

This pdf of your paper in *Aegean Scripts, Proceedings of the 14th International Colloquium on Mycenaean Studies* belongs to the publisher Istituto di Studi sul Mediterraneo Antico (Consiglio Nazionale delle Ricerche) and it is its copyright.

As author you are licensed to make up to 50 offprints from it, but beyond that you may not make it available on the Internet until two years from publication (December 2017).



*CNR*

ISTITUTO DI STUDI SUL MEDITERRANEO ANTICO

INCUNABULA GRAECA  
VOL. CV, 1

DIRETTORI

MARCO BETTELLI · MAURIZIO DEL FREO

COMITATO SCIENTIFICO

JOHN BENNET (*Sheffield*) · ELISABETTA BORGNA (*Udine*)  
ANDREA CARDARELLI (*Roma*) · ANNA LUCIA D'AGATA (*Roma*)  
PIA DE FIDIO (*Napoli*) · JAN DRIESSEN (*Louvain-la-Neuve*)  
BIRGITTA EDER (*Wien*) · ARTEMIS KARNAVA (*Berlin*)  
JOHN T. KILLEN (*Cambridge*) · JOSEPH MARAN (*Heidelberg*)  
PIETRO MILITELLO (*Catania*) · MASSIMO PERNA (*Napoli*)  
FRANÇOISE ROUGEMONT (*Paris*) · JEREMY B. RUTTER (*Dartmouth*)  
GERT JAN VAN WIJNGAARDEN (*Amsterdam*) · CARLOS VARIAS GARCÍA (*Barcelona*)  
JÖRG WEILHARTNER (*Salzburg*) · JULIEN ZURBACH (*Paris*)

PUBBLICAZIONI DELL'ISTITUTO DI STUDI SUL MEDITERRANEO ANTICO  
DEL CONSIGLIO NAZIONALE DELLE RICERCHE

DIRETTORE DELL'ISTITUTO: ALESSANDRO NASO

## AEGEAN SCRIPTS

Proceedings of the 14th International Colloquium on Mycenaean Studies  
Copenhagen, 2-5 September 2015

Volume I



# AEGEAN SCRIPTS

*Proceedings of the 14th International Colloquium on  
Mycenaean Studies, Copenhagen, 2-5 September 2015*

Volume I

edited by

Marie-Louise Nosch  
Hedvig Landenius Enegren



Istituto di Studi sul Mediterraneo Antico - ROMA 2017

Undertaken and published with the assistance and contribution of the Lillian and Dan Fink Foundation, the Carlsberg Foundation, the Danish National Research Foundation, the Institute of Aegean Prehistory, the R. K. Rasks Legat Foundation and the University of Copenhagen.

The rights of translation, electronic storage, reproduction and total or partial adaptation by any means (including microfilm and photostatic copies) are reserved for all countries. No part of this publication may be reproduced, distributed or transmitted in any form without the written permission of the Publisher, with the exception of short citations incorporated into reviews or other non-commercial uses permitted by copyright law.

ISSN 11267348  
ISBN 9788880802754

© *CNR edizioni*, 2017  
*Piazzale Aldo Moro, 7 - 00185 Roma*

## CONTENTS

### Volume I

<i>Contents</i> .....	VII
<i>Abbreviations</i> .....	XI
<i>Preface and acknowledgements</i> .....	XXVII
<i>List of participants</i> .....	XXXI

### Scripts, Palaeography and Research Tools

M. Del Freo, Rapport 2011-2015 sur les textes en écriture hiéroglyphique crétoise, en linéaire A et en linéaire B .....	3
M. Egetmeyer, A. Karnava, H. Landenius Enegren and M. Perna, 2011-2015 Report on the Cypriot Syllabic Inscriptions .....	31
M. Egetmeyer, A. Karnava, H. Landenius Enegren and M. Perna, IG XV 1, <i>Inscriptiones Cypri Syllabicae</i> : the completion of <i>Fasciculus I, Inscriptiones Amathuntis, Curii et Marii</i> .....	45
R. Firth, The Find-spots of the Linear B Tablets from the Archives Complex at Pylos .....	55
F. Aurora, <i>pa-ro, da-mo</i> . Studying the Mycenaean Case System through DĀMOS (Database of Mycenaean at Oslo) .....	83
T. Meißner and P. M. Steele, Linear A and Linear B: Structural and Contextual Concerns .....	99
H. Tomas, From Minoan to Mycenaean elongated tablets: defining the shape of Aegean tablets .....	115
V. Petrakis, Figures of speech? Observations on the Non-phonographic Component in the Linear B Writing System .....	127
J. Weilhartner, Les idéogrammes archéologiques: Does variation matter? .....	169
A. P. Judson, Palaeography, Administration, and Scribal Training: A Case-study .....	193
Y. Duhoux, Aides à la lecture à l'âge du Bronze : Égée, Chypre et	

Proche-Orient .....	209
A. M. Jasink, One-sided Hieroglyphic Seals .....	229
F. Aura Jorro, The Supplement (' <i>Suplemento</i> ') to the <i>Diccionario Micénico (DMic.)</i> .....	253
M. Cultraro and A. Sacconi, Un fragment de vase inscrit en linéaire B de Prinias .....	269
E. Hallager, LM IIIB Linear B from Knossos and Khandia .....	275
D. Nakassis and K. Pluta, <i>Vorsprung durch Technik: Imaging the Linear B Tablets from Pylos</i> .....	285

### Interpretations and Contexts

L. M. Bendall, Where was <i>da-wo</i> ? .....	301
S. Lupack, The Ea Series: It Takes A Village .....	347
C. W. Shelmerdine, Exceptional Women: Female Roles and Power in the Linear B Tablets .....	363
J. T. Killen, Notes On Linear B Tablets Concerning Wool, Cloth and Textile Workers .....	381
R. Palmer, <i>Agrimia in the Knossos tablets</i> .....	391
C. Varias García, Mycenaean Terms with the Stem <i>/xenwos/</i> : 'Foreigner, Guest, Host' .....	417
A. Leukart, A Note on <i>ze-ne-si-wi-jo</i> .....	429
E. R. Luján, J. Piquero and F. Díez Platas, What did Mycenaean sirens look like? .....	435
J. Bennet, On Comparison in Linear B: Genetic, Historical or Analogical? .....	461
N. Antonello Vittiglio, Testimonianze della presenza dei termini <i>ἄλευρα</i> e <i>ἄλφια</i> nei testi micenei .....	475
S. Nikoloudis, Tracking Eumedes, the Unguent-boiler: Mycenaean Textual and Archaeological Clues .....	489
E. Kyriakidis, Polity and Administrative Control in Mycenaean Pylos .....	499

## Volume II

### Philology and Linguistics

O. Panagl, Einige <i>Paradoxa</i> und <i>Paralipomena</i> im Dialekt der Linear B-Tafeln .....	517
A. Bernabé and R. Pierini, What, When, Why: Tablet Functions and <i>o-te</i> Expressions in Context .....	523
J. M. Jiménez Delgado, The Particle <i>ἄρα</i> from the 2nd to the 1st Millennium .....	537
I. Serrano Laguna, <i>ma-ka</i> .....	549

J. L. García Ramón, Del trabajo en una nueva gramática del Micénico: algunos problemas de vocalismo, <i>tu-ma-ko/to-ma-ko, da-ma/du-ma</i> y la continuidad micénica en Lesbio .....	563
R. J. Thompson, The Mycenaean <i>o</i> -stem Genitive Singular in <i>-o</i> : A Re-evaluation .....	575
E. Džukeska, Semantics of Mycenaean Genitive: A Tentative Analysis of Genitive Singular Forms ending in <i>-o, /-os</i> .....	591
D. Kölligan, Mycenaean Onomastics and Phraseology: <i>wo-ro-qo-ta, qe-ro(-)a-ta, qi-ri-ta-ko</i> .....	605

### **Comparative Studies between the Aegean the Levant and the Ancient Near East**

F. Rougemont and J. P. Vita, Les « gens du roi » à Ougarit et dans le monde mycénien .....	625
J. Zurbach, Esclaves, dette, monnaie en Grèce mycénienne .....	659
J. Gulizio, <i>di-u/wi-ja</i> and <i>po-si-da-e-ja</i> : Examples of Indo-European Female Consorts? .....	673
A. Greco, From Middle Assyrian to Mycenaean archives: Some Comparative and Theoretical Considerations on the Economic and Political Elites of a Mycenaean Polity.....	683
W. E. Bibee and A. M. Wilson-Wright, A Laryngeal in Linear B: Evidence from Egyptian and Ugaritic .....	713

### **Historiography**

F. Carraro, The Signs of Linear B and their ‘Use’ during the Decipherment. An Enquiry among the Decipherers as a Case Study .....	751
T. G. Palaima, Emmett L. Bennett, Jr., Michael G. F. Ventris, Alice E. Kober, Cryptanalysis, Decipherment and the Phaistos Disc .....	771
H. Landenius Enegren and M.-L. Nosch, Michael Ventris and Mycenaean Studies in Sweden and Denmark .....	789

### **Reports**

<i>Summary of the CIPEM meeting</i> .....	833
<i>Resolutions of the Signary Committee</i> .....	835
<i>Resolutions of the Committee on scholarly tools</i> .....	839

### **Indexes**

<i>Index of Texts</i> .....	843
<i>Index of Words</i> .....	861



## Abbreviations

### I. Journals

<i>AA</i>	<i>Archäologischer Anzeiger.</i>
<i>AAWW</i>	<i>Anzeiger der Österreichischen Akademie der Wissenschaften in Wien, Philos.-Hist. Klasse.</i>
<i>ABSA</i>	<i>Annual of the British School at Athens.</i>
<i>AC</i>	<i>Antiquité Classique</i>
<i>ACD</i>	<i>Acta classica Universitatis Scientiarum Debreceniensis.</i>
<i>AD</i>	<i>Αρχαιολογικόν Δελτίον</i>
<i>AE</i>	<i>Αρχαιολογική Εφημερίς.</i>
<i>AIÖN</i>	<i>Annali dell'Istituto universitario orientale di Napoli.</i>
<i>AJA</i>	<i>American Journal of Archaeology.</i>
<i>AOF</i>	<i>Archiv für Orientforschung.</i>
<i>AR</i>	<i>Archaeological Reports.</i>
<i>ArchAnAth</i>	<i>Αρχαιολογικά Ανάλεκτα εξ Αθηνών.</i>
<i>ASAA</i>	<i>Annuario della Scuola Archeologica di Atene e delle Missioni Italiane in Oriente.</i>
<i>BCH</i>	<i>Bulletin de Correspondance Hellénique.</i>
<i>BIBR</i>	<i>Bulletin de l'Institut historique Belge de Rome.</i>
<i>BICS</i>	<i>Bulletin of the Institute of Classical Studies of the University of London.</i>
<i>BSL</i>	<i>Bulletin de la Société de Linguistique de Paris.</i>
<i>CArchJ</i>	<i>Cambridge Archaeological Journal.</i>
<i>CPh</i>	<i>Classical Philology.</i>
<i>CQ</i>	<i>Classical Quarterly.</i>
<i>CRAI</i>	<i>Comptes rendus de l'Académie des Inscriptions et Belles-Lettres.</i>
<i>Ergon</i>	<i>Τό Εργον τής εν Αθήναις Αρχαιολογικής Εταιρείας.</i>
<i>G&amp;R</i>	<i>Greece and Rome.</i>
<i>IF</i>	<i>Indogermanische Forschungen.</i>
<i>JHS</i>	<i>Journal of Hellenic Studies.</i>

---

<i>JNES</i>	<i>Journal of Near Eastern Studies.</i>
<i>JPR</i>	<i>Journal of Prehistoric Religion.</i>
<i>MDAI(A)</i>	<i>Mitteilungen des Deutschen Archäologischen Instituts (Athenische Abteilung).</i>
<i>MH</i>	<i>Museum Helveticum.</i>
<i>MSS</i>	<i>Münchener Studien zur Sprachwissenschaft.</i>
<i>OAth</i>	<i>Opuscula Atheniensa.</i>
<i>OJA</i>	<i>Oxford Journal of Archaeology.</i>
<i>PCPhS</i>	<i>Proceedings of the Cambridge Philological Society.</i>
<i>PP</i>	<i>La parola del passato.</i>
<i>PZ</i>	<i>Prähistorische Zeitschrift.</i>
<i>RAL</i>	<i>Rendiconti della Classe di Scienze morali, storiche e filologiche dell'Accademia dei Lincei.</i>
<i>RCCM</i>	<i>Rivista di Cultura Classica e Medioevale.</i>
<i>RDAC</i>	<i>Report of the Department of Antiquities Cyprus.</i>
<i>REA</i>	<i>Revue des études anciennes.</i>
<i>REG</i>	<i>Revue des études grecques.</i>
<i>REL</i>	<i>Revue des études latines.</i>
<i>RFIC</i>	<i>Rivista di filologia e di istruzione classica.</i>
<i>RhM</i>	<i>Rheinisches Museum für Philologie.</i>
<i>RPh</i>	<i>Revue de philologie, de littérature et d'histoire anciennes.</i>
<i>SCO</i>	<i>Studi classici e orientali.</i>
<i>SMEA</i>	<i>Studi Micenei ed Egeo-Anatolici.</i>
<i>SMSR</i>	<i>Studi e materiali di storia delle religioni.</i>
<i>SPAW</i>	<i>Sitzungsberichte der Preussischen Akademie der Wissenschaften.</i>
<i>SSL</i>	<i>Studi e saggi linguistici.</i>
<i>TAPhS</i>	<i>Transactions of the American Philosophical Society.</i>
<i>TPhS</i>	<i>Transactions of the Philological Society.</i>
<i>ZAnt</i>	<i>Živa Antika.</i>
<i>ZPE</i>	<i>Zeitschrift für Papyrologie und Epigraphik.</i>

## II. Mycenological conferences

<i>Acta Mycenaea</i>	M. S. Ruipérez (ed.), <i>Acta Mycenaea. Actes du cinquième Colloque international des études mycéniennes, tenu à Salamanque, 30 mars - 3 avril 1970</i> , 2 vol., <i>Minos</i> 11-12 (1972).
<i>Aegean Scripts</i>	M.-L. Nosch & H. Landenius Enegren (eds), <i>Aegean Scripts. 14th International Colloquium on Mycenaean Studies, Copenhagen, 2-5 September</i>

- 
- Austin Colloquium* 2015, *Incunabula Graeca*, Vol. CV:1-2 (2017).  
*Proceedings of the 11<sup>th</sup> Mycenological Colloquium*, Austin, 7-13 May 2000 (unpublished).
- Cambridge Colloquium* L. R. Palmer & J. Chadwick (eds), *Cambridge Colloquium. Proceedings of the Cambridge Colloquium on Mycenaean Studies* (1966).
- Colloquium Mycenaenum* E. Risch, H. Mühlestein (ed.), *Colloquium Mycenaenum. Actes du sixième Colloque international sur les textes mycéniens et égéens tenu à Chaumont sur Neuchâtel du 7 au 13 septembre 1975* (1979).
- Colloquium Romanum* A. Sacconi, M. del Freo, L. Godart & M. Negri (eds), *Atti del XII Colloquio Internazionale di Micenologia, Roma 20-25 febbraio 2006*, *Pasiphae* 2 (2008).
- Études Mycéniennes* M. Lejeune (ed.), *Études Mycéniennes. Actes du Colloque international sur les textes mycéniens, Gif-sur-Yvette, 3-7 avril 1956*, (1956).
- Études Mycéniennes 2010* P. Carlier, C. De Lamberterie, M. Egetmeyer, N. Guilleux, F. Rougemont, J. Zurbach (eds), *Actes du XIII[e] colloque international sur les textes égéens, Sèvres, Paris, Nanterre, 20-23 septembre 2010* (2012).
- Floreat* S. Deger-Jalkotzy, S. Hiller, O. Panagl (eds), *Floreat Studia Mycenaea. Akten des X. Internationalen Mykenologischen Colloquiums in Salzburg vom 1.-5. Mai 1995*, Österreichische Akademie der Wissenschaften, Philosophisch-historische Klasse, Denkschriften, 274 (1999).
- Mycenaean Studies* E. L. Bennett, Jr. (ed.), *Mycenaean Studies: Proceedings of the Third International Colloquium for Mycenaean Studies Held at 'Wingspread', 4-8 September 1961* (1964).
- Mykenaika* J.-P. Olivier (ed.), *MYKENAIKA. Actes du IX<sup>e</sup> Colloque international sur les textes mycéniens et égéens organisé par le Centre de l'Antiquité Grecque et Romaine de la Fondation Hellénique des Recherches Scientifiques et l'École française*

- d'Athènes, Athènes, 2-6 octobre 1990*, BCH Suppl. XXV (1992).
- Res Mycenaee* A. Heubeck, G. Neumann (ed.), *Res Mycenaee. Akten des VII. Internationalen Mykenologischen Colloquiums in Nürnberg vom 6.-10. April 1981* (1983).
- Tractata Mycenaea* P. Hr. Ilievski, L. Crepajac (ed.), *Tractata Mycenaea. Proceedings of the Eight International Colloquium on Mycenaean Studies, held in Ohrid, 15-20 September 1985* (1987).

### III. Congresses

- 2<sup>nd</sup> Cretological Congress* Πεπραγμένα Β' Διεθνούς Κρητολογικού Συνεδρίου (1967).
- 8<sup>th</sup> Cretological Congress* Πεπραγμένα Η' Διεθνούς Κρητολογικού Συνεδρίου, Heraklion, 9-14 September 1996 (2000).
- 9<sup>th</sup> Cretological Congress* Πεπραγμένα Θ' Διεθνούς Κρητολογικού Συνεδρίου, Elounda, 8-6 October 2001 (2006).
- 10<sup>th</sup> Cretological Congress* I' Διεθνές Κρητολογικό Συνέδριο, Khandia, 1-8 October 2006 (2011).
- Culti primordiali* *I culti primordiali della grecità alla luce delle scoperte di Tebe, Roma, 24-25 febbraio 2000*, Contributi del Centro Linceo "Beniamino Segre" 109 (2004).
- Economy and Politics* S. Voutsaki & J.T. Killen (eds), *Economy and Politics in the Mycenaean Palace States, Proceedings of a Conference held on 1-3 July 1999 in the Faculty of Classics, Cambridge*, TPhS Suppl. 27 (2001).
- Emporia* R. Laffineur & E. Greco (eds), *EMPORIA. Aegeans in Central and Eastern Mediterranean, Actes de la 10<sup>e</sup> Rencontre égéenne internationale, Scuola archeologica italiana di Atene, 14-18 Avril 2004*, Aegaeum 25 (2005).
- Epi ponton plazomenoi* V. La Rosa, D. Palermo, L. Vagnetti (eds), *Ἐπὶ πόντον πλαζόμενοι. Simposio italiano di Studi Egei dedicato a Luigi Bernabò Brea e Giovanni Pugliese Carratelli, Roma, 18-20 febbraio 1998* (1999).

- 
- Fiscality* M. Perna (ed.), *Fiscality in Mycenaean and Near Eastern Archives, Proceedings of the Conference held at Soprintendenza Archivistica per la Campania, Naples 21-23 October 2004*, *Studi egei e vicino-orientali* 3 (2006).
- Food, Cuisine and Society* P. Halstead & J. Barrett (eds), *Food, Cuisine and Society in Prehistoric Greece, Proceedings of the 10<sup>th</sup> Aegean Round Table, University of Sheffield, 19-21 January 2001* (2004).
- Kosmos* M.-L. Nosch & R. Laffineur (eds), *KOSMOS. Jewellery, Adornment and Textiles in the Aegean Bronze Age. 13th international Aegean conference held at Copenhagen, April 2010/13eme rencontre égéenne, Copenhagen, avril 2010*, *Aegaeum* 33 (2012).
- La Crète mycénienne* J. Driessen & A. Farnoux (eds), *La Crète mycénienne, Actes de la table ronde organisée par l'École Française d'Athènes, 26-28 Mars 1991*, *BCH Suppl.* XXX (1997).
- Linear B: A 1984 Survey* A. Morpurgo Davies & Y. Duhoux (eds), *Linear B: A 1984 Survey. Proceedings of the Mycenaean Colloquium of the VIII<sup>th</sup> Congress of the International Federation of the Societies of Classical Studies, Dublin, 27 August-1<sup>st</sup> September 1984* (1985).
- Metron* K. P. Foster & R. Laffineur (eds), *METRON. Measuring the Aegean Bronze Age. Actes de la 9<sup>e</sup> Rencontre égéenne internationale, New Haven, Yale University, 18-21 Avril 2002*, *Aegaeum* 24 (2003).
- Monuments of Minos* J. Driessen, I. Schoep, R. Laffineur (eds), *Monuments of Minos. Rethinking the Minoan Palaces, Proceedings of the International Workshop "Crete of the hundred palaces?", held at the Université Catholique de Louvain, Louvain-la-Neuve, 14-15 December 2001* *Aegaeum* 23 (2002).
- Polemos* R. Laffineur (ed.), *POLEMOS. Le contexte guerrier en Egée à l'âge du Bronze. Actes de la 7<sup>e</sup>*

- 
- Rencontre égéenne internationale, Université de Liège, 14-17 avril 1998* Aegaeum 19 (1999).
- Politeia* R. Laffineur & W.-D. Niemeier (eds), *POLITEIA. Society and State in the Aegean Bronze Age. Actes de la 5<sup>e</sup> Rencontre égéenne internationale, University of Heidelberg, Archäologisches Institut, 10-13 April 1994*, Aegaeum 12 (1995).
- Potnia* R. Hägg & R. Laffineur (eds), *POTNIA. Deities and Religion in the Aegean Bronze Age, Actes de la 8<sup>e</sup> Rencontre égéenne internationale, Göteborg University, 12-15 April 2000*, Aegaeum 22 (2001).
- Primo Congresso* *Atti e Memorie del 1<sup>o</sup> Congresso Internazionale di Micenologia, Roma 27 settembre-3 ottobre 1967*, Incunabula Graeca XXV (1968).
- Pylos Comes Alive* C.W. Shelmerdine & T.G. Palaima (eds), *Pylos Comes Alive. Industry + Administration in a Mycenaean Palace, May 4-5 1984*, (1984).
- Secondo Congresso* E. De Miro, L. Godart, A. Sacconi (eds), *Atti e Memorie del Secondo Congresso Internazionale di Micenologia, Roma-Napoli, 14-20 ottobre 1991*, Incunabula Graeca XCVIII:1-3 (1996).
- SyllabeS 2000* *IIèmes Journées d'Etudes Linguistiques, Nantes, 25-27 mars 1999* (2000).
- Texte aus Theben* S. Deger-Jalkotzy & O. Panagl (eds), *Die neuen Linear B Texte aus Theben: ihr Aufschlusswert für die mykenische Sprache und Kultur. Akten des internationalen Forschungskolloquiums an der Österreichischen Akademie der Wissenschaften 5.-6. Dezember 2002*, Österreichische Akademie der Wissenschaften, Phil.-Hist. Klasse, Denkschriften, 338. Band (2006).
- Techne* R. Laffineur & P.P. Betancourt (eds), *TECHNE. Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age, Actes de la 6<sup>e</sup> Rencontre égéenne internationale, Philadelphia, Temple University, 18-21 April 1996*, Aegaeum 16 (1997).
- Thalassa* R. Laffineur & L. Basch (ed.), *THALASSA. L'Égée préhistorique et la mer, Actes de la 3<sup>e</sup> Rencontre égéenne internationale de l'Université*

- de Liège, Station de recherches sous-marines et océanographiques, Calvi, Corse, 23-25 avril 1990, Aegaeum 7 (1991).*
- The Role of the Ruler* P. Rehak (ed.), *The Role of the Ruler in the Prehistoric Aegean. Proceedings of a Panel Discussion presented at the Annual Meeting of the Archaeological Institute of America, New Orleans, Louisiana, 28 December 1992, Aegaeum 11 (1995).*

#### IV. Festschriften

- Briciaka* Y. Duhoux (ed.), *Briciaka. A Tribute to W.C. Brice*, Cretan Studies 9 (2003).
- Festschrift Bartoněk* I. Radová & K. Václavková-Petrovicová (eds), *Graeco-Latina Brunensia. Festschrift in honour of A. Bartoněk*, Sborník Prací Filozofické Fakulty Brněnské Univerzity 6-7 (2001-2002).
- Festschrift Panagl* T. Krisch, T. Lindner, U. Müller (eds), *Analecta homini universali dicata. Arbeiten zur Indogermanistik, Linguistik, Philologie, Politik, Musik und Dichtung. Festschrift für Oswald Panagl zum 65. Geburtstag* (2004).
- KE-RA-ME-JA* D. Nakassis, J. Gulizio, S.A James (eds.), *KE-RA-ME-JA: Studies presented to Cynthia Shelmerdine* (2014).
- Meletemata* P. P. Betancourt, V. Karageorghis, R. Laffineur, W.-D. Niemeier (ed.), *MELETEMATA. Studies in Aegean Archaeology Presented to Malcolm H. Wiener as he enters his 65th Year* (1999).
- Minoica* E. Grumach (ed.), *Minoica. Festschrift zum 80. Geburtstag von Johannes Sundwall* (1958).
- O-o-pe-ro-si* A. Etter (ed.), *o-o-pe-ro-si. Festschrift für Ernst Risch zum 75. Geburtstag* (1986).
- Studi Fiandra* M. Perna (ed.), *Studi in onore di Enrica Fiandra. Contributi di archeologia egea e vicinorientale* (2005).
- Studies Bennett* J.-P. Olivier & T.G. Palaima (ed.), *Texts, Tablets and Scribes. Studies in Mycenaean Epigraphy and Economy offered to Emmett L. Bennett, Jr. Minos Supl. 10 (1988).*

- Studies Chadwick* J. T. Killen, J. L. Melena, J.-P. Olivier (eds), *Studies in Mycenaean and Classical Greek presented to John Chadwick*, *Minos* 20-22 (1987).
- Studies Killen* J. Bennet, J. Driessen (eds), *A-NA-QO-TA. Studies Presented to J. T. Killen*, *Minos* 33-34 (1998-1999).
- Studies Palmer* A. Morpurgo Davies, W. Meid (ed.), *Studies in Greek, Italic and Indo-European Linguistics offered to Leonard R. Palmer on the Occasion of his Seventieth Birthday, June 5, 1976*, *Innsbrucker Beiträge zur Sprachwissenschaft* 16 (1976).

### V. Editions

- ADGS 2005* V. L. Aravantinos, M. Del Freo, L. Godart, A. Sacconi, *Thèbes. Fouilles de la Cadmée. IV. Les textes de Thèbes (1-433). Translittération et tableaux des scribes*, *Biblioteca di "Pasiphae"* 4 (2005).
- AGS 2001* V. L. Aravantinos, L. Godart, A. Sacconi, *Thèbes. Fouilles de la Cadmée. I. Les tablettes en linéaire B de la Odos Pelopidou. Édition et commentaire*, *Biblioteca di "Pasiphae"* 1 (2001).
- AGS 2002* V. L. Aravantinos, L. Godart, A. Sacconi, *Thèbes. Fouilles de la Cadmée. III. Corpus des documents d'archives en linéaire B de Thèbes (1-433)*, *Biblioteca di "Pasiphae"* 3 (2002).
- CHIC* J.-P. Olivier & L. Godart, *Corpus Hieroglyphicarum Inscriptionum Cretae*, *Études Crétoises* XXXI (1996).
- CIM* A. Sacconi, *Corpus delle iscrizioni in lineare B di Micene*, *Incunabula Graeca* LVIII (1974).
- CIV* A. Sacconi, *Corpus delle iscrizioni vascolari in lineare B*, *Incunabula Graeca* LVII (1974).
- CoMIK* J. Chadwick, L. Godart, J. T. Killen, J.-P. Olivier, A. Sacconi, I. A. Sakellarakis, *Corpus of Mycenaean Inscriptions from Knossos*, 4 vol., *Incunabula Graeca* LXXXVIII, 1-4 (1986-1998).
- GORILA* L. Godart & J.-P. Olivier (ed.), *Recueil des inscriptions en linéaire A*, 5 vol., *Études Crétoises* XXI:1-5 (1976-1985).
- IC* M. Guarducci, *Inscriptiones Creticae opera et consilio Friderici Halberr collectae*, 4 vol., (1935-1950).
- ICS* O. Masson, *Les inscriptions chypriotes syllabiques. Recueil critique commenté*, [réimpr. augmentée, Paris 1983] *Études Chypriotes* I (1961).

---

<i>IG</i>	<i>Inscriptiones Graecae.</i>
<i>IG<sup>2</sup></i>	<i>Inscriptiones Graecae, editio minor.</i>
<i>KT1</i>	E. L. Bennett, Jr., J. Chadwick, M. Ventris, <i>The Knossos Tablets. A Transliteration</i> (1956).
<i>KT3</i>	J. Chadwick & J. T. Killen, <i>The Knossos Tablets. A Transliteration. Third Edition</i> (1964).
<i>KT4</i>	J. Chadwick, J. T. Killen, J.-P. Olivier, <i>The Knossos Tablets. A Transliteration. Fourth Edition</i> (1971).
<i>KT5</i>	J. T. Killen & J.-P. Olivier, <i>The Knossos Tablets. Fifth Edition, Minos Supl. 11</i> (1989).
<i>MT II</i>	E.L. Bennett, Jr., <i>The Mycenaean Tablets II (with an introduction by A.J.B. Wace &amp; E.B. Wace; translation and commentary by J. Chadwick)</i> , <i>TAPhS</i> 48:1 (1958).
<i>MT III</i>	J. Chadwick, <i>The Mycenaean Tablets III (with contributions from E.L. Bennett, Jr., E.B. French, W. Taylour, N.M. Verdelis &amp; Ch. K. Williams)</i> , <i>TAPhS</i> 52:7 (1962).
<i>MT IV</i>	J.-P. Olivier, <i>The Mycenaean Tablets IV. A Revised Transliteration</i> (1969).
<i>PTTI</i>	E. L. Bennett & Jr., J.-P. Olivier, <i>The Pylos Tablets Transcribed. Part I. Text and Notes</i> , <i>Incunabula Graeca</i> LI (1973).
<i>PTT II</i>	E. L. Bennett & Jr., J.-P. Olivier, <i>The Pylos Tablets Transcribed. Part II. Hands, Concordances, Indices</i> , <i>Incunabula Graeca</i> LIX (1976).
Schwyzzer	E. Schwyzzer, <i>Dialectorum Graecarum exempla epigraphica potiora</i> , (1923), 2 <sup>nd</sup> ed. (1960).
<i>SEG</i>	<i>Supplementum Epigraphicum Graecum.</i>
<i>SM I</i>	A. J. Evans, <i>Scripta Minoa I. The Hieroglyphic and Primitive Linear Classes</i> (1909).
<i>SM II</i>	A. J. Evans, <i>Scripta Minoa II. The Archives of Knossos. Clay Tablets in Linear Script B, edited from notes and supplemented by J. L. Myres</i> (1952).
<i>Syll.<sup>3</sup></i>	W. Dittenberger, <i>Sylloge inscriptionum Graecarum</i> , 3. ed. (1915-1924).
<i>TAM III.1</i>	R. Heberdey, <i>Tituli Asiae Minoris III. Tituli Pisidiae linguis Graeca et Latina conscripti. 1. Tituli Termessi et agri Termessensis</i> (1941).
<i>TITHEMY</i>	J. L. Melena & J.-P. Olivier, <i>TITHEMY. The Tablets and Nodules in Linear B from Tiryns, Thebes and Mycenae. A Revised Transliteration, Minos Supl. 12</i> (1991).
<i>TMT</i>	C. Consani, M. Negri, <i>Testi Minoici trascritti con interpretazione</i>

- e glossario*, Incunabula Graeca C (1999).
- TT I J. Chadwick, Linear B Tablets from Thebes, *Minos* 10 (1970), 115-137.
- TT II Th. G. Spyropoulos & J. Chadwick, *The Thebes Tablets II*, *Minos* Supl. 4 (1975).

## VI. Other publications

- Aspects* Y. Duhoux, *Aspects du vocabulaire économique mycénien (cadastre - artisanat - fiscalité)* (1976).
- CMS I. Pini *et al.*, *Corpus der minoischen und mykenischen Siegel* (1964).
- Companion* Y. Duhoux & A. Morpurgo-Davies, *Companion to Linear B: Mycenaean Greek Texts and their World*. Vol. 1, *Bibliothèque des cahiers de l'Institut de Linguistique de Louvain* 120 (2008); Vol. 2, *Bibliothèque des cahiers de l'Institut de Linguistique de Louvain* 127 (2011); Vol. 3, *Bibliothèque des cahiers de l'Institut de Linguistique de Louvain* 133 (2014).
- DGE Francisco R. Adrados & J. Rodríguez Somolinos (ed.), *Diccionario Griego-Español*, (1980-).
- DELG P. Chantraine, *Dictionnaire étymologique de la langue grecque. Histoire des mots* (1968-1980).
- Desservants* J.-P. Olivier, *À propos d'une «liste» de desservants de sanctuaire dans les documents en linéaire B de Pylos* (1960).
- DMic. F. Aura Jorro, *Diccionario griego-micénico*, 2 vol., (1985-1993).
- Docs* M. Ventris & J. Chadwick, *Documents in Mycenaean Greek* (1956).
- Docs*<sup>2</sup> M. Ventris & J. Chadwick, *Documents in Mycenaean Greek*, 2nd ed., (1973).
- Docs*<sup>3</sup> J.T. Killen & A. Morpurgo Davies (eds), *Documents in Mycenaean Greek*, 3rd ed. (in preparation).
- Dosmoi* P. De Fidio, *I dosmoi Pili a Poseidon: una terra sacra di età micenea*, Incunabula Graeca LXV (1977).
- Early Destruction* J. Driessen, *An Early Destruction in the Mycenaean Palace at Knossos: A New Interpretation of the*

---

	<i>Excavation Field-Notes of the South-East Area of the West Wing</i> (1990).
<i>Études</i>	C. J. Ruijgh, <i>Études sur la grammaire et le vocabulaire du grec mycénien</i> (1967).
<i>EDG</i>	R. Beekes, <i>Etymological Dictionary of Greek</i> , 2 volumes (2010)
<i>EWA</i>	M. Mayrhofer, <i>Etymologisches Wörterbuch des Altindoarischen</i> (1986-2001).
<i>Formation</i>	P. Chantraine, <i>La formation des noms en grec ancien</i> (1933).
<i>GEW</i>	H. Frisk, <i>Griechisches Etymologisches Wörterbuch</i> (1954-1972).
<i>Gr.Gr.</i>	E. Schwyzer, <i>Griechische Grammatik</i> (1934-1953).
<i>HGD I</i>	A. Thumb & E. Kieckers, <i>Handbuch der griechischen Dialekte I</i> (1932).
<i>HGD II</i>	A. Thumb & A. Scherer, <i>Handbuch der griechischen Dialekte II</i> (1959).
<i>HMG</i>	A. Bartoněk, <i>Handbuch des mykenischen Griechisch</i> (2003).
<i>HPN</i>	F. Bechtel, <i>Die historischen Personennamen des Griechischen bis zur Keiserzeit</i> (1917).
<i>IDA</i>	F. Vandenabeele & J.-P. Olivier, <i>Les idéogrammes archéologiques du linéaire B</i> , <i>Études Crétoises XXIV</i> (1979).
<i>IEW</i>	J. Pokorny, <i>Indogermanisches Etymologisches Wörterbuch</i> (1949/1959).
<i>IGLB</i>	J.-P. Olivier, L. Godart, C. Seydel, C. Sourvinou, <i>Index généraux du linéaire B</i> , Rome 1973 <i>Incunabula Graeca</i> , LIX (1973).
<i>Interpretation</i>	L.R. Palmer, <i>The Interpretation of Mycenaean Greek Texts</i> (1963).
<i>Kühner-Gehrt</i>	R. Kühner, B. Gehrt, <i>Ausführliche Grammatik der griechischen Sprache</i> (1890-1904).
<i>LfgrE</i>	B. Snell, H. Erbse (ed.), <i>Lexicon des frühgriechischen Epos</i> (1955).
<i>LGPN I</i>	P. M. Frazer & E. Matthews, <i>A Lexicon of Greek Personal Names, vol. I: The Aegean Islands-Cyprus-Cyrenaica</i> (1987).

---

<i>LGPN II</i>	M.J. Osborne & S.G. Byrne, <i>A Lexicon of Greek Personal Names, vol. II: Attica</i> (1994).
<i>LGPN III.A</i>	P.M. Frazer, E. Matthews, <i>A Lexicon of Greek Personal Names, vol. III.A: Peloponnese, Western Greece, Sicily, and Magna Graecia</i> , (1997).
<i>LGPN III.B</i>	P.M. Frazer, E. Matthews, <i>A Lexicon of Greek Personal Names, vol. III.B: Central Greece: From the Megarid to Thessaly</i> (2000).
<i>LGPN IV</i>	P. M. Frazer, E. Matthews, <i>A Lexicon of Greek Personal Names, vol. IV: Macedonia, Thrace, Northern Regions of the Black Sea</i> (2005).
<i>LIMC</i>	<i>Lexicon iconographicum mythologiae classicae</i> (1981-1999).
<i>LIV</i>	H. Rix, <i>Lexikon der indogermanischen Verben</i> , 2 ed. (2001).
<i>LSJ</i>	H.G. Liddell, R. Scott, H.S. Jones, <i>A Greek-English Lexicon</i> , 9th ed. with a Supplement (1968).
<i>LSJ-RS</i>	P.G.W. Glare, <i>Greek-English Lexicon. Revised Supplement</i> (1996).
<i>Manufacture and Measurement</i>	A. Michailidou (ed.), <i>Manufacture and Measurement: Counting, Measuring and Recording Craft Items in Early Aegean Societies</i> , Μελετήματα 33 (2001).
<i>Mémoires I</i>	M. Lejeune, <i>Mémoires de philologie mycénienne. Première série (1955-1957)</i> (1958).
<i>Mémoires II</i>	M. Lejeune, <i>Mémoires de philologie mycénienne. Deuxième série (1958-1963)</i> Incunabula Graeca XLII (1971).
<i>Mémoires III</i>	M. Lejeune, <i>Mémoires de philologie mycénienne. Troisième série (1964-1968)</i> Incunabula Graeca XLIII (1972).
<i>Mémoires IV</i>	M. Lejeune, <i>Mémoires de philologie mycénienne. Quatrième série (1969-1996)</i> Incunabula Graeca XCIX (1997).
<i>Mentions</i>	M. Gérard-Rousseau, <i>Les mentions religieuses dans les tablettes mycéniennes</i> Incunabula Graeca XXIX (1968).
<i>MGL</i>	A. Morpurgo, <i>Mycenaeae Graecitatis Lexicon</i> , Incunabula Graeca III (1963).
<i>MGV</i>	J. Chadwick & L. Baumbach, <i>The Mycenaean</i>

---

	Greek Vocabulary, <i>Glotta</i> 41 (1963), 157-271; L. Baumbach, The Mycenaean Greek Vocabulary II, <i>Glotta</i> 49 (1971), 151-190.
<i>Minoan Roundel</i>	E. Hallager, <i>The Minoan Roundel and other Sealed Documents in the Neopalatial Linear A Administration</i> , <i>Aegaeum</i> 14 (1996).
<i>MME</i>	W.A. McDonald & G.R. Rapp, Jr. (ed.), <i>The Minnesota Messenia Expedition. Reconstructing a Bronze Age Regional Environment</i> (1972).
<i>Mochlos IB</i>	K.A. Barnard, Th.M. Brogan (ed.), <i>Mochlos IB. Period III. Neopalatial Settlement on the Coast: The Artisan's Quarter and the Farmhouse at Chalinomouri. The Neopalatial Pottery</i> , <i>Prehistory Monographs</i> 8 (2003).
<i>Mochlos IC</i>	J.S. Soles et al. (ed.), <i>Mochlos IC. Period III. Neopalatial Settlement on the Coast: The Artisan's Quarter and the Farmhouse at Chalinomouri. The Small Finds</i> , <i>Prehistory Monographs</i> 9 (2004).
<i>Mycenaean Feast</i>	J. Wright (ed.), <i>The Mycenaean Feast</i> , <i>Hesperia</i> 73:2 (2004).
<i>OKTi</i>	L.R. Palmer, <i>On the Knossos tablets: The Find-places of the Knossos Tablets</i> (1963).
<i>OKTii</i>	J. Boardman, <i>On the Knossos tablets: The Date of the Knossos Tablets</i> (1963).
<i>Pape-Benseler</i>	W. Pape & G.E. Benseler, <i>Wörterbuch der griechischen Eigennamen</i> (1884).
<i>People</i>	M. Lindgren, <i>The People of Pylos, prosopographical and methodological studies in the Pylos archives. 2 vol.</i> , <i>Boreas</i> 3 (1973).
<i>Perfume Industry</i>	C.W. Shelmerdine, <i>The Perfume Industry in Mycenaean Pylos</i> , <i>SIMA-PB</i> 34 (1985).
<i>Personennamen</i>	O. Landau, <i>Mykenisch-griechische Personennamen</i> (1958).
<i>Phonétique</i>	M. Lejeune, <i>Phonétique historique du mycénien et du grec ancien</i> (1972).
<i>PoM</i>	A.J. Evans, <i>The Palace of Minos at Knossos</i> , 4 vol., (1921-1935).
<i>PoNI</i>	C. W. Blegen, M. Rawson, <i>The Palace of Nestor at Pylos in Western Messenia. I. The Buildings and</i>

- their Contents* (1966).
- PoN II M. Lang, *The Palace of Nestor at Pylos in Western Messenia. II. The Frescoes* (1969).
- PoN III C.W. Blegen, M. Rawson, W. Taylour, W.P. Donovan, *The Palace of Nestor at Pylos in Western Messenia. III. Acropolis and Lower Town, Tholoi and Grave Circle, Chamber Tombs, Discoveries outside the Citadel* (1973).
- Problems in Decipherment* Y. Duhoux, T.G. Palaima, J. Bennet (eds), *Problems in Decipherment*, BCILL 49 (1989).
- RE *Real-Encyclopädie der klassischen Altertums-wissenschaft*.
- Rethinking Mycenaean Palaces* M.L. Galaty & W.A. Parkinson (ed.), *Rethinking Mycenaean Palaces. New Interpretations of an Old Idea*, The Cotsen Institute of Archaeology UCLA, Monograph 41 (1999).
- Royauté* P. Carlier, *La royauté en Grèce avant Alexandre* (1984).
- Sanctuaries and Cults* R. Hägg & N. Marinatos (eds), *Sanctuaries and Cults in the Aegean Bronze Age, Proceedings of the First International Symposium at the Swedish Institute in Athens, 12-13 May, 1980*, Skrifter Utgivna av Svenska Institutet i Athen 4°, XXVIII (1981).
- Sandy Pylos* J. L. Davis (ed.), *Sandy Pylos: An Archaeological History from Nestor to Navarino* (1998).
- Scribes Cnossos* J.-P. Olivier, *Les scribes de Cnossos. Essai de classement des archives d'un palais mycénien*, Incunabula Graeca XVII (1967).
- Scribes Pylos* T.G. Palaima, *The Scribes of Pylos*, Incunabula Graeca LXXXVII (1988).
- Scribes RCT* J. Driessen, *The Scribes of the Room of the Chariot Tablets at Knossos. Interdisciplinary Approach to the Study of a Linear B Deposit*, *Minos Supl.* 15 (2000).
- Studia Mycenaea* A. Bartoněk (ed.), *Studia Mycenaea, Proceedings of the Mycenaean Symposium, Brno, April 1966* (1968).
- Studia Myceanea (1988)* T.G. Palaima, C.W. Shelmerdine, P.Hr. Ilievski

- 
- (eds), *Studia Mycenaea 1988*, *Živa Antika* Monographies No. 7 (1989).
- Textos* J.L. Melena, *Textos griegos micénicos comentados* (2001).
- Thera IV* S.N. Marinatos, *Excavations at Thera IV (1970 Season)* (1971).
- Wortbildung* E. Risch, *Wortbildung der homerischen Sprache*, 2. ed. (1974).



## PREFACE AND ACKNOWLEDGEMENTS

*Marie Louise Nosch and Hedvig Landenius Enegren*

At the meeting of the *Comité international permanent d'études mycéniennes* (CIPEM) in Sèvres in September 2010, the CIPEM accepted Marie-Louise Nosch's suggestion to host the 14th Mycenological colloquium in Copenhagen. The first gathering took place in Gif-sur-Yvette near Paris in 1956. The spirit of good humour and collaborative enthusiasm established at the first colloquium became known within the field as *l'esprit de Gif*.

The group of countries and scholars at the mycenological conferences still reflect the correspondents and receivers of Ventris's work notes, which he had circulated to colleagues long before the internet made such a practice feasible.<sup>1</sup> The Gif colloquium included participants from Britain, Bulgaria, France, Greece, Italy, Spain, Switzerland and the USA.

Today mycenological studies are also an active field of research in Germany, Canada, Norway, Sweden, Denmark, Holland, the Czech Republic, Cyprus, and Australia. It is still the founding members of CIPEM who represent the most numerous scholars in the field of Aegean scripts since 1956, but new scholars join the group, and the photographs from each mycenological colloquium illustrate how the number of participants increases. We are an expanding discipline. Another significant change is the increasing number of female scholars in the field. John Chadwick, in his speech at Salzburg in 1995 noticed the few female scholars,<sup>2</sup> but this has also changed since then. In Nürnberg 1981, the hosts graciously arranged for a parallel 'spouse program' during the colloquium. In Copenhagen, 24 of 57 participating scholars were women. Since the publication in 1954 of *Documents in Mycenaean Greek*, Ventris and Chadwick strived to include other disciplines into the study of Aegean scripts, among others, the disciplines exploring texts from the ancient Near East.

Pierre Carlier and his co-organisers of the *13th Mycenological Colloquium*

---

<sup>1</sup> Bennet 2014.

<sup>2</sup> Chadwick 1999, 36.

in Sèvres in 2010 were the first to convene special events on comparative studies of the Mycenaean palatial economy and Near Eastern palatial economies.<sup>3</sup> We believe this to be a particularly important yet challenging endeavour and we are happy that several colleagues took up the challenge and publish stimulating comparative studies in the present volume.

Since the Paris colloquium in 2010, we have lost colleagues who will be missed for their scholarly contribution as well as for the friendship that unites us: Pierre Carlier (1949-2011), Emmett L. Bennett Jr. (1918-2011), Petar Hr. Ilievski (1920-2013), Martin S. Ruipérez (1923-2015), Anna Morpurgo-Davies (1937-2014) and Margareta Lindgren (1936-2017). We would like to take this opportunity to dedicate this volume to one our discipline's first ladies, historical linguist Anna Morpurgo-Davies, a world-leading figure in the study of ancient Greek and Anatolian, and as such a role model for what it takes to conduct comparative analyses. We corresponded with Anna Morpurgo-Davies until a few months before she passed away in September 2014. She was trained by Gallavotti and was editor of the first lexicon of Mycenaean, published in 1963. In Oxford, she worked closely with professor of Comparative Philology, Leonard Palmer, and Hittitologist and epigraphist David Hawkins. In 1971, she succeeded Palmer as chair at Oxford.

In this volume we also wish to remember the very first female scholar in Aegean scripts, Alice Kober (1903-1950), and thus highlight her significant contribution to the field of Mycenaean studies. Alice Kober who received an MA and PhD from Columbia University became assistant professor at Brooklyn College. It was with a Guggenheim Fellowship that she was able to immerse herself full-time to the study of Linear B.<sup>4</sup> Her methodological approach to the study of the Linear B signary, in which she established that the Mycenaean script shows an inflected language, ultimately influenced Ventris's final decipherment of the script.<sup>5</sup>

We also wish to commemorate our Scandinavian colleague, Margareta Lindgren (1936–2017). A pupil of Arne Furumark, she continued the Linear B scholarly tradition at Uppsala University with her publication on the prosopography of Pylos, a fundamental work within Mycenaean Studies.

As head of the Department for Maps and Prints at the Uppsala University Carolina Library for many years, she kept in close contact with the Department of Archaeology and Ancient history as an immensely appreciated lecturer in Aegean Scripts, who really knew how to engage her audience with her keen sense of humour. On a personal note, she was the thesis advisor to the co-

---

<sup>3</sup> Zurbach et al. forthcoming.

<sup>4</sup> [http://en.wikipedia.org/wiki/Alice\\_Kober](http://en.wikipedia.org/wiki/Alice_Kober)

<sup>5</sup> <https://repositories.lib.utexas.edu/handle/2152/15875>

editor of this volume (Hedvig Landenius Enegren). Her last participation in a Mycenological Colloquium was in Rome in 2006 with a paper on Cypriot Scripts. Many of us remember her vivid personality and her enthusiasm in a wide range of interests that went beyond Linear B; these included in later years, among others, pistol target shooting and the Harry Potter books!

It was an honour to host the 14<sup>th</sup> *Mycenological Colloquium* in Copenhagen, 2-5 September 2015. We thank friends and colleagues for joining us for this event, and for their presentation and fruitful discussions. We are particularly honoured to hear of *l'esprit de Copenhague*, uniting us all in a friendly conversation on the advancement of knowledge in our field.

For hosting the conference on the exquisite premises of the Carlsberg Academy, the former private villa of brewer Jacobsen and domicile of Niels Bohr, we warmly thank the Carlsberg Foundation. For continued support and trust, we thank the Danish National Research Foundation and the University of Copenhagen. Egzona Haxha, Camilla Ebert and Louise Ludvigsen were our efficient and kind coordination and organisation hostesses and assistants. We warmly thank Maurizio Del Freo for all his help in editorial and other matters; for the indexation Mikkel Nørtoft and for editorial assistance Peder Flemstad. We warmly thank Lillian and Dan Finks Fond, the Institute for Aegean Prehistory and the R.K. Rasks Legat foundation for generous support for this publication. We are grateful to Alessandro Naso, Marco Bettelli and Maurizio Del Freo for welcoming the conference proceedings in the *Incunabula Graeca* series.

Copenhagen and Brussels, Fall 2017

### *Bibliography*

- Bennet, J. 2014 'Literacies' – 60+ Years of 'Reading' the Aegean Late Bronze Age, *BICS* 57:2, 127-137.
- Chadwick, J. 1999 Linear B: Past, Present and Future. In Floreant, 29-38
- Carlier P. †, Joannès, Fr., Rougemont, Fr., Zurbach J. (eds), *Palatial Economy in the Ancient Near East and in the Aegean. First steps towards a comprehensive study and analysis. Acts of the ESF Exploratory Workshop held in Sèvres, 16-19 Sept. 2010*, Pisa – Rome, F. Serra, 2017.



## LIST OF AUTHORS

Francisco Aura-Jorro,  
Universidad de Alicante, Spain  
francisco.aura@ua.es

Federico Aurora  
University of Oslo, Norway  
federico.aurora@ub.uio.no

Lisa M. Bendall  
Keble College, Oxford University, UK  
lisa.bendall@arch.ox.ac.uk

John Bennet  
British School at Athens, Greece  
director@bsa.ac.uk

Alberto Bernabé  
Universidad Complutense de Madrid,  
Spain  
albernab@filol.ucm.es

William Bibee  
University of Texas at Austin, USA  
willbibee@yahoo.com

Flavia Carraro  
University of Copenhagen, Denmark  
fcarraro@yahoo.fr

Massimo Cultraro  
CNR-IBAM, Catania, Italy  
massimo.cultraro@cnr.it

Maurizio Del Freo  
CNR-ISMA, Rome, Italy  
maurizio.delfreo@isma.cnr.it

Fatima Diez Platas  
Universidad de Santiago de  
Compostela, Spain  
fatima.diez@usc.es

Yves Duhoux  
Université Catholique de Louvain,  
Louvain-la-Neuve, Belgium  
yves.duhoux@uclouvain.be

Elena Džukeska  
University “Ss. Cyril and  
Methodius”, Skopje, FYROM  
elena.dzukeska@gmail.com

Markus Egetmeyer  
Université de Paris IV-Sorbonne, France  
markus.egetmeyer@paris-sorbonne.fr

Richard Firth  
University of Bristol  
firth827@btinternet.com

José Luis García Ramón  
Universität zu Köln, Germany  
garcia.ramon@uni-koeln.de

Alessandro Greco  
Sapienza, Università di Roma, Italy  
a.greco@uniroma1.it

Joann Gulizio  
University of Texas at Austin, USA  
gulizioj@austin.utexas.edu

Erik Hallager  
University of Aarhus, Denmark  
klaeh@cas.au.dk

Margherita Jasink  
Università di Firenze, Italy  
annamargherita.jasink@unifi.it

José Miguel Jiménez Delgado  
Universidad de Sevilla, Spain  
jmjimdelg@us.es

Anna Judson  
Pembroke College, Cambridge  
University, UK  
apj31@cam.ac.uk

Artemis Karnava  
Inscriptiones Graecae,  
Brandenburgische Akademie der  
Wissenschaften, Berlin, Germany  
artemis.karnava@bbaw.de

John Killen  
Jesus College, Cambridge  
University, UK  
jandakillen@gmail.com

Evangelos Kyriakidis  
University of Kent, UK  
ek47@kent.ac.uk

Daniel Kölligan  
Universität zu Köln, Germany  
d.koelligan@uni-koeln.de

Hedvig Landenius Enegren  
University of Copenhagen, Denmark  
hedvigenegren@gmail.com

Alex Leukart  
University of Geneva, Switzerland  
alex.leukart@gmail.com  
nakileukart@hotmail.com

Eugenio R. Luján  
Univ. Complutense de Madrid, Spain  
erlujan@filol.ucm.es

Susan Lupack  
Macquarie University, Sydney, Australia  
susanlupack@mac.com

Torsten Meissner  
Cambridge University UK  
tm10012@cam.ac.uk

Dimiri Nakassis  
University of Colorado Boulder,  
USA  
Dimitri.Nakassis@colorado.edu

Stavroula Nikoloudis  
University of Melbourne, Australia  
s.nikoloudis@unimelb.edu.au

Marie-Louise Nosch  
University of Copenhagen, Denmark  
nosch@hum.ku.dk

Thomas G. Palaima  
The University of Texas at Austin,  
USA  
tpalaima@austin.utexas.edu

Ruth Palmer  
Ohio University, USA  
palmerr@ohio.edu

Oswald Panagl  
Universität Salzburg, Austria  
oswald.panagl@sbg.ac.at

Massimo Perna  
Università degli Studi Suor Orsola  
Benincasa, Naples, Italy  
maxperna59@gmail.com

Vassilis Petrakis  
Ministry of Education, Athens,  
Greece  
vpetrakisrm@yahoo.gr

Rachele Pierini  
Università di Bologna, Italy  
rachele.pierini@gmail.com

Juan Piquero  
Universidad Complutense de Madrid,  
Spain  
jpiquero15@gmail.com

Kevin Pluta  
The University of Texas at Austin,  
USA  
kpluta@austin.utexas.edu

Françoise Rougemont  
CNRS, UMR 7041, Nanterre, France  
francoise.rougemont@mae.u-paris10.fr

Anna Sacconi  
Sapienza, Università di Roma, Italy  
anna.sacconi@uniroma1.it

Irene Serrano  
Universidad Complutense de Madrid,  
Spain  
irene.serrano.laguna@filol.ucm.es

Cynthia W. Sherlmerdine  
The University of Texas at Austin,  
USA  
cwshelm@gmail.com

Philippa Steele  
Magdalene College, Cambridge  
University, UK  
pms45@cam.ac.uk

Rupert Thompson  
Selwynn College, Cambridge  
University, UK  
rjet1@cam.ac.uk

Helena Tomas  
University of Zagreb, Croatia  
htomas@ffzg.hr

Carlos Varias García  
Universitat Autònoma de Barcelona,  
Spain  
carlos.varias@uab.cat

Juan Pablo Vita  
CSIC–Instituto de Lenguas y

Culturas del Mediterráneo y Oriente  
Próximo, Madrid, Spain  
juanpablo.vita@cchs.csic.es

Nicola Antonello Vittiglio  
Universitat Autònoma de  
Barcelona, Spain  
nicola.vittiglio@uab.cat

Jörg Weilhartner  
Universität Wien, Austria  
joerg.weilhartner@oeaw.ac.at

Aren Max Wilson-Wright  
The University of Texas at Austin,  
USA  
wilsonwright@utexas.edu

Julien Zurbach  
Ecole Normale Supérieure, Paris,  
France  
julien.zurbach@gmail.com



## WHERE WAS *DA-WO*?

*Lisa M. Bendall*

### Introduction

The toponym *da-wo* appears some 58 times in the Linear B documents of Knossos. Structural analysis of the texts places it in a group of toponyms which includes *pa-i-to*, and *da-wo* is thus likely to be somewhere in the region of the former Minoan Palace of Phaistos, in the rich agricultural plain of the Mesara.<sup>1</sup> The present paper enquires which archaeological site *da-wo* is most likely to correspond to. Most previous suggestions have pointed to Agia Triada or Kommos, with alternatives being somewhere in the eastern or central Mesara.<sup>2</sup> Agia Triada was an important settlement about 2.5km west of the palace on the same hillock; it seems to have taken over in importance from the palace during the Neopalatial period and this situation continued at the time of the Linear B administration. Kommos was the main harbour for the Mesara (and Phaistos) during the Middle and especially Late Bronze Age. Specific sites for the eastern or central Mesara have not been suggested but Melena put *da-wo* in the watershed of the Anapodharis river in the extreme east of the plain,<sup>3</sup> and Privitera points out that there are important Bronze Age remains near Roman Gortyn.<sup>4</sup>

---

\* I would like to thank the editors. I am also grateful to John Killen and John Bennet for advice and references and to all who offered comments or further references in the discussion.

<sup>1</sup> Chadwick 1973, 44; 1976, 54; Melena 1974b, 329; 1975a, 121-122; Murray & Warren 1976, 44; Killen 1977, 41; Wilson 1977, 102, 123. For groupings of toponyms in the Knossos Linear B tablets see Hart 1965; Palmer 1972; 1979; Killen 1977; Wilson 1977; McArthur 1981; 1993. Also see Melena 1974b, 329-331; 1975a, 120-127; 1976, 147-153. Important recent commentaries include Bennet 1985; 1987; 1988; 1990; Driessen 2001.

<sup>2</sup> **Agia Triada**: Hiller 1976, 118; Bennet 1985, 247 (but he later [1992, 97 n. 96] suggests that Agia Triada is instead *pa-i-to*, see below); Watrous et al. 2004, 300 (noting this is the 'usual' guess); Palaima 2015, 633 n. 41. **Kommos**: J. Shaw 1985, 56; Shaw & Shaw 2000, 709 (noting *da-wo* could also have been Agia Triada or some other site). See also Cucuzza 2003, 244; Shaw & Shaw 2006, 874. **Eastern Mesara**: Chadwick 1973, 44; 1976, 54; Melena 1974a, 52 (see map); 1974b, 329-330; 1975a, 122; 1976, 151 (see map). **Eastern or central Mesara, or Kommos**: Privitera 2009, 68 (also noting Kommos possible); 2014, 440 with n 88 (he [2009, 68; 2014, 436] explicitly rejects an equation with Agia Triada which he identifies instead as *pa-i-to*).

<sup>3</sup> Melena 1974, 329; a later map of his (1976, 151) shows it near modern Pyrgos.

<sup>4</sup> Privitera 2014, 440 n 88.

To anticipate our conclusion, it will be argued that *da-wo* is most likely to have been the Bronze Age name of Kommos. As just noted, this suggestion is not new, but it has usually been mentioned in passing, rather than being the subject of a focussed discussion. Also, there is some new archaeological (plus a little epigraphic) evidence to consider. The case does not allow of final proof, but an overview strongly suggests that *da-wo* is more likely to be Kommos than any of the possible alternatives.

We will first review the Linear B data concerning *da-wo* as preserved in the Knossos archives. We then consider the question whether *pa-i-to* in the texts refers to Phaistos palace or Agia Triada. The archaeology of Kommos is then briefly considered, and finally we consider the question of why so much grain had been collected at *da-wo*.

### Linear B evidence for *da-wo*

All occurrences of *da-wo* in the Knossos Linear B documents are set out in Tables 1 and 2.<sup>5</sup> Table 1 shows the sheep tablets, which share structural features such that it is clearer to set them out separately; Table 2 shows the remaining documents. The tables show the form of the TN (including ethnicons *da-wi-ja* and *da-wi-jo* indicating women and men of *da-wo*), the numbers and types of people, livestock, or commodities recorded, and any relevant epigraphic or other notes.

We should note at the outset that most of the documents are contemporary, except for the few in Table 2 written by hand “124”, the catch-all number for scribes from the Room of the Chariot Tablets (RCT hereafter). Documents from the RCT are thought to be earlier than those of the other main archive deposits, perhaps by a generation or so, and it is probably the earliest large deposit that survives at the palace.<sup>6</sup> The presence of *da-wo* in this group of tablets indicates its importance from the very beginning of the Knossos Linear B administration.

The main subjects dealt with in the *da-wo* documents are sheep, personnel, textile production, agriculture, and taxation/collections. We will examine each of these categories in more detail, to give a sense of the type of information available. We begin with the sheep records.

<sup>5</sup> Tables 1 and 2 are based on Aura Jorro’s on-line word list, derived from his dictionary *DMic*. (<http://www.cervantesvirtual.com/bib/portal/diccionariomicenico/pcuartonivelf9e1.html?conten=presentacion>, accessed on 20 May 2016). I have excluded a couple of tablets where the readings are uncertain and where *KT<sup>s</sup>* and/or *CoMIK* make clear that a different TN is more likely. These are: **Dc 5812** (Table 1: apparatus reads ‘*vest. \*56-ko-we* more likely than *da-wo*’) and **Wb 9610** (see below under ‘labels’).

<sup>6</sup> Driessen 1990; 1997; 2000; see Bendall 2007, 11-13 for a recent summary.

***Sheep records at da-wo***

*da-wo* appears on thirty-four tablets recording sheep (Table 1). Section 1a of the table lists standard flock census records, while 1b shows more specialised types of documents. All but two of the documents in Table 1 were written by hand 117, who wrote the majority of the 700 or so sheep records found at Knossos.<sup>7</sup>

The flock census records, which comprise documents of the Da-Dg series plus Dv,<sup>8</sup> are well known and just a few examples will suffice here.

**Da 1313** + 1395 + 5590 (117)

.A ovis<sup>m</sup> 100

.B ku-mo-no-so / da-wo

**Da 5223** + 7184 + 7898 + 8269 (117)

.A ovis<sup>m</sup> 100

.B a-da-ra-ro / da-wo , ki-ri-jo-te

**Dc 1154** + 7683 + *fr.* (117)

.A we-we-si-jo-jo ovis<sup>m</sup> 91

.B wo-\*82-ni-jo , / da-wo , o ovis<sup>m</sup> 9

These are standard flock census records. The first word is always the name of a shepherd, in majuscule at the start of line .B, followed by the name of the town (here *da-wo*) in smaller script. Next are numbers of sheep, almost invariably in round numbers or adding up to round numbers. Some sheep are noted as being *o(-pe-ro)/ophelos/* ‘missing’ (e.g. 9 sheep in **Dc 1154**), and in one case as ‘old’ (*pa = /palaios/*). In some cases a second man’s name appears in the top line, the so-called ‘Collector’ (e.g. **Dc 1154**).<sup>9</sup> Very rarely, other information is given, such as the word *ki-ri-jo-te* on **Da 5223**, which is probably some sort of adjective referring to the sheep.<sup>10</sup> As shown by John Killen in a classic article, the sheep were spread out around Crete, farmed out to shepherds responsible for them under the organisational control of various TNs – in this case *da-wo* – as focal points for larger ‘estates’.<sup>11</sup> *da-wo* participates in this system in a perfectly ordinary way.

<sup>7</sup> The two exceptions are **DI(1) 928** (h 118) and **D 1650** (118?).

<sup>8</sup> On adding Dv see Olivier 1967, 73.

<sup>9</sup> The function of these figures is debated but I take Killen’s view (1964a, 15; 1979, 177; 1995) that they were persons to whom the *produce* of a flock was made over, while the palace remained responsible for its management. See also Olivier 1967, esp. 84, calling them *bénéficiaires*; 2001; summary and further references (including for contrasting views) in Bendall 2007, 77-80.

<sup>10</sup> *D.Mic.* I, 361.

<sup>11</sup> Killen 1964a.

There are at least 30 separate flocks belonging to the *da-wo* ‘estate’, under at least 21 different named shepherds. A total of 2635 sheep are recorded on the ‘raw’ figures, but as shown by Jean-Pierre Olivier, the numbers require restoration where they have been lost or where we can make reasonable guesses at what incomplete figures must have been;<sup>12</sup> these restored figures are shown in the final column.<sup>13</sup> Twelve of the preserved tablets have a ‘Collector’ name and nineteen do not; they are shown with their respective totals.

One tablet in the second part of the table (1b) is a totalling tablet for *da-wo*; the text is as follows.

**Dn 1094** + 1311 (117)

.1 pa-i-to OVIS<sup>m</sup> 1509

.2 da-wo OVIS<sup>m</sup> 2440

.1 Last hundred and 9 over erased numerals  
(certainly [[60]] and probably units).

The Dn series are totalling tablets for the Da-Dg+Dv series. They record non-‘Collector’ flocks according geographical region or ‘estate’, while ‘Collectors’ flocks are totalled by ‘Collector’ name, wherever located.<sup>14</sup> Standard Dn tablets, such as **Dn 1094**, record two TNs, and these are thought to be geographically linked – as Palmer put it, Dn toponym pairs share a ‘sheep frontier’.<sup>15</sup> The implication is that *da-wo* is the one of the TN group to lie closest to Phaistos.

Given how the Da-Dg series relate to Dn, we should expect the Dn figure to exclude ‘Collector’ flocks. In fact the amount preserved for non-‘Collector’ flocks (1544) is less than the 2440 recorded in **Dn 1094**, while the combined number is more (2635 on the raw figures, 3100 on Olivier’s restored figures), and this is in keeping with expectations. Olivier calculates that some twelve tablets, recording some 890 sheep, must be lost for *da-wo*.<sup>16</sup> This is on the high side compared with calculations for other Dn series TNs, but it is not uncommon for a Dn TN to be ‘missing’ some 6-7 tablets, so it seems we are merely unfortunate in not having more of the *da-wo* record preserved. If we take the Dn figure of

<sup>12</sup> E.g. on Dv 1145 the incomplete figure 11[ must originally have been 19 to give a total of 100 for the document.

<sup>13</sup> Drawing on Olivier 1988, 240-241.

<sup>14</sup> Olivier 1967, 75; 1972; 1988, 266.

<sup>15</sup> Palmer 1972, 39. He imagined these ‘sheep-frontiers’ as potentially ranging across hills or mountains (sheep being able to forage in such regions), but ‘frontiers’ across mountains are unlikely because it is more probable that the mountains would form conceptual (as well as actual) barriers for those thinking of administration in terms of geographical area. The scribes were unlikely to have thought of mountains as ‘frontiers’ rather than ‘barriers’.

<sup>16</sup> Olivier 1967, 76; 1972, 25; see also 1988.

2440 and add it to the ‘restored’ figure for ‘Collector’ flocks, we can suggest the site was associated with some 3690 sheep. It is also notable that the figure conforms to the 1 : 3 ratio that seems generally to pertain to ‘Collector’ vs. non-‘Collector’ items.<sup>17</sup>

Our final document is a lambing record.

**DI(1) 928** (118)

- .A ] ra-wo-qo-no-jo ovis<sup>f</sup>[  
 .B ]\*56-na-ro / da-wo ki ovis<sup>s</sup>[  
 .A -qo- over [[ ]].  
 .B Probably ovis[ (cf. DI 1060), though ovis<sup>f</sup> also theoretically possible.

**DI(1) 928** is a lambing record – the lambing may have been recently completed which is why there are not more such documents surviving.<sup>18</sup> The numbers are lost so the tablet adds scant information beyond that breeding flocks were present in the region.<sup>19</sup>

We now turn to the documents of Table 2, beginning with textile production.

### *Textile production records at da-wo*

Five documents deal with textile production. As is common for this industry, we have records of both stints and receipts. Two records give stints for weaving workshops; the texts are as follows.

**Lc(1) 526** (103)

- .A ] 'pe-ko-to' TELA<sup>1</sup>+TE 10 TELA<sup>2</sup>+TE 14[  
 .B ]da-wi-ja / tu-na-no TELA<sup>1</sup> 3 LANA[

**Lc(1) 7549** (103)

- .A ] vest.[  
 .B ]da-wi-ja / tu[  
 Palimpsest.

Tablets of the Lc(1) set are ‘stint’ records for weaving workshops.<sup>20</sup> They record allocations of wool and specify the numbers and types of pieces of cloth

<sup>17</sup> Olivier 1967.

<sup>18</sup> On the DI tablets see Killen 1964a, 4, 9-13; Killen 1964b, esp. 77-81, 88-89; 1993, 211-212 (noting another possible reason for the scarcity of such documents is that they pertain only where shepherds were themselves unable to make up shortfalls; see also Halstead 1990-1991; 1999).

<sup>19</sup> *ra-wo-qo-no-jo* is a ‘Collector’ whose name appears twice elsewhere in the Knossos documents. In B 798.7 he is almost certainly the same man, as this seems actually to a list of ‘Collectors’. A man of the same name also appears in Mc 4462 but it is uncertain here whether the same person is meant.

<sup>20</sup> Killen 1966; 1979; 1988; Firth & Nosch 2002-2003; Greco 2010.

to be made from it. **Lc(1) 526** is typical member of the set; the status of **Lc(1) 7549** has been questioned and it may not in fact be Lc(1).<sup>21</sup> **Lc(1) 526** begins with an ethnicon in majuscule, then the tablet is ruled into two lines with a different type of cloth recorded on each line: TELA+TE on the upper line and *tu-na-no* cloth on the lower. TELA+TE appears in two varieties, one labelled *pe-ko-to* (meaning uncertain).<sup>22</sup> At least 27 pieces of cloth are stipulated. Finally, the amounts of wool to be issued in order to make the textiles is recorded, although the numbers are lost on both lines.

Receipts of finished cloth from *da-wo* are also recorded. **Le 641** is a record of deliveries to Knossos of pieces of cloth produced by female workgroups in various places, including *da-wo* (line .2).<sup>23</sup>

**Le 641 + frr.** (103)

- .1 o-a-po-te , de-ka-sa-ṭo , a-re-i-jo , o-u-qe-po[  
 .2 pa-i-ti-ja , 'pe' TELA+TE 2 mi TELA+TE 14 da-wi-ja , pe TELA<sup>x</sup>+TE 1[  
 .3 do-ti-ja mi TELA+TE 6 qa-mi-ja TELA<sup>1</sup>+TE 1[  
 .4 ko-no-so , / te-pe-ja 'mi' TELA+TE 3 tu-ni-ja TELA<sup>1</sup>+TE 1 [  
 .5.6 vacant [ ] vacant [ ]

The heading includes a form of δέχομαι, probably 3<sup>rd</sup> sg. aorist middle / *deksato* 'received'. The verb is preceded and followed by men's names: *a-po-te*, with the 'opening graph' *o-* 'thus', and *a-re-i-jo*. Given the spelling rules, the cases are obscure so it not clear which man is the subject of the verb, but the general sense of the document as pertaining to deliveries is clear. The final word of the heading is also obscure; it may begin with the negating formula *o-u-qe / ou-q<sup>u</sup>e* 'and not', but whatever it was that was 'not' is lost (presumably *po-* was the beginning of the relevant word).

After the heading, the tablets lists quantities of TELA+TE booked against various feminine ethnics: the women of Phaistos, *da-wo*, *do-ti-ja*, *qa-mo*, and *tu-ni-ja*, plus the *te-pa* workers of Knossos. Some of the ideograms are accompanied by the adjuncts *pe* and *mi*. *pe* probably abbreviates *pe-ko-to*, a qualifier of TELA+TE as seen above. *mi* probably abbreviates the attested word *mi-ja-ro*, another variety of cloth (type and meaning obscure – it may pertain to

<sup>21</sup> Firth & Nosch (2002-2003, 124-125) note it is larger than other Lc(1) tablets and unusual in repeating a TN (only one other TN is repeated in Lc[1]). They suggest reclassifying it as Lc and question its ascription to h 103, proposing that it may belong to a group of records drawing up stints for the relevant TNs at a different time.

<sup>22</sup> *pe-ko-to* is thought to have some connection with the occupational term *pe-ki-ti-ra<sub>2</sub>*, the meaning of which is also uncertain. It could represent /pektriail 'wool-carders' (cf. /pékōl 'I card (wool)' or may have to do with a secondary meaning of the verb 'I cut/shear' (*Docs*<sup>2</sup> 316).

<sup>23</sup> Killen 1966, 106-107.

‘plain/unqualified’  $TELA+TE$ ).

The Knossos *te-pa* workers and all but one of the ethnics noted in **Le 641** appear also in the Lc(1) stint records, and given the overlap it is likely that the same groups of women were concerned in the two cases, particularly since both were written by the same scribe.<sup>24</sup> **Le 641** records only one or a very few pieces of cloth from *da-wo* (given the layout of the numbers it is unlikely to have been more than 3), but more detail is shown in another record, as follows (the tablet is divided by lines in the transliteration given here in order to make its structure clearer).

- Ln 1568** (103)
- .1a mi-ja-ro , e , pa 4 e , pa 6 e , pa 12
- .1b \*56-po-so 1 wa-wa-ka 1  $TELA^1+TE$  1 ru-ki-ti-ja *pe*  $TELA+TE$  1 wi-da-ma-ta<sub>2</sub> ,  
mi  $TELA^1+TE$  1
- .2a e , pa 12 e pa 4 e , pa 4 e , pa 8
- .2b po-po *pe*  $TELA^1+TE$  1 ta-su mi  $TELA+TE$  1 ko-re-wo mi  $TELA+TE$  1 di-\*65-  
pa-ta mi  $TELA+TE$  1
- .3a pa 12 pa 11 pa 12
- .3b ru-sa-ma *pe*  $TELA^1+TE$  1 na-e-ra-ja *pe*  $TELA+TE$  1 qe-pa-ta-no *pe*  $TELA^1+TE$  1
- .4a pa 8
- .4b ]tu-na-no , ru-nu  $TELA^1$  1 [ ] $TELA^x$  1
- .5 pa-ro no-si-ro  $TELA+TE$  3
- .6 da-wo to-sa te-[ ] [[*mi*  $TELA+TE$ ]] pa-ra-ja ‘*mi*’  $TELA^x+TE$  7 [
- lat. inf.* .a a-ze-ti-ri-ja ne-ki-ri-de [
- .b o-pi , ma-tu-we o-nu-ke LANA 1 o-pi , po-ni-ke-ja [
- Tablet now much damaged; several readings from Ashmolean photograph.

**Ln 1568** gives a detailed description of cloth produced at *da-wo* (line .6).<sup>25</sup> Most of the vocabulary words are women’s names, against which various types of cloth are registered. There are two types of  $TELA+TE$ , distinguished as *pe* (*pe-ko-to*) and *mi* (*mi-ja-ro*), along with *tu-na-no* cloth. The record is related to **Lc(1) 526** and may well detail exactly the same group and stints, since the numbers and types of cloth are similar.<sup>26</sup> Some of the women’s names appear in connection with issues of wool elsewhere (e.g. *po-po* in line .2b appears also on **Od(1) 689**), and given the connections between Lc(1) and Od(1) these are probably the same women.<sup>27</sup>

<sup>24</sup> Killen 1966, 109-110; 1979, 152-153.

<sup>25</sup> On this tablet see Killen 1966, 108; 1972, esp. 427-9.

<sup>26</sup> Killen 1966, 107; 1972, 428.

<sup>27</sup> Firth & Nosch 2002-2003, 133. She probably also appears on **Xe 524** where she is concerned with ‘finishing’ (Killen 1988, 178).

The edge of the tablet (*lat. inf.*) deals with ‘finishing’.<sup>28</sup> It first records issues of wool to women called */askētriaī/* ‘decorators’ for making *o-nu-ke*, probably ‘border’ or ‘fringe’,<sup>29</sup> to be applied to the cloth. The workgroup is specified as being *o-pi* in the sense of ‘chez’, ‘at the hands of’, indicating the supervisors responsible for the operation, a person *ma-tu* in the dative. Another group is ‘chez’ a woman *po-ni-ke-ja*, probably */Phoinikeia/*,<sup>30</sup> whose group is described by the term *ne-ki-ri-de*. This is probably an occupational term, and is certainly linked to textile production.<sup>31</sup>

Our final document also deals with ‘finishing’.

**M(1) 559** (103)

- |    |                   |                 |  |
|----|-------------------|-----------------|--|
| .1 | []ke’ o-no , o-na | LANA 2          |  |
| .2 | ]da-wi-jo         | *146 2          |  |
|    | .2                | Perhaps only 1. |  |

This tablet, like a few others by h. 103, records *LANA* in connection with \*146, a type of simple cloth. Unlike the textiles above, \*146 was not normally made in palace workshops but was obtained through taxation.<sup>32</sup> In this tablet therefore, the wool is not being issued in order to make \*146, but both wool and \*146 are being issued to the workers, with the intention of some type of decoration being added to the pieces of cloth. (Some documents of this type specify that *o-nu-ka* fringes/borders are to be added, e.g. **M 683**.)

In sum, it is clear that *da-wo* was the location of at least a few different textile workgroups responsible for delivering their output to Knossos. Some 15 women are named in **Ln 1568**, so that must be the minimum number associated with the site, but some workers appear only as members of plural groups, so it is virtually certain there were more. Some further detail about these personnel is seen in the next section.

### ***Personnel records at da-wo***

Five documents deal with personnel. Many, but not necessarily all, of these persons will have been involved in textile production. We begin with a tablet that mentions one of the groups seen also in the textile documents.

<sup>28</sup> For the structure of the entry see Killen 1968, 641; 1972, 428-429.

<sup>29</sup> Cf. classical ὄνυξ */ónux/* ‘talon, nail’, but here with some technical sense; it is used of the Erechtheion temple in later Greek with regard to ornamental bands (Killen 1979a, 157). See also Leukart 1979; Firth & Nosch 2002-2003.

<sup>30</sup> It is probably a feminine trade-name ‘purple-worker’ used as a personal name, cf. *ke-ra-me-ja* (Killen 1968, 638).

<sup>31</sup> Killen 1968, 641 with n 18; 1986.

<sup>32</sup> Chadwick 1964, 23-24; Lejeune 1964; 1969; Shelmerdine 1973; Killen 1984.

**Ak(3) 780** + 7004 + 7045 + 7767 (102).1 da-wi-ja , ne-ki-ri-de MUL 2 *pe* VIR 2

.2 ko-wa me-wi-jo[ ]1

.3 ko-wo me-wi[- jo - ]e 3

Whole tablet erased and rewritten: [[ - - - - - wø - ? - 4 ]] still visible at the end of l. 2,

[[*ko-wo* - ? - *di* - ? - 2]] at the end of l. 3.

**Ak(3) 780** records a group of women, men, and female and male children, all grouped under the female ethnicon of *da-wo*. We saw the occupational term *ne-ki-ri-de* above in **Ln 1568** and it is likely that the two women of Ak(3) are precisely this same group.<sup>33</sup> Next, two *pe* men are recorded (on *pe* see below), along with girls /*korwai*/ and boys /*korwoi*/ described as ‘younger’ /*meiwyōs*/ (sg.) and /*meiwyohes*/ (pl.). We thus see various aspects of the manufacturing system, with issues of raw materials to the workgroup on **Ln 1568**, and management of the same workgroup on **Ak(3) 780**.

The next document records a workgroup of 34 women together with 10 girls and boys who are described as ‘older’ /*medzohes*/, as opposed to ‘younger’.

**Ak(2) 621** (108).A ] MUL 34 *pe* ‘*di*’[

.B ] ko-wa , me-zo-e 4 ko-wa[

.C ]jo , / da-wo , / ko-wo , me-zo-e 6 [

*lat. inf.* ][[*vestigia*]]

.A Trace at left. MUL 30 probably over [[ ]].

In line .A the abbreviations *pe* and *di* appear, probably applied to the extra girl (or girls; the figure is lost) at the end of line .B. *di* probably abbreviates *di-da-ka-re* which is attested elsewhere and probably represents an old locative /*didaskalei*/ ‘under the schoolmaster’ presumably with sense of ‘under instruction’. The abbreviation *pe* appears elsewhere in the Ak(2) set (e.g. **Ak[2] 616**) in contrast with the abbreviation *za*. These seem (as in the case of the sheep records) to stand for *pe-ru-si-nu-wo* ‘last year’s’ and *za-we-te-ra* ‘this year’s’ respectively. Killen has shown that in the Ak tablets these adjuncts are functionally equivalent to *pa* and *ne*, which presumably thus abbreviate *pa-ra-jo* ‘old’ and *ne-wo* ‘new’ (also used in the sheep records).<sup>34</sup> Hand 108, who wrote the Ak(2) set uses *pe* and *za*;

<sup>33</sup> Killen 1972, 428-9. He goes on to suggest (p. 429) that **Ak(3) 7001** may deal with the ‘decorators’ from the same *lat. inf.* entry on **Ln 1568**, but notes that since the TN is lost on -7001 this cannot be proven.

<sup>34</sup> Killen 1972, 434-440. See also Killen 1964b; Olivier 1967 81 n. 18.



is to be restored in line 1.<sup>38</sup> It is not clear what is being counted – sometimes in this type of document it is the men themselves, but it could also be something they were being issued or were contributing (*pa-ro* in line .4 might suggest something along these lines).

### *Agricultural records at da-wo*

Two documents deal with agricultural matters. The first, **Ce 59**, deals with oxen described as *we-ka-ta* /*wergatās*/ (in pl. *-ai*) ‘workers’, in the sense of ploughing (cf. βούς ἐργάτης). The text is as follows.

<b>Ce 59</b>		(‘124’c)
.1	]m̄a-sa / we-ka-ta BOS <sup>m</sup> 6 // da-wo / we-ka-ta BOS <sup>m</sup> 6	
.2a	ta-ra-me-to	[ · ]-m̄o
.2b	ku-]ta-to / we-ka-ta BOS <sup>m</sup> 10 // da-*22-to / we-ka-ta BOS 6	
.3a	[ · ]-mo	
.3b	] tu-ri-so / we-ka-ta BOS <sup>m</sup> 6 // ku-do-ni-ja / we-ka-ta BOS <sup>m</sup> 50	
	.2b 10 over [[6]].	
	.3 Whole line over [[ ]].	
	.3a <i>da-mo</i> virtually impossible; perhaps <i>re-mo</i> .	

The animals are located at various towns around the island (e.g. Tylissos in north central Crete, Kydonia in the west). Four towns, including *da-wo*, have six animals registered against them, and two have more: *ku-ta-to* with 10 and Kydonia with no less than 50. Kydonia will probably have included within its territory the rich Apokoronas Plain, the second most important ‘breadbasket’ of Crete after the Mesara itself, thus would be an appropriate place to have large numbers of working oxen.<sup>39</sup> Why it seems actually to have more than the Mesara on this record is unclear – perhaps the Mesara was already well-equipped with oxen so that fewer needed to be sent from the palace, also *da-wo* was only one of several sites in the Mesara (e.g. *ku-ta-to* with its 10 oxen may have been in the Mesara too) and perhaps oxen at those places did not need to be included for the purposes of this particular document. Be that as it may, the 6 oxen here contribute to evidence for *da-wo* being an important area for agriculture.

The next document is of a type generally known as ‘harvest record’, although this may be something of a misnomer;<sup>40</sup> the text is as follows.

<sup>38</sup> Killen 1972, 431.

<sup>39</sup> Killen (1977, 42) makes a similar observation. Also see Palaima 1992, 472 (rightly noting that this tablet probably records only a fraction of the oxen under the administration’s control); 2015, 633-635; 1998-1999, 152, 161; Bendall 2007, 208.

<sup>40</sup> The crops involved cannot have been harvested at the same time of year, so these are more likely records

**F(2) 852 + 8071 + 9919 + fir. (4)** (—)

- .1 da-wo / a-ma , e-pi-ke-re GRA 10300[  
 .2 OLIV+A 70 OLIV+TI 20 PYC+O 12[

Cut at left.

- .1 10900[ quite possible.  
 .2 12[ : 22[ no entirely excluded.

*a-ma* is normally interpreted as /amā/ ‘harvest’, related to the verb /amaō/ ‘I reap’.<sup>41</sup> As discussed by Killen, the grain is actually /epi khērei/ ‘in hand’, by which we may understand was meant *in store*, that is already gathered, rather than pending harvest.<sup>42</sup> The document records two types of olives, a specific type of cyperus, and – most significantly – a large amount of wheat. The amount of wheat recorded is huge: at least 10,300 major units, and quite possibly 10,900 (see apparatus to line .1).<sup>43</sup> Even on the lower figure, this is over 1 million litres, or some 775 tons of grain.<sup>44</sup> This document is of course one of the well-known pieces of supporting evidence for *da-wo* being in the Mesara, since this area is a well-known major producer of wheat in all historical times and must have been in the Bronze Age too.

As John Bennet rightly observed, such a large amount of grain is unlikely to represent the output of *da-wo* alone.<sup>45</sup> He suggested that *da-wo* itself may have contributed some 300 units to the total, based on a calculation of what amounts of land might have been ploughed by the six oxen in **Ce 59**.<sup>46</sup> While such calculations must inevitably be uncertain – especially since, as we now know, **Ce 59** being from the RCT is probably not contemporary with **F(2) 852** anyway – as he points out, the amount of wheat recorded in our harvest record would have required at least 1000 ha of land to grow (or 2000 allowing for fallow land), and this must surely go beyond the hinterland of a single site, however many oxen *da-wo* may or may not have had at any given time.<sup>47</sup> As he concluded: “The figure of 10,000 units might then have been stored at *da-wo*, but would represent the produce of sites all over the Mesara”.<sup>48</sup>

---

of agricultural products in store (and see main text) rather than of harvests as they came in per se. On harvest records in general see Killen 1994-1995a; 2004, 158 with n. ii; 1998a. Also Godart 1968.

<sup>41</sup> Killen 1994-1995a, 330; also see *Docs*<sup>2</sup>, 219, 530; *DMic.* I, 53.

<sup>42</sup> Killen 1994-1995a.

<sup>43</sup> Text from *KT*<sup>5</sup> p. 198 (also shown in Killen 1994-1995, 330).

<sup>44</sup> Chadwick 1976, 54, 118; Killen 1977, 41; Halstead 1992, 67 (800 tons).

<sup>45</sup> Bennet 1985, 247.

<sup>46</sup> Bennet 1985, 247.

<sup>47</sup> Bennet 1985, 237 with n 18, 437, drawing on figures from Halstead (1981, 332-333) whose figure is 2000 ha to allow for fallow land. Halstead (1992, 67 with n. 127) notes that this area would require less than 200 oxen to plough.

<sup>48</sup> Bennet 1985, 247.

Figures from other harvest records strongly support this statement. Indeed **F(2) 852** records by far the largest amount of wheat in association with one site anywhere in the harvest records. Examples of typical figures from other harvest records are (GRA): 12, 23, 25, 30, 62, 70, 73, 100, 135, 143, 195, 246, 261, 302.<sup>49</sup> There are two which do record more: **F(1) 157** has 400+ units associated with *e-ko-so* and **F(2) 851** has the number 940 erased on the *verso*, although it is not clear whether this was associated with a particular site since all the TNs are lost on this document.<sup>50</sup> It is probably significant that **F(1) 157** includes the word *to-so*, indicating it is a totalling record, and **F(2) 851** includes the word *e-pi-ke-re*, like our *da-wo* record, also suggesting some sort of gathering or collection.<sup>51</sup> Thus these two records probably also show contributions from more than just one site, as suggested for **F(1) 852**. Even so, neither of the two amounts come anywhere near the amount on the *da-wo* record. [We may also note that *e-ko-so* probably was also in the Mesara.]

It is also worth noting, in keeping with Bennet's point about ploughing, that the modern Mesara includes some 5320 ha of arable land and the figure is likely to have been similar in ancient times.<sup>52</sup> Thus the some 2000 ha needed to produce the harvest recorded on **F(2) 852** is a significant proportion of the arable (especially given that other foodcrops will have been grown there as well).<sup>53</sup> So while the amount on **F(2) 852** would not represent the output of the entire Mesara, this is likely a significant proportion of its total output in wheat (at least a fifth, probably more), again emphasising that this must be a collection from multiple sites.

In short, the amount recorded is far in excess of what *da-wo* itself is likely to have produced, and the implication is that grain from a number of different sites had been gathered together here.<sup>54</sup> *da-wo* thus emerges as a major collection centre – perhaps *the* major collection centre – for grain in the Mesara, and in fact the largest known in the Knossos administrative system. This leads us to enquire: for what purpose was this grain being collected, and why at *da-wo*? We will return to these questions below.

<sup>49</sup> The list here includes figures only from more or less certain harvest records (some of which also include the word *a-ma*), gives only major units, and ignores incomplete numbers; this is sufficient for present purposes as we are only seeking to gain a sense of typical amounts. For the complete list of documents and figures see Bendall 2007, 168 (Table 5-1.1 'Harvests': the rest of the table lists rations and measures of land, which are not relevant here, plus 'Unclear' records which may or may not be relevant but none of which have such high figures anyway.)

<sup>50</sup> One of the 'Unclear' records also has a larger figure: **F(2) 853** is probably a harvest record and it records 500[ units, but since all the text is lost we cannot know whether it pertained to a single site or not.

<sup>51</sup> These are the only two documents in the entire corpus which include this term.

<sup>52</sup> Watrous et al. 2004, 300.

<sup>53</sup> In fact, the figure could have been even higher: Bennet elsewhere (1985, 437) comments that some 2000-6000 ha would be needed 'depending on the type of cropping used'.

<sup>54</sup> Perhaps as many as 34 or more, taking the upper average as 300 units (but most sites give less).

Agricultural concerns are also witnessed in records of collections of spices, as we see next.

***Collections/payments/taxation records at da-wo***

Four documents record payments or collections of some type, probably through the mechanism of taxation (although alternatives are possible). Three refer to collections of spices, one to an unidentified commodity. We begin with two documents from the Room of the Chariot Tablets.

**Np(1) 272 + 7419 + fr.** (‘124’e)  
da-wo CROC ‘Q 1’

**Og(1) 180** (‘124’)  
.1 pa-i-ti-ja M 130[  
.2 da-wi-ja M 60[  
v. .1 ]-to M 40[  
.2 M 4[  
r.1.2 Possible trace of units after tens.  
v.1 Perhaps ]te-to.

Np(1) records a collection of saffron from *da-wo*. The amount given is standard for this type of record. **Og(1) 180** records a commodity which is not indicated either by name or by ideogram. The one thing we can determine about it is that it was measured by units of weight (M). The document again pairs *da-wo* with *pa-i-to*, as in the Dn document seen above, expressing a link which given the nature of this record as dealing with produce is likely to be geographical.

The next two documents record ‘payments’ of spices.

**Ga(2) 427 + 8102** (136)  
.1 da-wi-jo / a-pu-do-si po-ni-ki-jo di-ta-ka-so M 8 N[ ]o N[  
.2 e-pu<sub>2</sub>-no / po-ni-ki-jo M 8 N 1 o M 1 N 1  
.1 -ta-ka- over [[ ]] (-ta- over [[ka]]).

**Ga(5) 1530 + 1531** (221)  
*sup. mut.*  
.1 ]-si-jo / o-pe-ro[  
.2 da-wi-jo / ki[-ta-no  
.3a [a-pu-]dō-si  
.3b ra-je-u, [ki-]ta-ṇo AROM 11 o 2  
.4a a-pu-do-si  
.4b pu-ṇa-si-jo / ki-ta-no AROM 11 o 1[  
.5 *vacat*

.6	to-sa	AROM 58
.7	.tq-sa-de / o-pe-ro	AROM 31
.8	<i>vacat</i> ?	

Both tablets include the word */apudosis/* ‘payment’ or ‘contribution’. This indicates amounts due to the palace, here in the context of taxation. Both documents duly note that some amounts are still ‘owing’ (*o* = *o-pe-ro*). Ga(2) records contributions of a plant-stuff *po-ni-ki-jo*, probably madder or alkanet.<sup>55</sup> *di-ta-ka-so* and *e-pu<sub>2</sub>-no* are men’s names, presumably the persons responsible for the collection.<sup>56</sup> Ga(5) records payments of *ki-ta-no* from various towns. This is commonly agreed to be */kirtanos/*, glossed as ‘terebinth’ by Hesychius.<sup>57</sup>

These points are consistent with the agricultural connections of *da-wo*, but here we see the site contributing itself rather than being the locus for assembling collections from other sites.

### ***Wb labels at da-wo***

*da-wo* appears on two labels.<sup>58</sup> The function of the Wb documents is uncertain (and they may not all have had the same function) but Olivier has pointed out that **Wb 5282** at least was probably by the sheep scribe h. 117 and proposes that it was used to label a box of his sheep tablets.<sup>59</sup> [Or possibly used for labelling packages of goods received from *da-wo* at Knossos?] Whatever commodities were referred to has been lost.

The remaining documents are fragments which contribute nothing to our study.

### ***Summary of Linear B evidence for da-wo***

The data show that *da-wo* was an important site involved in various aspects

<sup>55</sup> The matter is not entirely resolved (*DMic.* [II, 139-140] is non-committal), although it is agreed to be a plant stuff because it is often paired with coriander, and it is also agreed to have something to do with ‘red’ probably in the sense of something to make red dye for textiles. Murray & Warren (1976, see esp. 50-51, 57) give a useful review of the possible candidates and come out slightly preferring ‘safflower’ to madder or alkanet, but we have the Greek word for safflower attested as *ka-na-ko* at Mycenae and their arguments that the stuff may have had a different name in Crete are needlessly complicated. Foster (1977, 53, 66) takes it as a “‘red substance’, referring to a red dye material, probably alkanet”; Melena 1975b.

<sup>56</sup> *di-ta-ka-so* is certainly a MN, attested elsewhere in **DI 916**; *e-pu<sub>2</sub>-no* is hapax and could theoretically be a TN rather than MN (*DMic. s.v.*) but the structure of the tablet strongly suggests it is another MN (i.e. two MN’s in succession, both responsible for collections at *da-wo*; the fact that it does not appear to have the form of an ethnicon as standard for this set would support this idea).

<sup>57</sup> *DMic.* I, 365.

<sup>58</sup> Probably - both readings are uncertain. Aura Jorro’s list also notes the possible reading of *da-wo* on a third label, **Wb 9610**, but the apparatus prefers \**ṣṣ*[ and notes ‘*da-wo*[ almost impossible’. If \**ṣṣ* is correct, this is probably the start of \**ṣṣ-ko-we*, so this document has been excluded from the table.

<sup>59</sup> Olivier 1967, 85.

of the economy, especially agriculture, and wool and textile production. A number palace-dependent personnel were settled at the site, including at least 36 women, 5 men, and 14 children. These figures must be a minimum, but while they establish *da-wo* as a place of industrial production, especially of textiles, there is nothing to suggest that really large scale manufacture (such as associated with Knossos itself, for instance) was carried out at this site.

Some 3700 sheep were grazed in the region, so there was clearly a good deal of pasturage available. The Ce document shows oxen were kept at the site (at least at the time of the RCT tablets but there is no reason to doubt this was true later as well). The collection of spice and other plant stuffs underlines a connection with agriculture and *da-wo* probably also made its own contribution to the amounts gathered in **F(2) 852**. This last document also shows that *da-wo* was a place for collection of stuffs from other agricultural producers.

So far, a number of places in the Mesara would be suitable to be *da-wo*. As we saw at the outset, Agia Triada and Kommos tend to be the favourite choices, but before we deal with them we should consider the arguments for *da-wo* having been in the eastern or central rather than western Mesara.

### Was *da-wo* in the eastern or central Mesara?

The arguments for placing *da-wo* in the eastern or central Mesara are not particularly strong, and it is helpful to consider them here as a group.

John Chadwick's main reason for placing *da-wo* in the east was that "we already have Phaistos [in the west] with its large flocks of sheep and textile establishment", thus *da-wo* should lie further away.<sup>60</sup> However, the number of sheep recorded at the two sites is not so large that they could not both have been in the west.<sup>61</sup> Also, as we shall see below, the *pa-i-to* and *da-wo* documents are actually somewhat different in character, which would be compatible with their having complementary rather than identical functions in some respects, thus again proximity should not be an issue.

Another point has to do with fertility of the arable land available. Chadwick suggested that the eastern Mesara was particularly fertile, which would be compatible with the large amount of grain in **F(2) 852**.<sup>62</sup> Privitera more recently makes a similar argument, placing *da-wo* in the east or perhaps central Mesara in the region of Roman Gortyn.<sup>63</sup> However, these arguments do not sufficiently

<sup>60</sup> Chadwick 1973, 44.

<sup>61</sup> An Ottoman tax record for the western Mesara in 1699 counts 6329 sheep, goats and kids for Pyrgiotissa (area including Phaistos and down to Matala) and another 11,347 for neighbouring Kainourgio (Tsougarakis & Angelomatis-Tsougarakis, 2004, 409).

<sup>62</sup> Chadwick 1976, 54.

<sup>63</sup> Privitera 2014, 440 n. 88; see also Cucuzza 2003, 244-246.

appreciate that the amount recorded in **F(2) 852** is a *collection* gathered and transported from multiple other sites, and when this is taken into account, the point about fertility is unnecessary.

Melena considered the region of the Anapodaris river in the east of the Mesara would be consistent with the situation for *da-wo* because reedy plants were grown there which would have needed ample supplies of water.<sup>64</sup> He does not however make clear why the river which flows through the main valley down past Agia Triada to the sea could not have fulfilled such a role. Coriander need not have been grown only in the eastern Mesara and the figures attested do not make *da-wo* out to be a major producer of this commodity in any case.

In sum, nothing compels the placing of *da-wo* in the east. But there is at least one good reason to place it in the west, which is the pairing of *da-wo* and *pa-i-to* on **Dn 1094**. This suggests they shared a ‘sheep border’ and should thus be in proximity: i.e. in the western Mesara.<sup>65</sup> It should be emphasised that it is not just any two TNs that appear on a document that need to have geographical proximity – we are aware of cases where they clearly do not (e.g. **E 777** seen below which links Knossos with Phaistos). But the Dn tablets fit into other tablet structures in such a way that suggests that this series is particularly ‘geographical’ and indeed constitutes one of the strongest of such links that is indicated from contextual analysis of the documents.<sup>66</sup>

*da-wo* and *pa-i-to* should thus be near one another, that is in the western Mesara. What sites did they correspond to? Archaeological survey data for the entire Mesara is not available, but a few systematic surveys have been conducted in the west which suggest that (apart from the former Minoan palace) the two main sites were Agia Triada and Kommos.<sup>67</sup> A more detailed look at these sites and a review of documents concerning *pa-i-to* is in order.

### **Phaistos, *pa-i-to*, and Agia Triada**

Given the apparent significance of *da-wo* and its links with *pa-i-to*, many

<sup>64</sup> Melena 1974b, 329-330; Chadwick 1973, 44.

<sup>65</sup> With sheep, note they may be transhumant anyway.

<sup>66</sup> Killen 1977, 41; Palmer 1972. See also Olivier 1967.

<sup>67</sup> Systematic surveys (but not all using the same methodologies) have been carried out for the Ayiofarango Gorge (Blackman & Branigan 1977), Kommos (Hope Simpson 1995), the area around Phaistos (Watrous et al. 2004), and Moni Odigitria (Vasilakis & Branigan 2010, 3-27). There is no reason to look for *da-wo* in the Ayiofarango area, which was relatively too poor to have supported the activities associated with *da-wo*, nor are major sites of the relevant period indicated around Moni Odigitria. The other surveys make clear that Kommos and Agia Triada are the main sites of their respective areas. As Driessen (2001, 96) and others have pointed out, the public architecture at these sites (along with Tylissos and Plati) stands out in contrast with other sites in Crete, suggesting direct Knossian intervention. It has been suggested that another important harbour may have lain to the north around Timbaki in the Roman period (Sanders 1982, 23), but no concrete evidence for it has been identified.

scholars have been inclined to associate it with the site of Agia Triada, near the Palace of Phaistos. Archaeology reveals Agia Triada as an important industrial site in both Neopalatial and Linear B times, and in this respect it would be a suitable candidate for *da-wo*. An important difficulty for this hypothesis, however, is raised by the question of what is meant by *pa-i-to* ‘Phaistos’ in the Knossos Linear B documents. There is a long-standing suggestion that *pa-i-to* may in fact not refer to the palace site itself, but rather to Agia Triada,<sup>68</sup> and if this were so then Agia Triada cannot have been *da-wo*.

A review of the documents pertaining to *pa-i-to* supports the idea that this place was more important administratively than *da-wo*, and it is worth a brief survey before we return below to examine in more detail some of the arguments that have been made in favour of the identification.

### Linear B evidence for *pa-i-to*

In the following discussion, in order to avoid confusion, ‘Phaistos’ is used only where the archaeological site of the former Minoan palace is *specifically* intended, and *pa-i-to* is used when speaking of the Linear B evidence for that word in the Knossos archives.

*pa-i-to* appears on some 65 Linear B documents. As with *da-wo*, about half (35) are sheep tablets and these are listed in Table 3, with the remaining document types in Table 4.<sup>69</sup> The main subjects are textile production, taxation of various commodities including spices, personnel records, and chariot tablets. These are roughly the same types of documents as seen for *da-wo*, but there are some important differences in their character, and the addition of chariot tablets is in itself significant.

We will not go through the documents in as much detail as for *da-wo*, but will examine a few examples to gain a sense of how they are similar or different.

### *Sheep records at pa-i-to*

The sheep documents (Table 3) are primarily of the same type as seen for *da-wo*, that is flock census records (Table 3a). There is a slightly greater variety of other types of documents (Table 3b), including the totalling tablet **Dn 1094** seen above which records totals for *da-wo* and *pa-i-to* (1509 sheep). For the

<sup>68</sup> La Rosa 1985, 54; Bennet 1992, 97 n 96; see below for further references.

<sup>69</sup> Tables 3 and 4 are based on Aura Jorro’s on-line word list, derived from his dictionary *DMic*. (<http://www.cervantesvirtual.com/bib/portal/diccionariomicenico/pcuartonivelf9e1.html?conten=presentacion>, accessed on 20 May 2016). I have excluded a couple of tablets where the readings are uncertain and where *KT<sup>5</sup>* and/or *CoMIK* make clear that a different TN is more likely. These are: **V(3) 655** (‘Perhaps *pa-]i-to[*’ (*KT<sup>5</sup>*, 340), but the reading is very doubtful; this tablet does include *da-wo* so is listed in Table 2); **X 8502** (‘*pa-i-to* not entirely impossible’ (*KT<sup>5</sup>*, 416).

flock census records, the major difference is that at *pa-i-to* a far greater number of ‘Collectors’ appear. In fact, there are only seven of the 35 tablets without ‘Collectors’ (including two where a ‘Collector’ name may have been present but the tablet is too broken to tell – so the count may be even lower). Bennet suggested that given his prominence at *pa-i-to*, the ‘Collector’ *we-we-si-jo* may have had his main seat there.<sup>70</sup>

There are 2896 in ‘Collector’ flocks and only 839 in non-‘Collector’ flocks (ignoring tablets where the figures have been lost). But the number in Dn 1094 suggests there were 1509 non-‘Collector’ sheep at *pa-i-to* (Olivier calculates that some seven or so tablets must have been lost, recording 709 sheep).<sup>71</sup> This is 34 % of the total (‘Collector’ sheep in 3a and the Dn total from 3b), so nearly exactly 1/3.<sup>72</sup> The numbers of sheep recorded at *pa-i-to* are thus nearly an exact inverse of the usual ratio of ‘Collector’ to non-‘Collector’ flocks. Normally ‘Collector’ flocks are about 1/3 of the total, here they are 2/3.

### ***Textile production at pa-i-to***

*pa-i-to* has eight documents relating to textiles and collections of wool. The latter is a type of document *da-wo* does not have (although it does have a shearing record which *pa-i-to* does not).<sup>73</sup> We begin with the textiles.

Five documents are stint or delivery records. We already saw above the text of **Le 641** in the discussion of records mentioning *da-wo*. Only two others have substantive text preserved, as follows.

**Le 5629** + 5867 + 8446 + 8522 + 8559 + *frr.* [+] **8512** (103)

- |    |                                 |                         |
|----|---------------------------------|-------------------------|
| .1 | e-ki[-si-]ja                    | TELA <sup>1</sup> +TE [ |
| .2 | <i>vest.</i> [ ]ja / a-pu-do-si | TELA <sup>1</sup> +TE [ |
| .3 | pa-i-to / ko-ma-we-to           | TELA <sup>1</sup> +TE [ |

1. Small cavity (width *ca* 1,5 mm, min. depth 6 mm) 5 mm to the left of the ideogram, probably made with the sharp end of the stylus.
2. The three horizontal strokes at the right of *TE* were replaced by a cylindrical cavity (width 4 mm, depth 3,5 mm) possibly made with the round end of the stylus.

<sup>70</sup> Bennet 1992, 89. However, he also has sheep elsewhere and it seems apparent that ‘Collectors’ need not be located near their flocks, however numerous.

<sup>71</sup> Olivier 1967, 76; 1972, 26.

<sup>72</sup> Wilson (in Bintliff 1977, 48-49) comments that the *pa-i-to* group in general has a greater number of ‘Collectors’. For the ratios at each TN see Bennet 1992, 85-86; he observes (p. 86) that “the proportion of ‘Collectors’ present at individual sites varies quite considerably, implying that ‘Collector’ interests were not uniformly spread over the area of Knossos administration.”

<sup>73</sup> Possibly the shearing had already been completed at *pa-i-to* (it was suggested above that the process had nearly been finished at *da-wo*).

**L(6) 469** (210)

- .a me[/]-ta [ ]  
 .b po-ku-ta. ./ pa-i-to TELA<sup>3</sup>+PU 34[ ]  
 .a me-ki-ta

The numbers of textiles received from either site are not dissimilar although *pa-i-to* has more: 34+ units compared to some 11 from *da-wo*. But the records are hardly complete so not too much should be drawn from that, and in the stint records, *da-wo* has more: some 27+ units on **Lc(1) 526** alone. However, the wool records and, as we shall see below one of the personnel records, suggest a far larger industry than these few documents would seem to indicate.

Some examples of wool records are as follows.<sup>74</sup>

**Dp 1061** (117?)

- ]sa / pa-i-ti-ja OVIS<sup>x</sup> LANA 456[ ]  
 Probably *to-]sa*. OVIS<sup>f</sup> not impossible (OVIS<sup>m</sup> impossible).

**Od 502** (-)

- .a pa-i-to [ ]  
 .b we-we-si-jo-jo X LANA 11[ ]  
 Cut at left.

The tablet seems to have been a label of some kind, and there are marks showing that a piece of string originally ran through it.

.b Over [ [ ]]. Check-mark added after the tablet had dried.

**Od 765 + 7320 + *frr.* (3)** (-)

- .a ] pa-i-to [ ]  
 .b ]-ka-ra / a-me-a LANA M [ ]  
 .b Possibly ]o-ka-ra.

**Dp 1061** records a very large amount of wool gathered or received at *pa-i-to*. It is not more than the sheep recorded at the TN could have produced (e.g. 1509 sheep would produce ca. 1132 units of wool), but it does show a substantive amount having been assembled, presumably for distribution to workshops.

**Od 502** records wool belonging to *we-we-si-jo*, who is the most prominent ‘Collector’ in the *pa-i-to* sheep tablets. **Od 765** records the issue of a much smaller amount to a man, *a-me-a*, who is probably a textile worker or workshop supervisor. The first word is broken. If correctly restored as *o-ka-ra* these are a type of *solider* at Pylos, but *DMic.* prefers to see the Knossos reference (hapax for this site) as a MN. We cannot tell of course whether or not it is the same word.

<sup>74</sup> On these records see Killen 1962; Firth & Nosch 2002-2003; Greco 2010.

In any case the wool records are suggestive that *pa-i-to* was more concentrated in terms of textile production than *da-wo*. **Dp 1061** mentions 456+ units of wool. This is probably a total for various shearing records and if so this would suggest that wool from different flocks and even possibly different places (although *pa-i-to* could have supplied from its own flocks as noted above) was brought together at *pa-i-to*. There is no evidence for a similar gathering at *da-wo* and while hazards of preservation may have affected the picture, the contrast with the situation with grain may be telling. Thus we have wool drawn together at *pa-i-to* and grain drawn together at *da-wo*, in a complementary distribution appropriate to the differing main functions of each site.<sup>75</sup>

Corroborative evidence that *pa-i-to* was engaged in textile (and other industrial) production on a scale exceeding that of *da-wo* comes from the personnel records to which we now turn.

### ***Personnel records at pa-i-to***

Three or four documents mention *pa-i-to* in connection with personnel. However, one of these, **Ap 639**, lists women by individual name, and the ethnic *pa-i-ti-ja* is a women's name on this document. She was thus not necessarily based at *pa-i-to* although being named after the site she may well have been from there. Another, **E 36**, mentions a man *pi-ra-me-no* (*/Philamenós/* or */Phillamenós/*<sup>76</sup>) in connection with 10+ units of GRA. It is not clear whether this is a rations record, or a delivery of wheat, or perhaps a record of land tenure.<sup>77</sup> Whatever the truth, the tablet makes no difference either way since we already have both rations and land tenure more securely attested in other documents. We turn to the second in the next section.

The remaining two documents do record women based at the site. We begin with **Ak(3) 828**.

<b>Ak(3) 828</b>		(102)
.1	pa-i-ti-ja , DA 1 TA [	
.2	ko-wa / me-zo-e , di-da-ka[	
.3	ko-wo / me-zo-e , di-ḏa[	
	.3 di-ḏa[ over [[ ]].	

<sup>75</sup> Although it could also simply be that the shearing process had been completed at *pa-i-to* while it was still on-going at *da-wo*.

<sup>76</sup> It is hapax at Knossos but attested at Pylos.

<sup>77</sup> The amount would be large for a rations record, although such large amounts are not unknown particularly when associated with supervisors of workshops. But the tablet is one of five found together in a corner of the palace and whose contents *may* suggest the context was land tenure (Killen 1996-1997, 131- 132; see also 2004, 169 where he lists it as a possible measurement of land but without further comment; this is followed by Bendall 2007, 168).

**Ak(3) 828** records ‘older’ children ‘under instruction’ (*di-da-ka-re*), such as we saw at *da-wo* (**Ak[2] 621**), where the word was abbreviated. So we have evidence for persons being trained at *pa-i-to*. *DA* and *TA* indicate the presence of supervisors who were themselves part of the workgroups, but received extra rations.<sup>78</sup> It is curious that there are not more documents such as **Ak(3) 828** since, as we shall see next, the workforce was far larger than this one tablet might seem to suggest.

**E 777** gives at least a partial indication of the size of the work force at *pa-i-to*. The text is as follows.

<b>E 777</b>	ASHM (1910.214)	(—)
.1	ko-no-si-ja / ki-ri-te-wi-ja-i LUNA 1 GRA 100[	
.2	a-mi-ni-si-ja LUNA 1 GRA 100 [	
.3	pa-i-ti-ja LUNA 1 GRA 100[	
v.1	a-ze-ti-ri-ja GRA 10[	

*reliqua pars sine regulis*  
Cut at left.  
r. Whole text probably palimpsest: ‘jo’ visible in .2.

This well-known tablet lists rations for women (indicated by ethnicons) at Knossos (line .1), Amnisos (line .2), and *pa-i-to* (line .3). The ideogram LUNA indicates these are monthly rations, and 100 units of grain is disbursed for each site. This is enough to feed 500 women at each site, using Chadwick’s calculation of T 2 per month as the standard ration for one woman.<sup>79</sup> And this may of course not even have been the entire workforce (we can probably assume there were some male workers even if we do not have the records for them<sup>80</sup>).

The workforce at *pa-i-to* seems to have been much larger than that at *da-wo*. Of course the evidence for this comes from just one tablet and we cannot rule out the possibility that a similar record once existed for *da-wo* and does not happen to survive. However, the fact that Knossos and Amnisos are the other two places mentioned on this document goes some way towards speaking against this notion. Knossos itself of course will probably have had the largest workforce, and its harbour at Amnisos was also a major centre for production. **E 777** has an island-wide reference and it likely that the three place named on it really were the three places with particularly high concentrations of workers, so *pa-i-to*’s inclusion in this group is significant.

<sup>78</sup> Chadwick 1988, 72.

<sup>79</sup> Chadwick 1988, 68, 74.

<sup>80</sup> Although as we have seen from **Ak(3) 828**, men could in some cases be included under a feminine ethnicon.



There are also records of spice collections at *pa-i-to*, as for *da-wo*.

### ***Chariot tablets at pa-i-to***

<b>Sd 4413</b>	(128)
.a	a-ra-ru-]ja , a-ni-ja-pi , wi-ri-ni-jo , o-po-qo , ke-ra-ja-pi , o-pi-i-ja-pi CUR[
.b	i-]qi-ja , / pa-i-to , a-ra-ro-mo-te-me-na , do-we-jo , i-qo-e-qe , po-ni-ki[-ja
<b>So(1) 4448 + 5794</b>	(130)
	pa-i-to , a-mo-ta , pte-re-wa , te-mi-dwe-ta ROTA ZE 3

The first document is a record of chariots themselves (CUR), the second of wheels (ROTA 3 pairs). These are standard examples of this type of record and show that *pa-i-to* was equipped for military display. Bennet observed a link between the presence of chariots in the Linear B records, and the presence at sites of LM II pottery, which immediately followed the establishment of the Linear B administration.<sup>88</sup> He suggested that such places acted as second order centres, nodes both for administration and military control, and were established as such in the early days of the Knossian administration (very likely building on Minoan predecessors for the overall structure). The presences of chariots supports the role of *pa-i-to* as one such centre.<sup>89</sup>

### **Summary and discussion of Linear B evidence for pa-i-to**

The documents are broadly similar in type to those seen for *da-wo*, but there are also differences. One difference is the scale for the various sectors, which can be summarised as more industrial production and labour-power at *pa-i-to* and more grain at *da-wo* (albeit because grain was gathered there not because *da-wo* was itself producing so much). The large amounts of wool recorded at *pa-i-to* also attest to large scale manufacture at that place. Both sites have children ‘under instruction’, indicating an active textile industry, but *pa-i-to* is further singled out by E 777 as being the locus of an unusually large concentration of workers, on a par with Amnisos and Knossos itself.

Finally, *pa-i-to* has a few records suggestive of higher-level administration, including the land tenure record and the chariot tablets. We know that land tenure is not restricted only to major centres [or is it?] so this may not be particularly significant. Chariots, however, were limited in distribution and their presence at *pa-i-to* marks the place out as a second order, administrative and control centre, which there is no (preserved) evidence for *da-wo*’s having been.

In any case, we have at least 500 people working at *pa-i-to*. Where were

<sup>88</sup> Bennet 1985, 242-245.

<sup>89</sup> Sites with these elaborately decorated chariots are few (Chadwick 1973, 40; Bennet 1985).

they operating? We now return to the suggestion noted at the outset, that *pa-i-to* may be Agia Triada.

### **Does *pa-i-to* = Agia Triada?**

Wherever *pa-i-to* was located, the site in the archaeological record should show a good deal of industrial activity. This makes Phaistos itself a poor candidate for *pa-i-to* because industrial activity in this period was more concentrated at Agia Triada. The most compelling reason for believing that *pa-i-to* was Agia Triada rather than the former Minoan palace is the simple difficulty of placing some 500+ workers at the palace at the time. The Palace of Phaistos was largely in ruins at the time of the Linear B documents (true whenever one dates them to) and, while some repairs were made and there is evidence for houses and some ritual activity (including banqueting), large scale industrial manufacture seems to have been based at Agia Triada.<sup>90</sup> The difficulty this creates for placing *pa-i-to* at Phaistos itself has been widely noted.<sup>91</sup> The archaeological evidence suggests that 500 people cannot have been working at the palace of Phaistos, but would support their being based at Agia Triada. The implication is that Agia Triada was known as ‘Phaistos’ and that when the Knossos Linear B documents mention *pa-i-to*, the actual site being referred to was Agia Triada.

Watrous and Hadzi-Vallianou comment that, archaeologically, Agia Triada appears to be at the top of a hierarchical regional settlement pattern.<sup>92</sup> They go on to comment:<sup>93</sup>

Kommos and Agia Triada at this time, in function, were complementary sites whose local authority resided at Agia Triada.

This seems to echo the relationship seen between *da-wo* and *pa-i-to* in the documents, so it would be consistent with the Linear B evidence if these two TN’s did correspond to these two sites.

La Rosa early raised the possibility that *pa-i-to* might refer to a ‘whole district’, encompassing Agia Triada as well as the palace site.<sup>94</sup> He recently set out the idea more explicitly:<sup>95</sup>

The suggestion that it [Agia Triada] be identified with *da-wo*... is only hypothetical. It

<sup>90</sup> This relocation was indeed already done in the Neopalatial period, with the Mycenaean simply picking up the already existing order. See e.g. La Rosa 1985, 47-49; 1997; Watrous & Hadzi-Vallianou 2004, 297-298, 301; Shaw & Shaw 2006, 872-874.

<sup>91</sup> E.g. Bennet 1988, 30.

<sup>92</sup> Watrous & Hadzi-Vallianou 2004, 302.

<sup>93</sup> Watrous & Hadzi-Vallianou 2004, 303.

<sup>94</sup> La Rosa 1985, 54.

<sup>95</sup> La Rosa 2010, 497, 505.

is possible that the entire area was indicated with the single name *pa-i-to* in that period [the time of the Linear B tablets], which was more properly related to Phaistos.

Agia Triada likely constituted the administrative capital of the surrounding area [in LM IIIA2], still under Knossian control, with the single name *pa-i-to*.

Bennet also early on made the suggestion explicitly, although he does not discuss it at length (it appears in a footnote):<sup>96</sup>

I would like to raise the possibility that *pa-i-to* may represent the Bronze Age name of Agia Triada, rather than Phaistos. Given what we know about the status of the TN *pa-i-to*, the site of Agia Triada seems to fit much better than Phaistos in any phase of LM III [citing La Rosa 1985, *op.cit.*]. We might, therefore, assume that the name of Phaistos has migrated east along the ridge to become the name of the classical city-state.

The case has also recently been made by Santo Privitera:<sup>97</sup>

attempts have been made to identify it [Agia Triada] with one of two places, *da-wo* or *pa-i-to* . . . It is argued here that identification with the latter is the most plausible, once one takes into account (1) that Ayia Triada and Phaistos are only 2.5 km apart, (2) the lack of building activity in the latter site in LM IIIA2, and (3) that most Linear B place-names registered in the Knossos tablets refer to extensive territories rather than to nucleated settlements.

The matter is also discussed by Cucuzza who notes difficulties with equating Agia Triada with either *da-wo* or *pa-i-to*, but concludes that the equation with *pa-i-to* is the more likely.<sup>98</sup>

The point about districts has introduced a minor confusion into the arguments which it is useful to seek to clarify. Privitera is not quite correct in stating that Linear B place-names “refer to extensive territories rather than to nucleated settlements”. *Some* place-names surely referred to both. The relationship between district and settlement names is more clearly seen at Pylos, where names of districts were based on the name of the chief settlement of the given region. Hence the well-known nine town names of the Hither Province could be used in the documents *either* to refer to the whole district *or* to the chief settlement which the district was called after. Thus *pa-ki-ja-na* might be mentioned at the location where offerings are sent to a shrine or banqueting foodstuffs are assembled for a festival, but it might also appear as the centre/administrative node at which taxable commodities are gathered from an entire

<sup>96</sup> Bennet 1992, 97 n. 96. He earlier (1985, 247) does have *pa-i-to* at the palace site noting some reoccupation there in LM II.

<sup>97</sup> Privitera 2014, 436; see also 440.

<sup>98</sup> Cucuzza 2003, 244-248, esp. 247.

region (e.g. in the Ma tablets).<sup>99</sup>

It is likely that this type of naming system was used also in Crete. Thus, when *pa-i-to* appears as the locus for 1509 sheep in **Dn 1094**, the TN is functioning as a ‘district’ name (or we may say in this case as the administrative centre for a sheep ‘estate’). But when specific workgroups are mentioned, as in **Ak(3) 828**, it is unlikely these people are merely somewhere in a ‘district’, but instead they are located at a specific place, that place being a settlement called *pa-i-to*. Similarly, we have already seen evidence for a parallel situation with the *da-wo* documents. When the TN appears as the location of 2440 sheep on **Dn 1094**, it must be the wider district (or ‘estate’) which is being referred to. But when on the other hand it is a matter of recording the locations of workgroups, this cannot be a reference to a district, but must refer to a settlement.

Thus, it is not necessary to maintain that *pa-i-to* referred only to a district in order to support its identification with Agia Triada. In fact, the ‘district’ of *pa-i-to* should have extended beyond Agia Triada to encompass a number of other sites as well, and there is no reason to think that all of these sites were called *pa-i-to*. Rather, they will have had names of their own, and *pa-i-to* must have referred to a specific place, the chief administrative centre and settlement of the district so named.

La Rosa observed that there seemed to be a mainly peaceful fluctuation of the power dynamic between Phaistos and Agia Triada over the centuries (and extending beyond the period which is our focus here).<sup>100</sup> This dynamic may also have applied to the names given to both settlements, and my suspicion is that in the present case this could work because it was the entire *hillock* upon which both sites were located that was actually known as ‘Phaistos’. This oblong hillock, or ridge, was a major eminence in the plain of the Mesara. It forms a coherent unit rising from the plain and was (and is) very much an independent identifiable feature. Phaistos palace and Agia Triada lie 2.5km apart at opposite ends of this ridge.

<sup>99</sup> District names which only refer to an ‘extensive territory’ are more rare (albeit not unknown) – they are certainly not in the majority, and while there is some evidence for regional TN’s, most are probably settlements (especially when persons are mentioned in connection with those places). Note that the argument here does not intend to suggest that Pylos and Knossos had identical administrative systems – we are well aware of differences, e.g. that Knossos deals with fewer TNs than does Pylos despite probably controlling a much larger territory. Various reasons for this have been proposed (e.g. Bennet 1988, 28; Driessen 2001, esp. 98-100; Shelmerdine 1988; 1999), but none of these affect the basic point that in Mycenaean Greek (which was remarkably uniform across sites) place names could function in such a way as to refer both to a specific settlement and to a ‘district’ essentially conceived as its hinterland. The concept of ‘dis-continuous territories’ should also here be noted (e.g. Driessen 2001, 99-100, 111).

<sup>100</sup> La Rosa 1985. See also La Rosa 1997b; Militello 1988; Watrous & Hadzi-Vallianou 2004, 297-298.

As noted above, Bennet suggested that the TN may have migrated,<sup>101</sup> which is certainly possible, but it could also be that the word ‘Phaistos’ simply applied to the hillock as a whole. Thus, both Phaistos palace *and* Agia Triada could at any given time be known as ‘Phaistos’, and the administrators at Knossos would have surely known from context which was meant. They would also have known what was meant when instead they referred to ‘Phaistos district’ which will have extended beyond the hillock in the same way as district names were based on specific chief settlement names at Pylos. The large number of sheep recorded against *pa-i-to* cannot all have been on this one hillock, so in the case of the sheep records the TN is functioning as a district name referring to a wider area.

In sum, it is likely that at the time of the Linear B administration the name Phaistos probably applied to Agia Triada, as well as to the former palace, and *pa-i-to* thus refers to Agia Triada. And if Agia Triada was ‘Phaistos’, then it was not *da-wo*. But if Agia Triada was not *da-wo*, then where was *da-wo*? The main other suggestion has been Kommos, to which we now turn.

### **Kommos**

Kommos is located on the seacoast, about 6 km southwest of Phaistos. It was an important settlement which expanded then contracted in Neopalatial times, under circumstances probably related in some way both to Knossos and to activities in the Mesara more generally.<sup>102</sup> It was in essence the harbour site of Phaistos and main harbour of the Mesara. Sometime after LM IB the harbour at Kommos was reestablished and the character of the site changed from a household centred community to a small-scale industrial economy manned by dependent labourers.<sup>103</sup>

The main building in the Neopalatial period was Building J/T, near the centre of the excavated area. In the Mycenaean period Building P was built, while Building J was converted into Building N with storerooms in the east.<sup>104</sup> Building P was built in LM IIIA1 or soon after, and is some 40m x 40m.<sup>105</sup> It is characterised by six long rooms whose openings face the sea. They have been suggested by Maria Shaw to be ship sheds,<sup>106</sup> and this may be so, but the storage of perishable materials such as grain is also possible.<sup>107</sup> Few pithos sherds were found in the building, but grain intended for shipping may have been stored in

<sup>101</sup> Bennet 1992, 97.

<sup>102</sup> La Rosa 1985; Watrous & Hadzi-Vallianou 2004.

<sup>103</sup> Watrous & Blitzer 1997, 515; Watrous & Hadzi-Vallianou 2004, 300.

<sup>104</sup> M. Shaw 1985; Shaw et al. 2006, 850-854.

<sup>105</sup> M. Shaw 1985, 20-21; Shaw & Shaw 1997; 1999, 370; Watrous & Hadzi-Vallianou 2004, 301.

<sup>106</sup> M. Shaw 1985; Shaw & Shaw 1999.

<sup>107</sup> J. Shaw 1985, 56.

sacks which would be difficult to identify in the archaeological record. Nothing precludes a double purpose for the building and storage facilities may have been available elsewhere at the site as well.

The archaeology of Kommos is compatible with what we have seen in the records about *da-wo*, but there is one point in particular which makes it particularly suitable as a match: it is a harbour. And at this point we should return to the questions raised above: Why was so much grain brought together in **F(2) 852**, and why was *da-wo* chosen as the place for collecting it?

### Why the grain at *da-wo*?

As discussed above, **F(2) 852** records wheat which was probably from harvests brought together from a number of different sites. Why was this done?

It cannot have been for local use, because the amount gathered will have gone far beyond the requirements of a single site. Indeed, the major site in the region requiring grain for 'local' purposes was not *da-wo*, but *pa-i-to*, the purpose in question being the supply of rations to personnel as recorded on **E 777**. Given that the monthly need at *pa-i-to* was GRA 100, the amount required annually will have been on the order of GRA 1200.<sup>108</sup> This is only a fraction of the 10,300 (or 10,900) units recorded on **F(2) 852**, so the amount of grain gathered at *da-wo* exceeds the needs even of the most 'needy' site of the Mesara. Further, **E 777** makes clear that at least 2400 units was required elsewhere in the north of the island at Knossos and Amnisos, and the Knossos administration will have needed to support dependent workers at other places too. (Each site would need 1200 units per year each, so the three together would require 3600.)

This brings us back to the question of why the grain was being collected at *da-wo*, and raises the possibility that this was because it was intended to transport it elsewhere where it was needed on the island. Bennet already anticipated this notion, observing that if *Agia Triada* was *da-wo* it was probably significant that it was close to the harbour at Kommos.<sup>109</sup> The implication is that a good place to transport grain from would be a harbour, that is, by sea. In keeping with his later suggestion that *Agia Triada* was in fact *pa-i-to*, Kommos itself emerges as the best candidate to be *da-wo*.

Let us examine this suggestion in more detail.

The single paramount purpose that GRA was used for by the Linear B

<sup>108</sup> There is reason to believe that the Mycenaeans did observe a 12 month year or something similar (see Bendall 2007, 102 with n 38); even if this were not strictly correct, it does not affect the central argument since our concern here is only with orders of magnitude.

<sup>109</sup> Bennet 1985, 247.

administration was rations, that is, for feeding dependent personnel (whether all-year-round dependents, or seasonal *corvée* labour). So given that the supply of rations is likely to have been the purpose of the *majority* of the resources gathered in **F(2) 852** (which need not imply all of it), one may ask: how many people could the amounts gathered provide for?

As is well known, the standard monthly ration for one individual was  $\text{GRA } \tau 2$ .<sup>110</sup> There can be all sorts of complications, for example, some individuals receiving more due to their being higher status or supervisors of workgroups. But for simplicity's sake let us focus on figures based on the standard ration. At  $\tau 2$  per month the amount need for a person for a year would be  $\tau 24$  ( $= \text{GRA } 2 \tau 4$ ).

The amount recorded on **F(2) 852** is  $\text{GRA } 10,300$ , with 10,900 “quite possible” according to the apparatus. It is worthwhile doing the calculation for both figures, to give a sense of the range. We begin with the smaller figure and first break it down into units of  $\tau$  to facilitate comparison (since rations are measured in the smaller unit). We next divide by 24, since this is the amount needed per person per year, and the result tells us how many persons could be supported annually. The figures are as follows.

10,300 major units =  $\tau 103,000$

103,000 divided by 24 = 4291.7

So this is enough for ca **4292 people per year**.

10,900 major units =  $\tau 109,000$

109,000 divided by 24 = 4541.7

So this is enough for ca **4542 people per year**.

The figures are more or less in keeping with one another whether we use the smaller or larger amount. In essence, we can say that the amount of grain gathered on **F(2) 852** was sufficient to feed some 4300 – 4500 persons per year.

Now this is more than was likely needed to supply palace dependents in the Mesara locally: it is more likely to be the yearly need of the Knossos administration to supply the whole island (combining year-round and seasonal dependents). It should be emphasised here that this was not meant to feed everyone on the whole island – the needs of the larger population (even of just the Mesara) would have been far in excess of this. But the Knossos administration was not engaged in feeding the entire island, only its dependent workers. The ‘general population’ were expected to feed themselves, and indeed pay taxes. There is something to suggest that the whole of the dependent workforce was some 5000-6000 persons.<sup>111</sup>

<sup>110</sup> Chadwick 1988.

<sup>111</sup> Nosch 2000.

The contribution of grain from the Mesara then will have been a very substantial proportion of the overall amount required for their support.

Where was such labour located? A significant number of workers were located in the Mesara, as we have seen, but the majority was located elsewhere on the island (including some 1000 at Knossos and Amnisos). The Mesara thus appears to be supplying wider administrative needs, in this case rations for dependent personnel across the island.

If that is correct, it means the purpose of bringing the grain together at *da-wo* was in order to ship it somewhere else. The question then arises: where would one want to do that from? One can of course move goods overland, probably by donkey although the addition of manpower is not excluded. But when one is talking about literally tons of bulk products (some 775 tons in this case) it would be far more convenient to transport it by sea. There are later parallels for this, as we consider next.

### **Historical uses of the Mesara as a breadbasket for supply elsewhere**

It is a commonplace that it is easier to move goods by sea rather than land. Diocletian in his ‘Edict on Prices’ commented that it was cheaper “to ship grain from one end of the Mediterranean to the other than to cart it 75 miles”.<sup>112</sup> Medieval and other sources make clear that land routes remained important (one could walk from Knossos to Gortyn in 9.5 hours),<sup>113</sup> and the seas and winds around Crete were treacherous, but sea routes were still much used. Indeed, many ancient routes travelled along the south coast of Crete, as attested by the Phoenician shrine at Kommos and numerous other examples. However much land routes may have been used, sea routes would have still been more cost-effective for shipping bulk products such as grain in mass. And transporting grain seems clearly to be what was at issue here.

Watrous & Hadzi-Vallianou rightly note that:<sup>114</sup>

The Western Mesara was exploited as a source of grain by the Mycenaean rulers, a pattern of foreign exploitation repeated during the Venetian and Ottoman periods.

By the classical period, the harbour had shifted to Matala, just south of Kommos across a headland. This was because of different needs in different periods for different types of ships. Shaw points out that from the classical period onwards the preference was for ‘enclosed’ harbours, such as Matala, whereas in the Bronze Age the preference was for either a peninsula or open

<sup>112</sup> McCormick 2002, 83.

<sup>113</sup> Pendlebury 1939, 20.

<sup>114</sup> Watrous & Hadzi-Vallianou 2004, 300.

shoreline, such as at Kommos and Amnisos.<sup>115</sup> The fact that the locus of the harbour remained so very close emphasises Matala and Kommos as performing closely related functions in their respective periods.

In the Roman period the Mesara was exploited for agricultural purposes, sometimes by dignitaries living elsewhere, or by the empire itself.<sup>116</sup>

In medieval times, the Mesara was crucial to the island's economy, and grain was shipped as far as Patmos in the Aegean, and even to France. As Tsougarakis and Angelomatis-Tsougarakis comment:<sup>117</sup>

As the most extensive and fertile plain in Crete, the Mesara was of crucial importance to the island's economy. It was intensively cultivated, producing mainly cereals. Evidence for cereal production in the Byzantine era is only circumstantial, but it is well documented for the Venetian and Ottoman periods. . . . There is little doubt that cereal production was also the main economic activity of the Mesara in Byzantine times. Part of the grain was, of course, the staple food of the inhabitants, but quantities of grain were also exported from Crete.

Except when the normal economy was interfered with by outside controls - as happened when the Venetians shifted to viticulture, creating grain shortages on the island in the 16<sup>th</sup> and early 17<sup>th</sup> centuries AD - Crete produced a surplus, much of it generated in the Mesara.<sup>118</sup> After the Ottoman conquest in 1669, grain production increased once more and Crete resumed exports. Tsougarakis and Angelomatis-Tsougarakis report that, in 1696 AD, 2000 *mouzouria* of grain were shipped from Matala, some 38,400 kg., and in 1699 some 30,000 *mouzouria* of grain was exported from Crete. They note that "even in years of shortages . . . the Mesara was an important producer".<sup>119</sup> They further comment that in the 18<sup>th</sup> century specific orders were given that people from other parts of Crete (Sphakia) should not be prevented from purchasing grain in the Mesara, and that an 18<sup>th</sup> century French traveller referred to the Mesara as the granary of Crete and noted that the best grain was kept for town elites while the locals consumed coarse barley bread.

It seems that the Mesara as the granary or breadbasket of Crete was a situation that stretched back to Mycenaean times (and most probably the Neopalatial). There was doubtless some local consumption, but the purpose for gathering grain at *da-wo* was almost certainly to ship it elsewhere, and sea

<sup>115</sup> Shaw 1990; Shaw et al. 2006, 854; Shaw & Shaw 2010, 549.

<sup>116</sup> Sanders 1982, 23 (the parallel is commented on also by Bennet 1985, 247). Gallimore (2016, 180-182) discusses the export of various agricultural products from Crete and its supplying military forces in the wider empire.

<sup>117</sup> Tsougarakis and Angelomatis-Tsougarakis 2004, 402.

<sup>118</sup> Tsougarakis and Angelomatis-Tsougarakis 2004, 402-404.

<sup>119</sup> Tsougarakis and Angelomatis-Tsougarakis 2004, 404.

transport would have been the optimum way of doing this. *da-wo* should thus be a harbour, and the prime harbour of the Mesara in the Bronze Age was at Kommos. It is therefore highly likely that Kommos was in fact *da-wo*.

I have offered little new in this paper, but hope that this somewhat fuller review of an old problem may have put our understanding on slightly firmer ground. If *da-wo* is accepted to be Kommos we then add a TN to our previous list of six TNs identifiable with specific sites, plus refine our reference point for *pa-i-to*, identifying it not with the palace of Phaistos but with Agia Triada as has been long suggested. As Colin Renfrew once remarked: “The aims of our research . . . [are] to understand the nature of Minoan-Mycenaean polities as functioning entities”.<sup>120</sup> It is hoped that this article will have contributed one small piece to that puzzle and will have helped clarify relationships between Agia Triada, Phaistos, and Kommos – and changes in those relationships – in the Late Bronze Age.

### Post-script

Cucuzza’s suggestion that the Bronze Age name of Kommos was *mu-ka-ra* is unlikely to be correct.<sup>121</sup> He connects the word, which appears on Pp 498 along with *pa-i-to*, as relating to Amyklaion, the name of a shrine at Kommos in the classical period. That there *was* an Amyklaion at Kommos in the 1<sup>st</sup> millennium BCE is reasonably secure,<sup>122</sup> but *mu-ka-ra* need not be connected with this word, and it is far more likely to be a man’s name rather than a TN in the Linear B tablets.<sup>123</sup> Further, even if there were a connection, Amyklaion referred to a shrine and need not have been the name of the *site*.

Only after submitting this paper was I able to see Orazio Monti’s ‘Linéaire B *da-wo* et la datation de la tablette KN F(2) 852+’ (2015, *Kadmos* 54, 23–30), so a brief comment is needed. He identifies *da-wo* with Agia Triada based on the large amount of storage capacity available at that site (*loc. cit.* p. 27, with n. 31), which he suggests is more than at any other site of the Mesara thus making Agia Triada the only suitable place for storing the large amount of wheat recorded in **F(2) 852**. In fact, storage capacities at Kommos exceed those he calculates for Agia Triada, but Monti dismisses Building P as a grain store because (1) the galleries have been argued to be shipsheds, (2) their western extremities were open, and (3) few pithos sherds were found there (*loc. cit.* p. 27 n. 36). However, it is possible the building could have had multiple functions,

<sup>120</sup> Renfrew 1977, 109.

<sup>121</sup> Cucuzza 1999.

<sup>122</sup> Watrous & Hadzi-Vallianou 2004, 310, 317.

<sup>123</sup> *DMic.* I, 460; cf. *DMic. s.v. o-mu-ka-ra*.

including shipsheds, and that the openings could have been closed in some way not visible in the archaeological record, especially if only temporary rather than long-term storage was intended. Further, grain intended for transport would likely have been kept in sacks rather than pithoi, a possibility Monti himself raises elsewhere in his paper (p. 27, n. 31), and which J. Shaw (1985, 56) also suggested early on: 'It is even worthwhile to consider that grain may have been stored here [in Building P], perhaps in sacks awaiting local distribution for export.' The possibility that grain was stored in Building P should thus remain open, and it should further be remembered that there are other buildings at Kommos also suitable for storage.

Most importantly, the question of the location of *da-wo* cannot be resolved on storage capacities alone, but needs to take into account strands of evidence such as the likely use of the grain, Linear B evidence for the toponym, and the difficulties with taking Agia Triada as anything other than 'Phaistos'. These all support an equation of *da-wo* with Kommos.

### *Bibliography*

- Bendall, L. M. 2007 *Economics of Religion in the Mycenaean World. Resources Dedicated to Religion in the Mycenaean Palace Economy*. Oxford School of Archaeology Monograph 67.
- Bendall, L. M. Forthcoming *Reading Linear B*, Vol. 2.
- Bennet, J. 1985 The structure of the Linear B administration at Knossos, *AJA* 89, 231-249.
- Bennet, J. 1988 'Outside in the distance': problems in understanding the economic geography of Mycenaean palatial territories. In *Studies Bennett*, 19-42.
- Bennet, J. 1990 Knossos in context: comparative perspectives on the Linear B administration of LM II-III Crete, *AJA* 94, 193-211.
- Bennet, J. 1992 'Collectors' or 'owners'? An examination of their possible functions within the palatial economy of LM III Crete. In *Mykenaiika*, 65-101.
- Bennet, J. 2011 The geography of the Mycenaean kingdoms. In *Companion*, 137-168.
- Bintliff, J. 1977 *Mycenaean Geography: Proceedings of the Cambridge Colloquium September 1976*.
- Blackman, D. & Branigan, K. 1977 An archaeological survey of the lower catchment of the Ayiofarango Valley, *ABSA* 72, 13-84.
- Chadwick, J. 1964 Pylos tablet Un 1322. In *Mycenaean Studies*, 19-26.
- Chadwick, J. 1973 Relations between Knossos and the rest of Crete at the time of

- the Linear B tablets. In *Proceedings of the Third International Cretological Congress*, 39-45.
- Chadwick, J. 1976 *The Mycenaean World*.
- Chadwick, J. 1988 The women of Pylos. In *Studies Bennett*, 43-96.
- Cucuzza, N. 1999 Mu-ka-ra (KN Pp 498): antroponimo o toponimo? In V. La Rosa, D. Palermo, & L. Vagnetti (eds), *Epi Ponton Plazomenoi, Simposio italiano di studi egei dedicato a Luigi Bernabò Brea e Giovanni Pugliesi Caratelli*, 305-311.
- Cucuzza, N. 2003. Il volo del grifo: osservazioni sulla Haghia Triada ‘Micenea’, *Creta Antica* 4, 199-272.
- Driessen, J. 1990 *An Early Destruction in the Mycenaean Palace at Knossos*. Acta Archaeologica Lovaniensia Monographiae 2.
- Driessen, J. 1997 Le palais de Cnossos au MR II-III: combien de destructions? In *La Crète mycénienne*, 113-134.
- Driessen, J. 2000 *The Scribes of the Room of the Chariot Tablets at Knossos. Interdisciplinary Approach to the Study of a Linear B Deposit*. *Minos Supl.* 15.
- Driessen, J. 2001 Centre and periphery: some observations on the administration of the kingdom of Knossos. In *Economy and Politics*, 96-112.
- Firth, R. J. & Nosch, M.-L. B. 2002-2003 Scribe 103 and the Mycenaean textile industry at Knossos: the Lc(1) and Od(1)-sets, *Minos* 27-38, 121-141.
- Foster, E. D. H. 1977 *po-ni-ki-jo* in the Knossos tablets reconsidered, *Minos* 16, 52-66.
- Gallimore, S. 2016 Crete’s economic transformation in the late Roman Empire. In J. E. Francis & A. Kouremenos (eds), *Roman Crete. New Perspectives*, 175-188.
- Greco, A. 2010 *Scribi e pastori: Amministrazione e gestione dell’allevamento nell’archivio di Cnosso*. *Tripodes* 12.
- Godart, L. 1968 Le grain à Cnossos. *SMEA* 5, 56-63.
- Halstead, P. 1981 Counting sheep in Neolithic and Bronze Age Greece. In I. Hodder, G. Isaac, & N. Hammond (eds), *Pattern of the Past. Studies in Honour of David Clarke*, 307-339.
- Halstead, P. 1990-1991 Lost sheep? On the Linear B evidence for breeding flocks at Mycenaean Knossos and Pylos, *Minos* 25-26, 343-365.
- Halstead, P. 1992 The Mycenaean palatial economy: making the most of the gaps in the evidence, *PCPhS* 38, 57-86.
- Halstead, P. 1998-1999 [2002] Texts, bones and herders: approaches to animal husbandry in Late Bronze Age Greece. In *Studies Killen*, 149-189.
- Halstead, P. 1999 Missing sheep: on the meaning and wider significance of *o* in Knossos sheep records, *ABSA* 94, 145-166.

- Hart, G. R. 1965 The grouping of place-names in the Knossos tablets, *Mnemosyne* 18, 1-28.
- Higgins, M. D. & Higgins, R. 1996 *A Geological Companion to Greece and the Aegean*.
- Hope Simpson, R. 1995 An archaeological survey of the Kommos area. In J. W. Shaw & M. Shaw (eds), *Kommos I: An Excavation on the South Coast of Crete. The Kommos Region and Houses of the Minoan Town. Part 1: The Kommos Region, Ecology, and Minoan Industries*, 325-402.
- Hiller, S. 1976 Winajo und die 'Squatters' - Ueberlegungen zum Knossosproblem, *Kadmos* 15, 108-129.
- Killen, J. T. 1962 The wool ideogram in Linear B texts, *Hermathena* 96, 38-72.
- Killen, J. T. 1964a The wool industry of Crete in the Late Bronze Age, *ABSA* 59, 1-15.
- Killen, J. T. 1964b Some adjuncts to the sheep ideogram on Knossos tablets, *Eranos* 61, 69-93.
- Killen, J. T. 1966 The Knossos Lc (Cloth) tablets, *BICS* 13, 105-109.
- Killen, J. T. 1968 The Knossos *o-pi* tablets. In *Primo Congresso*, 636-643.
- Killen, J. T. 1972 Two notes on the Knossos Ak tablets. In *Acta Mycenaea*, 425-440.
- Killen, J. T. 1977 The Knossos texts and the geography of Mycenaean Crete. In J. Bintliff (ed.), *Mycenaean Geography: Proceedings of the Cambridge Colloquium September 1976*, 40-47.
- Killen, J. T. 1979 The Knossos Ld(1) tablets. In *Colloquium Mycenaeum*, 151-181.
- Killen, J. T. 1984 Last year's debts on the Pylos Ma tablets. *SMEA* 25, 173-188.
- Killen, J. T. 1986 Two Mycenaean words. In *o-o-pe-ro-si*, 279-284.
- Killen, J. T. 1987a Piety begins at home: place-names on Knossos records of religious offerings. In *Tractata Mycenaea*, 163-177.
- Killen, J. T. 1987b Notes on the Knossos tablets. In *Studies Chadwick*, 319-332.
- Killen, J. T. 1988 Epigraphy and interpretation in Knossos woman and cloth records. In *Studies Bennett*, 167-184.
- Killen, J. T. 1993 Records of sheep and goats at Mycenae, Pylos and Knossos. In *Domestic Animals of Mesopotamia, Part I. Bulletin on Sumerian Agriculture* 7, 209-217.
- Killen, J. T. 1994-1995a [1997] *a-ma e-pi-ke-re*, *Minos* 29-30, 329-333.
- Killen, J.T. 1994-1995b [1997] Review of: Ruth Palmer, Wine in the Mycenaean Palace Economy, *Aegaeum* 10, *Minos* 29-30, 371-373.
- Killen, J. T. 1995 Some further thoughts on 'Collectors', in *Politeia*, 213-226.
- Killen, J. T. 1998 The role of the state in wheat and olive production in

- Mycenaean Crete, *Aevum* 72, 19-24.
- Killen, J. T. 1999 Mycenaean *o-pa*. In *Floreat*, 325-342.
- Killen, J. T. 2004 Wheat, barley, flour, olives and figs on Linear B tablets. In *Food, Cuisine and Society*, 155-173.
- La Rosa V. 1985 Preliminary considerations on the problem of the relationships between Phaistos and Haghia Triada. In J. W. Shaw & M. Shaw (eds), *Scripta Mediterranea VI, Proceedings of the Kommos Symposium held at the Royal York Hotel, Toronto, Canada on December 29, 1984*, 45-54.
- La Rosa, V. 1997a Haghia Triada à l'époque mycénienne: l'utopie d'une ville capitale. In *La Crète mycénienne*, 249-266.
- La Rosa, V. 1997b La Villa Royale de Haghia Triada. In R. Hägg (ed.), *The Function of the 'Minoan Villa': Proceedings of the Eighth International Symposium at the Swedish Institute at Athens, 6-8 June 1992*. ActaAth 4° 46, 79-89.
- La Rosa, V. 2010 Agia Triada. In E. Cline (ed.), *The Oxford Handbook of the Bronze Age Aegean*, 495-508.
- Landenius Enegren, H. 1995 A prosopographical study of scribal hand 103, methods, aims and problems. In *Politeia*, 115-130.
- Lejeune, M. 1964 Observations sur l'idéogramme \*146. In *Mycenaean Studies*, 111-124.
- Lejeune, M. 1979 Sur la fiscalité pylienne Ma. In *Colloquium Mycenaicum*, 147-150.
- Leukart, A. 1987 Mycenaean *o-nu-ka*, *o-nu-ke*, etc. A Concealed Root-compound? In *Tractata Mycenaea*, 179-188.
- McArthur, J. K. 1981 The textual evidence for location of place-names in the Knossos tablets, *Minos* 17, 147-210.
- McArthur, J. K. 1993 *Place-names in the Knossos Tablets: Identification and Location*. *Minos Supl.* 9.
- McCormick, M. 2002 *Origins of the European Economy*.
- Melena, J. L. 1974a *ki-ta-no* en las tablillas de Cnoso, *Durius* 2.1, 45-55.
- Melena, J. L. 1974b *ku-pa-ro* en las tablillas de Cnoso, *Emerita* 42, 307-336.
- Melena, J. L. 1975a *Studies on Some Mycenaean Inscriptions from Knossos Dealing with Textiles*. *Minos Supl.* 5.
- Melena, J. L. 1975b *po-ni-ki-jo* in the Knossos Ga tablets, *Minos* 14, 77-84.
- Melena, J. L. 1976 Coriander on the Knossos tablets, *Minos* 15, 133-163.
- Militello, P. 1988 Riconsiderazioni preliminari sulla documentazione in lineare A de Haghia Triada, *Sileno* 14:1-2, 233-261.
- Militello, P. 2014 *Festòs e Haghia Triada. Rinvenimenti Minori I. Materiale per la tessitura*. Studi di Archeologia Cretese XI.

- Nosch, M.-L. B. 2000 The geography of the *ta-ra-si-ja* obligation, *Aegean Archaeology* 4 (1997-2000), 27-44.
- Olivier, J.-P. 1960 *A propos d'une 'liste' de desservants de sanctuaire dans les documents en linéaire B de Pylos*.
- Olivier, J.-P. 1967 La série Dn de Cnossos, *SMEA* 2, 71-93.
- Olivier, J.-P. 1972. La série Dn de Cnossos réconsidérée, *Minos* 13, 22-28.
- Olivier, J.-P. 1988 KN: Da-Dg. In *Studies Bennett*, 219-268.
- Olivier, J.-P. 2001 Les 'Collecteurs': leur distribution spatiale et temporelle. In *Economy and Politics*, 139-159.
- Palaima, T. G. 1992 The Knossos oxen dossier: the use of oxen in Mycenaean Crete. Part I: general background and Scribe 107. In *Mykenaiika*, 463-474.
- Palaima, T. G. 2015 The Mycenaean mobilization of labor in agriculture and building projects: Institutions, individuals, compensation, and status in the Linear B tablets. In P. Steinkeller & M. Hudson (eds), *Labor in the Ancient World: A Colloquium held at Hirschbach (Saxony), April 2005, Series sponsored by the Institute for the Study of Long-term Economic Trends and the International Scholars Conference on Ancient Near Eastern Economies* 5, 617-648.
- Palmer, L. R. 1963 *The Interpretation of Mycenaean Greek Texts*. Reprinted 1998 edition.
- Palmer, L. R. 1972 Mycenaean inscribed vases - II. The mainland finds, *Kadmos* 11, 27-46.
- Palmer, L. R. 1979 Context and geography: Crete. In *Colloquium Mycenaenum*, 43-64.
- Palmer, R. 1994 *Wine in the Mycenaean Palace Economy*. *Aegaeum* 10.
- Pendlebury, J. D. S. 1939 *The Archaeology of Crete: An Introduction*.
- Pope, K. O. 2004 Geoarchaeology of the Western Mesara. In L. V. Watrous, D. Hadzi-Vallianou, & H. Blitzer (eds), *The Plain of Phaistos. Cycles of Complexity in the Mesara Region of Crete*. *Monumenta Archaeologica* 23, 38-57.
- Privitera, S. 2009 Il 'raccolto' di *da-wo* (KN F[2] 852) e la misura di superficie gra nel regno miceneo di Cnosso. In F. Camia & S. Privitera (eds), *Obeloi: Contatti, scambi e valori nel Mediterraneo antico. Studi offerti a Nicola Parise*, *Tekmeria* 11, 65-76.
- Privitera, S. 2014 Long-term grain storage and political economy in Bronze Age Crete: Contextualizing Ayia Triada's silo-complexes. *AJA* 118: 429-449.
- Renfrew, C. 1977 Retrospect and prospect. In J. Bintliff (ed.), *Mycenaean Geography: Proceedings of the Cambridge Colloquium September 1976*, 108-119.

- Sanders, I. F. 1982 *Roman Crete*.
- Shaw, J. W. 1985 Epilogue. In J. W. Shaw & M. Shaw (eds), *Scripta Mediterranea VI, Proceedings of the Kommos Symposium held at the Royal York Hotel, Toronto, Canada on December 29, 1984*, 55-57.
- Shaw, J. W. 1990 Bronze Age Aegean harbours. In D. A. Hardy, C. G. Doulas, J. A. Sakellarakis & P. Warren (eds), *Thera and The Aegean World, I. Archaeology*, 420-436.
- Shaw, J. W. 2004 Kommos: The Sea-Gate to Southern Crete. In L. Preston Day, M. S. Mook, & J. D. Muhly (eds), *Crete Beyond the Palaces: Proceedings of the Crete 2000 Conference, Philadelphia*, 43-51.
- Shaw, M. C. 1985 Late Minoan I Buildings J/T and Late Minoan III Buildings N and P at Kommos: their nature and possible uses as residences, palaces, or emporia. In J. W. Shaw & M. Shaw (eds), *Scripta Mediterranea VI, Proceedings of the Kommos Symposium held at the Royal York Hotel, Toronto, Canada on December 29, 1984*, 19-30.
- Shaw, J. W. & Shaw, M. (eds) 1995 *Kommos I: An Excavation on the South Coast of Crete. The Kommos Region and Houses of the Minoan Town. Part 1: The Kommos Region, Ecology, and Minoan Industries*.
- Shaw, J. W. & Shaw, M. (eds) 1996 *Kommos: an Excavation on the South Coast of Crete. Vol. I: The Kommos Region and Houses of the Minoan Town. Part 2: The Minoan Hilltop and Hillside Houses*.
- Shaw, J. W. & Shaw, M. C. 1997 'Mycenaean' Kommos. In *La Crète mycénienne*, 423-434.
- Shaw, J. W. & Shaw, M. C. 1999 A proposal for Bronze Age Aegean shipsheds in Crete. In H. Tzalas (ed.), *5th International Symposium on Ship Construction in Antiquity, Nauplia, 26, 27, 28 August 1993, Proceedings*. *Tropis* 5, 369-382.
- Shaw, J. W. & Shaw, M. C. (eds) 2000 *Kommos IV: The Greek Sanctuary, Part I*.
- Shaw, J. W. & Shaw, M. C. (eds) 2006 *Kommos V. An Excavation on the South Coast of Crete by the University of Toronto under the auspices of the American School of Classical Studies at Athens. Vol V. The Monumental Minoan Buildings at Kommos*.
- Shaw, J. W. & Shaw, M. C. 2010 Kommos. In E. Cline (ed.), *The Oxford Handbook of the Bronze Age Aegean*, 543-555.
- Shaw, J., Shaw, M. C., Rutter, J. B. & Van de Moortel, A. 2006 Chapter 5: Conclusions: The history and functions of the Monumental Minoan buildings at Kommos. In J. W. Shaw & M. C. Shaw (eds), *Kommos V. An Excavation on the South Coast of Crete by the University of Toronto under*

- the auspices of the American School of Classical Studies at Athens. Vol V. The Monumental Minoan Buildings at Kommos*, 845-878.
- Shelmerdine, C. W. 1973 The Ma tablets reconsidered. *AJA* 77, 261-275.
- Shelmerdine, C. W. 1988 Scribal organisation and administrative procedures. In *Studies Bennett*, 343-384.
- Shelmerdine, C. W. 1999 A comparative look at Mycenaean administration(s). In *Florent*, 555-576.
- Tsougarakis, D. & Angelomatis-Tsougarakis, H. 2004 Chapter 14: A province under Byzantine, Venitian, and Ottoman rule. In L. V. Watrous, D. Hadzi-Vallianou & H. Blitzer (eds), *The Plain of Phaistos: Cycles of Social Complexity in the Mesara Region of Crete*. Monumenta Archaeologica 23, 359-439.
- Vasilakis, A. & K. Branigan (eds) 2010 *Moni Odigitria: A Prepalatial Cemetery and its Environs in the Asterousia, Southern Crete*.
- Watrous, L. V. 2004 A cultural geography of the island. In L. V. Watrous, D. Hadzi-Vallianou & H. Blitzer (eds), *The Plain of Phaistos: Cycles of Social Complexity in the Mesara Region of Crete*. Monumenta Archaeologica 23, 29-37.
- Watrous, L. V. & Blitzer, H. 1997 Central Crete in LM II- III B1: The archaeological background of the Knossos tablets. In *La Crète mycénienne*, 511-516.
- Watrous, L. V. & Hadzi-Vallianou, D. 2004. Chapter 10: Palatial rule and collapse (Middle Minoan IB - Late Minoan IIIB). In L. V. Watrous, D. Hadzi-Vallianou & H. Blitzer (eds), *The Plain of Phaistos: Cycles of Social Complexity in the Mesara Region of Crete*. Monumenta Archaeologica 23, 277-304.
- Watrous, L. V., Hadzi-Vallianou, D. & Blitzer, H. (eds) 2004 *The Plain of Phaistos: Cycles of Social Complexity in the Mesara Region of Crete*. Monumenta Archaeologica 23.
- Wilson, A. L. 1977 The place-names in the Linear B tablets from Knossos: some preliminary considerations. *Minos* 16, 67-125.

Table 1: Sheep records of *da-wo*

Document reference	Form of word	shepherd	ovis <sup>m</sup>	ovis <sup>f</sup>	<i>o</i>	<i>pa</i>	'Collector'	Olivier's restored figures (1988, 240-241)
<b>Ia. census</b>								
Da 1313.B	da-wo	ku-mo-no-so	100					100
Da 1315.B	da-wo	u-ra-mo-no	100					50
Da 1396.B	da-wo	ku-ne-u	100					100
Da 5223.B*	da-wo	a-da-ra-ro	100					100
Da 5252	da-wo	<i>lost</i>	100					100
Db 1368.B	da-wo	tu-ma-da-ro	78	22				100
Db 1372.B	da-]wo	<i>lost</i>	76	24*				100
Db 7107.B	da-]wo	<i>lost</i>	91*	9		*		100
Dc 1515.B*	da-wo	qi-nwa-so	48		2			50
Dd 1366.B	da-wo	]na	72	27		1		100
Dv 1310*	da-wo[	ko-ru-to	<i>lost</i>					100
Dv 1312.B	da-wo	su-ru-so	100					100
Dv 5301	da-wo	]sa-zo	86[					100
Dv 5841	da-wo	]pe-ri-mo	<i>lost</i>					100
Dv 5843.B	da-wo[	]ti	100	3[				100
Dv 7223.B	]da-wo	<i>lost</i>	220					250
Dv 8361.B	da-wo	]t̥o	44	<i>lost</i>	]41[*			100
Dv 8363.B	<i>vest.*</i>	]u	<i>lost</i>					100
		<b>non-'C'</b>	<b>1415</b>	<b>85</b>	<b>43</b>	<b>1</b>	<b>overall = 1544</b>	<b>1850</b>
		<b>TOTALS</b>						
Da 1314.b	da-wo	po-i-ti-jo	50				te-ra-po-si-jo	100
Da 8228.b	da-w̥o	[ / ]-pwa-jo	100				u-ta-jo-jo	100
Db 1155.B	da-wo	wi-jo-ka-de	86	14			we-we-si-jo	100
Db 1460.b	da-wo	ma-di-qo	67	33			u-ta-jo	100
Dc 1154.B	da-wo	wo-*82-ni-jo	91		9		we-we-si-jo-jo	100
De 1138.B	da-wo	si-ta-ro	103	88	9		u-fa-jo-jo	200
De 1361.B	]da-w̥o	<i>lost</i>	80	8	12		te-]ra-po-si-jo	100
De 1371.B	da-wo	o-to-ro-qa	80	8	12		te-ra-po-si-jo	100
Dv 1145.b	da-wo	]s̥o	81	11[			u-ta-jo-jo	100
Dv 1146.B	da-wo	]mo-ni-ja-ro	40[	109			u-ta-jo-jo	150
Dv 7785.b	da-wo	<i>lost</i>	<i>lost</i>				]si-jo[	100
		<b>'C' TOTALS</b>	<b>778</b>	<b>271</b>	<b>42</b>		<b>overall = 1091</b>	<b>1250</b>
<b>TOTALS</b>		<b>non-'C' + 'C'</b>	<b>2193</b>	<b>356</b>	<b>85</b>	<b>1</b>	<b>overall = 2635</b>	<b>3100</b>
<b>Ib. other</b>								
D 1650.b	da-wo	]pa	68				ra-wo-qo-no-jo	
D 8333	]da-wo	<i>lost</i>	60[					
DI(1) 928.B	da-wo	] *56-na-ro		<i>lost*</i>			ra-wo-qo-no-jo	
Dn 1094.2	da-wo		2440					

**Notes**

**DI(1) 928:** *ki* ovis<sup>m</sup> ideogram also appears, number also lost.

**Dv 1310:** All text lost after the TN (the shepherd's name of course comes first on the tablet if not the table, so is preserved).

**Db 1372:** The text reads 24[, but this must be complete since it gives a total of 100.

**Dc 1515:** *ki-ri-jo-te* also appears.

**Db 5223:** *ki-ri-jo-te* also appears.

**Db 7107:** Text reads ]31 but there is room in the lacuna for 91 and this is the more likely reading, so is given here. *pa* is present in an erasure.

**Dv 8361:** The uncertain reading ]41[ given its position in the text should pertain to either *o* or (less likely) *pa* animals. *ovis*<sup>f</sup> is in normal position on line above.

**Dv 8363:** Apparatus says ‘possibly *da-wo* [’ . I follow Olivier (1988, 241) in including this tablet in the counts.

**Table 2: Documents recording *da-wo* (except sheep tablets, see Table 1)**

Document reference	Hand	Form of TN	Type of document	People/commodities
			<b>1. Textile production</b>	
Lc(1) 526.B	103	]dā-wi-ja	Stints for weaving workshops	TELA+TE 24 ; <i>tu-na-no</i> TELA 3 ; LANA amount lost
Lc(1) 7549.B	103	]dā-wi-ja	Stints for weaving workshops	<i>tu-na-no</i> cloth; figure lost
Le 641.2	103	da-wi-ja	Deliveries to Knossos of finished textiles from women of <i>da-wo</i> and other places	At least 1 unit of TELA+TE (possibly up to 3)
Ln 1568.6	103	da-wo	Deliveries to Knossos of textiles from named women	From <i>da-wo</i> TELA+TE 10
M(1) 559.2	103	]dā-wi-jo	Stint for finishing workshop	Issue of wool and textiles for ‘finishing’: LANA 2 *146 2
			<b>2. Personnel</b>	
Ak(2) 621.C	108	da-wo	Personnel census	34 MUL; 1 <i>ko-wa</i> , 3 <i>ko-wo</i>
Ak(3) 780.1	102	da-wi-ja	Personnel census	2 MUL, 2 VIR ; 5+ <i>ko-wa</i> , 6 <i>ko-wo</i> ; palimpsest
Am(1) 568.b	103	da-wi-jo	Personnel	VIR (number lost)
B(3) 816	106	da-wi-jo	Personnel	<i>po-ku-ta</i> VIR (number lost)
V(3) 655.2	115	da-wo	Personnel	List of men by name; one is designated <i>da-wo</i>
			<b>3. Agriculture</b>	
Ce 59.1	‘124’c	da-wo	Working oxen at 6 towns, including <i>da-wo</i>	6 oxen recorded against <i>da-wo</i>
F(2) 852.1	—	da-wo	Harvest record	10,300 units wheat; 90 units olives; 12+ cyperus
			<b>4. Payments/taxation</b>	
Ga(2) 427.1	136	da-wi-jo	‘Payment’ of <i>po-ni-ki-jo</i>	<i>a-pu-do-si</i>
Ga(5) 1530.2	221	dā-wi-jo	‘Payment’ of <i>ki-ta-no</i> from at least 4 towns	<i>a-pu-do-si</i> ; number for <i>da-wo</i> lost, two towns pay AROM 11; total given is AROM 58, missing 31
Np(1) 272	‘124’e	da-wo	Collection of saffron	CROQ Q 1 from <i>da-wo</i>
Og(1) 180.2	‘124’	da-wi-ja	Contributions from <i>da-wo</i> and <i>pa-i-to</i>	60 M of commodity measured in weight ; 130 M recorded against Phaistos
			<b>5. Labels</b>	
Wb 5282		da-wo[	lable	<i>lost</i>
Wb 9608	117?	dā-wo[	lable	<i>lost</i>
			<b>6. Unclear</b>	
X 1538.2		da-wo	Unclear	
X 5570.B		da-wo[	Unclear	
X 7582		da-wo	Unclear	
X 7706.B		da-wo	Unclear	Has structure of a sheep tablet

X 9314		da-wo	Unclear	
X 9597		ɟda-wo	Unclear	

### Notes

**Wb 9610** probably records a different word so is excluded from the table; the apparatus notes ‘*da-wo*[ almost impossible’.

**Table 3: Linear B sheep records for *pa-i-to***

Document reference	Form of word	shepherd	ovis <sup>m</sup>	ovis <sup>l</sup>	<i>o</i>	<i>pa</i>	‘Collector’	Olivier’s restored figures (1988, 244)
<b>3a. census</b>								
Da 1170.B	pa-i-to	o-ku	100				—	100
Da 1495.B	pa-i-to	qo-te-ro	200				—	200
Da 1173	pa-i-to	du-pu <sub>2</sub> -ra-zo	200				on <i>lat. inf.?</i> *	200
Db 1507.B	pa-i-to	na-wi-ro	38	62			—	100
Dd 1171.B	pa-i-to	po-ro	20	72		8	—	100
Dd 5174.B	pa-i-to	ɟda-na-ro	76	10[		6	—	100
Dv 9568.B	pa-i[-to]	<i>lost</i>	<i>lost</i>				<i>lost?</i> *	none*
Dv 9591	pa-i[-to]	ɟno	<i>lost</i>				<i>lost?</i> *	none*
		<b>non-‘C’ TOTALS</b>	<b>634</b>	<b>144</b>	<b>0</b>	<b>14</b>	<b>overall = 792</b>	<b>800</b>
Da 1156.B	pa-i-to	a-re-ke-se-u	100				we-we-si-jo	100
Da 1161.B	pa-i-to[	ku-tu-qa-no	300				we-we-si-jo	300
Da 1163.B	pa-i-to	we-je-so	100				we-we-si-jo	100
Da 1164.B	pa-i-to*	da-i-qo-ta	130				we-we-si-jo	130
Da 1172.B	pa-i-to	ru- <sup>*56</sup> ra-so	100				pe-ri-qo-te-jo	100
Da 1341.b	pa[-i]-to	ɟno-qa-ta	400				da[-mi-]ni-jo	400
Da 1352.B	pa-i-to	ɟti-jo	200	<i>lost?</i>			u-ta-jo-jo	200
Da 1378.b	pa-i-to	wi-ja-ma-ro	50				u-ta-jo	50
Da 8201.B	pa-i-to	ta-i-po	120				we-we[si-jo ]	100
Db 1159.B	pa-i-to*	du-ta-so	144	55[			we-we-si-jo-jo	200
Db 1160.B	pa-i-to	a-qe-mo	94	6[			we-we-si-jo-jo	100
Db 1344.B	pa-i-to[	[/]-tu-to	170	30			we-we-si-jo-jo	200
Db 1464.B*	pa-i-to	a-nu-ko	38	62			we-we-si-jo-jo	100
Dd 1157.B	pa-i-to	a-wo-ti-jo	56	42		2	we-we-si-jo-jo	100
Dd 1342.B	ɟpa-i-to	<i>lost</i>	267	30		3	ɟra-to-jo	300
Dd 1429.B	pa-i-to	ɟza-ra-ro	54	43		3	u-ta-jo	100
De 1084.b	pa-i-to	ɟko-ti	34	4	2		a-ka-i-jo	40
De 1158.B	pa-i-to	a-ni-ja-to	63	25	10	2	we-we-si-jo	100
Dv 1085.b	pa-i-to	ki-mu-ko	36	11[	<i>lost?</i>		a-ka-i-jo	50
Dv 1509.B	pa-i-to	o-ki-ro	120[				we-we-si-jo-jo	150
Dv 1607.B	pa-i-to	ɟti-ro	37*	<i>lost</i>			we-we-si-jo	100
Dv 5075.B	pa-i-to	ɟmo	<i>lost</i>	<i>lost?</i>	<i>lost</i>		we-we-si-jo	100*
		<b>‘C’ TOTALS</b>	<b>2613</b>	<b>308</b>	<b>12</b>	<b>10</b>	<b>overall = 2943</b>	<b>3120</b>
<b>TOTALS</b>		<b>Non-‘C’ + ‘C’</b>	<b>3247</b>	<b>452</b>	<b>12</b>	<b>24</b>	<b>overall = 3735</b>	
<b>3b. other</b>								
Dm 1180.B	pa-i-to	a <sub>1</sub> -mi-re-we e-ka-ra-e-we	4 20					

Dm 1184.b	pa-i[-]tō	e-ka-ra-e-we o-we-to , o-pa	15				
Dn 1094.1	pa-i-to	n/a	1509				
Dq(3) 7126.b	pa-]i-to		<i>lost</i>			]ko-ta-o	
Dq(3) 7852.b	]pa-i-to		<i>lost</i>			wi-jo-qo[-ta	
D 747.b	pa-]i-to	]a-di-je-wo	40				

### Notes

All documents are by hand 117 except **Dq(3) 7126** (h 217) and **-7852** (217?).

**Da 1164:** Over [[su-ki-ri-ta]].

**Da 1173:** There is an inscription on the *lat. inf.* ‘*ku-ru-me-ni-jo , ke-to*’, which could be a reference to a ‘Collector’ but it would be unclear why it is not in the usual place. *ke-to* is a MN attested elsewhere (he is a shepherd at the TN \*56-ko-we but that must be a reference to a different man). *ku-ru-me-ni-jo* is a patronymic derived from *ku-ru-me-no* who does appear as a ‘Collector’ in **Fh 5502**, and is present in connection with armour (**Sc 236**). There is no way to tell if this was the father of the same *ke-to* who appears in **Da 1173**. Olivier (2001, see 141-151) does not include *ke-to* as a ‘Collector’ in his lists of these persons, so he is excluded here.

**Db 1159:** Over [[e-ṛa , ]]

**Db 1464:** *ki-ri-jo-te* also appears.

**Dv 5075:** Olivier lists this under **Dv 1470** on the basis of a supposed join which is now rejected.

**Dv 1607:** The figure given in transliteration is 27, but the apparatus notes ‘probably 37 or 47’ so 37 is given as the middle figure.

**Dv 9568:** Tablet so fragmentary it is impossible to tell if a ‘Collector’ was once present or not. The tablet is not in Olivier’s list.

**Dv 9591:** Tablet so fragmentary it is impossible to tell if a ‘Collector’ was once present or not. The tablet is not in Olivier’s list.

**Table 4: Linear B evidence for *pa-i-to* (except sheep records, see Table 3)**

Document reference	Hand	Form of word	Type of document	People/ commodities
			<b>1. Wool and textiles</b>	
Dp 1061	117?	pa-i-ti-ja	Wool record	OVIS: LANA 456[ ; probably total ( <i>to-?</i> ]sa) for shearing records*
Lc(1) 546	103	pa-i-ti-ja[	Stint record for textiles	All other text lost
Le 641.2	103	pa-i-ti-ja	Deliveries of finished textiles from <i>pa-i-to</i> and other places	TELA+TE 2 received from women of Phaistos
Le 5629.3	103	pa-i-to	Textile receipts	TELA+TE number lost; <i>komawens</i>
L(6) 469.b	210	pa-i-to	Textile receipt	TELA+PU 34+
Od 502.a		pa-i-to	Wool	<i>we-we-si-jo</i> X LANA 11[
Od 765.a	--	pa-i-to	Wool	]ka-ra / <i>a-me-a</i> LANA M [
Od(1) 681.a	103	'pa-i-ti-jo'	Textiles	
			<b>2. Personnel and rations</b>	
Ak(3) 828.1	102	pa-i-ti-ja	Personnel/rations	Supervisors, and children 'under instruction'
Ap 639.4*	103	pa-i-ti-ja*	Personnel	A woman named <i>pa-i-ti-ja</i> is listed among other named women
E 777.3		pa-i-ti-ja	Rations	Monthly rations for 500 women at Phaistos
			<b>3. Agriculture</b>	
E 36		pa-i-to	Harvest?	Wheat 10+ registered against MN
F(2) 841.4		pa-i-to	Harvest record	<i>pa-i-to</i> has <i>su-za NI 75</i> (figs), OLIV 46 (olives), <i>ka-po</i> figure lost (fruit)
			<b>4. Taxation/collections</b>	
Ga(2) 416	136	pa-i-to	Spice collection	AROM 9 T 2
Ga(5) 1536.1	221	pa-i-ti-ja	Spice collection	AROM 34[
Pp 498.2	119	pa-i-to	Taxation	*168, number lost
Og(1) 180.1	'124'*	pa-i-ti-ja	Collection from <i>pa-i-to</i> and others including <i>da-wo</i>	Probably collection of something weighed: 130+ m from <i>pa-i-to</i>
			<b>5. Chariots</b>	
Sd 4413.b	128	pa-i-to	Chariots	
So(1) 4448	130	pa-i-to	Chariot wheels	3 pairs
			<b>6. Label</b>	
Wb 2001		]pa-i-to[	label	
			<b>7. Unclear</b>	
Xf 5104		]pa-i-to	Unclear	
X 522		pa-i-to	Unclear	
X 697.1		pa-i-to[	Unclear	
X <1474>		pa-i-to[	Unclear	
X 1539		pa-i-to[	Unclear	
X 7546.B (= 508)		pa-i-to	Unclear	
X 7554	--	pa-i-ti-ja[	Unclear	
X 7629		pa-i-to[	Unclear	
X 9721		pa-i[	Unclear	
X 9196		pa-i-[	Unclear	

**Notes**

**Ap 639:** Ap 5864 probably part of same tablet (adding a few more names).

**Dp 1061:** Apparatus notes 'ovis<sup>f</sup> not impossible (ovis<sup>m</sup> impossible)'.  
**Og(1) 180:** Possibly same hand as V 77.  
**X 9196:** Apparatus notes 'Probably *pa-i-ti[*'.

