A critical lexicostatistical examination of Ancient and Modern Greek and Tsakonian

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Abstract. This article provides a lexicostatistical comparison of Ancient and Modern Greek Swadesh-100 vocabulary with data from the three recorded dialects of Tsakonian: Southern, Northern, and Propontis. Propontis Tsakonian (now extinct) has undergone the most influence from Modern Greek; Northern Tsakonian is known to have undergone more influence than Southern. Tsakonian is renowned for its Doric heritage, and there are some startling archaisms in its core vocabulary; but its lexicon overall takes Early Modern Greek rather than Doric or even Attic Greek as its departure point. Tsakonian phonology is distinctive compared to Modern Greek, which helps identify loanwords readily; the phonological developments that led from Ancient to Modern Greek, and from Ancient and Modern Greek to Tsakonian, are discussed in some detail. The etymologies of the Tsakonian forms in the Swadesh-100 vocabulary are also discussed in detail. There is a high number of cognates between Modern Greek and Tsakonian, that observe Tsakonian phonology, as well as a significant number of clear loanwords from Modern Greek that do not. Previous lexicostatistical studies on Tsakonian are examined, including the necessity for sound etymological analysis, and the challenges in identifying the primary term for a wordlist item; but also the fragility of interpreting the same etymological data, depending on one’s default assumptions about the relation between the two variants.

Keywords: Ancient Greek, Modern Greek, Tsakonian, etymology, lexicostatistics.

1. Introduction

In the development of lexicostatistical and glottochronological theory, a prominent role has been given to the evidence from Greek, as a language with a long written tradition. Until now, however, the lexicostatistical data used for Greek has not been published; nor has it been subject to the kind of scrutiny exemplified by Bergland and Vogt’s (1962) classic study.

While glottochronology is not generally considered reliable, lexicostatistics is still used to give a rough guide of how closely related languages are, especially in the absence of more reliable data (e.g. in Amerindian, Australian, and Papuan linguistics). So long as it is taken as only a rough guide, it can shed some light. In this study, I use lexicostatistics to give such a rough guide on how closely related Tsakonian is to Standard Modern Greek. Judgements on how cognate forms are involve more subtle judgement than is usually done in lexicostatistical studies: I expose those difficulties in arriving at such judgements here, to foreground how problematic they are, but also to illustrate the ways in which more mainstream forms of Greek have influenced Tsakonian at various stages.

Tsakonian has three dialects: Northern, Southern, and Propontis Tsakonian — formerly spoken by a colony in North-Eastern Turkey, and heavily influenced by Thracian Greek, a dialect much closer to Standard Modern Greek. There is thus a range of data to draw on for a lexicostatistical investigation.

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2. Tsakonian

Tsakonian is a now moribund language, spoken by perhaps 1000 people in the Peloponnesus, and formerly in two villages in North-Eastern Turkey. Tsakonian is not mutually intelligible with Standard Modern Greek, and deviates from Greek noticeably in its morphology. After some debate earlier this century, it has become accepted that Tsakonian is descended from Doric, the Ancient Greek dialect associated with Sparta, and not Attic-Ionic, the dialect which was to give rise to all other Modern Greek dialects, via Hellenistic Koine. Indeed, the word Tsakonian is often derived from Laconian, Laconia being the region in which Sparta was situated. (Caratzas (1976) has more convincingly concluded that it derives from διάκονοι, and refers to the military office often given to Tsakonians.) The association was already made by the Byzantines; thus, the Byzantine historian George Pachymeres (I 309) refers to “many of the Laconians, who are also called Tsakonians in corrupted form” (ἄλλοι τε πλεῖστοι ἐκ τῶν Δακόνων, οὕς καὶ Τζάκωνας παραφθείροντες ἔλεγον...) A good deal of the lexical evidence for the association with Doric is adduced in this paper; one of the major questions such a study could help resolve — and a question which does not seem to have been raised in the literature until now — is to what extent Tsakonian derives from Doric proper, as opposed to a Doric-coloured Hellenistic Koine, as was the case with Italiot Greek.¹

Tsakonian can be divided into three dialects. Southern Tsakonian (Pernot 1934) includes the villages of Melana, Prastos, Tiros, the smaller villages of Pramatefti and Sapunakeika, and the town of Leonidio (vernacular: Lenidi; Tsakonian: Agie Lidi). Northern Tsakonian (Costakis 1951) includes the villages of Sitena and Kastanitsa, and formerly the town of Prastos. Standard Modern Greek made its presence known much more strongly in these villages than in Southern Tsakonia, since primary schools opened up in the area much earlier, and the Kastanitsiots were very mobile as a result of their trade as travelling whitewashers. In addition, Northern Tsakonia was not as geographically isolated:

Kastanitsa seul a un accès plus facile vers certaines régions de l’intérieur, ce qui me paraît expliquer et le caractère plus moderne du tsakonien qu’on y parle et le fait que celui-ci n’a pas pratiqué certains changements qu’on observe à Lénidi; les noms de famille indiquent aussi qu’il y a eu là un afflux de gens du dehors. (Pernot 1934, 139) (The settlers in Northern Tsarkia (13th–14th century AD) appear to have been Epirots: Costakis 1951, 59.)

As a result, Northern Tsakonian is closer to Standard Modern Greek than Southern Tsakonian is, both lexically and phonologically, and the language has retreated much more rapidly; indeed, Haralambopoulos (1980, 7) reports he was unable to find consultants who could offer more than isolated words as far back as 1971. The date on which the two metropolitan dialects diverged is unknown, but Turkish traveller Evliya Çelebi, who visited the area in 1668, gives both a northern and a southern form for ‘house’ (Costakis 1951, 153): tanjala (ταν τσέλα tan ‛tsela) ‘the house’ (Northern) vs. tanja (ταν τσέα tan ‛tsea) ‘the house’ (Southern)—the elision of /l/ before back vowels is the main isogloss separating the two dialects. Pernot (1934, 503) prefers to see in this the singular / plural contrast evident in the glosses: /tʰa tcele/ ‘in the houses’, [tʰan ‛dzea] ‘in the house’. However, he believes the data was given to Çelebi by a Kastanitsiot, and accepts that the dialects had diverged by that time. Tzitzilis (in prep, cited in Liosis 2007, 37) believes Çelebi’s data represents a distinct, now extinct dialect of Tsakonian, which he calls Papadianika after the nearby village, and which Liosis calls Western Tsakonian.

¹In that regard, cf. Pernot (1934, 214) on the etymology of πῆ/pra RELATIVISER: “La forme ancienne πῇ [pʰːi, Attic-Ionic] d’où on le [pʰi] tire est plus indiquée [Attic-Ionic /eːi/ > Modern Greek /i/]. Comme on ne trouve pas ici le dorien πᾶ [pâːi > *pʰa], il y faut voir une preuve de plus de la pénétration en Laconie de la koine ancienne.”
The third dialect, Propontis Tsakonian, was formerly spoken in the villages of Vatka (Musatsa) and Havoutsi (now Havutça and Misakça), on the mouth of the Gönen (Aesepus) River, in the Propontis (Sea of Marmara) in North-Eastern Turkey. The inhabitants of these villages were subject to the 1922 population exchanges between Turkey and Greece, although they had already ceased speaking Tsakonian as their primary language in 1914, when they were internally exiled with other ethnic Greeks at the outbreak of World War I (Costakis 1986, X). Although Propontis Tsakonian is grammatically more conservative than metropolitan Tsakonian, morphologically and lexically it has been influenced significantly by Thracian, the dialect of Greeks in the surrounding area, which is much closer to Standard Modern Greek. The dialect has now died out.

The date on which the Tsakonians emigrated to the Propontis is under dispute. Koukoules (1924) argued for a 13th century AD emigration on the basis of historical evidence; the Byzantine historian George Pachymeres says explicitly that Emperor Michael VIII resettled Tsakonians in Constantinople. Costakis (1951, 151–155) argues for a much later date, possibly the time of the Orloff revolt (1770–1780), given what he considers to be the good preservation of archaic features of Tsakonian. He also adduces Turkish traveller Evliya Çelebi’s information that Tsakonian was spoken far south of Leonidio in 1668, in a region since settled by Arvanites (confirmed by Scutt 1912–13, 139) — and which includes a village called Vatika. As Scutt (1912–13, 138) discusses, the 14th century Chronicle of Morea includes in Tsakonia villages further south from the modern boundary, like Geraki, but not Vatika or Monemvasia. Tsakonian is spoken in the district of Cynuria, which is now administratively part of Arcadia, but was historically northeastern Laconia. If Tsakonian was spoken as far south as Monemvasia, Papadianika (where Çelebi visited) and Vatika, as the historical evidence hints, then it was originally spoken throughout the eastern half of Laconia.

Fixing a date on the divergence of Tsakonian from Standard Modern Greek is even more problematic. If we accept the received knowledge that Tsakonian is directly descended from Doric, without any Koine admixture, the divergence should be dated at the break-off of Doric from Proto-Greek — some time in the second millennium BC. By 1st century BC, the Ancient Greek dialects were dying out in the face of Hellenistic Koine; Laconian Doric experienced a revival in inscriptions up to 2nd century AD (where it is called Neo-Laconian), with varying degrees of success, but researchers have concluded the revival was largely artificial (Panayiotou 1993).

Phonologically, the divergence must be dated at around 800, the date by which almost all phonological changes and the most substantial morphological changes between Ancient and Modern Greek had been realised. Tsakonian phonology deviates significantly from Standard Modern Greek; nevertheless, most of the phonological changeovers from Ancient to Modern Greek have also taken place in Tsakonian. This does not imply that the languages could not have diverged before 800. Greek voiced and voiceless aspirated stops, for example, had started leniting to voiced and voiceless fricatives in 1st century AD. So with /ɡ, pʰ, kʰ/ already lenited to /ɣ, f, θ, x/, the remaining stops /d/ and /b/ could have readily lenited to /ð/ and /v/ independently in Middle Greek and Proto-Tsakonian after 500, under typological pressure. The major phonological archaism of Tsakonian (with the exception of the Doricism /th/ → /s/) is υ /u/ → /u/, as opposed to its development in Middle Greek, /y/ → /i/ (known to have taken place by 11th century AD); Tsakonian shares this feature with other archaic dialects of Greek — notably Old Athenian and Maniot — but it is not universally applied: υο /uо/ > γυναίκα γυναίκα, γυναίκα. Furthermore, as seen below, neither /th/ → /s/ nor /b/ → /u/ are particularly widespread processes.

Grammatically, the situation is even more complex. Some innovations of Middle Greek are absent in Tsakonian: the complementiser πως pos, datable to 2nd–6th century AD (Nicholas, 1996);
the negator δὲν den, first used as a reanalysis of οὐδὲν oudén ‘nothing’ in 1st century BC; the analogical remodelling of ὑμεῖς hymeis ‘you.pl’ into εσείς esis to obviate phonological merger with ἡμεῖς hemeis ‘we’ (6th century AD, according to Palmer 1980, 184.) The use of a participial periphrasis for the present tense is a feature of Koine abandoned in Standard Modern Greek (where it seems to have died out around 1400), but retained in Tsakonian. Other Middle Greek innovations, however, are present both in Standard Modern Greek and Tsakonian: the use of a locative as a relativiser (πἰ η pni; cf. MG που pu; first instance 5th century AD); the use of a volitive future (θα tha; volitive futures appear around 1st century AD, although they become the predominant expression of future tense only around 15th century AD); infinitive loss (10th–16th century AD).

The historical endpoint for the divergence of Tsakonian from Standard Modern Greek seems to be the Slavic invasions of the Peloponnese in the eighth century. The first reference to Tsakonian is considered to be Constantine Porphyrogenitus’ De Arte Imperiando (224) (ca. 950), in which he mentions that the inhabitants of the district of Maina are not from the breed of the aforementioned Slavs, but are of the older Greeks, who are to this day called Hellenes (pagans) by the locals for being pagans in time past and worshippers of idols, like the Hellenes of old, and were baptised and became Christians during the reign of the late Basil (867–886). (‘Ιστεόν ὅτι οἱ τοῦ κάστρου τῆς Μαΐνης οἰκήτορες οὐκ εἰσὶν ἀπὸ τῆς γενεᾶς τῶν προρρηθέντων Σκλάβων, ἀλλ’ ἐκ τῶν παλαιοτέρων Ἑλλάδος, οἳ καὶ μέχρι τοῦ νῦν παρὰ τῶν ἐντοπίων Ἑλλήνων προσαγορείονται διὰ τὸ ἐν τοῖς προπαλαιοῖς χρόνοις εἰδωλολάτρας εἶναι καὶ προσκυνητὰς τῶν εἰδώλων κατά τοὺς παλαιοὺς Ἑλλήνας, οἵτινες ἐπὶ τῆς βασιλείας τοῦ ἀοιδίμου Βασιλείου βαπτισθέντες χριστιανοὶ γεγόνασιν.)

Mani is a distinct region of the Peloponnese, which has remained isolated and distinct from its neighbours in modern times; but scholars routinely assume the passage also refers to the even more linguistically isolated Tsakonians. The fact that the Tsakonians remained pagan for so long is indicative of long-time isolation from mainstream Greek society.

In later Byzantium, Tsakonians were frequently conscripted into the Byzantine army, and were known of in Constantinople; hence the routine references to τζάκωνες or τζέκωνες as border guards. The first explicit allusion we have to Tsakonian not being intelligible by Standard Modern Greek speakers comes in the 15th century satire Mazaris’ Sojourn in Hades (quoted in Costakis 1951, 26):

I thought I would myself turn into a barbarian, just like the Laconians have become barbarians, and are now called Tsakonians. (Δέδοικα […] ἵνα μὴ βαρβαρωθῶ καὶ αὐτός, ὡσπερ ἄρα βεβαρβάρωνταί γε οἱ Λάκωνες καὶ νῦν κέκληνται Τσάκωνες)

As Pernot (1934, 240) points out, the words Mazaris goes on to quote as ‘barbaric’ are actually from Mani — the region we have already seen Porphyrogenitus refer to, which scholars refer to Tsakonia as well; that seems to indicate once again that the term ‘Tsakonian’ was formerly used with a much broader denotation than nowadays.

But while there is much evidence for a long-lasting separation of Tsakonians from Standard Modern Greek, it is just as true that Tsakonian has undergone gradual and constant contact with Standard Modern Greek for an extended period — earlier than the modern period, since the inception of the Greek state, when Tsakonian started dying out. (Already by the end of the 19th century, Tsakonians sung their folk songs in Standard Modern Greek.) Since, in particular, Tsakonian was spoken much further to the south of Leonidio in times past, there would have been extensive opportunities for contact. This contact is apparent even in the core vocabulary of Tsakonian.
3. Historical Phonology

3.1. Modern Greek

The phonological developments in Modern Greek (often concealed by historical orthography) can be summarised as follows:

- Aspirated consonants have been lenited to unvoiced fricatives: /pʰ, tʰ, kʰ/ → /f, θ, x/ (pʰσ: → φσ ‘light’, tʰάνατος → θάνατος ‘death’, kʰαρά → α’ρα ‘joy’).
- Voiced consonants have been lenited to voiced fricatives: /b, d, g/ → /v, θ, χ/ (βάρυς → βάρις ‘heavy’, δέκκαμοι → δέκεμε ‘to accept’, γυμνός → γυμνός ‘naked’). This process failed to take place in clusters, particularly with nasals; e. g. /mb/ → /mb/ (embάίνω: → mβένω ‘to enter’).
- The phoneme /h/, occurring only before word-initial vowels, has been lost (hό:ra → ορα ‘hour’, hόπου → οπου ‘where’), as has the voicelessness of initial /x/ → /t/ (τίζδα → τίζα ‘root’).
- Clusters have dissimilated in manner, so that stop–stop clusters have lenited to fricative–stop (κτίζδο: → ‘xtizo ‘build’, πτέρων → πτέρο ‘wing’), and fricative–fricative clusters have likewise dissimilated to fricative–stop (with the exception of /sf/) (ψφθάνω: → ‘φθάνω: → ‘φθάνου ‘arrive’, κβθές → βξες → ξτε ‘yesterday’, σκβίδο: → ‘σκίζο ‘split’, but σφενδόνε: → σφενδόνα ‘slingshot’).
- The cluster /zd/ has been lenited to /z/ (κτίζδο: → ‘xtizo ‘build’).
- Pitch accent has become stress accent.
- Contrastive vowel length has been lost.
- Long mid vowels were phonemically distinct from short; they had also become quantitatively differentiated, becoming raised. Of these, /ε:/ regularly became raised to /i/ (αγάπε: → α’γαπε ‘love’), although there are counterexamples (νε:ρόν → νε‘ρο ‘water’, κε:ρός → κε‘ρος ‘dry’). /ɔ:/ became /o/ regularly (ɔ:σος → ομος ‘shoulder’), although there are many examples of it also raising, to /u/ (κβοσ → κλου ‘cage’, τραγióδιο: → τραγίδιο ‘sing’, σα:πό:νιον → σα:πόνι ‘soap’).

As there are also sporadic instances of /o/ → /u/ in Modern Greek (kόμπιον → κομβί ‘button’, rοπβ̃: → rufo ‘suck’), the /ɔ:/ → /u/ development is considered by most linguists a secondary phenomenon; this is how it is discussed, for instance, by Hatzidakis (1975 [1892], 105). It should be noted, nonetheless, that in MG this raising occurs rather more frequently for Ancient /ɔ:/ than it does for /o/.

- Of the ancient diphthongs, those whose first vowel was long had the second vowel drop out: /ai, ei, o:i/ → /a, e, o/ (hάιδε:ς → αδίς ‘Hades’, zdίον: → ζο(α) ‘animal’).
- Diphthongs whose second vowel was /u/ had it fortitioned to a labiodental fricative, assimilating in voicing to the following segment: /au, eu/ → /af, av, ef, ev/ (αυγέ: → αυγά ‘dawn’, ευτύκχες → εφτί'ξις ‘happy’). The diphthong /ou/ had already been monophonogised and raised to /u/ in late Attic — a value it has retained since.
- Diphthongs whose second vowel was /i/ were monophonogised and raised: /ai, ei, oi, yi/ → /e, i, y, y/ (haimä: → 'ēma ‘blood’, peiνα → 'pina ‘hunger’).
- Ancient Greek /u/ fronted into /y/ in Attic, although it remained /u/ in the other dialects of Ancient Greek, including Doric. By Roman times, it had been joined by the reflexes of the diphthongs /oi/ and /yi/. Eventually, /y/ was unrounded to /i/ (e. g. hύπνος → hύπνος ‘sleep’, mοίρα: → mύρα: ‘mira ‘fate’). This change came about rather late in Greek; 11th century AD is the conventional date (Lauritzen 2009 gives evidence it had taken place by 1030), although toponymic loanwords (Korfoi → Old French Corfu, Oinoe →
Turkish Ünye) suggest the old pronunciation remained widespread as late as 13th century AD.

- Word-initial unstressed vowels have dropped out (embainō: → ‘mbo eenter’, oligos → ‘liyos ‘few’); such vowels present in the contemporary language are usually reimportations from Puristic Greek, although the elision was less frequent for disyllabic and trisyllabic words, for low and high rather than mid vowels, or where it would lead to unacceptable initial clusters (e.g. argos → ar’ya ‘late’, akoivō: → a’kou ‘hear’).
- Unstressed prevocalic /i/ has become a yod (diaforā → [ðjafo’ra] ‘difference’, opsária → [’psarja] ‘fishes’). As an extension, stressed prevocalic /i/ and /e/ also become yods (paidía → [pe’ðja] ‘children’, eleutèria → lefè’reta] ‘freedom’, ennëa → [e’na] ‘nine’, meléa: → [mi’lα] ‘apple tree’). This process has not taken place in Tsakonian; it has also not taken place in Maniot.

3.2. Tsakonian

For the most part, Tsakonian vocalism and consonantism are the same as those of Modern Greek. There are a plethora of phonological processes listed in the introductions to Pernot’s and Costakis’ works, not all of which are regular. In the following, the major processes are listed, including those which constitute archaisms with respect to Modern Greek.

3.2.1. Doricisms

The following processes in Tsakonian have been claimed to be Doricisms — that is, to continue characteristics which separated Doric from other Ancient Greek dialects. As should become clear in the discussion, subjective factors have been at work in claiming Tsakonian to be directly descended from Doric; Pernot’s critical discussion of these claims was crucial in forestalling their overly enthusiastic acceptance.

1. /θ/ → /s/ (*θy’yatir → ST ‘sati PT ‘sae ‘daughter’, *’θeros → NT ‘sere ST ‘seri ‘harvest’, *θi’lazo → ST si’lindu ‘to suckle’, *kri’θi → ST PT ‘krisa ‘barley’). The rendering of Ancient Greek θ /θ/ as Doric σ was first attested at the beginning of 4th century BC (Palmer 1980, 120); e.g. σάλασσα sállassa is written for θάλασσα tállassa, MG θαλάσσα ST θαλασσα ‘sea’ (Hatzidakis 1989 [1905], 365).

There has been confusion over the phonetic value of this θ. The obvious process is for /θ/ to have lenited to /θ/ earlier in Doric than in the other dialects of Greek, which would have been orthographically ill-equipped to denote the new sound. Hatzidakis’ counterargument, that the Laconians would not represent a new sound with the same letter as a sound /s/ still extant in their dialect, but would have invented a new letter, is unconvincing. So is the argument that words later borrowed into Tsakonian from MG retain their /θ/. However, the (phonologically more plausible) /θ/ interpretation of Laconian σ requires the process /θ/ → /s/ to have been completed in Proto-Tsakonian before it started borrowing MG words with /θ/. Note that initial /θ/ is frequently retained in Tk in words which cannot have been borrowed from MG — e.g. ST θυ’ov θi’u ‘to slaughter’ < AG θώ θi’ui: ‘to offer a burnt sacrifice; to kill’ (MG σφάζω ‘sλaze).

1 The following abbreviations are used: M — Melana; T — Tiros; P — Prastos; K — Kastanitsa; S — Sitena; V — Vatka; H — Havoutsi; NT — Northern Tsakonian; ST — Southern Tsakonian; PT — Propontis Tsakonian; MT — Metropolitan (Peloponnesian) Tsakonian; Tk — Tsakonian; Å — Åkerblad (1785–88 or 1796–97); Ç — Çelebi (1668); Vi — Villoison published word list (1785–86); D — Doric, typically as given in Hesychius; C — Costakis’ (1986) etymology; MG — Standard Modern Greek; EMG — Early Modern (Late Byzantine) Greek; AG — General Ancient Greek (including Attic and Doric); IG — (Attic-)Ionic Greek; IE — Proto–Indo-European. Text references are given as follows: Dict — texts given in appendix to Costakis (1986); Samp — Costakis (1980); Har — Haralambopoulos (1981); Thus — Houpis (1993); Mal — Houpis (1993); Kar — Karaliotis (1969); Mak — Makris (1952). If a word is not given a location, it is generally used in the region; thus, no location in Northern Tsakonian corresponds to S K, in Southern Tsakonian to M P T, and in Propontis Tsakonian to V H.
So as Scutt (1912–13, 152) finds, “the small number of these words makes it unlikely that the change \( \theta > \sigma \) was ever a regular law of the dialect, and the only explanation is that at the time when Laconian used \( \sigma \) for \( \theta \), a number of such words spread to the Tsakonian district, and have since become reduced under the influence of Modern Greek to the few quoted above.” After a fashion, Pernot (1934, 132–134) concurs: the number of instances is much smaller than claimed by Deffner, and the only convincing examples precede front vowels, making this an instance of palatalisation (see below). Pernot (1934, 138) concludes that this should be eliminated from the number of Doricisms in Tsakonian “certainement pour une partie des exemples, sinon pour la totalité.”

2. \(/s/ \rightarrow /\mathcal{r}/\) word-finally (*pos \( \rightarrow \) pur ‘how’, *tinos \( \rightarrow \) tsuner ‘whose?’). Rhotacism was a prominent feature of Neo-Laconian (Pernot 1934, 17). In Modern Tsakonian, word-final /\mathcal{r}/ persists only as a euphonic liaison phoneme; in the unmarked case, it drops out. This seems to explain why word-final /s/ has dropped out in Tsakonian.

3. /e:/ \( \rightarrow /a/\). One of the most salient features of Doric was that it used long /a/ where other Greek dialects used long /e/; for example, Doric used \( \text{g} \text{a} \): for Ionic \( \text{g} \text{e}: \) ‘earth’. This Doricism undergoes what Pernot (1934, 18) calls “persistence et extension”; e.g. ST a ‘mati PT a ‘mai corresponds to Ionic he: \( \text{m}: \text{e}:\text{t} \text{e}:\text{r} \text{a} \) ‘the mother’. The domain where Doric /a/ is most prominent is in noun morphology: while MG uses both /i/ \( < /e:/\) and /a/ as feminine noun endings, Tsakonian uses only /a/—to the extent that Tsakonians hypercorrect MG /a/ nouns to /i/ (e.g. u’ri for MG u’ra Tsakonian nu’ra ‘tail’) (Pernot 1934, 42). This /a/ is less widespread in other parts of the word.

4. /z/ \( \rightarrow /\mathcal{d}\) in verb endings (*fo’naz\( \alpha \)n \( \rightarrow \) ST fo’n\( \alpha \)nu PT fo’nazo ‘to shout’, *\( \theta \)il’az\( \alpha \)n \( \rightarrow \) ST si’lin\( \alpha \) ‘to suckle’). This also occurs in the word *r\( \mathcal{r} \)za \( \rightarrow \) ST jinda PT ‘riza ‘root’. Scutt (1912–13, 156) believes that this change, without parallel in Modern Greek dialects, is a further development of Doric */zd/ \( \rightarrow /\mathcal{d}\) /; see also Pernot (1934, 106, 122), who postulates the intermediate stage /\mathcal{d}\theta/. The phenomenon does not apply to PT.

### 3.2.2. Archaisms

The following processes in Tsakonian appear to be more archaic than their equivalents in Standard Modern Greek.

1. The Tsakonian reflex of Ancient Greek /u/ is not /i/, but /ju/ after a coronal, and /u/ otherwise (*lykos \( \rightarrow \) *ljukos \( \rightarrow \) ST ‘\( \text{t} \text{k} \)o’ \( \text{w} \) \( \text{l} \) \( \text{f} \) ‘wolf’, *ty’ros \( \rightarrow \) tju’ros \( \rightarrow \) ST [cu’re] ‘cheese’, *k\( \text{y} \)\( \text{o} \)n \( \rightarrow \) ST NT ‘kue ‘dog’, *mya \( \rightarrow \) ST PT ‘muza ‘fly’). In this way, Tsakonian keeps Middle Greek /y/ distinct from /i/; this also occurs in the Old Athenian–Maniot group of Modern Greek dialects, and sporadically in Standard Modern Greek itself (*\( \text{p} \text{\acute{y}sk} \)e: \( \rightarrow \) ‘fusska ‘bubble’ (cf. Tsakonian ‘fuk\( \alpha \)a ‘belly’), *k\( \text{y} \)\( \text{l} \)\( \text{\acute{e}} \)s \( \rightarrow \) ku’\( \text{l} \)os ‘maimed’, *k\( \text{y} \)\( \text{t} \)i\( \text{on} \) \( \rightarrow \) ku’\( \text{t} \)i ‘box’, *m\( \text{y} \)\( \text{\acute{e}} \)\( \text{\acute{t}sk}\)\( \text{a} \) \( \rightarrow \) mu’\( \text{\acute{e}} \)\( \text{t} \)k\( \text{a} \) ‘moustache’) — although most instances can be considered later developments after a labial or velar, rather than survivals (Hatzidakis 1990 [1907], 295). It does not seem this tendency regularly extends to the other Ancient Greek phoneme realised as /y/ in Middle Greek—/oi/: the regular reflex for this is /i/, as in MG (ko\( \text{\`o} \)te: \( \rightarrow \) *k\( \text{y} \)\( \text{i} \)ti \( \rightarrow \) ST ‘teita ‘bed’, poi\( \text{s}: \) \( \rightarrow \) *py’o \( \rightarrow \) ST NT ‘p\( \text{i} \)u ‘to do’), although examples with /j(\( \text{\`o} \)\( \text{\`o} \)r\( \text{\`o} \)s \( \rightarrow \) *\( \text{x} \)y\( \text{r}\)o\( \text{\`o} \)s \( \rightarrow \) ST NT PT ‘\( \text{x} \)\( \text{\`u} \)re ‘pig’, Costakis (1951, 37) calls this example “unique in Tsakonian.”)

The palatalisation of ‘\( \text{x} \)jur\( \text{e} \)’ is inconsistent with the rule for /u/, and also occurs for other instances where /ju/ is preceded by a non-coronal — both of /oi/ (heptako\( \text{i} \)\( \text{\`o} \)\( \text{i} \)on \( \rightarrow \) *epta’kyli \( \rightarrow \) ST fta’t\( \text{c} \)u’l ‘fecund (of vine)”) and /u/ (k\( \text{\`u} \)ri\( \text{s}: \) \( \rightarrow \) *\( \text{k} \)yr\( \text{\`o} \)s \( \rightarrow \) *kjuri \( \rightarrow \) ST NT ‘k‘uri ‘father’, gur\( \text{\`i} \)z\( \text{d}\):n \( \rightarrow \) *\( \text{y} \)y’ri\( \text{\`o} \)n \( \rightarrow \) *\( \text{j} \)u’ri\( \text{\`u} \)z\( \text{\`u} \) \( \rightarrow \) ST [ju’ri’zu] PT ‘ju’rizu ‘to turn’). Scutt (1912–13, 146) considers this evidence of two original phonemes: Tsakonian retains the Doric pronunciation of \( \text{\`u} \) as /u/, as is evident in Hesychius, notwithstanding his vacillation between (inscriptive?) /u/ and (transcribed?)
ou: the proto-form for a regular word like ‘ũku was likelier *lukos than *lykos, with the palatalisation caused by the consonant rather than any frontness in the vowel. The reflex of /oi/ and the instances in ‘teuri and [ju’rizu], on the other hand, where the /y/-sound palatalises a velar, mean that the proto-form here was a front vowel, which dates from later in the language. This is either Middle Greek /y/ or Modern Greek /i/; the former is likelier, although Scutt insists on calling it a sound.

After extensive discussion, Pernot (1934, 115) concludes that the words where /u/ reflects an old Doric /u/ (like *kuan’a → ST NT kuvane ‘black’) “ne dépassent pas la dizaine et probablement ne l’atteignent pas.” He finds that the development of modern /u, ju/ is not a survival of Doric (unlike Scutt), but a later development from mediaeval /y/, which also affected /i/ in certain contexts (*‘strivon → ST ‘jufu NT ‘stifu PT ‘stufo ‘to twist’, *olis’θenon → ST ‘u’tfenu ‘to slip’, *ksi’fion → ST ‘fu’θi ‘awl’, *otinos → ST ‘otsune NT ‘otsunu ‘whose’) — although what that context is is not clear.

Instances displaying /i/, the Standard Modern Greek reflex of Ancient Greek /u/, are not at all infrequent. The instances are dismissed by both Scutt (1912–13, 144) and Hatzidakis as loans from MG — but this does not ring true, as these words include core vocabulary (*‘yδor → ST NT iο ‘water’, *‘yos → ST NT PT i’ze ‘son’, *‘ynos → ST ‘ipre PT ‘ipne ‘sleep’, *‘θyon → ST ‘θio ‘to slaughter’). Indeed, in the case of ‘io and ‘θio, and other instances like *‘ollyme → ST oλin’dumene ‘to get lost; to howl’, *‘ta’nyszɔn → ST ta’nindyu NT ta’nizu PT ta’nizo ‘to stretch’, *‘ɔrymbi → ST fijyi NT ‘tiri ‘ripe olive’ (Pernot 1934, 110), the words had probably died out from MG by the time the transition /y/ → /i/ was complete after 11th century AD; the Modern word for ‘water’, ne’ro, first appears as early as 2nd century BC. In MG, in fact, /y/ has gone to /u/ in the reflex of *’ɔrymbi: ‘urumba. In Tsakonian, /y/ → /i/ occurs regularly in the prefix syn- and word-initially; Pernot (1934, 111) finds only two exceptions, *ye’tia ‘raininess → ST [ju’cia] ‘wet weather’ and *’yli ‘matter → ST NT ‘ui PT ‘uni ‘silt’ (Deffner’s etymology, uncontested by Pernot; C derives it from *‘i’ys ‘mud’), which appears to be a loan in its -i ending (Pernot 1934, 364), and which is found in that form in other Greek dialects (Cythera) (Hatzidakis 1990 [1907], 278).

2. Word-initial /r/ becomes /ʃ/ (*’ravon → ST ‘ʃafu ‘to sew’, *’riza → ST ‘ʃinda ‘root’). The easiest way to explain this development seems to be by appeal to the Ancient Greek voiceless allophone of /r/, [ɾ], which only occurred word-initially. Pernot (1934, 100) prefers to treat this as a modern phenomenon, related to initial /tr/ → /ʃ/ (see §3.2.3.1a): he posits initial /l/ had /t/ preposed as a dissipatory epenthesis after preceding /n/. For example, he derives ‘ʃinda as *tin ‘tinda → tin ‘tinda → tin ‘ʃinda → tin ‘ʃinda → ti ‘ʃinda ‘the root’. This phenomenon does not apply to PT.

3. Classical /ɔ:/ goes regularly to /u/ rather than /o/ in Tsakonian (*’pqma → ST ‘puma ‘plug’, *’xora → ST xura ‘field’, *’yrafon → ST NT ‘yrafu ‘to write’). This would indicate that Proto-Tsakonian kept /ɔ:/ > */ɔ/ and /o/ apart, as Hatzidakis (1989 [1905], 635 and elsewhere) has claimed. The counterargument raised for Standard Modern Greek also applies for Tsakonian, however: there are instances where Classical short / lax /o/ goes to /u/, and these include four words on the Swadesh-100 list: ‘poda → ST NT ‘pua ‘foot’, ‘yona → ST ‘yuna ‘knee’, ‘stoma → ST NT ‘θuma ‘mouth’, and ‘onoma → ST NT ‘onuma ‘name’. This counterargument is particularly strong in Scutt (1912–13, 145), who asserts that, where /ɔ:/ → /u/ is not morphologically predictable (primarily in verb endings), it has arisen “perhaps under the influence of neighbouring sounds [...] the evidence for [Hatzidakis’] theory can scarcely be said to be satisfactory.” Nonetheless, a (near)-minimal pair like *orɔn → ST NT o’ru ‘to see’, *’ɔra → ST NT ‘ura ‘hour’ corroborates Hatzidakis’ surmise.
One of the most characteristic features of Tsakonian is its avoidance of clusters; these and have no precedent or equivalent in Standard Modern Greek. However, the environment forcing /o/ → /u/ is rather broad: velars, labials, liquids and nasals can either precede or follow (*‘yona → ST ‘yuna ‘knee’, *‘ofis → ST ‘uβι ‘snake’, *‘poδa → ST NT ‘pua ‘foot’, *‘olos → NT PT ‘ule ‘all’); and the rule is by no means exceptionless (*‘yvοs → ST ‘yone ‘spawn’, *‘yomfari → ST ‘ofari ‘boulder’, *‘porοs → ST NT PT ‘ pore ‘door’, *‘olοs → ST PT ‘ole ‘all’).

While the phenomenon applies to PT (*τον → dun ‘their’, *‘fu’nazi → fu’naz ‘he shouts’, *‘λοιqιον → o’yju ‘kinds.GEN”), it is much less widespread. In particular, the participial ending used as the citation form for verbs in Tk (AG -ον) is PT /o/, rather than ST NT /u/. Since in addition Thracian, the MG dialect PT was in contact with, raises unstrusted /o/ to /u/, the evidence for the persistence of the phenomenon is weak.

4. There are a few Tsakonian words where /v/ appears to correspond to the Ancient Greek digamma /w/, which had already disappeared from Attic–Ionic; e. g. γαμνός wamnós ‘lamb’ > *wanne > ‘vane, δαβελός (δαβελός in Hesychius) dawelós ‘torch’ > dave’le.

3.2.3. Innovations

The following processes in Tsakonian are innovations with respect to Middle Greek, and have no precedent or equivalent in Standard Modern Greek.

1. One of the most characteristic features of Tsakonian is its avoidance of clusters; these are uniformly replaced by affricates or aspirated stops.

a. Thus, clusters involving a dental and a liquid (/θr, θr, tr/) go to /tf/ (*‘dryas → ST NT ‘fjua ‘oak’, *‘αθροπος → ST NT ‘at’opο ‘man’, *‘trayos → ST ‘fjao ‘he-goat’). Word-initially, /θr/ is further lenited to /f/ (*‘θρινακς → ST ‘finaka ‘pitchfork’, *‘θρεφον → ST ‘fεfu ‘to fatten’); this also occurs at times for /tr/ (*‘tremοn → ST ‘femу ‘to tremble’). This phenomenon does not apply to PT.

b. Clusters involving a sibilant followed by a stop or fricative go to the homorganic aspirated stop (*‘spιρον → ST ‘pʰiru ‘to sow’, *‘ιστος → ST NT ‘itʰε ‘sail’, *‘σα’fιδα → PT tʰa’fea ST *‘θια’θια > kʰiα’θια [cʰiα’θια] ‘raisin’, *‘επι’αςθι → ST ekj’at’e [c’at’e] ‘I seized’, *‘αςκος → ST NT a’kho ‘sack’, *‘ισ’χον → ST ‘ik’u ‘to hold’). However, there are instances where /sx/ goes to /sk/, as in Modern Greek (*‘s’xa’dα → ST NT as’ka PT ska’ia ‘dry fig’); and /sf/ does not go to /pʰ/ at all (*σ’fι’ri → ST sfi’zi ST NT PT sfi’ri ‘hammer’) (Pernot 1934, 128; Pernot thinks *‘sφονδυλος → ST ‘pʰοndile ‘vertebrum’ is a recent importation, and derives from *‘sφονδυλος). There is evidence to suggest this phenomenon dates from Proto-Tsakonian: AG δοκός askόs Hesychius άκκορ akkόr → ST NT a’kho ‘sack’.

c. Clusters involving a nasal followed by a fricative go to the homorganic aspirated stop (*omfa’los → ST PT a’pʰ’e’a ‘navel’, *‘υρο’νθια → ST ‘yro’tʰia ST PT yru’tʰea ‘punch’, *‘ρυγ’νος → ST ‘juk’o ‘nose’).

d. The cluster /ks/ goes to the affricate /ts/ (*‘ksε’ros → ST NT PT tse’re ‘dry’, *‘fy’laksq → ST fi’atsu ‘I guard.subj’).

e. The stop–stop cluster /kt/ goes to the aspirate /tv/ (*‘dακτυλο → ST NT ‘dαtʰile ‘finger’, *‘νυκτα → ST NT ‘nυtʰa PT ‘nυt’a ‘night’), although /pt/ goes to /ft/ like MG, instead of /v/ (opt: → ST NT ‘ftenu ‘to cook’ (MG mayi’revo), ptόc:sis → ST ‘ftoisi ‘fear’ (MG ‘fivos), pεμπτο: → ST PT ‘pefia ‘Thursday’ (MG ‘pemtiti). Similarly, the fricative–fricative cluster /xθ/ goes to /tv/ (*‘δεξ’θθο → ST ‘δεt’u ‘I accept.subj’, *‘vrex’θθο → ST vre’t’υu

Hatzidakis (cited in Costakis 1951, 37) considered /o/ → /u/ to have been triggered first by adjacent velars or labials, and then extended to liquids and nasals. (This also holds for PT.)
I get wet. subj), although /θο/ goes to /f/ like MG, instead of /内科/ (‘throat’ MG zilevo) — but *mazefθume → PT mazuθume PT mazuθume ‘we get together. subj’

f. Clusters whose second element is /l/ frequently lenite it to /r/ (‘play’ ST pra’kju PT plati, pwa’ti ‘wide’, *klefis → ST NT ‘thief’, *ylqsa → ST NT ‘yusra ‘tongue’, *ax’lades → ST ax’rae PT xrae, xraie ‘pears’). This also occurs for clusters whose second element is /n/ (‘ynpos → ST ‘ipre ‘sleep’, *texni → ST ‘texra ‘craft’). This phenomenon is severely restricted in PT.

g. Clusters involving /t/ and a stop or /d/ go to the homorganic nasal + voiced stop cluster (*skori’os ‘scorpion → k’om’bio ST ‘spider’ PT ‘mole’, *ar’tos → ST NT ‘ande ‘bread’, *arka → ST NT PT ‘anga ‘I took’, *por’di → ST p’und’a ‘fart’).

h. There is evidence suggesting that AG /kk/> Tk /k/: AG sakkos → ST ‘sak’o ‘sack’, AG kokkos → ST NT PT ‘koko’ ‘fava bean’, AG lakkos → ST PT ‘akko’ ‘hole’, Latin accumbo → MG akum’bo NT akum’bixu ST k’un’gixu ‘to touch, to lean on’ (Costakis 1951, 50, 61–62). This phenomenon may even date from Proto-Tsakonian: Costakis cites Phrynichus (2nd century AD), who says that the Dorians pronounced sakkos with two /k/’s, while the Athenians used one.

2. Word-final /o/ is raised after a coronal, becoming /e/ (*’onos → ST NT ‘one ‘donkey’, *’xyros → ST NT PT ‘xjure ‘pig’, *’yraftos → ST xraft’e ‘writing’). Coronals here include front vowels (*’xreos → ST ‘xrie ‘debt’). This change is widely seen, as it involves the major masculine and neuter citation-form endings for nominals. In PT, it is extended to labial nasals (*’dromo → ST ‘drome ‘path’, *’kosmos → ST ‘kosmo ‘world’, *’polemos → ST NT PT ‘polemo PT ‘poleme ‘war, effort’), and sporadically to other labials and velars (*’pyryos → ST ‘kiryo NT ‘piryo PT ‘pirye ‘tower’).

3. Various palatalisations, involving consonants preceding front vowels, and in particular /i/, go further in Tsakonian than in Standard Modern Greek. In fact, Katsanis (1989) draws an intriguing correspondence between Arumanian and Tsakonian: palatalisation proceeded much further in both languages than in dialects of Greek proper, because the latter were much more subject to conservative pressure from Standard Modern Greek than were Tsakonian (a distinct Hellenic language) and Arumanian (a Romance language). Thus, Standard Modern Greek has palatal allophones of velars before front vowels (/k, ɲg, x, y/ → [c, ɲj, ç, j]), and a palatal allophone of the alveolar liquids (/l, n/) before non-syllabic /i/. In Tsakonian, the following palatalisations take place:

a. The palatal unvoiced stop preceding front vowels is further fronted to an alveopalatal affricate (*’ke’ros [ce’ros] → ST NT PT tex’re ‘weather’, *’kipos [ci’pos] → ST NT ‘teipo ‘garden’). Its voiced counterpart fronts even further, to become an alveolar affricate (*an’gizon [ap’jizon] → ST an’dizixu ST NT an’dizixu PT an’dizixo ‘to touch’, *’strap’gizon [strap’jizon] → ST stran’dizixu PT stran’dizixo ‘to strain’). Occasionally, the unvoiced stop also fronts further, to become alveolar (*kefa’li → ST tsu’fa NT tsufala ‘head’, *’kipos → ST ‘teipo, tsipo ‘garden’, Turkish kayik → MG ka’iki → ST ka’itei, ka’itsi ‘boat’). Pernot (1934, 72) notes that, with the exception of tsufa, *k > ts is characteristic of recent loans, and Costakis himself used /tc/ in such words; consistent with this,

*There is some controversy and imprecision in the literature about how to describe both this phoneme and its more front counterpart, and I use the alveopalatal vs the alveolar for convenience: Haralambopoulos (1980) analyses the phonemes I call /te/ and /ts/ as /ts/ and /tks/ respectively. (Hence the minimal pair *keros > tex’re ‘weather’, *keros > tsere ‘dry’; in Haralambopoulos’ transcription, tex’re ‘weather, tsere ‘dry’). Liosis (2007, 342, 699) finds that [ts] is a rare realization of the /te/ phoneme only found among the very oldest female ST speakers; the more common realizations he found were [dz] ~ [ts]. For fluent speakers, he found 13% of instances of the phoneme were realised as [tc], 47% as [ts], and 40% as [dz]. By contrast, he found the phoneme I call /ts/, and Haralambopoulos calls /tsʰ/, was realised as [tsʰ] 78% of the time by fluent speakers, and as [ts] 22% of the time.)
C only records words such as *ka’iteci with /tc/. So it would seem /k/> /ts/ is a late and restricted development, which has exceptionally become generalised in the case of *tsu’fia. In PT, *k/> ts is more common (*bu’kia → PT bu’tsia ‘mouthful’, *ky’lia → PT ti’slia ‘belly’, *kyp’rinos → H tisp’rinε V kip’rini ‘carp’).

b. The typological gap vacated by palatalised velars is filled by both palatalised labials and dentals, which become palatals before /i/ (*pi’yaði → ST [ci’yaði] ‘well’, *pi’sa → ST [c’isa] ‘tar’, *kum’bi → ST [kun’çi] ‘button’, *ty’ros → ST [ci’re] NT [ci’re] ‘cheese’, *dia’mandi → ST NT [ja’maçi] ‘diamond’). (Following Haralambopoulos’ (1980, 53) analysis, these palatal stops are henceforth treated phonologically as velars preceding a yod: [ci’re] = /kju’re/.) In NT, these palatalisations occur but are severely restricted (*pi’anóŋ → ST NT kjanu [’canu] ‘to get’, *ty’lįęŋ → ST NT kli’liu [ci’liu] ‘to wrap’, *pra’mateft’is → ST NT prama’kef’ki [prama’kef’ci] ‘salesman’, but *pi’n’on → NT pi’nu ST ki’n[u] [’cinu] ‘to be hungry’, *a’yapi → NT a’yapi ST a’yaki [a’yaci] ‘love’, *ti’m’on → NT ti’mu ST ki’mu [ci’mu] ‘to honour’,[k’u’ti] → NT k’u’ti SU k’u’ki [ku’ci] ‘box’) (Costakis 1951, 55). This phenomenon does not take place at all in PT; the instances given by Costakis (1951, 163) of /d/> /ɡ/ do not involve palatalisation (*ma’d̪ο → ‘mango ‘to pluck’, *ma’d̪umenos → maŋ’gome ‘plucked’) Palatalised velars are thus also realised as dental affricates (*oti → ST NT PT ’otsi ‘complementiser’, *op’tilos → *op’tilos → ST NT eps’ile PT psi’le ‘eye’). According to Pernot (1934, 74), /ti/> [ci] is older than /ti/> /tsi/, and there is no reason to think that /ti/> [ci]> [tsi]. The transition /ti/> [ci] went through the intermediate step [ti], still extant as a realisation in Pernot’s time, although not as frequent as [ci]; Pernot found that [ti] was frequently backed: [tij]. The labial seems to have gone through the same transition (Pernot 1934, 77): /pi/> */pti/> */ti/> [ci]. Pernot found that like /ti/, /pi/ was realised as both [ti] and [ci], so that there was no difference in realisation between *ti’mä → ST [ti’mä, ’cima ‘honour.IMP!’ and *pi’mä → ST [’tima, ’cima ‘drinking’, although he had the impression that “pi se gutturisation plus asement que ti.” Indeed, Pernot even heard instances where backed /p/ was no longer palatal: *ndro’pi → ST [dro’ki] ‘shame’.

c. Palatalised alveolar liquids become palatal; unlike Standard Modern Greek, palatal liquids enjoy phonemic status. Such palatalisation also occurs before syllabic /i/, unlike in MG, where it is restricted to non-vocalic /i/ (*a’n’iºν [a’n’iºν] → ST NT a’n’indu PT a’n’iýo/ ‘to open’ (MG [a’n’iýo]), *il’i’azon [i’k’a’zɔn] → ST ’k’azu PT ’k’azo ‘to sun’ (MG [’k’azɔ]).) (As Costakis (1951, 33) notes, this is also characteristic of the Standard-Greek speaking villages to the south of Leoniūdi, such as Tsitalia, and indeed of Peloponnesian Greek in general; for example, /’yanis/ [’janis] ‘John’ is pronounced as [’janis] in Tsitalia — although, perplexingly, as [’janis] in Tsakonian.).

4. Intervocalic voiced fricatives — particularly /d/ and /g/—frequently drop out (*pod’as → ST NT ’p’u’a PT pa ‘foot’, *evo’ma’da → ST v’i’ma NT PT v’i’ma’da ‘week’, *o’y’at’ir → ST ’sati NT ’fati PT ’sae ‘daughter’, *trayos → ST ’tj’ao ‘he-goat’). This process is characteristic of other Modern Greek dialects, such as Cypriot.

5. Intervocalic hiatus or yod is fortitioned to /i/ (*mya → ST PT ’muza ‘fly’, *y’os → ST NT PT i’se ‘son’ or /v/ (AG k’á’os ‘chaos, chasm’ → *xaos → ST NT ’xavo ‘chasm’, *y’datu → y’atu → ST NT i’atu ‘water.gen’, AG kyanō’s ‘blue’ → ST NT ku’vane ‘black’). There seems to be no clear conditioning factor at work: cf. ’muza with ku’vane. This development was already

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5 Tsitalia is a Standard-Greek-speaking village immediately to the south of Leoniūdi; it is the village Costakis’ father came from. According to Liosis (2007, 41) Albanian placenames stop between Tsitalia and Leoniūdi, indicating that it was the start of a historically mixed Albanian / Tsakonian-speaking district.
in place by 1668; Çelebi records *izemi ‘my son’. This contrasts with MG, which inserts /γ/ instead (αχ:ρ, αέρος → a’eras → a’yeras ‘air’, ακούω: → a’kuo → a’kuyo ‘to hear’, áσ:ρος → ‘ayoros → ‘ayuros ‘unripe’).

6. Infrequently, stops become aspirated in Tsakonian; this is a characteristic of South-Eastern Greek dialects, as well (Pernot 1934, 131). In Peloponnesian Tsakonian, this only occurs for /k/ and /p/, predominantly word-initially (*kambi → ST PT ‘kamba’ ‘caterpillar’, *por’di → ST p’un’da PT p’or’dà ‘fart’, *pondi’kos → ST p’onji’ko NT pondi’ko PT pond’oke H p’ondi’ko ‘mouse’). In PT, this aspiration is further extended to /t/ (Mirambel 1960, 58) (*θyya’teres → sa’tere ‘daughters’).

7. There is a tendency for /e/ to be raised to /i/ word-finally (*ε’dare→ ST NT e’dar’i ‘now’, *ame’ros → ame’re→ ST ame’ri ‘day.GEN’, *kalos → *kale → ST NT ‘kali ‘stick’, *sates → ST NT ‘satsi ‘this year’), although the conditioning is not obvious; and in the word-final groups /’ea/ and /’eo/ (*’elea → ST NT e’lia PT e’ia ‘olive’, *’xreos → ST ‘xrie ‘debt’). The raising of /e/ word-finally does not apply to PT.

8. As seen above, /s/ + stop combinations go to aspirated stops. When an /s/ + stop combination results in Tsakonian as a secondary development — e. g. through an interceding vowel dropping out, or as a more recent loan into the language — /s/ becomes /ʃ/ (Mediaeval Greek *’laspı → ST ‘laspi PT ‘a/pi, o’a/pi ‘mud’, *sa tanq → ST ‘fтанu ‘above, in the mountains’).

3.2.4. Local Innovations

The following processes in Tsakonian are regionally restricted to Southern Tsakonian, rather than Northern. In all these instances, Northern Tsakonian patterns consistently with Standard Modern Greek; this has led Costakis to conclude that Northern Tsakonian ‘corrected’ the phonological innovations, undoing them under Standard Modern Greek influence. Liosis (2007, 167) however rejects this as an instance of internalised bias against Northern Tsakonian, which retreated much earlier than Southern, and believes they are simply NT archaisms — which is indeed the more economical explanation.

1. /l/ disappears before back vowels (*av’dela → ST av’dea NT av’dela PT av’dela, av’dewa, av’daa ‘leech’, *lo’vos → ST ’oyo NT ’loyo PT ‘loyo, ’oyo ‘word’, *’luzon → ST uk’u NT ‘luk’u PT ’luzo, ’uzo ‘to bathe’). This change may have been in place by 1668, as discussed above, and the data from Propontis Tsakonian shows it was also in place before the colonisation (Costakis 1951, 56); it is, as Hatzidakis (1989 [1905], 365) pointed out, more recent than the fronting of /o/ to /e/ after coronals (*kal’os → ST NT PT ka’le ‘good’, ’olos → ST NT PT ‘ole ‘all’). Costakis’ (1951, 57) argument that it is Northern Tsakonian that innovates in reintroducing /l/ is based on the existence of hypercorrect insertion of /l/ (which also took place in Leonidio, the urban centre of Modern Tsakonia) (*’axyra → NT ’laxiru ST ’axure ‘hay’, *’aypnia → NT aip’nila ST PT aip’nia ‘sleeplessness’, *’ayano → Leonidio ’layane ST NT PT ’ayane ‘beard of wheat’).

This process also takes place in PT; but while it is regular in Vatka, it is not attested in Havoutsı — which, being on the coast, was subject to much stronger influence from MG (*’ala → ST a NT H ’ala V ’awu, ’aa ‘other.FEM’, *’la’vos → ST V a’yo NT H la’yo ‘hare’, *los’tos → ST os’te NT H los’te H us’te V us’te ‘crowbar’). Vatka Tsakonian also presents other consonants in place of the lenited /l/; Costakis’ (1951, 161–162) discussion implies they are epenthetic, but they are clearly intermediate stages in the lenition (awkwardly described by Costakis), which has thus not progressed as thoroughly as in ST. Thus, velarised */l/ is realised in Vatka as θ, /o/ (*’lampa → o’aampa ‘lamp’), “a sound resembling more or less /u/” (clearly /w/; Makris (1951, 201) describes it as “corresponding almost to the digamma (p”), which in Ancient Greek represented /w/, and is a common reflex cross-linguistically of /w/ (*’ylosa → yu’osa [’ywosa] ‘tongue’), 29
“a sound comparable to /uv/, with /v/ barely audible” (possibly fricated /w/) (*xlakos → xauva’ko [xaya’ko] ‘to be ruined’), “a clear /v/” (by fortition of /w/) (*ke’fala → tse’fava ‘head’), /vo/ (combining two lenited forms (*ka’la → kavo’a ‘well.ADV’), and /vu/ (possibly /vw/ or /v̝w/, as an intermediate stage between /v/ and /v/(*a’naskela → a’nasteevva [a’nasteevwa] ‘supine’).

2. Palatalised /m/ assimilates to /n/ (*mia [mjà] → ST µia PT me ‘one’, *mia → ST ’nia NT PT ’mia ‘one’, *ma’mi → ST ma’ni NT PT ma’mi ‘midwife’). This is consistent with the behaviour of palatalised /n/ in Tsakonian.

3. Unlike Standard Modern Greek, the palatalisation of liquids also extends to /r/, whose palatalised variant is realised as /r/ in women’s Southern Tsakonian, although modern men’s Southern Tsakonian realise it as /r/ (Haralambopoulos 1980, 35) (e. g. *ry’aki → ’zatei, ri’aki ‘stream’, *’ryzi → ’zizi, ’rizi ‘rice’). In xix AD, this palatalised variant seems to have been more like a fricative trill [r] (Scutt 1912–13, 151: “it becomes something very similar to a Czechish r, often sounding like ζ’”); by the early twentieth century, this realisation had substantially died out (Pernot 1934, 97). In Northern Tsakonian, when /r/ is palatalised, Costakis (1951, 33) distinguishes between old people’s [z] and the younger / male realisations [rz] and [r̝z], which he considers assimilations towards MG /ri/—a changeover apparently complete by Haralambopoulos’ time. While Liosis (2007, 351) did observe variation between [z] and [r], he did not find it correlated with gender, and indeed he found [r] is now extremely rare: 3% for fluent speakers, exclusively in NT, against 43% for [z] and 50% for the MG [r].

4. There are several instances where NT /i/ corresponds to ST /u, ju/ (*’artyma → NT PT ’artima ST ’artuma ‘cheese’, *y’môn → NT ’jimu ST ’numu ‘you.pl’, *v’y’zi → NT PT ’izi ST PT ’izi ‘teat’) and vice versa (*’try’yon → NT tf’yu ST tf’yu PT tri’yo ‘to harvest’, *syy’r’izon → NT su’yur’izu ST si’yizu PT si’yizo ‘to tidy’, *ky’lon → NT ku’lizu ST ak’u’liu PT te’ilo, te’o ‘to roll’). In this instance, one dialect is conservative while the other patterns with Standard Modern Greek; neither dialect is consistently more conservative, which points to either different loans in different dialects, or lexical diffusion.

5. NT uses /ʃ/ “more frequently” (Costakis 1951, 32) than ST. Although Costakis gives no conditioning factors, the innovation specific to NT seems to be a palatalisation of /s/, which also extends to the clusters /ks/ (which goes to /ts/ regularly) and /ps/ (*kra’si → NT kra’fi ST PT kra’si ‘wine’; *’ksila → NT ’kilia PT ’ksila, ’ksia, ’ksipa (ST ’kasia) ‘pieces of wood’, *taksi → NT ’taksi ST PT ’taksi ‘order’, menstrual period, *ek’inda → NT ek’inda ST ’ksinda ‘sixty’; *psy’xi → NT ’psixa ST PT ’psixa ‘soul’). A palatalisation interpretation is reinforced by Costakis’ (1951, 37) observation that, where */u/ > */y/ > */j/ after a coronal, “/j/ is not heard after */ʃ/ ([ʃ], psʃ) or */ʃ/” (*karyo → NT ’kau, ’karyu, ’karu, ST ’kazi, ST PT ’kari ‘walnut’, *syo → NT ’jukɔ ST PT ’suko ‘fig’, *ok’symilo → NT tf’ulame ST tf’uma’si ‘plum’, *psy’xi → NT ’psixa ST PT ’psixa ‘soul’). Strangely, C makes no mention of this process, nor does it list many of the variant pronunciations given in Costakis (1951). This process also applies to cases where Tk /s/ is a reflex of AG /tʰ/ (*’ka’timenos → NT ka’jimene ST ka’simene ‘seated’). In the case of NT ’fatì ST ’satì ‘daughter’, we may have a secondary development from the etymology ’ugâ:’r > ’θy’yatir: *’θy’yatir: *’syy’yatir: *’sju’yatir (normal development after coronal)> *’sju’ati (morphological reanalysis) > NT *’fui’ati: ’fati; in ST the palatalisation did not take place, so *’sju’ati: *’sjati: ’sati. Costakis (1951, 32) attributes this development to the neighbouring non-Tsakonian villages, “where /s/ is pronounced thick [as /ʃ/];” one would presume that the phenomenon in those villages is also an instance of palatalisation.

6. PT has lost the Peloponnesian Tsakonian contrast between /u/ and / ju/ (*’lykos → ST ’luko H luko H V uko ‘wolf’, *’endyma → ST ’onyuma PT ’onduma ‘clothing’, *’stilos → ST [c’ule] PT t’ule ‘post’). /ju/ is present only in the stem *’gyro: *’yjuro → ST NT PT [jure] ‘around’.
7. PT regularly merges /ia/ into /æ/ or /æa/, when /i/ is unstressed (i.e. a yod) (*mya’lo → mæ’e ‘brain’, *fți’ano → ftae’no ‘to make’; *vori’a’des → voræ’ade ‘north winds’, *kam’ai’a → kamae’a ‘any.FEM’). In mainland Tsakonian, this applies only to the proper name *milti’a’dis → miltæ’di ‘Miltiades’, which is of recent importation.

That a form has undergone characteristic Tsakonian phonological processes is not in itself sufficient guarantee that it is not a loan. Some phonological processes — particularly those involved in morphology and the palatalisation of /k/ — are universal, and apply to words which are definitely loans. Examples given by Pernot (1934, 43) include Turkish inat → MG /i’nati/ → [i’naci, i’natsi] ‘spite’, MG /irino’dıksi/ → [ʒıno’dıtsi] ‘justice of the peace’, and MG /γramati’ki/ → [γramaci’tsi] ‘grammar’. Phonological assimilation can be undertaken quite systematically in Tsakonian; as Pernot (1934, 43) comments, “il faut tenir compte du fait que tous les villageois ont dans l’esprit un système de correspondances phonétiques et morphologiques, une sorte de sentiment linguistique inné, qui leur permet d’ordinaire une grande précision.”

One final point which should be raised is the likelihood of non-Greek influence on Tsakonian. As Pernot (1934, 141), himself formerly a sceptic on the Doric origins of Tsakonian, admits, “je touche ici à une point délicat” — Hesseling’s speculations on non-Greek admixtures in Tsakonian drew the indignant response of a Leonidio town meeting, and as Pernot (1934, 144) grumbles, “ce n’est pas ainsi que la question pourra être éclaircie.”

The Doric heritage of Tsakonian seems now to be beyond dispute. Yet it is also true that this Doric heritage has been overstated, for reasons of the prestige which comes with the unique status of Tsakonian as heir to Doric. One need only contrast Pernot’s scrupulous caution with the enthusiasm of both Deffner before him, and Costakis after him. Yet Costakis’ dictum (pers. comm.) that “the foreign influences on Tsakonian stopped at the shepherd’s hut door,” rings true: while livestock colours are largely borrowed from Albanian, for example (Costakis 1975–76), the names of kitchen utensils are native. The influence of Slavonic on Tsakonian is similarly small (Kisilier 2017, 114–115 lists 13 loanwords, and tsepa ‘skin, membrane’ discussed in this article is likely a fourteenth) — although Tsakonia has bordered on first Slavonic-speaking, and then Albanian-speaking territory for a long period. (Liosis 2007 nonetheless has extensive documentation on the possibility of Albanian–Tsakonian contact, with a formerly mixed population immediately south of present-day Tsakonia. Kisilier 2017, 115–116 also adduces a longer list of Albanian loanwords.)

Pernot’s (1934, 143–144) speculations on foreign (Slavonic) influence on Tsakonian are limited to morphology; they appear somewhat impressionistic, and in any case are beyond the scope of a study on historical phonology. One phonological feature Pernot does find worth mentioning is the extent of palatalisation in Tsakonian — both how widely it is spread (including, for example, all liquids), and the phenomena /ti/> [tsi] and /pi/> *[pti], which are not characteristic of Greek. Pernot’s (1934, 141) impression is that

une influence extérieure qui n’est pas celle de la langue commune, s’est exercée à un moment, donné, qu’elle n’a eu phonétiquement qu’une influence limitée et que le dialecte est en train de réagir, dans la mesure où il le peut.

4. Historical Lexical Issues

Two major processes involved in the transition from Ancient to Modern Greek vocabulary are the replacement of nouns by -ion diminutives (followed by the dropping of the /on/ neuter suffix after /i/) (poúś → pódi’on ‘foot’, ónuk’s → onúk’ion → ’nixi ‘nail’), and the morphological regularisation of nominals by generalising their oblique stems to the nominative (günê;
gunaikós → γυνέκα, γυνέκας ‘woman’, ἀνέρ, ἀνδρός → ἄνδρα, ἄνδρα ‘man’). Both these processes date from Middle Greek; the use of diminutives is already widespread in the New Testament, while the morphological simplification is noticeable in papyri after 3rd century AD.

The citation forms given for verbs vary. In Ancient and Modern Greek, the form given is the first person indicative present; the infinitive has not survived into Modern Greek. In Tsakonian, the indicative present tense is formed with an auxiliary and a participle; so the active present participle is the citation form. The Tsakonian participle corresponds to the Ancient Greek ɔː ending; as the /n/ has dropped out, the reflex /u/ is usually the same as that for the indicative present, whose first person ending is ɔː (Standard Modern Greek o, Metropolitan Tsakonian *u).

The effect of Puristic on MG has been profound; ancient revivals have displaced vocabulary even in the Swadesh-100 list (e.g. ‘skin’; Kassian 2018 elicits the archaic fila’s for ‘bark’). In order to account for this, I have attempted to provide the pre-Puristic vernacular term where possible.

5. Swadesh-100 List

In the following, I draw mainly on Costakis’ (1986) comprehensive dictionary to compile the basic word lists. As this is a unidirectional dictionary, in which the entries for different dialect equivalents are not always cross-linked, I have not been successful in tracing all entries for Northern Tsakonian; I have supplemented this with enquiries to Dimitris Houpis. As comparison with Costakis (1951) and Pernot (1934) makes clear, the dictionary does not list all phonetic variation present in the language — although it seems fairly reliable for Southern Tsakonian. To determine the unmarked form out of the available options, I have used textual frequency in the Tsakonian texts at my disposal: for all three dialects, the dialect texts collected and published by Costakis (1981; 1986 — predominantly Southern); in addition, for Southern Tsakonian, the texts in Haralambopoulos (1980); for Northern Tsakonian (Kastanitsa), Houpis’ texts (1990; 1993) — although the fact that Houpis is literate and late means his texts should be looked at with caution, notwithstanding the fact that Houpis checked his language use with old Kastanitsiots; and for Propontis Tsakonian (Havoutsi), Karaliotis’ (1969) autobiography, written at the behest of Costakis. I have occasionally cited the word list gathered in Kisilier’s (2017) fieldwork, where it supplements other findings.

Our major source in tracing the transition from Doric to Tsakonian, after the Neo-Laconian inscriptions, is Hesychius’ 5th century AD dialect dictionary. This is a highly heterogeneous source containing words ranging from the Homeric to comtemporary Latin loanwords, with no indication of provenance other than a one-word regional epithet, like ‘Cypriot’ or ‘Laconian’. Pernot (1934, 103–105) spends some time discussing how reliable a witness Hesychius is; while there are some inconsistencies, particularly in transcription, he takes Hesychius’ Laconian forms present in Tsakonian but unattested in Neo-Laconian as reasonably belonging to 4th century AD Proto-Tsakonian. More recently, in Tsakonian proper, we have 35 Tsakonian words recorded by Evliya Çelebi in 1668 (cited in Costakis 1951), the 55 words recorded by Jean-Baptiste-Gaspard d’Ansse de Villoison in his 1785–86 trip to Greece and published in 1788 (Famerie 2007), with a further 100 words recorded in his travel journal and recently published (Famerie 2006, not seen for this study); and the 52 words and phrases recorded by Johan David Åkerblad, in one of his trips to Greece, either 1785–1788, or 1796–1797 (Manolessou and Pantelidis 2018).

The villages drawn upon as reference points for the three dialects are those about whose language we know most: Melana (Costakis’ birthplace) for Southern Tsakonian, Kastanitsa for Northern Tsakonian, and Havoutsí for Propontis Tsakonian. The orthography used is that of Costakis (1986). Comparative text counts between two synonyms in a Tsakonian dialect are only given when neither is cognate with the Standard Modern Greek form, to determine whether there is a match or not. To determine the unmarked stems in Classical Greek, text counts
were used: primarily in the corpus of Plato, secondarily in Aristophanes and Thucydides (using the *Thesaurus Linguae Graecae*); Classical words were checked against Woodhouse 1979 [1932] and Liddell, Scott *et al.* (1940).

| Word | MG | NT | ST | PT |
|------|----|----|----|----|
| 1. *I* | εγώ ε’γο | εξού ε’ζυ | εξού(νε) ε’ζυ(νε) | εγώ ε’γο, εγώνα ε’γόνα, (ε)γόνε (ε)’γόνε |
| 2. *thou* | εσού ε’σι | εκιού ε’κ’ζυ | εκιού(νε) ε’κ’ζυ(νε) | (ε)τού (ε)’τυ, (ε)τούνε (ε)’τυνε, ετούνα ε’τυνα |
| 3. *we* | εμείς ε’μισ | εμεί ε’μι, εμείδ ε’μίν, ενεί(νε) ε’νι(νε) | εμεί ε’μι, εμείδ ε’μίν, εμείνε ε’μίνε |
| 4. *this* | αυτός α’τόσ | έντενη ’ενδενί | έντερη ’ενδερί | τερή ’ετερί |
| 5. *that* | εκείνος ε’κ’νος | ετήνε ε’τίνε | έτρεπ’ ετερί | τήνε ’τίνε |

Ἀ έσου. *MT* ε’ζυ < εγίο [ε’]ο < Α εγώ εγό: (Pernot 1934, 203): first the intervocalic fricative is lenited to a yod or dropped (§3.2.3.4), and then it is refortitioned to /z/ (§3.2.3.5), with final /σ/ raised to /u/ (§3.2.2.3). *ezune, e’gone* by analogy with *e’kjune, e’tune* ‘thou’. All forms cognate, although PT may have borrowed the MG form.

Ἀ ετ’ζου. MG ε’ςι < ΙΓ ές υ < ΙΕ *του* ‘thou.nοm’, asibilated by *των*– ‘thou.οbl’. Τk e’kJu, e’tu < D τó τύ: < ΙΕ *τυ* (C; Palmer 1980, 288; Hesychius is somewhat vague in this respect).

For the palatalisation /τ/ / > /k/, (C) see §3.2.3b. Pernot (1934, 187) gives the form as [e’tu]; at the time Pernot collected his data, there was still fluidity between [t] and [c], which seems now to have been resolved in favour of [c]. Costakis (1951, 191) cites e’tu as an instance of PT being more conservative than MT; however, the loss of palatal /ju/ is a PT innovation (§3.2.4.6).

Pernot (1934, 204) explains the endings of ST ‘you’ as being completely remodelled after those for *I* (*ετ’ζυ* after *εγί’υ*), rather than pointing back to Hesychius’ τούνη τούνε: ‘you’, which does not explain the palatalisation of /τ/. The palatalisation before reflexes of EMG /y/ (§3.2.2.1), Pernot had decided, occurs only to those instances where Doric /u/ had not survived — and it seems from Hesychius that Doric /u/ has survived here. (This seems to be confirmed by PT e’tu, which does not palatalise.) He conceded nevertheless that (“semble-t-il”) the form is likely Doric in origin, and (ε)’kju is the regular Tk reflex of D τυ: (τυ: > *τυ* > *kju*). The *ες* suffix is also present as an emphatic in the Modern Greek accusative of ‘thou’ (ε’ςενα, ε’ςενανε), whence it has been generalised in Tsakonian to the nominative. The initial /ε/ of e’si developed in Greek by analogy with egό: *I* around 1st century AD (Palmer 1980, 184). All forms cognate.

Ἀ εν’i. ST e’nι follows from palatalisation of /m/ (§3.2.4.2). Costakis (1951, 84) also gives e’nυ for NT. Tsakonian has not held on to D ήμεις ha:mes (Palmer 1980, 288), but has adopted IG ήμεις he:meis > MG εμείς e’mis. The D form survives in M K oblique vάμου *namu* ‘us’, which Pernot (1934, 202) derives from D ήμον ha:mον ‘of us’, with the initial /n/ metanalysed.

Anagnostopoulos (cited in Pernot 1934, 203) and Scutt (1912–13, 163) attempt to assert the Doric status of e’nι by adducing D ήμιο hemίο and ήμιο hemίς, used by the ancient comedian Rhinthon (C). The simplest explanation nevertheless seems to be that this is an early MG (or IG) loan — with which Pernot (1934, 204) concurs: “La non persistance de a’ni = ήμεις (cf. *namu*) rend possible, mais non certain, un emprunt à la langue commune.” All forms borrowed (very early).
À etineri ‘that masc’, eteneni ‘that fem’ (see below). The correspondences of demonstrative pronouns are complex. MG has a three-way distinction: τοῦτος ‘tutos’ (proximal), αὐτός ‘af’tos (unmarked), εκείνος ‘ekinos’ (distal). In Pernot (1934, 191), ST is said to also have a three-way distinction: ἐντενή ‘endeni’ or ἐντέρη ‘enderi’ (proximal), ἐτενή ‘eteni’ (medium distance), ἐτήνε e’tine’ (distal—“ce dernier indiquant un grand éloignement dans le temps out dans l’espace”). (This is not counting the emphatic variants ending in -ori and -eri.) Pernot reports that Costakis (his language consultant) “saisit mal une opposition de τοῦτος et de αὐτός”, and thus glossed the three Tsakonian demonstratives as αὐτός εδό (af’tos here), αὐτός εκεί (af’tos there), and εκείνος.

In C, however, ‘eteni’ is listed simply as a variant of ‘endeni’. Furthermore, C refers to e’tine as “indicating no clear differentiation of distance”—in other words, it is claimed to be unmarked, not distal. This is illustrated in Pernot’s (1934, 43) report that Tsakonians speaking Standard Modern Greek say για κείνο με ήθελες για ‘kino me ’ṭheles instead of γι’ αυτό με ήθελες γι α’f’to me ‘ṭheles for ‘that’s why you wanted me’; this is because the unmarked demonstrative, used in both languages for clausal referents, is in Tsakonian the distal rather than the medial (cf. Tsakonian [’ja ci m ‘θeu] ‘ibid.’, where (’e)ci is the neuter distal).

While NT has a huge panoply of demonstratives (11 nominative masculine forms), Costakis (1951, 86) claims that the “same forms are used in NT whether for a great or small distance, while in ST the distinction is clear” (i.e. the distance distinctions are effaced in NT.) PT is similarly complex, with 6 demonstratives. To help make some sense of all this, I tabulate the demonstratives fall in three groups:

**Group A (ende-)**: EMG ἐνι tos ‘it is he’ > Tsitalia ἐντος ‘endos’ ‘there he is’ (Pernot 1934, 208). Pernot gives the traditional derivation τος < αὐτός ‘af’tos ‘that one.nom’; but Joseph (1994) has proposed that this is in fact an analogical development from accusative τον ton < αὐτόν af’ton.

Defnner (cited in Scutt 1912–13, 164) sees the en element as derived from AG ἕν ‘behold!’, rather than ἐνι ‘eni’ ‘it is’. Scutt (1912–13, 164) finds these etymologies improbable, and prefers a connection with Hesychius ἄνδα ἀνά ‘that’ (Cypriot), ἀντετούς antetoús ‘that year’ (Laconian); Pernot (1934, 207) comments that “il y a loin de là, sous tous les rapports, au tsakonien ’enderi, ’endai’. C prefers an etymological connection with etήνε e’tine; as a result, he spells the pronoun endings with η, although in Costakis (1951) he used i.

Tzitzilis (in prep, cited in Liosis 2007, 415) rejects the proposed grammaticalisation of ‘eni tos ‘it is he’, and prefers to see proximal ’endeni and medial ’eteni as cognate, with et- > “emphatic” ett- > et- > e(n)d-, given that ett- and e(n)d- pronouns are attested in Greek dialect. The forms he cites starting in ett- (Italy, Cappadocia) are more readily derived from aftos > af’tos by assimilation. The claim of ett- > e(n)d- is based on Cappadocian etos ~ ettos ~ edos as recorded in the Historical Dictionary of Modern Greek (-t- variants also occur in Chios and Southern Italy): the likeliest account for that variation is analogical extension from clitic pronoun do, which in turn resulted from metanalysis of -n to (a commonplace development in Greek dialect). (A similar development would not be feasible in Tsakonian, which lacks that specific clitic.)

Tk ἐντενή ’endeni, PT ἐντενα ’endena, ’τενά nde’na, ’τενή nde’ni < ἐντος ’endene, ACC. of ἐντος. The unpalatalised /n/ in ’endeni indicates the form was originally *’endene, so that

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* Liosis (2007, 413) retorts that Tsakonian ’eci is the neuter of both medial ’eteni and distal e’tine. In addition, he notes that ekinos is unmarked as to distance in the Peloponnesian dialects of Modern Greek as well. He prefers Tzitzilis’ (in prep) etymological argument identifying proximal ’endeni and medial ’eteni as cognate, and so being in effect a single proximal pronoun opposed to e’tine; I admit to finding that derivation arbitrary. He does concede that Pernot’s observation hints that there was a three-way distinction in Tsakonian, which has since died out under Standard Modern Greek influence; Liosis has found all distinctions effaced between demonstrative pronouns, and notes that Costakis (1951, 86) had already made the same observation for NT.
palatalisation was not triggered (Pernot 1934, 208). Unlike other variants of Greek, prenasalisation of voiced stops in Tsakonian is still the usual option, as confirmed in Liosis (2007, 344); so 'endeni, which is occasionally realized as 'edeni.

MT ἐντερη 'enderi, M ντερη nde'ri, PT τερη te'ri < *ἐντε 'ende (< 'endos) + ορι o'ri 'look!' This means that ἐντερη was originally an emphatic form, and the emphatic forms ἐντενορι 'endenoroi' and ἐντενοποι 'etineroi' (Pernot 1934, 193). Costakis (1951, 177) derives the -ri suffix from Tsakonian rhotacism and the Ancient emphatic clitic -i, which is well attested for pronouns in Ancient Greek (e.g. ουτος-ι 'this very one'); thus, έντος-ι 'endosi > έντεο-ι 'endesi > ἐντερη 'enderi. But there is an attested tendency for renewal of -ori, and the posited -i suffix seems artificial (Modern Greek affixes -e to pronouns instead, and only to the accusative); so Pernot’s derivation is much more believable.⁷

In fact, the -ori suffix has been semantically bleached in the emphatics as well, giving the renewed forms ἐντενοποι 'endenoroi' and ἐντενοποι 'etineroi' (Pernot 1934, 193). Costakis (1951, 177) derives the -ri suffix from Tsakonian rhotacism and the Ancient emphatic clitic -i, which is well attested for pronouns in Ancient Greek (e.g. ουτος-ι 'this very one'); thus, έντος-ι 'endosi > έντεο-ι 'endesi> ἐντερη 'enderi. But there is an attested tendency for renewal of -ori, and the posited -i suffix seems artificial (Modern Greek affixes -e to pronouns instead, and only to the accusative); so Pernot’s derivation is much more believable.⁷

NT ἐντερη 'endeji, ἐντερη 'endei. Given the NT emphatic form ἐντενογί endenoi'yi (ογί o'gi 'here'), one can easily surmise that this is yet another blanched emphatic: 'endeji < *ende + ορι. 'endei would then follow by lenition of /y/ [j]. Tzitzilis (in prep, cited in Liosis 2007, 415) instead sees here the Ancient formant -ge/-gi, which he claims is also used in Southern Italian and Heptanesian Greek.

**Group B** (ete-): EMG ἐδε τος 'ede tos 'look! he’ > Dialectal Greek ἐ τος 'e tos ‘there he is’ (attested, for instance, in Crete and Chios); ἐδε 'ede> EMG εί e ‘interjection’ + ἐδέ i'dé ‘look!’ Tzitzilis (in prep, cited in Liosis 2007, 415) considers this derivation “unsustainable”, and derives it instead from αυτός > ατός ‘that’ > *ἐτος > ‘etos.

MT ἐτενη 'eteni < ἐτον 'e tone, ACC. of 'etos.

NT ἐτερη 'etere, PT τορη to'ri, τερη te'ri < *ἐτε 'ete (< 'etos) + ορι o'ri 'look!’ Pernot (1934, 209) expresses surprise that Costakis’ paradigm does not contain this term, by analogy with 'enderi.

**Group C** (eti-): D τήνος τένος ‘that one’ (cognate with MG εκείνος e'kinos; cf. Aeolian κήνος kēnos, AG (ἐ)κένος (e)kēnos) has been proposed as an etymon (Hatzidakis 1989 [1905], 94, 365, Scutt 1912–13, 165; defended in Liosis 2007, 416). Costakis does not question the Doric etymology of ετίνε (presumably because of PT 'tine)—hence its spelling with an η in C (τήνος > ττήνε). But this proposal is emphatically rejected by Pernot (1934, 209–210) (“s’il existe des lois phonétiques, le τ prouve précisément qu’il ne s’agit pas du dorien τήνος”), as /t/ here has undergone neither of the two palatalisations characteristic of Tsakonian, to [c] or [ts]. (τέ:nos is not to be confused with MG e’kinos, whose reflex would have been *e’tcine.)

As Scutt points out, the neuter of ετίνε is indeed έκηνι έκκινη; this would suggest *ετίνη, confirming τέ:nos as the etymon — but this does not explain the unpalatalised masculine and feminine forms. Scutt believes that the /t/ failed to palatalise because /i/ had dropped out (ετίνε’ri > *ετε’ri), and that in modern ST the reappearing /i/ is epenthetic (cf. *καπ’nos > kapi’ne ‘smoke’); the neuter did not have the /i/ drop out, he maintains, “owing to the number of syllables and position of the accent”. But as Pernot retorts, /i/ drops out of etine’ri

⁷ In doing so contra Costakis and Liosis, I take Pernot’s approach of considering modern etymologies in Tsakonian more plausible than ancient accounts, where they involve elements that have not otherwise survived in Greek, ceteris paribus. Liosis (2007, 415) argues for a clitic -i based on the older feminine genitives en’dari < endas + i, et’ari < etinas + i (§3.2.1.2), which analogically extended to the feminine nominatives en’dari, et’ari, where a final -s would not be justified. But if an ancient clitic -i can extend from FEM.GEN to FEM.NOM, then a modern suffixed -o’ri can just as readily (and with fewer moving parts) extend from MASC.NOM and FEM.NOM to FEM.GEN.
in rapid speech, and at any rate the stressed /i/ of *e'tine could hardly be epenthetic. In the end, Pernot cannot offer an alternative etymology; but drawing on the fact that, for Costakis, the declension paradigm of *e'tine is contaminated in the neuter by that of *eteni, he suspects that there might have been influence working between several forms: in particular, that the /t/ of *e'tine is related to a'tos or e'tos, dialectal variants of af'tos.

Tk⁴ έτηνε ρί *e'tine, ST έτή *e'tī, PT τηνε 'tine, ντηνε 'ndine. Of these, *e'tī is used as an animate or inanimate pronoun where MG would drop the pronoun; this even includes dummy pronouns, as in mē e'catē ε'rexo ‘but it started raining’ (Pernot 1934, 192). Pernot (1934, 210) does not believe enough is known to establish whether *e'tī is a truncation of *e'tine or not.

ST έτηνερπι, έτηνερπι 'etineri, 'etineri is listed by Scutt as a variant of *e'tine; there is no reason to doubt 'etineri < *e'tine + o'ri ‘look!’ In fact, the etymology Pernot (1934, 193) gives for it is *e'tina ‘that.fem + o'ri > *e'tina + ri > 'etineri ‘that.masc’. However, Scutt derives the form as τινενός > 'tiner (§3.2.1.2, §3.2.3.2), with the 'i ending by analogy to other Ancient Greek emphatic pronouns, such as οὗτοι houtosi ‘this very one’, αὐτή ραμε:i ‘that very one’. Costakis gave a similar argument for 'enderi, and both derivations are defended by Liosis (2007, 416). (For έτηνενί 'etineni, see below.)

PT eτηνεί έτενε ι (Costakis 1951, 176; not mentioned in C); presumably from *e'tine + o'yi ‘here’, just as with 'endei above.

PT tήνε τίνε, τήτα τί'ta. No etymology has been offered, but it is tempting to see in the second syllable a reflex of the definite article / relativiser το to; alternatively, this could be an old analogical remodelling of (e)tine after *'ende and *'ete. At any rate, these demonstratives are not common in PT texts.

NT έτρενι έτενι < *'etneni < έτηνενι 'etinenj is emphatic demonstrative in ST, though not in NT); this is derived by Liosis (2007, 417) from *e'tine + the accusative ending -ne, as already seen in ndενi < 'endeone.'). The unpalatalised /n/ is a problem, but may be an analogical formation after *eteni and *endeni. = The etr- demonstratives are listed under έντενη 'endeni in C; έτερη 'eterei, έτρεη 'etrei and έτρεη 'etreri are also analogous to έντενη 'enderi, έντεη 'endei and έτερη 'enderi. The neuter of NT 'etreri in Scutt (1912–13, 164) is 'ekini, which is also the neuter of ST 'etineri; this indicates that the two are cognate.

For our table, the conclusion is as follows. Of the Tk demonstratives, ende- and ete-, and possibly eti- demonstratives are related to the unmarked MG demonstrative (and third person pronoun) aフトos; there is a less compelling case for eti- demonstratives being cognate with the distal MG demonstrative e'kinos, via D τινενός. Whether to treat them as matches depends on the choice of MG terms corresponding to ‘this’ and ‘that’. All three dialects of Tk have a distal eti- demonstrative: PT 'tine is glossed as e'kinos, and the NT phrase έτρεη τὶρ αμὲρε 'etrei tir a'mere as εκεινες της ημερες “those days” (Costakis 1951, 88) strongly suggests a similar role for 'etrei, which seems to be the main NT cognate for e'tine. All these forms are taken to correspond to MG e'kinos.

For ‘this’, *endeni has been selected for ST; *eteni seems to be a much more infrequent variant. The NT phrase μ' έντενα ογι τε 'endenu o'yi ‘with these people here’ (Costakis 1951, 88) shows 'enderi (glossed as aフトos) to be equivalent to ‘this’. The main term other than *tine used in PT texts is τε'ri and that is the form quoted here for ‘this’; Makris (1952, 205), it should be noted, glosses τε'ri as τοτο. (Costakis never uses MG τοτο ‘this’ as a gloss in his work,

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⁴ C claims *e'tine does not occur in NT, counter to Costakis (1951).
⁵ In an earlier draft of this paper, I derived *etinenj from *e'tine + o'ri, with assimilation (*etinenj is a variant of *etineri); “The unpalatalised /n/ is a problem, but may be an analogical formation after *eteni and *endeni.” Liosis (2007, 417) rejects this account as convoluted, and I accept his counterproposal: instead of *eteni providing a model for analogical adjustment, it provides the simpler derivation.
and this is very probably ST influence on his MG idiolect, as pointed out by Pernot.) Since the distal scale appears to be weakened in NT and PT, and 'eteri is infrequent in ST, the MG equivalent selected for 'this' here is the unmarked form _af'tos_, while the MG distal _e'kinos_ is chosen to render 'that'. As a result, all 'this' forms are cognate, and no 'that' forms are cognate (following Pernot in rejecting _e'tine_ < _tɛ̂nos_).

6. who

|    | poio(ς) pjos | poie(r(ε)) 'pie(r(e)), pe(ρ(ε)) 'pe(r(e)) | poio(ρ) 'pio(r), pe(ρ) 'pe(r) | poio(ρ) 'pio(r), pe(ρ) 'pe(r) | poio(ρ) 'pio(r), pe(ρ) 'pe(r) |
|----|--------------|------------------------------------------|----------------------------|----------------------------|----------------------------|

Already in IG, _ποιος_ 'what sort of' had started displacing _τίς_ 'who’. Pernot (1934, 215) points out that the regular process /pi/ > /ki/ (§ 3.2.3.3.b) did not take place with this word (cf. D _pâ:i_ > _Tk _kja_ 'where', cognate with _poios_); “Ceci me paraît supposer que le mot est entré en tsakonien à une époque où cette évolution phonétique ne se produisait plus”. In other words, this is probably an MG loan (Scutt 1912–13, 167 concurs), displacing the earlier usage of _τσιρ_ _tsir_ < D _τίρ_ _tír_ 'who' (cf. IG _τίς_ _tís_ 'who') (§ 3.2.1.2, § 3.2.3.3.b), which survives in PT: _τσιρ_ _tsir_ _είρ_ _tsir_ _είρ_ 'who is it?' (C)—Costakis (1951, 191) mentions _ʹtsire_ as a PT archaism. _tsi_ is clearly the unmarked form for PT: there are 8 instances in the PT corpus, while the 2 instances of _ʹpio_ are both adjectival. (Liosis 2007, 427 notes that this distinction between reflexes of nominal _tís_ and adjectival _poîos_ is characteristic of Asia Minor Greek — i. e. it resulted from contact, and incidentally helped preserve the archaic _tsir_.) C gives 'what, who' as the gloss for _tsi_ throughout Tsakonian, but there are no grounds to believe _tsi_ means 'who' for MT, and C gives masculine and feminine (i. e. animate) forms for _tsi_ only for PT.

7. what

|    | _ti ti_ | _ti ti_ | _τοι tsi_ | _τοι tsi, τος tse_ | _τσα tsa_ |
|----|---------|---------|-----------|-----------------|----------|

Α _psi_. For /ti/> /tsi/ (§3.2.3.3.b), see above. All forms cognate.

8. not

|    | oυ(k) ou(k) | _δεν den_ | _ο_ | _ο_ | _δεν den_ |
|----|-------------|-----------|----|----|-----------|

Ç _wmehu_ 'there isn’t any’ (NT _όμ_ _’exou_ _om_ _’exou_ ‘I don’t have’, where _om_ < _o_ or _u_ + _εμι_ ‘em’ ‘am’; in ST, this would be _on_ _’exou_). According to C, MT _ο_ < AG _ο_ _ο_ variant of _oυ(k) ou(k) _EMG _u(k) ‘not’). Pernot (1934, 295) more plausibly derives _ο_ from the Tsakonian process /uʃe/> _lo/ (also present in many dialects of Greek: Andriotis 1956): _’ui_ > _’ui_ ‘they are not’, _’eni_ > _’oni_ ‘he is not’. The exigencies of the Tk conjugational system have /e/ as the usual vowel before which a negator occurs, so this was generalised at the expense of _/u/. MG _δεν_ < AG _ουδέν_ _oudén_ ‘nothing’ has penetrated into MT, although Costakis (1951, 125) explicitly refers to it as a loan from MG, and it does not appear to have become the unmarked alternative in Tk texts. AG _ou(k) did not survive after EMG outside Pontic (_kʰi_ < _u’kʰi_ < _uk_). NT, ST forms non-cognate; PT form borrowed.

9. all

|    | _πᾶς pâs_ | _όλος ῥο’lôs_ | _ολε’ole, ούλε ’ule_ | _ολε’ole_ | _ολε’ole, ούλε ’ule_ |
|----|-----------|----------------|---------------------|-----------|---------------------|

MG _’olos_ < AG _όλος ho’los_ ‘whole’. All forms cognate.

10. many

|    | _πολλοί polloί_ | _πολλοί po’lî_ | _πολλού po’lu, πρέσσο _pre’si_ | _πρεσσο _pre’si_ | _πο ρο’o_ |
|----|----------------|----------------|---------------------------|----------------|-----------|

MG _’olos_ < AG _όλος ho’los_ ‘whole’. All forms cognate.
ST "pre'si" < AG περίσσοι perissoi 'too many'; MT 'pa'fu, 'pase < AG πᾶς pās 'all', with the declension class regularised to singular *pasos > pase, plural pasi > pa'fi. Houpis (1990, 100) names the distinction between NT 'pafa and ST pre'sa (neut.pl.) as one of the main differences between NT and ST. Pernot (1934, 178) explicitly refers to ST 'pre'si and 'pase as synonyms; the texts, however, clearly show 'pre'si to be indeed the unmarked variant in ST: 18 instances of an allomorph of 'pre'si in Samp, Dict and Har, as against 2 of 'pase. V po'ó < MG po'li, which (as po'ló po'li) is indeed the PT singular of 'many' ('a lot'). According to Costakis (1951, 78), po'lu is the usual, suppletive form for the masculine plural of NT 'pre'se 'too many; many' rather than pre'fú, although the feminine and neuter plural and the singular use forms of 'pre'se. ST form non-cognate; NT and PT form borrowed.

11. one | év hén | éva 'ena | éva 'ena | éva 'ena | éva 'ena

Č ena. All forms cognate.

12. two | dío dúo | dío 'dio | dío 'dúo, dó 'dí | dío 'dúo, dó 'dí | ντύο 'dio, ντο 'dúo

Č dwya; Pernot (1934, 502) believes Çelebi or a copyist has conflated the ending of 'two' with that of the next word in the list, truwa 'three' ('tría). No NT form is listed in C, but 'two' can be found in NT texts (dí in Dict §9 ii; 'dúo in Samp §26.) Of the two forms, 'dúo is emphatic (Pernot 1934, 183); the unmarked form is dí. There are only two instances in PT of AG /d/ > /d/: dúo > 'dio, and ènduma > 'oduma 'clothes' (Costakis 1951, 163). All forms cognate.

13. big | mégas mégas | megálós me'gálos | atóē a'tfè | atóē a'tfè | megálē me'gále

MG me'gálos is a morphological levelling of AG mégas, megálou. C places a'tfè only in S, but it is used abundantly in Houpis' (K) writings. Kislier (2017, 125) records a'tse for Melana. Tk a'tfè < AG ád'rócs hadrós 'stout, fully grown' (C); /d/ > /t/ by §3.2.3.1.a. NT, ST forms non-cognate; PT form borrowed.

14. long | dolikós dolikós | makrós makrós | mákz'ê mak'z'ie | mákz'ô mak'zu | mákrôs (e) mak'ri(e)

While dolikós is a good Homeric word, by Classical times makrós predominates: in Plato there are 7 instances of the dolik stem and 5 of the adjective itself, while there are 94 instances of the adjective makrós, 33 of its comparative and superlative degrees, and 11 other instances of the stem in compounds. This pattern persists in other Attic authors: there are 35 instances of the adjective makrós in Aristophanes, and 31 in Thucydides, but none in either of dolikós.

MG ma'kris < EMG mak'ry < morphologically remodelled after pak'ús > pa'xis 'fat', bat'ús > va'this 'deep' (Andriotis 1990 [1983]). ST mak'zu < *mak'ruj < *mak'ry is consistent with EMG mak'ry. NT ma'kri(e) DH. NT, PT, ST forms cognate.

15. small | mikrós mi.krós | mikrós mi.krós | mi'tsi, mi'tsi | mi'tse, mi'tsi S | (e) mi'tsi, (e) mi'tsi | (e) mi'kre, mi'tse

Tk mi'tsi < EMG mi'tsos 'small' (cf. Cypriot mi'tsí, Cretan mi'kós mi'tsos) < D mikkós mikkós, according to Andriotis (1974 §4048; the etymology goes back to Hatzidakis); it still seems safe to treat mikkós as cognate to AG mikrós mikróς. Pernot (1934, 177), on the other hand, considers this implausible, since it would necessitate the palatal stem ending spreading from the feminine to the masculine and neuter forms; he favours viewing mi'tsos as originally a baby-talk form ("mi'tsos en grec commun est un caritatif et vient, je crois, de mik'ròs par une imitation
de la phonétique enfantine.”) Pernot also claims *mi’tsi* is a loan, since the native equivalent of MG /ts/ is /ʃ/ (EMG *angy’lista* ‘small crooked thing’) > MG *giltsa*, ST *angra’iťa* ‘shepherd’s stick’); but the evidence for Pernot’s claim is weak, and at any rate /ts/ is not a cluster of any great antiquity in Greek. Of course, if the baby-talk form was independently innovated in Tk, then the sound correspondence need not obtain, but it is worth noting that standard MG does not have palatoalveolars like Tk. All forms (for want of better evidence) considered cognate.

| 16. woman | γυνή γυνέ: | γυναίκα γυ’νεκα | γυναίκα γυ’νεκα | γυναίκα γυ’νεκα | γυναίκα γυ’νεκα |
|---|---|---|---|---|---|
| 17. man | ἀνήρ anér | ἄντρας ‘andras | ἀτόπω τ’ατόρο | ἄ(ν)θρωπο ἄ(ν)θρωπο | ἄ(ν)θρωπο | ἅντροι ἅντροι | ἅντρω ἅντρω | ἅντρω ἅντρω | ἅντρω ἅντρω | ἅντρω ἅντρω |
| 18. person | ἄνθρωπος ἄντ’ρωπο | ἄνθρωπος ἄνθρωπο | ἄθρωπο ἁθρωπο | ἁθρωπο ἁθρωπο | ἁθρωπο ἁθρωπο | ἁθρωπο ἁθρωπο | ἁθρωπο ἁθρωπο | ἁθρωπο ἁθρωπο | ἁθρωπο ἁθρωπο |

Vi γουναίκα γυ’νεκα. All forms cognate.

MT *’at’ópo* < AG ἄνθρωπος *’at’r’opos* (MG *’anthropos*); AG /tʰr’/> Tk /ʃ/ follows by rule §3.2.3.1.a. Although the adjective αντζι’ko ‘male, man’s’ < AG ἀνδρικός *’andrikos* exists in ST, the original word for ‘man’, preserved in MG, has been displaced by the word for ‘person’; this development is paralleled in Cypriot. The two reflexes of ἀντρόπος in MT, *’at’ropro* and *’at’ópo*, have become semantically differentiated in ST, with *’at’ropro* meaning ‘person’ and *’at’ópo* meaning ‘man, husband’. While *’at’ropro* is used in ST to denote ‘man’ (επεράτε *’ena’* ἁθρωπο τ’άτι δ’ γουναίτε *επε’rate* *’ena’* ἁθρωπο τ’έτι δ’ *γυνε’nete* ‘one man and two women went past’: C), this appears to be a marginal development; the unmarked term for ‘man’ in ST is *’at’ópo*. According to Pernot (1934, 163), *’at’ropro* is an MG loan:

Le mot ἄνθρωπος est curieux à plusieurs regards. Il se présente en tsakonien sous une double forme: *’at’ópo* = ἄντρας, ‘mari’ et ‘homme, opposé à femme’, *’at’ropro*, ‘homme en général, individu’. Pour le sens de ἄνθρωπος *’mari’* cf. Matthieu 19, 10. L’aspect phonétique de cette deuxième forme ne laisse aucun doute sur son origine: elle provient de la langue commune. Il est évident que les Tsakoniens n’ont eu, à un moment donné, qu’une seule forme, *’at’ópo*, pour ces différents sens; cf. en fr. ‘homme’ opposé à ‘femme’ et ‘mon homme’ pour dire ‘mon mari’. L’introduction de gr. com. ἄ(ν)θρωπος a amené une distinction sémantique.

In the NT texts I have, there is one instance of ‘man’ — *’at’ópo* in Samp §29 (K): *πότε να μόλωι οἱ ατόιποι! ’pote na μόλωι i ατ’iši ‘when were the men going to come!’ Houpis uses *’a(n)θρωπο* for ‘person’ and *’at’ópo* for ‘husband’ (*Thus* 60), but never uses the word for ‘man’. Though a sample size of one is slim, one could conclude that in NT as in ST, *’at’ropro* has only occupied the first stage of the cline *person > man > husband*. Since in PT *’at’ropro* is known to also mean ‘husband’, it seems reasonable that it would also mean ‘man’, given the same cline.

Recent data points to *’at’ópo* being used for both ‘person’ and ‘man’: Vyatkina (2015, cited in Kassian 2018) records *’at’ópo* for ‘person’ in Prastos and Melana, and *’at’ropro* only in Tyros, while Kisilier (2017, 129) records *’at’ópo* for ‘person’ in Prastos, Tiros, Melana, and Vaskina, and *’an’dropro* in Tyros and Kastanitsa. If Pernot was correct about the semantic distinction made between the MG and the indigenous form, it was a distinction that did not persist; the indigenous form has picked up both meanings again latterly (as was likely the case before Tk borrowed the form from MG).

In the PT texts I have access to, there is one instance of ἄντροι *’an’drι men* (*Dict* 11 ii (V) ἄμα σ’ βαλέκαμ’ ούο, εμε’ίν, οἱ ἄντροι, ὀσοὶ τα ἑτ’ ζώα *ama s va’lekam ’uo, e’min, i ’andri, ’osi
ta et 'zoa 'when we had loaded them all up — us, the men, whoever had animals'; there is no other instance of 'man'), and one of ἀνδρας 'andras ('andras?) 'her husband' (Mak p. 212 a γυναίκα γυρίτε να παγιάν απές σταν πόρτα, βρέτες τον ἀνδρας, πετς τινέρι... a γυνεκα γι'rits na payen apes stan 'porta, vrets ton 'andras, pets tine'rei 'the woman went back inside the door, found her husband, and told him...'). Thus: for 'man', PT seems to have borrowed the MG term; while it may well also use 'ἄθροπο, there is no textual evidence of this. NT and ST are not cognate. For 'person', PT, NT and ST all seem to have borrowed the MG term.

'psari is derived from the δίμ. ὀψάριον opsárión of ὄψον ópsis 'snack'. Kislier (2017, 128) records the variants 'psaríyi (Melana), 'píadzi (Melana), 'psara (K). All forms cognate.

pu'li is the δίμ. (pu'lion) of a Latin borrowing (pullus). All forms borrowed, given that the MG word is borrowed.

MT 'kue < AG κύων kú: n 'dog'; after considerable discussion, Pernot (1934, 112–113) cannot justify the /e/ ending of 'kue, as the expected reflex would be *'kuu > *'ku (cf. γέρνα: > 'yera 'old man'). The form as it stands suggests a morphological remodelling to *'kuos > *'kuer, as Hatzidakis (1990 [1907], 585) had suggested; but there is no preceding coronal or front vowel to justify raising /o/ to /e/.

MG 'skilos < AG σκύλας skúlaks 'puppy'. Pernot (1934, 380) identifies Leonidio 'stile (palatalising /k/) as meaning 'whelp', and describes it as "d'importation récente." Words derived from 'stile are attested in C only for PT; their MT counterparts are derived from 'kue, e.g. Η στόυλεύω steil'evno 'to become angry as a dog' vs. ST κουνέγγου κυ'νεγγο 'to become angry as a dog' (M, T), 'to idle' (P). (The verb is unknown in NT: Pernot 1934, 354). Furthermore, there are 12 instances of 'kue in the main ST texts — Samp, Dicht, and Har — with no instances of 'stile; so 'kue remains the basic term for 'dog' in MT. All the same, the MG term has made its presence known, and indeed the only forms for 'female dog' Costakis knew were based on it ( 'tila, 'stelia), while Deffner's κουνάρα ku'narα 'female dog, peevish woman' was to Costakis only an augmentative. NT, ST forms non-cognate; PT borrowed from MG.

For 'psira instead of the expected reflex 'ftira, Hatzidakis (1989 [1905], 172) sees the influence of 'psilos 'flea'; 'ftira is attested in Cyprus, Southern Italy and the Pontus. All forms cognate.

ST dendzi'ko < AG δενδρικόν dendrikó̂n 'tree-like (neut)'; cf. EMG ονικόν onikó̂n 'donkey' < AG ονικόν onikó̂n 'donkey-like (neut)' Kislier (2017, 126) adds 'dendri for Melana (which would be the MG equivalent of 'dendzi). All forms cognate.
Of the two AG words, spóros refers primarily to the act of sowing; the two terms, however, are clearly cognate. In Plato, spérmα is clearly the dominant term: there are 27 instances of the word, as against 1 of spóros.

ST pʰure is cognate with MG spóros < AG σπόρος; the process /sp/ > /pʰ/ word-initially is regular in Tsakonian, and there are only a couple of cases where a word-initial /sp/ can be ruled out as being a later development — most notably the word for ash, σπόρεια (but also ποία pʰo’iα in Leonidio). Tentatively, the NT and PT forms should be treated therefore as loans, displacing earlier pʰure (cf. the cognate word ‘sow’: PT σπείρω, NT σπείρου ‘spírur, ST πείρου pʰiru.) ST pʰrama ‘seed; sperm; silkworm egg’ < *sparma (cf. AG σπέρμα spérmα ‘seed; sperm’). Kisilier (2017, 128) adds pʰı’rasi (Melana) as a cognate of pʰrama; but this is clearly the Tk counterpart of MG spíraki (dim) ‘pimple; seed’ < AG sphyros.

It is impossible to tell which of the three ST forms is basic; the evidence of pʰiru strongly suggests spori is a recent loan — and indeed, the examples given in C suggest the primary meaning of spori in ST is ‘the act or season of sowing’, with its cognate pʰure used to mean ‘seed’, ‘shoot’, or ‘pimple’. There is only one instance of any of these words in the available ST texts, pʰrama, in the meaning ‘silkworm egg’ (Samp §17). Haralambopoulos (1980) cites pʰrama frequently in his phonetic study; but that is because it forms a neat minimal pair with γράμα ‘pragma ‘thing’. At any rate, all three ST words are cognate with spóros; since spori is unlikely to be the ST basic term, ST is considered not to have borrowed its term.

The unpalatalised /l/ in ST fili points to *file, preventing the palatalisation. Kisilier (2017, 127) records the MG-looking forms filo (Prastos), fio (Melana) alongside fili (including in K). All forms cognate.

ST jinda < riza; for consonants, see §3.2.1.4, §3.2.2.2. NT όιντα DH (without diacritics). Kisilier (2017, 127) records rize (Melana), riza (Kastanitsa) alongside jinda.

MG fluða < φλούδιον fludion< pʰloudition, dim. of φλούς pʰlous ‘reed’. PT pe’tsi ‘bark’ < ‘skin’. PT normally drops /l/ before back vowels. Kisilier (2017, 127) records only fruða in Vaskina, and fluða in Prastos, Vaskina and Kastanitsa; as often is the case, the forms he records as currently in use are far closer to MG.

Tk pe’tsi < EMG petsoí pe’tsin, dim. of Italian pezzo. Both pe’tsi and to’mari are also extant in MG; the latter as ‘hide’ (a meaning also suggested by C’s examples: το μαζί éνι θέντα άκισμα to to’mazi ‘eni θenda ‘akisma ‘the hide needs salting’; θα ντι μπάλου το τομάζ θα ndi ’mbalu
to to'mazi ‘I’ll skin you alive!’). It seems pe’tsi was the normal MG word, before it was displaced by the reintroduction of derma < AG δέρμα derma through Puristic Greek.

’tsepa is given in C with the second meaning ‘skin’, and Deffner (1923) defines it as ‘human skin’. Deffner gives the fanciful derivation < AG sképe: ‘covering’, but Pernot (1934, 376) objects that that would give stsepa or s:epa. The primary meaning ‘milk skin’, and the metaphorical meaning ‘shame’, Pernot concludes, make it clear that these are merely cognate to MG 'tsipa ‘milk skin, (fig.) shame’ < Bulgarian tsipa ‘membrane, film’, with ‘human skin’ a secondary development within Tsakonian. Kisilier (2017, 127) records derma in Prastos and zerma in K, and ‘petsi in Melana; he further records ‘mazi in Tiros and Vaskina, and speculates it is derived from MG mu’lari ‘mule’ (though it is tempting to see a reanalysis of to’mazi as to ‘mazi, with to the definite article). All forms borrowed, given that both ‘tsipa and pe’tsi are themselves loanwords in MG.

30. blood

| 30. blood |  |
|-----------|--------|
| αίμα haíma | αίμα ‘ema |
| αίμα ‘ema | αίμα ‘ema |

In MG kreas means ‘meat’, while sarka (perpetuated through ecclesiastical usage) means ‘flesh’ as opposed to ‘soul’; both are used for human flesh. The ‘meat’ definition has been assumed. NT krie unlisted in C, but given as declension paradigm in Costakis (1951, 75). krie has been morphologically remodelled from *kreas (a restricted declension paradigm) to *kreo (/o/ to /e/ by §3.2.3.2, /e/ to /i/ by §3.2.3.7). There are only two instances of the word in the PT corpus (Samp §35); both are krie. Since furthermore C claims krea is limited to Vatka, the PT form is considered here to be krie. All forms cognate.

31. bone

| 31. bone |  |
|-----------|--------|
| ὀστέον ostéon | κόκκαλο ‘kokalo |
| κόκκαλο ‘kokale | κόκαλε ‘kokale |

MG kokalo < AG κόκκαλος kókkalos ‘pine cone’. Kisilier (2017, 127) records ko’kali for K. All forms cognate.

32. grease

| 32. grease |  |
|------------|--------|
| λίπος lipos, | λίπος lipos, |
| αλοιφή aloipʰː | ξίντζι ksindzi |
| ξίντζι ksindzi | λόπος lipos |

Of the two terms given for AG, aloipʰː is a nominalisation of ἀλείφω aleipʰː: ‘to smear’, and refers generally to anything smeared, including ointment, unguent, and varnish. Of the two terms given for MG, lipos corresponds more generally to ‘fat’, and is probably a Puristic reimportation into MG, while ksindzi refers specifically to cooking fat / grease — although MT ksindzi has no such restriction: ὀλού ξίντζι ἐκι ἔντεινο ὁ βούλε π’ εὔθυκα μ’όλις ksindzi eki ‘endeni o ’vule pʰ e’dikame ‘that rooster we slaughtered was all fat’. MG ksingi < Latin axungia; the presence of initial /ks/ in ST ksindzi and the absence of /u/ strongly suggests this is a loan from MG, and not an independent reflex of axungia, despite the normal palatalisation of the velar. NT ξίντζι, DH. Kisilier (2017, 126) records only the more MG-like ksingi, ksigi.

33. egg

| 33. egg |  |
|----------|--------|
| φύον oːión | αβγό av’γo |
| αβ(u/i)γό au(∗u)*γo | αβουγό auv’γo |
| αβ(ou)γό au(u)γo |

Á augo, corresponding to MG auogo (mistakenly swapped with the Tk form?) Kisilier (2017, 129) records MG av’γo for NT, and auv’γo for ST. According to Hatzidakis (1990 [1907], 322), t au’ɣa ‘the eggs’ < *ta’va < *tau’a < *ta o’a < AG τά oːía. Tk forms involve epenthesis on a form which does not fit with Tk phonology, and the dissimilation *tau’Ya (which is not fully explained by Hatzidakis) is unlikely to have been independently arrived at in Tk, particularly as the hiatus consonants there are /z/ and /v/ (§3.2.3.5). There is no u’vo stem in Tk which might point to an independent survival of oːión; the form ούγια [u’ja] ‘selvedge’, present in both Tk
and MG, has been traced to ɔːiá by Defner and Andriotis (citing Koraes); the Turkish ọya 'fringe' is more obvious, as Pernot (1934, 364) points out, although ọya itself has been traced by Koukoules (cited in Andriotis 1990 [1983]) back to EMG ọvia ˈiːa. At any rate, ˈuia too is a MG phenomenon, and whether it has anything to do with ɔːiá or not, it does not represent an independent Tk survival. All forms borrowed from MG.

MG ˈkerato < AG κέρας, κέρατος κέρας, κέρατα. Kisilier (2017, 128) adds ˈʃepi (Vaskina), etymology unknown. According to Defner, ˈʃoxane < AG τρώξανον trɔːˈksan ˈtwig', τραύξανα traúksana 'dry chips'; ST ˈʃoxane means both ‘horn’ and ‘twig’, and Pernot (1934, 380) mentions a similar polysemy for French le bois. It is difficult to tell whether ˈʃoxane or ˈteera(te) is the older form in ST. ˈteera preserves the AG nominative κέρας, κέρατα, and displays the normal palatalisation of /k/; while ˈteera, like MG ˈkerato, has been morphologically regularised: ˈteera < *ˈkerato; but this does not mean ˈteera is a loan from MG. ˈteera has been semantically expanded to include ‘carob’ (parallel to MG ξιλοκέρατο ksilokerato ‘wood-horn = carob’) and a legume disease. Pernot (1934, 71) glosses the plural ˈteera as MG χαρούπια ‘carobs’; this implies strongly that ‘carob’ is the primary meaning of ST ˈteera.

ˈʃoxane also means ‘twig’ — and the etymology suggests this to be the original meaning. Both terms show up in Melanu proverbs: ˈteera in φαε νι εκιο να μπάλερε το ˈtěera ˈʃue ni eˈkju na ˈmbalere to ˈteera ‘you should eat it, so you can get the horn out’, and ˈʃoxane in κα ˈtɔjɔ̯ ˈtɔjɔ̯ ład ˈʃoxane s em ˈbitecer ‘you did it well and horns (i. e. not at all well)’. ˈteera(te) has given rise to ˈteera(τa) ‘cuckold’ (cf. Italian cornuto), also present in MG (κερατάς keraˈtas), and the words for ‘carob tree’, ‘carob leaf’, and ‘small carob’; ˈʃoxane has given rise to ˈʃoxaˈni ˈʃuˈxani ‘small horn’, and ˈʃoxa(ο)ˈnias ˈʃoxa(o)ˈnia ‘big-horned’. The fact that ˈʃoxane has been more lexically productive than ˈteera(τa) suggests that it is the ST basic term; furthermore, there are two instances of ˈʃoxane in ST texts (Samp §7, §10), but none of ˈteera(τa). We have no evidence to suggest ˈʃoxane is also used in NT. ST form not cognate; NT, PT forms cognate.

TK nuˈra < EMG nuˈra < AG 涌现出 ˈoura; by metanalysis. This process can be seen at work in Pernot’s (1934, 25) transcription of a story by Costakis: there are 6 instances of ‘tail’; one is the nominative a ˈnur̄a, but the other five are accusatives with a preceding /n/: tan ura ‘the tail’, mit⁶çan ura ‘small tail’. NT涌现出 DH. Kisilier (2017, 129) records MG ˈura alongside nuˈra; he also records nurul in Prastos. NT, PT, ST forms cognate.

All forms cognate.

Of the AG terms, ˈriks refers to both single hairs and (in the plural) hair on the head; kóme: refers only to the hair on the head, and is described by Woodhouse (1979 [1932]) as occurring in Plato but rare in other Attic prose. Text counts are ambivalent on this: there are 5 plural instances of ˈriks in Aristophanes against 7 of kóme:. MG ˈtrixa < AG θριξ, τριχός ˈriks, trikʰós.
Kisilier (2017, 126) records *tisxe, *tsixa for Melana. MG maʹljia, plural of μαλλί ma’li ‘hair, wool’ < μαλλίον ma’lion < mallion, ΔΙΜ. of μαλλός mallós ‘flock of wool’. Of the two MG words, ma’ljia refers to the hair on one’s head (French chevelure), while *trixa refers to individual hairs. While derivatives of the singular of ma’ljia, μαλλί ma’li, exist in Tk (μαλλιάκου ma’łąazu ‘grow hair’, μαλλιαρέ ma’a’re ‘hairy’), ma’ljia according to C exists only in PT, and even there predominantly refers to wool. (Kisilier 2017, 112 also reports it in K, under recent MG influence.) The examples given in C for *tsixa indicate that it has been extended to cover chevelure: κόψε του τόξα ντι, πε έξακάκ τάς τουρν εψού ντι ‘kopse tu *tsixa ndi, pʰ e’zakai tas tur ep’su ndi ‘cut your hairs (=hair), which has gone into your eyes’; τον τόξε ντι σ’ αγκά τα πουλία tu *tsixe ndi s’ anger ta pu’ia ‘the birds have taken your hairs (*trixa) away’ (said to a bald man, glossed in MG as ma’ljia). See also the example given in the definition in C of πλεξίδα ple’ksiđa ‘braid of hair’: Ν πλέχα μα τα μαλλία μ’ πλεξούδε ‘plexa ma ta ma’úia m plek’sude, M ενι πρέγα τον τόξε (PL) μ’ πλεξίδε ‘ep’i preyai tu *tsixe mi plek’side ‘I am braiding my hair into tresses’.

The conclusion seems to be that *tsixa covers the function of both ma’ljia and *trixa in MT, with ma’úia either reintroduced into PT from MG, or more likely constituting a PT archaism. This is because of the archaic stress in ma’úia < EMG μαλλί ma’lia, as opposed to MG [ma’ía]; the retention of word-final /ia/ is characteristic of other archaic dialects, such as Maniot and Old Athenian, but not of Thracian, the MG dialect PT was in contact with. In the context of the wordlist, the chevelure definition seems to be what is intended; therefore NT and ST must count as non-cognate, and PT as cognate, although not borrowed.

38. head

κεφαλή ke̱fakliːκεφαλι ke̱fali tsouφάλα tsu’fala tsouφά tsu’fa τόκεφαλα τε’σφαλα, τοκεφαλι

PT tse’fala < MG κεφάλα ke̱fala, augmentative of ke’fali; the final vowel and gender change implies ke’fala is the etymon for all variants of ‘head’ other than tse’fali (C). ST tsu’fa < *tsu’fia < NT tsu’fala, as ST drops /l/ before back vowels. For /ts/ instead of /tc/ before a front vowel, see discussion on rule §3.2.3.3.a; Deffner recorded the form as ST τζουφά NT τζουφάλα tsu’tafa, and Pernot (1934, 114) recorded τζju’fa in Tiros; Kisilier (2017, 126) records tsu’ja, τζu’fa in Tiros. Pernot (1934, 112) believes this is related to the occasional development in Tk of AG /i>/ /u/, comparing it to Southern Italian Greek ciofàli /τζο’fali/. All forms cognate.

39. ear

οος oös αφτί afτi αβο(υ)τάνα av(υ/o)τάνα (α)φτί (α)fti

MT avu’tana< a avut’ana ‘the ear’ < *a vua’tana < *ua’tani < *uatai + νιν’ ‘it’< D ούστα oûata ‘ears’ (C). The derivation C gives is somewhat stretched (particularly with the suffixing of νιν’), but the relation between avu’tana and oûata seems plausible enough. MG αφτί < AG ουτίον o’tion, ΔΙΜ. of οος’ ‘ear’, through τά o’tia ‘the ears’ > tautia > taf’tia > ta aft’tia [taft’ja] (Hatzidakis 1990 [1907], 321–322); the word is cognate with D ούκαta (cf. AG plural οτία.δ.τα.) All forms cognate.

40. eye

όφθαλμος op’talmós, ομμα omma μάτι mati ψιλέ ψιλέ, εψιλέ ep’isle ψιλέ ψιλέ

Of the two AG forms, op’talmós is barely predominant over ομμα: there are 72 instances of op’talmós in Plato as against 58 of ομμα, and 82 of the op’talm stem against 60 of the ομμα stem. Adding Aristophanes and Thucydidés, this becomes 93 instances of the word op’talmós (and 112 of the stem) against 70 of the word ομμα (72 of the stem). The two forms are ultimately cognate, both derived from PIE *oku’see; ομμα< op (reflex of *okw) + ma ‘nominaliser’, and op’talmós< PIE *okυph- with ‘expressive aspiration’ of the expected /pt/ to /pʰ/ (so Pokorny).
Çepsile; the form εψιλλε эpsi'le is also given for NT in Scutt (1913–14, 27) and Costakis' (1951, 32, 45) NT grammar, and is recorded for K by Kisilier (2017, 126), but is not recorded in C. The palatalisation is consistent with NT (§3.2.4.5). MG 'mati < AG ομάτιον ommátion, dim. of ομίμα. Tk psile < D óptiöös opítios 'eye'. As Pernot (1934, 74) notes, the form opitlos 'escaped' the older palatalisation /ti/> [ti]> [ci], undergoing instead the later palatalisation /ti/> /tsi/. The initial vowel is dropped in the citation form through hiatus: nominative o psile, accusative ton epsile (Pernot 1934, 171). In C, initial /e/ is only listed for accusative forms, where it is for the most part optional. D opitlos is cognate with òmma (and indeed opʰvalmós), being derived from *oký-. All forms cognate.

41. nose │ ρύγχος ρύγχος │ μύτη 'miti │ δούκο 'fυκό │ δούκο 'fυκό │ μύτη 'miti

No AG etymon for 'miti < EMG 'mytis (AG *mútis) has been convincingly identified, but it appears to be cognate to such words as μυκτηρ muktér 'nostril, nose, snout' and μύκα muksa 'mucus'. ST 'fυκό < AG ρύγχος ρύγχος 'snout, beak'. Consonants by §3.2.2.2, §3.2.3.1.c. NT σούκο DH (no diacritics indicated). Kisilier (2017, 128) gives the variant 'sukό for Melana. ST form non-cognate; PT form borrowed.

42. mouth │ στόμα στόμα │ στόμα στόμα │ τούμα 'тumá │ τούμα 'тumá │ στόμα στόμα, τόμα 'тóma

There are two possible derivations for Tk 'тumá. The first is from AG στόμα 'mouth'; /st/> /tʰ/ is normal for Tk, but one would have to explain /o/ > /u/, which occurs sporadically in Tk. The second is D τούμα τοحة 'mouth' (C), presumably cognate with στόμα 'mouth'. This does explain /u/; now it is the change /t/> /tʰ/ which would have to be explained. As Mirambel (1960, 58) points out, /t/> /tʰ/ is characteristic only of PT, and not of MT (§3.2.3.6); so στόμα is the least problematic etymology. (It is possible, as Pernot (1934, 127) hints, that Hesychius' τούμα is in fact Proto-Tsakonian 'тumá, in which the aspiration of /st/ has already taken place.) All forms cognate.

43. tooth │ ὀδοὺς odoús │ δόντι 'dondi │ ὄντα 'onda │ ὄντα 'onda │ δόντα 'donda

MG 'dondi < δόντινον o'dondion < odóntion, dim. of odoús, ódontos. The MT forms presumably by *o'donta > *o'onda > 'onda. All forms cognate.

44. tongue │ γλώσσα glówssa │ γλώσσα γλώσσα │ γρούσα γρύσα │ γρούσα γρύσα │ γλώσσα γλώσσα

NT 'γρύσα unattested in C but used abundantly by Houpis (in the meaning 'language', at least.) All forms cognate.

45. claw │ ὀνυχ όνυχ │ νύχη 'nixi │ νύχη 'nixi │ νύχη 'nixi │ νύχη 'nixi

MG 'nixi < ὀνυχον o'nyxon < onúk'ion, dim. of όνυχ. The failure of /u/ to retain its archaic pronunciation in Tsakonian (*'nuxi) in a context where this normally occurs (cf. AG nükς, nuktós> *nútha 'night') renders these forms suspect.

46. foot │ ποός poús │ ποδί 'podi │ πούα 'pua │ πούα 'pua │ πα ρα, η ρ'α

MG 'podi < πόδιον pódion, dim. of ποός, ποδός poús, ποδός. ST 'pua < *'poda < EMG πόδας pódas; intervocalic /d/ regularly drops out in Tk. C lists the dim. πούί 'pui for NT (cognate with MG 'podi, although the latter has lost its diminutive force), but does not list 'pua; however, 'pua is used by Houpis (Thus 24). /o/> /u/ is conditioned by the preceding labial. All forms cognate.
47. knee | γόνυ gónu | γόνατο γόνατο | γόνατε γόνατε | γούνα γούνα | γόνατε γόνατε

ST 'γόνατα is a back-formation from 'γούνατα 'knees'; this back-formation is also present in other dialects of Greek (Hatzidakis 1990 [1907], 15). /o/> /u/ is conditioned by the preceding velar. Kislilier (2017, 127) records only 'γόνατα for Prastos and γόνατα for Melana and Kastanitsa. All forms cognate.

48. hand | χείρ kheir | χέρι χέρι | χέρα χέρα | χέρα χέρα

MG uses a diminutive. All forms cognate.

49. belly | γάστηρ gaste'ρ | γόνατο γόνατο | γόνατε γόνατε | γούνα γούνα | γόνατε γόνατε

Of the AG terms, γάστε'ρ is etymologically primary, while γόνατο literally means ‘hollow’. The terms are fairly evenly matched in Attic: 7 instances of γόνατο in Plato against 5 of γάστε'ρ; but including Aristophanes and Thucydides, 18 of γόνατο against 26 of γάστε'ρ. (Counting stems, there are 19 instances of the γόνατο stem — unlike MG, γούνα itself cannot mean ‘belly’—against 43 of γάστε'ρ.)

ζ фουκα. Kislilier (2017, 126) records 'fuka for K. Tk 'fukα < D φύσκα φύσκα: ‘belly; and the large intestine’; IG φύσκη φύσκη: ‘large intestine; blister’. (Liddell-Scott-Jones Lexicon considers the use of D φύσκα: to mean ‘pot-belly’ “probably a nick-name.”) Note that φόσκα φόσκα, a reflex of φύσκα, is extant in both Tk and MG with the meaning ‘bubble; cyst; blister’. Presumably, the latter form became differentiated from the earlier within Tk as was the case with ατφόρο ‘husband’ and αθρόπο ‘man; person’. No forms cognate.

50. neck | τράχηλος trák'elos | λαιμός le'mos | λαιμό le'mo | λαιμό le'mo | λαιμό le'mo

MG λαιμός < AG λαμίος laimós ‘throat, gullet’. All forms cognate.

51. breasts | στήθος stíthos, μαστός mastós, στέρνον stérnon, κόλπος kólpos | στήθος στίθος, βυζιά ví'ziα | στήθος 'stíthi, βυζιά ví'ziα | στήθος 'stíthi, βυζιά ví'ziα | στήθος 'stíthi, βυζιά ví'ziα

Of the AG terms, στέθος and στέρνον refer to the breast or chest, mastós specifically to a woman’s breast, and κόλπος to a bosom or lap. Of the two MG terms, 'στίθος corresponds to ‘breast’, while vı’ziα specifically refers to a woman’s or female animal’s breasts; while it is now marked as vulgar in MG, it appears to be the basic vernacular term corresponding to ‘breasts’.

Kislilier (2017, 126) adds ma'stari for Melana. Of the Tk terms, ‘στίθαi seems to be a recent loan. Its normal reflex would have been *[ɛʰioθε], although the Tk singular στήθος 'stíthi is a back-formation from the EMG plural στήθη 'stíthi. Nevertheless, the plural is characteristically MG, not Tk, and Pernot (1934, 173) concludes on that basis that the form is “probablement un emprunt.” Given that vı’ziα has been chosen as the basic term, all forms are cognate. The NT and PT forms display AG /u/ > MG /i/; however, Tk itself is inconsistent in retaining AG /u/, so the NT form need not be a loan. NT 'stíthi: Thus 65 (referring to man’s breast).

52. heart | καρδία kardía | καρδία kardía | καρδία kardía | καρδία kardía | καρδία kardía

Scutt (1913–14, 27) gives the form καρδία kor'dia once, but four instances of καρδία kar'dia. Normally AG /d/ goes to /ν/ in Tk (§3.2.3.1.g); furthermore, /ð/ does palatalise into /ν/ in Tk, although there are not many examples of this. On the other hand, the failure of -ia to reduce to yod indicates this is not a recent loan. All forms cognate.
The post-classical forms are derived from the collocation ἕπαιρ συκώτων ἐπὶπυκνὸν τὸν ‘figged liver’, in the same way as the equivalent Latin collocation iecur ficatum gave rise to the Romance words for ‘liver’. The ST form is the normal Tk reflex of σικότι (§3.2.3.8); the PT form seems to have been reborrowed from MG. NT σκόκι DH; no diacritics indicated, though the pronunciation ‘skoki’ may be possible under MG influence. Kisilier (2017, 128) gives fi’koki for Prastos and Kastanitsa, si’koki for Melana, ‘skoki for Tiros and Vaskina. All forms cognate.

The ST form is the normal Tk reflex of ’pio; the palatalisation of /pi/ does not seem to have taken place in NT, so the NT and PT forms have not necessarily been reborrowed from MG. On the other hand, -inu verbs in Tsakonian are generally recent loans; Pernot (1934, 272) suspects the Tsakonian form was originally ’piu, through analogical remodelling which had eliminated the -inu verb class, and that ’kinu is a more recent, phonologically assimilated importation from MG. All forms cognate.

Á phare ‘that you eat’ (suppletive aorist, Tk (faere, MG fas). MG’tro(y)o < AG τρῶγω τρ.:go: ‘to chew’; the verb is already used in its new meaning in the Gospel of Matthew. ST ’tro/ is the normal MT reflex of /tr/ (§3.2.3.1.a); however, the process does not seem to operate in PT, which consistently retains AG /tr/. Since Ç records ‘three’ (MG τρία, ST τοία) as trwya, this is probably an archaism, rather than a loan from MG. NT ’f’u e.g. Houpis (1992, 12): Εἰνὶ τοιοῦτα σανῇ; ’ini ’f’unda sa’ne ‘do they eat hay?’ Kisilier (2017, 126) records the variant ’f’u for Tiros, Vaskina and Kastanitsa. All forms cognate.

NT, V da’gono is explicitly annotated by C as an MG loan. Kisilier (2017, 127) records ta’tsinu for K. According to Pernot (1934, 350), the metathesis /tsak/ > /kats/ is commonplace; as an etymology, Pernot (1934, 252) suggests MT κατασκόνου ‘break’ < SMG τσακόνω *’smash’ < possibly EMG τσακόνον ‘pen-knife’. He derives Deffner’s ka’tsinu by metathesis from τσακίνον *tsa’kinon, a variant of MG τσακίζω tsakiko ‘break’. However, the /te/ of ST PT point to *ka’kinon not *ka’tsinon—“ce qui complique le question.” What seems to have taken place is that the metathesis form *ka’tsinu (which may indeed still have been extant in Deffner’s time) was influenced by its still current etymon, which would have been palatalised to *tsa’cintu. Alternatively, *ka’tsinu may have been reanalysed to *ka’kinu [ka’tsinu] as a sort of assimilation, given that /ts/ is not a very common etymological phoneme in Tk.

Elsewhere, Pernot (1934, 350) suggests ka’cintu < dákn:> via consonant metathesis; that account is not much more convincing.

Liosis (pers. comm.), in his contribution to the Cognacy in Basic Lexicon project at the Max Planck Institute, Jena, has tentatively proposed *καταδάκνω *kata-dak-νο: ‘to bite down’ > *ka-daṅ-ino (remodeled present) > *ka-ak-inu (§3.2.3.4) > *kakinu > kacintu.

Since H is the reference dialect for PT and da’gono is unattested there, the PT form is non-cognate; the NT form is borrowed from MG. If we accept Liosis’ etymology over Pernot’s more problematic derivations, ST is cognate.
According to C, MT 'niu < AG voō noō: 'perceive'. But this verb already has the reflex ST voō no'u, PT voō no'yo 'feel, understand, remember', which is cognate with MG voō no'o (high register) and voayı̇ no'yaı̇ (colloquial), and which is a much better semantic and phonetic match for AG noō. (no'ú may well be an MG loan.) Pernot (1934, 277) points out a suitable cognate for 'niu would be MG vovōθo no'oθo 'feel' < voivō no'o (morphologically remodelled) < εννοia 'enio 'care, meaning'; however, the obvious reflexes in Tsakonian would have been *ni'azu > *'nandu. (The verb ending θu in Tk, as discussed for 'burn', is problematic.) What Pernot considers likeliest is that no'o > *νυκu, e'njuka 'I feel / hear, I felt / heard' was influenced by its semantic match o'ru, o'raka 'I see, I saw', giving the aorist e'njaka, which corresponds to the present tense 'niu (the aorist suffix 'jaka corresponds to the present 'iu.) In ST, a'kuo is present in the imperative ákou 'aku, áko 'ako. NT, ST forms non-cognate; PT form borrowed.

Of the AG terms, oida is originally the perfective of the verb *εiδω/είδω eidox: ~ widox: 'to see', which survived into Classical Greek only in the aorist είδον eidon (so still in MG: ειδα 'ida.) This form clearly predominates in AG: for the first person present indicative, Plato uses oida 139 times, epistamai 30 times, and gignó:sko: 10 times; Aristophanes uses oida 28 times, epistamai 6 times, and gignó:sko: once. EMG ηεύρεω i'ksero (< ?AG Υεύρο ekseuṛ: 'find out') > MG ksero.

While 'kseru is clearly the unmarked form for 'know' in Tk (26 instances in Samp, Dict and Har, and the reduced form δơ 'oksα for 'I don't know' in ST), it is just as clearly borrowed from MG, since /ts/ is the native reflex of AG /ks/. NT έρου DH. All forms borrowed from MG.

| 57. see | ὄρο ὀρι: | βλέπω 'vlepo | ὀρο ὀ'ru | ὀρο ὀ'ru | θορώ θ'o'ro |
|--------|-----------|----------------|-----------|-----------|-------------|
| Κέ wri 'see'! Α óra 'I see', nandioru (= na ndi o'ru) 'that I may see you', orade 'you saw' (for o'rare). MG 'vlepo < AG βλέπω blép: 'to watch'. ST o'ru< AG ὀρο ὀρι: 'see'; this form survives in PT only in the participle ὀρακό or'ako. PT θο'ro < dialectal Greek θο'ro 'see' (unmarked in e. g. Cretan, but absent in MG.) NT o'ru: Thus 36. No forms cognate. |

| 58. hear | ἀκούω akou: | ἀκούω a'kuo: | νίου 'niu | νίου 'niu | a'ku(γ)ο |
|-----------|--------------|--------------|----------|----------|-----------|
| Όναρι 'O hear'. N. Nicholas for Leonidio, and Pernot (1934, 351) also reports ['t |

| 59. know | οίδα oida, γνωσκό gignó:sko:, ἑπισταμαι epistamai | ἐξέρω 'eksro | ἐξέρω 'eksro | ἐξέρω 'eksro | ἐξέρω 'eksro |
|-----------|---------------------|---------------|---------------|---------------|---------------|
| Όναρι 'O know'. 10 times; Aristophanes uses oida 28 times, epistamai 6 times, and gignó:sko: once. EMG ηεύρεω i'ksero (< ?AG Υεύρο ekseuṛ: 'find out') > MG ksero. |

| 60. sleep | καθεῦδω kat'eúdo:, κοιμάμαι koimá:mai, ήμδω, ὑπνωμαι hýpno:mai | κοιμάμαι ki'mame | (καθήμενε ka'jime:ne), πραγιάζου pra'gía:zu | κιούφου 'kjufu, κασίου ka'siu | κοσίκο ko'siko, κασίο ka'sio, πλαγιάζο playi'azo |
|-----------|----------------------|---------------|----------|----------|----------|
| Όναρι 'I sleep!' (= k'jupsα). Of the AG terms, kat'eúdo: is clearly predominant. Plato uses kat'eúdo: 32 times against koimá:mai 11 times and heúdω: 6 times, while Aristophanes uses kat'eúdo: 32 times, koimá:mai twice and heúdω: 4 times. MG ki'mame< AG κοιμάμαι koimá:mai. |

| ST 'kjufu 'sleep; lie' < AG κύπτω káptw: 'to stoop'; the verb also turns up in Corsican Maniot (Pernot 1934, 285). Tk ka's(ε)(u) 'I sit; I sleep (present) ' < κασία ka'sika 'I sat; I slept (aorist) ' < AG καθίζω kat'ízo: 'I sit'. The texts show 'kjufu to be the unmarked form in ST: 9 instances in Dict, Samp and Har, with none of 'kasiu. Scutt (1913–14, 18) records the form ηεύρω τυφ' for Costakios. This would normally indicate |
an etymon of τύπτω τύπτο: (which in AG means ‘to strike’, and which in fact has the Tk reflex ‘tifu ‘to push’), but it seems that, since [v] and [c] were in free variation at the time, the process [v] > [c] could be reversed.

NT form only attested in passive past participle in C. Houpis uses pra’yjazu (Mal §25; Thus 36), also attested for NT by Scutt (1913–14, 27); Pernot (1934, 351) also noted that his Kastanitsiot consultant used pra’yjazu instead of ‘kjfü. ‘kjfü does in fact turn up in NT (Costakis 1951: 141; Mal §8 κυού / ‘kjupsimo ‘lying down’), but ‘sleep’ is overwhelmingly rendered as pra’yjazu (9 instances in the corpus, as against 2 of ‘kjfü.) NT pra’yjazu, PT pla’yjazo ‘to lie down; to sleep’ < MG pla’yjazo ‘to lie down’ < AG πλάγιοσ plágiōs ‘sideways. ka’sio – ka’isko is the only stem used in PT for ‘sleep’ (13 instances); a rather neat instance of ambiguity is given in Samp §12v: Μα’ αργατινά κασιήκοντε ‘τανι, ο γέρο με τα γραία, τσάι, το καβγί κασίότα ‘τανι, το παλικάρ ‘με aryati’na ka’싱onde taŋi sto ’džaki, o ’gyero me ta ’gyra, tce to κα’ν’yi kasi’ota taŋi, to pali’kar ‘one evening the old man and the old woman sat by the fireplace, and the lad slept, the young man’. No forms cognate.

61. die
| ἀποθνήσκο | πεθαίνω< | πενάκου | πενάκου | πεθαίνω πεθένο

MT pe’nak’u<*peθ’naskon (/θn/ > /n/ characteristic of Tk avoidance of clusters; see Pernot 1934, 257) < *pet’naskon: n < AG ἀποθνήσκο ἀποθνῆσκο. ‘die’. While there is a temptation to see in the /a/ of *peθ’naskon a Doricism, by equivalence with AG /ε/., Pernot considers it more probable this is an analogical development from the past stem *peθ’an- < apet’an-. MG, PT peθένο < EMG απεθαίνω απεθένο < AG ἀπέθανον apet’anon, aorist of ἀποθνῆσκον. The /ε/ in pe’nak’u seems likewise to point to influence from the aorist stem, and quite possibly from MG. NT pe’nak’u: Thus 74. NT, ST form cognate; PT form borrowed.

62. kill
| ἀποκτέινο | σκοτώνω | σκοτοῦνο | σκοτοῦνο | σκοτώνω

MG sko’tono < AG σκοτῶ skotōs: ‘to darken’. A more archaic verb exists in θύου θιο ‘to slaughter’ < AG θύω θύω: ‘to offer a burnt sacrifice; to kill’, but this is restricted to killing animals, and sko’tunu is used to denote killing either animals or humans. In the ST corpus, there are 7 instances of sko’tunu (5 with human victims) against 7 of θιο (6 with animal victims); for NT, 30 instances of sko’tunu (5 with animal victims) as against 2 of θιο (1 with a human victim).

Tk /sk/> /kʰ/ has not taken place; the regular process AG /ɔ:/ > Tk /u/ has taken place; but this occurs in a suspect context. Pernot (1934, 272) considers the -’unu present modern, displacing earlier -’uk’u. Several verbs admit both possibilities; the absence of an -’uk’u variant, like ka’fjunu, “dénote un emprunt particulièrement récent.” Indeed, Pernot (1934, 258) found -’uk’u was still productive in rendering newly borrowed MG -’ono verbs: e. g. learned MG δίκε’ono > δίτεκ’u’ to justify’. Since MG does not distinguish between /o/ and /ɔ/., -’uk’u is not in fact inconsistent with sko’tunu being recently borrowed from MG; /ɔ:/> /u/ need not be an archaism at all. The -’uk’u suffix seems to have arisen by analogy with the aorist suffix ‘uka (corresponding to MG -osa), and the -’ik’u class of verbs. As Pernot (1934, 273) finds, -’unu is newer than -’uk’u, but both are present for this verb (sko’tunu, sko’tuk’u), so this verb has been in the language for a reasonable amount of time. Indeed, -’unu has been so recently imported in the language that it has yet to spread to the subjunctive progressive of sko’tunu, which is only sko’tuk’u. In C, however, the sko’tuk’u stem is only listed for the passive participle skot’uk’u’mene. NT sko’tunu: Thus 64. Kisilier (2017, 129) records ko’tuk’u for K. All forms borrowed.
The primary meaning of *pléː* is ‘to float’. MG *kolím’bo* < AG κολυμβάω *kolumbáː* ‘to dive’. MT *preu*, PT *p’ilevnyo* ‘float, swim’ < AG *pléː*; the PT form has been morphologically remodelled to a different conjugation. Costakis (1951, 51) gives the ST form *ap’leu* as a counterexample to /pl/ > /pr/; this is not mentioned in C. ST *kúw’mbizu* < EMG κολυμβίζω *kolímvizo* < AG κολυμβῶ *kolumbóː*; Deffner gives the form κολυμβού *kolýmbou*. The fact that ST retains the AG /u/ suggests that ST did not necessarily borrow the form from MG; however, Modern Laconian Greek also pronounced the noun for ‘swim’ as διάνοι τόκον — *kou³μibi* as older than the MG loan μπάνιο *bano* < Italian bagno, and ἀπλέμα *apléma* < *pléː* as older than κυ’lumbi.

There are no instances of ‘swim’ in the available ST or NT texts, so one cannot establish which is the unmarked variant from textual frequency. All other things being equal, the deviant form *preu* must be assumed to be the original Tk form; as a result, no forms are counted as cognate.

### 64. fly

| πετούμαι pe’tomai | πετώ pe’to | ανεμούκου anemók’u | πετού pe’tu | πετώ pe’to |

According to Deffner, *ane’muk’u* < *ἀνεμόω* anemóː, cognate to ἀνέμος *ánemos* ‘wind’; cf. AG ἀνεμίζομαι *anémizdomai* ‘to be driven by the wind’; ἀνεμοῦμαι *anemóumai* (the passive counterpart of *anemóː*) ‘to be filled with wind; to be inflated, swollen’. There are two instances of ST *pe’tu* outside C: Har p. 145 *arxiêtne na rái petaliðè ena yiúre petántè* ‘she started seeing butterflies all around flying’, and Ikonomu’s 1870 poem *The Sparrow* (cited in Lekos 1984 [1920], 94): πετούντα πφούρ’ ἐζάτερε; *pe’tunda p’ur e’zatere* ‘how did you go flying?’ No NT form is given by C; Houpis uses *ane’muk’u* exclusively (Mal §3; §17), although the definition in C of *ane’muk’u* gives examples only of MG *pe’to* in its other meaning, ‘throw’ (also present for *ane’muk’u* in Houpis), and *ane’muk’u* is used only in the sense ‘throw’ in ST texts (22 instances in *Dict, Samp* and *Har*.) This means that both NT and MG have the same polysemy for *pe’to* and *ane’muk’u* respectively: both ‘fly’ and ‘throw’.

Now, it seems this polysemy is accidental for MG: while clearly *pe’to* < AG πέτομαι *pétomai* ‘fly’, Andriotis (1990 [1983]) quotes Hatzidakis’ (1989 [1905], 413) derivation from AG πετάννυμι *petánnumi* ‘open, spread out, unfold’; specifically for the meaning ‘throw’, he adds Menardos’ derivation from ἀποτάσσομαι *apóttasaː* ‘range apart; depart from’, presumably via the aorist ἀπέταξαν *apétaxon* (cf. the aorist of *pe’to*, πέταξα *petaksa*.)

One suspects, therefore, that a similar case to *a’trope ~ a’tfopo* ‘person; man’ has taken place: either *pe’tu* was borrowed into ST to disambiguate *ane’muk’u*, or *ane’muk’u* was extended to the meaning ‘fly’ from the meaning ‘throw’ in NT, as a calque of MG *pe’to*. Although in the case of *a’tfopo* NT was more conservative than ST in retaining it in the meaning ‘man’ when MG *a’trope* was introduced, in general NT has been more subject to MG influence than ST, and it is improbable that an accidental polysemy in MG would be echoed by the same polysemy in an unrelated Tsakonian word. There is a possibility that the polysemy is not accidental, with ‘throw’ taken as the causative version of ‘fly’; even so, however, it is difficult to see why the same causitivisation would occur in NT if not under MG influence. Thus, NT *ane’muk’u* ‘fly’ is a calque of MG *pe’to*, while ST and PT here have cognates.
A critical lexicostatistical examination of Ancient and Modern Greek and Tsakonian

| 65. walk | περιπατέω | περπατέω, πατέω | τρέχο 'trexо, τόδοχον 'τόξαυ S, περπατώνα | τρέχου 'trexо, τόδοχον 'τόξαυ | τρέχο 'trexо |
|----------|------------|-----------------|------------------|------------------|------------|

À tjachoumene (‘walking’, but given as verb). Of the AG terms, the primary meaning of πατέω: is ‘to tread, to step on’ (peripatēo: adds the preposition peri ‘around’), while badίzdо: also means ‘to go slowly, to pace’; both bainо: and badίzdо: have been extended in meaning to ‘to go’, a meaning bainо: tends to acquire in compounds (e. g. ἐκβαίνω ekbainо: ‘to get out’) > MG ἑγαίνω ‘vyno.) bainо: refers to motion only in its present stem: its perfect aspect denotes standing. The text counts strongly suggest badίzdо: was the basic form for ‘walk’ in AG: in Plato, there are 17 instances each of the verbs bainо: and bainо: against 7 of peripatēo:, while in Aristophanes there are no less than 89 instances of bainо: against 2 of bainо: and 4 of peripatēo:.

MG perpa'to < AG περπατέω peripatēо:; while badίzdо: > va'dίzo also survives in MG, there is no doubt that perpa'to is the basic term, with va'dίzo meaning ‘to pace, to walk slowly’. 'trexо is SMG for ‘to run’. 'τόξαυ ‘to walk; to run’ is the regular reflex of D τράγω tráκо: ‘to go’, cognate to AG τρέχο trékо: (> trexо) ‘to run’. No instances of 'τόξαυ ‘to walk’ have turned up in the Tk texts I have. No cognate of perpa'tо is listed in C, but the verb is used by Houpis (Mal §3, §17).

| 66. come | ερχόμενε ερχοται | ερχόμενε 'erxome | παρζίου par'ziu | ερχόμενε ερ'xomene, μόλι | μα 'molo ma |
|----------|-----------------|------------------|----------------|------------------|------------|

According to Deffner, pa'riu < παρίημι parίημι ‘let fall; pass by, pass over; allow to pass, admit’. The past tense of MT pa'riu is (e')kana < D ικάνον hikά:nо: ‘to come’ (Pernot 1934, 286), and the MT (Scutt 1913–14, 28) future is formed from PT 'molo < D μολείν moleίn ‘to go’ (AORIST). NT, ST forms non-cognate.

| 67. sit | καθημικα | κάθημι | κάθημενε ka'fimene | κασίου ka'siu | κασίκο ka'siko, κασίο ka'sio |
|----------|---------------|----------------|---------------|---------------|---------------|

Ç qi-si- mmi ‘seated’ (κασίμενε ka'simene). NT ka'fimene only attested in past participle form; its palatalisation is characteristic of NT (§3.2.4.5). Tk ka'si(k)u 'I sit; I sleep (present)’ < κασίκα ka'sika ‘I sat; I slept (aorist)’ < AG καθήμιο καθίζδо: ‘I seat’ (with /θ/>/s/: §3.2.1.1) < κατά κατά ‘down’ + τζίζδо: ‘to seat’. Tk ka'tsenu has the aorist eka'tsaka and the imperative katса (Pernot 1934, 268); these are comparable with the MG aorist 'ekatsа, imperative 'katse, and it seems the present stem has been remodelled after the aorist. The MG aorist 'ekatsа < e'katsа < *'ekaθsa < e'kaθisa (Hatzidakis 1990 [1907], 156); Tk does not have a -sa aorist (as shown by the fact that the Tk aorist eka'tsaka adds ka on to the MG stem), so one would reasonably consider ka'tsenu an importation. MG 'kaθome < AG κάθημι καθίζε:mai ‘to sit’ < κατά κατά ‘down’ + ήμαι hē:mai ‘to sit’.

Alongside ka'si(k)u, Tsakonian also has the form ka'ti(n)u ‘to place’; while C derives this from kat'izdo:, Deffner and Pernot (1934, 279) consider it likelier that the aspirated stop reflects a cluster formed by apocope from κατά katά ‘down’ + ήμαι hè:ka ‘I placed’. Since the aorist of ka'siu is ka'sika rather than *kasi'aka — even though the ika aorist is characteristic of transitives rather than intransitives — and ka'siu is defective, Pernot considers ka'siu to have been influenced by its transitive equivalent ka'ti:nu.

Of the two ST forms, it seems ka'tsenu means ‘sit down’ (εκατσάκα κοντά ίκάρα να ὁμιστοῦ eka'tsaka konda t'an i'kara na θονίσ'tu 'I sat (AORIST) near the fire to warm myself’: C)
and ka'siu 'be seated' (ἐκι κασήμενε γάμου τὸ ὑπερτειμένον ἐκείνης). The other meanings of ka'siu are 'dwell, stay, settle into some place, be occupied with, be idle, rest, sediment, stay awake, set (of sun or stars), go to bed, sleep', while katsenu also means 'settle into its place, set (of sun or stars), go to bed, get stunted, wait'. The dichotomy is largely borne out in the corpus: in the ST corpus, 9 of 14 instances of katsenu are inceptive, while the remaining 5 are to do with the meaning 'stay', which also occurs with the MG aorist ekatsa. For ka'siu, 15 instances are progressive and 3 inceptive — the spread to inceptive implies ka'siu is the unmarked term. In NT, 12 instances of katsenu are inceptive, with one doubtful and one instance progressive and meaning 'stay'; there are 7 instances of ka'siu, all progressive.

katsenu does not seem to be present in PT: ka'sio is used in both the inceptive (19 instances in the corpus) and progressive meanings (36 instances), while there are only two instances of a kats stem, which may well have been borrowed from MG. All forms cognate.

### 68. lie

| κέιμαι keimai | ξαπλώνω ksa'plono | τσαπλούνυς tsapluunu, γείρου 'γυρ, πραγιάζου pra'giasu | τσαπρούκυς tsa'pruku, γείρου 'γυρ | ξαπλώνω ksa'plono, γείρου 'γυρ |

MG ksa'plono < AG έξαπλώνω eksaplon: 'to spread out'. According to C, none of the terms for 'sleep' which etymologically may have once meant 'lie down' — pra'giasu < 'sideways', ka'siu < 'sit', kjufu < 'stoop' — have that meaning in current Tk. Both the NT and ST forms tsa'plunu, tsa'pruku, are regular reflexes of the EMG form. (Kisilier 2017, 112 also reports the more MG-like forms ksa'pruku in Tyros, ksa'pluku in K.) The alternation of older -'uku and newer -'unu as verb endings in Tsakonian has already been commented on for 'kill'; the ST form is quite regular, while the NT form is characteristically much closer to MG. The alternative word 'yiru has as its primary meaning 'lean', as does its MG cognate 'yerno; it occurs once in the NT corpus as against pra'giasu occurring twice (the latter possibly under MG influence); from the example ("lay down on the bed and went to sleep"), 'yiru probably corresponds to MG 'yerno, which is inceptive rather than stative. NT 'yiru: Scutt (1913–14, 27). All forms cognate.

### 69. stand

| ἵστημι histe:mi | στέκομαι ste'kome | στέκου 'steku | στέκου 'steku | στέκο 'steko |

In MG, στέκω ste'ko is a less frequent variant of ste'kome; the form is ultimately a back-formation from the AG aorist ἔστηκα heste:ka, and occurs already in the Septuagint (1st century BC) and the New Testament. The form looks like a recent importation; a verb does exist with /st/ > /st/, as expected for Tk, but this is the inceptive t'enu 'to stand up, to awake', attested by ζ (ezanou 'stand up!'); interpreted by Pernot (1934, 503) as et'a 'tanu, or possibly et'a 'tanu 'he stood up'. This form points to a proto-form *stenon, and the variant *t'enu reported by Pernot (1934, 380), to *stezon; this indicates the morphology of this verb has been extensively remodelled. All forms borrowed.

### 70. give

| δίδω μί did:mi | δίνω 'dino | δίον 'dion | δίον 'dion | δίον 'dino, ντίνω 'dino |

Apparently, MT 'dion < AG δίδω dido, with elision of intervocalic /θ/ (§3.2.3.4)—something Pernot (1934, 276) attributes to dissimilation. MG 'dino is an analogical back-formation from the aorist form of the verb. All forms cognate; PT borrowed.
The AG forms are a complex interlocking of four verbs — the three cited, and *ἐἴπω εἶπον, surviving only in the aorist εἶπον εἶπον. These verbs fill in each others' conjugations; the imperfective of ἄπασκ: is matched with the aorist of ἐπὶ:μί, and the aorist εἶπον substantially replaces the aorist of λέγο:. λέγο: is dominant in the present tense: in the first person singular, Plato uses λέγο: 496 times against ἐπὶ:μί 166 times (Aristophanes: λέγο: 44 times, ἐπὶ:μί 20 times, ἄπασκ: once), and in the third person singular, λέγει λέγει 260 times against ἐπὶ:μί 44 times (Aristophanes: λέγει 47 times, ἐπὶ:μί 1 once). In the aorist, εἶπον has an appreciable presence (third person singular: 29 instances of ἐπὶ:πε(ν) ἐπὶ:πε(ν) in Aristophanes, 26 in Thucydides, 118 in Plato), but ἐπὶ:μί is dominant (16 instances of ἐπὶ:πε: in Aristophanes, 56 in Thucydides, no less than 2103 in Plato), while λέγο: is hardly in the running (3 instances of ἐλεξε ἐλεκε in Aristophanes, 8 in Thucydides, 1 in Plato).

ST a'υ < NT la'lu < AG λαλέω λαλέω: ‘utter’; la'lo is also the unmarked term for ‘say’ in Cypriot. PT μουσι(k)o < AG μουθέω μουθέω: ‘say’ and / or D μουσιδδει μουσιδδει ‘speak (3SG)’; Costakis (1951, 191) gives this as an example of a PT archaism. The glosses of μουσι(k)ο in C point more towards ‘speak’ than ‘say’ (INTR). The aorist of la'lu, ST e'peka PT 'peka, is the same stem as the aorist of MG λεο, 'ipa, and is the reflex of AG εἶπον. Alongside it, the aorist of λαλεο: survives: ST al'ite PT la'lika. For aorist stems, where the conjugation of la'lo has been contaminated by 'leo in PT, the 'peka stem outnumbers the (v)a'ika (< la'lo) stem in the PT corpus by 168 to 54, with four instances of μουσι(k)ο. For present stems, where the verbs la'lo and 'leo are distinct, 'leo outnumbers la'lo 74 to 1. Although there is clearly still usage of la'lo in the present (e.g. C's example βα'ήω τιο Θεο σχωρέω να'ίο τιο θε'ο σκω'ρεσ 'I tell you God have mercy'), 'leo has clearly become the dominant form in NT. NT, ST non-cognate; PT borrowed.

### Table 1: Verb Conjugations

| Verb | 1SG (εἶπον) | 3SG (εἶπε) | 1PL (εἶπαν) | 3PL (εἶπαν) |
|------|-------------|-------------|-------------|-------------|
| λέγει | λέω | λαλού | αού | λέω, λαλά, λαλο, μουσι(k) | μουσι(k) |

71. say

All forms cognate.

72. sun

73. moon

74. star

No etymological derivation given by C, although the etymon AG ἄστρον ἄστρον ‘star’ (> MG ‘astro’) is obvious. Given the attested phonetic correspondences of Tk, the probable pathway is AG ἄστρα ἄστρα ‘stars’ > ‘astrae’ ‘star’ (back-formation; recorded by Kislier 2017, 126 for Tiros and Melana) > *’astři > ’afži (which Kislier 2017, 125 also records in Tiros). *’astři > ’afži (recorded in Kislier 2017, 126 for Tiros and Melana) > ’afži ['asci]. The change /ťʃ/ > /či/ is odd, but has a parallel in Costakis’ pronunciation of the reflex of *a’stritis ‘asp (vipera ammodytes)’, noted by Pernot (1934, 327): both [aʃʃtʃaʃ] “avec un premier /ʃ/ plus sifflant que le second”, and [aʃʃtʃaʃ], where [tʃ] was in free variation with [c]. It seems that, as a dissimilation, /ťʃ/ was resolved to underlying /ʃt/ through the lenition of the second /ʃ/; /ťʃ/ then immediately
went on its way to palatalising into [jc]. *'astri > 'afi (cf. MG στρίβο 'strivo > ST ιουφων 'fufu, NT στούφου 'fufu ‘twist’)

No PT form of *'astri is given in C, although PT has the δἰμ. αστρούλι as'truli, and the derived form αστροφεντζία αστρφεντζία ‘starry night’; PT 'asteri < AG δἰμ. αστέρινον αστέρινον < αστρόν, also present in MG. C claims 'asteri is an MG loan; although this may be the case for its ST cognate αστέζι 'a’stezi, there is no obvious cause for doing so for PT. All forms cognate.

75. water  | ὤδωρ ὕδατος  | νεό νε’ρο  | ἴο ἴο  | ἴο ἴο  | νεπέ νε’ρε

For PT form of 'water', narwu ‘water’ — narwu is ne’ro, and there is no reason to suppose this to have been part of Tk at the time. Vi (travel journal: Famerie 2007, 237) ἴο ἴο. MT ἴο < AG ὤδωρ ὕδατος ‘water’. Although intervocalic /ð/ drops out frequently in Tk (see ‘foot’), Pernot (1934, 174) considers a direct transition unlikely, since AG / σ/ > Tk /u/; he instead postulates the process ἴο < *’ivo < back-formation from plural Tk ἴβατα < EMG *’ydata < AG οὐδάτα οὐδάτα, plural of ὤδωρ. The existence of *’ivo is confirmed by the δἰμ. βατσούλι βατσούλι. MG form already present (as ne’don) in 2nd century BC. Hatzidakis’ thesis that the initial vowel of ἴο fails to be /u/ because the word was borrowed through the Church is unlikely. While the ancient word has survived in Peloponnnesian Greek, interestingly, it has survived with the /u/ vowel: οὐδάτα 'udata ‘urine’ (Andriotis 1974 §6166). NT, ST forms non-cognate; PT form borrowed.

76. rain  | ιετός υιετός  | βροχή βροχή  | βροχή βροχή  | βρέχε βρέχε  | βρόχα βρόχα

The ST form has changed gender from feminine to masculine; C believes it is patterned after masculine ‘ίετ’ ‘sun’. Deffner reports the form βροχ’ for Leonidio; the word was unknown to Costakis (1934, 334). The PT form vro’xi seems to be the native Tk reflex of IG βροχή βροχ’; (§3.2.1.3); with the exception of the words for ‘mother’ and ‘daughter’, feminines ending in /i/ in Tsakonian are all recent importations into the language from MG (Pernot 1934, 169; Costakis 1951, 72 says outright that vro’xi is a loan.) The ancient Greek word has survived in */ye’tia/ → [ju’cia] ‘wat weather’. ST, PT forms cognate; NT form cognate and borrowed.

77. stone  | λίθος λίθος  | πέτρα πέτρα  | πέτσε πέτσε  | πέτσε πέτσε  | πέτρα πέτρα

MG ‘petra ‘stone’ < AG πέτρα πέτρα ‘rock’. The MT form displays the normal MT process /tr/ > /tʃ/ (§3.2.3.1.a), although its gender has switched to masculine from feminine; C adduces an instance of a masculine form πέτροι πέτροι in Strabo. As already mentioned, /tr/ > /tʃ/ does not occur in PT; we have no way of telling whether PT ‘petra is an archaism or a loan from MG, but presume the former. Kislier (2012, 177) records the variants ‘petfi (Tiros), ‘petse, ‘petsune (Melana), ‘petfune (Prastos, Tiros). All forms cognate.

78. sand  | ἁμμός ἁμμός  | ἁμμός ἁμμός  | ἁμμό ἁμμός  | ἁμμό ἁμμός  | ἁμμό ἁμμός

All forms cognate.

79. earth  | γῆ γῆ, χθόν  | γῆ γῆ, χθόν  | γῆ γῆ, χθόν  | (γ) γῆ (γ) γῆ, γῆς  | (γ) γῆς (γ) γῆς, αννήγης αννήγης, χθόνα χθόνα

MG ‘xoma < AG χθόνα kʰɔːma ‘earth thrown up, mound’. Two forms are involved here: γῆ ‘ground’ and ‘xoma ‘dirt’ (although it has also acquired the meaning ‘ground’, absent in MG: Μ καλέ χόμα κα’λε ‘xoma ‘good ground’, T ἔμε παλέγγουντε με τα χώματα ’eme pαλεγ’γουντε me ta ’xomata ‘we busy ourselves with the land’ — cf. H με τα γης πολεμώ me ta γηs πολε’mo ‘I busy myself with the land.’) The form γηs seems to have taken over from γη in vernacular MG, with γη reinstated by Puristic Greek.
From an inspection of the examples given by C, the dominant form in ST is i’yi; however both Kisilier (2017) and Kassian (2018) take the main form to be ‘xoma. Pernot (1934, 172) considers i’yi a loan from MG (“un emprunt aux dialectes voisins”), and it is true that i’yi does not fit the Tk native declension patterns; it is known that Doric had γά: for IG γῆ γέ:. NT γῆ DH; this seems a straightforward loan from MG. As for ‘xoma, the form ‘xuma is clearly the native form (§3.2.2.3), with ‘xoma a loan from MG.

80. cloud
| νέφος néphos, | σύννεφο ‘sinefo | σύννεφο ‘sinefo | σύννεφο ‘sinefo |
| νεφέλη nepéle: | | | |

NT ‘sinefo in Houpis (e.g. Mal §23). In other dialects which have retained AG /u/ (IG /y/) as /u/ (Maniot, Old Athenian), this word occurs as suyne’fia, which is consistent with the word’s etymology (< AG σὺν σῦν ‘with’ + νέφος néphos ‘cloud’). Note that all words inheriting the AG sun- prefix in ST have /i/ rather than the archaic /u/ (Pernot 1934, 110). All forms cognate.

81. smoke
| καπνός kapnós | καπνός kap’nos | καπ(ι)νέ kap(ι)né | καπ(ι)νέ kap(ι)né |
| καπ(ι)νέ kap(ι)né | καπ(ι)νέ kap(ι)né | |

Vi καπνέ’καπ’νε. The Tk ephenthesis is characteristic of its treatment of such clusters; cf. AG δείπνον deípnon ‘dinner’ > ST δείπ(ι)νε’διπ(ι)νε ‘dinner after a funeral’. All forms cognate.

82. fire
| πῦρ pûr | φωτιά fo’tia | κάρα K’ara | (i)κάρα (i)K’ara |
| φωτιά fo’tia | κάρα K’ara | (i)κάρα (i)K’ara | |

MG fo’tia < φωτία p’otía < AG φῶς, φωτός p’o’s, p’o’s: ‘light’. MT ‘k’ara < AG ἐσχάρα esk’ára: ‘hearth; coal-pan’ (C; Pernot 1934, 170), which survives as MG σχάρα ‘grill’. Costakis (1951, 61) compares it to Hesychius ἐκχαρέων ekkháreōn ‘of the kitchens’; indeed, he quotes Hatzidakis on this point, who goes so far as to say “this, too, is a sure piece of evidence for the descent of Tsakonian from the Laconian dialect.” It may well be that ekkháreōn reflects Proto-Tsakonian: κχ could be an attempt to render aspiration at a time χ was already fricated (this is in fact how modern Tsakonians write /kʰ/), and the semantics is consistent with the meaning of esk’ára. The PT form is not necessarily a loan: it retains archaic stress compared to MG, and it has a cognate in MT θαία θ’kia ‘light’; treating it as a loan, however, is the simplest explanation for the form. NT ‘k’ara: Thus 66.

AG πûr survives as ST ‘pi’zi, kir, kizi ‘fire; intense heat’: the proverbial expression εξάκαι kwp Κύζιου όλοι e’zakai kir ki’ziu ‘oli ‘they all went to the Fire of the Lord (=Hell)’ strongly suggests that this word was reintroduced into Tsakonian through the Church; at any rate, it is clearly not the unmarked expression for ‘fire’. NT, ST forms non-cognate; PT form borrowed.

83. ash
| σποδός spodós, | στάχτη staxti | σπο’ila spo’ila | σπο’ia spo’ia |
| τέφρα tépra: | | | |

The textual evidence weakly suggests tépra: was used more widely than spodós: there are three instances of tépra: in Aristophanes and one in Plato, but none in either of spodós.

MG ‘staxti < AG στακτή staktē: ‘dripping’. ST spo’ia < NT spo’ila (§3.2.4.1) < *σποδίλα spo’dila < AG σποδός spodós (cf. AG σποδία spodia ‘heap of ash’). NT spo’ila: Thus 36, corroborated in Kisilier (2017, 127); the form as given is as would be phonologically expected, and the form spo’ila is also given in Oikonomou (1870). Oikonomou also gives po’ila and p’o’ia, with the latter the expected reflex of spodia. There is no obvious channel for spo’ia to have been borrowed into Tk from MG; it is likely that the regular p’o’ia was in use in the 19th century alongside the unexpected archaism spo’ia, and that spo’ia eventually displaced p’o’ia because its sp- made it look like MG — not because it actually matched anything in MG. ST σκόνι σκόνι ‘ashes; powder
(as medicine)', cognate with MG σκόνη 'skoni 'dust', is a borrowing, and clearly a rarer form. NT, ST forms non-cognate; PT form borrowed.

84. burn | καίω kaíː | καίο 'keo | δαισου 'desu | δαισου 'desu | ξαλι(γ)κο, ξαλι(χ)νό | καίω 'keo, καίου 'keo | καίου 'keo, καίου 'keo |

MT ἀδεσu< AG δαισο ἀδαι: 'to burn'; Hesychius attests the use of this verb in Laconian. A problem here is the emergence of /s/; this has led Deffner to postulate *ἀδεθὼν, with /θ/ subsequently going to /s/ (§3.2.1.1). There are only three verbs in Tsakonian ending in -su (*αλεθὼν > α'λεσu 'to grind', *γνεθὸν > 'νεσu 'to spin', 'δεσu), and Pernot (1934, 134) considers it likeliest that in all three cases, the present stem /s/ originates by analogical extension from the aorist stem (*ε:lesa, ενε:sa, εδαισα); ironically, the Tk aorists of all three have now dropped their /s/ (α'λεκα, ε'νεκα, ε'δακα), as the aorist suffix ka has spread in the dialect at the expense of sa (Pernot 1934, 250).

C gives no etymology for PT καλ'ίγο; although the first syllable suggests the MG prefix ξε- + α- κε- 'un-; exhaustively' (cf. Η ξαλλάξω κσα'λάζω 'change clothes' < kse + αλλάξω a'λαζο; but also Η ξαλλύνω κσα'lίνο 'get untied' < kse + λύνο λίνο). AG λιγνύς λίγνυ's 'smoke' is suggestive — then again, so is Turkish alaz 'flame'. At any rate, this is clearly not a loan from MG. Liosis (pers. comm.), in his contribution to the Cognacy in Basic Lexicon project at the Max Planck Institute, Jena, has proposed AG ἐξαναλίσκω eksanalísko: 'to consume', with -lngo the PT counterpart to the productive verb suffix NT ST -indu, MG -izo; the cognate kat-ana'lisko had already acquired the sense 'to burn, to destroy' in Mediaeval Greek. He admits ἐξαλείφω eksaleipō as another possible etymology. No forms cognate.

85. path | ὁδός hadós | δρόμος 'dromos | στράτα 'strata | στράτα 'strata, σύρμα 'sirma, πορεία 'po'ria, δρόμο 'dromo |

Vi Πορεία po'ria, noting the survival of the archaic word po'ria < AG po'reia 'journey, march', where other Greek dialects used στράτα < Italian strada. The term strata is extant in MG, but is not the most common current expression. A semantic swap seems to have taken place: C glosses Tk ὁδός as MG po'ria 'journey, march', and Tk po'ria as MG ὁδόμο 'way, path'. Furthermore, AG δρόμος drómos primarily means 'race', and only secondarily 'running track'. Σύρμα < AG σύρμα sýrma 'something trailed along'. Of the sundry synonyms given, po'ria is clearly predominant in ST: there are 12 instances in Dict, Samp and Har, and no other word is present. ST form non-cognate.

86. mountain | ὄρος óros | βουνό νυ'no | δίνα 'fina, βουνό νυ'nó, δίνα 'fina, δίνα 'fina, βουνό νυ'nó, βουνό νυ'nó |

MG νυ'no < AG βουνός bounós 'hill'. Kisilier (2017, 126) records the cognate νυ'ne in Prastos, and 'sina in Melana. MT 'fina < D θις, θινός θ'ǐ:s, θ'ί:nóς 'bank, sandy hill; strand, highlands' (C, after Deville and Hatzidakis). Scutt (1912–13, 151), after Deffner, speculates it might be a reflex of AG ρίς, ρίνος ρί:nós 'nose'. Although /θ/ tends to go to /s/ in Tk, not /ʃ/ (§3.2.1.1), Pernot (1934, 374) is inclined to accept θίς as the etymology, having heard from a Katsanitsiot the form ἔρο 'sina 'on the mountain'. Kisilier (2017, 111) proposes MG ori'na 'mountainous.neut.pl' as the etymology; the aphaeresis of ori'na < ri'na would explain the initial /ʃ/ by §3.2.1.2, but the accent shift is not explained, and I do not consider this development likely. NT, ST forms non-cognate; PT form borrowed.

87. red | ἐρυθρός erut'rós | κόκκινος 'kokinos | κοτσι'ne | κοτσι'ne | κοτσι'ne | κοτσι'ne | κοτσι'ne | κοτσι'ne |
AG is notorious for the difficulties in matching its colour vocabulary to that of modern languages. There were four AG terms for red: erutʰrós seems to have been unmarked, while φοίνικς pʰoínikς corresponded to dark red, and πορφύρεος porpʰúreos to light red (although ancient enumerations of the colours of the rainbow (Maxwell-Stuart 1981, 163–169) tended to eschew erutʰrós in favour of porpʰúreos and, in particular, pʰoínikς). In Old Greek, erutʰrós is less used: Homer uses erutʰrós 11 times, porpʰúreos 36 times and pʰoínikς 25 times. By Classical times, erutʰrós was dominant: Plato uses it 5 times, against porpʰúreos 3 times and pʰoínikς none. (Aristophanes uses only erutʰrós, 3 times).

The fourth AG term is the term that survived into the modern language: MG ‘kokinos < AG κόκκινος kókkinos ‘scarlet’ < κόκκος kókkos ‘scarletberry’. The regular reflex of this in Tk would be *’kotcine; the process /ki/ > /tsi/ does exist in Tk (§3.2.3.3.a), but seems to be late, and does not explain the accent shift. Pernot (1934, 72) believes this indicates the presence of adjectival formant -*tn’os> -ts’ine, a metanalysis of AG / MG adjectival formant -tn’os > in’os, also present in kɔ̂si’tsine ‘barley (AD)’ (MG κριθαρένιος kriθa’reniōs), tʃi’sitsine ‘made of hair’ (MG τριχένιος tɾi’xenios). Kisilier (2017, 127) records the variant kotʃ’ine in Tiros and Kastanitsa. All forms cognate.  

88. green  χλωρός kʰlɔːrós / πράσινος pʰrásinos / πράσινε ’prasiñe / πράσινε ’prasiñe / πράσινε ’prasiñe

The denotation of kʰlɔːrós is light green and yellow; it is the colour of young grass, honey, and sand. Dictionaries tend to ascribe pale green, bluish-green, and gray to γλαύκος glaukós; in his monograph, however, Maxwell-Stuart (1981) argues for light blue as the primary denotation. Dark green seems to have been covered by κυανούς kuanoûs, which was primarily dark blue, and by the surviving colour term, which appears to have become secondary in AG: MG ‘prasinós < AG πράσινος prásinos ‘leek-coloured’. Kisilier (2017, 126) records ‘prafine’ in K. All forms cognate.  

89. yellow χλωρός kʰlɔːrós / κίτρινος kʰitrinos / τσιτρίνε ’tsitrine / τσιτρίνε ’tsitrine / τσιτρίνε ’tsitrine

kʰlɔːrós has already been seen; ksantʰós is defined as ‘golden-yellow, pale yellow; red-yellow’, and its major denotation (which has survived into MG) is ‘blond’. Yellow was probably also covered by ɔ.kʰrós ‘pale’.  

MG ‘kitrinos < AG κίτρινος kitrinos ‘citrus-coloured’ < Latin citrus. The normal reflex in ST would have been ’tʃiʃtine or ’tʃiʃtine, depending on the order in which rules §3.2.3.1.a and §3.2.4.3 are applied. Presumably, as the NT form hints, the second /t/ dropped out, either in manner dissimilation from the first affricate, or because the resulting /tʃ/ affricate would be problematic (/dʒ/ would be unacceptable in Tsakonian unless prenasalised.) Kisilier (2017, 126) records only the more MG-like ’tʃtirine. All forms borrowed, given that the MG word itself is a loanword.  

90. white  λευκός leukós / ἁσπρος ’aspros / λεκό le’ko / λεκό le’ko / ἁσπρε ’aspre

V_i λευκό le’ko, recording it as a noteworthy archaism contrasted with MG ἁσπρος. (It has been revived since in Puristic, mostly with figurative meanings calquing French blanc in the sense ‘blank.’) MT le’ko < AG λευκός leukós ‘white’; MG ‘aspros < Latin asper. To explain the fact that the reflex is le’ko rather than the expected lef’ko, Pernot (1934, 20) formulates a rule that portioned υ drops out in Tsakonian, corroborated by *euriskọn = e’rexo ‘to find’. Kisilier (2017, 125) records the K form as ’astre, indicating a more recent MG loan. NT, ST forms non-cognate; PT form borrowed.
MG 'mauros < AG μαύρος 'dark'. MT ku’vane< AG κυανοῦς κυανοῦς 'dark blue'; with /v/ interpolated (§3.2.3.5). Hesychius attests the meaning 'black' for this word (κουανά kuaná) in Laconian. NT ku’vane only listed for S, but used abundantly by Houpis (e. g. Mal §23). A perusal of MT texts and of the lexical productivity of the two words leave no doubt that ku’vane remains the unmarked MT form; there are 5 instances in Samp, Dict and Har of ku’vane, and none of 'maure. NT, ST forms non-cognate; PT form borrowed.

Tk ‘nüt’a < EMG νύκτα < AG νυξ, νυκτός νύξ, νυκτός ‘night’; AG /k/ > Tk /kʰ/ by §3.2.3.1.e, and D /u/> /ju/ by §3.2.2.1; PT /ju/> /u/ by §3.2.4.6. NT ‘nüt’a: Thus 28. All forms cognate.

Ç śwmw ‘dinner’, Å schomo ‘cooked food’ (a secondary meaning fo’mo has acquired in Tk). ‘ter’mo, fo’mo are glossed by C as ‘very hot, boiling’, and the texts suggest fonisté is the unmarked term. MG zéstos < AG ξεστός zdestós ‘boiling’. ST fo’mo < *θremo < NT θer’mo < AG θερμός ’thermos’ hot’ (See Pernot 1934, 19 for the metathesis; initial /θ/ > /f/ by §3.2.3.1.a.) ST fonisté (past participle) < δομίζω fo’nimízu ‘to heat’ < NT δομίζω fo’nimízu (§3.2.4.2) < *ðremízu < AG θερμίζω ’thermízo: ‘heat’. NT fonisté: Thus 36. MG θερμός θer’mos was reintroduced into the language through Puristic Greek; there is no reason to think that NT θer’mo is a loan, since initial /θ/ is frequently retained in Tk in words which cannot have been borrowed from MG.

Liosis (pers. comm.), in his contribution to the Cognacy in Basic Lexicon project at the Max Planck Institute, Jena, adds lekh’té as the ST form for ‘hot’, as opposed to ‘warm’; this is a verbal adjective corresponding to the verb λεχούκ lexu’re to pour boiling liquid on something’, which Andriotis (1974, 353) derives from AG λεχώ lekhó: ‘new mother’. (Deffner 1923 instead glosses the verb as ‘to warm someone by putting them to bed’, which explains the etymology, but it is not clear whether this is a gloss or etymologising; Deffner’s exclamation “that explains everything” makes it suspect.) NT, ST forms non-cognate (though they use the same concept as MG: ‘boiling’); PT form borrowed.

ST kza’ne < PT kria’ne < EMG ’krios + a’nos ‘adjectival ending’. MT psu’xre < AG ψυχρός psu:k’rós ‘cold’; this term survives in MG as psi’xros, but is a reimportation from Puristic Greek in meanings other than ‘chilly’, and is not the unmarked term for ‘cold’. There are no instances of the adjective in the main ST texts, although there is one instance each in Samp of the nouns kžáde kza’dé (§11) and ψψχρα ’psixra (§23 = Dict §8ii) (which looks like an MG loan, notwithstanding the fact that ’psixra is attested throughout Tsakonia). With regard to the nouns, Pernot (1934, 382) notes that Costakis used both ’psixra and ’psuxra — but the first only jokingly (“en plaisantant”); while his Kastanitsiot consultant used kría’dá. This suggests a split between NT and ST; but there is not enough other evidence to support it. PT /æ/ by §3.2.4.7.
*ψυ'xre* is slightly more productive than *ka'ne*: it gives rise to MT ψούχρα ~ Tk ψύχρα

*ψυχρά* ~ *ψιχρά* 'cold (n.)', Tk ψούχρα *ψυ'xra* 'coldly', and ST ψουχραίνου *ψυχρ'enu* ~ ψουχραίνου *ψυ'x'enu* 'to make cold; to grow cold; to disappoint'. By contrast, *ka'ne* generates ST κ'άδα 'k'áda ~ ST, PT κρύαδα κρί'αδα ~ PT κράδα κρα'δα ~ PT κράδα 'k'ráda 'cold (n.)', ST κρυανίζου κρι'ανίζου ~ κ'άνιφου κα'ζήνιζυ 'to start getting cold' and PT κρυανίω κρί'ενο ~ κραίνω 'kreno 'to grow cold, to feel cold'. Semantically, ST καζήνιζυ is clearly marked, as distinct from ST *ψυχρ'enu* and PT *κρί'ενο*. So the evidence weakly suggests *ψυ'xre* is the more basic term in ST. ST, NT term non-cognate; PT term borrowed.

| 95. full | πλήρης πλε:ρ:ς | γεμάτος γε:μάτος | γιομάτε γιο:μάτε | γιομάτε γιο:μάτε | γιομάτε γιο:μάτε |
|----------|----------------|-----------------|-----------------|-----------------|-----------------|
| MG *γε:μάτος* < AG γέμω γέμω: 'to be full'. *γιομάτε* [jo:matos] is a widespread variant of *γε:μάτος* [je:matos] in MG; /e/ > /i/ backed because of the following labial (Andriotis 1990 [1983]), subsequent to the palatalisation of /γ/. Kisilier (2017, 128) gives *je:mate* (Prastos), *jo:mate* (Tiros, Vaskina), *jomak'nu* (Vaskina); he adds *fulari:ste* (Melana) < MG *fu'laro* 'to pad', and *xo'dre* (Prastos) *xon'dre* (K) < AG k'ondrós 'coarse' MG *xon'dros* 'thick, fat'. All forms cognate.

| 96. new | καινός καίνος, νέος νέον | καινύργος κε'νυργίος | τάινούργυη τε'νυργί'η S | τάιν(ρ)ουργί'η τα'νυργί'η | τάινούργυη τε'νυργί'η |
|----------|--------------------------|----------------------|------------------|------------------|------------------|
| Of the AG terms, *καινός* also means 'fresh', while *νέος* also means 'young'. To eliminate the 'young' reading, neuter (=inanimate) singular instances of the two adjective were counted in Plato: there are 36 instances of *νέον νέον* against 9 of καίνον *καινόν*. (For the masculine singular, there are 47 instances of *νέος* against only 1 of *καινός*.)

Pernot (1934, 377) reports that Costakis used both *τε'ινυρτ'ε* and *τε'ίνυρτ'ε*; so the metathesis was synchronically current. ST *τε'ίνυρτ'ε* leads back to *κι'ρυνκι* (metathesis) < *κι'νυρκι*, so that the /γγ/ cluster must have undergone fortition (Pernot 1934, 377). Deffner gives the form τάινούρτζε *τε'ινυρτ'ε*, whose /e/ ending arises by influence from the ending of MG *κε'νυργίος*. An NT form for 'new' is only given for S by C; I have found no instances of 'new' in Houpis' writings. MG makes a semantic distinction between *κε'νυργίος* (< AG *καινός* *καινός* 'new' + ἐργόν *ἐργόν* 'work'), and νέος *'νεος* (< AG *νέος* *νέος* 'new; young'): the former relates to things (cf. English *brand-new*), and the latter to abstractions, as well as meaning 'young'. The distinction is not made in Tk, where νέο *'νεο* means exclusively 'young' (notwithstanding that Kisilier 2017, 128 gives 'neo' as his gloss of 'new'). All forms cognate.

| 97. good | ἀγαθός ἀγαθός | καλός κα'λος | καλέ κα'λε | καλέ κα'λε | καλέ κα'λε |
|----------|----------------|----------------|-----------------|-----------------|-----------------|
| *κα'λος* < AG *καλός* *καλός* 'beautiful, noble'. All forms cognate.

| 98. round | στρογγυλός στρόγγυλος | στρογγυλός στρόγγυλος | στροντζύλε στρόντζυλε | στροντζύλε στρόντζυλε | στροντζύλε στρόντζυλε |
|----------|----------------------|----------------------|------------------|------------------|------------------|
| Phonologically, this form is suspect because it does not reduce the /tr/ cluster to /tʃ/, as is normal in MT; the expected reflexes are NT *ʃ'tʃondz'ile* and ST *ʃondz'ile*. *ʃondz'ile* has reduced MG /gi/ [ji] to /dzi/, as is regular in Tk; so the form has undergone some assimilation — but this only highlights the fact that */γγ/ here becomes /i/, which once more indicates that this is an MG loan. So all forms have been borrowed from MG, even though this is known to be an old form (Oikonomou 1888, 40): ἔχουνε τὸ ἐνα καπόνι στροντζύλε 'όσα τὸ πεπόνι ἑσυνε τ' ἐνα καπόνι στρόντζυλε σαν το πε'πονί 'and they have a capon round as a melon'). Kisilier (2017, 127) records *strondz'ile* (Prastos, Tiros, Melana, Vaskina), *strondz'ile* (Tiros, Melana) and *strongi'le* (Vaskina); he also records *xo'dre* < AG k'ondrós 'coarse', MG *xon'dros* 'thick' for K.

59
99. dry

Tk tse’re < AG ξηρός /ks/rós ‘dry’; AG /ks/ > Tk /ts/ (§3.2.3.1.d). The shortening of /e:/ in both MG and Tk is suspect. It is true, however, as Costakis (1951, 35) notes, that there are sporadic instances where /e:/ > Tk /e/ but MG /i/: AG πληρόω pli‘roω > MG πληρώνω pli‘rono Tk πλερούκ plērōk tu ‘to pay’, AG τήγανον tē:gonon > MG τήγανi ti‘gani Tk τέγαne tēgane ‘frying pan’, AG χαμηλός kʰamēlós > MG χαμηλός xami‘los Tk χαμελέ xame‘le ‘low’.

MG differentiates between ‘dry’ as in ‘dried up’ and ‘dry’ as in ‘not wet’; the latter is ste‘ɣnos < AG steganós ‘air-tight’, and Kisilier (2017, 129) takes that as the basic form, giving its Tk equivalent as ste‘ɣne. (He also adds psa‘xne for Prastos < MG psa‘xnos ‘fleshy’.) All forms cognate.

100. name

Vi ονουμα onuma. NT ονομα: Thus 74. /o/> /u/ under the influence of following labial. Kisilier (2017, 127) records ονομα only in Vaskina; in Prastos, Tiros, Melana and Kastanitsa he records ονυμα. All forms cognate.

6. Other Lexicostatistical accounts

This paper was first drafted in 1996. Since then, three lexicostatistical accounts of Tsakonian have appeared:

- Blažek (2010) is a list of Swadesh-100 word lists for Greek; it includes Attic Greek, Modern Demotic, and Southern Tsakonian. The primary source it uses is Deffner (1923), mainly because Blažek feels Deffner reflects Tsakonian more accurately before the mass influence of Modern Greek.

- Kassian (2018) is a list of Swadesh-110 word lists for Greek; it includes Ancient Greek (Ionic: Herodotus and Attic: Plato), Modern Demotic, Southern Tsakonian, Pharasa Greek, and Aravan Cappadocian Greek. The primary source it uses is Deffner (1923), with secondary reference to Costakis (1951, 1986); Kassian objects to Costakis for his prescriptive tendencies. Kassian also uses Swadesh word lists recorded in situ in Prastos, Tyros, Melana and Kastanitsa in Vyatkina (2015).

- Kisilier (2017) concludes with a Swadesh-110 word list for Tsakonian, based on his own fieldwork.

The reliance of both Blažek and Kassian on Deffner over Costakis is in my opinion a mistake; Kassian’s engagement with contemporary field work is welcome, but given language attrition, checking against corpora is also necessary. (It is true, as Liosis (2007) points out, that Houpis’ grammar is that of a terminal speaker, and the reliability of his corpus is compromised; unfortunately his is the only comprehensive corpus available for NT).

Both Blažek and Kassian are affiliated with Sergei A. Starostin’s programme of rehabilitating glottochronology (“recalibrated glottochronology”: Starostin 1999). As part of that approach, it is critical for them to isolate loanwords from cognates, since Starostin’s methodology discounts loanwords as compromising the stability of the core vocabulary set. In that regard, it has to be said, glottochronologists are fortunate that the radical changes in Tsakonian phonotactics allow most loanwords to be identified readily.

Kassian’s (2018, 11) conclusion is that there are too many loanwords in Tsakonian for it to be of much use: “Because of its mixed nature, the Tsakonian wordlist can hardly be used for lexicostatistic phylogeny of Ancient Greek dialects, not to mention for calibration of glottochronological formulae”. On the other hand, Blažek uses the 63.4% non-borrowed cognates between Attic and Tsakonian to argue for a divergence date of 1725 BC, close to the estimated date
of 1900 BC for the divergence of Northwest and Southeast Greek. He discards the estimate of 300 AD for a Tsakonian / Modern Greek divergence, based on 78.2% non-borrowed cognates, as ahistorical, contaminated by the strong influence from Modern Greek (that even eliminating clear loanwords does not address). It is worthwhile to compare the findings of Blažek, Kassian and this paper with regard to which forms are cognate (C), which are borrowings (B), and which are not cognate (N) between Southern Tsakonian and Modern Greek (I am ignoring the very recent MG loans Kassi

Table 1. Lexicostatistical Comparison of Blažek, Kassian and Nicholas

|   | Blažek                              | Kassian                              | Nicholas  |
|---|-------------------------------------|--------------------------------------|-----------|
| 1 | I                                   | C                                    | C         |
| 2 | Thou                                | C                                    | C         |
| 3 | We (unaware of the problem raised by the difference between Doric-looking oblique and Koine-looking nominative) | C (does not comment on the problem raised by the difference between Doric-looking oblique and Koine-looking nominative) | B         |
| 4 | This                                | N (unaware that ende-pronouns are cognate with MG αφτος, whether following Pernot’s etymology, Deffner’s, or Tzitzilis’) | C (allows Pernot’s derivation, but considers etymology unclear) | C         |
| 5 | That                                | C (takes on face value that ἐτίνη is derived from Doric τὴν ανα, unaware of the resulting phonological difficulty) | N (allows Pernot’s phonological concerns) | N#        |
| 6 | Who                                 | C (unaware of the phonological difficulty of ‘pier’) | B         | B         |
| 7 | What                                | C                                    | C         |
| 8 | Not                                 | C (unaware that MG δεν is marginal in Tsakonian, or that MG ‘οξι ‘no; non-’ is not a proper rendering of ‘not’) | N         | N#        |

10 Amusingly, even Starostin’s recalibrated glottochronology takes no account of standard deviation (which to his credit Swadesh 1955 had). Starostin (1999, 10) derives a modified rate of decay of λ = 0.05 on the Swadesh-100 list once loanwords are accounted for; he bases this on seven languages, which give a sample standard deviation of s = 0.01278, for use in the glottochronological formula for two languages (where c is the proportion of cognate words, and the value is in millennia):

$$\sqrt{\frac{\ln c}{-2\lambda^2}}$$

$$\lambda = 0.05, c = 0.782$$ in Starostin’s revised glottochronological formula gives 1667 years, so (from a date of 1986) 319 AD. But a 95% confidence interval is associated with three standard deviations (3σ) either side of the mean value; using the actual mean $$\lambda = 0.04625$$ and s (as an estimate of σ) = 0.01278 gives us a 95% confidence range for λ between 0.00791 and 0.08459, namely a mean value of 1734 years, but a range between 1282 and 4193 years (so nominally 252 AD, but 95% confidence for anywhere from 704 AD to 2207 BC). Starostin’s (1999, 11) claim that “the value for λ is stable and varies only slightly between 0.04 and 0.06”, is, regrettably, risible: the difference between 0.04 and 0.06 is one of 50% (and English in the sample set has a value of $$\lambda = 0.08$$); and the relation of λ to time elapsed is $$1/\sqrt{\lambda}$$, which shoots up as λ approaches 0. (Hence the small difference between 252 AD and 704 AD, but the massive difference between 252 AD and 2207 BC.)
|   | Blažek | Kassian | Nicholas |
|---|--------|---------|----------|
| 9 | All    | C       | C        |
| 10| Many   | N       | N#       |
| 11| One    | C       | C        |
| 12| Two    | C       | C        |
| 13| Big    | N       | N#       |
| 14| Long   | C       | C        |
| 15| Small  | C       | C        |
| 16| Woman  | C       | C        |
| 17| Man    | N       | N#       |
| 18| Person | B       | C        |
| 19| Fish   | C       | B        |
| 20| Bird   | B       | B        |
| 21| Dog    | C (assumes ky:ν had genuinely survived in MG; the survival is Puristic, and rare at that) | N | N* |
| 22| Louse  | C       | B (not so named in list of loanwords at Kassian 2018:11, but clearly considered a loanword in detailed discussion, Kassian 2018:99) | C |
| 23| Tree   | C       | C        |
| 24| Seed   | N (different derivational suffix of MG 'sporos vs ST 'pʰrama) | C | C |
| 25| Leaf   | C       | C        |
| 26| Root   | C       | C        |
| 27| Bark   | C       | B        |
| 28| Skin   | C (assumes to'mari is the basic term, unaware of pe'tsi or 'teepa) | N (accepts Deffner’s Hellenic etymology of 'teepa) | B |
| 29| Flesh  | C       | C        |
| 30| Blood  | C       | C        |
| 31| Bone   | C       | B        |
| 32| Grease | C (assumes the basic form is non-borrowed 'paxos, but that is the state of someone being fat; Kassian 2018 concurs) | B | B |
A critical lexicostatistical examination of Ancient and Modern Greek and Tsakonian

|   | Blažek | Kassian | Nicholas |
|---|--------|---------|----------|
| 33 | Egg    | C (unaware that *aupʰyo* is unlikely to be an old form in ST) | B | B |
| 34 | Horn   | C (assumes *ticerate* is the basic term in ST, and did not even list *tʃoxane*; we have seen the decision is difficult) | B (assumes *ticerate* is the basic term in ST, did not even list *tʃoxane*) | N# |
| 35 | Tail   | C | C | C |
| 36 | Feather | C | C | C |
| 37 | Hair   | C (assumes *trixa* is the basic form in MG) | N | N* |
| 38 | Head   | C | C | C |
| 39 | Ear    | C | C (because “the starting points in Tsakonian and Demotic are different”, considers ST form influenced by rather than directly borrowed from MG) | C |
| 40 | Eye    | C | C | C |
| 41 | Nose   | N | N | N# |
| 42 | Mouth  | C | C | C |
| 43 | Tooth  | C | C | C |
| 44 | Tongue | C | C | C |
| 45 | Claw   | C (did not suspect the phonology was borrowed) | B | B |
| 46 | Foot   | C | C | C |
| 47 | Knee   | C | C | C |
| 48 | Hand   | C | C | C |
| 49 | Belly  | N | N | N† |
| 50 | Neck   | C | B | C |
| 51 | Breasts| C | C (takes *stiði* as the basic term; surprisingly for Kassian, does not note the phonological difficulty, which means that not only *stiðos* but *stiði* must be recent loans) | C |
| 52 | Heart  | C | C | C |
| 53 | Liver  | C | B | C |
| 54 | Drink  | C | C | C |
| 55 | Eat    | C | B | C |
| 56 | Bite   | N (assumes not cognate, since they look so different) | C (accepts Pernot’s derivation from *dáknɔː*) | C |
|   | Blažek                                  | Kassian                            | Nicholas                        |
|---|-----------------------------------------|------------------------------------|---------------------------------|
| 57| See                                     | N                                  | N*                              |
| 58| Hear                                    | N                                  | N                               |
| 59| Know (unaware of the phonological dif-  | B                                  | B                               |
|   | ficulty of 'kseru)                      |                                    |                                 |
| 60| Sleep                                   | N                                  | N                               |
| 61| Die                                     | C                                  | C                               |
| 62| Kill (unaware of the phonological dif-  | B                                  | B                               |
|   | ficulty of sko'tunu)                    |                                    |                                 |
| 63| Swim (assumes kuːum'bu is the basic    | N                                  | N                               |
|   | term, unaware of 'preu)                 |                                    |                                 |
| 64| Fly                                     | C                                  | C                               |
| 65| Walk (N (considers 'engu ‘go’ < AG    | N                                  | N                               |
|   | érkəomai ‘come’ the basic form, glossing |                                    |                                 |
|   | ‘go’ rather than ‘walk’. Does not ac-  |                                    |                                 |
|   | knowledge the form 'faxu ‘walk’)        |                                    |                                 |
| 66| Come                                   | N                                  | N                               |
| 67| Sit                                     | C                                  | C                               |
| 68| Lie (N (posits the basic term in ST is | B                                  | C                               |
|   | ‘vamu ‘to set’)                         |                                    |                                 |
| 69| Stand (unaware of the phonological dif-| B                                  | B                               |
|   | ficulty of ’steku)                      |                                    |                                 |
| 70| Give                                    | C                                  | C                               |
| 71| Say (assumes MG ’lalo is the basic     | N                                  | N                               |
|   | term)                                  |                                    |                                 |
|   | N (Kassian 2018:11 lists only the aor- |                                    |                                 |
|   | ist suppletive stem pe- as borrowed    |                                    |                                 |
|   | from MG)                                |                                    |                                 |
| 72| Sun                                     | C                                  | C                               |
| 73| Moon                                    | C                                  | C                               |
| 74| Star                                    | C                                  | C                               |
| 75| Water                                   | N                                  | N                               |
| 76| Rain                                    | C                                  | C                               |
| 77| Stone                                    | C                                  | C                               |
| 78| Sand                                    | C                                  | C                               |
| 79| Earth (takes ’xoma rather than i’yi as | B                                  | B                               |
|   | the basic form)                         |                                    |                                 |
| 80| Cloud                                   | C                                  | C                               |
| 81| Smoke                                   | C                                  | C                               |
| 82| Fire                                    | N                                  | N                               |
A critical lexicostatistical examination of Ancient and Modern Greek and Tsakonian

|       | Blažek | Kassian | Nicholas |
|-------|--------|---------|----------|
| 83    | Ash    | N       | N#       |
| 84    | Burn   | N       | N#       |
| 85    | Path   | N       | N#       |
| 86    | Mountain | N     | N|       |
| 87    | Red    | C       | B        |
| 88    | Green  | C       | B        |
| 89    | Yellow | B       | B        |
| 90    | White  | C (assumes *lefkos* has genuinely survived in MG; recalls that Villoison expressed surprise at its survival in Tsakonian) | N | N* |
| 91    | Black  | N       | N#       |
| 92    | Night  | C       | C        |
| 93    | Hot    | C (assumes *θer'mos* is the basic term in MG) | N (has difficulty finding expressions for ‘warm’, which he takes as the base concept, as opposed to ‘hot’) | N* |
| 94    | Cold   | C (assumes *psix'ros* had survived in MG; it is secondary term) | N | N* |
| 95    | Full   | C       | B        |
| 96    | New    | C       | B        |
| 97    | Good   | C       | B        |
| 98    | Round  | C (unaware of the phonological difficulty of ‘strondzile’) | C (exceptionally, unaware of the phonological difficulty of ‘strondzile’) | B |
| 99    | Dry    | C       | C        |
| 100   | Name   | C       | C        |
|       | Non-Borrowed | 97 | 72 | 86 |
|       | Cognate Non-Borrowed | 76 (78.4%) | 45 (62.5%) | 59 (68.6%) |

Blažek is not a Hellenist, let alone a Tsakonologist, and it shows: he is often naïve about assuming Puristic cognates of ST were genuine survivals; he does not try to establish which among multiple alternatives is the basic term and allows any match among synonyms; and he is unfamiliar with Tsakonian phonology and its diagnostic value. In the case of ‘seed’, he has decided to discount the cognate pair for having different derivational suffixes; but the same objection could be raised for ‘eye’ or ‘tree’, and has not been.

Although Kassian has not used the range of sources this paper has, he is meticulous about trying to work out which terms are basic, and his conclusions are mostly the same as this paper’s. Kassian is if anything even more strict than I have been about considering terms to be MG loans,
and on inspection it is clear his criterion has been to consider a term a loan from MG if it is a post-
Koine innovation in MG, even when those innovations are still cognate, as with ‘bark’ (AG pʰloióς; ST ‘frua’ < MG ‘flūdia’ < back formation of ‘flūdion’ < DIM. of pʰloióς), or ‘long’ (AG makrós, MG changed declension ma’krís < *ma’krys, ST matching declension ma’kru). That is a methodo-
dological difference, and it is consistent with regarding Tsakonian as a Doric variant with heavy
MG colouring; Pernot’s contrary approach, of regarding Tsakonian as a Modern Greek variant
with a Doric core, has less difficulty in admitting phonologically native forms like tsa’pru to ‘lie’ or ‘ʃkoki’ ‘liver’ as Tsakonian cognates of ksa’plono and si’koti, rather than as early loans. Kassian
also makes some different interpretations of basic terms (‘warm’ vs ‘hot’, ‘go’ vs ‘walk’).

The massive disparity in cognate proportions between the three approaches point
to the methodological challenges around lexicostatistics — all the more pronounced in the differ-
ent results I obtain from Kassian, although we are in basic agreement about both the data and most
eytymologies.

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