \quad \text{Context: You expect Beverly to come over any time now, and you hear a knock on the door.}
\]

\[
\text{Beverly k\’e\hat{t}(-/\-a\hat{s}a\hat{r})\-i\-gi}\quad k\’e\hat{t}\-i \\
\text{Beverly 3-be(-NEAR.FUT)-IND-REL 3-MOD-IND}
\]

‘That must/will be Beverly.’

By contrast, ‘intermediate future’ -tiʔ/-t and ‘distant future’ -gab are proposed to be pure future tenses with temporal distance specifications as in (10)-(11).

\[
(10) \quad [\{t\-i\hat{s}\}] = \lambda P_{t,s,t} w. t \in Acc(w, t) \quad \exists t'[t' > int t \& P(t')(w)]
\]

(11) \[
[\{g\hat{a}\hat{b}\}] = \lambda P_{t,s,t} w. t \in Acc(w, t) \quad \exists t'[t' > far t \& P(t')(w)]
\]

I suggest that the reason why -tiʔ/-t and -gab are restricted to special licensing environments is that their meaning is too strong. Assuming a branching times model of the future (e.g., Thomason 1970), the future is represented not as a single timeline, but as a set of possible worlds that share a history up to the reference time. Thus, for a purely future tense statement to be true, the speaker must know which branch is the future continuation of the actual world. Such a meaning is unlikely to ever be true, and must thus be mediated by a modal or other non-veridical operator. Thus, future reference with -tiʔ/-t and -gab is in some sense decompositional, with temporal and modal components expressed separately.

**Pragmatic competition derives temporal distance effects.** Given the meanings in (8), (10) and (11), the ‘near future’ -ašaʔ has the weakest temporal distance specification (i.e., none), so based on Gricean reasoning, a speaker should prefer sentences with more specific forms when s/he believes that the stronger meaning holds. Conversely, if a speaker didn’t use the more specific -tiʔ/-t or -gab forms, s/he must not believe or have evidence that the stronger meaning holds. This derives both why -ašaʔ is typically restricted to ‘near future’ contexts, and why -ašaʔ is used in ignorance contexts like (2).

**Conclusion.** The results of this study support two distinct analyses of futures (and within a single language): a monolithic temporal/modal analysis, and a decompositional analysis, both of which have been proposed independently for other individual languages. With respect to decompositional futures, we observe a new twist on what those components are, in this case a temporal operator plus a non-veridical operator to the exclusion of negation (compare Matthewson 2012 on Gitksan and Mucha 2016 on Medumba for modals and non-veridical operators, respectively, as licensors for futures).