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An Ongoing Supplement to Traditional Dictionaries: *WiP – Words in Progress* and the Contribution of Greek Documentary Papyrology

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Abstract: Greek lexicography is in a state of constant evolution thanks to progress in philological studies and, in a special way, to the contribution offered by papyri, which frequently provides us with new words or new meanings of already known words. In this regard, the online, freely consultable database *WiP – Words in Progress. Supplementary Lexicon of Ancient Greek* aims to collect new or rare words and detail corrections and additions in order to record recent progress in the updating and expansion of Ancient and Byzantine Greek. This contribution aims to describe how the database works, and what advantages it offers compared to traditional dictionaries, with a particular focus on the contribution that Greek documentary papyri offer to Greek lexicography.

Keywords: *WiP – Words in Progress*, online dictionaries, Greek lexicography, Greek documentary papyrology, *hapax legomena* and rare words

1 The *WiP – Words in Progress* Database

WiP – Words in Progress: Supplementary Lexicon of Ancient Greek is a scientific tool provided by the *Aristarchus* portal (www.aristarchus.unige.net/en), a project based at the University of Genoa and directed by Fausto Montana, Franco Montanari, Lara Pagani, and Serena Perrone. This lexicon offers a set of working tools for research and teaching in the areas of ancient Greek and Latin.¹

¹ The platform groups together six different web tools for classical studies, which are constantly in progress and immediately and freely available to the scientific community: 1. the *Ancient Greek Grammarians' Lexicon* (*Lessico dei Grammatici Greci Antichi, LGGA*); 2. the *Words in Progress* website (*WiP*); 3. *The Catalogus Philologorum Classicorum (CPhCl)*; 4. the website of the Italian Centre

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The *WiP* website (www.aristarchus.unige.net/Wordsinprogress/en/Home), directed by Franco Montanari and Serena Perrone, is a freely accessible online database and represents an ongoing supplement to the major dictionaries of Ancient and Byzantine Greek currently in use.² Although the database has been accessible to the public since 2017, it draws inspiration and material from the more than ten years of experience of *PAWAG* – *Poorly Attested Words in Ancient Greek*, a project born in 2004 which aims to gather together rare words, namely “words of Ancient Greek that are either only scantily attested (i.e. in a small number of occurrences), inadequately (i.e. characterized by some sort of uncertainty) or in any case problematically, both from a formal and semantic point of view”.³ Over the years, the project vision has become broader. Now, the goal of *WiP* is to expand the objectives of *PAWAG* by detailing many different kinds of corrections and additions,⁴ as an online supplement to traditional ancient Greek dictionaries: in addition to new words, the database also records previously unknown sources, and improvements of all kinds involving the entries in the main existing dictionaries.

In particular, *WiP* aims to include:

- headwords that have one or few occurrences in the ancient sources;
- headwords that are not recorded in modern lexica like Liddell-Scott-Jones (*LSJ*) or the *Vocabolario della lingua greca* (*GF*);
- new meanings for headwords already present in the reference dictionaries;
- headwords based on multiple ancient sources or sources dealing with different subject areas compared to those already recorded in the reference dictionaries;
- headwords that are uncertain from a semantic or formal point of view (for example, a *hapax* based on conjecture);
- any corrections concerning headwords present in the reference dictionaries (including *ghost words*).

of *L'Année Philologique* (Centro Italiano dell'Année Philologique, *CIAPh*); 5. the *Scholia Minora in Homerum* database; 6. the *Mediaclassica* teaching portal. A specific description of each of these tools and their uses can be found on their respective websites. See also Montanari 2004a, Montanari 2004b, Montanari 2005a, Montanari 2005b, Montanari 2006a, Montanari 2006b, the web review of *Aristarchus* by Castelli 2006, and the response to this review by Montanari 2006.

2 A detailed description of the database and how it works can be found in the User Guide provided in the section “Help” of the website.

3 Montanari 2006a, 441; see also Reggiani 2017, 127–128 and Babeu 2011, 53.

4 As Reggiani 2017, 127 noticed, two significant practical improvements on *PAWAG* must be noted: in *PAWAG*, Greek was encoded in *SuperGreek*, while in *WiP* it is in *Unicode*; moreover, unlike *PAWAG*, which required registration, *WiP* is open access.

A *WiP* entry resembles a typical dictionary entry: it is made up of the headword, its etymology, grammatical label, translation (in the language of the entry author), sources in chronological order (the sources are abbreviated and each abbreviation is linked to a pop-up with an explanation of its meaning), and possible examples. Nevertheless, it provides some clear benefits when compared to a traditional dictionary, such as:

1. A “Dictionaries” section, which marks the presence or absence of a headword in the major dictionaries of ancient and Byzantine Greek in current use. The dictionaries checked are: *DGE* – *Diccionario Griego-Español*; *GF* – *Vocabolario della lingua greca*; *LBG* – *Lexikon zur byzantinischen Gräzität*; *LSJ* – *Liddell-Scott-Jones*; *PGL* – *A Patristic Greek Lexicon*; and Preisigke’s *WB* – *Wörterbuch der griechischen Papyrusurkunden*. The headword is marked as present in a reference dictionary even if the entry in that dictionary does not give the same meanings and information as recorded in the *WiP* entry.
2. A “Notes” section, where the term can be discussed and the main bibliography on the term can be mentioned. The space in this field is unlimited and can be used freely by the entry author. It is generally used to summarize the interpretations given by scholars about the word in question; to discuss problematic aspects and provide any further information; to point out possible different meanings of the term in the sources in which it occurs; to notice other words that belong to the same semantic field or have similar formations; to mention the reference bibliography on the term; and to point out the translations of the term recorded in the main existing dictionaries.
3. Each inserted record can be modified, updated, and continuously added to. This function is especially useful when it is necessary to add new sources or bibliographical references. The database saves previous versions of the entry in case users want to recover them or examine changes between the current version and a previous one.

The headwords can be browsed in alphabetical order or using the “Advanced search” function, which allows the entry of either Greek or Latin strings and searches for either an entire word or part of a word. Typing Greek is intuitive: all the characters in the text box are automatically converted into Unicode glyphs; accent marks can be added using a Greek keyboard.

In the “Greek” text area, it is possible to search for headwords (by checking the “In headwords” box) or full text, so as to include etymologies, examples, and all other fields (by unchecking the “In headwords” box). If one is interested in a specific semantic area, for example “trade”, by typing *πωλέω* and removing the “In headwords” checkmark, all the entries including this word in the headwords, etymologies, examples, and notes will appear. The “Advanced search” function also

Headword

Dictionaries area

«Notes» area

Name of entry
author

καταπέτασμα -ματος, τό

[καταπετάννυμι] sost. tenda, di un tempio *PGRENF.* 2 111.7 (V-VI^p) καταπέτασ(α) β, *PPRAG.S* 178.7 (V-VI^p) καταπέδασματα (l. καταπέτασματα) δό[ο] || velo, manto che copre la testa *POXY.* 3150.37-38 (VI^p) ποιήσον καὶ τὸ καταπέτασμα καὶ τὴν στολήν μου

Dizionari

☞ *GF*⁵ Franco Montanari, *GI* – Vocabolario della lingua greca, III edizione

☞ *WB* Friedrich Preisigke, *WB* – Wörterbuch der griechischen Papyriusurkunden

☞ *LSJ* Henry Liddell, Robert Scott, Henry Stuart Jones, *LSJ* – A Greek-English Lexicon

☞ *PGL* Geoffrey William Hugo Lampe, *PGL* – A Patristic Greek Lexicon

☐ LBG ☐ DGE

Note

Aggiornamento di significato.

Il sostantivo καταπέτασμα possiede il significato di «tenda» (all'interno di un tempio pagano o di una chiesa) in molte fonti di epoca cristiana (su cui v. Lampe). In *POxy.* 3150, una lettera bizantina di VI secolo, il termine sembra invece indicare un capo di abbigliamento. Albarran Martinez lo intende come un indumento che copre la testa, cioè un velo o un mantello di qualche tipo, coerentemente con la pratica diffusa tra le donne cristiane di indossare un velo sul capo. Su questa interpretazione v. M.-J. Albarran Martinez, *The nun on the run: new perspectives on P.Oxy. XLIII 3150*, «JJP» 44 (2014), pp. 24-26; cf. anche A. Alcock, *P.Oxy. XLIII 3150 Revisited*, «AFP» 50.2 (2004), p. 187 s.

Questo significato va aggiunto ai lessici, che registrano il termine nel senso di «velo», «tenda», ma non come capo d'abbigliamento (cf. anche *WB*, s.v., «Türvorhang»)

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Figure 1: Example of a *WiP* entry.

allows specific word searches depending on the sources in which they are found, by flagging the “From papyrological sources” and “From epigraphical sources” check boxes. Therefore, if the user is interested in the lexicon of documentary papyrology, there is the option of only looking for words attested in papyri. The search can be narrowed down further by only selecting words that are already recorded in Preisigke’s *Wörterbuch* or, alternatively, only words that are not recorded in Preisigke’s *Wörterbuch*; this second parameter can be useful to find new or rare words discovered after 2000, the date of the last supplement of the *Wörterbuch*.

The “Latin” text area is multifunctional and can find any results written in Latin characters: it can be used to search for either specific translations of headwords or for keywords, or for a specific source, such as an author, a work, a papyrus, etc., or for the name of the entry author.⁵ It is important to consider that the entries are in the language of the author who wrote them; the *WiP* website has both an Italian and an English version, but at the moment almost all of the material is in Italian.

⁵ The abbreviations of authors, works, papyri, ostraca, etc. are those used in *GF*⁵ by Franco Montanari (<http://www.aristarchus.unige.net/Wordsinprogress/en/Database/Author/>).

2 The Contribution of Greek Documentary Papyrology to *WiP*

Greek documentary papyrology offers an immense contribution to our knowledge of the Ancient Greek language. To this day, the main lexicon tool in documentary papyrology remains the *Wörterbuch der griechischen Papyrusurkunden* by F. Preisigke, published in three volumes between 1925 and 1931. Updates and supplements followed, until the year 2000. In the last twenty years, papyri have provided hundreds of words relating to many diverse areas,⁶ and these need to be fully incorporated into the lexicographical tools.⁷

Since 2015, a research team from the Istituto Papirologico “G. Vitelli” (University of Florence), led by Francesca Maltomini, has worked on *WiP*, updating the lexicon of documentary papyri. The research undertaken by the Istituto Papirologico is conducted on the one hand through a review of the most recent papyrological publications, from 2000 to date, and on the other through a critical examination of the bibliography relating to texts that are already known, for which new readings or interpretations have been proposed. The readings of the new terms proposed by the editors are verified through digital images of the papyri (where available).

So far, the Florentine team has added more than 1300 new headwords to *WiP*, which are attested in papyri from the 3rd century BCE to the 8th century CE. More than half of them are not recorded in Preisigke's *Wörterbuch*.⁸ By using the new records as a sample, we can make a rough estimate of the linguistic typology of the headwords added.

⁶ An enormous effort to systematize the extraordinary amount of new lexical material offered by papyri is made by the *Wörter Listen aus den Registern von Publikationen griechischer und lateinischer dokumentarischer Papyri und Ostraka* (WL), compiled under the direction of Dieter Hagedorn and Klaus Maresch, available on the servers of the University of Heidelberg since 2001, and hosted by the servers of the University of Cologne since 2017 (papyri.uni-koeln.de/papyri-woerterlisten). See Reggiani 2017, 119–121.

⁷ The updating of the technical administrative language of Graeco-Roman and Byzantine Egypt is currently the aim of the ongoing project *Neues Fachwörterbuch* (nFWB), directed by Reinhold Scholl at the University of Leipzig, which replaces, updates and extends the Preisigke's *Fachwörter des öffentlichen Verwaltungsdienstes Ägyptens: in den griechischen Papyrusurkunden der ptolemäisch-römischen Zeit*, published in 1915. The project belongs to the site *Organa Papyrologica* (www.organapapyrologica.net/content/dictionary_start.xed). On this project, see also Reggiani 2017, 125–126.

⁸ Unrecorded headwords can be found by using the “Advanced search” and flagging the “From papyrological sources” and then “Not in WB” check boxes.

1. The majority of new words are *hapax legomena* which only appear once in the papyri. Among them there are also some loans from Latin (e.g., ἰνβεντάριον from *inventarium*, “inventory”) and a few from Arabic (e.g. μεσάχα from *misâḥa*, “measurement of lands”). Other new words are hybrid, since etymologically they derive from two languages (e.g., ἀμπουλλάριον, “ampoule” from Lat. *ampulla* + Gr. dim. suff. -άριον).
2. Another important part consists of *papyrological hapax*, namely words that are already attested in existing literary or epigraphical sources but appear in the papyri for the first time.
3. A smaller group is made up of words found in the papyri with new meanings compared to those recorded in the reference dictionaries. For example, ἐκχυσίς is recorded with the single meaning of “spilling”, but in the papyri it is a technical term to indicate a specific part of the hydraulic machine for collecting water; both in literary sources and in papyri, καταπέτασμα generally means a “curtain” or “veil” of a temple or a church, but in *POxy.* XLIII 3150, a private letter from the Byzantine 6th century, it more specifically means a garment, probably a head covering worn by women, and so on.
4. A small number are *ghost words*, namely words recorded in dictionaries on the basis of one or few occurrences, for which a better reading has been proposed; since no other occurrences have been found either in papyri or literary sources, they must be listed as *delenda lexicis*. For example, the term ἐπάρδιον is recorded in *LSJ* (s.v. ἐπάρδια, τά) and Preisigke's *Wörterbuch* with the meaning of “irrigated land” on the basis of a single source (*PAmherst* 36, II century BCE), but the reading of this term in the edition (l. 11 ἐπαρδίων) has been corrected in the re-edition of the papyrus (*P.Dryton* 32, 11 ἐγγαίδιον). The word in the papyrus is therefore ἐγγαίδιον, a diminutive form of ἐγγαίος meaning a “small plot of land”. The term ἐξαίθρα, listed in *DGE*, is not a new word, but a variant of the already known ἐξέδρα, with the same meaning as “portico with seats, exedra”. There exist other such examples as well.

At the moment, most of the new words added to *WiP* belong to the vocabulary of daily life. Names of home furnishings and objects for domestic use, such as different containers, crockery, plates, luxury objects like jewels, and objects belonging to the textile industry, ranging from rags to fine clothes, are attested in papyri in large numbers, especially in accounts and lists of objects (e.g., ἀρτοθέσιον, a “pantry for bread”; φαρμακοθήκη, a “medicine kit”; φακιαλίδιον, a “foulard”; πέλλος, a “leather bag”; δακτύλιδον, a “ring”, etc.). Many new words are names of professions mentioned in lists of workers, accounts, or private letters (e.g., παρασφηνάριος, a “specialized worker employed in stone processing”; σμαραγδάριος/σμαραγδάρια, “miner in an emerald mine”; μελιτοπώλισσα, “honey seller”; πλαστήριος, a “worker

employed in the construction of walls”, etc.). Other words belong to different aspects of ancient life, such as religion, agriculture, medicine, botany, administration, jurisprudence, military affairs, and so on.⁹

3 The Benefits of an Open-Access Database

WiP is a freely accessible database whose material is immediately available to the scientific community. This allows scholars to easily and quickly keep up to date with recent progress in the updating and expansion of Greek lexicography and to access material in progress, without having to wait for the publication times associated with a printed dictionary.¹⁰

The most significant benefit of this lexicographical resource is that *WiP* is based on a collaborative methodology that is open to contributions from the scientific community.¹¹ Any registered user can submit new headwords, new meanings for headwords already recorded in the reference dictionaries, or corrections concerning headwords present in the reference dictionaries. Once authenticated, it is very simple for users to insert a new entry in their own language (by clicking on the “Insert a headword” icon and filling in the fields according to the instructions). All suggestions will be evaluated by the editorial board.

Each new lemma inserted in *WiP* goes into the online dictionary *The Brill Dictionary of Ancient Greek* by Franco Montanari (dictionaries.brillonline.com/montanari). The Brill Dictionary (or *GE online*) records both new headwords added to *WiP* and new sources of already recorded words: new headwords or sources are highlighted by the label *WiP*, which is linked to the *WiP* website when the lemma requires a further discussion. Collaboration with *WiP* allows the *GE online* to be an ongoing and continuously enriched dictionary.

The collaborative methodology on which *WiP* is based makes a significant contribution to collecting all newly discovered material and recording it in dictionaries, an operation that otherwise would be very expensive in terms of both time and labor costs. If all scholars of Ancient Greek lexicography or papyrology devoted some time to inserting the new or rare words that they came across in the course of their work into the database, in a very short time we would have a constantly updated picture of Greek lexicography.

⁹ The lemmata that belong to the technical administrative vocabulary already recorded in nFWB (see n. 7) are linked to their entries in nFWB website in the “Notes” section.

¹⁰ See Montanari 2006b.

¹¹ Reggiani 2017, 127–128.

BRILL *Over three centuries of scholarly publishing*

The screenshot shows the Brill Dictionary of Ancient Greek interface. On the left, there is a search bar with 'αδιατυπω' entered. Below it, a 'Full text search' button is visible. Underneath, an 'Advanced search' button is shown. A dropdown menu is open, displaying a list of Greek terms. The term 'ἀδιατυπώ' is highlighted in blue. Other terms in the list include 'ἀδιατίμητος', 'ἀδιατμήτος', 'ἀδιατράνωτος', 'ἀδιάτρεπτος', 'ἀδιατρεψία', 'ἀδιατύπωτος', 'ἀδίαυλος', 'ἀδιάφθαρτος', 'ἀδιαφθορία', 'ἀδιάφθορος', and 'ἀδιαωοσέω'. On the right, the title 'The Brill Dictionary of Ancient Greek' is displayed. Below it, a green 'WiP' (Work in Progress) tag is visible. The main heading is 'ἀδιατυπώ', followed by a bracketed entry '[διατυπώ]'. The text below reads: 'contr. to not leave a will ἀδιατυπ[οῦ]σαν not leaving a will pPetra 1.58 (VICE)'. Another green 'WiP' tag is present. At the bottom, a citation box states: 'Citation: "ἀδιατυπώ" in: The Brill Dictionary of Ancient Greek, edited by: Franco Montanari. Consulted online on 22/06/2020 <https://dictionaries.brillonline.com/search#dictionary=montanari&id=132984> First

Figure 2: Example of new headwords added in *GE* online from *WiP*.

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Abbreviations

- DGE* = Adrados, F.R./Rodríguez Somolinos, J. (eds.) (1980–2002), *Diccionario Griego-Español*, I–VI, Madrid, also available online (free of charge) at the link <http://dge.cchs.csic.es/>.
- FWB* = Preisigke, F. (ed.) (1915), *Fachwörter des öffentlichen Verwaltungsdienstes Ägyptens: in den griechischen Papyrusurkunden der ptolemäisch-römischen Zeit*, Göttingen.
- GE* online = Montanari, F. (ed.), *The Brill Dictionary of Ancient Greek*, <https://dictionaries.brillonline.com/montanari>.
- GI²* = Montanari, F. (ed.) (2013), *Vocabolario della lingua greca*, edited by F. Montanari, 3rd ed., Torino.
- LBG* = Trapp, E. (ed.) (1994–2017), *Lexikon zur byzantinischen Gräzität besonders des 9.–12. Jahrhunderts*, Band I (A–K) = Fascs. 1–4 (1994–2001); Band II/1.2 (Λ–Ω) = Fascs. 5–8 (2005–2017), also available online (registration needed) at the link <http://stephanus.tlg.uci.edu/lbg/#eid=1&context=lsj>.
- LSJ* = Liddell, H./Scott, R. (eds.), *A Greek English Lexicon*, revised and augmented by H.S. Jones, with the assistance of R. McKenzie, Oxford 1940, 9th ed., (1843'); *Greek-English Lexicon. A Supplement*,

edited by E.A. Barber, with the assistance of P. Maas/M. Scheller/M.L. West, Oxford 1968 (*LSJSup.*); *Revised Supplement*, edited by P.G.W. Glare, with the assistance of A.A. Thompson, Oxford 1996 (*LSJRev.Sup.*), also available online (registration needed) at the link <http://stephanus.tlg.uci.edu/ljsj/#eid=1&context=lsj>.

PGL = Lampe, G.W.H. (ed.) (1961), *A Patristic Greek Lexicon*, Oxford.

WB = *Wörterbuch der griechischen Papyrusurkunden, mit Einschluss der griechischen Inschriften, Aufschriften, Ostraka, Mumienbilder usw. aus Ägypten*, Band I (Berlin 1925), Band II (Berlin 1927), Band III (Berlin 1931), edited by F. Preisigke; IV. Band I (Berlin 1944), Band II (Marburg 1958), Band III (Marburg 1966), Band IV (Marburg 1971), Band V (Wiesbaden 1993), edited by E. Kiessling; Supplement 1 (Amsterdam 1971), edited by E. Kiessling; Supplement 2 (Wiesbaden 1991), edited by H.A. Rupprecht/A. Jördens; Supplement 3 (Wiesbaden 2000), edited by H.A. Rupprecht/A. Jördens.

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