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## Elite Economic Relationships between Crete and Thebes in the Late Bronze Age

*Abstract.* Economic ties between Crete and Thebes based on personal dynastic relations have been hypothesized by a number of scholars. While most of the evidence has been derived from Linear B documents, we can now draw also upon newly-published evidence from transport stirrup jars. The overall pattern of evidence is consistent with the thesis of elite ties between Crete and Thebes, perhaps with Argolid sites acting as intermediaries.

key words: transport stirrup jar; Thebes; Knossos; Linear B; inscribed stirrup jar

### Introduction

Many have proposed that especially close elite economic ties, based on personal relationships, existed between Crete and Thebes in Late Bronze III (e.g. Killen 1979, 176-179; Hiller 2006, 74-75; see also Palaima 1991, 282).<sup>1</sup> This hypothesis invites us to revisit the question of directed or directional movement of goods (see Haskell 2005).

The Linear B records are notoriously silent about “trade” (for trade within a Linear B environment, see Olivier 1996-1997; Palaima 1991; Killen 2008, 181-189; Rougemont 2009, 170-209; Haskell 2011b, 125-126). MY X 508 may be concerned with the movement of cloth (trade?) from Mycenae to (Boeotian?) Thebes, and if so would be a notable exception (Palaima 1991, 276-277; Olivier 1996-1997, 276-280; Killen 2008, 187-188; Rougemont 2009, 206, 459). If indeed a special, focused economic relationship between elites at Thebes and on Crete can be demonstrated, then directional movement may be indicated. Such movement would reflect direct connections between the two parties in question, in contrast to “down-the-line”

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<sup>1</sup> The author is grateful for the suggestions and corrections provided by the anonymous reviewers. Mistakes that remain are his own. Abbreviations used here: TSJ = transport stirrup jar; ISJ = inscribed stirrup jar.

movement or tramp-style exchange models which reflect indirect and relatively random connections.

Results from a recently published research project that integrates typological, chemical, petrographic, and epigraphic approaches in the study of TSJs can be brought to bear on the issue of relations between Crete and Thebes (Haskell et. al. 2011). These results supplement our understanding of possible Cretan-Theban elite relations that to this point have been based almost exclusively on Linear B evidence.

### **Linear B Tablet Evidence**

Personal elite connections between Crete and Thebes are suggested by three female working collectives at Thebes with designations derived from the names of 'collectors' known on Crete, a situation that John Killen (1979, 176-177) finds "striking." Two of the three personal names from which these Theban formations are derived appear at Knossos as 'collectors' or 'owners' of flocks and workers in the wool / cloth industry (*a-ka-i-je-ja* Of 27 [*<* Cretan 'collector' *a-ka-i-jo*], *ko-ma-we-te-ja* Of 35 [*<* *ko-ma-we-ta*]; see here also Killen 1994, 76), and the third perhaps is a 'collector' but in any case an owner of a house on Crete (*ma-ri-ne-wi-ja* Of 25, 35) [*<* *ma-ri-ne-u*] (see also Chadwick 1975, 90-91, 93-94). Furthermore, at the time of Linear B Knossos<sup>2</sup> there may have been a Theban woman on Crete (KN Ap 5864; see Palaima 1991, 282), perhaps connected with the central Cretan cloth industry (a Theban woman also is at Pylos, PY Ep 539). Killen and others infer elite dynastic connections (see also Rougemont 2008).

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<sup>2</sup> I follow the chronology that the main Knossos archives most likely predate those of Thebes. For a summary of the dating issue, see Driessen 2000, esp. 8-13, 217-23, and 2008, 70-72, 74-75; Driessen and Langhor 2007, 179-180.

In terms of geography, the first two ‘collector’ names upon which the collective names at Thebes are based, *a-ka-i-jo* and *ko-ma-we*, are associated with various parts of central Crete. *a-ka-i-jo* appears on tablets associated with *pa-i-to* (Wilson 1977, Group I; Landenius Enegren 2008, 54), i.e. the western Mesara, and the name *ko-ma-we* is associated with toponyms *e-ko-so* (Wilson 1977, Group I), *pa-i-to* (Wilson 1977, Group I), *sa-ma*, *ra-su-to* (Wilson 1977, Group II), *sa-jo* (Wilson 1977, Group III [?]), *qa-mo* (Wilson 1977, Group III), and *da-\*22-to* (Wilson 1977, Group I; Landenius Enegren 2008, 56; Bennet 1992, 91-92). Wilson (1977, 99) locates Group I in south central Crete, Group III in north central Crete; Group II may border Group I.

Some have argued that the third name at Knossos under consideration, *ma-ri-ne-u*, is the name of a god (see Landenius Enegren 2008, 59; Killen 1979, 178; 1987, 64), but in any case this figure is connected to (owner of?) a ‘house’ (*woikos*, KN As 1519) involved in the manufacture of perfumed oil (perfumed oil could be used in the manufacture of cloth). At Thebes the collective *ma-ri-ne-wi-ja* receives wool (Of 25, 35).

Of course, the Aegean was not the only area of interest to Linear B administrators. Tablet evidence at Thebes, as also at Pylos and Knossos, indicates connections with Cyprus. At Thebes the phonetic abbreviation *ku* (from the ethnic *ku-pi-ri-jo*) modifies wool on the Of tablets, including Of 27 and Of 35 noted above in connection with female collective names evidently derived from Cretan ‘collector’ names. At Knossos *ku-pi-ri-jo* modifies wool, oil, and honey, vases, and unguent ingredients (see Palaima 1991, 280-281, 291-295; Speciale 2001, 155-157). Some have argued that this is an adjectival term ‘Cypriote,’ perhaps indicating produce destined for Cyprus (e.g. Palaima 1991, 294), while Killen

(1995, 215-221) sees this term as a name, occurring both at Knossos and Pylos, assigned to 'collectors' because these individuals had a specific connection with trade to Cyprus (see also Olivier 1996-1997, 201-211, and Godart 1987, 207-210; the *ku-pi-ri-jo* issue is conveniently summarized by Rougemont 2009, 401-422).

As there quite likely is a difference in date between the Knossian archives and the Theban archives, something should be said about 'collectors' and their possible function in a postpalatial (in Knossian terms) context on Crete. Scholarly opinion varies as to the role(s) of 'collectors', ranging from collector, owner, beneficiary, or overseer (see Bennet 1992; Carlier 1992; Driessen 1992 and 2010; Godart 1992; Killen 1995; Olivier 2001; Rougemont 2001 and 2009, 249-524 [especially 311-328]). 'Collectors' ('owners') recorded on the Knossos Linear B tablets managed, with a certain level of autonomy, economic units within the overall sphere of Knossian administration, either as members of local elite families or of the Knossian royal family (Bennet 1992; Killen 1995, 213; Rougemont 2008). Knossian administrators may have tapped into previously-existing LM I units outside of the immediate Knossos area, specifically in the Phaistos, Malia, and Chania regions, and perhaps one or two west Cretan places. Under the Knossian Linear B administration, these 'collectors' quite possibly owned the livestock that they managed (Bennet 1992, 96). While the Linear B archives at Knossos may well predate the Theban tablets (end of LH IIIB, Spyropoulos 1975, 55; Andrikou 2006, 55-59), economic units on Crete certainly continued in LM IIIB Crete (see, e.g., Haskell 1997). Places that had been second-order centers under Knossos could have continued the sorts of production and export recorded earlier at Knossos. It is reasonable that family or household names passed down generation to generation.

Jan Driessen (2010) has defined the *woikos* such as that of *ma-ri-ne-u* noted above (KN As 1519) and elsewhere (e.g. TH Of 36, *woikos of a-ke-ti-ra*<sup>2</sup> [occupational term]) as the basic economic unit 'House', perhaps giving a new meaning to the term 'collector' (*don* is interpreted as a nuclear house). Such an economic unit easily would have survived the Knossos palace, and indeed may have been revitalized by the demise of the Knossian administrative center.

### **Cretan Transport Stirrup Jars and Thebes**

TSJs, including ISJs, document ties between Crete and Thebes. The largest and most diverse deposit of TSJs and ISJs on the mainland is in fact at Thebes, providing an array of evidence. This large assemblage has yielded a good representative collection of TSJs/ISJs, more so than is the case with the far smaller deposits known elsewhere on the Greek mainland (some of which, for example at the House of the Oil Merchant at Mycenae [Haskell 1981], may represent single or few shipments).

The relative richness of the extant Theban corpus of TSJs/ISJs, with its high numbers and technological range, may skew the evidence toward a possible directional Cretan-Theban movement of goods. That said, with the publication of the integrative TSJ/ISJ analysis project by Haskell et al. (2011), one can extract more detailed and precise evidence from this class of transport vessel. Typological and palaeographic studies were fully integrated into the research design, and petrographic analyses were conducted on a number of samples in addition to chemical, adding a level of precision unattainable with chemistry alone. Overall, there are excellent correlations among typological, chemical, petrographic, and palaeographic groups (see Haskell, Jones and Day 2011a; Killen 2011).

In most cases, this study has expanded and/or reinforced associations with production areas established previously on more limited grounds (for the history of scholarship here, see Haskell, Jones and Day 2011b, 6). The notable exception to tight correlations is the enigmatic “double-deep wavy line” group, some of which bear the inscription *wi-na-jo* (Typegroup XI: Haskell 2011c, 15). This group is discussed in some detail below.

At Thebes, all ISJs, and nearly all of the TSJs, were imported from Crete, most from west Crete and many from central Crete (including south central Crete; see here Day et al. 2011, 546-547, 552). Indeed, the TSJ phenomenon overall in Late Bronze III is primarily a Cretan affair. Of the 91 TSJs and ISJs at Thebes analyzed chemically, two thirds were assigned to west Crete, under one third to central Crete (with varying degrees of likelihood), just 4 pieces to local manufacture, and 1 perhaps to Peloponnesian manufacture (Haskell et al. 2011, Table 27). The balance in favor of west Crete is even greater in the ISJ corpus at Thebes. Of the 49 ISJs analyzed at Thebes, more than 90% were assigned to west Crete, with under 10% assigned to central Crete (leaving aside six “marked” TSJs). These numbers are not out of line with proportions of the entire corpus of analyzed ISJs, with the predominance of west Cretan over central Cretan ISJs at Thebes slightly higher than in the overall corpus of ISJs (Haskell 2011a, 119-123).

Looking first at west Crete,<sup>3</sup> seven of the 56 analyzed ISJs at Thebes assigned to west Crete were analyzed both chemically and petrographically. All seven belong to a single petrographic group (Day 2011, 42-44). While there is some variability in texture and aplastic inclusions, there is an overall coherence in this petrographic group. It has been associated with the coastal plain of Chania. In

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<sup>3</sup> While most decorated TSJs/ISJs are dark-on-light, light-on-dark pieces also exist. All light-on-dark pieces with secure attribution have been associated with west Crete.

addition to Thebes, TSJs and ISJs belonging to this petrographic group have been found at Chania, Enkomi, Gla, Knossos, Kommos, Malia, Mameloukas Cave, Mycenae, and on the Uluburun shipwreck.

The name *a-nu-to*, common to tablets at Thebes and Knossos, appears also on west Cretan ISJs at Thebes TH Z 863-865 (Hiller 2006, 75; Haskell et al. 2011, 13-14, Table 27 [catalog TH27-29]) (*a-nu[-to* appears also on fragmentary TI Z 8 + 26 [untested]; for palaeographic similarity to TH Z 865, see Bennett 1986, 140). At Knossos, the ‘collector’ *a-nu-to* may be associated with the textile industry (Landenius Enegren 2008, 73). On KN X 697, this name is recorded with the placename *pa-i-to*. We know little about the spatial relationship between the places of jar manufacture and of the production of contents. Nor it is certain whether an ISJ toponym refers to the origin of the jar itself or of its contents (more below; see Killen 2011, 102-105; E. Hallager 1987, 187-189). In any case, if the *a-nu-to* recorded on the ISJs at Thebes (LH IIIB context) has a traditional Knossian connection, we may well have a reference to a later generation *a-nu-to* on Crete, perhaps of a surviving *woikos*. It is well to remember that *a-nu-to* had been connected to the textile industry at Knossos; perfumed oil was used in connection with the textile industry.

If this ISJ name *a-nu-to* is connected with the *a-nu-to* associated with *pa-i-to* on the Knossian tablets, then we would have an instance of a ‘collector’ functioning in a geographical area remote from clay sources for commodity containers over which he maintained administrative control. This of course assumes that we are dealing with the same ‘collector’ household and in the same location. It seems not likely that an established household would move after the end of the Linear B center at Knossos.

Typologically (Haskell 2011c, 13-14, Typegroup IX) the *a-nu-to* jars are connected also with TH Z 857 and 858 (*di-no-zo* [Haskell et al. 2011, catalog TH21-22]: misspelling of *no-di-zo*? [Killen 2011, 99]) and TH Z 842 (*a-do-we* [catalog TH08], TH 890 [catalog TH52], TH 902 [catalog TH60], TH 923 [catalog TH66], and perhaps TH Z 24 ( ) *u-pa-ta*[-*ro* [catalog TI04]). There are certain paleographic correlations between the *di-no-zo* jars at Thebes and *no-di-zo* jars at Tiryns (see Haskell 2011c, 14 with notes). Of particular interest here are certain peculiarities of sign rendering seen also on Knossos tablets (Bennett 1986, 137; E. Hallager 1987, 175; Palaima 1988, 113). Again, all of these jars, if not necessarily their contents, may be associated with west Crete (Haskell et al. 2011, Table 27).

Sacconi (2012, 128-141; see also E. Hallager 1987, 172 and 2011, 423; Zurbach 2006, 53-54; and Killen 2011, 97-100) has identified ISJ scribes, some of which seem to reflect connections among west Crete, the Argolid, and Thebes. Specifically, Scribe 502 appears on ISJs at Chania (KH Z 27), Tiryns (TI Z 11-23), and Thebes (TH Z 857, 858). TH Z 857 and 858 belong to the typological group noted above that includes the *a-nu-to* pieces. Scribe 503 appears at Chania (KH Z 9, 22) and Tiryns (TI Z 1-5), Scribes 504 and 506 at Chania (KH Z 5, 39; 19 respectively) and Thebes (TH Z 869-872, 876; 975 respectively), and Scribes 510/511 and 514 at Tiryns (TI Z 8, 54; 24, 25 respectively) and Thebes (TH Z TH Z 863-865; 842 respectively).

Typological work by the author yields results that are consistent with this paleographic work. Body shape and decorative details link together vases of Sacconi's Scribes 502, 510/511, and 514 (Haskell 2011c, 13-14; Typegroup IX; see Killen 2011, 99). There seems to be more uniformity in vase typology than in the signs. ISJs belonging with the *a-nu-to* group discussed above also are of this

typological group. What is important here is that multiple scribes could be associated with a single typological group.

Sacconi's Scribe 503 group includes only two ISJs sufficiently preserved for typological work. Both belong to the same typological group (Haskell 2011c, 13, Typegroup V). Regarding Sacconi's Scribe 504 group (n.b. that E. Hallager 1987, 176, also associated these jars paleographically), only those at Thebes are sufficiently well-preserved for typological analysis. All belong to the same typological group (Haskell 2011c, 17-18, Typegroup XIX).

Direct typological correlations between Thebes and the Argolid are indicated by two west Cretan TSJs found in the same complex as the Of series (Spyropoulos 1975, 32, no. 13b, photo 72:b; 31-32, no. 9, 46, photo 68); these jars belong to a typological group at Mycenae associated with west Crete (Haskell 2011c, 11-12, Typegroup II). Furthermore, from the Kadmeion are two TSJs (Thebes 940 [Haskell et al. 2011, catalog TH71], Thebes 941 [catalog TH72]) (a TSJ [ISJ?] at Gla [catalog GLA02] may also belong here), light-on-dark pieces that match very closely a large collection of TSJs found at the House of the Oil Merchant at Mycenae and associated with west Crete. Several of the jars at Mycenae were stoppered, the four well-enough preserved all bearing the same lion-headed daimon / dogs sealing (Haskell 2011c, 12; Sakellariou 1964, no. 161). The problem is, of course, that we are not in a position to know whether Argolid sites transshipped such pieces to Thebes and/or such pieces were shipped directly from west Crete to Thebes. I return to this issue below.

While west Cretan TSJs outnumber central Cretan TSJs at Thebes by two to one, Central Crete is, nevertheless, well represented here. Central Cretan jars are typologically quite distinct from west Cretan pieces, and many bear the distinctive

octopus or deep wavy line (derived from the displayed octopus motif) as their primary decoration. It is almost certain that all decorated central Cretan TSJs bear dark-on-light decoration.

TSJs and a very few ISJs can only be associated with central Crete generally, but some of those analyzed petrographically can be associated more narrowly with south central Cretan shops. In fact, south central Cretan shops were significant producers of TSJs (Day et al. 2011). Petrographic analysis of ISJ TH Z 867 (Haskell et al. 2011, catalog TH31), for example, associates this piece with south central Crete, although no more specifically than the flanks of Idaean range and in the Asterousia Mountains of the south coast of Crete as far east as Myrtos (Day 2011, 77-78, Fabric 8, Table 17; also Day et al. 2011, 523, 527, Fabric C). This particular piece is one of three nearly identical jars at Thebes (TH Z 866-868: Haskell et al. 2011, 16, catalog TH30-32, Typegroup XIV) with the curiously rendered inscription *i-ru* or *ru-i*.

Although the signs on these three ISJs TH Z 866-868 reflect certain affinities with signs at Knossos (see Haskell 2011c, 16 with references), suggestive of postpalatial palaeographic conservatism on Crete, they are sufficiently idiosyncratic to have generated some debate as to their “authenticity” as Linear B signs (Killen 2011, 101, 106 notes 11-14). In any case, the jars themselves appear to be of south central Cretan manufacture. One should note also that these three ISJs are the only central Cretan ISJs at Thebes with recognizable Linear B signs (several TSJs at Thebes bear marks that might better construed as potmarks [included by Raison 1968]; lacking petrographic work, four such marked TSJs are assigned by chemistry to central Crete and two belong to a single typological group

of uncertain origin [Haskell et al. 2011, catalog TH23-26 and TH37-38 respectively, and Table 27; Killen 2011, 98]).

TSJs belonging to the same south central Cretan petrographic group (Day 2011, 52-54, Fabric 8) as that of TH Z 867 have a broad distribution, other pieces found at Knossos, Kommos, Malia, Enkomi, and on the Uluburun shipwreck. While all belong to a single petrographic group, they belong to more than one typological group. Some are decorated with the deep wavy line, others with bands. Note that the examples found at Knossos, often assumed to be “local,” indicate that local Knossian most likely includes south central Cretan fabrics.

Another TSJ at Thebes analyzed petrographically, Thebes 896 (Haskell et al. 2011, catalog TH56), decorated with the octopus motif, points toward south central Crete as well. Its fabric shows affinities with Neopalatial jars at Haghia Triada and the Mesara Plain (Day 2011, 61-63, Fabric 13; see Table 17). Other pieces of this fabric group are found at Kommos and Chania. These TSJs are decorated with the octopus or derivative deep wavy line.

Of considerable interest is a distinctive and puzzling group of central Cretan TSJs/ISJs that are linked typologically, of which three bear the inscription *wi-na-jo*. Most of the jars of this typological group are decorated with the unusual double deep wavy line, and all share a deep depression in the disc that appears to result from the manufacturing process (handle attachment to the disc) rather than from naturally occurring sagging during manufacture (contra, B.P. Hallager 2011, 294). Despite the typological ties, there is considerable variability with respect to origins. Some originate in south central Crete and others, particularly the ISJs of this group, most likely in north or west central Crete (Haskell 2011c, 15, Table 28, Typegroup XI, XIa-b). Pieces of this group are found at Knossos (KN Z 1716;

Haskell et al. 2011, catalog KN02), Armenoi (AR Z 1; Haskell et al. 2011, catalog AR01), Mycenae (Mycenae MY Z 300 [Raison 1968], Haskell et al. 2011, catalog MYC20; MY Z 204 [Raison 1968]; Haskell et al. 2011, catalog MYC17; MYC19; MYC21; MYC23-24; MYC42; MYC66); Midea (MI Z 4); Tiryns (Epichosis IIa/b: Voigtländer 2008, 109, Taf. 78 and 139 [OS 8]); Thebes (Archives Room, LH IIIB context: Spyropoulos 1975, 34, no. 5, photo 81); and Episkopi, *Bamboula* (Philadelphia, Univ. Mus. 54-12-99; Palaima, Betancourt and Myer 1984; Haskell et al. 2011, catalog EP01). The three ISJs bear the same carefully rendered inscription, *wi-na-jo* (Sacconi 2012, 129, Scribe 512). On tablets at Knossos, the name *wi-na-jo* most likely refers to at least three individuals (Landenius Enegren 2008, 88; see Hiller 1976).

Of the jars of this Typological Group that have been analyzed petrographically, six pieces belong to Fabric Group 11, associated with south central Crete (Day 2011, 59-60, Table 17; Day et al. 2011, 522-523, Fabric A, "Main south-central Cretan"). Two belong to Fabric Group 14 (Day 2011, 63-64), a Fabric Group difficult to pin down more tightly than Crete, suggesting that similar but not identical fabrics were being used in different production places.

That these jars typologically are close to one another is an indication that similar technologies were employed at diverse locations. Further variability is seen in the ISJs belonging to this typological group. AR Z 1 is anomalous in body shape (piriform) but is tied to the typological group by the inscription and the deep depression in the disc. Chemically, two of the three ISJs, KN Z 1716 and AR Z 1, differ from one another, although they both are likely to be associated with places in west or north central Crete (see discussion by Killen 2011, 99-100) rather than south central Crete as is the case with the TSJs of this group. The third ISJ, MI Z 4,

has not been analyzed. KN Z 1716 and MI Z 4 share the double deep wavy line. It should be noted that the TSJ of this typological group at Thebes, not analyzed but clearly belonging to this group, comes from the same complex in which the TH Of tablets were found. The piece at Thebes is not, however, inscribed. Note also that a smaller, piriform piece with the double deep wavy line was found at Rethymno (Kanta 1980, fig. 86.7).

Several of the TSJs of this typological group at Mycenae retained their stoppers, one preserving its sealing (bovid: Sakellariou 1962, no. 160). This same sealing is seen also on the stopper of a jar of clear mainland manufacture (Athens 7626: Haskell et al. 2011, catalog MYC73), an indication that some TSJs most certainly were reused and a reminder that caution is advised in inferring historical implications from these vessels.

The broad distribution of find spots and variability of fabric of this distinctive *wi-na-jo* “double deep wavy line” group present interesting possibilities for manufacture and export. If indeed the same scribe painted *wi-na-jo* on all three ISJs, then this scribe (and perhaps one ‘collector’ / head of a *woikos*) may have been involved with at least two, if not more, ISJ production areas. We have represented here an interesting export pattern from central Crete generally to the Argolid, and Thebes, with Cyprus added for good measure. The palaeographic correlations are between northwest central Crete and the Argolid, but, on extant evidence, not Thebes. Furthermore, while as noted above with regard to west Cretan ISJs that multiple scribes could be associated with a single typological group, we have here an instance of a single typological group comprised of TSJs/ISJs of dissimilar clay fabric. The circumstances of administering the production and export of TSJs and ISJs certainly were rather complex and variable.

More generally, the challenge of relating the place of TSJ/ISJ manufacture to a geographical administrative context is illustrated by two ISJs bearing the toponym \*56-ko-we, a place which on the basis of Knossian tablets is associated with *da-22-to*, i.e. northwest central Crete (for \*56-ko-we, see Hart 1965, 9; Wilson 1977, 102; Bennet 1992, 88 n. 72). One of the ISJs is an unpublished dark-on-light piece at Knossos (Killen 2011, 102-103), the other a light-on-dark ISJ at Tiryns, TI Z 27 (not analyzed). TI Z 27 either is a rare example of a light-on-dark ISJ manufactured outside of west Crete, or is a west Cretan jar manufactured some distance from the toponym recorded on its shoulder. The latter possibility lends support to ISJ toponyms recording origins of contents rather than of containers. At Mycenae, if ] *e-ra* on west Cretan ISJ MY Z 202 refers to the place *e-ra* on Knossian tablets and if *e-ra* is to be located in central Crete (Haskell et al. 2011, catalog MYC01 and Table 27; Killen 2011, 102), we would have an additional indication that toponyms on ISJs refer to contents.

Scholarly speculation (e.g. Sacconi 2012, 130) wonders if sites in the Argolid may somehow have been involved actively as intermediaries in directional movement between Crete and Thebes. The well-known MY X 508 records *pu-ka-ta-ri-ja* sent to *ma-ri-ne*[ at *te-qa-de* (Boeotian?) Thebes. *ma-ri-ne-wi-ja* is one of the formations at Thebes (TH Of 25, 35) perhaps derived from a name *ma-ri-ne-u* at Knossos. Based on the scribal correlations among Chania, the Argolid, and Thebes, Sacconi (2012, 130) posits that ISJs associated with west Crete may have been shipped first to an Argolid port and then forwarded to Thebes.

Central Crete might be brought into the conversation as well. Typological Group XI (the *wi-na-jo* “double deep wavy line” group, Haskell 2011c, 15) shows a scribal correlation among Armenoi, Knossos, and Midea. The jars of this

Typological Group are of generally central Cretan origin, with TSJs and ISJs found on Crete (Armenoi, Knossos), Mycenae, Midea, Thebes, Tiryns, and Episkopi, *Bamboula* on Cyprus. As is the case with the ISJ toponym distribution discussed above, numbers are too small to draw definitive conclusions, but we have at least a pattern that would be consistent with the thesis of a special relationship between Crete and Thebes mediated by Argolid center(s). Based on evidence currently available, this thesis remains, however, tentative at best.

To return to the fundamental question of special relationships between Crete and Thebes, with or without the Argolid acting as intermediary, Thebes effectively offers a case study. TSJs and ISJs represent the movement of commodities in bulk. The TSJ/ISJ deposits at Thebes are large and varied, more so than extant deposits elsewhere on the mainland. As already noted, one must proceed here with caution, as what may appear to be uniquely strong connections between Crete and Thebes may be a function of the surviving evidence.

The situation on LM IIIB Crete can be summarized as follows (see Haskell 2011a, 118-122). West Crete dominated the TSJ and ISJ export business. ISJs with *wa-na-ka-te-ro* or the abbreviation *wa* are associated with west Crete (or, in the case of EL Z 1, northwest central Crete), consistent with the notion that Chania most likely operated with its own *wanax* in LM IIIB (see B. P. Hallager 2011, 380, and E. Hallager 2011, 424-425). Furthermore, export of virtually all west Cretan TSJs and all ISJs is confined to the Aegean.

Central Crete also participated in the TSJ export business at a significant level, although on a smaller scale than west Crete. Central Cretan ISJs are extremely rare. Not only were TSJs/ISJs exported in some numbers to Aegean sites, many south central and central Cretan TSJs were exported beyond the Aegean to

eastern Mediterranean markets. The port town of Kommos, where many central Cretan (and a very few west Cretan) TSJs have been found, certainly played a major role here (Day et al. 2011). The octopus or derivative deep wavy line motif is a characteristic of TSJs exported from central Crete to the Aegean and eastern Mediterranean – all analyzed octopus TSJs exported from Crete have been associated with central Crete.

The carefully inscribed *wi-na-jo* trio of ISJs seems most likely to be associated with north / west central Crete (some TSJs of this typological group with south central Crete). The three idiosyncratically inscribed central Cretan ISJs at Thebes TH Z 866-868, the only central Cretan ISJs at Thebes, seem to be associated with south central Crete.

Linear B tablets at Chania prove that a Linear B administrative center existed there in LM IIIB, the prime period of TSJ/ISJ export from Crete. In addition, well over 40 ISJs have been found at Chania (E. Hallager 2011, 415-419). In relative terms, there is a degree of technological uniformity within the west Cretan TSJ/ISJ corpus, and also there are scribal hand correlations with Thebes (and the Argolid). One might easily imagine administrators at Chania directing exports to mainland sites such as Thebes, either on their own initiative or at the behest of mainland elites.

The situation in central Crete seems far more complex. In contrast to west Crete, with very few ISJs originating in central Crete, the distinguishing characteristic for TSJs intended for export is the octopus motif – indeed, many such octopus TSJs exist at Thebes. Variations in TSJ technologies may reflect a greater degree of decentralization throughout the central part of the island. Finally, exporters from central Crete expanded beyond the Aegean to include Cypriote and

Levantine destinations, while west Cretan jars, apart from a few strays, are confined to the Aegean.

The question remains regarding at whose bequest movement of TSJ commodities moved from Crete to Thebes. Cretan TSJs at LH IIIC Tiryns offer an intriguing possibility, although later, parallel for a continuing special relationship there with Crete (Maran 2005; Stockhammer 2009; for continued prosperity at Thebes in LH IIIC, see especially Maran 2012). Cretan TSJs, including octopus TSJs, are found in LH IIIC contexts, one of which was evidently displayed on a threshold just outside a monumental room. No light-on-dark (which would indicate west Crete) nor large Mycenaean type TSJs are yet identified in developed IIIC levels. It appears, then, that people at Tiryns continued to import TSJs from Crete, especially central Crete, in the 12<sup>th</sup> century. The excavators speculate that the TSJs at LH IIIC Tiryns may represent tribute from Crete, exacted by an elite at Tiryns after the demise of the *wanax* there (Maran 2005, 428; Stockhammer 2007, 281-310, and 2009, 167-169). Display of a TSJ with distinctive Cretan decoration would legitimize the social position of the recipient. Whether or not this speculative but unprovable hypothesis is correct, it does suggest an interesting model of directed connections, perhaps also as at Thebes earlier.

### **Conclusions**

With respect to possible elite or dynastic connections between Crete and Thebes, the TSJ/ISJ evidence such as we have points toward both central and west Crete. On the other hand, two of the collective formations derived from names known on the Knossian tablets seem associated with south central Crete. The third collective formation is based on *ma-ri-ne-we*, known as Knossos as an owner of a

*woikos* and perhaps was of high elite status more closely connected to Knossian elites than other 'collectors'.

South central Cretan affiliations may be suggested also by a particular *a-nu-to* at Knossos associated with toponym *pa-i-to*. If this name as recorded on west Cretan ISJs at Thebes is connected with same Cretan *woikos* as recorded at Knossos perhaps considerably earlier, then a 'collector' with geographical connections in south central Crete is involved with the administration of ISJs manufactured in west Crete. This would lend further support to the notion that ISJ inscriptions refer to contents rather than containers. Note that a very few west Cretan TSJs are known at Kommos – were these jars shipped empty to Kommos to be filled with some commodity there?

Other scenarios may be envisioned here, and in fact it is quite likely that various scenarios existed simultaneously. West Cretan administrators may have overseen the production and export of commodities contained in TSJs and ISJs, exerting at least some level of control over some 'collectors' even in south central Crete. As was clearly the case at Knossos, 'collectors' had owed a certain amount of their produce to the central controlling authority, retaining some of their own produce for their own benefit.

While west Cretan export interests lay almost exclusively within the Aegean, central Cretan producers (administrators?) associated with various centers in north and south central Crete, with or without the collaboration of west Cretan officials, also exported in some numbers to recipients in Aegean and beyond. At least two central Cretan centers were involved with the production of ISJs, although not nearly at the same scale as in west Crete. Recall that a south central Cretan ISJ producer is responsible for the three central Cretan ISJs

represented at Thebes (TH Z 866-868). Special elite relationships, direct or indirect, involving south central Crete and Thebes certainly are consistent with the evidence, but unfortunately cannot be proven.

Indeed, the roles of various regions on the mainland in the movement of ISJs and TSJs remain rather uncertain. That the Argolid played an intermediary role in relations between Crete and Thebes, as suggested by Sacconi, cannot be proven. It is worth contrasting Pylos here, however, which played a minimal role in the movement of TSJs, as the type is nearly absent there.

An additional element must be considered. As noted above, both central Crete and Thebes seem to have had especially close relations with the eastern Mediterranean. If *ku-pi-ri-jo* does indeed refer to “Cypriote,” even as a ‘collector’ name reflecting a particular interest in Cyprus (Killen 1995, 221), then a central Cretan and Theban parallelism seems indicated. This name or designation occurs also as *ku* on Of tablets at Thebes. Yet *ku-pi-ri-jo* appears also at Pylos, and it is difficult on this basis to argue decisively in support of a special Thebes/Crete relationship.

At Thebes, ultimately, what seems to be persuasive evidence for a special Theban-Cretan relationship in Late Bronze IIIB are the onomastic correspondences (Hiller 2006, 74-75 and Table 2 on p. 78), although admittedly these correspondences could as well result from chance. In addition to the collective names at Thebes perhaps derived from names of ‘collectors’ at Knossos, there is a relatively high number of names known only at Thebes and Knossos. If Killen is correct that dynastic elites served as ‘collectors,’ with connections overseas, then we may see here dynastic descendants continuing or even developing elite connections between Late Bronze III Crete and Thebes.

The bulk of TSJs and ISJs at Thebes may be of west Cretan manufacture, but onomastic correlations point toward central Crete and in particular south central Crete. ISJs and TSJs themselves might be associated with specific areas of Crete, especially west Crete, but their production and movement was managed within a broad area that extended through central Crete. The *wi-na-jo* “double deep wavy line” group may be the most illustrative example of the complexity of Late Minoan III economic administration on Crete. Two ISJs of this group come from northwest central Crete, with TSJs associated with south central Crete. All share distinctive technological features.

Finally, the new data provided by TSJ/ISJ analyses yield nothing that is incompatible with special elite economic relations between Crete and Thebes. Indeed, these data lend further support to this hypothesis, even if not the quite the definitive proof of concept for which one might hope. The large size of the preserved Theban corpus of ISJs and TSJs provides a wealth of evidence, and, while it yields a picture that may be disproportionately skewed toward Thebes, nevertheless it reinforces a sense of closely directed movement between Crete and Thebes.

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