

## **FROM A LEXICAL DATABASE TO A COMPARATIVE MODEL: VERBS OF BURNING IN KONDA, PENGO, MANDA, KUI, AND KUWI IN DIGITAL COMPARATIVE LINGUISTICS**

Contemporary digital comparative linguistics should not be reduced to the mechanical comparison of lexical items based on identical English glosses. That is a weak methodological path. If five forms in a digital database are glossed as “*burn*,” this does not automatically mean that they are direct cognates or that they represent the same semantic state. On the contrary, such material requires multi-level interpretation: phonetic, morphophonological, semantic, grammatical, and etymological.

The material of these theses consists of verbs belonging to the semantic field ‘to burn / to set fire to / to consume by fire’ in five Dravidian languages of the Konda–Kui subgroup: Konda, Pengo, Manda, Kui, and Kuwi. They are represented in the Global Lexicostatistical Database, whose purpose is to “compile, formalise, and provide public access to standardised basic lexicon wordlists” for the world’s languages; the database is oriented precisely toward basic vocabulary as material for historical-comparative classification (Starostin, 2011–2019). It is important that Konda is described as a language close to Kui / Kuvi and even closer to Pengo and Manda, which form a pair within the same subgroup (Krishnamurti, 1969).

The research problem is that the English gloss *burn* conceals several different semantic zones: ‘to burn’, ‘to be burnt’, ‘to set fire to’, ‘to ignite’, ‘to burn up’, ‘to scorch’, ‘to singe’, ‘to roast over fire’, ‘to burn incense’, and, in some cases, even ‘to fire / to shoot’. Therefore, the object of analysis should not be an isolated form, but the **development of a lexical-semantic field** in which phonetic reflexes, morphological types, and semantic branches interact with one another.

The theoretical background for such analysis is the concept of regular sound changes in South-Central Dravidian. Bh. Krishnamurti’s work on apical displacement is especially important here. He defines the phenomenon as follows: “‘Apical displacement’ is the name given to a set of sound changes in the Dravidian family” and further specifies that it involves the displacement of alveolar and retroflex consonants from a postvocalic to a prevocalic position in a particular subgroup including Telugu, Gondi, Konda, Kui, Kuvi, Pengo, and Manda (Krishnamurti, 1978, p. 1). He also stresses that these rules “gradually spread to the rest of the lexicon over the following two millennia” (Krishnamurti, 1978, p. 1). Thus, phonetic development in this area cannot be treated as a single completed change; it is a process of lexical diffusion.

For the analysis of verbs of burning, this is crucial. If a phonetic innovation can spread lexically and unevenly, then separate forms within the field *BURN* cannot be evaluated only by their surface similarity. It is necessary to determine whether a given form belongs to an older layer, whether it is a specialised formation, whether it represents a secondary causative, or whether it emerged through semantic extension. In this sense, a digital database does not provide a ready-made reconstruction; it provides material for building a hypothesis.

The first regularity is the **presence of a retroflex zone in part of the forms belonging to the semantic field BURN**. In Pengo, the form *ka:d-* is given as both transitive and intransitive; the source directly notes: “Used in intransitive and transitive senses alike” (Burrow & Bhattacharya, 1970, p. 200). In Manda, *ka:t* is recorded with the polysemy “to burn / to scorch” (Reddy, 2009, p. 28), and an intransitive pair *ka:d* ‘to burn, be burnt’ is also attested (Reddy, 2009, p. 28). In Kuwi, an additional intransitive form *ka:d-i-* ‘to be burnt’ is mentioned (Israel, 1979, p. 346). This allows us to speak not of accidental similarity, but of a local retroflex complex *ka:d- / ka:t-* within the semantic zone ‘to burn / to set fire to / to scorch’.

The second regularity is the **distinction between transitive and intransitive development**. For historical semantics, this is critical. In many languages, ‘to burn’ in the sense ‘to be on fire’ and ‘to burn’ in the sense ‘to set fire to / consume by fire’ are not identical meanings. The first denotes a state or process; the second denotes a caused action. In Pengo, one form *ka:d-* covers both valencies. In Manda, a split is visible: *ka:t* as transitive ‘to burn / to scorch’ and *ka:d* as intransitive ‘to burn, be burnt’. Thus, the development of the field proceeds not only through phonetic change but also through the grammatical splitting of valency.

The third regularity is the **semantic transition from general ‘burn’ to specialised meanings such as ‘scorch’, ‘singe’, and ‘destroy by fire’**. This is especially clear in Manda and Kui. Manda *ka:t* has the meaning ‘to burn / to scorch’ (Reddy, 2009, p. 28), meaning that one verb combines the general action of burning and the resultative damaging of a surface. In Kui, the form *m̄rah-pa* is glossed as “to consume by fire, to burn; n. destruction by fire” (Winfield, 1929, p. 79). This is no longer merely ‘to burn’, but ‘to consume/destroy by fire’. The semantic development here may be described as movement from process to result: FIRE PROCESS → FIRE DAMAGE → DESTRUCTION BY FIRE.

The fourth regularity is the **presence of lexical competition within one semantic field**. In Konda, the basic transitive form for ‘burn’ is *er-*, with the meaning “to kindle fire / to light, burn” (Krishnamurti, 1969, p. 356). However, several potentially close or specialised forms are also given: *mar-g-* ‘to burn’, the intransitive *vey* ‘to be burnt’, the specialised *aṭk-* ‘to burn heaps of hacked forest-wood before starting cultivation / to set fire to’, and *sur-* ‘to roast; to burn incense’ (Krishnamurti, 1969, pp. 347, 396, 406, 411). This means that in Konda, the field FIRE / BURN is already functionally divided into: ignition, burning, burning of material, ritual burning, and culinary treatment by fire.

The fifth regularity is the **semantic extension from ‘fire/burn’ to ‘shoot/fire a gun’**. In Kuwi, the basic form selected is *hu:d-*, which has the polysemy “to fire (gun etc.) / to burn” (Israel, 1979, p. 423). This is an especially valuable case because two zones are combined: fire as physical burning and fire as shooting. The source also provides a textual example: “put me also (in the hole) and burn me” (Israel, 1979, p. 273), where the imperative form *hu:d- adu* confirms precisely the meaning ‘to burn’. The semantic path may be reconstructed as FIRE / BURN → RELEASE FIRE → FIRE A GUN, or through the shared image of a controlled act involving fire.

The sixth regularity is the **uneven preservation of older lexical layers**. Pengo and Manda provide the most transparent local complex *ka:d- / ka:t-*. Kuwi preserves a related intransitive form *ka:d-i-* ‘to be burnt’, but the main transitive verb in the slot is *hu:d-*. Kui uses *m̄rah-pa*, while other forms, such as *kap-pa* ‘to cause to burn, to char, scorch’ are treated as regular derivatives from the intransitive *kamb-a* ‘to be burned/injured by fire / consumed by fire’ (Winfield, 1929, pp. 57, 59, 79). Thus, the field ‘to burn / to set fire to’ does not develop

linearly; it is redistributed among older roots, causatives, specialised verbs, and semantic innovations.

This corresponds well to broader typologies of semantic change. In contemporary lexical typology, semantic change is often analysed through polysemy, heterosemy, and cross-linguistic maps of colexification. The volume *From Polysemy to Semantic Change* explicitly defines its subject as the study of “semantic shifts at large, both synchronic and diachronic: the outcome of polysemy, heterosemy, or semantic change at the lexical level” (Vanhove, 2008). For the present material, this means that the polysemy *burn / scorch*, *burn / kindle*, *burn / fire a gun*, and *burn / roast* is not a marginal detail. It is the central mechanism in the field’s historical development.

Thus, the digital comparative model for this material should not be constructed as a flat table “language — form”, but as a dynamic map of phonetic-semantic transitions. At the centre of the model there should not be one proto-form, but several interacting lines of development: 1) the retroflex complex *ka:d-* / *ka:t-*; 2) the causative–intransitive opposition ‘to burn’ / ‘to set fire to’; 3) the semantic specialisation ‘to burn’ → ‘to scorch / singe’; 4) the resultative meaning ‘to destroy by fire’; 5) the ritual and culinary periphery ‘to burn incense / to roast’; 6) the metonymic extension ‘fire’ → ‘gunshot’.

Phonetically, the most important issue is not the surface similarity of all forms, but regularity within microgroups. The complex Pengo *ka:d-* — Manda *ka:t / ka:d* — Kuwi *ka:d-i-* allows us to reconstruct a local zone with long *a:* and a retroflex consonant. However, Konda *er-* and Kui *mʔah-pa* cannot be forcibly drawn into the same line. That would be methodologically dishonest. For these forms, it is more appropriate to speak of lexical replacement or of another etymological layer within the same semantic field.

Semantically, the field ‘to burn / to set fire to’ displays at least three directions of development. The first is **inchoative-causative**: ‘to ignite’ → ‘to burn/set fire to’. This is visible in Konda *er-* “to kindle fire / to light, burn” (Krishnamurti, 1969, p. 356). The second is **resultative-destructive**: ‘to burn’ → ‘to be destroyed by fire’ → ‘to destroy by fire’, which is especially clear in Kui *mʔah-pa*. The third is **technical-metonymic**: ‘fire/burn’ → ‘to shoot’, as in Kuwi *hu:d-* “to fire (gun etc.) / to burn” (Israel, 1979, p. 423).

In sum, these data show that digital comparative linguistics should work not with “ready-made words”, but with **structured laws of development**. A lexical database is only the first level. The second level is the annotation of valency, polysemy, and source reliability. The third level is the identification of local phonetic correspondences. The fourth level is the construction of semantic trajectories. The fifth level is verification through etymological dictionaries, above all Burrow and Emeneau’s *A Dravidian Etymological Dictionary*, which remains a fundamental resource for Dravidian etymology (Burrow & Emeneau, 1984).

Therefore, verbs of burning in Konda, Pengo, Manda, Kui, and Kuwi do not show one simple row of correspondences, but a complex picture of development: partial preservation of a retroflex complex, uneven lexical diffusion, splitting of transitivity, semantic specialisation, and metonymic extension from physical fire to shooting. For this reason, these data are highly revealing for digital comparative linguistics: they show that a serious model must explain not only “which forms look similar”, but **which phonetic and semantic laws govern their development**.

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