

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
- Chaouia
- Saharan Berber

Tuareg

- A semi-nomadic people of the western Sahara and neighboring Sahel.
- Local names reflect historical sound changes.
 - **Tamahaq**, Tahaqart
 - **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.



References

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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**, **ʔsyn**, **ʔrs** = V-initial Libyco-Berber **nkn**, **syn**, **rs**.



gwytt·mdn·bwmʔmt·z,ym
hyhz,rt·z,bmn

(written from the bottom up)

Oukaïmeden, Morocco
libr-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 *Shifnagh*.
- 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, Tifinagh written in this alphabet,
with vowel letters i and a.

ⵜⴰⵎⴰⵙⴰⵏⵜ ⵉⵏ ⵓⵎⴰⵙⴰⵏⵜ

Typology

The Semitic abiad

- 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.
 - *kattī* "I was" written כָּתִי = kt.
- Hebrew, like most abjads, writes some vowels.
 - The otherwise consonantal letters y w h as *matres lectionis*.
 - *lūḥōt* "tablets" historically לוחות הלוי, לוחות לבנה, לוחות יהושע, לוחות יהונתן, לוחות יהוה

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 שָׁלוֹם = *šālōm* "three"
 - As a consonantal alphabet (abjad): שָׁלוֹם
 - As a syllabary with unmarked vowels: שָׁלוֹם (→ שָׁלוֹם)
- *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 *Ḍ* 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 *adab* "custom" written ادب = *ʔad.b*.
 - Malay *emas* "gold" written اسما = *ʔm.s*.
 - 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

⋮ 13 TAA: ±1±

w nk fddw tnt
awa nək fədudu tənnat
this (is) me Fedudu saying

||| CT @:Σ :Λ ||| CΘ.

hlyn šf swy hd lyšba

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 *ɛhak* "tent" as $\text{I}+\text{h}$ *hkt*; plural *ɛhaktan* as $\text{I}+\text{h}$ *hktn*
 - Infinitive *asal* "to hear" as $\text{O}+\text{I}$ *sl*; impf. hab. *sallay* "I hear" as $\text{O}+\text{I}$ *slɣ*
- But syllabification does matter in whether a segment is C or V.
 - Vowel in *ɣnya* "he killed" is not written: $\text{I}:$ *ɣny* (Hanoteau 1896)
 - Glide in *alas wa ɣnya* "the man he killed" is: $\text{I}:\text{O}+\text{I}$: *ɣ*. Is *w* *ɣny*
- Word-initial vowels are not directly written, but they play another role.
 - Ligatures are used for certain adjacent consonants. (Priest, et al. 2008)
 - *ɛmbal* "he buried" as $\text{O}+\text{I}$ *mbɛ*; *tasetaq* "song" as $\text{O}+\text{O}+$ *tɛtq*
 - Loanword *fanta* "Fanta" as $\text{I}+$, *frita* (Aghal-Zakaria 1994)
- Unwritten V prevents the use of a ligature in CVC.
 - *anabal* "burial" as $\text{O}+\text{I}$ *nbɛ*; *tasetaq* "infection" as $\text{O}+\text{O}+$ *tɛtq*
 - Loanword *limonon* "lemonade" as $\text{I}+\text{I}+$ *lmnt*
 - Some writers may not strictly observe this practice. (Pirasse 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.
 - *w* not an inherent property of an abjad.