Deciphering Linear B
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■ In 1900, Sir Arthur Evans uncovers the remains of a palace in Crete and finds tablets containing inscriptions in unknown writing systems:

- First set of tablets: 2000-1650 B.C. Semagrams.
- Second set of tablets: 1750-1450 B.C. Linear A.
- Third set of tablets: 1450-1375 B.C. Linear B. Mostly inventories. Numbers easy to decipher.

■ First cues:
Left to right writing system.
Syllabic, with approx. 90 characters.
Probably not Greek, since the most common ending in Greek is /s/, but what looks like the corresponding character rarely appear word final in the Linear B script.

■ The problem:
Sequences of signs forming words are easy to identify, given that the texts are mostly inventories or by recurrence. The problem is to find out what symbol corresponds to what phonetic syllable (and from there uncover the meaning of the text, since there is no parallel translation nor speaker to ask). As in lexical analysis, the idea is to define our units (the 90 syllabic symbols) and group them into classes by some distributional criteria. Once a grid of relations is worked out, phonetic hypotheses can take over.

■ Alice Kobler and bridging syllables.

(1)   Case inflection in pronouns:
he
him
his

Kobler noticcs that some words form triplets, following the schema:

(2) s_1 + s_2 + … + X + ending 1/ending 2/nothing

Syllable X varies from the two first cases to the third. Kobler compares that to case declension in other ancient languages, as in (2). Syllable X –the bridging syllable-- is the syllable where the root and the case ending meet.

(3)   Akkadian:
       sad-anu
       sad-ani
       sad-u

Distributional properties of bridging syllables:

- The syllables X in a noun share one distributional property: their symbol must encode the final consonant of the root followed by a vowel. That means that the two bridging syllable symbols for a given noun stand for phonetic syllables with the *same consonant*.

- The syllables X in two different nouns in the same case share another distributional property: since the case ending must be the same, the vowel in the bridging syllable must be there same. This means that two bridging syllable symbols from different nouns in the same case stand for phonetic syllables with the *same vowel*.

■ Michael Ventris continued Kobler's distributional method:

- Phonetic CCV must be resolved by epenthesis of a default vowel to render the script purely syllabic: Cv+CV.

- Phonetic initial vowel at the beginning of the word does not form a CV sequence. There must be some symbols --occurring only/predominantly at the beginning of words-- that are not syllabic, but merely vocalic: 61 and 08.

- Expanded grid of relations: Table 22.

- Ventris attempted the first phonetic pairings as an educated guess: the three most common nouns in the texts must be names of important towns.

(4)　　08　　73　　30　　12
　　　　V　　CV_1　　CV_1　　CV_2

(5)　　70　　52　　12
　　　　CV_2　　CV_2　　CV_2

(6)　　69　　53　　12
　　　　CV　　CV_1　　CV_2

■　Ventris and Chadwick continued finding phonetic correspondences until the scripts were completely deciphered. The language of the script turned out to be Greek, with omission of final /s/ that the reader could easily recover.