# 323: Principles of Analysis

## 1.    Part I: the easy principles

In part I, all the allomorphs of a set of words must share a common phonological string which share a common semantic or functional form.

(1)        **Principle I.**
           In a paradigm of two or more words, if a string with a common set of phonemes occurs in both or all words and if they have a common function, the string is considered to be a morph.

(2)        Example (1):
      a.    dual        /dúəl/
      b.    dually      /dúəli/
      c.    dualism    /dúəlɪzm/
      d.    dualize     /dúəlàjz/
      e.    Common form:  /dúəl/
           (The symbol "əl" represents a syllabic 'l' (a syllabic lateral liquid); some people might pronounce it as [əl].

           Common meaning of  /dúəl/: "referring to a pair (2)".

Note: the word duel includes the common meaning but it also includes the meaning of a combat between two persons. By Principle 1 duel would not be the same morph as dual.

(3)        **Principle 2:**
           If a morph can occur alone with no other adjoined morphs, then the morph is a stem as well as a word:

(4)        Example (2):
           In the above paradigm (1), dual may stand alone as an adjective: the dual number of nouns.

(5)        **Principle 3:**
           If the remaining forms can not occur alone or indendently, they are
           affixes adjoined to the stem.

(6)        Example (3):
           The morphs /i/, /ɪzm/, /ajz/, /əl/ in (1) are each affixes since they
           cannot occur alone in English.

(7)        **Principle 4: (morphophonemic alternations: the weak type)**
           Given a paradigm of two or more words, if they each contain a
           string of phonemes which are the same except for one phoneme
           and each string shares a common semantic form or function, each
           string is an allomorph. The set of allmorphs belong to a common set
           called a morpheme.

           Each allomorph will usually form a syllable or a part of a syllable
           (often affixes); or each allomorph may contain two or more sylla-
           bles (often stems).

(8)        Example (4)
           The allmorphs in Example (1) /i/, /ɪzm/, and /ajz/ are each a syllable.
           /dúəl/ contains two syllables. The plural allomorphs (suffixes) /z/
           and /s/ in dogs and cats each form part of the coda of the word, of
           which both are a single syllable.

If the onset, nucleus, or coda differ in a common syllable of the paradigm, we will call this a
weak alternation if the alternation is predictable on phonological grounds.

(9)        Example (5)
           The alternation of /s/ and /z/ in the plural is phonologically predict-
           able. /s/ can only occur after a voiceless consonant: /kæt+s/. /z/ can
           only occur after a voiced consonant or sonorant /dag+z/. There is
           a third plural allomorph: /xz/: passes = /pæsxz/. This allomorph only
           occurs after a sibilant. It is predictable, and constitutes, therefore, a

weak alternation with /s/ and /z/. The same holds true for the third person singular morpheme {Z} which has the same distribution as the plural morpheme. A similar alternation is found in the past tense morpheme {D}, which as the allomorphs /d/, /t/, and /ɪd/: played = /ple:+d/, hissed = /hɪst/, and pitted = /pɪtɪd/. In the latter allomorph, /ɪd/ is selected if the stem ends in an alveolar stop. This alternation is also predictable, and is therefore weak.

(10)        **Principle 5: (morphophonemic alternations: the strong type)**

If the alternation of two or more allomorphs is not predictable on phonological grounds solely, we will call this alternation strong.

(11)            Example (6):
                Note the alternation of the syllabic nucleus in loan and lent. The nucleus "oa" -> "e" in the past tense. There are, therefore, at least two allomorphs of the verb LOAN: /lo:n/, /len/). /t/ is an allomorph of the past tense morpheme. We will return to this later. There is no way that the nucleus in the past tense form (allomorph or allostem) can be phonologically predicted. The verb GROAN in English is regular: groan, groaned; CROAK: croak, croaked; CHOKE: choke, choked.

The verb MAKE has two allormophs: make = /me:k/ and ma- = /me:/ in made. Here, /k/ -> Ø = change in the coda [read 'Ø' as coda deleted]); hence two allomorphs: /mek/, /me/. The deletion of /k/ is unpredictable, as /k/ remains in the past tense form of most verbs: STAKE: stake, staked; RAKE: rake, raked; BAKE: bake, baked.

In some verbs the rhyme (nucleus and the coda) does not alternate predictably. Rarely, if ever, do the onset and either the nucleus or the coda form the alternation.

(12)            Example (7)
                BRING: bring, brought: the rhyme 'ing' -> 'ough ' / _____ t (= change of rhyme). There are two allomorphs: /brɪŋ, brɑ/. This alternation is

unpredictable. There are some verbs ending in 'ing' which are regular: DING: ding, dinged; KING: king, kinged (make one a king); WING: wing, winged.

(13)     **Principle 6: (morphological suppletion)**

If no members of the syllable are the phonologically the same, the two forms are considered to be suppletive allomorphs.

(14)     Example (8)

GO: go, went ('go' ->' wen' / ___'t' = complete change of syllable (in this case).

–

## 2.     Part 2.

–

This page last updated 19 JA 2004

–