Lenition in Jamul Diegueño

Michel Achar

University of California San Diego

0. Introduction.

In this presentation, I am concerned with the observation and characterization of lenition in Jamul Diegueño. In that language where voicing is not distinctive, the voiceless consonants are usually fortis. They are strongly articulated and released. The examples I will be presenting here concern cases where the consonant loses its characteristic force of articulation and becomes lenis.

As a phonological phenomenon, lenition can very broadly be defined as an assimilation phenomenon by which the proximity of a voiced element triggers the loss of the force of articulation of a neighboring fortis consonant. In the most complete cases of assimilation, the leniting consonant surfaces voiced. However, a softening of the consonant will still be a lesser degree of lenition.

The main issue of interest here is the nature of lenition. I will show that it cannot be analyzed as a purely phonological phenomenon but as a form of interaction between phonology and other areas of grammar. In order to achieve that result, I will first consider a strictly phonological treatment of lenition and point out the ensuing problems.

1. Structure of the Word in Jamul.

The concept of lenition applied to Jamul can only be understood against the more general background of word formation in the language. A Jamul word necessarily includes a stress bearing root. In the hand out, (1) presents monosyllabic roots and (2) bisyllabic roots.

\[
\begin{align*}
(1) \quad \text{Wa} & \quad /\text{wa}/ \\
\text{'House'} & \quad \text{Ha} & \quad /\text{ha}/ \\
\text{'Water'} & \quad \text{Hat} & \quad /\text{hat}/ \\
\text{'Dog'} & \quad \text{Aa} & \quad /\text{aa}/ \\
\text{Shawii} & \quad /\text{iipa}/ \\
\text{'Acorn mush'} & \quad \text{Ripa} & \quad /\text{ri}/ \\
\text{'Man'} & \quad /\text{ma}/
\end{align*}
\]

Since in Jamul, the stress regularly falls on the last root syllable, all the affixes will be unstressed.

Two kinds of morphemes which can affix to a root need to be differentiated. The first class provides a lexical type of information such as plurality, causation or nominalization. Their affixation to a root derives a stem. Even though a stem is analyzable into separate morphemes, it remains a single lexical item. The morphemes which participate into stem derivation will be called derivational morphemes. The examples in (3) present examples of stems derived from roots:

\[
\begin{align*}
(3) \quad \text{Wā} & \quad /\text{wā}/ \\
\text{Sit} & \quad \text{limā} & \quad /\text{limā}/ \\
\text{Dance} & \quad \text{lima} & \quad /\text{lima}/ \\
\end{align*}
\]
The roots in (3) are \textit{wa} and \textit{lima}. The suffixation of the suffix \textit{.ty} (both a nominalizer and a plural marker) derives the stems \textit{waty}, \textit{limaaty}, and \textit{limaty}. Notice the way vowel length desambiguates the plural form of the verb 'dance' and the nominal form which are derived by the suffixation of a morpheme of the same \textit{.ty} shape.

The second class of morphemes provides a syntactic type of information. Those will be called \textbf{syntactic morphemes}. Notice that derivational morphemes are preceded by a period (.), whereas syntactic morphemes are preceded by a dash (-).

The examples in (4) present examples of the suffixation of syntactic morphemes to a root:

(4) (a) \textit{hatpu}/
\begin{tabular}{l}
Hat-\textit{pu} \\
Dog-DEM
\end{tabular}
(b) \textit{hatpiy\textit{a}}/
\begin{tabular}{l}
Hat-\textit{pi-t\textit{y-a}}? \\
Dog-DEM-S-Q
\end{tabular}
\textbf{‘Where is the dog?’}

In both (4) (a) and (b), the root is \textit{hat}. The demonstrative morpheme \textit{-pu} in (a) and the demonstrative marker \textit{-pi} followed by the subject marker \textit{-ty} and the question marker \textit{-a} in (b) are suffixed to it.

Of course, the syntactic morphemes can suffix to a derived stem as illustrated in (5): (example (5) presents a sentence fragment.)

(5) \textit{lipa k-wa.ty-pi-ty}......
\textit{Man REL-sit,NOM-DEM-S}
\textbf{‘The man sitting there’}......

From the root \textit{wa}, the suffixation of the derivational morpheme \textit{.ty} derives the stem \textit{waty} (i.e. example (4)). The syntactic morphemes \textit{-k} and \textit{-pi-ty} are affixed to that stem.

2. Conditions For Lenition.

The conditions of lenition can greatly vary cross linguistically. The assimilation described in the introduction can occur systematically every time a voiced element is in direct contact with an unvoiced segment, or it can follow certain specific conditions.

As a starting hypothesis, I will argue that the occurrence of lenition in Jamul is regulated by the two following conditions:

\textbf{Condition 1: The Stem Boundary Condition (henceforth SBC):}
Lenition can only occur across a stem boundary.

\textbf{Condition 2: The Post Stress Condition (henceforth PSC):}
Only post stress consonants can lenite.

The SBC correctly rules out all possible types of stem internal lenition. If lenition occurred across the board, the underlined consonants of the words in (6) would all be lenis since they are all preceded by a voiced segment. However, all three voiceless stops preserve their fortis character. This fact is correctly predicted by the SBC since they are stem internal and thus not candidates for lenition.

(6) \textit{\textit{na}t\textit{a}t}/
\begin{tabular}{l}
Netaat \\
\textit{Pap}/
\end{tabular}
\begin{tabular}{l}
Hat
\end{tabular}
'Father'     'Baked stuff'     'Dog'

The SBC also correctly predicts the impossibility for lenition to occur across word boundaries. The rightfulness of this prediction is illustrated by the contrast presented in example (7) where puu and -pu are related (see section 3 below).

(7)  
(a)  Shawii-bu mu-wiiw-a?  
    Acorn-DEM 2-see-Q  
    'Did you see the acorn?'

(b)  Me-naan puu-dy ma'am w-aa-h w-aa-dyum?  
    2-mom she-S where 3-go-IR 3-go-Q  
    'Where is your mom going?'

In (7), lenition only occurs at the stem boundary. In (7) (b) we have a word boundary.

(8) illustrates what happens when the conditions are met. P(i) usually has a fortis consonant as illustrated in (8) (a), and it is separated from the preceding root by a stem boundary. In the voiceless environment of (8) (a), the consonant remains fortis. In (8) (b) however, where the preceding segment is voiced, the initial consonant of the suffix lenites and becomes voiced.

(8)  
(a)  Mi-ny-shapuuk-pi-ty-a?  
    2-POS-pillow-DEM-S-Q  
    'Where is your pillow?'

(b)  Mat kwataay-bi-ty-a?  
    Earth big-DEM-S-Q  
    'Where is the big mountain?'

(9) illustrates the relevance of the PSC.

(9)  
/kiiimaatyh/  
K-iimaaty-h!  
I-dance.PL-IR  
You guys dance!

The segment adjacent to /k/ in (9) is voiced. Furthermore, the SBC is satisfied since k- is not part of the stem. However, the phonemic /k/ does not lenite and surfaces as [k]. This is predicted by the PSC which specifies that lenition can only occur in a post-stress environment. Since the /k/ in (9) is a prefix, it is pre-stress and thus not available for lenition.

If the SBC restricted the environment of lenition to the combination of roots and affixes, the PSC restricts it further to suffixes.

The combined work of the SBC and the PSC allows to very precisely narrow down the scope of lenition in Jamul to a finite set of voiceless initial suffixes. The set includes the following: pu, pily, ty, tyum, k, kum which will briefly be considered in the next section.

3. Description of the Leniting Morphemes.

The demonstrative puu 'that', an independent word carrying its own stress, bleaches semantically and phonologically to become the syntactic morpheme -pu, which suffixes to a noun and has the meaning of some kind of demonstrative or article. Its use is illustrated in (10):
(10) *Humaay hat-pu pillah.*
Boy dog-DEM hit
'The boy hit the dog.'

-Pi-ty is a combination of the demonstrative -pu1 considered above and the subject marker. The form -Pi-ty is always found in the cases involving the demonstrative followed by the subject marker. It could thus very well be analyzed as a whole. However, for reasons which will be clear later, the two morphemes will be kept separate. (11) presents an example of the use of -pi-ty.

(11) *Hat-pi-ty-a?*
Dog-DEM-S-Q
'Where is the dog?'

(12) illustrates the use of -k as a same subject marker in an irrealis context.

(12) *Hwaan wi:wi:k smaan shin tuwa-h.*
John come-SS,IR week one stay-IR
'John will come and stay for one week.'

(13) illustrates the use of -kum as a different subject marker in an irrealis context.

(13) *Hwaan mariik nyu-llyul:y-kum naan sukwiny llu'us-h.*
John beans when-cook-DS,IR mom pots clean-IR
'John will cook the beans and my mother will clean the pots.'

(14) illustrates at the same time the subject and same subject value of -dy, as well as the value of -tyum as a different subject.

(14) *Wa-dy ny-ullap-tyum Hwaan chpaa-dy we-naw-dy w-aam.*
House-S burn-DS John come.out-SS 3-run-SS 3-go.away
'When the house burned down, John left running.'

4. Lenition as an Analytical Tool.

We know from the definition of the SBC that all leniting morphemes have to be syntactic morphemes since they cannot be stem internal. This can be very useful to analyze certain Jamul sentences. We will consider the case of -ty here.

Five different kinds of -ty can be identified: two syntactic morphemes (subject and same subject marker), as well as three derivational morphemes: (nominalizer, iterative plural marker, and marker of the plurality of the subject). (15) and (16) present nominalizations, (17) presents the iterative plural marker.

(15) *lipa k-wa:ty-pi-ty uumaal nyar-nar.*
Man REL-sit.NOM-DEM-S book 3/1-steal
'The man sitting there stole my book.'

(16) *Thi: tusi:ty may nemuhay hmaaw.*
Clothes wash.NOM NEG like NEG
'I dont like washing clothes.'

1 The vocalic alternation between /u/ and /i/ will not be considered here.
The Lenition conditions can be instrumental in the analysis of sentences. Consider (17) and (18):

(17) *Hakuval chimii.*y
    Child all.cry.ITER
    'The child is crying all the time.'

(18) *Huukwaal we-mii-dy nyuway.
    Children 3-cry-SS all.PL
    'All the children are crying.'

The phonological environments are similar in (17) and (18). However, in (17), the .ty morpheme is part of the stem, and thus prevented from lenition by the SBC. In (18), -ty is a syntactic morpheme. The SBC correctly restricts the possible occurrence of lenition to the syntactic morphemes.

I do not intend to claim that the presence or absence of lenition is the only way to desambiguate the nature of the morpheme in (17) and (18). There are of course other ways made available by the language: -ty in (17) could not possibly be a S marker since it is suffixed to a verb. It could not be a S marker either since the sentence only has one verb and -ty is sentence final. My intention is merely to point out that lenition represents a reliable analytical tool for the understanding of Jamul sentences.

5. A Hierarchy of Leniting Environments.

In the phonological definition of lenition, the precise nature of the triggering stem final segment has not yet been carefully investigated. This will be the purpose of this section. Three different kinds of stems will be considered: long vowel final, voiced consonant final and short vowel final.

5.1 Long vowel Ending Stems.

(19) *Shawii-bu ma'ay me-chaw-aa?*
    Acorn-DEM where 2-put-Q
    'Where did you put the acorn?'

(20) *Shawii-bi-ty-a?*
    Acorn-DEM-S-Q
    'Where is the acorn?'

(21) *Aa-g Hwaan wiw-h.*
    Go-SS,IR John see-IR
    'I'll go and see John'

(22) *Iinyaaym fyeeest nye-n-aa-gum*
    Tomorrow feast when-they-go-DS,IR
    *Hwaan nyakuya uu-cha-g jima-g*
    John young-girls.PL lead-SS,IR dance-SS,IR
    *nyapum Mariya-dy we-si-h.*
    and.then Mary-S 3-drink-IR
    'Tomorrow, when they go to the dance, John will dance with the young girls, then Mary will drink.'

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2 Not enough data is available at this point to provide a full paradigm for -tyum. Until shown incorrect by additional examples, the conclusions reached for -ty will also be accepted for -tyum.
As for examples involving -ty, the forms chapaa-dy in (14) and wemii-dy in (18) are representative of the very high frequency of lenition found after a long vowel. All examples considered with long vowels indicate that in that particular environment, lenition is almost automatic.

5.2 Stems Ending in a Voiced Consonant.

(23) Me-naan-bu chu-w-i-ty we-shi?
2-mom-DEM Q-3-say.PL 3-call
‘What is your mother’s name?’

(24) Papel-bi-ty-a?
Paper-DEM-S-Q
‘Where is the paper?’

(25) Mariya wi-nyay-gum Hwaan we-nar-h
Mary 3-hunt-DS,IR John 3-cook-IR
‘Mary will hunt and John will cook.’

For -ty consider wenaw-dy in (14).

Compare examples (23) through (26) to wiyiw-k in (12) above where the -k morpheme does not lenite. Unlike it was the case following a long vowel, lenition is not automatic after a voiced consonant. Examples such as (12) present a certain amount of variation between leniting and non leniting forms.

5.3 Short Vowels Ending Roots.

(26) Ha-p/bu ma’ay me-chaw-a?
Water-DEM where 2-put-Q
‘Where did you put the pitcher of water?’

(27) Wa-pu me-wiwiw-a?
House-DEM 2-see-Q
‘Did you see the house?’

(28) lipa-pl-ty-a?
Man-DEM-S-Q
‘Where is the man?’

(29) Ha-bi-ty-a?
Water-DEM-S-Q
‘Where is the water?’

(30) Akwi-k/g ip-h.
Ask-SS,IR say-IR
‘I’ll ask John.’

For -ty consider wa-dy in (14) and Mariya-dy in (22). -Ty always lenites in this environment.

If -ty regularly lenites following a short vowel, the other morphemes exhibit an even greater amount of variation than it was the case with a voiced consonant.
5.4 Voiceless Ending Stems.

According to the definition given in the introduction, the occurrence of lenition is strictly dependent on the voicing of the stem final sound. Consequently, voiceless ending stems should never trigger lenition. This is corroborated by examples (10), (11), (13), (14). However, compare those to (31) and (32):

(31) Hwaan Mariya nya-llwyak-t/dy w-aa-m.
    John Mary when-hit-SS 3-go-away
    'John hit Mary and left.'

(32) Hwaan matuunaap-t/dy aayaw.
    John play-SS move.around
    'John is here playing.'

Contrary to expectations, (31) and (32) show a certain amount of lenition for -ty, even if the preceding stem is voiceless final.

5.5 Generalization.

The study of the voicing environments allows the three following observations:
First, a hierarchy of the voicing environments has been established based on the regularity with which each one of them triggers the lenition of the following suffix initial segment. The environment the most conducive to lenition is a long vowel stem final, followed by a voiced consonant stem final and a short vowel stem final.

Secondly, specific morphemes have been observed to react differently to those environments. -Pu or -pi-ty for instance tend to resist lenition in short vowel environments whereas -ty lenites systematically.

Thirdly, certain morphemes lenite in unexpected environments (-ty in a voiceless context).

The study of the specific voicing environments leaves a phonological account with two seemingly opposite sets of elements to account for: the tendency of certain morphemes to resist lenition in less conducive voicing contexts and the tendency of others to exhibit lenition even in voiceless contexts.

So far, all the examples presented are still compatible with the conditions for lenition given earlier. I will now present examples of violation of those conditions.

6. Problematic Cases of Lenition.

The SBC stipulates that lenition can only occur across a stem boundary. Taken in the strict sense, this reduces the possibility of lenition to the morpheme immediately following the stem and thus prevents the lenition of the initial consonant of any following morpheme. This prediction is easily testable since two syntactic morphemes following a root is a common phenomenon in Jamul.

I will show here that the SBC makes the wrong prediction in two cases: the irrealis -h marker preceding the SS marker and the demonstrative preceding the subject marker (the familiar pi-ty).

6.1 Irrealis Preceding the Subject Marker.³

Consider example (33):

---

³ In the following examples, the ( ) notation indicates that lenition occurs but that it is not accompanied by voicing.
(33) Tren ma'am w-aa-h-(d)y w-aa-dyum?
Train where 3-go-IR-SS 3-go-Q
"Where is the train going?"

Even though the -ty morpheme always remains voiceless, it definitely exhibits a
certain amount of lenition. This is in violation of the SBC since -h is clearly not part of the
stem. The lenition illustrated in (33) is consistent with the tendency already observed for
-ty to lenite in unexpected environments. In (33), it extends that tendency beyond the limits
fixed by the SBC.

6.2 -Pi-ty.

The same type of analysis could be given for -pi-ty. When it follows the
demonstrative morpheme, the subject marker -ty often undergoes some form of lenition,
even though it is never voiced. The following examples illustrate this situation:

(34) lipaa-bi-(d)y-a?
Man-DEM-S-Q
"Where is the man?"

In (34), the root preceding [bi] ends in a long vowel and the DEM marker is realized
lenis. One could propose that lenition spreads from the root via the DEM marker and
arrives in a lesser degree to the S morpheme. This analysis would only demand the
addition of a spreading adjustment rule to the SBC. In other cases, this type of solution
would be impossible. Consider (35) and (36):

(35) Cha'ak-pi-(d)y-a?
Woman-DEM-S-Q
"Where is the woman?"

(36) Hat-pi-(d)y-a?
Dog-DEM-S-Q
"Where is the dog?"

In (35) and (36), the consonant initial of the S marker also exhibits some degree of
lenition. In this case, it is impossible to argue in favor of the spreading solution since the
root final is voiceless and the DEM morpheme surfaces in its fortis form. We have to
assume that the lenition of the -ty in (35) and (36) is not triggered by the environment but
provided by some property inherent to the morpheme itself. This constitutes yet another
example of the particular behavior of -ty with regards to lenition. This leads us to believe
that properties inherent to the particular morphemes have to be considered.

6.3 Recapitulation.

It is now useful to recapitulate the different observations which resulted from our
phonological consideration of lenition.

As an hypothesis, lenition was treated as a phonological phenomenon, regulated by
two conditions: the SBC and the PSC. The leniting morphemes have been observed in
different phonological environments and the long vowel ending stem was considered the
most conducive to lenition. With contexts less conducive (short vowel or voiced consonant)
some resistance to lenition was observed among several morphemes (-pu, -pi-ty, -k). On
the other hand, -ty has been observed as leniting even in voiceless contexts.

The tendency of -ty to lenite unexpectedly has even been observed outside the limits
allowed by the SBC. The S marker has been shown to exhibit some degree of lenition
following the DEM marker even when the latter is realized fortis. The SS marker has also shown signs of lenition following the IR marker.

Those two cases which violate the SBC as well as the opposing results of the study of the voicing environments have led us to believe that a satisfactory account of lenition has to consider some properties intrinsic to the morphemes themselves. This is only possible if lenition is not viewed as a purely phonological phenomenon. 4

7. Characterization of Lenition.

Should we simply find a way to exclude -ty from the scope of lenition and accept a certain amount of irregularity? Such a solution would present very little interest. I propose instead that we recognize lenition as the interaction between various areas of the grammar of the language (even if those areas are very difficult to isolate) and consider phonology as one of those areas (perhaps the most easily approachable).

In that light, the conditions presented in section 1 are quite useful in establishing the role of the phonological parameter in the more global context of lenition.

7.1 The SBC, PSC and the Role of the Phonological Parameter.

Firstly, the SBC allowed the isolation of -ty as a dissident morpheme since it is the only one (according to the current stage of our data) which presented clear violation of its definition.

Secondly, the SBC captures the notion of degrees of lenition. The cases where lenition occurs within the limits permitted by the condition are much more conclusive than those which violate it. No case of voicing of a leniting consonant has been observed outside the scope of the SBC.

Notice that it is precisely in the case of the dissident -ty that the difference in the degree of lenition between the contexts predicted by the rule and those which violate it have been observed. Recall that when it is separated from a long vowel ending root by an irrealis marker, the SS marker only shows some degree of lenition and no voicing. When it directly follows a long vowel root, the SS marker is always voiced. Once it is accepted that phonological conditions alone are only a part of a comprehensive account of lenition, the data from -ty argues in favor of the formulation of the SBC. It illustrates the rightness of its scope by the difference in the degree of lenition it exhibits within and outside it.

7.2 Motivation For Lenition: An Hypothesis for -TY.

The reason for the appeal of a purely phonological account is the great difficulty to isolate other possible reasons for the occurrence of lenition. In that highly speculative domain, I will hazard an hypothesis concerning the -ty morpheme.

We might venture into saying that -ty has so many different senses that it tends to use lenition to differentiate between syntactic and derivational morphemes, even when the phonological environment is not conducive to lenition.

This ambiguity relieving function of lenition can be further illustrated by the following observation: the only verbal roots which can be nominalized with the -ty marker end in a vowel. This precisely constitutes the environment where a syntactic -ty morpheme would consistently lenite. Following a verbal stem, the possibility of ambiguity between a nominalization and the SS marker is greatly reduced by the fact that only the SS can lenite. This however merely constitutes an hypothesis which I do not have the data to put to the test.

4 Notice that the weakening of the SBC which would allow lenition anywhere after a stem boundary would be of little help. It would correctly but uninterestingly allow the cases of lenition of the SS marker after the IR marker but would offer no insight in the case of the leniting S marker following a fortis DEM marker.
7.3 The Diachronic Evolution of Lenition.

It is now clear that lenition is not the result of a certain kind of phonological environment alone. The specific behavior of particular morphemes partly results from their own individual history.

I propose that lenition be considered as a continuous diachronic process, with different morphemes at different points in its evolution. The rationale for a diachronic process involving the morphemes considered throughout this presentation is not clear but it seems reasonable given their tight semantic links. Except from the DEM marker and the subject marker, it is the whole switch reference system which is concerned. Its current state in the language suggests that under the influence of -ty, before going on to the other members of the system at different points of time. We now need to consider how this diachronic process interacts with the phonological component.

7.4 Interaction Between the Phonological Component and the Diachronic Process.

This diachronic process interacts with the phonological component previously considered in a very natural way. The PSC and SBC provide the optimal location for the occurrence of lenition. The various phonological shapes of the roots considered in section 3 establish a leniting hierarchy according to their degree of voicing.

Different morphemes will react differently to those parameters according to their own position along the diachronic continuum of lenition.

The furthest along a morpheme is situated, the more it will tend to lenite in the least conducive environments. This stage represents the current behavior of -ty. In the earlier stages of lenition, a morpheme will tend to resist lenition in contexts where the phonological environment is not overwhelming (in the case of a short vowel for -pu and -pi-t). Lenition would then result from the interaction between a specific function carried out diachronically (may be the distinction between the different senses of a polysemous morpheme as it appears to be the case for -ty) and a certain type of phonological environment. This type of analysis accounts for the 2 opposite trends considered during the study of voicing environments.

In order to test this hypothesis, we need data from three different sources: from diachronic studies showing the evolution of a specific form over time, from the synchronic evaluation of the same forms in different phonological environments as well as from other Diegueno dialects or related languages.

8. Other Cases of Lenition.

This section presents some interesting elements in support of the relevance of the diachronic parameter for the consideration of lenition.

The data presented here cannot be directly accounted for by the SBC and PSC conditions. Consider the following examples:

(37)  Hwaan we-zaaw (h)i-wa.  
John 3-eat here-sit  
'John is here eating.'

(38)  Hwaan (h)i-wa.  
John here-sit  
'Here is John.'

5 The DS marker -m is of course not considered since it is voiced.
(39) *Han (d)a-wa.*  
   OK AUX-sit  
   'She is OK.'  

In the examples above, the prefix initial voiceless consonant surfaces in its lenis (although still voiceless) form. This sort of lenition presents a problem for both the SBC and the PSC. First of all, it does not occur across a stem boundary. Secondly, the leniting morphemes are prefixes and thus should be prevented from lenition by the PSC. Their description would thus command a totally new analysis. I am now going to propose a possible motivation for this form of lenition process.

8.1 The Suffixation Hypothesis.

In order to understand this lenition process, we must realize that lenition in (37), (38), (39) always occurs with auxiliary verb constructions.

I would like to offer the hypothesis that lenition might accompany the beginning of the attempt of suffixation of the whole auxiliary group. This hypothesis is supported by the fact that the auxiliary verbs are much less stressed than main verbs. Furthermore, such phenomena are accounted for in other Yuman languages.

We have hinted at the beginning of this section that this phenomenon might be fairly new, due to the generally low level of lenition (voicing is never present). This lesser degree of lenition is corroborated by the following examples:

(40) *Nipily aa-h pii-wa.*  
    Ready go-IR here-sit  
    'I'll be ready to go soon.'

(41) *Hwaan kafe we-si-dy pii-wa.*  
    John coffee 3-drink-SS here-sit  
    'John is drinking coffee.'

No sign of lenition has been observed in the [p] in *pii* in (40) and (41) where the candidate for lenition is separated from the stem by an intervening morpheme. If the origin of lenition is provided by some kind of attraction from the preceding stem, it is to be expected that adjacency be a necessary condition. (40) and (41) seem to confirm that fact.

8.2 Importance for a More General Account of Lenition.

These cases of lenition are interesting because they might illustrate the beginning stages of a process similar to the one we have observed with the other morphemes at a much more advanced stage.

Notice finally that if the PSC is violated by the fact that the leniting morpheme is pre-stress, a successful suffixation would make lenition conform to both the SBC (the boundary would now be a stem boundary) and the PSC (the total loss of stress of the following element would make the former prefix pre-stress).

Even if the motivation for lenition is still not known, it seems to accompany the notions of loss of stress by certain elements and their reanalysis. Furthermore, the elements concerned seem to share syntactic (or semantic) properties. This may indicate an interesting line of future research.

9. Conclusion.

The analysis of the various cases considered throughout this presentation has led to the conclusion that lenition is not a purely phonological phenomenon, but results from the
interaction between a diachronic process and a certain type of phonological environment. The reaction of various morphemes to the different voicing degrees of the stem is indicative of their position along the diachronic lenition process. This type of analysis accounts for the relative inconsistency of the data since it recognizes the particular status of every morpheme. However, the question of the basic motivation for lenition has not yet been directly addressed. The examples presented in section 7 are particularly interesting in that respect because they might illustrate the very early stages of a lenition process.
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Department of Linguistics
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PREFACE

The 1990 meeting was the twentieth anniversary of the First Hokan conference, which met at the University of California, San Diego. From time to time, the conference has met with other groups such as the Penutian conference and the Uto-Aztecan conference. It now regularly meets with the Penutian conference.

The conference is again indebted to Margaret Langdon and the Department of Linguistics at the University of California, San Diego, for hosting the conference. Our thanks are also due to the various graduate students who took care of the numerous details such as supplying the endless coffee.

The papers in this volume appear in the same order as they did on the program at the conference. Unfortunately, a few of the presenters were not able to send in a paper for publication. All of the papers in the volume except the last one were presented at the 1990 meeting.

In 1983, 1984, and 1985, very few of the presenters sent in their papers for publication. In 1986, a few papers from each of these years were assembled into a single volume. Werner Winter sent his 1983 paper in so early that the editor lost it in the files, and Winter's paper was omitted from the 1986 volume. It is now egg-on-the-face time for the editor. Winter's paper is included in this volume as the last paper. Mea culpa.

Arrangements have been made with Coyote Press, P.O.B. 3377, Salinas, CA 93912, 408-422-4912, to reprint the various Hokan and Hokan-Penutian conference volumes. Dr. Gary S. Breanchini of Coyote Press has told me that he will try to keep all the volumes in print. I have just sent him part of the original manuscripts and will be sending him the rest of the manuscripts very shortly. Only a very few of the original publications are still available. Please see the list at the end of the volume for details on the few remaining original volumes. I do not know how long it will be until Coyote Press will begin issuing reprints of the backissues.

James E. Redden

Carbondale, December 1990

Historical Note: The proceedings of the First Hokan conference were edited by Margaret Langdon and published by Mouton. I have edited all the other volumes of proceedings except those of 1988 and 1989, when I was in Africa. The 1988 and 1989 volumes of proceedings were edited by Scott Delancey in the series published by the Department of Linguistics at the University of Oregon. Please do not request these two volumes from me. Please address orders for the 1988 and 1989 volumes to: Department of Linguistics, University of Oregon, Eugene, OR 97403. I hope that Scott will be willing to publish the Hokan-Penutian volumes regularly, when I retire in a few years.

JER
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Richard Epstein

Lenition in Jamul Diegueño
Michel Achard

Some Differences between Two Speakers of Jamul Diegueño
Amy Miller

The Use of Auxiliary Verbs in Jamul Diegueño
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The Perfective-Imperfective Opposition in Kishaya
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Suffixal Aspect and Tense-Aspect in Northern Pomo
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The Role of Lexicalization in Shaping Aspectual Systems: Central Pomo
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Agentivity and the Animacy Hierarchy in Kashaya
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