Descent vs. diffusion in language diversification: Mono Lake Paiute and Western Numic dialectology

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1 Numic and Western Numic

1.1 Two models of diversification

1. Arboreal descent: Dialects first become linguistically distinct; then internal innovations within each dialect lead to further diversification.

2. Undine descent: Isoglosses cross pre-existing dialect and language boundaries.

1.2 Numic classification

3a The northernmost Uto-Aztecan branch, Numic, has 7+ languages (depending how you count Southern dialects):

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<table>
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<th>Numic</th>
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<td>Western</td>
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<td>1 Mono</td>
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<td>2 Northern Paiute</td>
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<td>Central</td>
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<td>3 Tümbisa Shoshoni (= Panamint)</td>
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<td>4 Shoshoni</td>
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<td>7 Chemehuevi ~ Ute ~ Southern Paiute</td>
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b Geography (Goddard 1996, Fowler & Fowler 1971)

c The Numic languages are obviously very closely related. Their closest relatives within Uto-Aztecan are Tübatulabal and the Takic languages, in southern California.
All the dialects known from [Numic] belong to three well marked groups between which, as yet, but few connecting dialects have been found.’

(Kroeber 1907: 97)

b Kroeber’s Western vs. Central vs. Southern Numic classification was based only on lexical isoglosses.

c Kroeber did not discuss the dialectology of Western Numic.

1.3 Western Numic classification: Mono vs. Northern Paiute

Eastern Mono: ‘Distinctive dialects occurred at: Owens lake and Lone Pine; Fish Springs; Independence; Big Pine; Deep Springs valley; Bishop, Laws, and Round valley. Benton, said by some to resemble Mono Lake, was difficult to Owens valley people. Mono lake speech, which Bridgeport resembled, was more difficult; Walker lake was scarcely intelligible.’

(Steward 1933: 236, emphasis added)

a ‘Kroeber fails ... to recognize the dialectic and geographic distinctness of the [Mono-speaking] tribes of Owens Valley and the Sierra from the Northern Piute (including the Mono Lake band) ....’

(Merriam 1955: 151, emphasis added)

b ‘[T]he territory of the northernmost [Mono-speaking] bands ... is less than forty miles distant from that of the Piute of Mono Lake (a Northern Piute tribe), but a barrier of lofty mountains intervenes and the languages are materially different ... Linguistically, the closest relationship appears to be with Panamint ..., more words being common to [Mono] and these tribes than to [Mono] and Northern Piute, although the preponderance is not great.’

(Merriam 1955: 169, emphasis added)

7 Among the Northern Paiute dialects of Nevada, northeastern California, and Oregon, one finds very slight differences from dialect to dialect; and even dialects as far apart geographically as those of Pyramid Lake and Warm Springs are surprisingly similar to each other. The Bannock of Fort Hall, Idaho, speak a dialect which differs only very slightly from the dialects of the Paiutes of Oregon and northern Nevada. Moving farther south, the differences seem to be greater for a given distance, but there is nevertheless marked similarity all the way to Mono Lake. Between Mono Lake and the northern Owens Valley, however, the situation is quite different. Here we find a very clear boundary, marked by a number of important differences. The degree of mutual intelligibility is so slight that it is best to consider the dialects as belonging to two separate languages. The language boundary may be drawn along the watershed divide between the headwaters of the Owens River and Mono Lake Basin.’

(Lamb 1958b: 96, emphasis added)

8 Our goal is to re-examine the ‘distinctness’ of the two Western Numic languages bearing in mind the models of diversification in 1-2 above:

a Did Mono and Northern Paiute first differentiate, with the latter then diversifying into a set of dialects including the Mono Lake dialect? If so, there would be a reconstructable Proto-Northern Paiute with distinctive innovations.

b Alternatively, within Western Numic, do isoglosses cut across the ‘language’ boundary between Mono and Northern Paiute? (Shaul 1986 describes the sociolinguistic basis for pervasive diffusion of innovations in Great Basin foraging cultures.)

9 Unfortunately, as it happens, the best documented Western Numic dialects are Western Mono and relatively northern dialects of Northern Paiute. Dialects just north and south of the Mono Lake — Owens Valley line are not well documented.
1.4 Western and Central Numic dialects: Select sources

10 Northern Paiute
   a Northern dialects (in general: Liljeblad 1966)
      i Bannock, Idaho: Liljeblad 1950
      ii Burns, Oregon: Nichols 1974, Thorne 2003
   b Southern dialects
      i Walker River, Nevada: Walker River Paiute Tribe 2006
      ii Stillwater, Nevada: Steve et al. 1951-1952
      iii Mono Lake, Bridgeport, and Coleville, California: fieldwork 2005-2006

11 Mono
   a Eastern Mono
      i Big Pine, California: Stone & Lamb 1953-1955; Norris 1986
      ii Independence, California: Sven Liljeblad apud Nichols 1974 (qua ‘northeast Mono’)
   b Western Mono (west of the Sierra crest): Lamb 1958a, Lamb n.d., Bethel et al. 1992


13 a Language-name abbreviations
   CN, SN, WN = Central, Southern, Western Numic
   EMo, WMo = Eastern, Western Mono
   (ML)NP = (Mono Lake) Northern Paiute
   PN = Proto-Numic
   SP = Southern Paiute
   TS, WS = Tümbisa Shoshoni, Western Shoshoni

   b Notation: y = palatal glide [j], i = high central vowel [i]

2 ‘Northern Paiute’ features of Mono Lake Northern Paiute

2.1 Archaisms (not probative for subgrouping)

14 Unique innovations in Mono
   a The object suffix on pronouns is -ka throughout WN. Definite object nouns are marked
      by a proclitic ka in NP, including MLNP, and by a suffix -(n)a in WMo and EMo. Norris
      (1986: 181-185) argues that the Mono pattern is an innovation, and that NP continues
      the pattern of Proto-WN.
   b The associated motion suffix -ka ‘motion away’ in NP, including MLNP, has developed
      a purposive sense in Mono: EMo -kaa ‘go in order to’, WMo -kaa ‘go and X, go in order to,
      be on the point of X-ing’.

15 Mono innovations shared with TS or Shoshoni in general
   a The word for ‘mountain’ is kai-ba in NP, including MLNP, vs. toya-bi in WMo and EMo.
      But kai-ba is inherited from PN (e.g. SP kai-pa) and toya-bi is found throughout CN. We
      consider kai-ba archaic because (1) its Numic dialectological distribution is peripheral,
      (2) it is inherited from Uto-Aztecan, and (3) its absolutive suffix is not productive in SN.
   b The absolutive suffix -ba (NP, WS, etc.) is replaced by -be in Mono and TS, as in ‘face’:
      SP qɔ-va-vi, MLNP ko-ba, Walker River NP i=ggō-be ‘my face’ vs. WMo qo-be, TS ko-pe
c  Development of original *(a > *ai (in some words) in Numic dialects outside NP
   i  ‘bow, gun’: MLNP, NP *adí vs. WMo edi, Shoshoni (huu)eti, etc.
   ii ‘daughter’: MLNP, NP *padí vs. WMo, Shoshoni pedí, etc.
For these cases Nichols 1974 assumes pre-PN **a > PN *ai, but it is simpler to assume
that NP is archaic and the innovation was not strictly ‘Proto-Numic’.

   d Development of *(i > *ai (in some words) in Numic dialects outside NP
      i  ‘many’: MLNP, NP *íwa- vs. WMo *awa-, EMo *awa-, SN awa-
      ii ‘gray, light-colored’: MLNP *ísí- vs. WMo esi-, Shoshoni esi-
For some such cases Nichols 1974 suggests that pre-PN **i > PN *ai, but it is simpler to
assume that NP is archaic and the innovation was not strictly ‘Proto-Numic’.

2.2 Innovations shared with other Numic languages (not probative)
   Sporadic w-loss in ‘horn’: MLNP, NP *aa ( = WS, SN *aa) vs. Mono *awa ( = TS *awa)

2.3 Unique innovations
   Two cases involve originally sound-symbolic k ~ ts alternations.
      a  Proto-WN *aka ‘red’, *atsa ‘tan, brown’, as in Mono: in NP, including MLNP, *aka has
          been lost and atsa is now ‘red’ (Nichols 1974: 260)
      b  Numic *(ma-kihi, *ma-tsihi ‘elbow’ (instrumental prefix *ma- ‘hand’): MLNP, NP *ma-tsihi
          vs. WMn ma-kiibi ~ ma-kiibi, Shoshoni kiipi

   Sporadic intervocalic * loss
      a  ‘willow’: MLNP, NP *síibi vs. EMo *sihiipi, WMo *sihibi, WS *síhípi
      b  ‘boss’: MLNP, Walker River NP *poina-bi vs. WMo *pohena-bi

2.4 Representative unclear cases: NP innovation? Innovation elsewhere?
   Within WN, for ‘hand’, MLNP and other NP dialects have *mai vs. WMo, EMo *maya
   ‘hot’: MLNP, NP *idiṭi vs. WMo *idiʔi
   ‘cold’: MLNP, NP *idzitsi vs. WMo *idziʔi

   Distinctive NP plural forms of suppletive postural verbs
      i  ‘sit’: singular *kati throughout WN, CN
          dual MLNP yak*i-g*adi (suffix -g*adi), NP k*i-wig*i, wig*i, TS kati, yik*i
          plural MLNP, NP *aataʔa vs. WMo yikk*i, EMo, WS yik*i
      ii  ‘lie’: singular *hapi throughout WN, CN
          dual MLNP k*opi-g*adi (suffix -g*adi), NP k*api, TS k*opi
          plural MLNP *pok*a, NP pok*a, wak*api vs. EMo k*abi, WMo q*api, Shoshoni k*api

3 MLNP features shared with Mono

3.1 Archaism
   The Proto-WN voiced fortis stops *bb, *dd, *gg, *gg remain in MLNP and in some EMo
dialects, but have merged with voiceless stops in other NP (and Mono) dialects.
For ‘7’, MLNP has \textit{nataatsik}^\text{\textperiodcentered} (prefix \textit{na}-), agreeing with EMo \textit{taatsimi}, WMo \textit{tatsiw}, Shoshoni \textit{taattsiw}, whereas Burns NP has \textit{natak}^\text{\textperiodcentered} \textit{atsik}^\text{\textperiodcentered} (but again with prefix \textit{na}-).

Absolutive suffix in ‘fat, oil’:
MLNP, WMo \textit{yuhu-bi} vs. Burns NP, Walker River NP \textit{yuhu-pi} (= Shoshoni \textit{yuhu-ppi})

### 3.2 Innovations

#### 25 Unique innovations: reduplicated plural of ‘man’ in EMo and MLNP

#### 26 Innovations shared with Shoshoni (dialects)

a MLNP, Mono, and (Western) Shoshoni have lost reduplication as a productive marker of pluactionality; it remains in other NP dialects (Houser 2007).

b Development of *\textit{i} > \textit{ai} \sim \textit{e}

   i ‘three’: MLNP \textit{pahi} \sim \textit{pahai} \sim \textit{pahe}, EMo \textit{pahi} \sim \textit{pahe}, Shoshoni \textit{pahai} \sim \textit{pahe} vs. \textit{pahi} in other NP dialects and WMo

   ii ‘tongue’: MLNP \textit{ego}, WMo \textit{ego}, Shoshoni \textit{ego}, etc. vs. NP \textit{igo}

Cf. the words in 15d above, where, in contrast, MLNP retains \textit{i} in agreement with other NP dialects.

c Numic *\textit{n} > \textit{n} as in *\textit{sono} ‘lungs’ > MLNP \textit{sono}, Mono \textit{sono} vs. Burns NP \textit{sono}

d ‘Ponderosa pine’ has two attested forms. Dialectology suggests that the second form is the spreading innovation and the first is the peripheral archaism:

   i *\textit{wogo}-: northern NP \textit{wogo}-, SN (e.g. Kawaiisu \textit{wogo})

   ii *\textit{wongo}-: southern NP \textit{wogo}-(MLNP, Walker River NP), WMo \textit{wogo}-, CN (e.g. WS \textit{wongo})

### 4 Conclusions

#### 4.1 Numic diversification

a As generally assumed, Numic differentiated into three branches (WN, CN, SN) which have radiated out from eastern California, in the southwest of current Numic territory.

b Within WN, much of the secondary differentiation into Mono vs. NP — contributing to the arboreal effect — is due to laterally spreading innovations:

   i innovations spreading into NP from northern Shoshoni dialects; and

   ii innovations spreading into Mono from TS and southern Shoshoni dialects.

#### 28 ‘In Western Numic, [isoglosses] tend to run east and west ... [I]n Central Numic they tend to run northwest and southeast ....’

(Miller 1986: 99)

b The isogloss patterns in 27a are rooted in Great Basin geography, and correlate with the diffusional patterns suggested in 26b.

#### 4.2 Dialectology and language diversification in America

Structuralist practice considered each American ‘language’ in need of only one round of documentation, but in fact we need to learn a lot more about the dialects of most of the native languages of North America.
Arboreal models of linguistic descent emphasize dialect diversification from a common prototype, but diffusional patterns can also create the appearance of ‘nodes’ in a tree. (Cf. Garrett 2006 on the formation of Indo-European subgroups as the partial result of convergence between adjacent dialects in a continuum.)

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UC = University of California
UCPAAE = University of California Publications on American Archaeology and Ethnology

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