Tifinagh and consonantal writing systems

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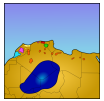
Linguistic setting

Afro-Asiatic

- A large family of languages across North Africa and the Middle East.
- Consonantal-root morphology, famous especially from Semitic.

Berber

- One branch of Afro-Asiatic.
- Multiple languages across the Maghreb (western North Africa).
- Tuareg in a large region of the Sahara and Sahel.



- Tarifit
- Tamazight
- Tashelhiyt
- Tamasheq
- Chenoua
- Kabyle
- Chaoula
- Saharan Berber

Tuareg

- A semi-nomadic people of the western Sahara and neighboring Sahel.
- Local names reflect historical sound changes.
  - **Tamahaq**, Tahaggart
    Algeria, Libya, Niger — 62,000 speakers
  - **Tamajaq**, Tawallammat
    Niger, Mali — 640,000 speakers
  - **Tamajeq**, Tayart
    Niger — 250,000 speakers
  - **Tamasheq**
    Mali, Burkina Faso — 281,200 speakers
- The language is sometimes collectively called Tamashek / Tamasheq.
- The point of interest here is the use of the traditional Tifinagh script by the Tuareg to write their language.

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Scripts

Libyco-Berber (Numidian)

- An ancient script of disputed origin.
  - Most likely from Phoenician, perhaps via Iberia.
  - Mainly attested in Algeria and Tunisia.
- Rock inscriptions often difficult to date.
  - May have originated by the 6th century BCE, or even earlier.
- Only consonants are represented, to the extent the texts are understood.
  - E.g., Punic names **ʔnkn**, **ʔšyn**, **ʔrš** = V-initial Libyco-Berber **nkn**, **šyn**, **rš**.

gwytt·mdn·bwm?mt·z$_1$ym
hyhz$_2$rt·z$_2$bmn

(written from the bottom up)

Oukaimeden, Morocco
<lbi-project.org>

Traditional Tifinagh

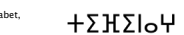
- Descended from Libyco-Berber, through long period of minimal attestation.
  - Some letters differ graphically or in their phonetic value.
  - In Niger, also called *Shifinagh*.
- Used today by the Tuaregs mainly for symbolic or playful purposes.
- Only consonants are written, except for many word-final vowels.

In this photo, the city name ***Kidal*** (in Mali) is written **kdl** from left to right.

Neo-Tifinagh

- A recently proposed, standardized version of the script with vowel letters.
  - Structurally a simple alphabet, not an abjad.
- Limited use in Morocco and Algeria for Northern Berber.

At right, **Tifinay** written in this alphabet, with vowel letters **i** and **a**.



Typology

The Semitic abjad

- An *abjad* is a writing system that represents just (or mainly) consonants.
  - The West Semitic script family, ultimately inspired by Egyptian.
- Phoenician is a pure form, representing only consonants.
  - ***katti*** "I was" written 𐤊𐤕 = **kt**.
- Hebrew, like most abjads, writes some vowels.
  - The otherwise consonantal letters **y w h** as *matres lectionis*.
  - ***lūḥōṯ*** "tablets" historically לחת lḥt, לוחות lwḥt, לוחות lḥwt, לוחות lwḥwt

A syllabary?

- Gelb (1963): writing systems evolve unidirectionally over time.
  - Logographic > syllabic > alphabetic.
  - Cannot skip a step, or go in reverse.
- West Semitic is derived from Egyptian consonantal signs.
  - Egyptian phonograms < logograms, therefore must be syllabic.
  - Semitic yielded the Greek alphabet (syllabic > alphabetic).
- Under this view, the West Semitic script is a syllabary.
  - CV signs in which the vowel is **indeterminate**, and can be zero.
- Hebrew שלש = ***šālōš*** "three"
  - As a consonantal alphabet (abjad): **šlš**
  - As a syllabary with unmarked vowels: **šᵊlᵊšˣ** (→ **šᵊlᵊšᵍᵊ**)
- *Matres* have to be treated as phonetic complement to syllabic sign.

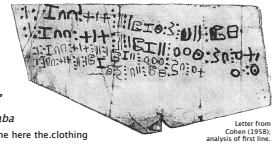
Syllable structure

- Partly this works because (ancient) Semitic syllables all begin with C.
  - Every syllable therefore has at least one consonant, and letter.
- Many have rejected the syllabic analysis (Daniels 2000).
  - Complications such as this needed to resolve contradictions.
- But a compromise position (Swiggers 1984):
  - The letter DENOTES a consonant, but STANDS FOR a syllable.
- True even in borrowings of a script to languages with V–initial syllables.
  - Adaptations of Arabic: initial *alif* occurs in vowel–initial words.
    - Persian ***ædæb*** "custom" written ادب = **ʔdb**.
    - Malay ***əmas*** "gold" written أمس = **ʔms**.
  - A letter therefore still STANDS FOR that syllable.
- But in Tifinagh no such marker exists.
  - An important proof of the abjad as a true segmental system.

Tifinagh writing

ⵡ ⵏⴽ ⵜⴷⴷⵡ ⵜⵏⵜ
w nk fddw tnt
awa nak ɣadudu tənnat
this (is) me Fedudu saying

ⵀⵍⵢⵏ ⵙⴼ ⵙⵡⵢ ⵀⴷ ⵍⵢⵛⴱⴰ
hlyn šf swy hd lyšba
huləyin šif siwi hid eləyəšaba
I.greet.there the.chief send.me here the.clothing



Letter from Cohen (1958); analysis of first line.

- Initial, internal, and some final vowels are omitted.
  - This results in unrepresented initial syllables: note **w** for *awa* "this".
    - Same is true in Lybico–Berber.
    - In more limited way, also found in Orkhon (Old Turkish) runes.
- Many final vowels are written by special **a** sign, or **y w** for *i u*.
  - Notably, these do not function to represent a syllable, just the V of CV.

Complex linguistic structure

- Tifinagh mainly represents consonants, but also some vowels word–finally.
  - Already the constituents C, V, and Word are implicated.
- Syllables are not directly represented. More examples of unwritten initial V:
  - Singular ***ehakit*** "tent" as ⵄⵀⴰⴽⵉⵜ; plural ***ihaktan*** as ⵉⵀⴰⴽⵜⵏ
  - Infinitive ***asal*** "to hear" as ⴰⵙⵍ; impf. hab. ***salay*** "I hear" as ⴰⵙⵍⵢ
- But syllabification does matter in whether a segment is C or V.
  - Vowel in ***inya*** "he killed" is not written: ⵉⵏⵢⴰ (Hanoteau 1896)
  - Glide in ***alas wa ynya*** "the man he killed" is: ⵍⴰⵙ ⵡⴰ ⵢⵏⵢⴰ; **ls w ynya**
- Word–internal vowels are not directly written, but they play another role.
  - Ligatures are used for certain adjacent consonants. (Priest, et al. 2008)
    - ***inbal*** "he buried" as ⵉⵏⴱⵍ; ***tastaq*** "song" as ⵜⴰⵙⵜⴰⵇ
    - Loanword ***fanta*** "Fanta" as ⴼⴰⵏⵜⴰ (Aghali–Zakara 1994)
  - Unwritten V prevents the use of a ligature in CVC.
    - ***anabal*** "burial" as ⴰⵏⴰⴱⴰⵍ; ***tasetaq*** "infection" as ⵜⴰⵙⴻⵜⴰⵇ
    - Loanword ***limonat*** "lemonade" as ⵍⵉⵎⵓⵏⴰⵜ
    - Some writers may not strictly observe this practice. (Prasse 1972)
- The rich constituent structure of spoken language provides many categories that can play a role in writing systems.
  - The syllable is decidedly less important in Tifinagh.
  - Swiggers' compromise reflects a fact of Semitic syllables.
    - Not an inherent property of an abjad.