

## Sound Symbolism, Fire, and Light in the Greek Lexicon

Brian D. Joseph  
The Ohio State University

### I. Introduction: Light and Sound Symbolism

Light is a key element of being human and of living in the real world. Its importance means also that we as humans are keenly aware not only of their presence but also of their absence; thus, recognizing light and its importance also requires the recognition of notions that are opposite to them, namely darkness and, more generally, the obscuring of light. This connection is not just a matter of sophistry or of applying the folk adage that “opposites attract”, but rather it falls in line with psycholinguistic evidence; results from word-association tasks support this view, in that just as a word like *fat* evokes the response *thin*, so too should *light* as a concept evoke *dark* as a likely partner. Light is primordially, and still to this day, associated with fire, since fire was and still remains a key source of light, especially so in many underdeveloped parts of the world, but even so in certain circumstances in virtually all areas, developed or otherwise.

It is not at all difficult to suppose that all languages have lexical items embodying the concepts of light and dark, as well as a word for fire; even the most minimal color terminology systems found in languages of the world distinguish ‘dark’ and ‘light’, for instance, and the so-called Swadesh list<sup>1</sup> of some 200 basic lexical items includes not only ‘fire’, but also ‘white’ and ‘black’, thus suggesting a basic recognition of a distinction between dark and light and of one of the key ways in which light historically was created. But it is of special interest for linguists if there is more than a basic differentiation and if instead forms and meanings cluster in such a way that there are groups of lexical items that fall into these general semantic categories and show some formal relationship to one another. In many cases, what links items on the formal side is just an element identifiable as a root, that is, a full-fledged morpheme; sometimes, though, what links them is not a fully recognizable morpheme but rather just a short sequence of sound.

Such situations show what is commonly referred to as sound symbolism, though the phenomenon is also known as phonaesthesia or phono-semanticism, and it describes a situation in which bits of form within words, i.e., individual sounds or clusters of sounds, make significant contributions to the meaning of the word. A standard example is the widely discussed initial *gl-* sequence in English words such as *gleam*, *glimmer*,

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<sup>1</sup> Named for Morris Swadesh, who devised the list originally for the purposes of offering some chronological depth for language relationships; see Swadesh 1952 on this, for instance.

*glint*, *glisten*, *glitter*, and *glow*, to list just a few, where all the words in this group share an element of meaning having to do with light and brightness and the only constant element of form is the initial *gl-*; the logical inference, the one that the morphologist is led to by long-accepted principles of morphemic analysis, is that the *gl-* is responsible for the light/bright meaning.

Interestingly, this phenomenon has long been a troublesome concept for morphological theory, and thus for morphologists interested in word analysis and in neologistic word-formation. This situation may seem somewhat odd, since with the view of *gl-* suggested above and the definition of sound symbolism stated as it is above, it seems like one is dealing just with nothing more than a characterization of an ordinary morpheme, i.e., an element defined by a recurring meaning matching up with a recurring piece of form. Yet such is not the case and one can find in the literature such labels as “quasi-morpheme”, “sub-morpheme”, or “phonaestheme” for such elements, treating them as something different from ordinary derivational or inflectional or root morphemes.

One reason for the discomfort with sound symbolism is not that the form is not clear, since *gl-* is in *gleam*, *glint*, etc. readily segmentable, but rather that the contribution on the semantic side is not as transparent as one typically sees with morphemes;<sup>2</sup> the sense of “light” and “brightness” that is found in each of *gleam*, *glimmer*, *glint*, *glisten*, *glitter*, and *glow* is not identical and instead is rather vague. This issue becomes more pronounced when one considers the question of whether other *gl-* words, such as *glance*, *glare*, or *glass*, as well as words with an opposite sense pertaining to darkness or more generally the obscuring of access to light through vision, as in *gloaming*, *gloom*, *glower*, and *glum*, are part of the same morphemic group; the intuition of many native speakers is that they do belong, especially in the case of the former group, but it is hard to isolate in an exact way the relevant components of the meaning of these words that can be attributed precisely to the *gl-*. To a large extent, the problem on the semantic side is that most sound symbolic elements have meanings that are evocative and sensory-based, having to do with sharpness, burning, perception of size, or, as with the *gl-* words listed here, visual cues such as brightness and darkness, rather than meanings that are concrete, whether concretely grammatical, as with most derivational and inflectional morphemes, or concretely rooted in the real world, as with most root morphemes.

The sensory basis for the meaning of many sound symbols is not surprising. For one thing, sound symbols tend towards the less arbitrary, i.e. more iconic, side of the scale of arbitrariness for the relationship between form and meaning. In iconic form-meaning pairings there is a more direct link between the shape of a linguistic element and its meaning. Since the senses are naturally involved in the way humans interact with

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<sup>2</sup> Another aspect of sound symbols that troubles some analysts is that once the sound symbol, say *gl-* in the words under consideration here, is segmented off, the principle of exhaustive analysis of words into morphemes demands that the remaining parts of the words would be morphemes too; but it is not clear what *-int* or *-eam* or *-ow* or *-itter* would be as morphemes, and thus what their contribution to the meaning of the word would be. Moreover, many of these elements are isolated within English, so that recognizing *gl-* as a morpheme occasions the need to recognize several *cranberry* morphemes, i.e. elements that are clearly identifiable via segmentation but isolated in that they do not recur. For what it is worth, my sense here is that once one recognizes that *cranberry* morphemes exist, the number of such elements in a language need not count against an analysis.

the world, they therefore provide a basis for the assignment of meanings in forms that are even somewhat iconic.

It may be, then, that the easiest solution as to the status of sound symbols vis-à-vis morphological theory is to simply recognize them as morphemes. In most instances where sound symbols have been identified, there is a substantial piece of the lexicon that shows the element in question, as with the many *gl-* words in English. Thus the abundance of an item that is parsable over a large lexical set is a reason to think that the *gl-* has some independent status and thus functions like a morpheme. So too is the fact that sound symbols can show some productivity, allowing the lexical group to be extended. For instance, the English adjective *glitzy* and its back-formed noun partner *glitz*, whether they are based on a loan word, e.g. from German *glitzern*, or they represent a neologistic formation within English, e.g. from a blend of *ritzy* with any of the *gl-* words), fit comfortably into the *gl-* group in terms of their semantics and their form.

Modern Greek has a set of words that are like the *gl-* words in English in various ways. In particular, they show meanings that have some basis in the senses and, like the *gl-* words, they range over, and thus can be parsed over, a substantial lexical set pertaining to fire and related notions, and in that way to a light-producing and light-related notion. There are some differences, as becomes clear below, in that, for instance, the Greek sound symbol actually comprises a larger set of formal elements, and moreover it receives support as a sound symbol in two ways. In sound symbolism, the sounds themselves, being linked to a sensory meaning, offer some expressivity on their own; thus looking at the sound symbol from within Greek, and viewing it in the broader systemic context of “expressive phonology” more generally, offers support since sound symbolism in this sense is really just a piece of a larger and wider-ranging nexus of expressive phonological dimensions. Moreover, looking outside of Greek, the sound symbolism discussed here receives support in a broader geolinguistic context of expressive phonology in other Balkan languages. The discussion of these Greek words thus gives some insight into how elastic and extensible the Greek lexicon can be and the sorts of relations that are lexically encoded in the language.

## II. A Sound Symbol in Greek

Before the relevant sound symbolic material from Greek is introduced, two important methodological points need to be made. First, the relevant meanings here relate in a somewhat general way to fire, and to light as well, only by associative extension, but in some instances only indirectly, perhaps through an invocation of opposites. Given what is seen in the previous section with *gl-* words in English, this is perhaps not at all surprising. Still, it does mean that the slipperiness and vagueness that have bothered some analysts about sound symbols in general, and the *gl-* words in particular, must be reckoned with in this Greek case as well, and this even though fire might be thought of as more concrete on the semantic side than some of the meanings associated with sound symbols. Second, with any sound-symbolic lexical grouping that might be identified in a language, it must be realized that some of the forms in that group may be native words and some may be borrowings. As the discussion of English *glitzy* above suggests, what is significant is the synchronic clustering of related meanings, and the persistent and

recurring linkage to a particular sound sequence, regardless of the origin of the word. This becomes evident in both the Greek and the Balkan groupings examined here.

The words to focus on as providing the relevant FIRE-related cluster in Greek are those listed in (1), where the recurrent element of form – the sound symbol – is word-initial *ts* or its voiced counterpart *dz*;<sup>3</sup> there may be an onomatopoetic basis to this sound symbol, with the *ts* reflecting the *ts-ts-ts*-like sound made by a weak fire, or even the striking of a match and the subsequent noise of the flare as it lights, but the various lexemes listed here extend this symbol semantically, and formally, well beyond this onomatope:

- (1) Greek lexical clustering with *ts/dz* <==> FIRE  
    **tsakmakópetra** ‘flint stone (for making sparks)’  
    **tsakmáki** ‘(cigarette) lighter’  
  
    **dzáki** ‘fireplace’  
  
    **tsiyarízo** ‘to brown (foods, e.g. onions)’ (via “brown” => “dark”)  
    **tsiyáro** ‘cigarette’ (as an object that glows, or else as base for *tsiyarizo*)  
  
    **tsiknízo** ‘burn (meat)’ (via “burnt meat” as “blackened”)  
    **tsuruflízo** ‘burn (up)’  
    **tsitsirízo** ‘sizzle’ (as a consequence of burning, via flames)

On the semantic side, the recurrent element of meaning has to do with fire or fire-making in various ways, e.g. via reference to flaming or sparking, as with *tsakmáki* and *tsakmakópetra*, or to the locating of fire, as with *dzáki*, or by the resulting sparks or glow, as in the case of *tsiyáro*. There is also reference to the result of fire, i.e. burning or blackening, in *tsuruflízo* and *tsiknízo*, and the association with cooking brings in *tsiyarízo* and *tsitsirízo* as well. The more directly fire-related words are connected also via the light, the sparks, and the glow associated with fire, so that a subsidiary set of associations leads from FIRE to LIGHT, and blackening of meat as a result of being burned could mean that DARK as the opposite of LIGHT might be an operative connection, as also *tsiyarizo*, via ‘brown’ as ‘dark’.

To the extent that LIGHT and DARK are involved, the lexical set in (1) could be extended by the forms in (2):

- (2)     **dzámi** ‘pane of glass’  
        **tsímblis** / **tsimbliáris** ‘bleary-eyed/gummy-eyed’

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<sup>3</sup> The affricates *ts* and *dz* are the least frequent consonants in Greek (see Mirambel 1959 and Householder, Kazazis, and Koutsoudas 1964 for phoneme-frequency counts for Greek). Given their rarity, it is reasonable to treat them as a single entity for the purposes of establishing the sound symbolism, even if they are distinctive phonemically. I ignore here the analytic issue of whether *ts* and *dz* are unit phonemes or clusters; see Joseph and Philippaki-Warbuton (1987) for a discussion of both sides of the issue, and Joseph and Lee (2010) for some relevant phonetic and dialectal evidence.

where, in the case of *dzámi*, the connection to ‘light’ is via ‘transparent/clear’, i.e. through visual transparency, much as *glass*, as noted above, can be included in the English *gl-* group. And, recognizing the relevance of the opposite notion, a lack of transparency, would be the basis for including *tsímbilis* and *tsimbliáris*, via an obscuring of vision, i.e. a blocking of access to light, much as *gloom*, as a typological parallel, can be thought of as belonging in the English *gl-* group.

These connections, if valid, reveal a few other important methodological points. First, the semantic linkages and clustering involved are admittedly somewhat subjective and in some cases can be motivated by reference to networks of association, in some instances even crosslinguistic ones. For instance, to anticipate the evidence from Albanian discussed more fully below in section 4, there are forms in that language that cluster in ways that the Greek words do, with a similar affricate sound [dz], spelled <x> in Albanian orthography, running throughout the forms. This sound occurs in, for instance, the noun *xixë* ‘spark; sparkle’ and its derivative *xixërij* ‘spurt and give off sparks’, a verb that specifically pertains to flames; that there are languages in which such a relationship is derivationally clear provides some validation on the semantic side for including fire-related words such as Greek *dzáki* in a cluster with forms referring to sparkle and sparks. Further, the involvement of a noun like *xixë* gives a basis for including Greek *tsakmáki/tsakmakópetra*, as, for that matter, does the connection between the fire-related *spark* in English and the LIGHT-related *sparkle*. Similarly, the inclusion of *glass* in English as part of the *gl-* group validates including *dzámi* in the LIGHT group in Greek. Still, as a second key point, it must be admitted that membership in a given putative lexical cluster is not a strictly determined phenomenon. For instance, the class of *gl-* words in English can reasonably be seen as somewhat fluid: not only are various LIGHT-related forms (*gleam*, etc.) claimed to be part of the class, but also DARK-related ones (*gloom*, etc.) and there are various *gl-* words whose membership, on a subjective level, not an etymological one, are less clear, e.g. *glad*, *glide*, or *glory*.<sup>4</sup>

### III. A Greek Sound Symbol in its Broader Context within Greek

The forms cited in section 2 provide a basis for thinking in terms of a sound symbol in Greek that on the formal side involves an initial affricate and on the semantic side is associated with light and various related notions. Within Greek, there is an important additional dimension that provides further support for the analysis of affricates as being involved in the FIRE/LIGHT-associated sound-symbolic group. In particular, such sound symbolism can be viewed as the one part of a chain of associated meanings in which recurring phonic elements serve as the links holding the chain together.

That is, there are other sound symbolic groupings involving affricates in Greek that are ostensibly related to the sound symbolism discussed here. For example, a sound symbol *ts(i)-* can be identified with the meaning ‘small, narrow, thin’, based on forms such as those in (3):

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<sup>4</sup> One has to guard of course against the analysis overplaying his/her hand, and positing forms that require large analytic leaps on the semantic side. Ideally, experimental confirmation would be forthcoming via word-association tasks and the like.

- (3) ‘small, narrow, thin’ sound symbol *ts(i)-*  
**tsitóno** ‘stretch out thin’  
**tsíxla** ‘small bird’  
**tsíros** ‘very small fish’  
**tsíta-tsíta** ‘just, barely (said of a narrow squeeze or a tight fit)’

In addition, there is also **-ts-** as a nucleus of diminutive marking, evident in the neuter diminutive noun suffix *-ítsi*, as in *korítsi* (cf. *kóri* ‘girl, daughter’); the feminine diminutive noun suffix *-ítsa*, as in *lemonítsa* ‘little lemon tree’ (cf. *lemoniá* ‘lemon tree’); various nonsuffixed hypocoristics derived directly from names, as in *Mítsos* (from *Dimítrios*) and *Kótsos* (from *Konstandínos*); and “diminished” adjectives, as in *γlikútsikos* ‘sweet-ish, cute’ (cf. *γlikós* ‘sweet’) or *kalútsikos* ‘good-ish’ (cf. *kalós* ‘good’). Finally, it can be noted that *tsíxla* has a metaphorical sense, ‘thin woman’, that extends and draws on the THIN feature of its meaning, and *tsíros*, likewise, has a metaphorical sense ‘thin person’, focusing on the SMALL aspect of its meaning.

Similarly, the lexical set in (4) is the basis for identifying a sound symbol *tsV-* associated with the meaning ‘sting, tease, bite’:<sup>5</sup>

- (4) ‘sting, tease, bite’ sound symbol *ts(i)-*  
**tsúzo** ‘sting’  
**tsukniða** ‘nettle’  
**tsúxtra** ‘a stinging jellyfish’  
**tsúγðo** ‘very provoking and insulting woman’  
**tsim(b)úri** ‘tick’ (“small stinging insect”)  
**tsivíki** ‘tick’  
**tsi(m)bó** ‘pinch’  
**tsatízo** ‘I tease’  
**tsi(n)gló** ‘provoke by teasing’

It is useful and informative to consider at this point that in these groups there are some items with semantics and associations involving fire and burning that can be seen as links between the *ts-* group for FIRE/LIGHT and these groupings. For instance, *tsiyarízo* (‘brown’) and *tsitsirízo* (‘sizzle’) metaphorically mean ‘tease’, aligning these forms in the LIGHT-related set, via their associations with fire as described in section 2, with the sting/tease/bite group in (4). To continue further along this path, it can be argued that in Greek the affricates in question are prime carriers of *phonic expressivity*. In particular, there is a certain basic fact about Greek [ts] and [dz] that is highly relevant here, and that is their restricted lexical distribution: [ts] and [dz] in Greek generally occur only in forms that fall into lexical groupings that are *marginal* or *noncanonical* by various measures. Most typically, the forms themselves are *nondenotative* and instead inject color or emotion or expressiveness into an utterance through their use or else respond to and are provoked by an expressive, emotive, and sometimes marginal

<sup>5</sup> Some of these may be derivatives of one or the other form here; for instance, *tsúxtra* is surely derived from *tsúzo*. Such forms, however, clearly represent different lexemes inasmuch as they are different parts of speech and have specialized meanings. Thus they add to the lexical “bulk” that bolsters the sound symbol in question,

situation; to a large extent, then, the relation they show between form and meaning is *nonarbitrary*, so that they are differentiated in this way from what might be called “ordinary” lexical items, those that are denotative and generally show an arbitrary and typically unmotivated form-meaning connection. The sorts of words in question include interjections (5a), calls to animals (5b), onomatopoeia (and derivatives) (5c), ideophonic adverbial expressions (5d), conventionalized forms used by adults to and around children (5e), and a wide range of words that are colorful, playful, expressive, and in general somewhat slangy, lending color to language beyond their simple denotation (5f).<sup>6</sup>

- (5) Marginal/Noncanonical/Nondenotative/Nonarbitrary Lexical Groups with *ts/dz*
- a. interjections, e.g. *príts* ‘so what?!; who cares?!’, *ts* ‘NEGATION’ (actually an apico-dental click, but conventionally represented in this way; cf. also *tsuk* as a conventionalization of this noise), *tsá* ‘noise used in peek-a-boo game’, *tsup* (for a sudden and often annoying appearance of someone)
  - b. calls to animals, e.g. *gúts* ‘call to pigs’, *tsú(nk)s* ‘call to donkeys’, *óts* ‘whoa!’, *íts* ‘whoa’
  - c. onomatopes and derivatives, e.g. *tsák* ‘crack!’ (cf. *tsakízo* ‘I break’), *kríts-kríts* ‘crunch!’ (cf. *krítsanízo* ‘I crunch’), *máts-múts* ‘kissing noise’, *tsiú-tsiú* ‘bird’s chirp’, *plíts-pláts* ‘splish-splash!’, *gráts* ‘scratching sound’ (with variants *xráts*, *kráts*, and *kráts kríts*, and derivative *gratsunízo* ‘I scratch’)
  - d. ideophonic adverbials (where the sound is evocative of a manner of action), e.g. *tsáka-tsáka* ‘immediate quick action; straightaway; directly’, *tsúku-tsúku* ‘steadily and surely, with a hint of secretive activity’, *tsáf-tsúf* ‘in an instant’
  - e. adult conventionalized child-language forms, e.g. *tsátsa* ‘aunty’, *tsitsí* ‘meat’ (also adult slang for ‘breast’), *tsis(i)a* ‘peepee’, *pítsi-pítsi* ‘(act of) washing’
  - f. expressive, playful, slangy words, e.g.: *tsambunízo* ‘whimper’, *tsalavutó* ‘do a slovenly job’, *tsapatsulis* ‘sloppy worker’, *tsókaro* ‘vulgar woman’ (primary meaning: ‘wooden shoe’), *tsirízo* ‘screech’, *tsili(m)burdó* ‘gallivant; fart about’, *tsitsíði* ‘(stark) naked’, *tsiplákis* ‘naked’, *tsirtsiplákis* ‘stark naked’, *dzá(m)ba* ‘for free; cheap’, *dziridzándzules* ‘evasiveness, coquettish airs’, *dzándzala-mándzala* ‘rags and such’ (with Turkish expressive *m*-reduplication)

The relevance of these forms for the treatment of the FIRE/LIGHT words is that they show that the lexicon of Greek is rich in elements that are expressive in various ways semantically, that they generally have a meaning that is associated with some sort of sensory impression, that these elements seem to exist more on the peripheries of the lexicon than in any sort of central core, and moreover that they contain one of the dental affricates *ts* or *dz*. The FIRE/LIGHT words presented in section 2 fall in line with this general characterization. It can be noted, for instance, that the status of *ts/dz* as a sound symbol based on the forms in (1) and (2) suggests that they, like the words forms in (3), (4), and (5), have a less-than-arbitrary relation between their form and

<sup>6</sup> These facts are laid out in greater detail in Joseph (1994) and elsewhere (references therein).

their meaning; to some extent, their meaning is connected to the occurrence of *ts* or *dz* in them.

#### IV. Greek Phonosemantics in a Broader Geographic Context: Balkan Phonic Expressivity

Besides the inner-Greek connections that the FIRE/LIGHT words with *ts/dz* evince, there is an interesting and possibly quite telling external connection as well. That is, *ts/dz*'s phonic expressivity, the characteristic that makes them most appropriate elements to function sound symbolically, is also to be seen in neighboring languages in the Balkans, as is detailed below. This fact alone does not mean that there is any sort of direct historical connection with the expressive function of Greek *ts/dz*, for instance in the form of contact between speakers leading to this special functional status of these sounds, but it is suggestive of a connection. Moreover, it turns out that many expressive *ts/dz* words in Greek are loanwords from other Balkan languages, some of which are expressive in their respective source languages, so that at least in this way, there is a connection between Greek phonic expressivity with *ts/dz* and expressive elements in neighboring languages.

Perhaps the most relevant Balkan language material in this case comes from Albanian, where the affricates [dz] and [dʒ], spelled <x> and <xh> respectively, occur in clusters of LIGHT-related lexical groups, some of whose items have FIRE-related senses as well, as seen in (6) and (7); the same possibility of onomatopoeia for the FIRE-related items is there for the Albanian, as it is for the Greek forms in (1) discussed above:

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|-----|--------------------|---|
| (6) | <b>xhingël</b>     | ‘spangle’                               |
|     | <b>xhixhë</b>      | ‘glittering bauble’                     |
|     | <b>xhixhëlloj</b>  | ‘glitter, glisten’                      |
|     | <b>xhixhëllojë</b> | ‘firefly, glowworm’                     |
| (7) | <b>xixë</b>        | ‘spark; sparkle’                        |
|     | <b>xixëllim</b>    | ‘sparkling’                             |
|     | <b>xixëlloj</b>    | ‘give off sparks; sparkle, twinkle’     |
|     | <b>xixëllonjë</b>  | ‘firefly; glowworm’                     |
|     | <b>xixërij</b>     | ‘(of flames) spurt and give off sparks’ |
|     | <b>xixoj</b>       | ‘give off sparks; spark’                |

Moreover, just as *glass* can be added to the *gl-* group in English, and *dzámi* ‘glass’ is added in (2) to the Greek group, one can add *xham* ‘glass; mirror’ to the group in (6). This move highlights another methodological point that is useful to interject here, since the semantic linkages and the relevant clusterings involved are arrived at on an admittedly somewhat subjective basis. They are arrived at in large part through networks of conceptual association, pairing words and concepts, even working cross-linguistically, so that the fact that Albanian *xixërij* specifically pertains to flames can be taken to validate the inclusion of fire-related words such as Greek *dzáki*. Similarly,



Albanian *xixë* validates the inclusion of Greek *tsakmáki/tsakmakópetra*, as does the connection between English *spark* (FIRE-related) and *sparkle* (LIGHT-related).

Moreover, just as it is argued in section 3 above that what is seen in Greek with the FIRE/LIGHT sound symbolic group is just the tip of a phonosemantic iceberg, a similar claim can be put forth for the strident palatal voiced affricate <ɣh> of Albanian. In particular, Curtis (2010) has argued that there is a general expressive, phonosemantic value for <ɣh> based on its occurrence in onomatopoeia and in expressive, sometimes reduplicative formations, as in (8):

- (8) Lexical evidence for expressive status of Albanian <ɣh> (Curtis 2010)
- ɣhagajdur** ‘cocky braggard who goes around looking for a fight: bully’
  - ɣhahil** ‘(person) who is ignorant, backward, uncultured and thickheaded’
  - ɣhambaz** ‘swindler, con-artist’
  - ɣhaxhi** ‘[children’s usage] term of affectionate respect for a man’
  - ɣhingërrima** ‘baubles, trifles, trivia’
  - ɣhingla-mingla** ‘trifles, trivia; small ornaments, baubles’
  - ɣhixhëlloj** ‘glitter, glisten’
  - ɣhuxh** ‘dwarf’
  - ɣhuxhmaxhuxh** ‘very short old man [in folklore] with a long beard who lives underground; dwarf’

And even further, some similar facts can be marshaled for the Albanian voiced dental affricate [dz], spelled <x>, as shown in (9), suggesting an expressive phonological role for this sound as well:

- (9) Lexical evidence for expressive status of Albanian <x>
- xanxar** ‘(person/animal) with bad habits; mischievous/naughty person’
  - xarbaxul** ‘shabbily dressed and dirty person; ragamuffin’
  - xexerica** ‘claptrap, nonsense’
  - xixëlloj** ‘sparkle, twinkle’
  - xixërimë** ‘crackling sound (of wood giving off sparks)’
  - xuq** ‘shrivelled-up old person who can barely speak; dotard’
  - xurxull** ‘soaked from head to toe; stone drunk, soused’
  - xa** ‘here you are!’ (interjection, Mann 1948: s.v.)

Importantly too, just as it was possible to find links between the various expressive sound groups in Greek based on semantics and on associative connections, in the case of Albanian, a formal link between the two expressive phones can be found in the form of the crossover/variation between <ɣh> and <x> in *xixëlloj/ɣhixhëlloj*.

A key point here is that the occurrence of *ts/dz/x/ɣh* in the words in the lexical groups discussed here are not just one-off unique occurrences but rather these sounds (and these words) fit into larger networks of phonosemantically related forms; by contrast, the sounds in English *spark* do not seem to have any particular phonosemantic connections. Greek *ts/dz* and Albanian *x/ɣh* on the other hand seem to function as a pivot around which a host of interconnected meanings cluster, ranging (in Greek) from ‘small’ to ‘sharp’ to ‘burn’ and to ‘light’, and consequently a cluster of lexically related

forms, connected by their expressiveness and the occurrence of these sounds.

While Greek and Albanian have been the focus here in this somewhat in-depth exploration of expressive phonology in some Balkan languages, one can catch glimpses of similar sorts of phenomena in other languages of the region. In particular, affricates in Bulgarian, Macedonian, and Turkish all figure in expressivity that is suggestive of what is seen in Greek and Albanian, but not as extensive. Thus affricates in these languages, while not restricted in the same way as in Greek and Albanian, nonetheless do show some lexical occurrences in noncanonical items such as onomatopoes or in dialectisms and borrowings that thus stand outside of the core native system; overall, therefore, the special expressive role of affricates could well be a phonological Balkanism to add to the discussion of convergence phenomena in the region. A brief survey of this evidence is given in (10):

(10) Expressive phonology in other Balkan languages

a. Bulgarian (based on Academy dictionary (BAN 1977ff.)):

i. only four words begin with *dz* and all are loans or onomatopoes

ii. 69 lemmata are headed by *џ*, but again mostly noncanonical lexical items, e.g.

*џуџурија* ‘rattling noise’, an obvious onomatopoe, and loans, such as the most common morpheme beginning with *џ*: the Turkish-derived agentive suffix *–џија*

b. Macedonian; cf. Friedman (2002: 10) on [џ]: “Phonemic / џ / occurs in the following contexts: (1) loans: *џуџе* ‘dwarf’, *буџет* ‘budget’, (2) voicing of underlying /č/: *лиџба* ‘beauty’ derived from *liči* ‘suit’, (3) affrication of etymological /ž/, generally before a consonant, sometimes for expressive effect: *џвџа* ‘chew’, *џбџа* ‘rummage’, *џган* ‘mob’.”

c. Turkish voiceless and voiced palatal affricates *ç/c* (based on Marchand (1953: 59), as summarized in Joseph (1984: 233): “[ç/c occur] in numerous words which he [Marchand] terms ‘lautsymbolisch’, including words for murmured and vibrating noises, words of ‘affective’ origin, and the like ... [Moreover,] he notes onomatopoeic forms like *civil* ‘twittering noise’ [cf. *civildamak* ‘to twitter (like a bird)’], affective pet names like *cici*, conventionalized child-language forms like *çiş* ‘peepee’.”

It can be noted further that many of the sound-symbolic and otherwise noncanonical forms in these languages come from Turkish, raising the somewhat ideological issue of the generally low stylistic status of Turkisms in the Balkans (Kazazis 1972), e.g. Greek *tsakmáki*, *dzáki*, *dzámi*, *tsiplákis*, and *tsirtsiplákis* (with Turkish emphatic reduplication) etc., Albanian *xham*, *xhambaz*, and *xhuxh*, among others.

## V. Conclusion

Finally, by way of conclusion, it can be noted that the types of lexical items focused on here, especially sound symbols, but also onomatopoes, interjections, calls to animals,

and so on, might seem like a disparate set of lexical types, but they are all linked by the fact that they stand outside of the usual structuring of language, and therefore represent ways in which lexical items are nonarbitrary and thus noncanonical; moreover, the occurrence of loanwords in some of these groups is consistent with this characterization, since by definition loanwords stand outside of the native system, at least in their first appearance. Overall, then, the notions of FIRE/LIGHT and the various words that they summon up when taken as a concept, as a result of their considerable reach through the lexicon, offer illumination and indeed shed light on a wide range of nonconventional aspects of language as they are realized in the morphology and the lexicon of various languages, and especially Greek.

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## **ABSTRACT:**

Notions of FIRE and LIGHT are quintessentially sensory-based notions, and as such, they provide a basis for sound symbolism (phonaesthesia) cross-linguistically. In sound symbolism, individual sounds or clusters of sounds, though falling short of morphemic status in the classical sense, nonetheless are evocative of meaning in and of themselves. And, in numerous instances, the meanings that are evoked are sensory-based, having to do with sharpness, burning, perception of size, and visual cues such as brightness and darkness. In this paper, I discuss sound-symbols in Greek, with extension into other languages of the Balkans, that have fire/burn/light/glow-like meanings associated with them. It is shown further that these sound symbols form networks with related other sound symbols and that all of these, moving even farther along, fit into broadly based sets of noncanonical – that is, nondenotational, nonarbitrary, and generally nonconventional – forms, e.g. interjections and onomatopoes, that taken together shed light on expressive uses of phonology in the lexicon and morphology across the Balkans.

## **Περίληψη**

Η ΦΩΤΙΑ και το ΦΩΣ αποτελούν έννοιες ουσιαστικά βασισμένες στις αισθήσεις και ως εκ τούτου παρέχουν τη βάση για ηχητικούς συμβολισμούς (φωναισθησίες) διαγλωσσικά. Στον ηχητικό συμβολισμό, μεμονωμένοι ήχοι ή ομάδες ήχων, αν και δεν μπορούν να χαρακτηριστούν μορφήματα με την παραδοσιακή έννοια του όρου, ωστόσο, εμπεριέχουν οι ίδιοι νόημα, επαναφέροντας στον νου τις σημασίες που συμβολίζουν. Σε πολυάριθμες μάλιστα περιπτώσεις οι σημασίες που ανακαλούνται είναι αισθητηριακές, έχουν να κάνουν με την οξύτητα, το κάψιμο, την αντίληψη των μεγεθών, καθώς και με οπτικά σημάδια, όπως η φωτεινότητα και το σκοτάδι. Στη μελέτη αυτή εξετάζω ηχητικά σύμβολα της Ελληνικής, με επέκταση σε άλλες γλώσσες των Βαλκανίων, τα οποία συνδέονται με σημασίες του τύπου φωτιά/ κάψιμο/ φως / λάμψη. Αποδεικνύεται περαιτέρω ότι τα ηχητικά σύμβολα αυτά σχηματίζουν δίκτυα με άλλα συναφή ηχητικά σύμβολα και ότι όλα μαζί εντάσσονται σε ευρύτερα σύνολα μη-κανονικών, δηλαδή μη-δηλωτικών, μη-αυθαίρετων και γενικά μη-συμβατικών μορφών, όπως είναι τα επιφωνήματα και οι ονοματοποιημένες λέξεις. Οι μορφές αυτές, αν συνεξεταστούν στην ολότητά τους, διαφωτίζουν την εκφραστική χρήση της φωνολογίας στο λεξιλόγιο και στη μορφολογία των βαλκανικών γλωσσών.

Brian D. Joseph  
joseph.1@osu.edu