The perfective–imperfective distinction in Northern Paiute

Maziar Toosarvandani
University of California, Santa Cruz

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Like many languages, Northern Paiute—a Uto-Aztecan language from the Numic branch—distinguishes imperfective aspect, with the progressive suffix -winni, from perfective aspect, with the ‘punctual’ suffix -hu.  

(1) a. Amamu’a su=naatsi’i ti=kaadzi madabbui-winni. (Yaisi kaisu madabbui-maggwi-hu.)
   morning DEF.NOM=man REFL=car fix-PROG PTC not.yet fix-COMPL-PUNC
   ‘This morning, the boy was fixing his car. He hasn’t finished fixing it yet.’ (elicitation, EM, BP47-
   8, 21:16)

b. Amamu’a su=naatsi’i ti=kaadzi madabbui-hu. (#Yaisi kaisu madabbui-maggwi-hu.)
   morning DEF.NOM=man REFL=car fix-PUNC PTC not.yet fix-COMPL-PUNC
   ‘This morning, the boy fixed his car. He hasn’t finished fixing it yet.’ (elicitation, EM, BP47-
   8, 19:17)

In keeping with one traditional definition, the perfective “presents the totality of the situation referred to,” while the imperfective “make[s] explicit reference to the internal temporal constituency of the situation” (Comrie 1976:4).

There is another aspectual category in Northern Paiute that is conveyed through a process of ‘durative gemination.’

(2) Amamu’a su=naatsi’i ti=kaadzi madabbui-i. (Yaisi kaisu madabbui-maggwi-hu.)
   morning DEF.NOM=man REFL=car fix-DUR PTC not.yet fix-COMPL-PUNC
   ‘This morning, the man was fixing his car. He hasn’t finished fixing it yet.’ (elicitation, EM, BP47-
   8, 17:06)

In a previous description, Thornes (2003:413) takes it to convey “[a]n aspectual distinction typically interpreted as durative[…]” which makes it sound like a type of imperfective aspect.

With achievement predicates, however, durative gemination is incompatible with assertions of noncompletion.

(3) Amamu’a su=naatsi’i mi’a. (#Yaisi kaisu mia-maggwi-hu.)
   morning DEF.NOM=boy leave-DUR PTC not.yet leave-COMPL-PUNC
   ‘This morning, the boy had left. He hasn’t left yet.’ (elicitation, EM, BP51-1, 2:00)
   [EM: “The boy left this morning. Kaisu miamaggwi-hu…well, sound like that he’s not gone yet[…]It
   don’t make sense.”]

Why does durative gemination, which otherwise behaves like imperfective aspect, behave like perfective aspect with achievements?

This is the same superficial profile as the (controversial) category of neutral aspect, which Smith (1997:77–81) proposes for French, Mandarin, and Navajo (see also Iatridou et al. 2003 on Bulgarian).

(4) a. Demain il jouera un robre de bridge, mais il ne le finira pas.
   tomorrow he play.FUT a rubber of bridge but he NEG it finish.FUT NEG
   ‘Tomorrow he will play a rubber of bridge, but he won’t finish it.’ (Smith 1997:202)

b. Le cheval gagnera le course, (#mais il ne gagnera pas).
   the horse win.FUT the race but he NEG win.FUT NEG
   ‘The horse will be winning the race, but he won’t win.’ (Smith 1997:80)

The neutral aspect only entails the initiation of an event. For activities and accomplishments, this means that the event does not have to terminate, but for achievements, the event necessarily culminates.

While the idea of neutral aspect is intuitively appealing, I propose that durative gemination in Northern Paiute does, in fact, convey a type of imperfective aspect.

The surprising behavior of achievements arises because they do not solely encode an instantaneous change of state, but also the result state, cf. Japanese (Ogihara 1998).

But this imperfective aspect must, unlike the progressive, allow for the events in the extension of the predicate to have no proper subparts, cf. Russian (Altschuler 2012, to appear).

In the rest of this talk, I will:

– describe the morphological properties of durative gemination;
– provide some general background on aktionsart in Northern Paiute;
– show how Smith’s (1997) neutral aspect is not the aspecual category conveyed by durative gemination;
– argue that it can instead convey imperfective aspect, if achievement predicates encode a result state;
– discuss what kind of imperfective aspect this must be for durative gemination to combine with predicates that do describe just instantaneous events.

1 What is ‘durative gemination’?

Morphologically, durative gemination does one of two things to a verb.

• If the onset of the final syllable is a lenis consonant (short, voiced), it becomes fortis (long, voiceless).

(5) a. lehi → lepo ‘drink’

b. pidi → piti ‘arrive’

c. yodo → yoti ‘fly off’

d. igwe → iko ‘enter’

e. igwe → ikwi ‘smell (tr.)’

g. kwana → kwanna ‘smell (intr.)’

2
If there is no onset or if the onset is a glide, a glottal stop is inserted.

(6) a. madabbui → madabbu\'i ‘fix’
    b. m\u1d30i → n\u00e2\u1d30`\u015f ‘limit’
    c. swi → sw\u00e2 ‘fall asleep’

The same process is attested — albeit in a more restricted fashion — in other Numic languages, e.g. Mono (Lamb 1957:246), Shoshone (Crum and Dayley 1993:94), and Kawaiisu (Zigmund et al. 1990:96).

In Northern Paiute, durative gemination is productive (see also Thomes 2003:413 fn. 27); it does not apply just to morphologically simple verbs.

(7) hubia-du → hubia-tu ‘sing’ (song-make)
(8) a. nagi-gaa → nagi-ga\u1d30 ‘chase away’ (chase-MOT)
    b. hubia-du-no → hubiadu-no\u1d30 ‘song while coming along’ (sing-make-MOT)
    c. aataa-moo → aataa-mo\u1d30 ‘sit around (pl.)’ (sit.PL-MOT)

But not every verb can undergo this morphological process. The final syllable can have an onset that is a non-lenis consonant (i.e. fortis or voiced fortis) or a glottal stop.

(9) a. kw\u1d30i ‘shoot’
    b. nayaggw\u015f ‘play handgame’
    c. hak\u00e2 ‘hicough’

This does not mean that these verbs cannot convey the same aspectual meaning as durative gemination.

• In general, with verbs that do have both forms, the simple form cannot occur on its own without any aspectual morphology.

(10) a. * Su\u1d30\u1d30na t\u015f=kaadzi madabbui.
    DEF,NOM=boy REFL=car fix

Intended: ‘The man is fixing his car.’ (elicitation, EM, BP44-4, 3:27)

b. Su\u1d30\u1d30na t\u015f=kaadzi madabbu\u1d30i.
    DEF,NOM=boy REFL=car fix,DUR

‘The man is fixing his car.’ (elicitation, EM, BP44-4-s, 1)

c. Su\u1d30\u1d30na t\u015f=kaadzi madabbu\u1d30i.
    DEF,NOM=boy REFL=car fix-PUNC

‘The man just fixed his car.’ (elicitation, EM, BP51-1, 15:06)

d. Su\u1d30\u1d30na t\u015f=kaadzi madabbui-winni.
    DEF,NOM=boy REFL=car fix-PRG

‘The man is fixing his car.’ (elicitation, EM, BP46-3, 33:44)

• But the verbs that cannot undergo durative gemination for morphological reasons can occur without any aspectual morphology.

(11) a. Nii nayaggw\u015f.
    1SG,NOM play.handgame

‘I am playing handgame.’ (elicitation, EM, BP45-5-s, 9)

b. Nii nayaggw\u015f-hu.
    1SG,NOM play.handgame-PUNC

‘I played handgame.’ (elicitation, EM, BP45-5-s, 10)

c. Nii nayaggw\u015f-winni.
    1SG,NOM play.handgame-PRG

‘I am playing handgame.’ (elicitation, EM, BP45-5, 51:37)

In these verbs, the morphological contrast between the simple form and the geminated form of the verb is neutralized. The simple form conveys the meaning of durative gemination, e.g. (11a).

When we can see it, durative gemination is in complementary distribution with other aspectual suffixes, e.g. the punctual -hu and the progressive -winni.

(12) a. * Su=mata\u1d30\u1d30i t\u015fibu\u015f-hu.
    DEF,NOM=boy emerge,DUR-PUNC


b. * Su=mata\u1d30\u1d30i t\u015fibu\u015f-winni.
    DEF,NOM=boy emerge,DUR-PROG

Intended: ‘The boy is emerging.’ (elicitation, EM, BP45-3, 20:50)

For this reason, I take durative gemination, represented as an infix -\u1d30\u1d30, to realize the same Asp(ect) functional head that these other aspectual suffixes do.

(13) AspP
    Asp
      TP
    \u00ab
    V
      \{ -hu \}
      \{ -winni \}

An interesting aside. In the dialect spoken immediately around Mono Lake in eastern California, durative gemination is accompanied by an overt suffix, -\u1d30\u1d30-yu.

(14) a. Nii ka=mata\u1d30\u1d30i toogga punni.
    1SG,NOM DEF,ACC=little,ACC dog see,DUR

‘I see the small dog.’ (elicitation MS, BP32-3-s, 13)

b. Su=mogo\u015f ni=mia-\u1d30\u1d30 punni-\u1d30\u1d30-yu.
    DEF,NOM=woman 1SG,GEN=leave,NMZ see,DUR-DUR

‘The woman sees me going.’ (elicitation, EM, BP49-3-s, 4)

Durative gemination conveys an aspectual category that is in complementary distribution with other markers of aspect, e.g. the progressive and punctual suffixes.
2 Background on aktionsart in Northern Paiute

There are at least four aktionsart classes in Northern Paiute: i) activities, ii) accomplishments, iii) achievements, and iv) semelfactives.

1. Activities and accomplishments give rise to an ongoing interpretation with the progressive suffix -winni. Achievements are infelicitous; semelfactives are coerced into an iterative interpretation.

a. Surnaatsá'i hubia-du-winni.
DEF.NOM=boy song-make-PROG
The boy is singing.” (elicitation, MS, BP46-2, 1:38:13)
[MT: “Is he singing now?" MS: "Yes, he’s singing.”] activity
b. Surnána ti=kaadzi madabbiu-winni.
DEF.NOM=man REFLECT=CAR fix-PROG
‘The man is fixing his car.’ (elicitation, EM, BP46-3, 33:44) accomplishment
c. # Surnána mia-winni.
DEF.NOM=man leave-PROG
Intended: ‘The man is leaving.’ (elicitation, EM, BP44-7, 1:24:13) achievement
d. Nín akwisiyae-winni.
SING.NOM sneeze-PROG
‘I am sneezing (over and over again).’ (elicitation, EM, BP45-5, 1:45:04) semelfactive

2. Accomplishments can be distinguished from activities and other aktionsart classes. When modifying accomplishments, the adverb tu’i ‘almost’ can entail the event begins but does not culminate (Dowty 1979:58).

a. Context: The boy started singing, and he’s still singing.
# Surnaatsá’i tu’i hubia-du-hu.
DEF.NOM=boy almost song-make-PUNC
Intended: ‘The boy almost sang.’ (elicitation, EM, BP50-2, 20:28) activity
b. Context: The man started fixing his car, and he’s still working on it.
Surnána ti=kaadzi tu’i madabbiu-hu.
DEF.NOM=man REFLECT=CAR almost make-PROG
‘The man almost fixed his car.’ (elicitation, EM, BP50-2, 22:30) accomplishment
c. Context: The man left and is going.
# Surnána tu’i mia-hu.
DEF.NOM=boy almost left-PUNC
Intended: ‘The man almost left.’ (elicitation, EM, BP51-5, 16:57) achievement
d. Context: The boy sneezed.
# Surnaatsá’i tu’i akwisiyae-hu.
DEF.NOM=boy almost sneeze-PUNC
Intended: ‘The boy almost sneezed.’ (elicitation, EM, BP51-5, 19:20) semelfactive

While there are other diagnostics, these two suffice to distinguish four aktionsart classes in Northern Paiute.

3 The problem with neutral aspect

Going back to the original contrast, durative gemination is compatible with an assertion of incompleteness for activities and accomplishments, but not for achievements.

morning DEF.NOM=boy song-make-DUR PTC not.yet song-make-PUNCT
‘Yesterday, the boy was singing. He hasn’t finished singing yet.’ (elicitation, MS, BP47-6, 9:45) activity
b. Amamú’a suu=nana ti=kaadzi madabbiu’i. Yaisy kaisu madabbiu-maggwi-hu.
morning DEF.NOM=man REFLECT=CAR fix-DUR PTC not.yet fix-PUNCT
‘This morning, the man was fixing his car. He hasn’t finished fixing it yet.’ (elicitation, EM, BP47-8, 17:06) accomplishment
c. Amamú’a suu=natsí’i mía’i. # Yaisy kaisu mia-maggwi-hu.
morning DEF.NOM=boy leave-DUR PTC not.yet leave-PUNCT
‘This morning, the boy had left. He hasn’t left yet.’ (elicitation, EM, BP51-1, 2:00)
[EM: “The boy left this morning, Kaisu mimaggwi... well sound like that he’s not gone yet[... it don’t make sense.]” achievement

Smith (1997:77–81) proposes that this pattern arises for various categories in French, Mandarin, and Navajo because they encode neutral aspect (see also Iatridou et al. 2003 on Bulgarian). In her words, the neutral aspect:

“... includes the initial point and at least one internal stage of a situation (where relevant)” (p. 81).

In many analyses of tense and aspect, a clause is interpreted with respect to three different time intervals (Reichenbach 1947, Klein 1994).

- event time (t_e): the time at which the event described by the sentence takes place
- reference time (t_r): the time about which a claim is made
- utterance time (t_u): the time at which the sentence is uttered

Within such a framework, Pancheva (2003:282) proposes that the neutral aspect requires the reference time to overlap with the event time such that it includes some time interval preceding the event time (given by the τ function).

\[
\tau(t) = \lambda(f,x) = \{t \in \tau(x) \cap \neg t \}
\]

If durative gemination conveyed neutral aspect, then activity and accomplishments would not necessarily have to terminate within the reference time.

\[
\tau(t) = \lambda(f,x) = \{t \in \tau(x) \cap \neg t \}
\]
We can test these predictions by constraining the reference time with temporal adverbials:

In contrast, for achievements, the neutral aspect would require that the entire event be located within the reference time, since by hypothesis they describe instantaneous changes of state.

We can test these predictions by constraining the reference time with temporal adverbials:

- As predicted, the reference time can be restricted by a punctual adverbial like suhagge 'two o’clock', so it contains just the initiation of the event described by an activity or accomplishment and the entire event described by an achievement predicate.

(20) a. Context: The boy started singing at 2. He finished singing at 3.
   Waha-gwwe su=naats’i hubia-tu.
   two-LOC DEF.NOM=boy song-make.DUR
   ‘At two o’clock, the boy was singing.’ (elicitation, EM, BP51-5, 15:03)
   [EM: ‘Yeah, you could say that.’]
   b. Context: The man started fixing his car at 2. He finished fixing it at 3.
   Waha-gwwe su=nana ti=kaadzi madabbu’i.
   two-LOC DEF.NOM=man REFL=car fix.DUR
   ‘At two o’clock, the man was fixing his car.’ (elicitation, EM, BP51-5, 4:45)
   [EM: ‘He started at two then he was through at three. That’s… That would be telling the truth.’]
   c. Context: The woman left at 2. She reached her destination at 3.
   Waha-gwwe su=mogo’ni mi’a.
   two-LOC DEF.NOM=woman leave.DUR
   ‘At two o’clock, the woman was going.’ (elicitation, EM, BP51-5, 17:27)
   [EM: ‘Yeah, she left at two.’]

- Also, the reference time can be restricted by a frame adverbial like Idzi’i ‘yesterday’, so it contains the entire event — including the termination — described by an activity, accomplishment, or achievement predicate.

   Idzi’i su=naats’i hubia-tu.
   yesterday DEF.NOM=boy song-make.DUR
   ‘Yesterday, the boy sang.’ (elicitation, EM, BP51-5, 19:09)
   [EM: ‘I think you’re kai isayu’e [‘not lying’]’]
   b. Context: The man started fixing his car yesterday morning at 9. He finished fixing it at 12.
   Idzi’i su=nana ti=kaadzi madabbu’i.
   yesterday DEF.NOM=man REFL=car fix.DUR
   ‘Yesterday, the man fixed his car.’ (elicitation, EM, BP51-5, 19:55)
   [EM: ‘I think kai isayu’e [‘not lying’]… he did it all yesterday.’]

c. Context: The woman left yesterday morning at 9. She reached her destination at 12.
   Idzi’i su=naats’i mi’a.
   yesterday DEF.NOM=woman leave.DUR
   ‘Yesterday, the woman left.’ (elicitation, EM, BP51-5, 21:33)
   [EM: ‘I think kai isayu’e [‘not lying’], init… cuz she walked all the way.’]

We also predict that the reference time should not be able to contain just the process component of the event described by an activity or accomplishment predicate (Schenken 2008:210f.). But this is entirely possible.

(22) a. Context: The boy started singing at 1. He finished singing at 3.
   Waha-gwwe su=naats’i hubia-tu.
   two-LOC DEF.NOM=boy song-make.DUR
   ‘At two o’clock, the boy was singing.’ (elicitation, EM, BP51-5, 2:40)
   [EM: ‘At two o’clock he’s singing, and then three o’clock he’s through singing.’]
   b. Context: The woman left yesterday morning at 9. She reached her destination at 12.
   Waha-gwwe su=nana ti=kaadzi madabbu’i.
   two-LOC DEF.NOM=man REFL=car fix.DUR
   ‘At two o’clock, the woman was going.’ (elicitation, EM, BP51-5, 10:47)
   [EM: ‘Then she’s still going till three o’clock.’]

Similarly, if durative gemination conveyed neutral aspect, it should not be possible for the reference time to be located entirely after the change of state encoded by an achievement predicate. But this, too, is possible.

(23) a. Context: The man started fixing his car at 1. He finished fixing it at 3.
   Waha-gwwe su=nana ti=kaadzi madabbu’i.
   two-LOC DEF.NOM=man REFL=car fix.DUR
   ‘At two o’clock, the man was fixing his car.’ (elicitation, EM, BP51-5, 7:02)
   [EM: ‘That would be okay. He worked all the way through.’]
   b. Context: The woman left yesterday morning at 9. She reached her destination at 12.
   Waha-gwwe su=naats’i hubia-tu.
   two-LOC DEF.NOM=boy song-make.DUR
   ‘Yesterday, the man fixed his car.’ (elicitation, EM, BP51-5, 19:55)
   [EM: ‘I think kai isayu’e [‘not lying’]… he did it all yesterday.’]

Durative gemination in Northern Paiute does not convey neutral aspect, even though it exhibits a similar contrast between activities and accomplishments on the one hand and achievements on the other.

4 What is in an achievement?

But how can the reference time be located during the event described by an activity or accomplishment predicate (23–22), but after the event described by an achievement (24)?

Perhaps achievements in Northern Paiute do not mean what we expect them to. Speakers report that an achievement predicate in its geminated form describes the result state that follows the transition.
This meaning for durative gemination also derives the culmination entailment for achievement predicates. The semantics of durative gemination (second version)

\[ [\text{mi’o}] = \lambda e f \omega e’(e = (e’ \cup e^\nu) \land \text{BECOME}(e^\nu) \land \text{go}(e^\nu)) : \langle s, t \rangle \]

This achievement predicate is decomposed, following Dowty (1979) and Rothstein (2004), into a state (e^\nu) and the event (e’) of entering into this state, introduced by the \text{BECOME} operator.

Consequently, just as Ogihara proposes for Japanese, durative gemination itself can be treated as just another type of imperfective aspect. It can locate the reference time so that it is properly contained inside the event time.

For activity and accomplishment predicates, it is obvious how this gives rise to a nonterminating interpretation. As with other types of imperfective aspect, the event cannot end inside the reference time.

This meaning for durative gemination also derives the culmination entailment for achievement predicates. The reference time can be located inside the result state, entirely after the transition into this state.
Altshuler (to appear) proposes that the imperfective aspect in Russian:

“[does] not require proper event stages and, therefore, when [it] combines with non-achievement VPs, any one of the VP-event-stages satisfies [its] truth-conditions. . . When the VP is an achievement, however, the [operator] always lead[s] to an entailment that the described event culminated because the only event stage that could satisfy [its] truth-conditions is the VP-event.”

This can be contrasted with the progressive, for instance, which would require that the events in the extension of the predicate have proper subparts.

Adapting Altshuler’s idea within the current framework, I propose that durative gemination in Northern Paiute allows the reference time to be nonproperly contained within the event time.

(33) **The semantics of durative gemination (final version)**

\[
\begin{align*}
\text{m}
\end{align*}
\]

\[
\text{m}
\]

Such a meaning is sometimes proposed for the imperfective aspect in general, though it is not clear whether it is for the same reasons (Kratzer 1998:107, Paslawska and von Stechow 2003:322).

It accounts for the two difficult cases that we have been examining. First, for achievement predicates, it gives rise to a culmination entailment, because the reference time is located inside the result state.

(34) a. Context: The woman left at 1. She reached her destination at 3.

\text{Waha-ggwe} su=mogo’ni mi’a.

\text{two-LOC DEF.NOM=woman leave.DUR}

‘At two o’clock, the woman was going.’ (elicitation, EM, BP51-5, 10:47)

[EM: “Then she’s still going till three o’clock.”]

b. \[
\text{mi’a}
\]

Second, for semelfactive predicates, it permits a noniterative interpretation, because the event time can be coextensive with the reference time.


\text{Waha-ggwe} su=naatsi’i akwisiya’e.

\text{two-LOC DEF.NOM=boy sneeze.DUR}

‘At two o’clock, the boy sneezed.’ (elicitation, EM, BP51-1, 40:59)

b. \[
\text{akwisiya’e ‘sneeze’}
\]

A caveat. Altshuler (2012:64) dismisses this specific implementation, because the imperfective aspect in Russian requires the reference time to follow a (sub)part of the event.

(36) Nedelju nazad Marija po-celova-l-a Dudkina. On dari-l ej cvety i week ago Maria PPV-kiss-PAST-3SG-F Dudkin he give.PPV-PAST-3SG her flowers and priglasha-l ee v teat. invite.PPV-PAST-3SG her to theater ‘A week ago, Maria kissed Dudkin. He had given her flowers and invited her to the theater.’ (Altshuler 2012:61)


But for durative gemination in Northern Paiute, it is completely impossible for the reference time to follow the event time, regardless of the aktionsart of the predicate.


\# Waha-ggwe su=naatsi’i hubia-tu two-LOC DEF.NOM=boy song-make.DUR

Intended: ‘At two o’clock, the boy had finished singing.’ (elicitation, EM, BP51-5, 36:23)

[EM: “Nine to twelve, was it? Nine to twelve. Yeah, [say][e] [‘lie’]. I guess.”]

b. Context: The man started fixing his car at 9. He finished fixing it at 12.

\# Waha-ggwe su=nana ti=kaadzi madabbu’i.

\text{two-LOC DEF.NOM=man REFL=car fix.DUR}

Intended: ‘At two o’clock, the man had finished fixing his car.’ (elicitation, EM, BP51-5, 37:13)

[EM: “That would [say][e] [‘lie’]. init! Cur he’s through at twelve . . . nine to twelve, init!”

accomplishment

c. Context: The woman left at 9. She reached her destination at 12.

\# Waha-ggwe su=mogo’ni mi’a.

\text{two-LOC DEF.NOM=woman leave.DUR}

Intended: ‘At two o’clock, the woman had finished going.’ (elicitation, EM, BP51-5, 38:09)

[EM: “That would [say][e] [‘lie’]. . . cuz she only walked nine to twelve, not to two.”]

achievement

d. Context: The man sneezed at 12.

\# Waha-ggwe su=nana akwisiya’e.

\text{two-LOC DEF.NOM=man sneeze.DUR}

Intended: ‘At two o’clock, the man had sneezed.’ (elicitation, EM, BP51-6, 9:41)

[EM: “Yeah, that would be [say][e] [‘lie’].”]

Finally, I should point out the external semantic extensions for durative gemination above is clearly a simplification.

- Durative gemination, like the progressive suffix -winni, exhibits the imperative paradox, so that an intentional meaning is required.

(38) Su=mogo’ni ka=poo wokwopa. Su=kaadzi

DEF.NOM=woman DEF.NOM=road cross.DUR DEF.NOM=car

u=wi-dzaga-hu-ka.

3SG.ACC=it long.thing-strike-PUNCE-MOT

‘The woman was crossing the street. The car hit her and ran.’ (elicitation, EM, BP51-1, 1:12:17)

[EM: “She didn’t make it across the street . . . yeah, not yet. She got hit by the car.”]

- Unlike the progressive suffix -winni (see the Appendix), durative gemination allows for both a progressive and a habitual interpretation.

(39) Q: Hau su=nana managgwi-’yu=nadzaddi-n-o’o? how DEF.NOM=nana do.DUR-DUR 4:GEN=Sunday-LOC

“A what does the man do on Sundays?”

A: Su=nana ti=kaadzi madabbu’i.

DEF.NOM=man REFL=car fix.DUR

‘The man fixes his car.’ (elicitation, EM, BP51-5, 43:44)
6 Conclusions

There are a number of languages with aspectual categories that exhibit the same interaction with aktionsart that durative gemination in Northern Paiute does. Achievement predicates give rise to a culmination entailment, while activity and accomplishment predicates do not.

As we saw, there have two general strategies in the literature for dealing with this tension.

– The aspectual contribution is not what we were expecting: e.g. neutral aspect in French, Mandarin, Navajo, and Bulgarian (Smith 1997, Puncheva 2003) or a type of imperfective aspect that allows for the events in the extension of the predicate to have no proper subparts (Altshuler 2012, to appear).

– The lexical meaning of achievement predicates is not what we are expecting, e.g. Japanese (Ogihara 1998).

In Northern Paiute, both strategies were needed to account for the meaning of durative gemination.

Data and acknowledgments

The data in this paper comes primarily from my own fieldwork on the variety of Northern Paiute spoken at Mono Lake in eastern California (Lee Vining, California) and immediately to the north in Bridgeport and Coleville, Lake in eastern California (Lee Vining, California) and immediately to the north in Bridgeport and Coleville, and Sweetwater, Nevada. I am greatly indebted to Grace Dick, Leona Dick, Morris Jack, Elaine Lundy, Edith McCann, and Madeline Stevens for teaching me about their language.

Examples are annotated with relevant metadata: (i) how the data was collected (in a dialogue, through elicitation, in a narrative, or in a prompted narrative), (ii) the initials of the speaker who uttered the example or provided a judgement for the example (EM or MS), (iii) a number (starting with BP) identifying the source recording for the example, and (iv) the initial location in the source recording (either a line number in the corresponding transcription of the recording or a timestamp).

Abbreviations

ACC = accusative, ADV = adverbial suffix, APPL = applicative, CAUS = causative, COMPL = completive, DEF = definite, DEM = demonstrative, DIM = diminutive, DL = dual, DS = different subject, DUR = durative gemination, EMPH = emphatic particle, EXCL = exclusive, F = feminine, GEN = genitive, IRR = irrealis, INCF = inceptive, INCH = inchoative, INCL = inclusive, IND = free choice indefinite, INSTR = instrumental nominalizer, INT = intensive, IP = instrumental prefix, LOC = locatival postposition, M = masculine, MOD = modal particle, MOT = motion suffix, NEG = negation, NMZ = nominalizer, NOM = nominative, NSP = nonspecific object, PASS = passive, PERF = perfect, PL = plural, PLUR = pluralional, PRO = resumptive pronoun, PROG = progressive, PRS = present tense, PROSP = prospective, PTC = discourse particle, PUNC = punctual, Q = question particle, QUOT = quotative, REFL = possessive anaphor, SEQ = sequential marker, SG = singular, SIM = simultaneous marker, STAT = stative aspect, TI = ‘general tense’ (Thornes 2003:398).

Appendix: Other aspectual categories in Northern Paiute

The progressive suffix

The -winni suffix conveys progressive aspect, a type of imperfective aspect, since it depicts an event as ongoing. It does not entail the termination of the event with accomplishment predicates or with activity predicates.


   morning DEF.NOM=man REFL=car fix-PROG PTC not.yet song-make-COMPL-PUNC

   ‘This morning, the boy was fixing his car. He hasn’t finished fixing it yet.’ (elicitation, EM, BP47:8, 21:16)


   morning DEF.NOM=boy song-make-PROG PTC not.yet song-make-COMPL-PUNC

   ‘This morning, the boy was singing. He hasn’t finished singing yet.’ (elicitation, MS, BP47-6, 12:30)

In part, the meaning of the progressive suffix can be treated by locating the reference time within the event time.

(41) The semantics of the progressive suffix

   [-winni] = \text{\lambda}(f,t) \cdot (f(1) \sqsubset f(t)) : \langle(t,t)\rangle

Indeed, with the reference time specified by a temporal adverb such as wahoggwe ‘at two c’clock’, progressive sentences are judged true in contexts where the reference time is subsumed in the event time.

(42) a. Context: The boy started singing at 1 o’clock and he continued until 3 o’clock.

   Waha-ggwe su=natsi’i hubia-du-winni
   two-LOC DEF.NOM=boy song-make-PROG

   ‘The boy was singing at two o’clock.’ (elicitation, EM, BP50-2, 45:09)

b. Context: The boy fixing his car at 1 and he continued until 3.

   Waha-ggwe su=natsi’i ti=kaadzi madabbui-winni
   two-LOC DEF.NOM=boy REFL=car fix-PROG

   ‘The boy was fixing his car at two o’clock.’ (elicitation, EM, BP50-2, 45:33)

In addition, we expect there to be interactions between the progressive suffix and aktionsart.

• The progressive suffix is simply infelicitous with achievement predicates, e.g. maa ‘leave’ in (15c), since progressive aspect is not compatible with their result state component.

• With semelfactive predicates, such as akwisuswe ‘sneeze’ in (15d), the progressive suffix coerces an iterative interpretation, which consequently has duration and can contain the reference time.

The -winni suffix has a true progressive interpretation, since it does not permut habitual interpretations.

(43) Q: Hau su=nana managgwi-‘yu=nadaddi-no’o?

   how DEF.NOM=man do-DUR 4.GEN=Sunday-LOC

   ‘What does the man do on Sundays?’

A: # Su=nana ti=kaadzi madabbui-winni.

   DEF.NOM=man REFL=car fix-PROG

   Intended: ‘The man fixes his car.’ (elicitation, EM, BP51-5, 44:53)

   [EM: ‘Madabbuiwinni means he’s fixing it now, the car.”]
Of course, the semantics for the progressive suffix does not account for the so-called imperfective paradox (Dowty 1979:133). When -winni applies to an accomplishment predicate, such as ka=poo wokwopa 'cross the street,' the event need not culminate in the actual world.

(44)  Su=mogo’ni  ka=poo  wokwopa-winni. Su=kaadži
DEF:NOM=woman DEF:ACC=road cross-PROG DEF:NOM=car
u=wi-dzaga-hu-ka.
3SG.ACC=P:long.thing-strike-PUNC-MOT

‘The woman was crossing the road. The car hit her and ran.’ (elicitation, EM, BP50-1, 1:17:26)


The punctual suffix

The -hu suffix conveys a type of perfective aspect, since it portrays an event in its totality. For accomplishment predicates, the punctual suffix entails their culmination; it is not compatible with an assertion of completion.

(45)  a.  Amamu’u su=naatsi’i ti=kaadži madabbui-hu. #Yaisi kaisu madabbui-maggwi-hu.
DEF:NOM=boy REFL=car fix-PUNC
morning DEF:NOM=man fix-PUNCPT
‘This morning, the boy fixed his car. He hadn’t finished fixing it yet.’ (elicitation, EM, BP47-8, 19:17)

DEF:NOM=boy song-make-PUNC
morning DEF:NOM=man song-make-PUNCPT
‘This morning, the boy sang. He hadn’t stopped singing yet.’ (elicitation, EM, BP47-6, 11:50)

Perhaps surprisingly, with activity predicates like hubiaadu ‘sing,’ the punctual suffix is also incompatible with an assertion of incompletion, even though activities are not inherently telic.

I take the punctual suffix in Northern Paiute to entail termination of the event, cf. the perfective aspect in Dêne Sûlîné (Wilhelm 2007:47–53). Semantically, this can be cached out as maximization over events; there can be no larger event within the reference time that satisfies the predicate’s event description.

(46)  The semantics of the punctual suffix (static version)

\[
[s-hu] = \lambda f . \exists e ( f ( e ) \land \exists e' ( e' \subseteq e' \land f ( e' ) ) ) \land ( \exists t : [(s,t), (i,t)] )
\]

We can see independently that the punctual suffix locates the event time of the clause inside the reference time.

(47)  a.  Context: The boy sang yesterday from 9 o’clock until 12 o’clock.

\[\\text{ldzi’i} \quad \text{su}=\text{naatsi’i} \quad ti=\text{kaadži} \quad \text{hubia-du-hu}.
\]

Yesterday DEF:NOM=boy REFL=car song-make-PUNC
‘Yesterday, the boy sang.’ (elicitation, EM, BP50-4, 1:00:59)

b.  Context: The boy sang yesterday from 9 o’clock until 12 o’clock.

\[\\text{ldzi’i} \quad \text{su}=\text{naatsi’i} \quad ti=\text{kaadži} \quad \text{madabbui-hu}.
\]

Yesterday DEF:NOM=boy REFL=car fix-PUNC
‘Yesterday the boy fixed his car.’ (elicitation, EM, BP50-4, 1:04:45)

When the reference time is restricted by the temporal adverbial ldzi’i ‘yesterday,’ a punctual sentence is judged as true in a context where the run time of the event is located wholly inside the time interval it delimits.

References


Department of Linguistics
University of California, Santa Cruz
1156 High Street
Santa Cruz, CA 95064
mtoosarv@ucsc.edu
http://people.ucsc.edu/~mtoosarv/