

Towards an account of acronyms / initialisms in Greek

Elli Vazou¹ & George J. Xydopoulos²

University of Athens¹ and University of Ioannina²
ebazoy@phil.uoa.gr¹ & gjxydo@cc.uoi.gr²

Abstract

In this paper, we discuss the phases through which Greek initialisms / acronyms are created. More specifically, we show that these abbreviated configurations take the forms of: (A) “initialisms”: objects of the written language; (B) “acronyms”: legitimate pronounceable objects; (C) “meaningful” objects: legitimate elements of the lexicon. In parallel, we touch on the graphetic, phonological, morphological, syntactic, and semantic processes which stimulate the development of these abbreviated forms. Finally, we cast light on other morphosyntactic and semantic phenomena involved in the creation of Greek initialisms/acronyms.

Keywords: abbreviation, acronyms, prosody, syllable structure, lexicalisation, neology

1. Preliminaries

By the term initialism (or else alphabetism) we refer to a type of abbreviation, in the written form of a language, that normally consists of the initial letters of the constituent words (see e.g. Cannon 1989). In most of the cases, these are nouns:

- (1a) B.Φ.Λ. = Β(ιομηχανία) Φ(ωσφορικών) Λ(ιπασμάτων) “Phosphoric Fertilizers Ind.”
- (1b) Ο.Τ.Ε. = Ο(ργανισμός) Τ(ηλεπικοινωνιών) (της) Ε(λλάδος) “Hellenic elecom.”
- (1c) R.S.V.P. = R(épondez) s(’il) v(ous) p(laît) “Please respond”

As Anastassiadis-Symeonidis (1986: 211, 214-17) puts it, such an abbreviation of the written form of a language can be transformed into a unit of the spoken form and as a consequence become an acronym (Baum 1962; McArthur 1988; Cannon 1989; Dal 1991).

So, we will understand acronyms as initialisms that have become independent lexical units, like AIDS (Acquired Immune Deficiency Syndrome), LASER (Light Amplification by Stimulated Emmission of Radiation) or ΠΑΣΟΚ [PASOK] (Panhellenic Socialist Party). Initialisms, and consequently, acronyms are considered to be one of the most important ways for enriching the lexical stock of a language, especially that of Greek which lacks productivity in other abbreviatory word-formation processes (e.g. clipping or blending; see Xydopoulos 2005 for cases of abbreviation in brand names formation).

2. Phase A: The Creation of Initialisms

2.1 Copying of Graphetic Characters

The first phase of the creation of initialisms / acronyms is strictly graphetic as, first, they appear to obey to spelling rules and not to phonetic / phonological principles, so they are not necessarily pronounceable and are written in capital letters:

- (2) Ε.Σ.Ν.Π.Γ.Π. = “Soc. for the Study of M. Greek Culture and for General Education”

This kind of graphetic abbreviation applies solely to the nouns that constitute a phrase. All functional words (if any) are omitted as they are considered semantically-empty lexemes (Anastassiadis-Symeonidis 1986: 216):

- (3) Κ.Ε.Α.Δ.Ε.Α. = Κίνηση (για) (την) Εθνική Ανεξαρτησία (τη) Διεθνή Ειρήνη (και) (τον) Αφοπλισμό “Movement for National Independence, World Peace and Disarmament”

This graphetic abbreviation can follow three alternative patterns: either (i) copying the initial graphetic characters of the constituent words (Anastassiadis-Symeonidis *ibid.*), e.g. (4) or (ii) copying the initial syllabic fragment (CV or VC) of the constituent words, e.g. (5) or (iii) combining initials and syllabic fragments, e.g. (6):

- (4) Δ.Ε.Η. = Δ(ημόσια) Ε(πιχείρηση) Η(λεκτρισμού) “Public Power Corporation”
 (5) ΕΛ.ΤΑ. = Ελ(ληνικά) Τα(χυδρομεία) “Hellenic Post”
 (6) Ε.ΥΔ.Α.Π. = Ε(ταιρεία) Υδ(ρευσης) (και) Α(ποχέτευσης) Π(ρωτεύουσας)
 “Athens Water Supply and Sewerage Company”

All graphetic characters or syllabic fragments that constitute initialisms are separated from each other, normally, by a dot, signalling the fact that they are abbreviations, do not constitute independent lexical units and may not be necessarily pronounced as a word.

2.2 Grammatical and Syntactic Features

Initialisms found in Greek are divided by Anastassiadis-Symeonidis (1986: 218-24) in fifteen distinct categories, according to the structure of the noun phrase they represent. As it is the case in Greek, such phrases are normally headed by a noun which is modified either by adjectives or by embedded noun phrases in genitive.

All grammatical characteristics of the noun phrase, such as gender and Case, as well as syntactic distribution, are transferred onto the abbreviation of the corresponding NP. Even in languages with rich morphology like Greek, initialisms are morphologically invariable units (see Anastassiadis-Symeonidis *op. cit.*: 215-6). However, they appear to carry all nominal grammatical characteristics, such as gender and Case, at abstract level, that are realised on the definite article that always introduces them. Expectedly, they also function as ordinary nouns in syntax, playing the roles of subjects, objects, agent phrases and modifier phrases:

- (7a) ο Κ.Δ.Ν.Δ. (Κ.Δ.Ν.Δ.) periexi sira diatakseon ...

- “The Public Maritime Law Code includes a series of regulations...”
 (7b) ο *ipourgos politismou episkeftike to K.TH.V.E. (K.Θ.B.E.)*
 “The minister visited the State Theatre of Northern Greece”

Because none of these initialisms can be pronounced, these sentences can be uttered only if initialisms are replaced by the noun phrases in full form:

- (7a') Ο *Kodikas Dimosiou Naftikou Dikeou periexi sira diatakseon ...*
 “The Public Maritime Law Code includes a series of regulations...”
 (7b') Ο *ipourgos politismou episkeftike to Kratiko Theatro Voriou Elados.*
 “The minister visited the State Theatre of Northern Greece”

2.3 Spelling and Phonetics

As we explained earlier, when formed initialisms are solely based on spelling principles. Certainly, there are cases where initialisms are formed with the ambition to be pronounced and so become acronyms, or else units equivalent to lexical items.

The examples in (8) show initialisms in Greek that can be found only in writing:

- (8a) E.Z.A.Θ. = “Thessaloniki Port Free Zone”
 (8b) Γ.Γ.Ν.Γ. = “General Secretariat for Young People”
 (8c) E.E.E.E. = “Hellenic Society for Business Research”
 (8d) E.E.E.H.A.E. = “Hellenic Scientific Society for Solar and Aeolian Energy”

The purpose of these units is to offer a written short form of the name of the corresponding organisation, on the basis of their spelling pattern.

In most of the cases, the spelling characters, used in these initialisms, have a one-to-one correspondence with the relevant sound. This is clearly coincidental, given also that the spelling of consonants in Greek is phonetically transparent. This is further proved by the fact that there are several initialisms which display phonetic opacity, like the case of (9e), where the adjective “Eolikus” (Aeolian) is abbreviated with the graphetic character “A” that does not correspond to the initial sound of the word (i.e. [e]). This is due to the fact that the sounds [i] and [e] can be spelled either with the characters “ι” and “ε” or with the double characters “οι, ει” and “αι” (Anastassiadis-Symeonidis op. cit.: 228):

- (9a) Γ.O.K. = Γενικός Οικοδομικός Κανονισμός “General Building Regulation”
 (9b) Α.Μ.Ε.Α. = Άτομα (με) Ειδικές Ανάγκες “People with Special Needs”
 (9c) Ε.Ν.Ο.Α. = Ελληνικός Ναυτικός Όμιλος Αιγυπτιωτών “Greek Egyptians Marine Club”

Initialisms in Greek appear to consist of vowels or consonants or a combination of the two, at a random distribution. The random character of their constituency is justified by the fact that they are secondary constructs of fully-fledged noun phrases. So, the combination of the segments they consist of simply depends on whether constituents start with a consonant or vowel. Expectedly, initialisms can be either pronounceable or non-pronounceable. Non-pronounceability is quite frequent with initialisms, especially when they consist only of consonants, like Δ.Δ.Δ.Δ. [D.D.D.D.] (World Court for International Justice), Κ.Τ.Σ. [K.T.S.] (Army Common Fund) or Π.Φ.Σ. [P.F.S.] (Panhellenic Pharmacists’ Association). In principle, these initialisms are non-pronounceable constructs, as they consist of clusters that are illegitimate in Greek.

However, as it is going to be explained later, some of these constructs can become pronounceable as long as the truncated segments they consist of will enter a templatic process, either based on existing vowel segments (functioning as nuclei) or with the support of vowel epenthesis.

3. Phase B: The Creation of Acronyms

3.1 The phonological formation of Greek Acronyms

The formation of acronyms is based on a copying process. They are in fact by-products of the so-called “fake” truncation, which imposes templatic constraints (fixed prosodic patterns), rather than derivations from one lexical category to another (see Bat-El 1994).

The formation of acronyms can be viewed as the transfer of the truncated segments (initial graphetic characters, or syllabic fragments) to a prosodic template (cf. McCully & Holmes 1988). This structural device renders them pronounceable configurations. As soon as this prosodic template is complete, we can detect further properties of lexical nature as, for example, their ability to become stems hosting suffixes (ibid. 4.2; Anastassiadis-Symeonidis 1986: 241-243):

- (10a) OTE+ -tzis > otetzi “an employee of OTE”
 (10b) OYK+ -ades > oikádes “SEAL commandoes”
 (10c) ΠΕΣΥ+-arxis > pesiárxi “Chief of Regional Health Authority”

According to their prosodic structure (their templates), we can distinguish four types of acronyms, namely monosyllabic - disyllabic - trisyllabic - tetrasyllabic

3.1.1 Monosyllabic Acronyms

Monosyllabic acronyms in Greek are: (a) monosyllabic words consisting of one and only one syllable; they are in fact subminimal words in the sense of Kenstowicz (1994) and Vazou (2004) among others; (b) although they are naturally “p(rosodically)-derived” words (as truncated configurations), they do not obey binary branching, which is determined by the Word Binariness requirement proposed by Itô & Mester 1992), whereby: *P-derived words must be prosodically binary*. However, this requirement is obeyed in the formation of people’s nicknames in Greek, like: *Kikí, Évi, Día, Mános, Ákis*, etc.

The most common monosyllabic acronyms in Greek are the CVC ones:

- (11) [jés]: ΓΕΣ “Army General Staff”
 [kók]: ΚΟΚ “Code of Road Traffic”
 [nát]: ΝΑΤ “Sailors’ Fund”

CVC monosyllabic acronyms are further distinguished according to whether they contain permissible final codas like [jés] or impermissible ones like [kók] and [nát] (Malikouti-Drachman 1984, 2001).

Greek also permits: (i) CCV acronyms with onset clusters, e.g. (12a), (ii) VC onsetless monosyllabic acronyms with impermissible final codas, e.g. (12b), (iii) VCC onsetless monosyllabic acronyms with impermissible clusters word-finally, e.g. (12c), (iv) CCVC acronyms with word-final consonant clusters permitted in Greek and impermissible final codas, e.g. (12d), (v) CVCC acronyms with word-final

impermissible consonant clusters, e.g. (12e), and (vi) CV acronyms which consist of the most legitimate string, e.g. (12f):

- (12a) [ɣná]: ΓΝΑ “Athens General Hospital”
- (12b) [ám]: ΑΜ “His Royal Highness”
- (12c) [ólɸ]: ΟΛΠ “Piraeus Port Authority”
- (12d) [ktél]: ΚΤΕΛ “Buses Common Fund”
- (12e) [pásk]: ΠΑΣΚ “Panhellenic Socialist Movement”
- (12f) [dá]: ΔΑ “Municipality of Athens”

From the examination of these data, four important issues arise: (a) these monosyllabic forms exhibit all possible CV strings because the initial characters of the constituent words are randomly combined; (b) the majority of these strings violate the universal (markedness) constraints regarding syllabic structure. More specifically, they violate the Greek-particular syllable structure, especially the coda final constraints; (c) the fact that they have the form of a single syllable, and not the form of a Prosodic Word, does not prevent them from forming pronounceable phonological objects; (d) the three-segment acronyms, which correspond to the copying of the initial characters of three-constituent phrases can also yield disyllabic or trisyllabic configurations. Despite these violations, most of them are all totally faithful to the principal formation property of initialisms, that is, only the initial characters are copied:

- (13) Γενικό Επιτελείο Στρατού “Army General Staff” > Γ.Ε.Σ. [jés] is the truncatum, *Γ.ΕΠΙ.Σ. or *Γ.ΕΠΙ.ΣΤΡΑ.

Consequently, monosyllabic acronyms seem to need a minimum effort in order to be pronounced, even if they violate the Prosodic Word templatic requirements. Their phonological as well as templatic structure is determined by the property of pronounceability, that is, the property of any object that contains at least one syllable, formed of an onset, a nucleus and a coda.

3.1.2 Disyllabic acronyms

Disyllabic acronyms exhibit two templatic patterns, based on the position of the primary stress, i.e. (σ'σ) and σ(σ'). Their basic property is that they constitute prosodic words (standing on foot-level), and not necessarily that they originate from the copying of a corresponding initialism. This property characterises all non-monosyllabic acronyms.

These two types of disyllabic acronyms are: (a) those that exhibit penultimate stress, having the prosodic pattern (σ'σ), which is a foot forming the minimal Prosodic Word (as viewed by McCarthy & Prince 1994), e.g. (14), and (b) those stressed on the ultimate syllable exhibit the prosodic template σ(σ'), thus forming the Loose Minimal Word (see McCarthy & Prince 1994), e.g. (15):

- (14) [év.ɣa]: ΕΒΓΑ “Greek Dairy Industry”
[dé.ko]: ΔΕΚΟ “Public Corporations and Organisations”
- (15) [o.té]: ΟΤΕ “Hellenic Telecommunications Organisation”
[ðe.í]: ΔΕΗ “Public Power Corporation”
[nu.ðu]: ΝΔ “New Democracy”

3.1.3 Trisyllabic acronyms

Trisyllabic acronyms also form two distinctive templates, depending on the position of the primary stress: (a) the $(\sigma \square \sigma)(\sigma')$ template, which in most cases exhibits a secondary stress, e.g. (16) and (b) the acronyms based on the $\{\sigma\}(\sigma' \sigma)$ template, which constitute loose minimal words $([\sigma+F])$, e.g. (17):

- (16) [e.i.ðâp]: EYΔΑΠ “Water and Sewage Co”
 [o.i.é]: OHE “United Nations Organisation”
 [se.le.té]: ΣΕΛΕΤΕ “School of Professional and Technical Instructors”
 [ku.ku.é]: KKE “Greek Communist Party”
 (17) [a.mé.a]: AMEA “People with Special Needs”
 [o.vél.pa]: OBEΛΠA “ELPA Road Assistance”

3.1.4 Tetrasyllabic acronyms

Tetrasyllabic acronyms’ prosodic patterns support the hypothesis that acronyms never exceed the size of a Prosodic Word (no matter the number of the constituent words in the base). By examining the corpus of Greek data, we did not find any acronyms consisting of five or more syllables. Their prosodic templates are delimited by the position of stress, as we have seen with disyllabic and trisyllabic acronyms. Those which exhibit penultimate and those which exhibit ultimate stress, can not exhibit antepenultimate stress, which is an attested stress pattern in Greek (for example in the tetrasyllabic word [paráθiɾo] “window”. Needless to say that secondary stress is detectable in both cases.

Acronyms based on the $(\sigma \square \sigma)(\sigma' \sigma)$ template are shown in (18) and acronyms that are based on the $(\sigma \square \sigma)\{\sigma\}(\sigma')$ template and have a degenerate foot as head of the configuration are shown in (19):

- (18) [el.vi.é.la]: ΕΛΒΙΕΛΑ “Greek Rubber Industry”
 (19) [i.pe.xo.ðé]: ΥΠΕΧΩΔΕ “Environment, Land Planning & Public Works Ministry”

3.2 Segmental Processes

Having completed the examination of the different types of acronyms in Greek, it is necessary, at this point, to make three important observations. First, from the above data we distinguish cases of acronyms where the first character of a function word is also copied, in contrast with the claim made earlier that function words are omitted in the abbreviation process. This exception is made with the purpose to create the most harmonic Prosodic Word:

- (20) [ðé.ko] ΔΕΚΟ “Public Companies & Organisations”
 [a.mé.a] AMEA “People with Special Needs”

Second, the truncation of the constituent words and the copying process result in new configurations, that is, new adjacency correlations (different from the ones observed in the base phrases). In turn, these correlations cause phonological alterations of the sounds of the bases, such as voicing and velarization:

- (21) *Voicing: the /s/ becomes [z]:*
 [azðén]: ΑΣΔΕΝ “Higher Military Command for Mainland and Islands”
- (22) *Velarization: the palatal [j] becomes [ɣ]*
 [ɣná]: ΓΝΑ “Air Force General Hospital”

Third, in the Greek data we also detected truncated configurations whose written form contradicts the pronounced form. Double consonant-characters or double vowel-characters are not pronounced; this is a clear case of unfaithful mapping:

- (23) [a.so.é]: ΑΣΟΕΕ “Athens Higher School of Economics and Business”

A characteristic case of inconsistency between the pronounced form and the written form is when segments are inserted in order to turn an initialism into a pronounceable object. So, initialisms like K.K.E. or N.Δ., are pronounced [ku.ku.é] and [nu.ðú], with the help of the epenthetic vowel [u] (see also Anastassiadis-Symeonidis 1986: 236).

A case of “pseudo-epenthesis” is shown in (24) where we pronounce the alphabetical names of the graphetic characters (see also Anastassiadis-Symeonidou *ibid.*), by inserting the vowel [i]:

- (24) ΠΙΠΣΠΙ > [pi.pi.si.pi] “University Progressive Syndicalist Union”

Finally, across the same lines, we find initialisms which, when pronounced, develop the vowel [e]. This is not an arbitrary epenthetic vowel, but the nucleus of the first syllable, that is not represented in the written form, as shown in (25), which could be a case of “economical” epenthesis (according to Malikouti, *p.c.*):

- (25) [ɣe.se.é]: ΓΣΕΕ “Workers General Confederation of Greece”

3.4 Suprasegmental Processes: Stress Assignment

So far, we have seen that the stress position in acronyms is in all cases fixed on the ultimate or penultimate syllable. Regarding the assignment of the stress, two notions are important to consider. First, Greek is a trochaic system, meaning that Greek feet tend to be as close as possible to the right edge of the word (Drachman & Malikouti-Drachman 1996). Second, stress or accent in the Greek metrical system is defined as “lexical”. As Revithiadou (1999) argues, stress is an entity “sponsored” by a morpheme. However, as we have said earlier, acronyms lack *prima facie* morphological substance. Consequently, the question that arises is how they acquire stress properties, since they are not legitimate morphemes.

We can tentatively make two distinct but inter-connected assumptions: (a) Greek acronyms could be understood as stems which, although they lack morphological substance, they can enter processes of derivational morphology (*ibid.* 4.2), therefore, their bare morphological status grants them the ability to sponsor lexical stress; (b) the fixed position of the stress perhaps signals the speaker’s uncertainty about how to stress them. Given that they are taken to be non-words, speakers tend to stress them on the last syllable, or tend to give two alternative stress forms, like [ðóe] / [ðoé] for Δ.Ο.Ε. Since there is no morphological information, speakers are not restricted. Either way, stress assignment in this case is not semantically significant, as it is with [mónos] “alone” vs [monós] “odd”. It is possible that the speaker, not knowing where to stress, assigns

stress at the rightmost edge (either the last foot, or the last syllable) of the configuration, thanks to the tacit knowledge that s/he has about the trochaic metrical system.

4. Phase C: Lexicalisation of Acronyms

Only a subset of those constructs that became pronounceable, through the templatic process already discussed, can be turned into legitimate elements of the lexicon, i.e. be lexicalised (see e.g. Talmy, 1985). Lexicalisation can be instigated by various factors related to mechanisms of the language system, as well as to preferences of language use related to specific categories of speakers or human activity.

4.1 Sociolinguistic criteria

According to Anastassiadis-Symeonidis (1986: 247), Greek initialisms that are transferred from the written language onto the spoken language, so they become acronyms in our sense, are related to specific areas of human activity, from a sociolinguistic point of view. Such initialisms are related to football teams (*ΠΑΟΚ*), political parties or other political organisations (*ΠΑΣΟΚ*, *ΠΑΣΠ*), international organisations (*ΕΟΚ*, *ΝΑΤΟ*) and to entities related to the state (*ΓΣΕΕ*, *ΑΕΙ*, *ΦΠΑ*).

Apart from this sociolinguistic justification, which is perfectly sound, we do believe that initialisms become acronyms, and so are used in oral language, because of reasons also related to the language system (Cannon 1989).

4.2 Derivational Morphology

A fundamental process for the lexicalisation of acronyms is that of derivation. This view is also adopted by Anastassiadis-Symeonidis (1986: 241-3) who argues that some initialisms behave as ordinary stems and enter a morphological process through which they can produce nominal derivatives such as adjectives, agent nouns, augmentatives and compound derivatives:

- (26a) *Adjectives in [ikós] (Masc) or [iki] (Fem)*
NATO > νατοϊκός, νατοϊκή “of NATO”
- (26b) *Agent Nouns in with [tzís] (Masc) [tzú] (Fem) suffixes*
AEK > αεκτζής, αεκτζού “fan of AEK FC”
- (26c) *Agent nouns with [ítis] (Masc), [ítisa] (Fem) suffixes*
ΔΑΠ > δαπίτης, δαπίτισσα “fan of DAP students union”
- (26d) *Augmentatives with [ára] “big, huge” suffix (with gender conversion)*
AEK (Fem) > αεκάρα (Fem) “great AEK FC”
- (26e) *Compound adjectival derivatives with [ikos] (Masc), [iki] (Fem) suffix*
AEK > αεκτζής > αεκτζίδ-ικος, -ικη “of the AEK fan”
- (26f) *Derivatives with [andi] “anti-“ or [arxi] “arch-“ prefix*
ΚΥΠ > κυπατζής > αρχικυπατζής “chief member of Intelligence Service”
NATO > νατοϊκός > αντινατοϊκός “against NATO”

4.3 Lexical Semantics

4.3.1 Sense Relations

Another indication that acronyms are lexicalised is that such units appear to acquire a semantic status that is independent from that of their base phrase, through different sense relations (see e.g. Lyons 1977). Acronyms can be polysemous while their base phrases are monosemous, as displayed in the examples with the acronym OTE (Hellenic Telecommunications Organisation) in (27):

- (27a) plirosa ton OTE
“I paid the telephone bill.
- (27b) irthe o OTE ke mu eftiakse to tilefono
“The telephone technician(s) came and fixed my telephone connection.”
- (27c) agorasa OTE se kali timi sto xrimatistirio
“I bought telephone shares at a good price at the stock exchange
- (27d) akrivine poli o OTE ton telefteo mina
“Telephone rates increased a lot during the last month.

The acronym OTE that represents the phrase “Organismos Tilepikinonion tis Ellados” appears to be a polysemous lexeme by expressing meanings that are not related to the full base phrase. So, OTE, apart from its default meaning, can mean “telephone bill”, “telephone technician”, “telephone shares”, or “telephone rates”. The full phrase is monosemous and only refers to the organisation as an entity.

If we attempt to replace the acronym OTE in any of the examples in (28) above we are led to marginality or ungrammaticality, as shown in (28’):

- (28a’) ??Plirosa ton Organismo Tilepikinonion tis Ellados.
(28b’) *Irthe o Organismos Tilepikinonion tis Ellados ke mu eftiakse to tilefono.
(28c’) ??Agorasa Organismo Tilepikinonion tis Ellados se kali timi sto xrimatistirio.
(28d’) ??Akrivine poli o Organismos Tilepikinonion tis Ellados ton telefteo mina.

Acronyms can display other kinds of sense relations like homonymy, where one phonetic form represents distinct acronyms (see Anastassiadis-Symeonidis 1986: 231), like the case of ΔΟΕ [DOE] where the acronym corresponds to, at least, three semantically distinct base phrases, namely, [Didaskaliki Omospondia Ellados] “Teachers Federation of Greece”, [Diethnis Olympiaki Epitropi] “International Olympic Committee” and [Diethnis Organosi Ergasias] “International Work Organisation”.

Interestingly, there are cases where an acronym is created to be homonymous with an existing proper or common name (see Anastassiadis-Symeonidis 1986: 234); this is done on purpose so as to guarantee that it is easily recalled by speakers:

- (29) [embrós] “ahead” or (E.M.IIPO.Σ.) “Society for the Study of Collective Problems”
[esí] “you” or (E.Σ.Y.) “National Health System”

4.3.2 Connotation

Another indication that acronyms have an independent semantic status from their base phrases comes from the fact that only the former and not the latter appears to acquire

positive or negative connotations (see e.g. Palmer 1976; Lyons 1977), while the connotation of the base phrase, in most cases, remains neutral. Let us see, for example, the case of ΕΣΑ [esá] that originates from the base phrase “Eliniki Stratiotiki Astinomia” (Greek Military Police). The base phrase has a neutral connotation as it only refers to the particular section of the Greek army. However, as illustrated in (30), the acronym “ΕΣΑ” has negative connotations because of the atrocities committed by the particular military, during the 1967-1974 dictatorship in Greece:

(30a) to arxijio tis ESA vriskete stin Athina “ESA headquarters are in Athens.” (neg.)

(30b) o sindagmatarxis tis ESA Ioanidis ... “The ESA colonel Ioannidis ...” (neg.)

If we replace the acronym with the full phrase in the examples in (30) then the connotation becomes more neutral, as shown in (30’):

(30a’) to arxijio tis Elinikis Stratiotikis Astinomias vriskete stin Athina (neutral)

“The headquarters of the Greek Military Police are in Athens.”

(30b’) o sindagmatarxis tis Elinikis Stratiotikis Astinomias Ioanidis (neutral)

“The colonel of the Greek Military Police Ioannidis ...”

We could see a similar behaviour in the use of the English acronyms “CIA” and “NATO”, among others, versus the full phrases “Central Intelligence Agency” and “North Atlantic Treaty Organisation”.

We believe that this semantic effect is due to the fact that acronyms are semantically opaque to the majority of speakers as to what their base phrase means. The more we use an acronym the more opaque it becomes. It is true that the majority of English speakers, especially younger, would not recognise that English “words” *laser* (L.A.S.E.R.) or *radar* (R.A.D.A.R.) are indeed acronyms.

4.4 Morphosyntax

A final note regarding the lexical status of acronyms comes from morphosyntax. As Anastassiadis-Symeonidis (1986: 226-7) argues, the gender and number specification borne by the head of the base phrase is inherited by the corresponding acronym and is realised by the article:

(31a) Dimosia Epixirisi (FemS) Ilektrismou > η ΔΕΗ (FemS)

Public Power Corporation the-FemS DEI

(31b) Ilektrokinita Leoforia (NeuP) Perioxis Athinon Pireos > τα ΗΛΙΑΠΙ (NeuP)

Electric Buses of the Athens-Piraeus Area the-NeuS ILPAP

However, as Anastassiadis-Symeonidis (ibid.) also suggests, speakers are doubtful about what the gender and number of the acronym should be and so tend to use the gender of the entity underlying the acronym. We consider this as due to the fact that acronyms become opaque as to the base phrase they have originated from and become independent lexemes:

(32a) i ISAP (MasP) > o ISAP (sidirodromos) MasS

the-MasP ISAP > the-MasS ISAP (railway MasS) (ISAP=Electrical Railway)

(32b) ta EKO (NeuP) > i EKO (eteria) FemS

the-NeuS EKO > the-FemS EKO (company FemS) (EKO=Greek Fuels & Oil)

- (32c) ο LOK (MasS) > τα LOK (stratevmata) NeuP
 the-MasS LOK > the-NeuP LOK (troops NeuP) (LOK=Commandos Troop)

We believe that the gender and number conversion that is found in these cases is another strong indication that several acronyms are lexicalised.

5. Conclusion

In this paper we discussed three distinct phases in the formation of initialisms/acronyms. We argued that the first phase is exclusively a process in the area of written language, where the copying of initial graphetic characters or syllabic fragments yields written abbreviations, the so-called initialisms. In the second phase, a subset of these initialisms is submitted to a templatic process which forms pronounceable objects without morphological substance, the so-called acronyms. We argued that in this process priority is given to prosody over morphology. Finally, in the third phase a subset of acronyms are lexicalised on the basis of lexical properties or sociolinguistic trends that the particular objects appear to have.

Bibliography

- Anastasiadis-Symeonidis, A. (1986). *I Neologia stin Kini Elliniki* [Neology in Standard Greek]. Thessaloniki: Aristotle University of Thessaloniki.
- Bat-El, O. (1994). "The optimal acronym word in Hebrew". *Proceedings of the 1994 Annual Conference of the Canadian Linguistic Association. Toronto Working Papers in Linguistics*, 23-27.
- Baum, S. (1962). "The Acronym, Pure and Impure". *American Speech* 37: 48-50.
- Cannon, G. (1989). "Abbreviations and Acronyms in English Word Formation". *American Speech* 64: 99-123.
- Dal, Y. (1991). "The world of abbreviations and acronyms". *Verbatim: The Language Quarterly*, XVIII (1).
- Drachman, G. & A. Malikouti-Drachman. (1996). "Greek accentuation". In H. van der Hulst (ed.), *Word Prosodic Systems in the Language of Europe*. Berlin & New York: Mouton de Gruyter, 897-946.
- Ito, J. & Mester, A.R. (1992). "Weak layering and word binarity". Linguistic Research Center, Report no. 92-109. University of California, Santa Cruz.
- Kenstowicz, M. (1994). *Phonology in Generative Grammar*. Oxford: Blackwell.
- Lyons, J. (1977). *Semantics*. Cambridge: Cambridge University Press.
- Malikouti-Drachman, A. (1984). "Syllables in Modern Greek". *Phonologica* 1984: 181-187.
- Malikouti-Drachman, A. (2001). "Greek phonology: A contemporary perspective". *Journal of Greek Linguistics* 2: 187-243.
- McArthur, T. (1988). "The cult of abbreviation". *English Today* 4.3 (15): 36-42.
- McCarthy, J.J. & Prince, A. 1994. "The emergence of the unmarked: Optimality in prosodic morphology". In M. Gonzalez (ed.) *Proceedings of the North East Linguistic Society* 24, Amherst, MA: GLSA, 333-79.
- McCully, C. B. & M. Holmes. (1988). "Some notes on the structure of acronyms". *Lingua* 74: 27-43.
- Palmer, F. R. (1976). *Semantics*. Cambridge: Cambridge University Press.
- Revithiadou, A. (1999). *Headmost Accent Wins: Head Dominance and Ideal Prosodic Form in Lexical Accent Systems*. The Hague: Holland Academic Graphics.
- Talmy, L. (1985). "Lexicalisation patterns: semantic structures in lexical forms". In T. Shopen (ed.), *Language Typology and Syntactic Description, Vol. 3*. Cambridge: Cambridge University Press, 57-149.
- Vazou, E. (2004). *O sximatismos ton arktikolekson tis NE sti Theoria tou Veltistou: Fenomeno pollaplis perikopis* [The formation of initialisms in Modern Greek in Optimality Theory: A phenomenon of multiple truncation]. Unpublished MA dissertation, University of Athens.
- Xydopoulos, G. J. (2005). "Μια αναζήτηση των γλωσσικών μηχανισμών δημιουργίας των προϊοντικών ονομάτων [A survey of the linguistic mechanisms governing the formation of brand names]". *Studies in Greek Linguistics 2004*, Aristotle University of Thessaloniki, 437-448.

