

## **Deities and Religious Personnel as Collectors<sup>1</sup>**

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The names of deities, their sanctuaries, and the titles of religious functionaries, are often found within the Linear B tablets in association with economic resources. Many such tablets record the offerings that the palace sent to the religious sector. But there are several instances where we can surmise that the deities and religious personnel were not simply passive receivers of goods, but rather that they were actively managing the resources they are associated with on the tablets. For instance, I have proposed that the religious personnel found on the Pylos land tenure tablets were involved in cultivating their land and that they derived some of their support from the land's produce.<sup>2</sup> Here I will focus on what we can deduce concerning the economic role of the religious sector using the sheep tablets from Knossos and Pylos, the textile tablets of Thebes, and the bronze-working tablets of Pylos.

Within these series, deities' names appear in the same position, or administrative slot, as the personal names of a group of men who are traditionally called "collectors." It seems reasonable to propose that the religious personnel working in the name of those deities fulfilled the same role in society as those individual collectors.<sup>3</sup> The role that those collectors played, however, has been the subject of much debate.

Collectors were originally recognized in the sheep tablets from Knossos and Pylos. Dd 1171 is typical of those from Knossos:

Dd 1171:

- A. OVIS<sup>m</sup> 20 OVIS<sup>f</sup> 72  
B. po-ro / pa-i-to, pa OVIS<sup>m</sup> 8

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<sup>1</sup> I want to thank Massimo Perna for extending his warm hospitality not only to me but also to my family. I also want to thank M.-L. Nosch and F. Rougemont for generously supplying me with their articles and F. Rougemont for taking the time to read and provide copious and very helpful comments on an earlier draft of this paper.

<sup>2</sup> Lupack, *Hesperia* suppl., in press.

<sup>3</sup> Nosch (2000) came to a similar conclusion in her analysis of the flocks associated with Potnia and Hermes.

The flocks are recorded along with their location (*pa-i-to*) and the name of their shepherd (*po-ro*). On some tablets, such as Dd 1157, an additional man's name, often in the genitive as here (*we-we-si-jo-jo*), is also included in the record.

Dd 1157:

- A. we-we-si-jo-jo OVIS<sup>m</sup> 56 OVIS<sup>f</sup> 42  
B. a-wo-ti-jo / pa-i-to , pa OVIS<sup>m</sup> 2

These additional men are the individuals designated as “collectors.” Gradually it was found that the collectors' names appeared on several different kinds of records. In addition to those that recorded flock strengths (Da-Dg, Dv), they also appeared on sheep totaling tablets (Dn), tablets that gave targets for wool and lamb production (Dk and Dl), and tablets that recorded targets and subsequent deliveries of the cloth that was manufactured using the sheep's wool (Lc, Le and Ld). Lists of textile workers (Ak) also bore their names. In all of these series, there is a very careful and consistent distinction made between collector and non-collector records. The question that Mycenologists have been trying to answer is, what role does this collector play? What is the nature of his association with the sheep and the textile workshops, and what is his relationship with the palace?

Originally it was proposed that the collectors were palatial agents, who were sent out to collect the sheep, wool and cloth specified on the tablets.<sup>4</sup> But this solution was quickly discarded since it does not make sense to have such agents associated with some flocks but not with all of them. F. Rougemont has recently proposed something similar: she sees some collectors (namely, the ones attested with deficits representing more than 15% of the production of flock) as palatial inspectors who were sent out by the palace because the flocks and textile workshops were not being productive enough to meet the palatial targets.<sup>5</sup> She came to this conclusion after looking at the deficits in the sheep records and finding that the tablets with collectors accounted for nearly 50% of the documents that recorded a deficit, while only 30% of all the tablets in those series record a collector's name. She thinks that this differential is significant and one of the keys to our understanding of the role of the collector. It may be objected though that this theory has the same failing as the idea that the collectors were palatial tax collectors: why would the palace deem it necessary to assign such auditors to some of the flocks but not to all of them? Rougemont deals with this objection in a clever way. She suggests that the palatial administration only inspected 30% of its productive force each year.<sup>6</sup> But if you accept this explanation, other problems arise. If only 30% of the flocks could be inspected in a given year, one might expect that the palace would do this as efficiently as possible. But it is quite common for the same collector to be found in a

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<sup>4</sup> Ventris and Chadwick 1973, p. 200.

<sup>5</sup> Rougemont 2003. Rougemont, *Hesperia* suppl., in press. Rougemont has pointed out to me that our thinking on the collectors may benefit from our considering the possibility that they may not have all played one and the same role. (Hence her theory that some were auditors should not be automatically applied to all the collectors.) She may be correct in this, but herein I will persist in my attempt to find the solution that best fits the majority of cases.

<sup>6</sup> Rougemont 2003, n. 29.

wide number of locations, while at the same time several different collectors often appear at the same location.<sup>7</sup> Also, there are some collectors who are quite active, such as *u-ta-jo* who appears 49 times (at 16 different locations in the Da-Dg, Dv, Dn series) and *we-we-si-jo* who appears 33 times (at 9 different locations in the same series), while others appear only once or twice.<sup>8</sup> These patterns do not seem to reflect an organized effort on the part of a centralized administration to inspect its holdings. Also, from an administrative point of view one would expect that all the flocks from a certain location would be recorded together, regardless of whether they were being inspected, since at that level the fact that the flock had been inspected would not have been of much consequence. But, as I mentioned, the distinction between collector and non-collector flocks is maintained in the totaling records. Rougemont herself mentions another problem, which is that high deficits do not exist within the Pylian records. Therefore the idea that the collectors were auditors would not serve to explain their presence in those documents.<sup>9</sup>

From my point of view, the fact that greater deficits can be attributed to the collector flocks than the non-collector, or palatial, flocks may demand an explanation,<sup>10</sup> but I am not convinced that the deficits *per se* constitute the necessary starting point in our search for an understanding of the collectors. Rather, it seems to me that the most important aspect of these tablets is the fact that the palatial administration consistently distinguishes the resources associated with the collectors from those without one.

Killen and Olivier, whose work has provided the foundation for all current research on the sheep and textile series, proposed a theory that does account for the distinction between collector and non-collector being maintained at all levels of accounting. Their idea is that the collectors were members of an elite class who had been allotted part of the palace's goods as beneficiaries of the palace.<sup>11</sup> Killen, who really fleshed out the concept, said that "the 'collectors' [were] members of the nobility, the royal family, or the like who were allocated part of the productive capacity of the kingdom for their own benefit..."<sup>12</sup> Killen also later proposed that those goods were "not only recorded, but were also clearly *managed*, by the central organization."<sup>13</sup> Killen's theory has the advantage of providing a plausible reason as to why not every

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<sup>7</sup> See Bennet 1992, Tables 7-10.

<sup>8</sup> See Bennet 1992, Table 8.

<sup>9</sup> Rougemont, *Hesperia* suppl., in press. Rougemont would say here that the Pylian collectors were performing some other function besides auditing, but that they were acting on behalf of the palace in some capacity.

<sup>10</sup> I have also noticed this phenomenon in my work, but I was looking at it from a different point of view. I was trying to see if the Potnian flocks, which have nearly 100% deficits, were in some way special because of this. What I discovered was that such deficits were not uncommon; both collector and non-collector flocks had very high deficits. I concluded therefore that this must be a system-wide problem: perhaps it had been a bad year, or a series of bad years, for everyone involved in sheep rearing. The higher deficits among the collectors could be explained by the idea that the collectors were in a better position than the shepherds to avoid or even to refuse the demands of the palace.

<sup>11</sup> Olivier 1967, p. 84. Killen (1979).

<sup>12</sup> Killen 1979, p. 177.

<sup>13</sup> Killen 1983, p. 85. See also Killen 1995, p. 213.

flock had a collector (the palace had only allocated a portion of its resources to the elite), and it made sense of the scribes' need to distinguish the flocks associated with the collectors - presumably the palace would want to know how much of the flocks, wool, and textiles was going to be available for their use as opposed to how much was going to be given to the collectors. Nonetheless, despite the advantages of this theory, I can't help wondering about the practical aspects of such a system. Earmarking the production of particular flocks and workshops for certain individuals while maintaining control over the management of those resources seems an elaborate way to reward your elite. Why not simply allot them a certain amount of say, wool or cloth, and avoid the connection with certain flocks? Also, we don't have any record of the materials being given to the collectors, as one would imagine must happen at some point if these resources were being managed entirely by the palace. Indeed, I think that I would be better persuaded by the beneficiary theory if we assumed that the collectors did manage the resources associated with them. But then this situation would come much closer to the theory that I favor, that the collectors were actually the owners of the sheep and the workshops that they are recorded against. To my mind, the fact that the names of the collectors are recorded at every administrative level must mean that the collectors were far more intimately concerned with the sheep and the manufacture of their wool into cloth than either their being inspectors or beneficiaries would account for.

Palmer first proposed the theory that collectors were the owners of their flocks in 1957,<sup>14</sup> but Bennet has recently revived and supported this view, particularly for the collectors of Knossos. He noted how removed from palatial affairs the collectors of Knossos seemed to be, and wondered how they could have been palatial elite when the tablets showed that their interests were almost exclusively in the shepherding and textile production that were conducted in their own local areas, at some distance from the palace. He therefore concluded that, "This pattern strongly suggests that these individuals enjoyed a substantial degree of responsibility, forming small economic units of their own, albeit within the overall economy based on the palace at Knossos."<sup>15</sup> Bennet reasons that the collectors were actually members of locally based elite groups who headed up economically productive communities that were in existence before the palace at Knossos had become powerful enough to incorporate them into its own economic network. Even after they had been incorporated, these local elites maintained some independence from the palace and were able to retain control over their own enterprises. Hence they were fully "owners" even though their resources were being taxed by the palace.

I agree with Bennet on this point, and I would like to extend Bennet's conclusions concerning the Knossos collectors to those at Pylos. In contrast to the Knossian collectors, Bennet thinks that the four collectors at Pylos "seem to be palace officials, perhaps based at Pylos itself, entrusted with the management and/or the produce of about 40% of the region's flocks...."<sup>16</sup> Bennet says this because at Pylos the

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<sup>14</sup> Palmer 1957, pp. 569-570.

<sup>15</sup> Bennet 1992, p. 96.

<sup>16</sup> Bennet 1992, p. 97.

collectors are sometimes found dealing with matters related to the palace, such as *a-ko-so-ta* who is a land inspector on Eq 213. Thus it would be more likely for the collectors of Pylos than for those of Knossos that they were palatial functionaries who had been given the sheep by the palace in recognition of their service. This scenario is certainly possible, but I wonder if we might not see the Pylian collectors as owners of their flocks as well. The fact that the Pylian collectors are closely tied to the palace cannot be denied. But perhaps the prominent role they played in palatial interests derived from their being influential nobles in the vicinity of Pylos. That is, instead of thinking that holding the flocks was a privilege that was derived from their being associated with the palace, one could say that they held their palatial positions because they were influential men, and part of what made them influential was their control over the means of production such as sheep and textile workshops, which the *wanax* had a need for. The early *wanax* would have done well strategically to win over the support of such men since their influence could have helped him to solidify and maintain his position as head of the community. The early *wanax* might have tried to bind the collectors to him by offering them prominent positions within the palatial hierarchy. The relationships formed in this way between the Pylian *wanax* and the elites could have been maintained and strengthened over the years. This historical development could account for the situation we see in the tablets just as well as the idea that the collectors were Pylian officials given flocks for their benefit, and it would avoid the problems I raised above to the beneficiary theory. Thus, as in the Knossian situation, the palace at Pylos might have been tapping into already existing systems of production. The difference then between the situation at Knossos and at Pylos may have been that at Pylos those who owned the systems of production were incorporated into the palatial elite, whereas at Knossos they were not.

The other issue that has been debated concerning the collectors is whether they were able to acquire any real benefit from their association with the flocks. The fact is that whatever relationship the collector had with the flocks and workshops, he was still required to pay a substantial amount of tax in wool and lambs to the palace. For instance, the Dk series, which records the wool targets for the sheep of the Da-Dg series, shows that the palace expected 750 g of wool per sheep.<sup>17</sup> That amount was reduced somewhat, to 600 g, for the breeding ewes found on the DI(1) tablets. The targets for lambs varied: in the DI series the palace expected to receive one lamb from each ewe, while the lambing target for those in the DI(1) series was only one lamb per two ewes. Also, the breeding sheep of the Do tablets seem to have “had a variable lambing target of 80%, 50%, or 40%.”<sup>18</sup> These targets were definitely not inconsequential, but Carlier has shown that, despite these burdens, the collector may have been able to make the business of shepherding and textile production somewhat profitable for himself.<sup>19</sup>

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<sup>17</sup> Killen first derives and discusses these targets in 1964, pp. 9-13. Also see Halstead’s discussion (1990-1991) of the different series and their targets.

<sup>18</sup> Halstead 1990-1991, p. 348.

<sup>19</sup> Carlier 1992.

Carlier proposed that the collectors might have been enterprising men who leased the flocks and workshops from the palace – ostensibly with the idea that they would make a profit, or at least a reasonable livelihood, from those resources.<sup>20</sup> Therefore Carlier cites several ways in which the collectors, if they were vigilant, might have been able to realize that profit. First he points out that it is not an uncommon event for ewes to give birth to two lambs, an event which is called twinning.<sup>21</sup> In my investigation into the topic, I found that under the right conditions modern ewes give birth to twins on a regular basis. For instance, one manual on the topic of animal husbandry from 1924 has a picture of sheep standing on a hillside with the caption: “A flock of 105 Suffolk breeding ewes with their 210 lambs.”<sup>22</sup> More recent texts give detailed advice on the best way in which to produce a high occurrence of twinning.<sup>23</sup> More to the point though, there is evidence that twinning was not unheard of in the ancient world. In the *Historia Animalium*, Aristotle states that, “The ewe normally produces two lambs.”<sup>24</sup> He goes on to discuss the reasons why a ewe may give birth to twins, presumably because his readers would want to maximize the occurrence of twinning. Varro also addressed this issue and recommended that rams that were going to be used for breeding purposes should be chosen as much as possible from mothers that had given birth to twins.<sup>25</sup> Both of these authors show a knowledge of the effects of selective breeding, which the Mycenaeans were probably also aware of. This leaves open the possibility that in good years the collector may have been able to retain some lambs for his own use.

Carlier also proposed that the normal Mycenaean target of 750 g of wool (=1.6 lb) per sheep would not have been unreasonable. In fact he cites figures of wool production targets from the Near East that are somewhat higher than 750 g. For example, early second millennium B.C. texts from Larsa record amounts that varied between about 1 and 1.15 kg.<sup>26</sup> Tablets from Ur III (ca. 2100 B.C.) set targets of 1.3 kg per sheep.<sup>27</sup> Thus it seems that there was a range of what was considered reasonable to collect. Ryder, who has surveyed all the ancient target figures for wool, says that it seems likely that sheep in the ancient world must have produced at least 1 kg of wool per head.<sup>28</sup> If this was so, then the Mycenaean collectors would have been able to keep

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<sup>20</sup> Carlier (1992) proposes that the collectors may have been “fermiers”. This explanation, like Killen’s, has the merit of accounting for the detail with which the palatial scribes recorded the flocks, since they were still the property of the palace, as well as the need to distinguish the flocks associated with the collectors from those that were not. However, I prefer to think of the collectors as owners because this theory seems to fit better with our understanding of the diachronic development of the palaces and their methods for exploiting the productive capacity of the surrounding regions (see Bennet 1995).

<sup>21</sup> Carlier 1992, pp. 161-166.

<sup>22</sup> Harper 1924, p. 389.

<sup>23</sup> For example see Weir 1980, pp. 586-598.

<sup>24</sup> Aristotle, *Historia Animalium*, 6.19, A.L. Peck, translator, Loeb Classical Library 1970.

<sup>25</sup> Varro, *Rerum Rusticarum*, 2.2.18: “Quos arietes summittere volunt, potissimum eligunt ex matribus quae geminos parere solent.”

<sup>26</sup> Carlier 1992, p. 165.

<sup>27</sup> Ryder 1983, p. 96.

<sup>28</sup> Ryder 1983, p. 96.

about a quarter kilo of wool per sheep, and maybe a bit more, or 50 kg from a flock of 200. This would certainly add up to amounts that would have been useful for industrial purposes, particularly if, as I will discuss below, the collectors also owned flocks that were not taxed by the palace.

In addition, it should not be forgotten that the animals produced a variety of other goods which the palace seems to have had no interest in collecting (under this system at least<sup>29</sup>). For instance, the sheep's milk was probably used to make cheese and yogurt, while the animals themselves could have been eaten once they were culled from the flock. Also, the animals' skins, tendons, and horns would have been made into many items such as clothing, vessels, musical instruments, and weapons. Thus the animals constituted a productive source of food, while their physical remains would have been useful in the manufacture of all sorts of domestic and industrial products.

Also, Carlier and Killen have separately proposed that the collectors had flocks that were not taxed by the palace, in addition to those that appear on the tablets.<sup>30</sup> Halstead made an observation that is very pertinent here. In his analysis of the Knossos D tablets, Halstead found that the records of breeding flocks do not record a number of animals that would have been sufficient for replenishing the palatial flocks.<sup>31</sup> Therefore, he thinks it necessary to assume that there were other flocks not counted on the palatial records from which the palace must have gathered sheep. The collectors are likely candidates for the ones who held such flocks, and the palace would certainly have had to compensate them in some way for these animals.

Another way in which the collectors were probably adding to their wealth was by using the wool they did retain to produce textiles. As I mentioned earlier, many collectors' names can be traced in the tablets that deal with the textile industry. Killen in particular has discussed this aspect of the collectors.<sup>32</sup> The collectors then would have been able to profit from any textiles that were produced in excess of the targets set by the palace.

As I have already implied, in addition to the financial transactions that the collectors engaged in with the palace, they were probably also exchanging their goods with other members of their communities.<sup>33</sup> The fresh products that the collectors derived from the sheep, and the textiles that were made from their wool, would certainly have been used by the collectors and their families, but they would also have been

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<sup>29</sup> We know from tablets such as Un 718 that residents of the palaces certainly did consume cheese and that they could requisition it, along with other foodstuffs, for special ceremonial banquets. One has to wonder though how they usually acquired their fresh foods. R. Palmer (1999, p. 467) says that the palace must have used "a procurement system for cheese outside of the standard assessment-collection systems." Thus, these items may have been procured through the use of barter. It is worth keeping in mind that perishable items could not have been carried long distances, and so would have been gathered from producers who were close to the palace, which many of the collectors were not.

<sup>30</sup> Carlier 1992, p. 165. Killen 1993, pp. 211-212. See Killen 1993, p. 217, n. 19 concerning evidence "for the possibility that shepherds in the Near East used their own animals to make good losses in centrally owned flocks under their care."

<sup>31</sup> Halstead 1990-1991, pp. 343-365.

<sup>32</sup> Killen 1976, p. 121.

<sup>33</sup> See on this topic Halstead 1992 and 1999.

traded for whatever other goods that the collectors needed or even desired. Of course the local transactions do not show up on the palatial records, but that is simply because the palace had no reason to record them.

Thus, the collectors may have been able, through a variety of means, to have made the businesses of shepherding and textile production somewhat profitable, even if they were obligated to give up a substantial portion of their wool and lambs to the palace. They would have been able to use the products of the sheep that were not collected by the palace, as well as possible surpluses of the goods that were, and it is likely that the collectors kept flocks in addition to those taxed by the palace. The fact that the collectors were able to retain some wool of their own is supported by the fact that many of the collectors were engaged in manufacturing cloth. This would not have been possible if the palace took all the wool produced by the collectors' flocks. Also, it is possible that the collectors received some sort of remuneration for what they supplied to the palace in excess of the targets, and they certainly would have benefited from trading their goods within local exchange networks.<sup>34</sup>

With all of these sources of income, the collectors must have held an economically significant position within Mycenaean society. Their resources, at Pylos at least, do not seem to have been limited to sheep and textiles. For instance, *a-pi-me-de*, who can be classified as a collector through his appearance on Cn 655.5, is also seen with *e-to-ni-jo* land on Ep 539.14. At Knossos too, one of the collectors, *e-me-si-jo*, appears to own "large amounts of land or wheat at various places" on E 843.<sup>35</sup> Thus we know that collectors could also be substantial landholders. It seems therefore that rather than being dependent on the palace, the collectors were more likely to have been able to support themselves, and in some cases, to have become quite prosperous. If this was the case, it is possible that through their affluence they also acquired a certain amount of influence within their communities.

Now we may return to the issue of the economic position of the sanctuaries and their religious personnel in Mycenaean society. As I pointed out at the beginning of this article, the names of deities, sanctuaries and religious personnel appear on the sheep tablets in the same administrative slot, so to speak, as the collectors. For instance, on D 411 we see *e-ma-a<sub>2</sub>-o*, or Hermes as the collector of a flock, and an adjectival form, describing someone in the service of Potnia (*po-ti-ni-ja-we-jo*) appears (or can be safely restored<sup>36</sup>) in the position of the collector on a full nine of the DI tablets.<sup>37</sup> Also, Potnia is recorded as the collector associated with new fleeces (*ne-wa po-ka*) on two tablets in the Dp series (997 and 7742). DI 946 is a good representative of these tablets.

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<sup>34</sup> Of course the shepherds working for the collectors would have expected some share of the available goods as well, which would have necessarily reduced the profit for the collectors. But, considering the elevated positions held by the collectors (particularly the Pylian ones), it seems likely that they would have been able to commandeer the majority of the profits for themselves.

<sup>35</sup> Killen 1998, p. 22.

<sup>36</sup> DI 950 and 7771 both record *po-ti-ni*], and DI 7905 has *]ja-we-jo*, which is enough to restore the word as *po-ti-ni-ja-we-jo*.

<sup>37</sup> DI(1) 930.A, 933.A, 943.A, 946.A, [950.A], 7147.A, 7503.A, [7771.A], and [7905.A].



Dl 946:

- A. po-ti-ni-ja-we-jo OVIS<sup>f</sup> 70 LANA 7  
B. ke-u-sa / si-ja-du-we , o ki OVIS<sup>m</sup> 70 o LANA 7

Killen has noticed a similar parallel between collectors' flocks and those belonging to the religious sector on the Thebes sealings, where the words *a-ko-ra* and *a-ko-ra-jo* appear to denote animals that came from secular 'collectors,' while the words *i-je-ro* and *i-je-ra* are used to indicate animals that came from a religious source.<sup>38</sup> At Pylos too we have one tablet (Cc 665) that records Potnia as the collector of a herd of 100 sheep and 190 pigs.

Cc 665:

ne-wo-pe-o , po-ti-ni-ja OVIS<sup>m</sup> 100 SUS 190

Thus not only at Knossos but also at Thebes and Pylos, the religious sector is found in association with livestock.

On analogy then with the Knossos D tablets, we can see that Hermes and Potnia were considered to be collectors. This seems to indicate that these deities were, if we follow Bennet's conclusions, the nominal owners of the sheep recorded with them on their tablets. Clearly though, it was not the gods themselves who did the work of managing the sheep, but rather religious personnel who were working in their names. Because it is the deity's name that is mentioned on the tablets, rather than an individual's name, as was the case for the secular collectors, it seems most likely that these personnel were probably associated with a sanctuary that was dedicated to the deity recorded as the owner. Such sanctuaries may have constituted mini-economic centers, just as the collectors may have headed up their own economic units. And just as the secular collectors were able to make use of the meat, dairy products and physical remains of the sheep, and probably also the wool and lambs that were in excess of the palatial targets, so the religious personnel must also have been able to.

Many sanctuaries probably did not aspire to accomplish much more than providing for their basic needs, but some sanctuaries, like some of the secular collectors, may have been able to grow and become quite prosperous, acquiring material resources in excess of what they needed for their daily sustenance. It is possible that such a sanctuary existed in a place called *si-ja-du-we*. Six of the Dl tablets name *si-ja-du-we* as the location of Potnia's flocks.<sup>39</sup> The total extant number of sheep held at *si-ja-du-we* is 210, and if we add two flocks of 50 (which is a common flock size) for the two tablets where figures are not extant, we have 310, not an inconsiderable number of animals. *Si-ja-du-we* is mentioned again on Am 821 as the location of a man named *ta-ra*, who is described not only as a shepherd (*po-me*), but also as a priest (*i-je[-re-]u*). Am 821 therefore shows that religious personnel were active in the business of shepherding at *si-*

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<sup>38</sup> Killen 1996, p. 81. *a-ko-ra*: Wu 49.g, Wu 50.g, Wu 63.g, and *a-ko-ra-jo*: Wu 52.b, Wu 68.b. *i-je-ro*: Wu 66.g, Wu 86.b, Wu 87.b and *i-je-ra*: Wu 44.b.

<sup>39</sup> Dl 930, 933, 946, 950, 7503, and 7905.

*ja-du-we*. *Si-ja-du-we* then, as Deger-Jalkotzy has already recognized, was probably a place with a sanctuary dedicated to Potnia, which supported itself at least partially through shepherding.<sup>40</sup>

The sanctuary at *si-ja-du-we* might also have been engaged in textile production. Ak 830 is one of a group of tablets that seem to have recorded the “working strength” of the female workgroups who were employed in the Cretan textile industry.<sup>41</sup>

Ak 830:

1. ]du-wi-ja , po-si[
2. ko-]wa / me-zo-e [
3. ko-]wo / me-zo-e 3[

If we follow Melena’s restoration of Ak 830’s ]*du-wi-ja* as the ethnic adjective \**si-ja-du-wi-ja*, then we may have evidence, as he says, “testifying to the existence of a textile centre in this village.”<sup>42</sup> Killen, however, has proposed that the word should be restored as *o-du-wi-ja*, so I will not press this point.<sup>43</sup> The Pylian tablets, on the other hand, give us more certain evidence that textile production was taking place at a location that also had Potnian flocks. The sheep and pigs belonging to Potnia on Cc 665 are located at *ne-wo-pe-o*, which is the location recorded for female textile workers (and their children) on tablets Aa 786, Ab 554, and Ad 688. Thus there was almost certainly a textile workshop located at *ne-wo-pe-o*.

However, it is not clear whether these workers (or those on Ak 830) were associated with the religious sector or with the secular. Perhaps we could infer from the combination of Cc 665 and its associated A tablets that religious personnel not only kept flocks at *ne-wo-pe-o*, but that they were also managing a textile workshop there. However, it is also possible that the workers were associated with the palace. We cannot say for sure which institution was managing the workers, but in either scenario the sanctuary of Potnia and its personnel stood to gain from their possession of sheep: even if the textile workshop was operated by the palace, the sanctuary could have supplied the nearby palatial workshop with wool, and most likely would have derived some benefit from this exchange.

While the nature of the evidence from Knossos and Pylos leads us to be unsure as to whether textile manufacture was conducted under religious auspices at these places, the evidence from Thebes is far more clear, and it indicates that there were several religiously associated textile workshops in operation there.

In the Thebes Of series, we see the adjectival form of people’s names used to describe or denote groups of workers, just as was common in the sheep and textile series. Killen has proposed that, on analogy with the Knossian tablets, we should also see those people as “collectors.”<sup>44</sup> The collectors who were in charge of the textile

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<sup>40</sup> Deger-Jalkotzy 1978, p. 89.

<sup>41</sup> Killen 1988, pp. 168-169.

<sup>42</sup> Melena 1975, p. 28.

<sup>43</sup> Killen 1988, pp. 168-169.

<sup>44</sup> Killen 1979, pp. 176-178.

workshops in the Of series were apparently doing work for the palace under the *ta-ra-si-ja* system, which means that they were allocated raw materials that they were expected to return to the palace in the form of finished goods.<sup>45</sup> Since the amounts of wool allocated to the Theban workshops were usually not large (the allocations most frequently fall between 1 and 6 kg<sup>46</sup>), I think it is unlikely that the palatial *ta-ra-si-ja* work was the sole occupation of these workshops.<sup>47</sup> Rather, the collectors who ran these shops probably took on work from local clients in addition to what they were required to do for the palace. I think it was probably through the latter kind of work that the collectors acquired the more significant portion of their livelihood.

Religious figures, as on the sheep tablets, also appear among the holders of textile workshops at Thebes. Therefore, the religious collectors may again be said to hold an economic position that was parallel to that held by collectors. Among the religious holders of Theban textile workshops we see Hera (*e-ra*) on Of 28.2, Hermes (*e-ma-a<sub>2</sub>*) on Of 31.3, and Potnia (*po-ti-ni-ja*) on Of 36.2. Of 36 will stand as an example of this type of tablet:

Of 36:

1. no-ri-wo-ki-de *ku* LANA 1 a-ke-ti-ra<sub>2</sub> , wa-na-ka[
2. po-ti-ni-ja , wo-ko-de , a-ke-ti-ra<sub>2</sub> *ku* LANA 1

There are several other words found on Of tablets that have been thought to denote religious groups, such as *ma-ri-ne-we-ja-i* (Of 25.1 and 35.2), *po-re-si* (Of 26.1), *ko-ma-we-te-ja* (Of 35.1), and *a-pi-qo-ro* (Of 34.1), but the constrictions of space do not permit me to go into the full details of their cases in this article.<sup>48</sup> Suffice it to say that I

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<sup>45</sup> *Dic. Mic.* II, p. 313. Also see Killen 1999 and 2001.

<sup>46</sup> The largest amount is 10 units, which equals 30 kg. This amount is only allocated twice, and each time to the same person (on Of 37 and 38). After this the next largest amounts are 18, 15, 12, 11 and 10 kg, each of which is allocated one time. The amounts that are most frequently allocated fall between 1 and 6 kg (1 and 3 kg are each allocated seven times, 2 kg is allocated twice and 6 kg is allocated four times).

<sup>47</sup> See Killen 2001, p. 172 for a similar conclusion concerning the work required at both Knossos and Pylos. M.-L. Nosch has impressed upon me (in person and in her article of 2003) that the production of cloth is far more time consuming than we might think. The process of spinning the wool into thread takes up the bulk of the time: 1 kilo of wool, depending on the fineness of the thread, can take from 195 to 700 hours to spin. Assuming a workday of 10 hours, that would mean 20 to 70 days. The weaving however goes much faster: it takes an average of 4 days to weave a kilo's worth of wool thread into cloth. Despite the time-consuming nature of this process, given that there would most likely be a group of women working together in a workshop, it seems that the amounts allocated on the Theban Of tablets would still leave ample time for the workers during which they would have been able to produce cloth for clients other than the palace.

<sup>48</sup> I have presented detailed discussions of each of these in Lupack 2002. Here though I will briefly give my opinion on their status. It is difficult to say for certain whether *\*ma-ri-ne-u* is divine or not, but the fact that *\*ma-ri-ne-u* is given a single amphora of honey on KN Gg 713 (*KT* VI states that the number following “*ME+RI* *\*209<sup>VAS</sup>* + *A*” could be ‘1’), instead of several, speaks in favor of *\*ma-ri-ne-u* being a deity because all the gods in the series receive one amphora, whereas the industrial allocations consist of several. If *\*ma-ri-ne-u* is a deity, then *\*ma-ri-ne-u*'s female workers, the *ma-ri-ne-we-ja-i* (Of 25.1 and 35.2) would represent another textile workshop associated with the religious sphere. I also think it is likely that the *po-re-si* (which is the dative plural of \*φορήν “something brought or offered”) were

think there are probably other religiously affiliated workshops on the Of tablets besides those belonging to the deities mentioned above.

Chadwick suggested that the wool was given to the deities as offerings or that it was going to be used for religious purposes.<sup>49</sup> This seems unlikely given the nature of the tablets. Of 36.2, for instance, specifies that the wool was being sent to decorators or finishers of cloth (*a-ke-ti-ra*<sub>2</sub>), that is, specialized wool workers. Hence it is clear that this wool was to be used in a workshop that was occupied with the task of finishing textiles. The fact that the workshop is associated with a deity need not encourage one to find some religious purpose behind the transaction or the work being done. Rather, it seems reasonable to suppose that sanctuaries found ways to support themselves, such as weaving and finishing cloth, and that this is reflected in the tablets. The *a-ke-ti-ra*<sub>2</sub> associated with Potnia were working under the *ta-ra-si-ja* system just like the other secular workers within the series, and in fact on the same tablet. Under this system the religious workers would have been expected to return finished products to the palace just like their secular counterparts. The religious association simply indicates that the *a-ke-ti-ra*<sub>2</sub> were working in a shop dedicated to the service of a deity, which most likely meant that they were working for the sanctuary in which that deity was worshipped. Such workshops may even have been located within the precincts of the sanctuaries.<sup>50</sup> Regardless of where the workshops were located, the religious functionaries managing the textile workshops probably looked to this business as a way of benefiting, in a

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religious. The accusative of \*φορήν, *po-re-na*, is found on PY Tn 316 where the context shows that the *po-re-na* were about to be dedicated to their respective deities. Thus I would translate the word as “dedicants.” The religious associations of the word \*φορήν are continued on two Pylos tablets where it is used in compound words (*po-re-no-zo-te-ri-ja* on Un 443 and *po-re-no-tu-te[-ri-ja* on Ua 1413) which refer either to religious festivals or the paraphernalia used in the rituals associated with such a festival. Hence the *po-re-si* recorded on Of 26 were most likely people who were dedicated to the service of a deity, and their responsibilities in this case must have included manufacturing textiles in the workshop affiliated with the sanctuary. It is also possible that the workshop of the *ko-ma-we-te-ja* women (Of 35.1) was religiously affiliated since *ko-ma-we-te-ja* appears on Tn 316v.3 as a deity. But this case is not as certain as the previous two because there is a collector named *ko-ma-we(-ta)* on sheep and textile tablets (e.g., KN Dv 5278.B), whom we may presume is mortal (although Del Frio [1998] has proposed that he too may be a deity). Thus the *ko-ma-we-te-ja* women may be associated with the deity or with a mortal collector. The *a-pi-qo-ro* (Of 34.1), or “attendants,” have also been thought to be religiously affiliated (Chadwick 1975, p. 92) since *a-pi-qo-ro-i* are found on PY Fr 1205 receiving an allocation, or offering, of oil. However, female palace workers are designated as *a-pi-qo-ro* on PY Aa 804 and Ad 690, which could indicate that a secular context would be more appropriate for the “attendants” of the Of series.

<sup>49</sup> Chadwick 1975, p. 91.

<sup>50</sup> Archaeological evidence from the Late Helladic III period (which I discuss briefly in Lupack 1999, and in full detail in Lupack 2002) supports the idea that sanctuaries did at times engage in workshop activities within their own precincts. For instance, at Mycenae there is evidence of glass-working and other crafts within its Cult Center (French 1981, French forthcoming a and b, Moore and Taylour 1999) while at Pylos the Northeast Building (whose religious connections are demonstrated by the tablets found in its rooms) seems to have functioned as a storeroom that supported workshop activities (Hofstra 2000, Bendall 2003). The sanctuary personnel at Phylakopi were engaged in manufacturing obsidian blades on a much greater scale than could have been solely for domestic use (Renfrew 1985, Torrence 1985), and in one of the rooms of the sanctuary at Ayios Konstantinos at Methana items such as lead blobs and crucibles demonstrate that it was being used for industrial purposes (Konsolaki 1991, 1995).

material way, the sanctuary and its personnel. Just as the secular collectors probably worked for other members of the community in addition to the work they did for the palace, so the religious workshops most likely also manufactured cloth for clients other than the palace. I think that it is from these extra-palatial commissions that the religious workshops, like the secular collectors, most likely gained the more substantial portion of their income.

Collectors have also been recognized in the Jn series from Pylos,<sup>51</sup> which records allocations of bronze to various smiths scattered throughout the Pylian realm. The bronze smith collectors were also working under the *ta-ra-si-ja* system. Jn 431 is a good example of the 18 tablets in this series.

Jn 431:

1. a-pe-ke-i-jo , ka-ke-we , ta-ra-si[-ja e-ko-te
2. wi-ja-ni-jo AES M 5 ka-ra-\*82[ ] AES M 5[ ] ko-tu-ro<sub>2</sub> AES M 5
3. ma-na-si-we-ko AES M 5 da-ma-so AES M 5 qe-ta-ko AES M 4
4. a-ko-to-wo AES M 7 u[ ]i-jo AES M 6 [[ ]]
5. ma-wa-si-jo AES M 5 qe-to-ro-no AES M 7
6. qa-si-re-u , a-pi-qo-ta 1 [ ]i-\*65-qe 1
7. to-so-de , ka-ko , AES [L 1 ] M 24
8. vacat [ ] vacat
9. to-so-de , a-ta-ra-si-jo , ka-ke[-we ] vacat
10. a-ta-tu-ro 1 i-ta-ra-jo 1 sa[ ] 1] vacat
11. wi-ja-te-wo 1 no-e-u 1 tu-ri-ja-jo 1 qe-ta-ko-jo , do-e-ro 1
12. a-ka-ma-wo 1 e-pe-ke-u 1 \*82-de 1 pu-te-u 1
13. ko-ne-wa-ta 1 qe-to-ro-no 1 mo-re-u 1 a-e-ri-qo 1
14. vacat
15. vacat
16. a-pe-ke-e , ka-ke-we , po-ti-ni-ja-we-jo , ta-ra-si-ja , e-ko-te
17. ko-za-ro AES M 6 a-ke-wa-ta AES M 3 sa-ke-re-u AES M 6
18. we-we-si-jo AES M 3 ko-ta-wo AES M 3 da-u-ta-ro AES M 6
19. vacat
20. to-so-de , ka-ko AES M 27 [ ]
21. vacat [ ]
22. to[-so-de ]a[-ta-]ra-si-jo , ka-ke-we , ka-ri-se-u 1 du-ko-so[ ] 1
23. ko[ ] 1 e-u-wa-ko-ro 1 ke-we-no 1 a-ta-o 1 [ ]
24. ]wa-ti-ro 1 me-ri-wa-[•] 1 [ ]
25. ] i-je-re[-wo ]VIR 10 to-sa-no-jo VIR 5
26. VIR] 1 a-mu-ta-wo-no VIR 31

The first paragraph records the smiths who were to receive an allocation (*ka-ke-we ta-ra-si-ja e-ko-te*) and usually bears a heading that indicates the location of the smiths (*\*a-pe-ke-e*). Then follows the names of the smiths and the amounts of their allocations. On most tablets a second paragraph (here on line 9) is created for smiths who were not given an allotment (*a-ta-ra-si-jo*), or an assignment of work, at that time. Since these *a-ta-ra-si-jo* smiths were recorded despite their not receiving any bronze at the time, I would say that the palace kept a standard list of smiths who could be called

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<sup>51</sup> Killen 1995, p. 214.

upon when the need arose, but that not all of them were required to work for the palace at the same time.<sup>52</sup>

This, along with the fact that the allotments given to the individual smiths are generally not large (3-4 kg is the norm) implies that the palace was probably not the only client that these bronze smiths worked for. Another fact that speaks against the palace being their sole client is that the workshops were scattered all over the region. One would expect to find them concentrated around the palace if the palatial inhabitants were the only ones requiring their services. Rather, as I proposed for the textile workshops, the bronze smiths probably also served the needs of others who lived in the vicinity of their workshops. Repair work and recasting of scrap metal could have been among their more common tasks. Thus, it seems reasonable to suppose that these workshops were independently founded and managed, and that the palace simply called upon them when the need arose.

As with the Of series, the Jn tablets also record allocations that were assigned to workers who were affiliated with the religious sphere. These religious collectors, designated as *po-ti-ni-ja-we-jo*, or Potnian, are found on two tablets, Jn 310.14 and Jn 431.16. The Potnian bronze smiths are marked out as distinct from the other secular smiths by being set off in their own paragraphs. Indeed, it looks as if the scribe of Jn 431 at first meant to make the Potnian paragraph a separate tablet entirely. In the middle of line 15 there is a deep scoring which evidently was made in order to separate the two parts, although in the end the scribe retained the two parts as one tablet. Both Smith and Melena noticed that after the tablet was scored, an attempt was made to repair it.<sup>53</sup> Perhaps the scribe reconsidered how the file should be organized and decided that all the bronze smiths from *a-pe-ke-e* should stand together regardless of their different affiliations. Nonetheless, the fact that he did use separate paragraphs for the Potnian smiths on both Jn 310 and 431, and the fact that his initial impulse with Jn 431 was to physically separate the two records, indicate that the Potnian smiths were considered to be distinct from the others. I think this was probably not just because the smiths had different affiliations, but also because they were located at different workshops. The religious workshops may have been located within or near to the confines of sanctuaries dedicated to Potnia.<sup>54</sup>

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<sup>52</sup> The fact that not all the smiths received an allotment has been taken by some to indicate that there was a shortage of bronze at Pylos which had been caused by the disruption of trade routes by “sea-raiders.” (Ventris and Chadwick 1973, pp. 509-510, Baumbach 1983, p. 33). It may be true that unrest in the area affected the supply of bronze, but it has to be said that the amount of bronze allocated on the Jn series is not insignificant. The total of the extant allocations is 645 kg. (I have only included extant tablet totals and restorations that one can be confident of. The actual total would have been higher.) This seems to indicate that the palace was not facing a major shortage of bronze.

<sup>53</sup> Smith 1992-1993, p. 228. Melena *PofN* IV. The main body of the tablet was found in two pieces, but a fragment from the right end of the tablet covering lines 14-17 has also been found that retains the original connection, which assures the break between the lines was not made by the scribe who wrote the tablet.

<sup>54</sup> On Cyprus, where the religious sector clearly took an active role in the production aspects of the copper industry, several Late Bronze Age sites, such as Kition (Karageorghis and Demas 1985), Enkomi (Dikaios 1969-1971), Athienou (Dothan and Ben-Tor 1983) and Myrtoú Pigadhes (Du Plat Taylor 1957

Despite this distinction, the palatial administration seems to have treated the Potnian smiths in the same way as the other bronze smiths. They were working under the *ta-ra-si-ja* system just like the secular smiths (which means that we can discount immediately the idea that the allotments of bronze were given as offerings), and the amounts of bronze allocated to the Potnian smiths fall well within the range of those given to secular smiths.<sup>55</sup> It should also be pointed out that the Potnian smiths were just as likely to have been left without an allotment of bronze. On Jn 310.17 there is one Potnian smith described as *a-ta-ra-si-jo*, and on Jn 431.22-24 there are at least eight Potnian smiths in this category. Also, both secular and religious smiths had *do-e-ro*, which implies that both types of workshops were run internally in a similar fashion as well.

An indication that the Potnian workshop at *a-pe-ke-e* was actually being run by religious personnel is found on line 25 of Jn 431 (please see the text of Jn 431 above). There we see a group of 10 men, the first in a list of four such groups, listed against *i-je-re*], which can be restored as either *i-je-re[-ja* or *i-je-re[-wo*, the genitive forms of ‘priestess’ and ‘priest’. This makes sense because the other two records that are fully extant have the groups of men recorded against names that are also in the genitive (*to-sa-no-jo*, *a-mu-ta-wo-no*). These groups then were most likely under the management of the person whose name or title is given in the genitive. Smith thought that all of the groups must have had religious affiliations simply because they were all recorded right underneath the Potnian bronze smith paragraphs.<sup>56</sup> I think though that it is safer to take only the group clearly marked as being managed by a *i-je-re*] as a religiously affiliated workforce.<sup>57</sup>

Thus, I think it is possible to see in Jn 310 and Jn 431 two religiously affiliated workshops, one at *a-ke-re-wa* and another at *a-pe-ke-e*, that were established and managed by sanctuaries dedicated to the worship of Potnia. The religious smiths, like the secular, were most likely engaged in the production and repair of items made from bronze for local customers in addition to the *ta-ra-si-ja* work they did for the palace, and the goods they received in exchange for their work most likely provided for, at least, the general maintenance of the sanctuary and its personnel.

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and Knapp 1999, p. 235) had metal-working facilities in close association with a sanctuary site. Keswani (1993) and Knapp (1986, 1997, 1999) in particular have discussed this phenomenon.

<sup>55</sup> On Jn 310 the four Potnian smiths are all listed as receiving AES M 3, while three of the six Potnian smiths on Jn 431 also receive AES M 3 and the last three receive AES M 6. Ventris and Chadwick (1973, p. 356) record that 123 of 144, or 85% of the smiths whose allotments are extant receive between AES M 1 N 2 and AES M 5 (see also Smith 1992-1993, p. 179). A smaller number of smiths receive between AES M 6 and 8, and AES M 12 is allocated once (Jn 601.6). Thus, the seven Potnian allotments of M 3 are well within the normal range of allocations given to secular smiths, while the allotments of M 6 are a bit on the high end, but still not abnormal.

<sup>56</sup> Smith 1992-1993, p. 184.

<sup>57</sup> The fact that the scribe did at first mean to separate the bottom half of the tablet from the upper could be seen to support the idea that all the workers in this last paragraph were religious. However, it is also possible that the reason he did not separate the two is because he realized that he would have to add these groups of men at the end, and since they were associated with both secular and religious workshops, he had to keep the two records together.

From the Linear B evidence it seems that the Mycenaean religious sector was not only involved in animal husbandry, but also textile manufacture and metal working, and it seems that the religiously affiliated collectors interacted with the palace in the same way that the secular collectors did. The religious collectors therefore held a position in the Mycenaean economy that was commensurate with that held by the individual collectors. This means that the religious personnel were, like the secular collectors, most likely engaged in procuring their own livelihoods, and that they probably traded their goods and services within local exchange networks, as well as with the palace. It is from these local transactions that both types of collector most likely gained the more substantial portion of their income.

If indeed the religious collectors were working for sanctuaries dedicated to their deities, then the proceeds from their work was probably used by the sanctuary to finance its own operations and to support its personnel. Therefore, it seems possible that sanctuary sites could have acted as economic centers just as the palaces did, albeit on a much reduced scale. I do not mean to overestimate the role of the religious sector in the Mycenaean economy. The religious collectors were well integrated into the organizational systems the palace used to procure the goods it needed. They had to comply with the palace's demands for wool, lambs and manufactured goods just as the secular collectors did. The sanctuaries were therefore subordinate to the economic power of the palace. But neither do I think that the religious hierarchy relied on the support of the palace for its sustenance, nor do I think that their economic activities were controlled by the palatial administration.

Of course, many of the sanctuaries must have been fairly modest in size, and the proceeds from their economic endeavors may have been intended simply to provide for the maintenance of the inhabitants of the sanctuary. But in some cases, the religious collectors could have created surpluses, which would have given the religious personnel more opportunity to barter and exchange their goods. They would also have been able to take on additional roles within the community, such as landlord, employer, and loan provider. It is possible then, as seems to have been the case for several of the collectors, that the sanctuaries and their personnel may have been able to acquire some real material wealth. This wealth would have served to enhance the prestige that was already attached to the religious personnel because of their cultic knowledge, and would have provided them with a more concrete base for their influence within society. Thus, although the religious sector may not have rivaled the political authority and economic force wielded by the palaces, nonetheless prosperous sanctuaries and their personnel may have had a certain amount of *auctoritas* within their communities that was made more effective because it was based not only on religious knowledge, but also on access to economic resources. For the sanctuaries that were particularly successful, such as *Pakijane*, the combination of economic and religious power may have given their priests and priestesses influence even within the elite spheres of Mycenaean society.



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