Building a bilingual lexical database for motion verbs in English and Greek: the rationale of a lexicographic project

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Abstract: This paper reports the rationale of a lexicographic project, which aims to implement a theoretically and empirically motivated methodology for compiling a bilingual lexical database by studying 10 polysemous English verbs of motion and their *prima facie* equivalents in Greek. Attention is focused on the 2 template entries created to ensure comprehensive coverage of the lexical units of the verbs and maintain consistency throughout the database. Parts of the database entries are selected to exemplify (a) the systematic treatment of polysemy and phraseology, and (b) the unified way of comparing distributions of semantic concepts among different lexical units.
Key words: bilingual lexicography, corpus research, template entry, polysemy, anisomorphism, motion verbs

1. Introduction

The aim of this paper is to outline the principles underlying the development and implementation of a methodology for building an interlingual lexicographic resource on the basis of linguistic theory and empirical corpus research. The proposed methodology has been put into practice in the construction of 38 detailed database entries –19 monolingual and 19 bilingual ones– for English and Greek verbs selected from the lexical set of motion verbs. Members of a single lexical set have been chosen because they are expected to pose the same kind of lexicographic problems and thus should be handled in the same way in a dictionary.

2. Project description: verbs under study

The 10 English verbs of motion and their *prima facie* equivalents in Greek that have been chosen for illustrating the methodology for compiling a bilingual lexical database are *walk/ περπατάω*, *run/ τρέχω*, *crawl/ σέρνομαι*, *fly/ πετάω*, *float/ πλέω*, *stagger/ παραπατάω*, *stumble/ παραπατάω*, *march/ παρελαύνω*, *dash/ ορμάω*, *gallop/ καλπάζω*. All the verbs express full body movement; the first five pairs are basic-level manner of motion verbs while the last five ones are hyponyms of *walk/ περπατάω* and *run/ τρέχω*. In order to delimit the innumerable verbs of motion, I have taken account of classifications available for English verbs; in particular, the chosen English verbs (in their prototypical sense) are recorded under manner of motion verbs in Levin (1993: 264-267), and under [Motion] or [Self_Motion] frames in FrameNet.[1] Spatial area has been an additional criterion for selection, so that expression of movement on land, through air and water can be studied.

[1] The Berkeley FrameNet project is creating an on-line lexical resource for English (<http://www.icsi.berkeley.edu/~framenet>). Its theoretical background is frame semantics, which links situation-specific semantic roles (frame elements) to their syntactic realizations (grammatical functions and phrase types); in this way, valence (i.e. the constituents with which words combine in grammatical sentences) is specified in both semantic and syntactic terms. For details on FrameNet see, for example, Fillmore et al. (2003); for its contribution to lexicography see, for example, Atkins et al. (2003).

The semantic class of motion lends itself to a comparative study of English and Greek verbs due to the different categorization of the two languages in terms of motion event encoding (Talmy 1985; Slobin 1997; Papafragou et al. 2001). English belongs to satellite-framed languages, in which manner of motion is typically encoded in the verb, and path in particles or prepositional phrases; on the contrary, Modern Greek has been classified as a verb-framed language because it prefers to encode path of motion in a verb, and manner in optional adverbial phrases (*ibid*.). The fact that Greek is a path language does not mean that it lacks common manner verbs; in fact, a quite extensive manner lexicon has been found in metaphorical motion (Σελίμης & Κατή 2003). Therefore, polysemy has played a crucial role in deciding which verbs of motion are most suitable for a lexicographic study that investigates aspects of interlingual anisomorphism and establishes contextual correspondences at the level of lexical unit (LU) rather than word.

3. Building the database

3.1 Methodology

The theoretical frameworks informing the project are frame semantics, cognitive semantics, as well as the contextual theory of meaning and corpus linguistics. The lexical information recorded in the database entries results from the study of authentic language data drawn from electronic corpora representative of English and Modern Greek: the "British National Corpus" (BNC) –accessed through a state-of-the-art lexicographic software, "the Sketch Engine"– and the "Hellenic National Corpus" (HNC). The basic tool used to process corpora is the concordance, while a new generation of data-mining software is additionally available for BNC, the "Word Sketch" program, which automatically derives corpus-based summaries of words' grammatical/ collocational behaviour, streamlining thus the sense-differentiation task.

Drawing on Atkins & Rundell (2008: 99-103), the first methodological step towards the construction of a bilingual lexical database is the compilation of monolingual database entries built independently for each language, but coding the same types of information in a unified and formalized manner, so that the monolingual databases are interrelated and compatible. At a second level of analysis it is possible to systematically record correspondences and divergences between the LUs of the two languages in the form of detailed bilingual database entries. To this end, a monolingual template entry and a bilingual template entry should be created to hold, in an ordered way, the essential facts about members of the same lexical set, maintaining thus consistency throughout the database entries.

As regards the principles applied in establishing LUs, the study follows Evans's (2005) model of principled polysemy, with the difference that the most basic criterion (meaning) is defined in terms of additional or different frame elements. Therefore, when the corpus examples evoke a set of frame elements that differs from the one evoked prototypically, we are dealing with a distinct sense, which is represented as a separate LU in the database. In contrast, "differential but highly predictable patterns of concept elaboration" are treated as sub-senses within a LU (*ibid*.: 51). The database entries demonstrate that each LU is derived from the central sense via cognitive mechanisms, and has specific collocational and/ or syntactic patterns.

3.2 Monolingual template entry

Table 1 shows the framework which is used to systematize the independent, yet unified, monolingual analysis of the motion verbs under study. The template is filled separately for each one of the LUs of the polysemous verbs.

Table 1. Monolingual template entry

Lexical Unit (number)
a) corpus attested examples
b) semantics • frame • definition (in English metalanguage) • motivation/ experiential basis of the extended sense (metonymy, metaphor) • semantic prosody
c) grammar • part of speech • syntactic-semantic profile [frame element/ grammatical function/ phrase type]
d) collocation: collocate types (representing whole semantic classes), collocates (specific lexical items of significant co-occurrence frequency)
e) usage: style, domain, region, speaker's attitude
f) notes on corpus facts: normal patterns of co-occurrence (colligations, idiom schemas), remarks on frequency

With regard to the types of information extracted and assembled, special reference should be made to the importance of recording the frames evoked and the cognitive mechanisms motivating extended senses. On the one hand, the same conceptual backbone is used to structure both English and Greek databases, and on the other hand for each verb a principled semantic network is built cumulatively.

3.3 Bilingual template entry

Table 2 represents the building block of the bilingual database entries used to hold the information necessary for translating each one of the LUs of the monolingual databases from the source language (SL) to the target language (TL). The bilingual database entries match the LUs of the English and Greek database entries to each other; that is why cross-references are made. In cases of lack of correspondence between the analyzed LUs the gaps are filled with other lexical items, for which no monolingual database entry has yet been built up and whose appropriateness is confirmed with the help of existing bilingual and monolingual dictionaries as well as the Internet used as corpus.

Table 2. Bilingual template entry

SL Lexical Unit (number)
a) meaning (drawn from SL monolingual lexical database)
b) **TL** translation equivalents
c) context-sensitive translations collocate type: example translation …
d) notes on degree of correspondence (between the *prima facie* equivalents under study)

The bilingual database entries are to be used in combination with the monolingual ones, as they complement each other. Component (a) is copied from the corresponding monolingual database entry, but for the rest of the information the user has to go back to

it. The "translation equivalents" component (b) is a kind of guide to the rest of the database entry, since it summarizes the translations of the specific LU. As regards the examples (component c), they are corpus-based and they are chosen from the examples cited in the monolingual database entries so as to illustrate the most typical SL contextual patterns (collocations, colligations, idioms) and their TL equivalents. Lastly, component (d) calls attention to the degree of equivalence (complete/ partial/ lack of it) between the verbal pairs under study uncovering thus their points of mismatch and indicating translation strategies to compensate for them.

4. Putting flesh on the monolingual template entry

4.1 Sample from the English database: crawl (LU3)

In order to illustrate how the two templates are completed, I present four samples from the database entries. The first example (Table 3) comes from the monolingual database entry for *crawl*, and specifically its 3rd LU has been chosen to demonstrate how the template allows for a detailed and systematic treatment of polysemy. The first step in the workflow involves recording BNC sentences exhibiting typical uses of this LU, which means "move forwards slowly" and belongs to the [Self_Motion] frame. Further insight into the semantics of the LU is provided by pointing out its motivation (a case of metonymy & metaphor interaction) and its semantic prosody (implication of difficulty). Following the FrameNet annotation of corpus sentences, the "grammar" part summarizes the combinations of the frame elements and their syntactic realizations as they appear in the corpus attested examples.[2] The "collocation" part lists the lexical realizations of the frame element in subject position, which vary from human, vehicle, substance, plant to path, process, time and fear collocate types forming thus a continuum of metaphoricity. Since the underlying metaphors are conventional and elaborate the "slow motion" sense of *crawl* in a predictable manner, these co-occurrence patterns are treated as contextually modified variants of the same LU. Lastly, adverbs of manner frequently occurring with *crawl* are recorded under "notes on corpus facts" to substantiate the semantic prosody claim.

Table 3. Sample from the English database entry for *crawl*

LU 3	
a) corpus attested examples	1) I have a stud farm, and as I was saying I'm usually too shattered to do more than **crawl** into bed at the end of the day. 2) Dappled dawn came slowly to us as we **crawled** weakly up a steep track. 3) For those of you who think self-employed actually means well I can **crawl** out of bed at elevenish, work till fourish, that's three days a week because the other two days I can have a couple of rounds of golf, Thursday and Friday, those of you who think that' s what self-employed means, are gon na fail. 4) The train **crawled** slowly along until, eventually, our destination came in sight. 5) The team was hoisted onto open trucks which took five hours to **crawl** the three mile distance from Lahore Airport to the Fortress

[2] FrameNet employs three labels for tagging the grammatical functions which are assigned by target verbs. Namely, the labels Ext (External Argument) and Obj (Object) are assigned to sentence constituents that occupy core syntactic slots (subject, object); "all other constituents accompanying a syntactic head are considered dependents given that their presence in a construction centred on the head is licensed by the head" (Ruppenhofer et al. 2006: 89-90). Phrase type tags include NP (Noun Phrase), PP (Prepositional Phrase), AVP (Adverb Phrase), etc.

	Stadium. 6) But she would not **crawl** home for comfort, defeated. 7) Christina **crawled** behind one of the gaudily painted island buses for most of the journey, waving at several giggling girls. 8) Jackson stared at the map, half-focused, until the highways and streets and open spaces seemed to **crawl** and shift. 9) Dark heavy clouds were **crawling** across the sky. 10) But a few minutes later he heard the rattle of heavy rain on the loose corrugated iron sheet hiding the way in, felt the first trickle of water **crawling** down the floor, and then remembered how long this place took to drain. 11) This delightful 17th-century house has wisteria and roses **crawling** up its south wall. 12) The Department of Finance guesses that retail sales **crawled** up by 1% in the first three months of 1993. 13) They stretched and strained in the darkness, and the hours **crawled** by like years. 14) The morning **crawled** past. 15) Secrets, she thought, feeling a cold, clammy fear **crawling** down her neck.
b) semantics	
• frame	Self_Motion
• definition	move forwards slowly
• sense motivation	extension from *crawl* (LU2)[3] → experiential grounding: when you crawl (LU2) your speed is reduced **-metonymy**: shift of emphasis from the manner of motion of human beings to their speed of motion **-metaphor**: further extension to the slow speed of any kind of activity (for the different Target Domains –and hence, sub-senses– see [d] collocation)
• semantic prosody	it implies effort and difficulty
c) grammar	
I. • PoS	intransitive verb
• syntactic-semantic profile	- [SELF-MOVER/ Ext/ NP] (example 8) - [SELF-MOVER/ Ext/ NP] [PATH/ Dep/ PP] (examples 2, 7, 9, 10, 11, 15: *across, behind, down, up*) - [SELF-MOVER/ Ext/ NP] [DIRECTION/ Dep/ AVP] (examples 4, 13, 14: *along, by, past*) - [SELF-MOVER/ Ext/ NP] [GOAL/ Dep/ PP] (examples 1, 6: *into, home*) - [SELF-MOVER/ Ext/ NP] [SOURCE/ Dep/ PP] (example 3: *out of*) - [SELF-MOVER/ Ext/ NP] [DIRECTION/ Dep/ AVP] [DISTANCE/ Dep/ PP- *by*] (example 12)
II. • PoS	transitive verb
• syntactic-	- [SELF-MOVER/ Ext/ NP] [DISTANCE/ Obj/ NP] [SOURCE/ Dep/

[3] In the database entry *crawl* (LU2) means "to move on hands and knees or by dragging the body along the ground".

semantic profile	PP] [PATH/ Dep/ PP] (example 5)
d) collocation	- SELF-MOVER: [collocate type – human] - SELF-MOVER: [collocate type – vehicle & vehicle's rider (by metonymy)] e.g. *train, hoverbus, car, traffic* - SELF-MOVER: [collocate type – substance] e.g. *cloud, fog, water, blood, light, darkness, sound, moan* - SELF-MOVER: [collocate type – plant] (tendrils resemble limps) e.g. *rose, ivy, jasmine, plant* - SELF-MOVER: [collocate type – path] (FICTIVE MOTION) e.g. *street, road, highway* - SELF-MOVER: [collocate type – process] (EVENT STRUCTURE metaphor: speed of action is speed of movement) e.g. *procedure, sales, share of the vote* - SELF-MOVER: [collocate type – time] (TIME IS A MOVING OBJECT metaphor) e.g. *week, minute, hour, dawn, time* - SELF-MOVER: [collocate type – fear] (EMOTION IS MOTION metaphor) e.g. *fear, horrors, suspicion*
e) usage	no marked usage
f) notes on corpus facts	Frequent adverbs of manner in the context of *crawl*: *slowly*, *sluggishly*, *wearily*, *weakly*, *limply*, *eventually*, *exasperatingly*, etc. The semantic feature [+ difficulty] is spread to the context from *crawl* (semantic prosody).

4.2 Sample from the Greek database: τρέχω (LU15)

The second example (Table 4) comes from the monolingual database entry for *τρέχω*; it is its last LU that has been selected to highlight the emphasis placed on phraseology. In the following HNC sentences *τρέχω* means "happen", it extends from its 1st literal sense "run" via the EVENT STRUCTURE metaphor, and implies that what may be going on is unpleasant or secret. Since there is no Greek FrameNet yet, this work builds on the existing English frames and, when necessary, modifications are made to accommodate the Greek data. In the case at hand, *τρέχω* LU15 fits well into the English [Event] frame with its Event and Place core frame elements. The "collocation" part of the database informs us of the verb's selectional restrictions on its subject, which in combination with its [3rd person singular present] colligation and its highly specific context ([+ indefinite], [+ negative]) contribute to the idiomaticity of this LU. The specific patterns of co-occurrence are neatly outlined under "notes on corpus facts" together with their pragmatic/ evaluative shades of meaning.

Table 4. Sample from the Greek database entry for *τρέχω*

LU 15	
a) corpus attested examples	1) «Τι **τρέχει** εδώ;» αναρωτήθηκε ο ιδιοκτήτης του ισόγειου καταστήματος. 2) Ο οδηγός, με τα εισιτήρια στο χέρι, τους κοίταζε πονηρά και ο Αμπρόσιο τον αποπήρε: **τρέχει** τίποτα, φίλε; 3) Δεν υπήρχαν, άραγε, κάποιες ενδείξεις που να εγείρουν υπόνοιες ότι εδώ «κάτι μπορεί να **τρέχει**»; 4) Μόνο τρεις - τέσσερις ποιητές μας μυρίζονται ότι κάτι **τρέχει** στον κόσμο έξω απ' την Ελλάδα. 5) Όμως, γενική είναι η εντύπωση πως με τον Ρούντι κάτι **τρέχει**, το

	πιθανότερο είναι να πονάει στο πόδι, γι' αυτό και δεν έπαιξε καλά. 6) Γι' αυτό το λόγο, κι όταν ακόμη δεν συμβαίνει στην πραγματικότητα τίποτα μεταξύ ενός κινηματογραφικού ζευγαριού, για λόγους καθαρά διαφημιστικούς αφήνονται επιμελώς υπόνοιες ότι κάτι **τρέχει** μεταξύ τους και εκτός γυρισμάτων. 7) Έλα εδώ εσύ, πώς κάνεις έτσι, δεν **τρέχει** τίποτα. 8) Και, παρά τις ρωσικές διαβεβαιώσεις ότι δεν **τρέχει** τίποτα... η διεθνής αγορά φοβάται ολοκληρωτική κατάρρευση του ρωσικού τραπεζικού συστήματος. 9) Ο Μισέλ Ινταλγκό θυμήθηκε ότι μια φορά κι ένα καιρό, στο Μουντιάλ '82, έπρεπε να βρει αντικαταστάτη του Πλατινί, κι «ο Ζενγκινί τα κατάφερε περίφημα», συνεπώς δεν... **τρέχει** μία. 10) Όσο παράγουμε καλή μουσική δεν **τρέχει** κάστανο. 11) Δύο ώρες νωρίτερα χρειαζόταν φορείο και τώρα περπατάει σαν να μην **τρέχει** τίποτα. 12) Η απειλή του Δ. Μπέη ότι θα κατέβει υποψήφιος στην Αθήνα κόντρα στην επιλογή του κόμματός του και η απάντηση του Ευάγγ. Γιαννόπουλου «κάτι **τρέχει** στα γύφτικα» χρωμάτισαν την ατμόσφαιρα χθες, μία μέρα μετά την επίσημη ανακοίνωση του ΠΑΣΟΚ για τους υποψήφιους δημάρχους του στις τρεις μεγάλες πόλεις.
b) semantics	
• frame	Event
• definition	happen
• sense motivation	extension from LU1 via the EVENT STRUCTURE metaphor: external events are large, moving objects (Lakoff 1993: 220)
• semantic prosody	it implies that what may be going on is unpleasant or secret (negative semantic prosody)
c) grammar	
• PoS	intransitive verb (3rd person singular)
• syntactic-semantic profile	- [EVENT/ Ext/ NP] (examples 1, 2, 3, 7, 8, 9, 10, 11) - [EVENT/ Ext/ NP] [PLACE/ Dep/ PP] (examples 4, 5, 6, 12: *με, μεταξύ, σε*)
d) colligation	EVENT: interrogative pronoun (*τι*), indefinite pronoun (*κάτι*, *τίποτα*)
e) usage	style: informal
f) notes on corpus facts	- Patterns of co-occurrence and evaluative meaning: • interrogative «τι τρέχει (με κπ.)» (direct/ indirect question): you wonder what is happening and you feel that what you will hear is not pleasant «(ρε) τρέχει τίποτα;» (direct question): impolite (you snap at someone) • affirmative «κάτι τρέχει (με κπ.)» (indefinite pronoun): you are suspicious that something is wrong despite appearances «κάτι τρέχει στα γύφτικα» (culture-specific idiom): indifference, irony (you consider an event as insignificant) • negative «δεν τρέχει (και) τίποτα», «σαν να μην τρέχει τίποτα»: you reassure someone that there is nothing wrong or you show indifference

	«δεν τρέχει μία/ κάστανο» (idiom): informal style, reassurance - Idiomaticity of LU15: • limitation in verb form: 3rd person singular, present colligation («τρέχει») • limited choice in subject position • context (what all the above patterns have in common): [+ indefinite] (no specific reference is made to an event) & [+ negative] (pragmatic, evaluative meaning)

5. Putting flesh on the bilingual template entry

5.1 Sample from the English-Greek database: march (LU1)

With regard to the bilingual template entry, it is worth presenting the transfer stage of the literal motion sense of *march* into Greek (Table 5), as it exemplifies a productive translation strategy that results from the systematic mismatch of semantic distribution between the two languages. On the basis of the structural difference between satellite-framed and verb-framed languages, when followed by directional particles English manner of motion verbs are normally translated by Greek directional motion verbs with optional adverbials of manner. Therefore, although «το τάγμα παρέλασε στους δρόμους της πόλης» and «οι μαθητές παρέλασαν ενώπιον των επισήμων» sound well in Greek, the direct translation *παρελαύνω* is not appropriate for the rest of the examples, where directional verbs are needed, such as *αποχωρώ*, *μπαίνω*, *προχωράω*, *προελαύνω*, *διανύω*, and manner is expressed by complements, like «συντεταγμένοι», «με συγχρονισμένο βήμα», or is implied by the context.

Table 5. Sample from the English-Greek database entry for *march*

LU 1	
meaning	walk with regular, firm steps of equal length in a formal group or military formation
transl. equivalents	*παρελαύνω* (LU1), *βαδίζω συντεταγμένος*, *προελαύνω*, *διανύω*
collocate type: human (military group)	OK
example	The battalion **marched** in force, fully armed, through the city to join in some public ceremony.
translation	Το τάγμα, σε πλήρη σύνθεση και πάνοπλο, παρέλαυνε στους δρόμους της πόλης για να πάρει μέρος σε κάποια επίσημη τελετή.
example	The students, in their naval uniforms, **marched** past to the music of the school band.
translation	Οι μαθητές φορώντας τη ναυτική τους στολή παρέλασαν ενώπιον των επισήμων ακολουθώντας το ρυθμό της σχολικής μπάντας.
example	German troops **marched** off in column of four.
translation	Γερμανοί στρατιώτες αποχώρησαν (βαδίζοντας) συντεταγμένοι σε τετράδες.
example	We would **march** along in step, doing eighty-eight paces to the minute singing our hearts out.
translation	Θα προχωρούσαμε με συγχρονισμένο βήμα, κάνοντας ογδόντα οχτώ βήματα το λεπτό και τραγουδώντας όσο πιο δυνατά μπορούσαμε.

example	The French army **marches** across the Alps to invade Austrian territories.
translation	Τα γαλλικά στρατεύματα προελαύνουν στις Άλπεις με σκοπό να εισβάλουν σε εδάφη της Αυστρίας.
[Tr] example	The team will have **marched** 10 miles a day for a fortnight to reach base camp.
translation	Η ομάδα θα έχει διανύσει 10 μίλια την ημέρα για να φτάσει στη βάση σε ένα δεκαπενθήμερο.
notes on degree of correspondence	- correspondence between *march* (LU1) and *παρελαύνω* (LU1) in those cases that the formal rhythmical movement is part of a public ceremony - structural difference between satellite-framed and verb-framed languages: English manner of motion verb + directional particles → Greek directional verb + optional manner complement

5.2 Sample from the Greek-English database: πετάω (LU6)

Table 6 displays the last example, which is from the Greek-English database entry for *πετάω* and demonstrates the extent to which metaphorical language is at the service of phraseology, thus giving rise to cross-linguistic divergences. In its 6th LU *πετάω*, meaning "feel light with happiness", is not normally translated by the *prima facie* equivalent *fly*, rather it corresponds with other manner of motion verbs, i.e. *float* and *walk*. Both the Greek and English figurative phrases of happiness («πετάω απ' τη χαρά μου/ στα σύννεφα/ στον έβδομο ουρανό», "float in bliss/ on air/ on clouds/ on cloud nine", "walk on air") are motivated by the same metaphors EMOTION IS MOTION and HAPPY IS UP. Yet, the exploitation of these underlying conceptual structures leads to different conventionalized linguistic expressions in the two languages; useful information to be considered by a lexicographer writing the related bilingual entries.

Table 6. Sample from the Greek-English database entry for *πετάω*

LU 6	
meaning	feel light with happiness
transl. equivalents	*float* (LU9), *walk on air* (LU10)
collocate type: human	OK
example	Από μέσα μου, **πετάω** απ' τη χαρά μου.
translation	Deep inside I am floating in bliss.
example	Λογικό είναι να **πετούν** στα σύννεφα ύστερα από μια τέτοια επιτυχία.
translation	After such a great success it is only natural that they should be floating on clouds/ on air.
example	Με τόσες νίκες στη σειρά, πώς να μην **πετούν** στον έβδομο ουρανό οι πρωταθλητές Ευρώπης;
translation	With so many successive victories, the European champions could not help floating on cloud nine.
example	Περπατούσα και **πετούσα**!
translation	I was walking on air!
notes on degree of correspondence	- no semantic correspondence between *πετάω* (LU6) and *fly*; yet, it corresponds with other manner of motion verbs, i.e. *float* (LU9) and *walk* (LU10) - the same metaphors (EMOTION IS MOTION and HAPPY IS

	UP) underlie the Greek and English figurative phrases of happiness through an air image; for a similar figurative phrase of happiness built around a different image (of water) see *πλέω* (LU4): «πλέω σε πελάγη ευτυχίας» - notice the numbers in the phrases «πετάω στον έβδομο ουρανό» and "float on cloud nine" which are related to culture-specific narratives

6. Concluding remarks

With a view to outlining a model for building rich, consistent and product-independent lexicographic databases, this paper has presented 2 template entries (a monolingual and a bilingual one), which are corpus-driven, frame-based and cognitive-oriented (section 3). In order to illustrate the methodology proposed, I have provided four samples (sections 4 and 5) from the database compiled for selected motion verbs in English and Greek (section 2). The most important implication of this project is that the database entries, which are independent and comparable, can contribute to the compilation of various dictionaries: monolingual or bilingual, printed or electronic.

Since the project focuses on semantic/ pragmatic features of specific lexical items of a single domain for research purposes, there is great potential for extension and processing. For instance, the analysis could be extended to other lexical items of the motion domain as well as to other domains to capture their own critical cross-linguistic divergences. The database could also be enriched with formal word features like pronunciation and inflection. As regards its form, the database –now provided as a MS-Word document– should be stored in XML format in order to be used by publishers with the benefits of easy accessibility, internal consistency and reusability.

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