The Structure of Hawaiian

Day 6
Part 1: Valency Changing Morphology
Part 2: Possession Morphology

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1 Valency Morphology
   Description
   Prior Analysis
   Morphological Interactions
   Proposal

2 Possession
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2 Possession
Recap

- Determine the different meanings of ho’o
- Search the dictionary for ha’a entries
- Can these items be collapsed (are the allomorphs?)
- If so, why? If not, why not?
Goals

- Describe valency increasing morphemes *hoʻo*, *haʻa*
- Compare the distribution of these with other valency related morphology
- Argue that *hoʻo* and *haʻa* are syntactically conditioned allomorphs
  - Within Distributed Morphology framework
**Terminology**

- *Allomorphs* are pronunciations of morphemes (usually more than one)
- Morpheme: minimal meaning-bearing unit
- Allomorphs can be *phonologically conditioned*

(1) a. impossible
   b. incredible

(2) a. autumn
   b. autumnal (cp. form/formal)

- Allomorphs can also be *syntactically conditioned*

(3) a. Some Greeks believed (that) the earth is round.
   b. That the earth is round was believed by some Greeks.
   c. *The earth is round was believed by some Greeks.*
Terminology

• *Valency* refers to the number of arguments some word has
• Valency changing operations include passive, nominalization, causative, and other morphological operations

(4) a. tooth  
   b. teethe

(5) a. bath  
   b. bathe

(6) a. sit  
   b. set

(7) a. Mary kicked the ball.  
   b. The ball was kicked.
Data Sources

- Elbert & Pukui (EP henceforth):
  - *Hawaiian Grammar*, 1979
  - *Hawaiian Dictionary*, 1986 (primary source)
836 entries headed by *hoʻo* & *haʻa*

- Coding for morphology, phonological alternation, interaction with reduplication, meaning, etc.

- Note that *hoʻo* & *haʻa* have several uses not related to valency change, which I do not focus on here
hoʻo and haʻa increase valency

- hoʻo & haʻa are typically characterized as causative prefixes
- However, these have a wider range of applicability than typical causatives
- In particular, both hoʻo & haʻa can be prefixes to nouns as well as adjectives and verbs with different levels of transitivity
- hoʻo & haʻa are best characterized as general valency increasing prefixes: they increase the number of arguments associated with their root
EP describe *hoʻo* as a *causative-simulative* prefix

EP’s causative function is exemplified here

\[
\begin{align*}
(8) & \quad a. \hele & \quad (10) & \quad a. \ola \\
& \quad \text{to go} & \quad & \quad \text{alive} \\
& \quad b. \hoʻ\hele & \quad b. \hoʻ\ola \\
& \quad \text{to set in motion} & \quad & \quad \text{to save} \\
(9) & \quad a. \ʻ\ai & \quad (11) & \quad a. \hale \\
& \quad \text{to eat} & \quad & \quad \text{house} \\
& \quad b. \hōʻ\ai & \quad b. \hoʻ\ohale \\
& \quad \text{to feed} & \quad & \quad \text{to house}
\end{align*}
\]

*Hoʻo* has phonologically conditioned allomorphs *hoʻ*, *ho*, *hō*, and *hōʻ*

The vowel lengthening of the root in (10) is a phonological process related to stress domains (Alderete & MacMillan 2014).
EP describe an additional prefix *haʻa* as *causative-simulative*

EP’s causative function is exemplified here

(12)  a. ʻāpuka
      *to cheat*
     
     b. haʻāpuka
      *to cause to cheat*

(13)  a. kia
      *nail, spike*
     
     b. hākia
      *to nail, fasten*

*Haʻa* has phonologically conditioned allomorphs *hā* and *ha*
Simulative uses

- For EP, the simulative refers to examples where *hoʻo* or *haʻa* derive an intransitive from a noun, meaning ‘to act/feign like:’

(14) a. haole
    *white person*

    b. hoʻohaole
    *to act like a white person*

(15) a. koaʻe
    *tropicbird*

    b. haʻakoʻaʻe
    *to act like the tropicbird*
More simulative uses

(16) a. wahine
   woman
   b. hoʻowahine
   to behave like a woman, to grow into womanhood

(17) a. kuli
   deaf
   b. hoʻokuli
   to act deaf or to feign deafness

• Similar construction in English:

(18) What happened was you Anderson Silva-ed the guy. [Jim Rome Show, 5/23/16]

(19) I’m gonna monster over this table. (= climb over the table like a monster truck)
Descriptive summary

- *hoʻo* & *haʻa* both increase valency very generally
- Prefixation of these morphemes to nominals (both for EP’s causatives and simulatives) does not necessarily encode causation
- EP’s ‘causative’ and ‘simulative’ describe special cases of valency increase
EP’s Analysis

- Despite similarity, EP analyze hoʻo & haʻa as (synchronically) unrelated
- First, both morphemes may attach to the same root, deriving the same meaning:

(20) a. koʻo
    brace, prop, pole
b. hoʻokoʻo
    to prop with a pole
c. haʻakoʻo
    (same as hoʻokoʻo)

(21) a. ʻawe
    pack, knapsack
b. hōʻāwe
    to carry on the back
c. hāʻawe
    (same as hōʻāwe)
EP’s Analysis

• Further, *hoʻo* may attach to *haʻa*, but not the converse:

(22) a. nui

*large*

b. haʻanui

*to brag, exaggerate*

c. hoʻohaʻanui

*to cause to brag*

(23) a. nini

*to pour*

b. hanini

*to overflow*

c. hoʻohanini

*to cause an overflow*

• Within EP’s structuralist framework, each morpheme has a unique slot: they are not allomorphs
Morphological Competition

- Corpus analysis suggests an additional distribution pattern
- *hoʻo*, but not *haʻa*, co-occurs with other valency related morphology, such as passive and nominalization
- *haʻa* competes with other valency related morphology
- This distribution, combined with the similarity of meaning, indicates that these morphemes are syntactically conditioned allomorphs
Interaction with Nominalization

- hoʻo (but not haʻa) freely co-occurs with nominalizing -na:

(24) a. kahu
to pray in chant
b. kahuna
priest
c. hoʻokahuna
to ordain a kahuna

(25) a. ‘ike
to see [transitive]
b. ‘ikena
view, seeing, knowing
c. hoʻikena
to see, know [intransitive]
Interaction with Passive

- *hoʻo* (but not *haʻa*) freely co-occurs with passive -*Cia/-a*:

(26)   a. ʻike 
      to see 

b. hōʻike 
      to show 

c. hōʻikea 
      to be shown 

(27)   a. waʻa 
      canoe, trench 

b. hoʻowaʻalia 
      to be dug out
Cyclic Effects in Morphology

- I adopt the DM framework for cyclic effects in morphology (Embick & Marantz 2008, Embick 2010)
- Embick’s (2010) example with nominalizing *n*:

  \[(28)\]  
  \(n\) root-conditioned allomorphs: marri-*age*, refus-*al*, confus-*ion*

  \[(29)\]  
  \(n\) elsewhere allomorph -*ing*: marry-*ing*, refus-*ing*, confus-*ing*

\[(30)\]

- 2-way distinction: *n* in ‘inner domain’ has unpredictable allomorph, *n* in ‘outer domain’ has predictable allomorph
- The specific realization of inner-*n* is an independent, morpho-phonological process
Morphological Analysis

• For Hawaiian, where \( n \) & \( v \) are cyclic:
  • \( v_{incr} \) is a general valency-increasing morpheme
  • for \( v_{incr} \): \( ha'a \) is the root conditioned allomorph, \( ho'o \) elsewhere
  • for nominalizing \( n \): \( \emptyset \) is the root conditioned allomorph, \( -na \) elsewhere
  • \( v_{be} \) and \( v_{agent} \) are always spelled out \( \emptyset \)
Sample Derivations

- **intransitive → transitive**

(31) a. hele
   \( \text{to go} \)

b. hoʻohele
   \( \text{to set in motion} \)

(32) a. \([ \text{hele } v_{be} ] = \text{hele} \)
   \( \text{to go} \)

b. \([ v_{incr} [ \text{hele } v_{be} ] ] = \text{hoʻohele} \)
   \( \text{to set in motion} \)
Sample Derivations

- **noun/root → simulative**

(33)  
- a. haole  
  *white person*  
- b. hoʻohaole  
  *to act like a white person*

(34)  
- a. koaʻe  
  *tropicbird*  
- b. haʻakoaʻe  
  *to act like the tropicbird*

(35)  
- a. \([ v_{incr} \ [ haole n ] ] = hoʻohaole  
  *to act like a white person*  
- b. \([ v_{incr} \ koaʻe ] = haʻakoaʻe  
  *to act like the tropicbird*

- The optionality of *n* with a root derives EP’s observation that both *hoʻo* and *haʻa* can superficially attach to roots.
Cyclic Interactions

- Presence of passive or nominalizing morphemes forces $v_{incr}$ into outer domain:

(36)  
\[
\begin{align*}
  & a. \quad [ \text{‘ike } v_{agent} ] = \text{‘ike} \\
  & \quad \text{to see [transitive]} \\
  & b. \quad [ [ \text{‘ike } v_{agent} ] n ] = \text{‘ikena} \\
  & \quad \text{view, seeing, knowing} \\
  & c. \quad [ v_{incr} [ [ \text{‘ike } v_{agent} ] n ] ] = \text{ho‘ikena} \\
  & \quad \text{to see [intransitive]}
\end{align*}
\]

(37)  
\[
\begin{align*}
  [ v_{incr} [ [ \text{‘ike } v_{agent} ] v_{pass} ] ] = \text{hō‘ikea} \\
  \text{to be shown}
\end{align*}
\]
Co-occurrence Restrictions

• The same analysis derives the ungrammaticality of *haʻa hoʻo- prefixes:
  • The root-attached morpheme must be spelled out as haʻa
  • Any additional affixation of $v_{incr}$ is realized as hoʻo

(38) [ [$v_{incr}$ [$v_{incr}$ nui ] ] ] = hoʻo haʻa anui

*to cause to brag*
Conclusion

• *Haʻa* competes with other valency related morphology, including passive, nominalization, and itself (*ν_{incr}*)
• This suggests that *haʻa* is the root-conditioned allomorph of the functional morpheme *ν_{incr}*
• *hoʻo* is the realization of *ν_{incr}* when in an outer domain
  • *hoʻo* can prefix to *haʻa*, but not the converse
  • *hoʻo* & *haʻa* can both attach to string-identical roots (*haʻa* to a root directly, *hoʻo* to a true nominal)
• *hoʻo* is far more frequent in EPs dictionary, because it is less restricted in its domain of application
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Outline

1 Valency Morphology
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Prepositions

(39)  

a. noho i Waikiki ma O’ahu  
living at Waikiki at O’ahu  
living at Waikiki on O’ahu

b. mai Hilo  
from Hilo
from Hilo (EP)
(40) a. Aia ke kumu i ka hale.
   there the teacher in the house
   The teacher is home.

   b. Ua hele ’o ia i ke kuahiwi.
      PERF go  SUBJ he to the mountain
      He went to the mountain. (Cook, 2002)
Possession: Introduction

(41) a. ka heana a ke aliʻi
   the corpse GEN the chief
   ‘the chief’s victim’

   b. ka heana o ke aliʻi
      the corpse GEN the chief
      ‘the chief’s (own) corpse’ (EP)
Possession: Kinship

(42) a. ko’u makua kane
    my parent male
    ‘my father’

b. kana keiki
    his child
    ‘his child’ (EP)
Possession: Inanimates

(43) a. ka i‘a a kākou
    the fish GEN our
    ‘our fish’

   b. ka i‘a o keia wahi
    the fish GEN this place
    ‘the fish of this place’ (EP)

- Communally owned items (dictated by Hawaiian culture) take the o possessive
- fresh water and canoes are examples
- The categories can be pragmatically manipulated, though
Possession: Simple Locations

(44) Ua nani o waho.
    PERF beautiful GEN outside
    ‘the outside is pretty’
Possession: Complex Locations

- Complex spatial prepositions are difficult:
- Unclear what kind of relationship obtains within these prepositional constructions

(45)  a.  i luna o ka waʻa
      at top GEN the canoe
      in the canoe (EP)

b.  Aia ka nupepa ma luna o ka pakaukau
    there the newspaper on top GEN the table
    The newspaper is on top of the table (Hopkins 1992)
Possession: Complex Locations

(46)  a. Ua peʻe ʻo Koʻolau malolo iho ʻo ka lapa
       PERF hide SUBJ Koʻolau pause down GEN the ridge
       ‘Koʻolau hid under the ridge’ [lit. down of the ridge] (EP)

      b. I ka moe ʻana o loko ʻo ka hale.
       at those sleep DIR GEN inside GEN the house
       ‘While those in the house slept’ [lit. inside of the house]
       (Elbert & Pukui 1986)

      c. mawaho aku ʻo  ka poʻina nalu
       out DIR GEN the crest wave
       ‘beyond the breakers’ [lit. out beyond of the breakers]
       (Elbert & Pukui 1986)
Problem 5

• Read Wilson (1976) (in the ‘theoretical literature’ folder)
• Consider Wilson’s examples along with the ones presented above
  • Especially the complex spatial prepositions
• Determine what qualifies might induce the a/o distinction
  • It’s okay to stick with Wilson’s analysis - just be sure that the preposition data is accounted for