THE POSITION OF YANA IN THE HOKAN STOCK

By

E. SAPIR

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INTRODUCTION

Of the Hokan languages, Yana would seem to be one of the most, if not the most, specialized, particularly in grammatical respects. Thus, unlike other Hokan languages, it is completely lacking in prefixes. Moreover, it seems to possess a far more elaborate apparatus of derivative suffixes than any of the others. At present published information on the morphology of most of the Hokan languages is too scanty to make a comparative study of Yana morphology very profitable. On the other hand, there is already enough lexical material accessible to justify a comparative review of the lexical evidence for the inclusion of Yana in the Hokan stock. The Hokan languages, or groups of languages, recognized in this paper are Shasta-Achomawi, Chimariko, Karok, Yana, Pomo, Esselen, Yuman, Salinan, Chumash, Seri, and Chontal. Salinan and Chumash are at present of more doubtful inclusion than the others. I hope, however, to have helped
to dispel this doubt by data presented in the course of the following pages.

The following table shows the source of the material used in the present study.

**TABULATION SHOWING THE PROVENIENCE OF THE MATERIAL USED IN THE FOLLOWING PAGES**

The order of groups is geographical from north to south. Karok, Shasta, Achomawi, Atsugewi, Mohave, and Diegueño forms marked (K) are from manuscript material made accessible by Dr. Kroeber. Achomawi forms marked (S) are from a vocabulary obtained by the writer in 1907. Karok, Shasta, and Achomawi forms marked (G) are from manuscript loaned by Mr. E. W. Gifford. Salinan forms marked (M) are from Dr. J. A. Mason’s manuscript notes.

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The phonetic orthographies of the various authorities cited have been left unchanged, and are explained in the original sources. Stress-

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1 See bibliography.

2 The Yahi subdialect is meant. The material was obtained from Ishi.
accents, however, have been omitted. The system used for Yana in this paper is identical with that employed in my Yana Texts, except that the glottal catch is rendered by an apostrophe ('). In all but a few cases duly noted, the Yana forms quoted are in the Central dialect.

RADICAL ELEMENTS

1. Yana 'ta- "woman goes"
   Chim. -a- "to go"
2. Yana adai-ri, adai-, -dai, da "that"
   Kar. ta adverbial participle preposed to verb forms, defined as indicating 'probably indefinite or imperfect time' (e.g., ta-ni-ho "I have come," literally perhaps "at that [time]-I-come")
C. Pomo tê-ya "those people" (-ya is personal plural; e.g., E. Pomo hîba-ya 'persons,' cela-ya 'young men')
Sal. t-, t'- article agglutinated as prefix to many nouns (e.g., t'-ulet 'teeth,' cf. t'm-ulet 'thy teeth'; t'a-m-lamxat 'thy food,' cf. lamxat 'food')
Chum. t- article agglutinated as prefix to certain nouns (e.g., S. L. O. t-aza "bow," cf. S. Yn., S. Bar., San Buen. az; S. L. O. t-awa "moon," cf. S. Yn., S. Bar. awai); S. Bar. i-te 'this,' S. Cruz t'yu 'this'
Seri i-tam 'he, that' (cf. Chum. i-te above)
3. Yana -'alâ-, with diminutive consonantism -'ana- "child," occurring only in compounds: wa-'alâ-mari'-'i 'girl' (literally "sit-child-woman"); cf. wa- 'to sit' [sing. subj.], mari'-'i 'woman'); wa-'ana-'i 'boy' (literally "sit-child-man"); yai-'alâ-p'udiwi 'girl' (literally "sit-child-women"); cf. yai- 'sit' [plur. subj.], p'udiwi 'women' syncopated to -p'idiwi
N. E. Pomo ula- "child," occurring in compounds: ula-bike 'boy' (literally "child-man"); cf. bike 'man'); ula-dake 'girl' (literally "child-woman"); cf. dake 'woman')
3a. S. Yana 'at'djuwi "mother's mother, woman's daughter's child" (for -wi cf. am'awvi, no. 4; 'awvi 'father's father, man's son's child')
Shas. (G) atei-di "mother's mother, woman's daughter's child" (perhaps related to ateu 'older sister'); for -di cf. ani-di 'stepmother' as compared with ani 'mother'); Ach. (G) ateu-n 'mother's mother, woman's daughter's child'
4. S. Yana am'awv 'father's mother, woman's son's child'
Shas. (G) amâ 'father's mother, woman's son's child'; Ach. (G) am'un 'father's mother, woman's son's child'
Chim. kimo-la-(i) '"my grandson' (also 'nephew, niece'; -lla- is diminutive)
Pomo ma "paternal grandfather": N. Pomo am-ia; C. Pomo ma-tse; E. Pomo ma-tsaa; S. Pomo o-ma-isen; S. W. Pomo ama-n (reduplicated); S. E. Pomo im-ma; N. E. Pomo ma-tse-dai "paternal grandfather," ma-tei-dai "paternal grandmother"
Chum. (ma-k-)ama '"my grandchild'; (ma-k-)mama '"my paternal grandparent"
Sal. (M) ama '"paternal grandparent'; t-emak '"grandchild"
5. Yana 'ambi- ‘‘who?’’
Chim. awi-lla ‘‘who’’
E. Pomo am ‘‘who? what?’’

6. Yana 'ap'sa ‘‘sky’’
Ess. imita ‘‘sky’’
Sal. l-ém ‘‘sky’’
Chum. al-apa ‘‘sky’’ (S. Yn., S. Bar.); hal-acepai (S. Buen.)
Moh. ammaya ‘‘sky’’; Dieg. ammai
Chon. emaa ‘‘sky’’
Seri ami-me ‘‘sky’’

7. Yana 'au-na ‘‘fire’’ (-na is absolute noun suffix)
Shas. dwa ‘‘wood’’ (perhaps originally ‘‘fire-wood’’; ‘‘fire’’ and ‘‘fire-wood’’ are often indicated in American languages by a single term or by closely related words, e.g., Takelma p'í ‘‘fire, firewood’’; New River Shasta (ga-)'au ‘‘wood’’ (for prefixed ga- cf. ga-'ats ‘‘water’’ and gè-'íc ‘‘man’’); Ats. ahawi ‘‘wood’’
Chim. hau-na ‘‘tinder’’ (literally probably ‘‘fire-wood’’; -na is suffixed to nouns referring to plants)
Ess. a-nix ‘‘fire’’ (for noun suffix -nex, -nix cf. masia-nex ‘‘heart,’’ katus-nex ‘‘mouth’’)
Sal. (M.) t-a'au ‘‘fire’’
Moh. a'awa ‘‘fire’’; Yuma ow; Kiliwi a-au

8. Yana ba- primary verb stem in certain verbs of ‘‘calling’’ (e.g., ba-ts'ie di-'a- ‘‘to shout’’; ba-wau- ‘‘to call on people to come’’; ba-bil-mits'i- ‘‘to call people together from all over’’; ba-djiba- ‘‘to call by messenger at every place’’)
Chim. -pa-, -patci- ‘‘to say’’
E. Pomo ba- in verbs of ‘‘telling’’ (e.g., ba-tsan ‘‘to preach’’; ba-yi ‘‘to teach’’; ba-t'a ‘‘to tell’’; ba-qo ‘‘to tell’’)

9. Yana badjal- ‘‘to be big’’
C., S. Pomo bat'e ‘‘large’’; S. W. Pomo ba'te; E. Pomo baten; S. E. Pomo batenek

10. Yana bādjai-'i ‘‘manzanita bush’’ (-'i ‘‘tree,’’ see no. 59); bādjai-na ‘‘manzanita berry’’
Ach. (S) badjicu 'la ‘‘manzanita’’; ba'dja ‘‘black manzanita’’
Sal. (M) pat'ax, pat'ak ‘‘manzanita’’

11. Yana bai- ‘‘one’’
Ess. pek ‘‘one’’
Chumash (S. Yn., S. Bar.) paka ‘‘one’’; (S. Buen.) paket

12. Yana bāma ‘‘sinew’’
Shas. imme (K) ‘‘sinew’’ (probably assimilated from *ipme); Ach. (K) pipm; Ats. (K) ippiu (probably assimilated from *ipmi-u)

13. Yana ba'nī- ‘‘to be full’’
E. Pomo madi ‘‘to fill tight, jam’’; minam ‘‘to be full, fill’’
Sal. (M, quoting Sitjar) ape'syn(e) ‘‘to be full’’

14. Yana basi ‘‘meat’’ (cf. ba- ‘‘deer’’)
N., E., S. W. Pomo bice ‘‘meat’’; C. Pomo pice; S. Pomo bece; S. E. Pomo bexe; N. E. Pomo bece. These Pomo forms also mean ‘‘deer’’
Sal. (M) p'ac ‘‘elk’’

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2a According to Dr. Mason, however, there is ‘‘no evidence whatsoever that lem ‘above, sky’ can be analyzed into l-em.’’
15. Yana bat'-p'al- "to be flat"
   N. Pomo badū "flat"
16. Yana bawā'la "tongue" (possibly from *babā'la, cf. -wal- as incorporated
   postvocalic form of bal- "mouth"); bal-la "mouth" (assimilated from
   *bal-na)
   Kar. (K) apri "tongue"
   Shas. ehena "tongue" (from *epena); Ach. (S) ip'ti
   Chim. h-ipen "tongue"
   N. Pomo ba, haba "tongue"); C. Pomo haab; E., S. E. Pomo bal; S. Pomo
   ḫbaa; S. W. Pomo ḫaba; N. E. Pomo ḫāba
   Sal. (M) ipat, epat "tongue"
   Chim. (S. Yn., S. Bar., S. Buen.) eleu "tongue"
   Moh. ipalya "tongue"
   Seri ipu "tongue"
   Chon. ipat "tongue"
17. Yana ban-di- "(coal) falls, round hard object bounds" (-di- probably identi-
   cal with local verb suffix -di-, -ri- "down")
   Chim. -man- "to fall"
   E. Pomo ban "to throw a round object, put"
18. Yana bē- "it is so and so which, who"; probably demonstrative in origin
   ("that") of reference), as indicated by its non-employment of verbal
   -si- suffix in present time (contrast dēwai-si-nđja "I see" with bē-ndja
   "it is I who," with which such verbalized nouns as k'wui-nđja "I am
   medicine-man" agree in form); bē-ndja, e.g., must originally have
   meant "that-I (am"); there are only three or four verb stems (of
   "being") in Yana whose present tense lacks -si; this peculiarity of
   form is probably to be explained as due to their being verbalized demon-
   strative pronouns (cf. na- and *u-, nos. 94 and 132)
   Kar. pa demonstrative pronoun indicating reference; compounded in pa-ipa
   "this" and pa-ik'u "that"
   Chim. pā-mut, pā-ut "that"
   E. Pomo ba general demonstrative pronoun "that, the"; compounded in
   u-ba, me-ba "that"; its similarity in usage to Yana bē- is indicated by
   such constructions as mēp ba hikiba "he (is) the-one-who it did"
   Sal. (San Antonio) pe "that"
19. Yana bē'na- "to eat (mush) with hands"
   E. Pomo būi "to suck, eat mush"
20. Yana bui- "to kick"; bu-ri- "man dances" (-ri- "down"); bu-ri- literally
   "to foot down"); Yana bui- is probably verbalized from old noun stem
   *bu- "foot" (cf. Yana bai- "to hunt deer" from ba- "deer"; Chim. -pen-
   "to lick" as denominative verb from -pen- "tongue")
   Chim. h-upo "foot"
21. Yana bū-na "black bear"
   Ats. (K) piriki "grizzly"
   N. Pomo bīta "bear"; S., S. W. Pomo būta-ka; C. Pomo pta-ka; E. Pomo
   būra-ka; S. E. Pomo bete-kal
22. Yana dā- "to jump; to fly"
   Chim. -tu- "to fly"; -t庑- "to jump"
23. Yana dal-la "hand" (assimilated from *dal-na), diminutive dan-
   Ach. (S) il'ī "hand" (perhaps assimilated from *itii, syncopated from
   *itili; cf. ip'ti "tongue" from older *ipali, no. 16)
Chim. -teni "hand" (e.g., xuli-teni "left hand"); h-itcan-ka "fingers"; h-itan-pu "arm" (for pu cf. Chum. pu "arm, hand"); tranèhé "five"; h-itra, h-ita "hand, finger"
N., C. S. Pomo tana "hand"; S. E. Pomo a'tan
Serì inoì "hand"
(Yuman *sal, e.g. Moh. isalya and Wal. sal, is probably not related; cf. Pomo ical "arm")

24. Yana dat'- "to be much, many"
Chim. èta, hitat "many"; -tan "lot of" (noun suffix)

25. Yana dè- "to cut off hair, peel bark"
Chim. -tra- "to tear"
E. Pomo dak "to split"

26. Yana dè- primary verb stem in certain verbs of "seeing" and "knowing" (e.g., dè-wai- "to see"; dè-djiba- "to know")
Chim. -trahu- "to know"

27. N. Yana det- (probably from den-) "to mash (choke-berries), shell (corn)"
C. Pomo itel "to peel"

28. Yana d6- primary verb stem in certain verbs of "removing" (e.g., d6-l'isi-sa- "to take covering down from head"; d6-gal'di- "to peel off skin"); passive form of stem, da- (e.g., da-k!au- "to be cut")
E. Pomo dop "to cut off"

29. N. Yana d6nit- "to whip, beat"
E. Pomo duli, dut "to kill" (singular object); doc "to strike"

30. Yana dja- primary verb stem in certain verbs of "eating" (e.g., dja-dut- "to eat much"; dja-nau- "to eat plenty"; dja-wit'dja- "to eat fast"; dja-lili-p'a- "food slips down in eating")
Chim. -tcatci- "to chew"
E. Pomo tsa "to chew"

31. Yana dja- primary verb stem in certain verbs of "proceeding, moving" (e.g., dja-sa- "string goes out"; dja-'an- "to arrive at"; dja-k!uyû- "to move in single file"; dja-ri- "woman dances"; dja-djil- "to dance in circle"; dja-ru- "to come down from sky")
N. Pomo tea "to run"; C. Pomo teak

32. Yana djau-na "grasshopper"
Chim. tsatu-r, tsa-tl "grasshopper" (for Yana au from aru, a'du, cf. Yana mau, no. 80)

33. Yana djawatsi "chin"
Shas. tsawak "jaw"; Ach. tsoiwas
Chim. tsina "chin"

34. Yana djiman- "five"
Chim. -tcibum, -(t)cpom "five" in higher numerals (e.g., p'un-tcibum, p'un-tcpom "six," literally "one plus five"); qâqi-cpom "seven," literally "two plus five")

35. Yana djî-na "louse"
Shas. (K) tcituk "louse"; Ats. (K) atci
Chim. tsina "wood-tick"
N., C. Pomo teči "louse"; S. Pomo atci; S. W. Pomo a'tci; E. Pomo gi
Chum. cIK "louse"

36. Yana dju- primary verb stem in certain verbs of "sitting, dwelling" (e.g., dju-k'unsâ- "to sit, dwell"; S. Yana dju-k'ola-ri- "to sit")
Chim. -tce- "to lie on ground, sleep"
37. Yana djū- "to spear salmon"
   S. Pomo aca-tsu "fish-spear" (aca "fish"); N. Pomo tcō-k "to shoot";
   C. Pomo djo-k; S. Pomo i'teō-k; S. W. Pomo djo
38. Yana djū-ri- "tree, stick stands" (-ri- "down")
   S. Pomo djōteōn "to stand"
39. Yana djū-ri- "to snow" (-ri- "down"); djaZ- possibly from *hyiū-
   N., C. Pomo yū "snow"; S. E. Pomo yū-l; S. W. Pomo t'yū; N. E. Pomo
   hāyū; E. Pomo hā-l; S. Pomo ūhū
40. Yana djūkut "heart"; E. Pomo ts'ūkūt; S. E. Pomo ts'ūkūt; N. E.
   Pomo ūkūn
41. Yana djut-a-wi "bird" (-wi is collective)
   N., S. Pomo ts'ūta "bird"; S. W. Pomo t'sūta; N. E. Pomo
   tcē-tka; E. Pomo ts'ūya
42. Yana djūwā "jackrabbit" (from *djuwa; for postvocalic w from x, cf.
   Yana -wu-lu "in," no. 176, in comparison with Chim. -xun and Kar. -fur-
   Ess. xčči "rabbit" (for c, s from Hokan x, cf. asa-nax "water," no. 55;
   for i from older u, cf. hocí-s "nose" from *hozu-, in comparison with
   Chim. -oxu, Dieg. *exu)
43. Yana e'- "to shell acorns"
   Chim. thi-ci "shelled acorns"
44. Yana e-ga- "to shell acorns"
   Chim. thi-ci "to sing"
45. Yana e-per verb stem in certain verbs of "singing" and other forms
   of vocal utterance apart from normal speech (e.g., e-lau- "to sing";
   e-tsa!za "to whisper"); e- 'nai- "to sing another song"); Yana e- perhaps from *ehe- from Hokan *ehe- (cf. dju-hau- contracted to djū-
   Ach. es (K) "to sing"; Ats. (K) etca; Shas. (K) etc-ni; Okwanuchu Shasta
   (K) ist-duk (for Shasta-Achomawi s, c, tc, ts from x, cf. nos. 53, 55, 56)
   N. Pomo ke-ben "to sing"; C. Pomo ke-tcano; E. Pomo zai-nem; S. E. Pomo
   xččūhè; S. Pomo ih-min. These forms point to Hokan *(e)xe-
   Chim. ga-d, -ko- "to talk"
46. Yana ga- primary verb stem in certain verbs of "singing" and other forms
   of vocal utterance apart from normal speech (e.g., ga-ya- "to talk";
   ga-ri- "to talk N. Yana"; ga-t'e&- "to talk S. Yana"; ga-witceui- "to
   tell a lie"; gā-te\-lan- "to make a speech")
   Chim. gā-, -kō- "to talk"; E. Pomo ga-nuk "to speak"
47. Yana gādu "leg"
   Shas. (K) xatia "leg"
48. Yana gāgi "crow"
   N., C., E., S., S. W. Pomo kaai "crow"
   Sal. (M) cāk! "crow"
   Moh. aqā "raven"; Dieg. axāq
48a. S. Yana gal-si "father"); C. Yana tōt'i-gal-la "father,
   " vocative gai-si-nā
   Kar. (G) ākă "father"
49. Yana galu "arm"
   E. Pomo gadget "local verb prefix 'on the shoulder'"); for E. Pomo d from
   original l, cf. da "sun" from la
50. Yana gameu "clover"
   Chim. kāteu "clover"
   N. Pomo kabō "clover"
51. Yana gō- ‘‘to hear’’
Chim. -kē- ‘‘to hear’’
52. Yana ha't-dai-x, xa't-dai- ‘‘to dream’’
E. Pomo xadum ‘‘to dream’’
53. Yana haga, xaga ‘‘flint, arrowpoint’’
Kar. (K) cak ‘‘arrowpoint’’ (from Hokan *za; Hakan x becomes Kar. s, c, cf. no. 55)
Ach. sat ‘‘arrowpoint’’ (from *zak; for -k developing to -t, cf. also nos. 76, 127)
Chim. gōka ‘‘arrowpoint’’ (for Chim. q corresponding to Hokan x, cf. nos. 55, 133)
E. Pomo zaga ‘‘knife,’’ xag’a-xabe ‘‘flint-rock, obsidian,’’ masan-xag’a ‘‘metal’’ (literally ‘‘terrible knife or flint’’)
Sal. (M) (i)cak, (i)cēk ‘‘knife’’; asak'la ‘‘flint’’
54. Yana ha'la-i-xa'la-‘‘to be early morning, dawn’’; xalai’a ‘‘morning star’’
Moh. haly'a ‘‘moon’’; Dieg. xal-yă
Sal. (M) ecxai, icxai ‘‘dawn, morning’’
55. Yana ha-na, xa-na ‘‘water’’
Kar. ac, ic ‘‘water’’ (from Hokan *a'za); ca- in ca-ruk ‘‘towards river’’
(literally ‘‘water-toward’’; from Hokan (a)za-, cf. Pomo wi ‘‘eye’’ but compounded we, no. 128; parallel to ca-ruk is ma-ruk ‘‘away from river,’’ originally ‘‘land-toward,’’ cf. Chim. ama ‘‘earth’’)
Shas. atsea ‘‘water’’; New River Shasta ga'ats; Ach. (S) ac; Ats. atssi
Chim. aqa (for Chim. q as equivalent to Hakan x, cf. nos. 53, 133), a'ka;
-h-uso-za ‘‘tears’’ (literally ‘‘eye-water’’)
N., E., S. E. Pomo xa ‘‘water’’; C., N. E. Pomo ka; S., S. W. Pomo aka
Ess. asa-nax ‘‘water’’
Sal. (M) xoa ‘‘water’’ (analysis into t-ca’, according to Dr. Mason, is probable, but bare stem -ca’ is not found)
Moh. aha ‘‘water’’
Seri ax ‘‘water’’
Chon. aha ‘‘water’’
56. Yana hāts'it', xāts'it’ ‘‘to feel cold’’
Ach. (S) acte-la-siwi ‘‘it is cold’’ (from Hokan *azatc'la; for x developing to c, s, cf. nos. 53, 55; for elision of second vowel of trisyllabic base see section VII)
Chim. zatsa ‘‘cold’’
E. Pomo katsi ‘‘cold’’ (i.e., k'ats'il from *zats'il; for Pomo k' from Hakan and older Pomo x cf. nos. 45, 55)
Moh. hatchu-urk ‘‘cold’’ (i.e., hatchuq); Dieg. h'tchor; Mar. h'tchurk (i.e., xtocq); Yuma hutsile, atchura; Kiliwi ahhtchak (i.e., atxacak)
57. Yana t'dal-la ‘‘bone’’ (assimilated from *t'dal-na)
Shas. ak (K) ‘‘bone’’ (perhaps from *hyak or *hay[a]k)
N., C., S. E. Pomo ya ‘‘bone’’; E., N. E. Pomo hiya; S. W. Pomo iyă ‘‘bone,’’ iyha ‘‘awl’’; S. Pomo thā ‘‘bone’’
Ess. iyā ‘‘bone’’

29 If Sal. cak (t'-cak ‘‘knife,’’ t'-cakē ‘‘knives,’’ t'-me-cak ‘‘thy knife’’) belongs here, it would indicate that Hakan x has become assimilated in Salinan as in Karok, Shasta-Achomawi, and Esselen; cf. also t'ā, tca ‘‘water, ocean,’’ perhaps compounded of article t- and *ca from Hakan *za ‘‘water.’’ This, however, is contradicted by Sal. *zap ‘‘stone’’: Pomo xabe.
Sal. ejac (Sitjar) "bone" (i.e., ezak; from Hokan *ihyaka); (M) p-azak, azak
Chum. (S. Yn., S. Bar.) se ' "bone" from *hya?"
Moh. isaka "bone"; Dieg. (K) hak (from Hokan *ihyaka); Wal. tiaga
(i.e., tyaga from *hyaka)
Seri itak "bone"

58. Yana ima- "liver"
Shas. äpci "liver"; Ats. ópsi
Moh. t'ipasa "liver"; Dieg. to-ipzsi

59. Yana 'i-na "wood, tree"
M. p-axck, axak Chum. (S. Yn., S. Bar.) se' "bone" from *hya'?
Moh. isaka "bone"; Dieg. (K) hak (from Hokan *ihyaka); Wal. tiaga
(i.e., tyaga from *hyaka)

60. Yana 'isi "man, male, husband"
Shas. ic "man"; New River Shasta gé-ic
Chim. itci, itri "man"
S. Pomo atcai "man"; N. Pomo toa "person"; C. Pomo teate; S. W. Pomo atce
Chum. -isuyix "husband"
Chon. acana "person"

61. Yana 'itca!-in-na "wildcat"
Chim. tagni-r, trcagni-l "wildcat"
Sal. (M) èts! "pinacate"

62. Yana 'iya "trail"
Ach. (S) it deu "trail"
Chim. hisa "trail" (for Chim. s: Yana y, cf. Yana -ya "female," no. 184;
see also 139)
C., S. W. Pomo da "trail"; N., C. Pomo da "door"; S. Pomo hida "door"
Tonto inya "trail"

63. Yana k'tis!au-na "teeth" (k'ti- probably prefixed element; cf. verb suffix
-ts!au- "to grasp as with teeth or claws")
Ach. (S) its!a "teeth"; Shas. ètsau; New River Shasta k-i'tsau; Ats. i'tsau
Chim. h-utsu "teeth"
Chum. sa' "tooth"

64. Yana k'tu- "not"
Chim. x- negative verbal prefix; xu- "not" (e.g., xu-itecual "not long")
E. Pomo k'tyi "no"
Sal. (M) ku-, ko- negative prefix

65. Yana k'tul- primary verb stem in certain verbs denoting unpleasant states
of mind (e.g., k'tul-dja- "to feel bad, lazy"; k'tul-mits!i- "to feel sorry,
grieved")
E. Pomo k'tul "to fear"

66. Yana k'lo- "to be bitter, strong in taste"
Chim. goiyo-in "sour" (goi- probably to be read as k!oi-, cf. Dixon's Yana
orthography qaina "rock" for k!aina)

67. Yana k'la!-na "stone, rock"
Chim. qd'a, kaa "stone (if to be read k!d'a; if pointing to Hokan *xa-, it
cannot be connected with Yana k'la!- but belongs with Kar. aca "rock";
Shas. tsa; Pomo zabe; Ess. ciefe; Chim. xop; Sal. c-zap, te-xa)

* This and following forms seem to point to some such Hokan prototype as
*(i)tya.
68. Yana k’u- ‘‘to be long’’ (not freely used as verb stem, but implied in klu-rul-la ‘‘long-neck, crane’’ and klu-wil-la ‘‘long-belly, lizard’’)
N., C. Pomo kól ‘‘long’’; S. Pomo a’kôn; S. W. Pomo a’köï; N. E. Pomo kol
Sal. (M) k’o’oka ‘‘long, high, tall’’
Tonto ikule ‘‘long’’
69. Yana k’u-na ‘‘yellowjacket’’
Chim. zówu ‘‘yellowjacket’’
70. Yana k’u-ni, k’u-nu- ‘‘and’’
Kar. karo ‘‘and,’’ kare-xac ‘‘and then’’
71. Yana k’uwi ‘‘shaman’’
S. W. Pomo köö ‘‘doctor’’; S. E. Pomo ëzöwi
72. Yana lâlagi ‘‘goose’’
Chim. lâlo ‘‘goose’’
S. W. Pomo lala ‘‘wild goose’’
73. Yana mala ‘‘acorn’’ (only in certain compounds, e.g., bâsi-mâla acorn of bâsî ‘‘black oak’’; souya-mâla ‘‘acorn of white oak’’)
N., N. E. Pomo maa ‘‘acorn’’
Chim. mâni ‘‘acorn of black oak’’
74. Yana märi-pá- ‘‘fire is covered up with ashes’’ (märi- from madi-); causa-
tive märi-a- ‘‘to cover up fire with ashes’’
Chim. h-märi-pxa ‘‘ashes,’’ matre-pa ‘‘dust’’; matci-tsól ‘‘dust’’
N. E. Pomo mala ‘‘ashes’’
75. Yana märi-mi ‘‘woman’’ (from madi-mi)
N., C. Pomo mata ‘‘woman’’; S. W. Pomo ëmata
76. Yana mäsî ‘‘coyote’’
Ats. makita ‘‘coyote’’
77. Yana märi-p’a- ‘‘fire is covered up with ashes’’ (märi- from mädi-); causa-
tive märi-a- ‘‘to cover up fire with ashes’’
Chim. matri-pxa ‘‘ashes,’’ matre-pa ‘‘dust’’; matci-tsól ‘‘dust’’
N. E. Pomo mala ‘‘ashes’’
78. Yana märi-p’a- ‘‘woman’’ (from madi-mi)
N., C. Pomo mata ‘‘woman’’; S. W. Pomo ëmata
79. Yana märi-p’a- ‘‘to be summer’’; mat-dasi ‘‘spring salmon’’ (quoted
from J. Curtin, Creation Myths of Primitive America); märi-dja- ‘‘to get
new acorns’’
Chim. hömåt ‘‘ripe’’; xo-manat ‘‘unripe’’ (xo- ‘‘not’’)
80. Yana märi-p’a- ‘‘to tell’’; märi-p’a-yauna ‘‘myth’’
E. Pomo märi ‘‘to tell traditions’’
81. Yana märi-p’a- ‘‘coyote’’
Ats. makita ‘‘coyote’’
Chim. maidjande-ra, maidjande-la "coyote"
Ess. matcka-s "coyote"

82. Yana mi- "to cry, wail"
N. Pomo mina "to cry"; C. Pomo mìn-wan; S. Pomo mi-mai
Tonto mi "to cry, scream, sigh"; Moh. himin "to cry, lament"

83. Yana minin- "to look"; mi- (passive), m̀- (active) primary verb stem in certain verbs of "appearing, looking" (e.g., m̀-rap-cuì-di'-a- "face is all red"; m̀-wìlk!ùdi'-a- "to be cross-eyed"; m̀-kùl- "to look slant-wise at")
Ach. -nima- "to see"; Ats. -ima-
Chim. -mam- "to see"
E. Pomo ma-bi, ma-yap "to face, look"

84. Yana midja- "to be heavy"
Chim. tcu-midan "heavy (I)" (tcu- may be interpreted as prefix tcu- used to refer to round objects)

85. Yana min-, S. Yana men- "to twirl, drill (for fire), roll"
Chim. men-drahe "disk beads" (beads obtained by drilling bones?)

86. Yana mo-, passive maid- "to eat"
Kar. av "to eat" (from am)
Ach. -am- "to eat"; Ats. -amm-
Chim. -ma-, -ama- "to eat"
N. Pomo maamaa "to eat"; N. E. Pomo maa-riba, mam-ti
Ess. am "to eat"
Chum. (S. Buen.) umu "to eat"
Sal. (M) amo "to eat"; (Sitjar) amma "to eat (as gruel), to suck"
Moh. mam "to eat"; Tonto ma; Coc. aîma

87. Yana mo-, passive m̀- "to reach out, hand to, hold"
Chim. -imu- "to hold"
E. Pomo ma "to hold" (singular subject)

88. Yana mo', passive ma- "to take along, fetch"
Ach. -mu- "to carry" (perhaps belongs rather to no. 87)
Chim. -mai- "to carry"
Sal. (M) m̀a, ma'a "to bring, carry"

89. Yana m̀-ma- "to work"; simpler stem m̀- seen, e.g., in m̀-yasi-p/a "to feel ill from working"
Chim. -mu- "to fix"
E. Pomo mumu "to try"

90. Yana mugala-'i "log" (for -'i see no. 59)
S. Pomo mokòc "stump"

91. Yana muk'lùl- "round hole, pit" (k'lùl- may be related to S. Yana -k'ola- of dju-k'ola-ri- "to sit")
Pomo m̀a, mo "hole"
Ess. imu-sa "hole"

92. Yana muru- (from m̀udul-) "to lie, be in a lying position"
N. Pomo mìtì "to lie"; C. Pomo m̀tì; S. W. Pomo mìtì-; S. E. Pomo mat-mìtì-; N. E. Pomo tca-mtà; E. Pomo xana-méra-gì (Kroeber gives mer)

93. Yana mùdî, S. Yana musâtì "paternal aunt"
Kar. (G) mìtdî-its "father's sister" (-its is probably diminutive), mítca-vàcì "father's sister after death of father"
Ach. (G) hamut "father's sister"
Chim. mā-ta-la-(i) "(my) maternal aunt" (-la- is diminutive)
S. W. Pomo mā-ta-en "paternal aunt"; S. Pomo a-mā-ta-en; C. Pomo māmā-ta-en; N. Pomo māmā-ak
Chum. -mus "father-in-law, mother-in-law" (this term may originally have meant "father's brother or sister," cf. Yana and Pomo; if so, cross-cousin marriage is probably implied)
94. Yana na- "that it is, inasmuch as it is" (e.g., na malla-p!a' "[I wonder what is going to happen], for [my sleep] is bad"); na-gu- "therefore one does, is so and so" (-gu- "just, merely, a little"); na-k'w- "therefore not" (k'w- independent verb stem "to be not"); Like bē- (see no. 18), these verbs are used without -si- suffix in their present tense (e.g., nagu-naja "therefore I do, am so and so"); this makes it probable that na is originally demonstrative in force (na-gu-naja originally perhaps "this-just-I"), which is confirmed by its composition with independent stem k't- "to be not"
Sal. na "this"
Chum. -na in kid-na "this" (animate); "this" indefinitely is kid
95. Yana ni- "to go" (one male subject)
E. Pomo negi, nek "to go to"
Ess. neni "to go, walk"
Sal. (M) naax "to come" (Sitjar), enoxo "to come," ko-nox "to arrive"; these forms belong perhaps rather with C. Yana ner-, S. Yana nex- "to step"
96. Yana nīna "mother"; simpler stem -n- (from *-ni- or *-na-) is implied in S. Yana ga-n-na "mother" (vocative ga-n-nd found also in northern dialects; -na is absolute noun suffix)
Shas. (G) ani "mother"; Ach. (G) m-ani "thy mother"
E. Pomo nīna "mother"
97. Yana ap'če- "to dig for (anni) roots" (če is active vocalism of a or d)
Chim. ā-tce- "root"
98. Yana p'adj'a "snow"; pťa- "snow lies on ground"
Chim. pa-nna "snowshoes"\
Moh. tupaqa "snow"; Tonto paka
99. Yana p'al- "back" (e.g., da-p'al-sa- "to be black"); p'al-wite'u "black salt, mud salt"
Seri ko-polt, ko-polch, ko-pez't, ji-ko-pohl "black" (i.e., -pot; ko- is prefixed to several adjectives of color)
100. Yana p'ats'í "excrement"; p'ats'idjua "intestines"
Shas. ipzai "intestines" (pz from p')
Chim. h-ipza "intestines" (pz from p')
N., C., E. Pomo pa "excrement"; S. Pomo apa "excrement," i'pa "intestines"; S. W. Pomo apa "excrement"; S. E. Pomo f'a "excrement, intestines"; N. E. Pomo f'a "intestines"; Pomo f, like Shas. and Chim. p, point to strongly aspirated Hikan p' (cf. Yana form just quoted)
Sal. (M) p'zat "excrement, intestines"
101. Yana p'ę- "to lie, be in a lying position"
E. Pomo pid "to lie" (plur.)

4 Sapir, 1910, p. 116, l. 3.
5 If analyzed as pa- "snow" plus -nna "footwear" (?). pa- may, however, be related to pa, ipa "moccasin." "Snow" is ordinarily hipū, hipue in Chimariko, doubtless cognate with Chim. (S. buen.) poi "snow."
102. Yana p't- ‘‘several move, go’’ (corresponding singular is ‘‘t-’’)
   E. Pomo pil ‘‘to walk’’ (plur., pilii ‘‘to go’’ (plur.). That pil is to be
   understood as p'il (cf. Yana form above) is indicated by Kroeber’s
   remark* that cō-pil-ele ‘‘east (they) went’’ was heard in text as
   cōp-il-ele
103. Yana p'ilōtu ‘‘woman’s (round) basket-cap’’
   S. W. Pomo pololo ‘‘round’’
104. Yana p'it-’’bal- ‘‘to boil’’ (intr.; -bal- ‘‘up’’)
   Chim. -potpot- ‘‘to boil’’
105. Yana p'it-’’lan- ‘‘(wound) bursts,’’ p'it-’’gan- ‘‘(bow) snaps’’
   E. Pomo pid'ak, pad'ak ‘‘to break’’
   Sal. (M) paleko ‘‘to break’’
106. Yana p'it- ‘‘to discharge wind’’; p'ē-t'āi-na ‘‘skunk’’ (from p'ē-t’-t'āi-na
   ‘‘one who discharges wind on people’’)
   Chim. p치-ci-ra, picui ‘‘skunk’’ (pz from p', cf. no. 100)
107. Yana p'ō- ‘‘to blow’’; p'u-sā- ‘‘to smoke’’ (-sā- ‘‘off, away’’)
   Chim. -sxu-, -xuc- ‘‘to blow’’; -sxu- ‘‘to whistle’’ (from *p'u-
   probably via *pxu-; for Chim. sxu from Hokan p'u, cf. also nos. 109, 110, 111)
   E. Pomo pu- verb stem in verbs of ‘‘blowing’’ and ‘‘breathing’’ (e.g.,
   pu-cen, pu-t'am ‘‘to take breath’’; pu-cul ‘‘to blow’’; pu-G'a ‘‘to
   whistle’’)
108. Yana p'ōwawat-'a- ‘‘to wear beads around neck,’’ passive p'awawat-'a-;
   p'ōwawat-'u-'a- ‘‘to put beads around neck’’
   N. Pomo pō ‘‘magnesite beads’’; C. Pomo po; E. Pomo pōl; S. E. Pomo fol;
   N. E. Pomo fo, fo! (Pomo fo points to Hokan p' ; cf. no. 96)
109. Yana p'ū ‘‘to swim’’
   Chim. -xū- ‘‘to swim’’ (from Hokan *p'ū-)
110. Yana p'u!- ‘‘to be fat’’
   Ach. ʻıp̕hau ‘‘fat’’ (adj.)
   Chim. -xu- ‘‘fat’’ (adj.; from Hokan *p'u-)
   N. Pomo pē ‘‘greasy’’
   Sal. (M) upi-nit ‘‘fat’’
111. Yana p'un- ‘‘to paint,’’ p'an-na ‘‘paint’’; p'ō- ‘‘to put (paint, pitch) on’’;
   p'u-lai- ‘‘to smear (pitch) on’’
   Chim. -xol- (from Hokan *p'ul-) reduplicated in -po-xolxol ‘‘to paint’’
112. Yana p'las ‘‘buckeye’’
   Ats. (K) p'lasup ‘‘buckeye’’
   S. Pomo baca ‘‘buckeye’’; S. W. Pomo bace
   Sal. (M) peca ‘‘buckeye’’
113. N. Yana p'ut-'di-wi, C. Yana p'udi-wi ‘‘women’’ (-wi is collective, -t-
   plural infix); -p'di (syncopated from *p'udi) ‘‘woman’’ in compounds;
   te'ap'dju-p'un'na (from -p'ut-'na) ‘‘mother-in-law’’ (cf. te'ap'dju'i
   ‘‘father-in-law’’)
   Chim. puntsa-r ‘‘woman’’
114. Yana p'ulas ‘‘tail’’
   Kar. (K) apuei ‘‘tail’’
   Shas. (K) ʻihuwa ‘‘tail’’ (from *ipiwa, cf. no. 16); Okwanuchu Shas. (K)
   ip'ihuwa; Ach. (K) ipe; Ats. (K) t'-ipwi-ri
   Chim. aq̑iye ‘‘tail’’ (read probably ak̑iye; k!u from p'l as xu from p'u,
   see no. 107)
   Tonto bihe ‘‘tail’’

   * 1911a, p. 344, note 49.
115. Yana samsi- 'to sleep'; simpler stem sam- implied in plur. sa'dim- (-di- plural infix); in S. Yana this stem appears as te'amsi-
Shas. (K) itsmas 'to sleep'; Okwanuchu Shas. (K) itsivi; Ats. (K) itsmi
N. Pomo sima-miti 'to sleep'; E. Pomo sima-nek; S. Pomo sima-mitiši; S.
W. Pomo sima-ka; N. E. Pomo oma-ka; C. Pomo sima-mitiši
Ess. atsini-si 'to sleep'
Moh. ismā 'to sleep'; Dieg. ez'mā
Seri sim 'to sleep'
Chon. cmai 'to sleep'

116. Yana sawa 'arrow'
Chim. sa 'a 'arrow''

117. Yana si- 'to drink'
Kar. (K) i is 'to drink''
Ach. (S) dis'a 'drink!', dis'i'-gusiwt 'I drink'
Sal. (M) icem, ecim, acim 'to drink''
Moh. idi 'to drink'; Dieg. esi
Seri ka-si 'to drink''
Chon. cwa 'to drink''

118. Yana sigāga 'quail'
N., C., S. W. Pomo cakaka 'valley quail'; E. Pomo cag'ax; S. Pomo cakaga;
S. E. Pomo xak; N. E. Pomo cakaka-ka

119. Yana siwin-i 'yellow pine' (for -i see no. 59)
Kar. civir-ip 'yellow pine' (from *ciwin-; -ip suffix for nouns denoting
trees)

120. Yana sun-na (var. of edible root)
Chim. san-na 'wild potato'

121. Yana sāsu 'dog'
Chim. sitce-lla, sitce-la 'dog'; sitci-wi, sitci-wi 'wolf'

122. Yana t'alam-mauna 'white' (-mauna is participial)
Shas. (K) it'ayu 'white'
N. E. Pomo taiya 'white'

123. Yana t'in- 'to be little'; t'ini-si- 'child'
Ach. (G) atun 'younger brother'
Kar. tunu-ite 'small'
Chum. (ma-k-ite-tu'n ' (my) son''

124. Yana te'tau-na 'sugar pine'
Kar. (K) uc-ip 'sugar pine' (-ip 'tree')
Shas. (K) atsahu 'sugar pine'; Okwanuchu Shas. (K) atsaiihi; Ach. (K)
asaayo; Ats. (K) acau-wo-p

125. Yana te'čil-laun-na 'smoke'
N., N. E. Pomo sako 'smoke'; E. Pomo saza; S. E. Pomo taza
Ess. taza 'smoke'

126. Yana te'gal-la 'father' (-la assimilated from -na; te'gal- may be com-
pounded of te' and gal-, cf. S. Yana galsi 'father')
Chim. ičila-či ' (my) father' (-či probably diminutive)

127. Yana te'či 'female breast'
Shas. ičišk 'milk'; Ach. (S) ičiš 'milk, female breast' (from *ičiš); 
Ats. ičiska 'milk'
Sal. (M) iču' 'breast, bosom, chest,' plur. ičileco' 'breasts'
Dieg. ičilkih (i.e., ičiz) 'breast, heart'
Probably distinct from these are:
Chim. čara, či'ila 'woman's breast, milk'
C. Pomo siđo "female breast"; E. Pomo siđo; S. W. Pomo cido; S. Pomo ciđo "female breast, milk"

128. Yana te'[u]-na "eye, face"
Kar. (K) yup "eye"
Shas. oi "eye" (probably from *o'yo); Konomihu, New River Shasta ki'-oi;
Ach. oyi; A. a'sa
Chim. h-usot, h-ucot "eye"); h-uso- 'xa "tears" (literally "eye-water");
h-isu-'ma "face" (Chim. -uso- probably assimilated from -iso-, as shown
by stereotyped h-isu-'ma; in Shasta-Achomawi and Pomo original *i'yu,
cf. Yuman and Seri, has likewise become assimilated to uyu)
N., C., E., S. E., N. E. Pomo uš "eye"; S., S. W. Pomo hudi; as Kroeber
points out, E. Pomo uš becomes uy in compounds: uy-xa "tear" (literally
eye-water," cf. Chimariko above); in other words, original *u'yu becomes
ui, (u)yu'-xa becomes uy-xa
Sal. (M) t-xeu "face" (perhaps assimilated from *-uyu from *-iyu), t-ű, t-ů
Moj. lđo "eye" (from *i'yu); Dieg. iyű
Seri ito "eye". Sibilant s- of Achomawi, te'- of Yana, and s- of Chimariko;
-y of Shasta, Atsugewi, Karok, Pomo, and Yuman; and t- of Seri would
seem to point to some such Hokan original as *i'yu (cf. Yana dj: Pomo
(h)y, no. 39; and developments of Hokan -hy-, no. 57)

129. Yana ts'awil-la "bluejay" (-la assimilated from -na)
S. W. Pomo tsu'ula "valley bluejay"

130. Yana ts'up-: "to be good"
S. E. Pomo tsama "good"
Sal. (M) tslep "good"
Chum. (S. Yn., S. Bar.) cuma "good"

131. Yana ts'uradu "red-headed woodpecker"
Chim. tsuredhu, tsuleti "woodpecker"
Sal. (M) ts'e'l "woodpecker"

123. Yana u- "be"; like bę and na- (see nos. 18 and 94) this verb stem is
used without -si- suffix in its present tense; hence demonstrative origin
seems probable, though not as clearly so as with bę- and na- (u-'nidja
"I am", perhaps originally *(that-I [am])"
E. Pomo u, u-ba "that" (for ba see no. 18); u-mip "he (distant)"
Chum. (S. Bar.) hō "that"
Sal. hō "that"

133. Yana u-, S. Yana uz- "to be two"
Kar. azak "two"
Shas. zokwa "two"; Ach. (S) hak'; A. hok;
Chim. zok'u, qaju (probably to be read zık'u) "two"
N. Pomo kō "two"; C., S. W. Pomo ko; S. Pomo akō; E. Pomo zōte; S. E.
Pomo zōs
Ess. zulaz "two"
Sal. (M) hakie "two" (San Miguel); kakęč, kakaću (San Antonio)
Moh. havık "two" (from *zawik); Coc. howök; Kiliwi huak (i.e., zuak);
Dieg. zawok
Seri kā-z kem "two"
Chon. oke "two"

134. Yana 'ul- "to hit"; *uldja- "to put," *uldja-sa- "to throw away"; in S.
Yana 'ul- appears as 'ol- which internal Yana evidence shows to be more
archaic than *ul-
E. Pomo ol "to throw at"
135. Yana wa- 'to sit'
Ats. we- instrumental verb prefix 'by sitting on'
Chim. -we- 'to sit'; wa- 'by sitting on'
Tonto o-a 'to sit'; Wal. (nu)-wa; Kiliwi oua

136. Yana wak'i 'to defecate'
Ats. wehki 'excrement' (for Ats. e from a, cf. also no. 135)
Chim. -hiwax-ni 'excrement'

137. Yana wat'du-wi 'blood' (-wi is collective, -t' probably infixed plural element); da-wat'-sa- 'to be red' (i.e., 'blood-colored'; da- and -sa- are characteristic of most color verbs, cf. da-p'al-sa- 'black,' no. 99);
wat'wa-i 'redbud' (probably reduplicated form; for -'i cf. no. 59).
Yana wat- from Hakan *(a)zwat-
Kar. (K) az 'blood' (syncopated from *axwa; cf. ic 'water' from Hakan *aza)
Shas. axta 'blood'; Okwanuchu Shas. axta; Ach. axdi; these forms are syncopated from Hakan *axwata, *axwati (Chim. sōtri 'blood,' sōdre- 'to bleed'; if these forms really belong here, we would have to assume that Hakan xw has developed to Chim. s, though Hakan x always remains)
S. Pomo hata 'red' (perhaps from *zwata)
Chum. (S. Yn., S. Bar.) aXulis 'blood' (probably from *zwata)
Sal. (M) (p)akata, ekata 'blood'
Moh. ahwata 'blood' (from axwata); Dieg. axwat 'blood'; Yuma hhwat (i.e., zwat) 'red'
Seri avat 'blood'
Chon. awas 'blood'

138. Yana wawi 'house' (-wi is probably collective suffix); simpler stem -wa probably in māt'adju-wa 'sweat-house' (literally 'winter-house')
Chim. āwa 'house'
Ess. ēwa-no 'house'
Moh. awa 'house' (from *awa); Dieg. āwa

139. Yana wēyu 'horn'
Kar. wēcu-ra 'horn' (from *wēcu-
Chim. h-ōwec 'antlers, horn' (for Yana -y-: Chim. s, c, see also nos. 62, 154)

140. Yana wil-la 'belly' (-la assimilated from -na); from Hakan *(u)zwil- (cf. no. 137); for -l of Yana wil-, cf. t' dal- 'bone': Hakan *ihya- (no. 57)
N. Pomo kōi 'belly?'; N. E. Pomo kōi; S., S. W. Pomo ōka; S. E. Pomo xo;/ E. Pomo xo; C. Pomo woxa; these forms point to original *(a)zoi, *(a)zwi

140a. S. Yana ya'ga'ki 'wife's brother'
Shas. (G) iyaki 'wife's brother, man's sister's husband'

141. Yana yu-na 'acorn'
Ats. yummí 'acorn'
Chim. yutri 'acorn'
SECON DARY VERB STEMS

Among the numerous suffixed elements that go to build up Yana verb structure is a large class that come immediately after primary stems and convey verbal or adjectival ideas of considerable concreteness. They may, accordingly, be appropriately termed "secondary verb stems." It is highly probable that they were originally primary stems which, being often compounded with other preceding primary stems, gradually came to lose their independence and to assume the aspect of verbal suffixes. Indicative of this is the fact that in at least a few cases elements may be used in both initial and secondary positions. Thus -wat' "red" and -p'al- "black" are secondary elements in verb structure, but occur in initial position in nouns (e.g., wat'wa'-i "red-bud"; p'al-witc'u "black salt"); further, samsi- "to sleep" occurs in secondary position in gi-samsi-p'a- "to feel sleepy" (gi- primary verb stem indicating states of mind). Composition of primary verb stems is, however, so rare in Yana as to be practically absent. The loss of independence of secondary verb stems has evidently been consummated as a general process in the very remote past. Comparison with other Hokan languages strongly supports the view that the suffixation in Yana of these stems is the result of a loss of independence, for some of them are clearly cognate to independent stems in these languages.

142. Yana -balla- "to knock, hit, poke"
Chim. -pat- "to poke"
E. Pomo bati "to shoot"
143. Yana -dada- "to shake, flutter" (e.g., yaidja-dada-a- "[one's flesh, eyelashes, cheeks] shake from fear"; 'epli-dada-dibil- "[humming-bird] goes buzzing around"; 'al-t' da-, syncopated from *al-dada-, "to shake [intr.]")
S. Pomo tata-u "to shake"; N. E. Pomo tcererem (probably to be understood as tec-ererem from *-dedem) "to shake," tcarara-rem "earthquake" (from *tea-dada-dem)
144. N. Yana -gat- "to roll" (intr.)
Chim. -k- "to roll"
145. Yana -gal- "(to bite) out piece of"; -gal-di- "to peel off (skin, bark)"
Chim. -kzol- "to dent"
146. Yana -gan- "to break"; S. Yana -sgan-
Chim. -kat- "to break, separate"
147. Yana -gulai- perhaps "to be bent" (in ba-gulai-makli- "to be humpbacked"); makli "back")
Chim. -koru- "to bend" (r and l constantly interchange in Chimariko)
148. Yana -k!al-: hui-k!al-di- "to wash" (hui- is probably causative form of hai-, incorporated form of ha- "water"); bô-k!al-di- "to clean out (grain) by beating"; dô-k!al-di- "to brush"

C. Pomo k'al- "to rub"

149. Yana -k!au- "(to cut, snap, break) piece out, off"
S. Pomo ikau- "broken or burst asunder"

150. Yana -k!un'-, -k!un'-'a- "to stay, dwell, sit") S. Yana -k!ola-; occurs also as primary stem in k!un'-'a-mari'-'mi "old woman" (literally "sit-woman"), plural k!un''n-p'diwi; for verbs of sitting as first members of compounds referring to persons, cf. no. 3

Kar. kisi, kiri "to live, sit, be"

151. Yana -Uli-, -lili- "smooth" (probably reduplicated element; cf. -dada-, no. 143)

Chim. la-yuin "smooth"

152. Yana -'la- "(to act upon) soft, sticky object"

Chim. lo'ren "soft"

153. Yana -ts'an- in ga-ts'an- "to make a speech" (for gâ-, see no. 46)
E. Pomo -tsan- in ba-ts'an "to preach" (for ba- see no. 8)

154. Yana -ts'au- (see no. 63)

155. Yana -ts'u- "to tear, scratch, wear out"
E. Pomo bâ-tcu 'to gnaw off'

156. Yana -wa-, -wâ- secondary stem in certain verbs of weeping (e.g., dja-wâ- "to mourn, lament off in woods"); dîl-wa- "to dance with grief"

Ach. -wo- "to cry"

Chim. -wo- "to cry"

157. Yana -yi- in mô-yi, passive mû-yi- "to teach, give advice" (for mô-, mû- cf. perhaps mô-, mû- "to reach, hand to, hold," no. 87)

E. Pomo -yi in ba-ya- "to teach"; mî-ya- "to count"; dû-ya- "to show, teach, count"

LOCAL SUFFIXES

Yana is characterized by a large number of local verb suffixes, resembling in this respect Karok, Shasta-Achomawi, and Chimariko. On the other hand, it does not possess the local postpositions suffixed to nouns which are found in these languages, also in Pomo and Esselen. To express prepositional relations Yana employs the same method as Salinan and Chumash, that is, the noun is preceded by an independent local noun of prepositional significance; thus with such constructions as Salinan tôke tecaan "in the basket" and Chumash mâma o' "in water" compare Yana 'yêmairik'tu dâha "in middle of river,'" ihaute'nâ dâha "west of river." Such local nouns are in every case built up of a local verb suffix preceded by the element i- or ì- and sometimes followed by the absolute noun suffix -na or by an element -k'u (thus the verb suffixes corresponding to the above local nouns are -yêmairi- and -haudju-). As a matter of fact, the most common
method of expressing prepositional relations in Yana is to suffix the local element to the verb stem and to connect the verb with the noun by means of the objective particle gi. The close connection between local verb suffixes and local nouns in Yana is at least theoretical ground for suggesting that these suffixes, where they occur in Hokan, are nothing but incorporated local nouns that originally possessed complete independence, as still indicated by Chumash and Salinan. Comparative evidence bearing on certain specific suffixes would seem to confirm this hypothesis (see nos. 169, 172, 174, 176; cf. perhaps further Karok -tako "on" as verb suffix with Salinan tōke "in" as local noun).

158. Yana -an- "arriving at"
   Kar. -ra verb suffix "toward" (Karok r frequently goes back to n)
   (E. Pomo -n nominal postposition "to")
159. Yana -bil- "about, moving about"
   E. Pomo -mal, -mli verb suffix "around"
160. Yana -dam- (-ram-), -dāmi- (-rāmi) "out, out of the house"
   Kar. -arup, -ripa verb suffix "out"
   Ach. (K) -da verb suffix "out of house"; Ats. -ta verb suffix "out of"
   Chim. -tap verb suffix "out"; -tpi verb suffix "out of"
161. Yana -di- (-ri-), -dī- (-rī-) "down" (occurs also compounded, as in -ma-ri-
   "down into hole, receptacle"; -wal-di- "down on ground"; -u̇ldī- "down from
temperature")
   -dū- (-ru-), -dū- (-rū-) "down from point above"; these two suffixes are probably
defined, both being perhaps based on older Hokan *-da- "down" plus elements that have now
lost their individuality
   Ach. (K) -danu- verb suffix "down"
   Chim. -dam verb suffix "down"
162. Yana -dja- "off," used in certain verbs of "putting," "throwing," and
   other activities
   E. Pomo lsa- verb prefix "away"; as Kroeber remarks of this class of
   Pomo elements, "Adverbial prefixes are the most loosely connected with
   the verb, and sometimes are heard as separate words"; it is therefore
   not altogether surprising that certain of them correspond to local
   suffixes of other Hokan languages; with the exception of -mli, -mal
   "around" (see no. 159), Kroeber lists no Pomo local suffixes for verbs;
   see further no. 173 and compare E. Pomo ca- verb prefix "through"
   with Chim. -tsuba verb suffix "through"
163. Yana -dja- "up" in certain verbs (e.g., dja-dja- "water rises"; bul-dja-sa-
   "three fires blaze up"); ordinarily appears compounded in -t'-dja-
   "up (in air)"); containing this -dja- are probably also local suffixes
   -dja-rī- "house, going up" (e.g., u'-djaris- "there are two houses,
   literally "there are two going up"); -s-dja- "house going up" (e.g.,
   mallap'a-adja-s-k'ī "he has bad house going up," cf. mallapa- "to be
   bad" and -s-k'ī "his is"); -dja-rī- "on top of"
   Chim. -tso- verb suffix "up"
164. Yana 'ê- "with, by means of"  
(E. Pomo -i, *yaï nominal postposition "with, by means of")

165. Yana -gun- stereotyped secondary element possibly indicating "interior, inside": *-gun-na "sweat-house" (t- possibly identical with prefixed i-, t- of local nouns; *-na absolute noun suffix), originally perhaps "inside place"; N. Yana *wat'-guru-wa "sweat-house" (syllabically final n becomes t in N. Yana, which develops to *wu before *w, cf. N. Yana *aru-wul- "several go into house" with C. Yana *'an-uwel-; *wa "house," cf. no. 133), originally perhaps "sit-inside house"

Kar. -k'wa verb suffix "into"

166. Yana -k'i- "hither"  
Chim. -k- in -wa-k-, -wa-to-k- "to come" (cf. -wa-, -wan- "to go"); cognate with Kar. -var, -varam "to go" from *wan or -wal and E. Pomo wa, wal "to walk, go, pass")

Yuma *kiriš "to come"; Dieg. kiyu

167. Yana -k'alam "toward oneself"  
Kar. -ka verb suffix "to"

Chim. -s-kw verb suffix "towards" (for *s- cf. *s-mu "across")

Sal. (M) sk'alam "close, beside, hither"

168. Yana -lau- "out of enclosed space into open," sometimes specifically "out of mouth" (e.g., ga-lau- 'mouth bleeds;' *ul-lau-wal- 'breath smells,' -wal- incorporated form of bal- "mouth")

Chim. -lo verb suffix "apart (?)" (e.g., n-itça-lo "pull out tooth!" itça- "to pull")

169. Yana -lú- "in head" (e.g., ne'-lú- "to kick one's head," from ne'- "to step" plus -lú-; lau'-lú- "to be strong in head"); N. and C. Yana preconsonantal -l- goes back to either original s- or -x-, as shown by comparison with S. Yana (e.g., *bu- "to be first"; S. Yana -xbu-; *gan- "to break": S. Yana -sgan-); Pomo cina (see below) suggests that Yana -lú, if indeed related, goes back to original *itiu-

Shasta innux "hair" (perhaps assimilated from *isnuw); Kononihu k-'na "head" (perhaps from *isna; cf. Pomo cina; for k-prefix cf. New River Shasta k-i'sawu, no. 63); New River Shasta k-innux "head"; Okwanuchu Shas. innux "head"; Ach. lax "head"; Ats. naza "head" (perhaps from *naza)  
N., S. Pomo cina "head"; S. W. Pomo cina; C. Pomo cnu; S. E. Pomo ziyu (Pomo c becomes z in this dialect)

Chum. (S. Bar., S. Yn.) noke "head, hair" (perhaps from *ono-kc; cf. Ach. laz and Ats. naza above) is this hypothetical c- preserved in Chum. (S. L. O.) co "head, hair" (perhaps from *ono?). Hokan *i(i)n-*, *i(i)n- makes it appear that all these forms are related to the same root

170. Yana -ma- "together with"; -ba-nau-ma "everyone" (as subject; -ba- "all"; for -nau cf. dja-nau- "to eat much"); perhaps also compounded as *m-, *mi- in *mtsli-, *mitsli- "together, with one another"

Chim. -m- in *-m-di, *-m-du instrumental postposition (cf. Ess. -ma-nu below)  
E. Pomo -ma verb suffix "plural subject"; -ma reciprocal verb suffix "each other, one another"; these elements are probably further related to nominal postposition -(i)mak "in company with"; -mak verb suffix "to have, be provided with"

Ess. -ma-nu nominal postposition "together with" (comitative idea probably conveyed by -ma-, as -nu alone is "with" in its instrumental sense
171. Yana -ma- verb suffix "there, at that place"; -madu "place of" suffixed to nouns (this element is generally used after nouns preceded by objective gi and is practically equivalent to nominal postposition "at," e.g., gi 'lqun-madu "at sweat-house place")

Chim. -ma-, -mu suffix for place names (e.g., tcitecan-ma "Taylor's Flat," literally "manzanita-place," cf. tciteca "manzanita")

S. W. Pomo mali "there, place"

Sal. (M) ma- locative prefix "at, to, there?"

172. Yana -ma- in -ma-ri- "down into (pit, receptacle)" (as -ri- means "down," see no. 161, -ma- must be interpreted to have originally meant "in, into," though it does not occur alone in that sense)

Kar. -am-ni- verb suffix "in, into"

Chim. -ema- verb suffix "into"

Sal. mum-, mem- in local noun mum-tøke, mem-tøke "in" (cf. tøke "in")

Chum. mäma local noun "in"

173. Yana -mi- "to one side," occurs only compounded, e.g., -wil-mi "on one side, half," cf. -wil- "across"; -wal-mi- "apart, in hiding"; -ma-mi- "plus five," e.g., bul-mami- "eight," literally "three with (cf. no. 170) five to one side"

E. Pomo ma- verb prefix "across, opposite"

174. Yana -mminak/i- "behind"; corresponding local noun i-mmink/i- "behind!"

Chim. h-imina "back"; h-imina-tec "behind, outside"; this example is particularly valuable as directly suggesting that at least certain Yana local verb suffixes are in origin incorporated nouns

175. Yana -udi- "down (from fixed point)" (compounded with -di- "down," see no. 161)

Kar. -uni verb suffix "down"

176. Yana -wul- "into," as local noun i-wulu "in, into"; Yana -wulu probably goes back to Hokan *xulu (cf. Yana w from Hokan xw, no. 137)

Kar. -fur-k verb suffix "into house" (from Hokan *xunu or *xulu-; for Kar. f from original x before original u, cf. further Kar. yułi "nose: Chim. h-xu, Moh. -ezw "nose")

Ach. (K) -lu verb suffix "into house" (probably from *-zl-, cf. laz "head" from older *slaz, see no. 169; -zl- syncopated from *-xulu-, as so often in Shasta-Achomawi)

Chim. *xun verb suffix "into"; as independent local noun xuno-i "into"

(observe that suffixed *xun is related to independent xuno-i with its second vowel as Yana suffixed *wul- is to independent *wulu). This example further illustrates originally independent character of local verb suffixes

Chum. tülükün local noun "in" (perhaps assimilated from Hokan *xulu-

OTHER VERB AND NOUN SUFFIXES

177. Yana -gu- verb suffix "a little, just"

Chim. -gu-, -ku- indefinite suffix with diminutivizing force: xant-gu "by and by"; curai-gu "some time ago" (cf. sul "long ago"); patee-am-ku "something" (cf. patei "what"); -gu-lan "merely, only" (-ia- is probably diminutive suffix)

178. Yana -ma- usitative verb suffix "to be wont to"

E. Pomo -kima verb suffix indicating usitative past
179. Yana -na absolute noun suffix added to stems ending in long vowel, diphthong, or consonant and to all monosyllabic stems; preceding t assimilates it to -la
Kar. -an, -ar noun suffix denoting agent or instrument
Chim. -r, -l noun suffix of rather colorless significance (e.g., teima-r 'man'; kosa-r 'crane'; tsaboko-r 'mole'; hmetasur 'morning'; piso-r, piso-l 'quail'); some nouns have -ra, -la (e.g., pxici-ra 'skunk,' ta'i-ra 'ground squirrel'); diminutive -lla perhaps contracted from diminutive -la, -l and absolute -la, -ra
Pomo -l absolute noun suffix (e.g., N. E. Pomo fo-l 'beads,' S. E. Pomo föl, E. Pomo pöl, N. E. Pomo po, N. Pomo pöl; S. E. Pomo cala-l 'liver': N., C. Pomo cala)
Ess. -naz, -nez, -naz noun suffix (e.g., masia-nex 'heart'; asa-naz 'water')
Dieg. -iy absolute noun suffix (e.g., esi-ly 'salt': Moh. aði; 'emi-ly 'leg, foot': Moh. time)

180. Yana -p'a modal verb suffix of dubitative significance (e.g., a-p'a 'if he would be'; a- 'if'); -sp'a- (compound of present -si- and modal -p'a-) modal verb suffix of contrary-to-fact significance (e.g., a-sp'a 'if he were, had been')
E. Pomo -pi, -pi-la verb suffix 'if, until'

181. Yana -t', -t', -r plural noun suffixes; -di-, -dja-, -t plural verb infixes, e.g., sit'in-i-wi 'yellow pine' from siwín'i 'yellow pine'; mut'djau-tli-wi 'chefs' from mudjaw-pá; mut'galá'i-wi 'logs' from mudgalá'i; k'urúwi 'medicine-men' from klúwi; t'ádi-ba plur. of t'ába 'to be old'; sáim-plur. of samst 'to sleep'; k'ádjawái-plur. of k'áwi 'to be tired'; dja'wá-plur. of djawá 'to mourn'
Sal. -l, -ts, -l plural noun and adjective infix; -l also used as plural suffix (e.g., sem'ta plur. of sepso 'child'; hósate plur. of hútcaí 'dog'; lentse-n plur. of lene 'woman'; celtip plur. of cetep 'dead'; smatel plur. of smat 'beautiful')

182. Yana -tsli collective noun suffix generally referring to small objects (e.g., haga-tsli 'flint fragments' from haga 'flint'; djawá-tsli 'small game' from djawá 'jack-rabbit'); more often occurs as compounded -tsl'i-gi, -tslé-gi diminutive noun plural (e.g., tamai-ts'gi 'children'; ts'légi 'little sticks' plur. of 'p'la 'little stick')
Kar. -ito diminutive noun suffix
Pomo -ts, -tee, -tes in certain terms of relationship, evidently expressing affection; C. Pomo -ts (e.g., cü-ts 'mother's sister,' cf. N. Pomo -sū); E. Pomo -ts (e.g., tse-ts-a 'mother's brother,' cf. N. Pomo -tsū); S. Pomo -tes (e.g., a-ba-tsen 'father's father,' cf. N. Pomo -ba); S. W. Pom. -tes; S. E. Pomo -ts (e.g., im-ba-ts 'father's father'); N. E. Pomo -tee, -tei (e.g., ka-tei-dai 'mother's mother,' cf. N. Pomo -ka)
Chum. -ite, -te in ma-k-ite-tun 'my son,' ma-k-ite-ts 'my younger brother'

183. Yana -uwi dual noun suffix (e.g., dál-úwi 'two hands'; lal-úwi 'two feet'; mal'úwi 'two ears' from mal'yú 'ear') -w is plural or collective noun suffix (see no. 183a and examples in no. 181), leaving -u as distinctive of duality
Chim. -owa in nőut-owa 'we two (excl.)' (cf. nőut 'I') mamut-owa 'we two (incl.)' (cf. mamut 'thou')
Chum. -u in chúm-u (literally 'two two') from iekom 'two'

It is impossible to be certain at present that Yana -na and Ess. -naz are comparable to Chim. -l, -r, Pomo -l, and Dieg. -ly.
183a. Yana -wi collective noun suffix (e.g., 'i-wi 'firewood, wood,' cf. 'i-na 'tree, stick'; for other examples see nos. 181 and 183)
Shas. -ya-wir plural pronominal suffix; Ats. -wir
Sal. hi-wet, hi-wat plural of demonstrative he 'that'
Chum. -wun plural demonstrative suffix (e.g., kaiu-wun 'these' from kai 'this one'); golo-wun 'those' from golo 'that one')

184. Yana -ya 'female' (e.g., k!wi-ya 'medicine-woman' from k!wi 'medicine-man')
Chim. -sa 'female' (e.g., lasa 'widow'; teu-mako-sa 'my mother-in-law,' cf. tcu-makul 'my father-in-law'); for Yana y: Chim. s, cf. no. 62

185. Yana -yau- forms verbal nouns (e.g., m6-yau-na 'food' from m6- 'to eat')
Chim. -eu, -bu forms verbal nouns (e.g., hâm-eu 'food' from ama- 'to eat')
Sal. (M) -ia, -i'a suffixed to verbs to form nouns

PRONOUNS

Pronominal ideas are expressed in Yana by means of suffixed elements (-ndja, -nidja, S. Yana -ndji, -nidji 'I, my'; -numa 'thou, thy'; -nigi 'we, our'; -nuga, S. Yana -numgi- 'ye, your'). These elements when suffixed to third personal stem ai 'he, it' form the series of independent pronouns (ai'ndja 'I,' S. Yana ai'ndji; ai'numa 'thou'; ai'nigi 'we'; ai'nuga 'ye,' S. Yana ai'numgi). As the present independent series is thus evidently of quite secondary origin, it is highly probable that the suffixed pronominal elements of Yana are themselves the old series of independent personal pronouns which, because of their habitual position after the verb, have become reduced to the status of suffixed elements (e.g., déwaisi'numa 'thou seest' from older *déwaisi numa 'see-in-present-time thou'). This analysis is confirmed by the fact that the elements -nidja (-ni-dji), -numa, -nigi, and -nuga (-numgi) are regularly separated from preceding vowels by a light glottal stop of purely phonetic (disjunctive) force (e.g., bé'nidja 'it is I'; mósí'nigi 'we shall eat'). It is also in striking agreement with the testimony of other Hokan languages, which make use partly of simple independent pronouns, partly of prefixed elements, but only to a relatively slight extent (Chimariko and Shasta-Achomawi) of suffixed elements.

Further analysis of the Yana pronominal elements readily discloses the fact that they are not simple, but compounded. The analysis is evident from the following:

Sing. 1. -ni-diya
       (-ni-di)  Plur. 1. -ni-gi
2. -nu-ma                      2. -nu-ga
       (-nu-mgi)
The pronominal elements consist of -ni- (for the first person) or -nu- (for the second person) plus characteristic elements (-dja, S. Yana -dji; -ma; -gi; -ga, S. Yana -mgI) that undoubtedly constitute the old pronominal series proper. The -ni-, -nu- may be an old demonstrative element (-ni- perhaps originally "this, it near me"; -nu- "that, it near you"), as seems to be indicated by the fact that it occurs only in intransitive forms and in transitive forms involving a third personal subject or object (e.g., nisāsi-n-dja "I go away"; dēwaisi-n-dja "I see; I see him," "he sees me, I am seen by him"), but disappears in transitive forms involving combinations of first personal subject and second personal object or second personal subject and first personal object (-dja, S. Yana -dji "thou-me"; -gi "thou-us"; -ma "I-thee"; -mgI, S. Yana -mgI "I-you").

While the pronominal subject and object are solely expressed by means of suffixed elements, nouns with suffixed possessive pronouns are at the same time preceded by article-like proclitics. These are, in Northern and Central Yana, dji for the first person and dju for the second (e.g., dji wawi-n 'my house,' dji wawi'n 'our house,' dju wawi'n 'my house,' dju wawi'nu 'thy house,' dju wawi'nu 'your house'); the i-u alternation is probably comparable to the corresponding use of -ni- and -nu- above, while dju is a demonstrative or article-like element found also in other connections (e.g., ai-dje, ai-dje'e 'that one'; ai-dj, ai-te'; S. Yana te' 'the; he, it'; ai-dja 'there'). 8 In Southern Yana, however, the possessives are expressed by proclitic elements alone, except for the second person plural, which is also expressed by a suffixed -numgi, probably to distinguish it from the corresponding singular form; the possessive elements in Southern Yana are:

\[\text{dji 'my'}\]
\[\text{dju-m 'thy'}\]
\[\text{dji-n 'our'}\]
\[\text{dju-m ... -numgi 'your'}\]

The -n of djin and the -m of djum are peculiar to this dialect and are probably abbreviated forms of an old first person plural -n-element which has otherwise disappeared in Yana (see no. 189 below) and of older ma 'thou' or mi 'thy' (see no. 190). It is not impossible that the -i of dji 'my' is only secondarily contrastive to the u characteristic of the second person and is really an old first person singular.

8 ai 'he, it' of these forms has been already referred to; it is disconnected from demonstrative -dji-, -te' by objective gi, e.g., ai-gi-dje'e 'to that one.' For -e, -e' of ai-dje('e) see no. 192 below; -dja of ai-dja may contain a survival of an old postpositional -a 'in, at' that has otherwise disappeared (ai-dj-a originally 'it therein'); with this hypothetical -a cf. E. Pomo -a 'at,' e.g., me-a 'here, at this').
possessive element that has lingered on only in proclitic position (thus S. Yana djangowai originally "the-my house"; with this -i cf. perhaps Chimariko -n in, e.g., masomas-i "my red-salmon" and i- in, e.g., ipatni "I poke thee, him"). The pronominal elements -i, -n, and -m are the more significant for comparative purposes in that their position corresponds to that of possessive pronouns in other Hokan languages (thus with such a form as S. Yana dyumowai "thy house," cf. Kar. mikiriviram "thy house"; Ach. (S) mimu-diyum'джи "thy house"; Chim. misam "thy ear"; E. Pomo mimex "thy older brother"; Ess. nemis-hikpa "thy eyes"; Sal. t-umulet "thy teeth");10 Chim. ma-p-go "thy dog";11 Moh. ihi "his nose").

The comparative data bearing on Yana pronominal elements follow.

186. Yana -ndja, -ndja (S. Yana -ndjì, -n) "I, me; my"; -wà-dja (S. Yana -wà-djì "thou-me" (-wà is really passive, hence literally "I-by-[thee]")

Shas. s verbal suffix "I"; Ach. s; Ats. s

Chim. tce- "my" (inherent possession); tce-, tca- "he, they-me"; tca-, -tce "I" (with static verbs)

187. Yana -t in djì "my"; mau-si- "I am about to" (see introductory remarks to this section)

Ach. (S) 't. in t'tu "my" (for t'tu cf. mim-s-t'uu "thy"); t'tu diyum'djì "my house," e.g., probably means literally "my-property house")

Chim. i- "my" (accidental possession): i- "I-thee, I-him"

188. Yana -ni-gi "we, us; our"; -wà-gi "thou-us" (literally "we-by-[thee]")

Kar. ki-n- "us" (but cf. also kik- "you," subj.; kik- . . . -ap "you," obj.)

Sal. (San Miguel) ka "we"; (San Antonio) kak

Chum. ki-cku "we two" ki-ku "we"; ki- "we, our"

189. S. Yana -n in djì-n "our" (for djì see introductory remarks to this section)

Kar. nuw "we"; nuw- "we" as subjective prefix; nauw- "our"; ki-n- "us" as objective prefix

190. Yana -nu-ma "thou, thee; thy"; -wà-ma "I-thee" (literally "thou-by-[me]"); S. Yana m in djì-m "thy" (for djì see introductory remarks to this section)

Kar. tma "thou"; mi- "thy"

Shas. mai "thou"; Ach. mi- "thou" as subjective prefix, Ach. (S) mi's-t'u-; mimu- "thy"; Ats. mi- "thou" as subjective prefix

Chim. ma-mut "thou"; mi- "thou, thou-me, thou-us; thou-him, them; he, they-thee"; mi- "thy" (denotes accidental relation), m- "thy" (denotes inherent relation)

E. Pomo ma "thou"; mi "thee"; mi- "thy" (with terms of relationship)

Ess. nemi, name, nanne "thou"; nemic-, mic- "thy"

9 Here may well belong also the quite isolated form mau-si- "I am about to" (mau-s "he is about to"); such forms as mau-s mòyuna "I am about to eat" are perhaps to be understood as originally meaning "is-about-to-be (mau-s) my (-i) eating (verbal noun in -yauna, see no. 185),"

10 In Chimariko possessive pronouns indicating accidental relations are prefixed, those indicating natural or inalienable relations are prefixed.

11 Sal. t- and Chim. ma- correspond structurally to Yana djì(u)-.
When it is remembered that Yana is clearly non-typical of general Hokan morphology, it will have to be conceded that the present comparative list of stems and non-radical elements (which is quite large, considering that data are scanty for nearly all the languages involved) goes a long way towards encouraging us to proceed with confidence on the basis of the Hokan hypothesis. Aside from Yana, I have observed many striking Hokan cognates. While this is not the place to discuss them in detail, a few significant references may be welcome.

Chim. -maza of h-itxani-maza "knee"
(from h-itxan "leg")
Chim. -lot- "to mash"
Chim. -owa-, -wam- "to go"

S. W. Pomo moko "knee"
Dieg. meze-tunn "knee"
E. Pomo lat "to mash"
Kar. var (from "wan- or *wal-") "to go"
E. Pomo wa, wai "to go"

12 Other Hokan demonstratives have become verbal in force in Yana; see Yana bê (no. 18), na (no. 94), and u (no. 132); see also no. 2.
Sapir: The Position of Yana in the Hokan Stock

Chim. *tu* "with the hand" E. Pomo *du* "with the hand"
Chim. *h-"his," ha-mut "he" E. Pomo *ha-"his, their" (with terms of relationship)
Chim. *h-"his," ha-mut "he" (with terms of relationship)
Moh. *'his"
Chim. *-ana-* "on" (as verb suffix) E. Pomo *-na, -wi-na "on" (as post-position)

It is only when we have something like an adequate knowledge of all the Hokan languages or dialectic groups that it will be possible to compile a relatively complete comparative Hokan dictionary and to study in detail the linguistic groupings and sub-groupings of these tribes. So far there seems to be no strong lexical evidence to connect Yana with one rather than with another of the other Hokan languages. Geographically it is closest to Shasta-Achomawi, but it seems to be at least as far removed from these languages as from the geographically more remote Pomo. Indeed, the only grouping of Hokan languages among themselves that it seems at all possible to make at present is that of Chimariko with Shasta-Achomawi, as already pointed out by Dixon in his study of Chimariko. To Shasta-Achomawi and Chimariko I should be inclined to add Karok as the third member of a geographically continuous northern group of Hokan.

REMARKS ON PHONOLOGY

The material gathered together in the preceding sections enables one to determine (or at least suggest) a number of phonetic laws characteristic of one or other of the Hokan languages. Nevertheless it would be premature to attempt a systematic presentation of Hokan phonology. The evidence is far too scattered and scanty for this purpose. I shall therefore content myself with a reference to only two or three points, especially as certain phonetic laws have been already suggested in connection with the specific entries.

In regard to vowels, one of the most striking features is a somewhat frequent correspondence of Chimariko *o*, less often *u*, to *a* in other Hokan languages. It is to be noted, however, that more often general Hokan *a* seems to be represented by *a* in Chimariko also. Examples of Chim. *o, u*, Hokan *a*, are:

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13 Not explicitly recognized by Dixon, but found in certain instrumental nouns; e.g., *háma-ana-kšia* "whereon one eats, table"; *hiwo-ana-da-tsa* "whereon one sits, chair."
An important feature of the Hokan group is the occurrence in certain languages of initial vowels which are absent in other languages or in other forms of the same language. The vowel in question is often identical with the stem vowel following the consonant (e.g., Hokan *"axa "water," *"axwati "blood"), but by no means always. Frequently the identity of the two vowels is due to a dialectic assimilation of the first vowel to the second (e.g., Karok axak "two," cf. S. Yana ux-; Chim. h-uso- "eye," cf. Chim. h-isu-ma "face," Dieg. iyų "eye"). Sometimes the vowel differs in different languages (e.g., S. W. Pomo a'kol "long," but Tonto ikule). Assimilation of the second vowel to the first also occurs (e.g., Yana lili-mauna "nose" from *"ili- from *"ilal-", cf. S. W. Pomo ila; Ess. xulax "two," N. Pomo kō, S. E. Pomo xōs from *"uxu- from *"uxa-, cf. S. Yana ux-, Chontal oke, Dieg. xawok). In nearly all available examples Yana has lost the initial vowel, which is best preserved in Shasta-Achomawi, Chimariko, and dialectically in Yuman; as for Pomo, it seems to be regularly lost, but is retained in S. and S. W. Pomo (cf. aka "water" of these dialects with xa and ka of all others). For examples of variation on this point within the same dialect see nos. 55 (Chimariko and Karok) and 128 (Pomo). Examples illustrating the loss in Yana (and other languages) of an initial Hokan vowel are:

(a) With a-Vowel

<table>
<thead>
<tr>
<th>No.</th>
<th>Lost vowel</th>
<th>Retained vowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Yana 'au-na &quot;fire,&quot; Shas. əwa, &quot;wood&quot;</td>
<td>Moh. a'awa &quot;fire,&quot; Ats. ahawi &quot;wood&quot;</td>
</tr>
<tr>
<td>35</td>
<td>Yana dji-na &quot;louse,&quot; N. Pomo teci</td>
<td>S. Pomo atci, Ats. atci</td>
</tr>
<tr>
<td>No.</td>
<td>Lost vowel</td>
<td>Retained vowel</td>
</tr>
<tr>
<td>-----</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>48</td>
<td>Yana gəgi</td>
<td>Moh. aqəqa</td>
</tr>
<tr>
<td>55</td>
<td>Yana ha-na</td>
<td>Kar. ac, Ach.</td>
</tr>
<tr>
<td></td>
<td>'water,'</td>
<td>ac, S. Pomo aka, Ess.</td>
</tr>
<tr>
<td></td>
<td>E. Pomo Χ</td>
<td>asa-nax, Moh. aha, Seri az, Chontal aha</td>
</tr>
<tr>
<td>56</td>
<td>Yana həts'</td>
<td>Ach. acta'-, Kiliwi ahhtchak</td>
</tr>
<tr>
<td></td>
<td>it'</td>
<td>Moh. a'i; Ess. i (assimilated)</td>
</tr>
<tr>
<td>59</td>
<td>Yana i-na</td>
<td>Kar. av, Ach. -am-, Chim. -ama-, Ess.</td>
</tr>
<tr>
<td></td>
<td>'stick, wood'</td>
<td>am, Cocopa ahma; Chim. umu</td>
</tr>
<tr>
<td>65</td>
<td>Yana ma-</td>
<td>Ach. hamut</td>
</tr>
<tr>
<td></td>
<td>'to eat,'</td>
<td>Shas. ani, Chic. -ani</td>
</tr>
<tr>
<td>93</td>
<td>S. Yana mu-</td>
<td>Kar. apuvi, Chim. aqüye; Shas. ihwa</td>
</tr>
<tr>
<td></td>
<td>'father's sister,'</td>
<td>(probably assimilated from *apiwa)</td>
</tr>
<tr>
<td></td>
<td>Kar. mūdɪ</td>
<td>Ats. atcawo-p; Kar. we</td>
</tr>
<tr>
<td>96</td>
<td>Yana nɪna</td>
<td>Kar. ax 'blood,' Shas. axta, Chim. axulis, Dieg. axwat, Seri avat, Chontal avas</td>
</tr>
<tr>
<td></td>
<td>'mother,'</td>
<td>Chim. ˈawa, Moh. ˈava; Ess. ˈiwa-no</td>
</tr>
</tbody>
</table>

(b) WITH i-Vowel

<table>
<thead>
<tr>
<th>No.</th>
<th>Lost vowel</th>
<th>Retained vowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Yana bama</td>
<td>Ats. ippiu</td>
</tr>
</tbody>
</table>
|     | 'sinew,'  | Ach. ipli, Chim. h-i-pen, S. Pomo  
|     | Ach. pim | hiba, Chim. eleu, Sal. -ipat, Moh. |  
| 16  | Yana bawu-l | *ipali; assimilated to *apali in Kar. apri, S. W. Pomo haba |  
|     | 'tongue,'  | Ach. il'ʃ, Chim. h-itra, Seri isol; S. E. |  
|     | E. Pomo bal | Pomo atan (assimilated) |  
| 23  | Yana dal-la | Chim. h-ita  
|     | 'hand,'    | 'many' |  
|     | Chim. tranĥe | S. Pomo  
|     | 'five,'    | 'to shoot' |  
|     | N. Pomo tana | S. W. Pomo  
|     | 'hand'    | ˈyuu  
| 24  | Yana dat' | 'to shoot'  
|     | 'much,'    | S. W. Pomo  
|     | Chim. -tan | ˈyuu  
|     | 'lot of'   | 'snow' |  
| 37  | Yana djü- | Chim. hiteun |  
|     | 'to spear,' | Sal. icedi  
|     | N. Pomo teo-k | 'dawn' |  
| 39  | Yana djü-ri | Ach. ɪts'la; Chim. h-utsu (assimilated) |  
|     | ˈto shoot,' | S. W. Pomo  
|     | N. Pomo ˈyu  
|     | 'snow'    | ˈyuu |  
| 41  | Yana djul- | Chim. ˈyuu  
|     | 'long'     | 'snow' |  
| 54  | Yana za-lai | Sal. icedi  
|     | ˈto be dawn' | 'dawn' |  
| 63  | Yana -ts'la | Ach. ɪts'la; Chim. h-utsu (assimilated) |  
|     | 'tooth,'  | S. W. Pomo  
|     | Chim. sa' | ˈila |  
| 73  | Yana ili-mauna | Ach. ɪts'la, Kar. itiv, Chim. h-isam, Seri ˈilo, Chontal ˈimata; assimilated to *a(i)ma- in Ats. asmak, Moh. |  
|     | 'nose,'    | ˈamala  
|     | N. Pomo la | ˈalma  
| 76  | Yana mat'gu | Ach. ɪts'la, Kar. itiv, Chim. h-isam, Seri ˈilo, Chontal ˈimata; assimilated to *a(i)ma- in Ats. asmak, Moh. |  
|     | 'ear,'  | ˈamala  
|     | Pomo cima | (progressively assimilated from *icama) |  

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No. Lost vowel Retained vowel
48. Yana gəgi 'crow'
55. Yana ha-na 'water', E. Pomo xₐ, Kar. ca-ruk 'towards river'
56. Yana həts'it'. 'cold', Chim. xatsa, E. Pomo katsil, Moh. hatchu-urk
59. Yana i-na 'stick, wood'
65. Yana ma- 'to eat', Pomo maa-, Tonto ma
93. S. Yana mu- 'father's sister,' Kar. mūdɪ, Pomo mū, Chim. mūtə- 'mother's sister'
96. Yana nɪna 'mother,' E. Pomo nɪza
114. Yana pɨlusu 'tail,' Tonto bihe
124. Yana to- 'sugar pine'
137. Yana wat'du-wi 'blood,' -wat- 'red,' Yuma ˈhkwat 'red'
138. Yana wawu 'house'

Retained vowel
Moh. aqəqa 'raven'
Kar. ac, Ach. ac, S. Pomo aka, Ess. asa-nax, Moh. aha, Seri az, Chontal aha
Ach. acta'-, Kiliwi ahhtchak
Moh. a'i; Ess. i (assimilated)
Kar. av, Ach. -am-, Chim. -ama-, Ess. am, Cocopa ahma; Chim. umu
Ach. hamut
Shas. ani, Ach. -ani
Kar. apuvi, Chim. aqüye; Shas. ihwa (probably assimilated from *apiwa)
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No. Lost vowel Retained vowel
12. Yana bama 'sinew,' Ach. pim
16. Yana bawu-l 'tongue,' E. Pomo bal

Retained vowel
Ats. ippiu
Ach. ipli, Chim. h-i-pen, S. Pomo hiba, Chim. eleu, Sal. -ipat, Moh. ipalya, Seri ipi, Chontal ipal; Hokan *ipali; assimilated to *apali in Kar. apri, S. W. Pomo haba
Ach. il'ʃ, Chim. h-itra, Seri isol; S. E. Pomo atan (assimilated)
Chim. h-ita 'many'
S. Pomo ˈteo-k 'to shoot'
S. W. Pomo ˈyuu 'snow'
Chim. hiteun
Sal. icedi 'dawn'
Ach. ɪts'la; Chim. h-utsu (assimilated)
S. W. Pomo ˈila
Ach. ɪts'la, Kar. itiv, Chim. h-isam, Seri ˈilo, Chontal ˈimata; assimilated to *a(i)ma- in Ats. asmak, Moh. ˈamala
(b) WITH i-Vowel

No. Lost vowel
12. Yana bama 'sinew,' Ach. pim
16. Yana bawu-l 'tongue,' E. Pomo bal

Retained vowel
Ats. ippiu
Ach. ipli, Chim. h-i-pen, S. Pomo hiba, Chim. eleu, Sal. -ipat, Moh. ipalya, Seri ipi, Chontal ipal; Hokan *ipali; assimilated to *apali in Kar. apri, S. W. Pomo haba
Ach. il'ʃ, Chim. h-itra, Seri isol; S. E. Pomo atan (assimilated)
Chim. h-ita 'many'
S. Pomo ˈteo-k 'to shoot'
S. W. Pomo ˈyuu 'snow'
Chim. hiteun
Sal. icedi 'dawn'
Ach. ɪts'la; Chim. h-utsu (assimilated)
S. W. Pomo ˈila
Ach. ɪts'la, Kar. itiv, Chim. h-isam, Seri ˈilo, Chontal ˈimata; assimilated to *a(i)ma- in Ats. asmak, Moh. ˈamala

Sapir: The Position of Yana in the Hokan Stock

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65. Yana ma- 'to eat,' Pomo maa-, Tonto ma
93. S. Yana mu- 'father's sister,' Kar. mūdɪ, Pomo mū, Chim. mūtə- 'mother's sister'
96. Yana nɪna 'mother,' E. Pomo nɪza
114. Yana pɨlusu 'tail,' Tonto bihe
124. Yana to- 'sugar pine'
137. Yana wat'du-wi 'blood,' -wat- 'red,' Yuma ˈhkwat 'red'
138. Yana wawu 'house'

Retained vowel
Moh. aqəqa 'raven'
Kar. ac, Ach. ac, S. Pomo aka, Ess. asa-nax, Moh. aha, Seri az, Chontal aha
Ach. acta'-, Kiliwi ahhtchak
Moh. a'i; Ess. i (assimilated)
Kar. av, Ach. -am-, Chim. -ama-, Ess. am, Cocopa ahma; Chim. umu
Ach. hamut
Shas. ani, Ach. -ani
Kar. apuvi, Chim. aqüye; Shas. ihwa (probably assimilated from *apiwa)
Ats. atcawo-p; Kar. we
Kar. ax 'blood,' Shas. axta, Chim. axulis, Dieg. axwat, Seri avat, Chontal avas
Chim. ˈawa, Moh. ˈava; Ess. ˈiwa-no
No. Lost vowel Retained vowel
78. Yana mari’i ‘woman,’ N. Pomo mata S. W. Pomo ímata
82. Yana mî- ‘to weep,’ N. Pomo mina, Tonto mi Moh. himim
83. Yana mî, mî- ‘to look,’ Chim. Ats. -ima-
-mam-, Pomo ma- Chim. -imu-
87. Yana mó-, mî- ‘to hand, hold,’ Pomo ma
91. Yana mu-kuld- ‘hole,’ Pomo ma
100. Yana p’ats’i ‘excrement,’ N. Pomo pa, Sal. p’xat Shas. ipxai ‘intestines,’ Chim. h-ipxa, S. Pomo i’pa; S. W. Pomo apa ‘excrement’ (assimilated)16
110. Yana p’uii- ‘to be fat,’ Chim. Ach. āphau; assimilated to *up’uii- in Sal. upinit
-xu-, N. Pomo pû Shas. itsmas, Moh. ismä; Ess. atsinsi-si16
115. Yana samsi- ‘to sleep,’ Pomo sîma, Seri sim, Chontal cmai Kar. is, Moh. iθi, Sal. icem (but also acim)
117. Yana si- ‘to drink’ Shas. it’yuu
122. Yana ti’alam- ‘white,’ N. E. Pomo tâiya Chim. tcei-la-
126. Yana te’tgal-la ‘father’ Shas. itsik ‘milk,’ Dieg. itchikh ‘breast, heart’; Ats. atciska ‘milk’17
127. Yana te’tik’i ‘female breast’ Chim. h-isu-ma ‘face,’ Dieg. itci-la-
128. Yana te’tu-na ‘eye, face,’ Kar. Seri iθo; assimilated to *u(s)yî- in Shas. oî, Chim. h-usot, Pomo oî.
-yup ‘eye,’ Pomo yu-xa Shas. it’ayu
136. Yana wak’i ‘to defecate,’ Ats. Shas. iyaki ‘wife’s brother’
wehki ‘excrement’
140a. S. Yana yat’gaihi ‘wife’s brother’ Shas. iyaki ‘wife’s brother’
149. Yana -k’au- ‘to break off!’ S. Pomo ik’u ‘broken asunder’
160. Yana -lu- ‘head,’ Ach. lax, N. Pomo cina Shas. innux ‘hair’
174. Yana -mina-k’i ‘behind’ Chim. h-imina ‘back’

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15 It is worth noting that while Shas ipxai, Chim. h-ipxa, and S. Pomo i’pa, all with i-vowel, mean ‘intestines,’ S. and S. W. Pomo apa, with a-vowel, means ‘excrement.’ This suggests a morphological, rather than a purely phonetic, basis for the significance of difference of vowels. However, S. E. Pomo, which does not preserve initial vowels, has fa in the sense of both ‘intestines’ and ‘excrement.’

16 Esselen a- is difficult to explain, unless both Shasta-Achomawi and Yuman i- are due to assimilation to following Hokan i (*isima from older *asima); in that event Yana samsi- would be progressively assimilated, via *asam-, from *asim.-

17 Perhaps another example of i-interchanging with a- that is of morphological significance (see note 26); or is Shas., Ach., and Dieg. i- due to assimilation of older a- with following i?
Sapir: The Position of Yana in the Hokan Stock

(c) With u-Vowel

<table>
<thead>
<tr>
<th>No.</th>
<th>Lost vowel</th>
<th>Retained vowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.</td>
<td>Yana bu-, bui “to dance, kick”</td>
<td>Chim. h-upo “foot”</td>
</tr>
<tr>
<td>79.</td>
<td>Yana mat'-banui- “to be summer”</td>
<td>Chim. hōmat “ripe”</td>
</tr>
<tr>
<td>98.</td>
<td>Yana p'adjha “snow,” Tonto paka</td>
<td>Moh. 'upaka</td>
</tr>
<tr>
<td>139.</td>
<td>Yana wēyu “horn,” Kar. vēcu-ra</td>
<td>Chim. h-owec</td>
</tr>
<tr>
<td>140.</td>
<td>Yana wēl-la “belly,” N. E. Pomo koi</td>
<td>S. Pomo ūka, C. Pomo wōza</td>
</tr>
</tbody>
</table>

(d) With i- or a-Vowel

<table>
<thead>
<tr>
<th>No.</th>
<th>Lost vowel</th>
<th>Retained vowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>68.</td>
<td>Yana k'lu- “to be long,” N. Pomo kōl</td>
<td>S. W. Pomo a'kōl, Tonto īkule</td>
</tr>
</tbody>
</table>

Far less frequently Yana has preserved an initial vowel lost in other languages. Examples are:

<table>
<thead>
<tr>
<th>Retained vowel</th>
<th>No.</th>
<th>Lost vowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Yana -'alā- “child”</td>
<td>125</td>
<td>Chim. -māma (reduplicated) “paternal grandparent”</td>
</tr>
<tr>
<td>4. Yana 'amūwi- “woman’s son’s child,”</td>
<td>126</td>
<td>Chim. -ama “grand-child” (assimilated); Chim. h-imō-lā “grandson”</td>
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<tr>
<td>6. Yana 'ap'-sa “sky,”</td>
<td>127</td>
<td>Chim. al-apa, Moh. ammaya, Seri amī-me; a- umlauted to e- or assimilated to i- in Sal. ẽm, Chontal emaa, Ess. imi-ta</td>
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<td>45. Yana tē- “to sing,”</td>
<td>128</td>
<td>S. E. Pomo xe-</td>
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<tr>
<td>57. Yana ẽ' Dal-la “bone,”</td>
<td>129</td>
<td>N. Pomo ya, Chim. se', Dieg. hak</td>
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<td>58. Yana ima- “liver,”</td>
<td>130</td>
<td>Shas. ōpei, Moh. ōpasa</td>
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<tr>
<td>60. Yana 'tēi “man,”</td>
<td>131</td>
<td>N. Pomo te ‘person’</td>
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<td>61. Yana 'ite' in-na “wildcat,”</td>
<td>132</td>
<td>Chim. tagni-r</td>
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<td>62. Yana 'tēg ‘trail,”</td>
<td>133</td>
<td>C. Pomo da</td>
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<td>133. S. Yana uz- “two,” Chontal oke</td>
<td>134</td>
<td>Ach. hak!, Chim. zok’u, E. Pomo zōtc, Ess. xulax, Sal. hakic, Dieg. zawok</td>
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</table>

18S. Pomo akō seems to suggest Hokan *axu- rather than *uxa-, but may be explained as derivable from assimilated *axwa- (from older *uxwa-, which owes its -w- to preceding u-; this labializing of older a to u, whence Pomo o, ɔ is paralleled within Shasta-Achomawi by Shas. xokwa, Ats. hoki, cf. Ach. hak!).
The distribution in Hokan of forms with and without initial vowel is such as to strongly suggest that the alternation was characteristic of the primitive Hokan language from which the languages accessible to us have diverged. Whether this alternation was primarily a phonetic or morphological feature can hardly be demonstrated at present. A more intensive study of the typical Hokan languages (particularly Shasta-Achomawi, Pomo, and Yuman) is sure to yield a solution of the problem.

The only other point of a phonological nature that I wish to refer to is the syncope, presumably under requisite accentual conditions, of the second vowel of a stem. Examples of this type of syncope are found in several Hokan languages, but the process seems to be particularly characteristic of Shasta-Achomawi, though not all the languages of this group always illustrate syncope in the same stem. The loss of the vowel regularly causes the word to end in a consonant or brings two consonants together; these are then not infrequently assimilated to each other. Examples of vocalic syncope are:

(a) SYNCOPE OF FINAL VOWEL

<table>
<thead>
<tr>
<th>No.</th>
<th>With syncopated vowel</th>
<th>With retained vowel</th>
</tr>
</thead>
</table>
| 45  | Ach. es "to sing," S. Pomo ūh,- Chum. eX- | Okwanuchu Shas. ēsi-, S. E. Pomo xe-
| 53  | Kar. cak "arrowpoint," Ach. sat az         | Yana haga, E. Pomo zaga az         |
| 55  | Kar. ac "water," Ach. ac, Seri az          | Yana ha-, Shas. atsa, Moh. aha     |
| 60  | Shas. ic "man"                              | Yana ēsi                           |
| 117 | Kar. is "to drink"                          | Yana ēst-, Moh. ēdī               |
| 128 | Shas. oi "eye," Pomo ēl                   | Kar. yup, Dieg. ēyū                |

(b) SYNCOPE OF MEDIAL VOWEL

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<th>With retained vowel</th>
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</thead>
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<td>12</td>
<td>Ats. ēppiu &quot;sinew&quot; (from *i-pmi-u), Shas. ēme (from *ipme)</td>
<td>Shas. chena, Chim. h-epen, Chontal ēpæn.</td>
</tr>
<tr>
<td>16</td>
<td>Kar. ēppi &quot;tongue,&quot; Ach. ēpli, Seri ēpl.</td>
<td>Yana dal-la, Chim. h-itæn-</td>
</tr>
<tr>
<td>23</td>
<td>Ach. ēlī &quot;hand&quot; (i.e., ēlī from *itli)</td>
<td>Chim. ētsa, Moh. hatchu-urk</td>
</tr>
<tr>
<td>56</td>
<td>Ach. ēcēl-a-siwi &quot;it is cold,&quot; Kiliwi ahhtchak</td>
<td>Moh. ēsaka, Seri ētæk</td>
</tr>
<tr>
<td>57</td>
<td>Shas. ak &quot;bone&quot; (perhaps from *akh[a]k)</td>
<td>Moh. ēpæsa</td>
</tr>
<tr>
<td>58</td>
<td>Shas. ēpæ &quot;liver&quot;</td>
<td>Chim. h-ēsæm</td>
</tr>
<tr>
<td>76</td>
<td>Shas. ēsak &quot;ear&quot; (i.e., ēsak from *ismak), Ach. ēsæat, Ats. ēsmak, Chontal ēsmats</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>With syncopated vowel</td>
<td>With retained vowel</td>
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</tr>
<tr>
<td>114</td>
<td>Okwanuchu Shas. <em>ip'iwa</em> &quot;tail&quot;</td>
<td>Shas. <em>ihiwa</em>, Kar. <em>apuvi</em></td>
</tr>
<tr>
<td>115</td>
<td>Ats. <em>itsmi</em> &quot;to sleep,&quot; Moh. <em>ismā</em></td>
<td>Okwanuchu Shas. <em>itsiwi</em>, Seri <em>sim</em></td>
</tr>
<tr>
<td>169</td>
<td>Shas. <em>innux</em> &quot;hair&quot; (from <em>isnux</em>), Ats. <em>naza</em> (from <em>snaza</em>), Yana -'lu- &quot;head&quot;</td>
<td>N. Pomo <em>cina</em> &quot;head&quot;</td>
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<tr>
<td>176</td>
<td>Ach. -'lu- &quot;into house&quot; (from <em>-xlu</em>)</td>
<td>Yana -wul(u), Kar. -fur-k</td>
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</tbody>
</table>

The original Hokan forms for the stems with syncopated medial vowel can be reconstructed with a considerable degree of confidence as *ipami* "sinew"; *ipali* "tongue"; *itali* "hand"; *axatcl"cold"; *ihyaka"bone"; *ipasi"liver"; *isama-"ear"; *apliwa"tail"; *isima"to sleep"; *axwati"blood"; *isilu-(*isila-)* or *isinu-(*isina-)* "head"; *-xulu"into."

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