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Heterogramme in hurritischen Texten aus Boğazköy und Nordsyrien

The article discusses the use of heterograms in Hurrian texts from Anatolia and Northern Syria of the second millennium BC. The frequency of Sumero- and Akkadograms is examined through a variety of Hurrian text genres. Most texts of religious content, which include rituals, festivals, or myths, exhibit only a small number of logograms and determinatives. Hurrian mantic texts from Ḫattuša and Emar offer an exception to these findings, in that they make use of a comparatively large amount of heterograms. In order to interpret these data one should consider a number of parameters, such as the scribes' level of foreign language acquisition, the texts' possible addressees, and the significance of text genres and styles. For comparison, a short overview of heterographic writing in Urartian texts has been provided.

Keywords: Hurrian cuneiform texts; Anatolia; Northern Syria; Urartian inscriptions; scribal traditions.

Von den Hethitern sind zahlreiche Tontafeln mit Keilschrifttexten überliefert, die sich in Archiven des 2. vorchristlichen Jahrtausends vorrangig in der hethitischen Hauptstadt Ḫattuša fanden. Auch an anderen Orten Anatoliens traten – in unterschiedlicher Anzahl – Tontafeln zu Tage, darunter in Maşat Höyük – Tapikka (Alp 1997), Kuşaklı – Šarišša (Wilhelm 1997), Ortaköy – Šapinuwa (vgl. De Martino – Süel 2015, v.a. 7f. mit Verweis auf weitere Literatur), Kayalıpınar – Šamuḫa (Rieken 2019), um an dieser Stelle nur die Wichtigsten zu nennen. Neben hethitischen Texten wurden auch solche in luwischer, palaischer, hattischer, akkadischer, sumerischer und hurritischer Sprache in den Archiven Ḫattušas gefunden. Im Folgenden stehen die hurritisch-sprachigen Texte und hethitischen Texte mit einzelnen hurritischen Abschnitten im Vordergrund, deren Überlieferung mit der sog. Mittelhethitischen oder Vorgroßreichszeit beginnt und sich bis zum Ende des hethitischen Großreichs verfolgen lässt (ca. 1500 bis 1180 v. Chr.). Sie wird u.a. mit einem starken hurritischen Einfluss auf das Hethiterreich in Verbindung gebracht, welcher aus dessen Auseinandersetzungen mit und um Kizzuwatna, der Region um das heutige Adana, resultierte. Diese Auseinandersetzungen kulminierten in der Integration Kizzuwatnas in das Hethiterreich im 15. Jh. v. Chr. Weiteren hurritischen Einfluss lieferte die Eroberung Mittanis unter Šuppiluliuma I. zu Beginn der Großreichszeit und vor allem die Hochzeit des Königs Ḫattušili III. mit Puduḫeba, der Tochter des Priesters der Šaušga von Lawazantija. Puduḫeba sorgte auch dafür, dass Abschriften des *ḫišuwa*-Festes aus Kizzuwatna in Ḫattuša angefertigt wurden (vgl. unten).

Die meisten der in Ḫattuša gefundenen hurritischen Texte sind dem religiösen Sektor zuzuschreiben. Dazu zählen einsprachig hurritische Fest- und Beschwörungsritualtexte, hurritische Rezitationen in hethitischen Ritual- und Festbeschreibungen, mythologische Texte, Gebete, Omina und hurritisch-hethitische Bilinguen, darunter das „Lied der Freilassung“, mythologische Erzählungen um die Götter Teššob und Allani ebenso wie die ansonsten im Alten Orient nicht belegte Gattung der Parabeln¹. Weitere hurritische Texte, darunter lexikalische Listen, religiöse Texte, Omina und Briefe, stammen aus verschiedenen Orten Nordsyriens und

¹ Vgl. von Dassow 2013, bes. 131–146 zur Frage verschiedener Versionen und Fassungen des Textes / der Texte.

Mesopotamiens. Zu nennen sind z.B. die aus dem 3. Jt. stammende Gründungsinschrift des Tiš-atal vermutlich aus Urkeš, Beschwörungen aus Larsa und Mari, ein Brieffragment aus Larsa, der große Mittani-Brief aus el-Amarna in Ägypten, hurro-akkadische Texte aus Alalah, Qatna und Nuzi, sowie Vokabulare und religiöse Texte aus Ugarit und lexikalische Listen und Omina aus Emar sowie ein Fragment aus Tigananu².

Im Folgenden sollen zunächst Abschnitte der verschiedenen hurritisch-sprachigen Textgattungen vorrangig aus Ḫattuša vorgestellt werden, in denen Heterogramme, d.h. Akkado- und Sumerogramme, belegt sind. Unter Heterogramm wird dabei “a general cover term for Sumero- and Akkadogramms in Hittite texts” verstanden (Kudrinski — Yakubovich 2016: 64). Die Zusammenschau möchte unter Berücksichtigung weiterer hurritischer Texte, vor allem aus Nordsyrien, Überlegungen in Bezug auf die Verwendung von Heterogrammen in hurritisch-sprachigen Texten formulieren.

Zunächst soll ein Blick auf die Fest- und Beschwörungsrituale der hurritischen Tradition geworfen werden. Begonnen werden soll mit einem Abschnitt des *ḫišuwa*-Festes. Dieses Fest zählt zu den großen Festen der Hethiter und lässt sich besonders mit der Großkönigin Puduḫeba, Gemahlin Ḫattušilis III., in Verbindung bringen, die es, aus ihrer kizzuwatnäischen Heimat stammend, in Ḫattuša bekannt machte, wie aus den Tafelunterschriften der Texte deutlich wird:

KBo 15.52+ (CTH 628; jH)

(Rs. VI 39') MUNUS.LUGAL ^f*pu-du-ḫé-pa-aš-kán ku-wa-pí* (40') mUR.MAḪ-LÚ-in GAL.DUB.SAR^{MEŠ} (41') ^fURU⁷ *ḫa-at-tu-ši A-NA ṬUP-PA*^{HIA} (42') ^fURU⁷ *ki-iz-zu-wa-at-na ša-an-ḫu-u-wa-an-zi* (43') ^fú⁷ *-e-ri-ia-at na-aš-ta ke-e ṬUP-PA*^{HIA} (44') Š[A E]ZEN₄ *ḫi-^{*}šú^{*}-wa-a-aš a-pí-ia UD-at* (45') *a[r-ḫ]a a-ni-ia-at*

„Als Königin Puduḫeba den Obertafelschreiber UR.MAḪ-zidi beauftragte, in Ḫattuša nach Tafeln aus Kizzuwatna zu suchen, hat er diese Tafeln des *ḫišuwa*-Festes an jenem Tage kopiert.“³

Das Fest, das wohl Waffenglück für den König und damit Leben und Wohlergehen für die königliche Familie und das ganze Land sichern sollte, ist in zahlreichen Abschriften überliefert, die von seiner Bedeutung für die Königsfamilie in Ḫattuša zeugen dürften. Bislang lassen sich knapp 500 Fragmente ca. 310 Tafeln zuordnen. Ca. 25 davon sind in mittelhethitischer Zeit niedergeschrieben worden, der Großteil in jungethitischer Zeit und einige wenige (ca. 15) sind als spätjungethitische Niederschriften zu klassifizieren⁴.

Generell weisen die hurritischen Abschnitte des folgenden Ausschnitts (Vs. III 22–24, 27–29, 33f., 35f. — hier nicht kursiv gesetzt) im Vergleich zu den benachbarten hethitischen Passagen keine Akkado- und Sumerogramme auf:

KBo 15.48+ (CTH 628; jH)

(Vs. III 18) *nu-za* LÚSANGA GAL A *da-a(Rasur)-i* (19) *an-da-ma-kán* GIŠEREN *ki-it-ta-ri* (20) *nu wa-a-tar PA-NI ḫu-u-up-ru-uš-ḫi* (21) *la-ḫu-u-wa-i nu me-ma-a-i* (22) *a-zu-ma-aš-ši-ia šu-mi-pu-na* (23) *le-el-lu-re-en-na a-ba-te-in-na* (24) *ti-ia-ri-in-na ma-nu-uz-zu-un-ni* ^fURU⁷ (25) *nu-uš-ša-an wa-a-tar* GIŠEREN-za LUGAL-i (26) ŠU^{HIA}.^{*}*aš^{*} la-ḫu-u-wa-i nu me-ma-a-i* (27) *a-zu-ma-aš-ši-ia šu-mi-pu-na* (28) *a-a-ri-^fin⁷-ni ke-re-pí-in-ni* (29) *ke-re-^feš⁷-tu-un-ni ku-ni-in-ni* ^fURU⁷ (30) *na-aš-^fta⁷* |GIŠEREN A-NA Ì.GIŠ *an-da* (31) *šu-ni-^fan⁷-[z]i na-at-ša-an ḫu-up-ru-uš-ḫi* (32) *ḫa-aš-ši[-i p]é-eš-*

² Siehe für einen Überblick Wegner 2007: 24–30, und zu dem Text aus Tigananu Salvini 1996: 123–128.

³ Siehe u.a. Waal 2015: 441.

⁴ Vgl. zur Datierung und Textzusammenstellung S. Košak, hethiter.net/: hetkonk (v. 1.993) sub CTH 628 (Zugriff 29.3.2020).

šī-ia-zi⁽³³⁾ nu me-ma-ṛa-i¹ a-ḥar-re-eš ge-lu-uš⁽³⁴⁾ te-e-a EGIR-ŠŪ-ma 5 NINDA.SIG^{MEŠ} pá-ri-ia⁽³⁵⁾ nu me-ma-a-i a-a-nu-iš ḥar-ša-iš⁽³⁶⁾ ge-lu-uš te-e-a nu-kán A-NA NINDA.SIG^{MEŠ}⁽³⁷⁾ a-na-a-ḥi da-a-i na-at-kán A-NA Ì.GIŠ⁽³⁸⁾ an-da šu-un-ni-ez-zi

„Der SANGA-Priester nimmt sich einen Becher Wasser. Darin liegt Zedernholz. Er gießt Wasser vor dem Räucherständer aus und spricht: „... die Lelluri, Abadi, die Spindel(?) von Manuzzi.“⁵ (§-Strich) Das Wasser mit Zedernholz gießt er dem König auf die Hände und spricht: „... der böse(?) kirpinni-Mensch, der k.-ische kereštunni-Mensch.“ (§-Strich) Dann tunkt er das Zedernholz in Öl und wirft es auf den Räucherständer auf dem Herd und spricht: „Möge er (der König?) vollkommen heil sein durch den Weihrauch!“⁶ Anschließend bricht er fünf Fladenbrote und spricht: „Möge er (der König?) vollkommen heil sein durch dieses Brot!“⁷ Von den Fladenbroten nimmt er eine Kostprobe und tunkt sie in das Öl.“⁸

Diese hurritischen Abschnitte weisen keine heterographischen Schreibungen auf. Zieht man die weiteren, dem *ḥišuwa*-Fest zuzuordnenden Texte in Betracht, finden sich in den hurritischen Abschnitten nur die Sumerogramme DINGIR und TU₇, die beide als Determinative Verwendung finden⁹.

Eine vergleichbare Situation findet sich in den den Ritualen der AZU-Priester zuzurechnenden Texten, die große Ähnlichkeiten mit den Texten des *ḥišuwa*-Festes in Bezug auf rituelle Handlungen und Rezitationen aufweisen und ebenfalls aus einer südostanatolisch-hurritischen Ritualtradition stammen. Beschrieben wird in ihnen häufig die Verehrung der beiden wichtigsten hurritischen Götter, des Wettergottes Teššob und seiner Gemahlin Ḥebat. Als Beispiel soll hier ein Abschnitt einer Textgruppe dienen, die als „Trankopfer für den Thron der Ḥebat“ (CTH 701) bezeichnet werden:

KBo 21.33+ (CTH 701; mH) Vs. I

(Vs. 1¹²) nam-ma-aš-ša-an^{DUG} ḥu-u-up-ru-uš-ḥi GIŠ^{HIA} ḥa-a-da-an wa-ar-n[u-zi]⁽¹³⁾ na-aš-ta LÚAZU BE-EL SÍSKUR PA-NI DINGIR-LIM an-da pé-ḥu-te-[ez-zi]⁽¹⁴⁾ nu-kán^{DUG} a-ḥ-ru-uš-ḥi-ia-az GIŠEREN ša-ra-a da-a-i⁽¹⁵⁾ na-at A-NA BE-EL SÍSKUR pa-a-i BE-EL SÍSKUR UŠ-KÉ-EN⁽¹⁶⁾ LÚAZU-ma ḥur-li-li ku-un-zi-ip zu-uz-zu-ma-a-ki-ip KLIMIN m[e-ma-i]⁽¹⁷⁾ nu-za LÚAZU GÙB-la-az ki-iš-ra-az MUŠEN.GAL da-a-i ku-un-na-za-ma-k[án]⁽¹⁸⁾ ki-iš-ra-az *DUG*^{DUG} a-ḥ-ru-uš-ḥi-ia-az GIŠEREN ša-ra-a da-a-i⁽¹⁹⁾ na-aš-ta Ì.GIŠ A-NA^{DUG} GAL ME-E an-da za-ap-nu-zi nu-za ŠA^D ḥé-p[át]⁽²⁰⁾ ka-at-ki-ša ir-ḥa-a-iz-zi nu-uš-ša-an GIŠEREN kat-ta A-NA^{DUG} GA[L ME-E]⁽²¹⁾ da-a-i nu-za^{DUG} GAL ME-E ša-ra-a da-a-i nu wa-a-tar A-NA DINGIR-LIM⁽²²⁾ me-na-aḥ-ḥa-an-da la-a-ḥu-i⁽²³⁾ ḥur-li-li-ma ki-iš-ša-an me-ma-i a-aš-še-eš^D ḥé-pát šu-u-ni-ip⁽²⁴⁾ ši-ia-a-i a-aḥ-ra-a-i ú-na-am-ma GIŠke-e-eš-ḥé-ep-we⁽²⁵⁾ ke-el-t[e]-i-e-ni a-am-ba-aš-ši-ni ke-e-lu nu wa-a-tar A-NA BE-EL SÍSK[UR]⁽²⁶⁾ me-na-ṛaḥ¹ ḥa-an-da la-a-ḥu-i nu-uš-ša-an^{DUG} GAL ME-E kat-ta⁽²⁷⁾ A-NA GIŠBANŠUR AD.KID da-a-i⁽²⁸⁾

„Ferner verbrennt er auf dem Räucherständer getrocknete Hölzer. Der AZU-Priester bringt den Ritualherren vor die Gottheit, nimmt von der Räucherschale das Zedernholz

⁵ Bei den Formen dieser Worte handelt es sich wohl um Absolute — vgl. den später folgenden Spruch III 41–45, der von Schwemer 1995: 97, wie folgt übersetzt wird: „Diese Kostprobe soll zufriedenstellen die Lelluri, Abadi, die Spindel(?) von Manuzi; das Brandopfer für ihr Wohlbefinden aber möge sie sehr angenehm machen.“ Vgl. Hutter — Braunsar-Hutter 2016: 295 Anm. 5.

⁶ Siehe zu dieser Konstruktion Campbell 2015: 141. Vgl. Hutter — Braunsar-Hutter 2016: 295.

⁷ Siehe Campbell 2015: 141 und Hutter — Braunsar-Hutter 2016: 295.

⁸ Nach Wegner — Salvini 1991: 33f. (ohne Übersetzung der hurritischen Passagen).

⁹ Wegner — Salvini 1991: 36, lesen GIŠ als Determinativ. Der Abschnitt ist jedoch nicht GIŠzé-er-ra-e, sondern ke-e-e]z-zé-er-ra-e zu lesen (KBo 27.198 8' — vgl. VSNF 12.22 8': ke-e-ez-zi-ri-ra-e (in ChS I/4 nicht berücksichtigt)).

hoch und gibt es dem Ritualherrn. Der Ritualherr verbeugt sich. Der AZU-Priester spricht „Dein *kunzi-*, dein *zuzzumaki-* dito.“ auf hurritisch¹⁰. (§-Strich) Der AZU-Priester nimmt sich mit der linken Hand eine Gans, mit der rechten Hand aber nimmt er Zedernholz aus der Schale hoch und träufelt Öl in den Becher Wasser. Er beopfert das *katkiša* der Ištar. Er legt das Zedernholz in den Becher Wasser, nimmt den Becher Wasser hoch und gießt Wasser der Gottheit gegenüber aus. (§-Strich) Auf hurritisch spricht er folgendermaßen: „Wasch dir, Hebat, deine Hand mit Wasser und Weihrauch! Komm! Sei zufrieden gestellt durch *keldi-* und *ambašši-*Opfer deines Throns.“¹¹ Und er gießt das Wasser dem Ritualherrn gegenüber aus und stellt den Becher Wasser auf den Rohrflchtisch hinab.“¹²

Auch in diesen hurritischen Abschnitten werden bis auf KI.MIN¹³ und die Determinative DINGIR und GIŠ keine Heterogramme verwendet. Zieht man die weiteren, der CTH-Nr. 701 zuzuschreibenden Texte in Betracht¹⁴, zeichnet sich ein dem *hišuwā*-Fest vergleichbares Bild. Es finden sich die Sumerogramme DINGIR, GIŠ, DUG und URU als Determinative, die Heterogramme KI.MIN, URU, DINGIR^{MEŠ} sowie GAŠAN und die logographischen Schreibungen von Götternamen IŠKUR, 10, 30, UTU und IŠTAR.

Die Beobachtung, dass hurritisch-sprachige Texte nur eine sehr begrenzte Anzahl von Sumero- und Akkadogrammen aufweisen, lässt sich auch für andere Textgattungen machen. So weist der hurritische Teil der hethitisch-hurritischen Bilinguen kaum Heterogramme auf; zu nennen sind die Determinative DINGIR, URU und der Personenkeil m sowie die Sumerogramme IŠKUR, IGI und GU₄¹⁵. Zu bemerken bleibt, dass auch das Hethitische relativ wenig Heterogramme aufweist (so z.B. in KBo 32.14), ein Umstand, der der mittelhethitischen Niederschrift des Textes geschuldet sein dürfte¹⁶.

Ähnliches gilt für die hurritischen mythologischen Texte, die insgesamt nur sehr fragmentarisch überliefert sind. In diesen sind es vorrangig Namen, die heterographisch geschrieben werden: So finden sich die Akkadogramme ^DÉ-A und ^DIŠTAR sowie die Sumerogramme ^DA.A, ^DIŠKUR, ^DGIŠ.GIM.MAŠ, ^D10, ^DUTU, ^D30, LUGAL.GI. Des Weiteren sind die Determinative DINGIR, URU, KUR, m, f, GIŠ, GU₄, LÚ, UZU, MUŠ, die Sumerogramme DINGIR, EN, GU₄, ҒUR.SAG, ҒR, KASKAL, Ғ.GIŠ, LÚ, SI.GAR, ŠU.GI, URU, SUKKAL, ŠÚ.A sowie die akkadographischen Komplementierungen -IA und -ŠU in den mythologischen hurritischen Texten belegt¹⁷.

Eine Ausnahme bilden die Fragmente, die den hurritischen mantischen Texte zuzurechnen sind. Überliefert sind Texte, die der Vorzeichenschau aus dem Verhalten eines Opfertieres während der Schlachtung oder dem Aussehen der Leber gewidmet sind. Zwei Texte beschäftigen sich darüber hinaus mit Missgeburts- und astrologischen Omina. In ihnen finden ver-

¹⁰ Zur Analyse des Spruches vgl. Görke — Lorenz 2018/19: 50 sub Beispiel 6. Anders Neu 1996: 359: kunz=i=b entspricht akk. *UŠKĒN* „er verbeugt sich“.

¹¹ Zur Analyse des Spruches vgl. Schwemer 1995: 90; zur Übersetzung „waschen“ von ašš- siehe Richter 2012: 51, mit weiterer Literatur.

¹² Vgl. Salvini — Wegner 1986: 38–41.

¹³ Durch KI.MIN werden vorrangig ab der mittelhethitischen Zeit in verschiedenen Textgruppen v.a. Verben, Sätze und Abschnitte kurzgefasst wiederholt. Das Heterogramm KI.MIN ist dabei als technischer Marker, vergleichbar den deutschen Gänsefüßchen, zu verstehen und sollte daher am ehesten mit „dito“ übertragen werden. Siehe Görke — Lorenz 2018/19.

¹⁴ 152 Tafeln / 268 Fragmente nach S. Košak, hethiter.net/: hetkonk (v. 1.992) — 9.9.2019. Vgl. ChS I/2.

¹⁵ Nach Neu 1996.

¹⁶ Zur Datierung siehe Neu 1996: 3–7.

¹⁷ Nach Salvini — Wegner 2004.

gleichsweise viele Heterogramme Verwendung, eine Tatsache, die mit der Übernahme der betreffenden Techniken aus Mesopotamien in Zusammenhang stehen dürfte¹⁸. Mantische *termini technici* werden in den hurritischen Omen-Texten sumerographisch, wie aus mantischen Texten Babyloniens bekannt, geschrieben. Als Beispiel dafür kann die Bezeichnung eines Leberteils angeführt werden, der in akkadischen Texten akkadisch *mazzāzu*, ab dem Ende der altbabylonischen Zeit sumerographisch KI.GUB „Standort“, tituiert wird¹⁹. In dem hurritischen Text KBo 33.135 r. Kol. 1', 3', 9' aus Boğazköy (de Martino 1992: 31) findet sich die Schreibung KI.GUB-ḫé-ni mit der hurritischen Komplementierung -ḫé-ni des Sumerogramms KI.GUB für šintaḫe=ni „am Standort“. Bei der Übernahme der hurritischen Texte nach Zentralanatolien nutzten die Hethiter die sumerographische Schreibung in ihren (wenig belegten) Omentexten und verwendeten daneben auch die entsprechenden hurritischen Termini. Das ist z.B. erkennbar in KBo 10.7, einem Eingeweideomen, das in Rs. IV 4 die heterographische Schreibung A-NA KI.GUB *iš-tar-na* „auf dem Mittelpunkt des Standortes“ aufweist, in Rs. IV 9 und 12 hingegen den hurritischen Terminus šintaḫi: 9f.: [*ták-ku-uš-ša-a*]n ši-in-ta-a-ḫi an-da [] *ki-ša-ri* „[Wenn] auf dem Standort [] entsteht“ (Riemschneider 2004: 28, 32). Die vorherrschende Rolle, die die mesopotamische Eingeweideschau besonders in Bezug auf Leberschauomina spielte, wird in der Anzahl vor allem der Sumerogramme in hurritischen Omentexten aus Hattuša deutlich. So weisen die insgesamt nur 45 hurritischen mantischen Textfragmente die Determinative LÚ, GIŠ, D, m und URU, die Akkadogramme *IZBU*, *RUQQU*, *TIRANU* und *IŠTAR* sowie die Sumerogramme *ARAD*, *BA.ÚŠ*, *DAGAL*, *DIŠ*, *DINGIR*, *DÜG.GAN*, *DUMU.É.GAL*, *É*, *EN*, *É.EN.NU.UN*, *EGIR*, *ÉRIN*, *GEŠTU*, *GIG*, *GÍR*, *GÚ*, ^{GIŠ}*GU.ZA*, *GÜB*, *IGI*, *IM*, *ITU*, *KA*, *KAXU*, *KÁ.É.GAL*, *KASKAL*, *KI.A*, *KI.GUB*, *KUR*, ^{LÚ}*KÚR*, *LÀL*, *LÍL*, *LÚ*, *LU.GAL*, *MAŠ.SÌL*, *MUL*, *MURUB₄*, *NUMUN*, *SAG*, *ŠÀ*, *ŠEŠ.TUR*, *ŠU.SI*, *TUKUL*, *UD*, *UDU*, *URU*, *ZAG*, *ZÍ*, *UTU*, *EN.ZU* auf²⁰.

Abschließend zu den hurritischen Texten aus Anatolien soll ein Text aus Ortaköy vorgestellt werden, der eine Parallele zu Tafeln des *itkalzi*-Rituals aus Boğazköy enthält. Die mittelhethitische Tafel ist bis auf Determinative wie f für Frau und das Sumerogramm *DINGIR*^{MEŠ} „Götter“ syllabisch geschrieben und reiht sich damit nahtlos in die hier bereits vorgestellten Beispiele ein. Inhaltlich enthält die Tafel bzw. ihr erhaltener Teil der Vs. I und Rs. IV hurritische Rezitationen, die im Zuge der Reinigung der im Text genannten Königin Taduḫeba evtl. anlässlich ihrer Hochzeit mit Tutḫaliya II. vorgetragen wurden. Beispielhaft soll das folgender Abschnitt illustrieren:

Or. 90/1494 + Or. 90/1665 + Or. 90/1707 Rs. IV (mH; CTH 777)

(Rs. IV 17') aš-ḫu-ši-ik-ku-un-ni-bi 'ta-du-ḫ[é-ba-a-bi i-ti] (18') pa-a-ḫi pa-a-ši ir-te kar-ši ḫa-ap-zu[-u-ri] (19') i-ti it-ni šum-mi tar-šu-wa-an-ni-bi [] (20') aš-ḫu-ši-ik-ku-un-ni-bi 'ta-du-ḫé-pa-a-b[i] (21') še-ḫa-lu-la-a-eš it-ku-la-a-eš ga-aš-lu-la-a[-eš] (22') e-ku-uš-šu-la-a-eš aš-ḫu-ši-ik-ku-un-ni (23') a-a-bi *DINGIR*^{MEŠ}-a-a-ša

„Der Ritualherrin Taduḫ[eba Körper,] Kopf, Mund, Zunge, Lippe, Spuc[ke,] Körper, der ganze Körper der Person de[r] Ritualherrin Taduḫeba soll klar, rein, stark, sauber werden, die Ritualherrin vor den Göttern!“ (de Martino — Süel 2015: 58f., 64f.)

Eine Ausnahme in Hinblick auf die Verwendung von Heterogrammen bildet der Kolophon dieses Textes. Er ist auf Hethitisch verfasst und gleicht den Kolophonen hethitischer Texte (vgl. dazu weiter unten):

¹⁸ So bereits de Martino 1992: 4.

¹⁹ Vgl. Meyer 1987: 56f. Für Beispiele siehe CAD M 235b sub 2.

²⁰ Vgl. dazu das Glossar in de Martino 1992: 129–138.

Or. 90/1494 + Or. 90/1665 + Or. 90/1707 Rs. IV 28'-31' (mH; CTH 777):

DUB 3.KAM Ú-UL QA-T[I ŠA SÍSKUR *it-kal-zi-ia-aš*]

a-iš [š]u-up-pí-ia-[*aḫ-ḫu-wa-aš* ANA ^DUTU^{ŠI}-at-kán]

KAXU-az pa-ra-a [I-NA ^{URU}zi-it-ḫa-ra]

I-N[A] BURU₁₄ a-[*ni-ia-u-en*]

„3. Tafel, (Ritual) nicht beend[et; des Rituals des *itkalzi-*] und des Mund-Rein[igens;] auf Anweisung [der Majestät] hab[en wir es in Zithara] im Sommer aus[geführt.]“²¹

Nicht ausführlich kann an dieser Stelle auf das Phänomen der Vollkomplementierung eingegangen werden, das sich vereinzelt in hurritischen Texten beobachten lässt. Darunter wird verstanden, dass syllabisch geschriebenen Wörtern das Determinativ gleicher Bedeutung beigefügt wird. Als Beispiel dafür können im Hurritischen Schreibungen von „Gott“ und „Götter“ im Mittani-Brief angeführt werden: z.B. Mit I 78: ^{DINGIR.MEŠ}e-e-en-na-šu-uš. Dabei sind die Pluralformen alle mit dem Determinativ ^{DINGIR.MEŠ} versehen (I 78, II 52, II 76,77, IV 64, 65, IV 117, 118), während zwei der drei Singularformen kein Determinativ aufweisen (I 87, I 195 vs. III 98)²². Das Phänomen ist allerdings nicht auf das Hurritische beschränkt. Bereits im alt-hethitischen Text KBo 17.3+ (CTH 416) Rs. IV 12 findet sich die hethitische Schreibung ^{GIŠ}ta-*ar-ru* „Holz“ parallel zu dem in KBo 17.1+ Rs. IV 16 belegten ^{GIŠ}-*ru* (cf. C. Montuori (ed.), *hethiter.net*: CTH 417 (TX 8.2.2017, TRit 24.7.2015) § 43 Kolon 237 — Zugriff 19.11.2019). Formen von ^{GIŠ.HUR}gulzattar „Tafel“ finden sich in KUB 50.6+ (CTH 569) Rs. III 12, 18 (jH), sowie in KBo 11.1 (CTH 382) Vs. 41 (jH). In Bezug auf eine Schreibung ^Dši-ú-na-aš oder ^Dši-ú-ni vgl. CHD Š 463 mit der Möglichkeit einer Lesung ^{DINGIR}-LIM-ú-na-aš oder ^{DINGIR}-LIM-ú-ni (siehe dagegen Starke 1979: 55f.). Als keilschriftluwischer Beleg ließe sich ^{KÁ}aštummant- „Tor“ in KBo 29.31 (CTH 763) Rs. IV 5' (jH) anführen²³.

Insgesamt zeigen damit sowohl einsprachig hurritische Texte als auch hurritischsprachige Abschnitte in den hethitischen Texten aus Boğazköy und Ortaköy weit weniger Heterogramme, als man von dem Gros der hethitischen Texte gewöhnt ist. Dies gilt zumindest für die Textgruppen der Fest- und Beschwörungsrituale, der hurritisch-hethitischen Bilinguen und der hurritischen mythologischen Texte. Einzig die hurritischen mantischen Texte weisen einen höheren Anteil an heterographischen Schreibungen auf.

Differenziert man die einzelnen Gruppen nach der Art der hurritischen Abschnitte, ist in Bezug auf die Fest- und Beschwörungsrituale zu konstatieren, dass es sich hierbei in allen Fällen um Rezitationen handelt, die zu den auf hethitisch notierten Ritualhandlungen gesprochen werden. Die mythologischen Texte sowie die Bilinguen geben dagegen auch Erzählungen auf Hurritisch wieder²⁴.

In allen Fällen überwiegt die Verwendung von Sumerogrammen gegenüber Akkadogrammen²⁵ sowie der Gebrauch von Sumerogrammen als Determinative. Häufige Determinative sind dabei D, URU, ^{GIŠ}, m, f, häufige Sumerogramme u.a. sumerographisch geschriebene Götternamen wie ^{IŠ}KUR oder UTU, aber auch die Notation einer namentlich nicht genannten

²¹ De Martino — Süel 2015: 59, 65 mit Ergänzungen u.a. aus FHG 21+ Rs. IV 38'-41' (ChS I/1 Nr. 6, S. 77), KBo 23.6+ Rs. IV 36'-38' (ChS I/1 Nr. 5, S. 65).

²² Belege nach Dietrich, Mayer 2010: 240. Die dort getroffene Aussage „Ohne Determinativ ist *ēni*= Apposition zu einem Götternamen.“ ist zu relativieren, da auch der Beleg in III 98 und vermutlich die in I 78, II 77, IV 118 als Appositionen mit Determinativ auf gefasst werden dürften. Zu einer Form ^Den-na- in einem Text aus Emar siehe Fischer 2017: 36.

²³ Ich danke J. Lorenz für diese Hinweise.

²⁴ Vgl. dazu auch ein hurritisches Fragment aus Kayalıpınar (Wilhelm 2019: 197–200).

²⁵ Auch in hethitischen Texten überwiegt die Verwendung von Sumerogrammen gegenüber Akkadogrammen.

Gottheit mit DINGIR oder die vereinfachte Schreibung von geographischen Begriffen wie ÍD „Fluss“, ̣UR.SAG „Berg“ und URU „Stadt“ gegenüber den hurritischen Äquivalenten. Akkadogramme in mythologischen Texten umfassen im Wesentlichen Götternamen wie IŠ-TAR oder EA und vor allem Fachbegriffe der Eingeweidenschau in den mantischen Texten.

Eine zeitliche Differenzierung zwischen der Verwendung von Heterogrammen in mittel-, jung- und spätjunghethitischen Niederschriften ist nicht erkennbar. Die bislang angeführten Beispiele stellen Niederschriften der Großreichszeit dar (*hišurwa*-Fest CTH 628, mythologische Texte – siehe dazu Salvini – Wegner 2004: 13f.), die ebenso wenige Heterogramme aufweisen wie die Rituale der AZU-Priester (CTH 701), die hurritisch-hethitische Bilinguen oder der zitierte Texte aus Ortaköy, die beide in der mittelhethitischen Schriftperiode niedergeschrieben wurden.

In einem Vergleich mit anderen fremdsprachigen Texten in den Archiven ̣attušas, also hattischen, palaischen und luwischen Texten, ist festzustellen, dass auch diese eine Präferenz für syllabische Schreibungen erkennen lassen. Wie bei den hurritischen Passagen handelt es sich vorwiegend um Rezitationen oder mythologische Erzählungen²⁶. In Bezug auf die palaischen Textpassagen geht Kudrinski davon aus, dass die Verwendung der Heterogramme nach dem Willen des Schreibers bei Diktat des Textes erfolgte, ohne dass der Schreiber besondere Palaisch-Kenntnisse gehabt hätte (Kudrinski 2017: 245f.). Im Gegensatz dazu dürfte davon auszugehen sein, so Kudrinski, dass die Schreiber des Luwischen im Wesentlichen mächtig waren, was zu einem vermehrten Gebrauch von Heterogrammen, insbesondere Sumerogrammen, im Vergleich mit der Niederschrift der palaischen Passagen, geführt habe (Kudrinski 2017: 246–248).

Wie oben bereits angemerkt, weisen auch einsprachig hurritische Texte keine hurritischen Kolophone auf. Allgemein dürften alle Kolophone hethitisch verstanden worden sein²⁷, auch wenn manche vollständig heterographisch geschrieben sind und die dahinterstehende Sprache damit nicht bestimmt werden kann. Als Beispiel dafür mag der Text KUB 47.2 (Hurritische Version des Kešše-Epos) dienen: lk. Rd. 1–3 DUB 14.KAM SİR ṁke-eš-še NU.TIL „14. Tafel (des) Liedes (von) Kešše. Nicht beendet.“ Hinweise auf fremdsprachige Kolophone lassen sich nur in Ausnahmefällen finden. So dürfte es sich dabei teilweise um die Titel oder Anfangswörter fremdsprachiger Rezitationen handeln, z.B. KBo 25.135 rev. 7' [*tup-p*]²⁸ 2.KAM ša-i-šu-mi-da-a-a[n]²⁸ (hattisch – cf. Waal 2015: 516 mit Lesung ŠA i-šu-mi-na-a-a[n]) oder KUB 28.83 rev. 3'] 1 SİR i-wa_a-aḫ_a-ru-wa a-aš-da-ak-ši-du²⁹ (hattisch – Waal 2015: 516). Ob das auch auf den Kolophon des hurritischen Fragments KBo 8.143 rev 15'] [Ⓛ]INANNA¹ šu-pal-wu_u da-a-ia-a-na-a-x[(Waal 2015: 533 – cf. Trémouille 2005: 23 mit einer Lesung] [Ⓛ]INANNA¹ ŠU BAL-wu_u da-a-ia-a-na-a-x[) zutrifft, muss derzeit offen bleiben.

Vergleicht man diesen Befund einer Präferenz syllabischer Schreibungen in hurritischen Texten aus Anatolien mit entsprechenden Analysen hurritischer Texte anderer Fundorte, ist festzustellen, dass auch diese überwiegend syllabisch geschrieben sind: Die vorrangig religiösen Texte aus Ugarit³⁰ in syllabischer Schrift weisen kaum Heterogramme auf, sind aber zum

²⁶ Hethitische Rezitationen wie z.B. die Anrufungen des Ambazzi-Rituals CTH 391.1 und .2 oder die der Baurituale CTH 413.1 und 414.1 sind ähnlich mit Heterogrammen gespickt wie hethitische Ritualbeschreibungen.

²⁷ Waal 2015: 506: “In general, the colophons of texts in other languages follow the same pattern as comparable texts composed in Hittite: the colophons of the festival and ritual texts are generally the same as the festival and ritual texts listed CTH 591–725 and CTH 390–500 respectively. The same applies to the prayers, omen texts and invocations.”

²⁸ Soysal 2004: 510: Eventuell als šai=šumin=an für *tai=*tumin=an(?) zu verstehen.

²⁹ Soysal 2004: 389: Verbales a=š=da=k=šit(=)u[für a=š=*ta=*ka=šit(=)u(?).

³⁰ Siehe dazu Laroche 1968: 447–544, v.a. 462–496. Vgl. auch Dietrich-Mayer 1999: 58–62.

Teil nur sehr fragmentarisch überliefert. Auch die hurritischen Beschwörungen aus Mari sind syllabisch geschrieben³¹. Der Mittani-Brief als hurritisches Dokument *par excellence* enthält nur wenige Heterogramme, darunter die Determinative D, m, f, KUR, URU, MEŠ, die Sumerogramme DINGIR^{MEŠ}, KUR, URU, GUŠKIN, ^{NA}ZA.GÌN sowie das Akkadogramm *šalmu*³². Unter den in Emar gefundenen hurritischen Texten sind zahlreiche Leberschauomina, die — ebenso wie die mantischen Texte aus Hattuša — eine Vielzahl v.a. an Sumerogrammen aufweisen. Beispielhaft sei auf den Text MSK 74.192a+³³ verwiesen, einem mit 127 Zeilen sehr langen Text mit Leberschauomina, der alleine in den ersten 12 Zeilen 94 Sumerogramme verwendet (Salvini 2015 I: 98–104 mit einer Transliteration des Textes)³⁴. Zu bemerken bleibt, dass besonders die wenigen Textfunde aus dem Jahr 1973 weit weniger heterographische Schreibungen aufweisen als das Gros der Texte, die im Jahr 1974 gefunden wurden³⁵.

Berücksichtigt man für eine Auswertung auch die Einteilung von Texten gemäß der Gruppierung nach van den Hout 2002 in eine Gruppe A „Texte mit Duplikaten“ sowie eine Gruppe B „*unica*“³⁶, sind die hurritischen Rituale, mythologischen Texte sowie Parabeln mit vergleichsweise wenigen Heterogrammen der ersten Gruppe zuzuschreiben, während die mantischen Texte mit ihren zahlreichen Heterogrammen den *unica* zuzurechnen sind.

Als Erklärung für eine Auswertung dieser Beobachtungen wurde wiederholt das Fremdsprachenniveau der Schreiber angeführt. Salvini (1980: 166f.) vermutete, dass die hethitischen Schreiber des (*h*)išuwa-Festes die hurritischen Rezitationen Wort für Wort kopierten, ohne sie recht zu verstehen³⁷. Auch Kudrinski bringt ein höheres Fremdsprachenverständnis als Argument für einen vermehrten Gebrauch von Heterogrammen vor (Kudrinski 2017: 246, 249). Angenommen wird, dass Rezitationen syllabisch geschrieben wurden, um eine falsche Interpretation der Logogramme, und damit eine fehlerhafte Aussprache der dann wirkungslosen Rezitation zu verhindern³⁸. Demgegenüber steht die Beobachtung, dass hurritische Texte auch außerhalb Anatoliens vorwiegend syllabisch geschrieben worden sind. Weiterhin dürften Schreiber in Anatolien als Experten auf ihrem Gebiet angesehen worden sein und besonders für hethitische Schreiber, die hurritische Werke ins Hethitische übersetzten, darf ein gewisses Verständnis der hurritischen Sprache vorausgesetzt werden (Hoffner 1992: 105; Klinger 2001; Corti 2007: 120f.). Insbesondere zu einer Zeit wie der mittelhethitischen, in der man von der

³¹ Thureau-Dangin 1939, 1–28; Salvini 1988: 81.

³² Vgl. die Umschrift in Dietrich-Mayer 2010: 27–53.

³³ Siehe Fischer 2017: 31 Anm. 6, zu einem Join mit MSK 74.238A.

³⁴ Siehe zu den in den hurritischen Emar-Texten gebrauchten Sumerogrammen den Thesaurus (Salvini 2015 II: 211–281).

³⁵ Siehe z.B. die Texte MSK 73.1034 oder MSK 73.1049+ (Salvini 2015 I: 57–59). Zur Einteilung der hurritischen Texte aus Emar in zwei Gruppen, von denen die erste im Wesentlichen die Textfunde aus dem Jahr 1973 und einige wenige aus dem Jahr 1974 umfasst, während die zweite die restlichen Textfunde von 1974 einschließt, siehe Fischer 2017, vor allem 32–40. Vgl. dort S. 36 auch die Bemerkungen zum Gebrauch von Logogrammen.

³⁶ Siehe van den Hout 2002: 864; zur Gruppe A sind demnach u.a. historische Texte, Verträge, Edikte, Instruktionen, Gesetze, Hymnen und Gebete, Festtexte, Ritualtexte, mythologische Texte, lexikalische Texte sowie fremdsprachige Texte zu zählen, während sich in der Gruppe B Briefe, Landschenkungsurkunden, hippologische Texte, Orakeltexte, Gelübde und einige administrative Texte finden. Für eine weitere Aufteilung in vier Gruppen siehe Waal 2015, bes. 173–175.

³⁷ Vgl. dazu Gordin 2015: 153 mit Anm. 631, der sich jedoch nicht in Bezug auf die Hurritisch-Kenntnisse der Schreiber Talmi-Teššub und Hūlunabi festlegen möchte.

³⁸ Das hieße auch, dass die hurritische Lesung der Logogramme eindeutig gewesen sein muss. Kudrinski — Yakubovich 2016 machen wahrscheinlich, dass Heterogramme im Hethitischen zusätzliche Informationen semantischer Art liefern könnten. Vgl. Kudrinski 2017. An dieser Stelle kann diesen Fragestellungen nicht weiter nachgegangen werden.

Anwesenheit hurritischer Muttersprachler in Ḫattuša ausgehen kann, überzeugt mich das Argument des unkundigen Schreivers nicht. Erinnert werden soll in diesem Zusammenhang auch an den Schreiber mit dem hurritischen Namen Ḫubidi, von dem hurritische und hethitische Tafeln überliefert sind: ein hurritisches Gebet der Taduḫepa an Teššub für das Wohl von Tašmi-Šarri³⁹ und ein hethitisches Fragment eines militärischen Reinigungsrituals⁴⁰. Die Frage nach dem Fremdsprachenniveau des Schreivers ist demnach kritisch oder zumindest differenziert zu betrachten.

Neben dem Fremdsprachenniveau des Schreivers gilt es auch, dasjenige des bzw. der Adressaten zu berücksichtigen. In diesem Zusammenhang sei an die Argumentation von B. Christiansen erinnert, die die Festritualtexte als Anweisungstexte verstehen möchte. Vergleichbar mit dem Missale Romanum der römisch-katholischen Messe von 1970 könnten sie den Priestern und anderen Kultakteuren dazu gedient haben, sich den Verlauf des Festes und die zugehörigen Riten einzuprägen, um sie korrekt auszuführen (Christiansen 2016: 41)⁴¹. Eine englischsprachige Anleitung für katholische Messdiener verweist darüber hinaus auf die korrekte Aussprache lateinischer Texte, ohne aber eine Übersetzung zu liefern. Nach Christiansen (2016: 53) wird dadurch wohl dem korrekten Vollzug der Riten ein höherer Wert beigemessen als deren Verständnis durch die Messdiener. Für die anatolischen Texte mag ein Blick auf die hurritischen mantischen Texte und Omina deutlich machen, dass diese, die durch ihren vergleichsweise häufigen Gebrauch von Heterogrammen (v.a. Sumerogrammen) herausstechen, gleich ob sie aus Ḫattuša oder Emar stammen, zur Gruppe der Unikatstexte gehören. Sie wurden also eher für einen konkreten Moment gebraucht und richteten sich sicher nur an Experten. Die Adressaten der anderen hurritischen Texte sind schwieriger zu bestimmen und sollen an dieser Stelle offen bleiben. Sicherlich dürfte eine syllabische Schreibung das Vorlesen von Texten auch bei Unkenntnis der jeweiligen Sprache erleichtert haben, was z.B. auf die palaischen Texte zutreffen könnte⁴².

Betrachtet man vergleichend die urartäischen Inschriften des 1. Jt. v. Chr., ist zunächst deutlich zu machen, dass diese einem anderen Textgenre, nämlich dem der Königsinschriften zuzurechnen sind. Heterogramme werden nach einer Durchsicht der urartäischen Texte in allen Inschriften, aber nicht in übermäßiger Zahl genutzt. Gehäuft treten sie in Elementen der Herrschaftstitulaturen sowie in Auflistungen von Beute oder Opfergaben auf. Vergleicht man die Verwendung von Akkadogrammen in parallelen akkadischen Versionen, liegt der Anteil in urartäischen Texten bei etwa der Hälfte. Als Beispiel dafür mag die Kelišin-Stele vom Ende des 9. Jh. v. Chr. dienen. In den teilweise ergänzten 41 Zeilen der urartäischen Version werden 46 Determinative (DINGIR, m, URU, KUR, MEŠ), 27 Sumerogramme (u.a. MAN, URUDU, GU₄, KÁ, IM, UTU, DINGIR) sowie 8 Akkadogramme (*DANNU*, *LIM*, *ME*) genutzt. In dem ebenfalls teilweise ergänzten, 42 Zeilen umfassenden assyrischen Text werden 54 Determinative (DINGIR, URU, m, MEŠ) und 67 Sumerogramme (u.a. MAN, A, GAL, DUMU) verwendet (siehe zu den beiden Versionen der Kelišin-Stele Salvini 2008 I: 141–144; zu weiteren, allerdings nicht so gut erhaltenen urartäischen Inschriften mit assyrischen Parallelen siehe Salvini 2008 I: 497–508, Inschriften A 10–3, A 10–4, A 10–5). Metallobjekte mit urartäischer Beschriftung

³⁹ KUB 32.19+, CTH 778.8, mH; siehe ChS I/1 Nr. 41: 215–232; Singer 2002: 43f.; Gordin 2015: 109, 351.

⁴⁰ KBo 22.129+, CTH 428, mH; siehe Groddek 2008: 120f.; Gordin 2015: 109, 351.

⁴¹ Auch Burgin 2019 konnte in seiner Untersuchung zu den althethitischen Tafeln des KILAM-Festes deutlich machen, dass verschiedene Angaben und Formulierungen darauf schließen lassen, dass die Texte für unterschiedliche Adressatengruppen verfasst wurden; allerdings beschäftigte er sich nicht mit Tafeln, die fremdsprachige Partien enthalten.

⁴² Ich verdanke diesen Hinweis I. Yakubovich. Vgl. auch oben und Kudrinski 2017: 245–248.

tung weisen recht wenige Heterogramme auf, was damit in Verbindung stehen könnte, dass die Namen als Besitzangaben meist syllabisch geschrieben werden (vgl. die Darbietung der Texte in Salvini 2012: 19–74). Etwas mehr Heterogramme zeigen einige urartäische Tontafeln, besonders, wenn es sich um Listen, in denen die Verteilung von Gütern an verschiedene Personen notiert wird (vgl. Salvini 2012: 122f.), oder andere Verwaltungstexte handelt (vgl. Salvini 2012: 122–150). Diese weisen teils bis auf die Namen nur Heterogramme auf (siehe dazu z.B. die Tafel CT An-1 aus Anzaf; siehe dazu Salvini 2012: 122f.; vgl. auch die Tafeln aus Toprakka-*le*; siehe Salvini 2012: 145–150). Für das Urartäische kann damit festgehalten werden, dass die Verwendung von Heterogrammen textsortenspezifisch variiert. Darüber hinaus kann davon ausgegangen werden, dass Listen und Verwaltungstexte von Verwaltungsbeamten für Verwaltungsbeamte notiert wurden, man hier also in gewisser Weise von Experten mit identischem Kenntnisstand ausgehen kann. Urartäische Namen, und zwar Götter-, Orts- und Personennamen, werden fast ausschließlich syllabisch geschrieben (vgl. Salvini 2008 II: 258–372, oder auch Salvini 2012: 93–108, 159–163, 203–205) und der Gebrauch von Heterogrammen in Königsinschriften kann unter Beeinflussung der assyrischen Schreibtradition gestanden haben. Als Adressaten derselben dürften die einheimischen Urartäer gelten, für die ein problemloses Verständnis der Inschriften angenommen werden darf.

In einer Zusammenschau scheinen die hurritischen Texte aus Boğazköy in einer anderen Schreibtradition zu stehen als die hethitischen Texte. Da alle bislang auf uns gekommenen hurritischen Texte – mit Ausnahme der mantischen Texte – einen eher zurückhaltenden Gebrauch von Heterogrammen bezeugen, was sich im Übrigen bereits für die Tiš-Atal-Inschrift des beginnenden 2. Jt.s v. Chr. konstatieren lässt, fügt sich das Textmaterial aus Zentralanatolien (Ḫattuša und Ortaköy) sehr gut in den Befund ein. Besonders der Vergleich mit hurritischen Texten anderer Fundorte wie Ugarit oder Emar scheint darauf zu deuten, dass der Gebrauch von Heterogrammen in der Verschriftlichung der hurritischen (und anderssprachigen) Texte in Ḫattuša einer anderen Tradition zuzuschreiben ist und eher keine Rückschlüsse auf die Sprachkompetenz der Schreiber zulässt. Die Schreibungen in hethitischen Texten unter häufiger Verwendung von Heterogrammen, darunter auch Mischungen akkadischer und sumerischer Logogramme, teils mit hethitischen Komplementen, sind singulär im Alten Orient, ohne dass bislang eine grundlegende Erklärung für dieses Phänomen gefunden werden konnte⁴³. Ob bei den Hethitern ein Bewusstsein existierte, dass eine syllabische Schreibung die Tradierung und das Verständnis fremdsprachiger Texte auch bei zurückgehender allgemeiner Sprachkompetenz sicherstellen würde (und damit z.B. die korrekte Durchführung und Rezitation in Festen oder Ritualen) oder ob, wie von Kudrinski – Yakubovich 2016 angenommen, der Gebrauch von Heterogrammen bei der Verschriftlichung des Hethitischen semantisch bedingte Gründe hat, können nur weitere Studien erweisen.

Abbreviations

ChS I/1 – Haas 1984; ChS I/2 – Salvini-Wegner 1986; ChS I/4 – Wegner-Salvini 1991;
ChS I/6 – Salvini-Wegner 2004.

⁴³ In manchen Texten finden sich Hinweise, dass sie laut vorgelesen wurden (vgl. HW² H 101 s.v. *tuppi ḫalzai-* „(Ton-)Tafel vorlesen, laut lesen“ mit Hinweis auf 11 Belege dafür, davon 6 Briefe, 3 Vertragstafeln und 2 Ritualtexte). Wird eine konkrete Person genannt, die vorlesen soll, ist es ein Schreiber. In Bezug auf die Frage nach der Sprachrealität des Hethitischen mit seinen zahlreichen Heterogrammen stellt sich daher die Frage, ob diese vom Schreiber wirklich hethitisch (vor)gelesen wurden (so z.B. Rieken 2011: 16) oder einfach nur gelesen wurden; vgl. Rieken – Yakubovich im Druck.

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Сузанна Гёрке. Гетерограммы в хурритских текстах из Богазкёя и Северной Сирии

В настоящей статье обсуждаются гетерографические написания в хурритских текстах второго тысячелетия до н.э. из Анатолии и северной Сирии. Частота шумеро- и аккадограмм анализируется в зависимости от жанра хурритских текстов. Большинство текстов религиозного содержания, включая ритуалы, описания праздников и мифы, содержат лишь небольшое количество логограмм и детерминативов. Исключением являются хурритские гадательные тексты из Хаттусы и Эмара, в которых гетерограммы используются достаточно часто. Для интерпретации полученных результатов необходимо использовать различные параметры, такие как степень усвоения иностранного языка писцами, возможные адресаты текстов, а также прагматика различных жанров и стилей. Для сравнения приводится краткий обзор гетерографических написаний в урартских текстах.

Ключевые слова: хурритские клинописные тексты; Анатолия; северная Сирия; урартские надписи; писцовые традиции.

Ethnic Groups and Language Contact in Lycia (I): the ‘Maritime Interface’

The paper offers an overview of the ethnolinguistic and sociolinguistic contact in Lycia in the Late Bronze and the Early Iron Age (ca. 1400–330 BC) resulting from the sea-borne connections of the region. Following a brief sketch of the Lycian geography and definition of its ‘ethnocultural interfaces’ (§1), the discussion concentrates in turn on the southern coasts of Caria and Rhodos, also touching upon the question of the ethnic names of the Lycians, *Lukkā*/Λύκιοι and *Trnīmīleli* (§2), Pamphylia (§3), Rough Cilicia (§4), the Levant (§5) and the Aegean (§6). The section on the Aegean offers a revision of the evidence on Greek-Lycian contacts and suggests a new explanatory scenario accounting for the paradoxical situation where an insignificant number of lexical borrowings contrasts with evidence for a deep structural influence of Greek on Lycian.

Keywords: Greek-Anatolian contact; language contact; ethnolinguistics; sociolinguistics; Aegean migrations; Anatolian languages; Lycian language; Luwian language; Greek language.

Seen from the perspective of language contact, Lycia has received a fair amount of scholarly attention in recent years, at least in comparison to other regions of ancient Anatolia¹. As is often the case, this is due first and foremost to the nature of the available evidence. Not only is the Lycian corpus, comprising at present more than 200 inscriptions, some of which are quite long and elaborate², more substantial than those available for other ‘alphabetic languages’ of the early 1st millennium BC Anatolia, such as Carian, Lydian or Phrygian, but the level of understanding of Lycian texts is in general also higher, allowing to focus even on minor details. The fact that Lycian is a close relative of Luwian — the ‘Asian Tiger’ of Anatolian studies of the last two decades — plays no small part in it. Moreover, the Lycian corpus includes a number of bilingual and trilingual texts, which present one of the most convenient starting points for approaching the problem of language contact, and numerous Greek inscriptions, in part belonging to the same genre as Lycian texts (funerary inscriptions), also present an excellent opportunity for a comparative analysis of Greek and Lycian texts, a subject still quite far from being exhausted³. Given the epigraphical situation, it is quite natural that scholars hith-

¹ Cf. Le Roy 1989, Brixhe 1999, Rutherford 2002, Schürr 2007, Molina Valero 2009, Melchert 2014, Dardano 2015. To this one may add the recent PhD thesis by Florian Réveilhac (2018) which pays a lot of attention to the effects of language contact in the domain of onomastics.

² For a recent overview of the Lycian corpus and recent additions to it see Christiansen 2020. Besides that, there is a number of coin legends, important both for Lycian onomastics and especially the reconstruction of the political history of the region.

³ One can identify 20 inscriptions combining Greek and Lycian text only, some of which are bilinguals (more or less exact renderings of the same text), some quasi-bilinguals (approximate correspondences) and some contain only names additionally rendered in Greek; besides that there are two Lycian-Aramaic bilinguals (for details see Rutherford 2002: 200–201; to the table on p. 200 one should add TL 115 and TL 139, both from Limyra). Trilingual texts include Xanthos Trilingual (Greek-Lycian-‘Lycian B’) and Letoon Trilingual (Greek-Lycian-Aramaic). A major corpus of Greek inscriptions from Lycia is presented in the second volume of *Tituli Asiae Minoris* (TAM II), published in three parts between 1920 and 1944, now supplemented by numerous separate publications of inscriptions found more recently.

erto concentrated almost entirely on the *Lycian-Greek* contact. However, the resulting picture is neither complete nor a balanced one, nor, one could say, even fair to the people who inhabited the region. It is quite obvious that the binary model ('Greeks' vs. 'Orient' or the like), rooted in the traditional Hellenocentric perspective, very inadequately describes the real cultural and ethnic complexity of practically every corner of the ancient Mediterranean, but in the case of Lycia it proves to be especially misleading. The evidence of Greek literary texts, supported by numerous archaeological, epigraphic and onomastic indications, implies that this part of Anatolia was one of the most culturally complex and dynamic regions of the ancient Mediterranean, and that the name Παμφυλία — '(the land) of mingled tribes' — would be as appropriate for the whole region from Side in the East to Kaunos in the West and from Aperlae in the South to Kibyra in the North, as it is for the alluvial coastal plain to the East of Lycia. There can be little doubt that before the extensive Hellenization of the region started after the Macedonian conquest in 334/333 BC, linguistic contact in Lycia was both multidirectional and multidimensional. The aim of the present contribution, conceived in two parts, is to give an overview of the ethnolinguistic and sociolinguistic situation in and around Lycia as can be glimpsed from historical evidence, as well as to present, whenever possible, linguistic exponents of this ethnocultural contact. The present first part will focus on the 'Maritime Interface' (for definition see below).

§1. Geography of Lycia, Lycian ethnolinguistic area and 'Ethnocultural Interfaces'

It is appropriate to start with the physical geography of Lycia, which is quite specific and largely predefines the framework for the unique ethnolinguistic situation there⁴. Strabo (14.3.1) wrote that Lycia is the county lying between the Daidala Mountains, which marks the eastern limit of the Rhodian Peraia (i.e. the southern coastal regions of Caria), in the West and Pamphylia in the East. Neither Strabo nor any other Greek author offers any clear definition for the northern borders of Lycia, and this is probably not quite accidental, since Lycia is first and foremost a country immediately connected to the sea. In any case, Lycia, as a linguistic and cultural phenomenon, is *not* simply the Teke Peninsula — the land protrusion between the Bay of Telmessos and the Pamphylian Sea (the Gulf of Antalya) — as many modern maps tend to represent it.

The eastern part of the Teke peninsula is formed by a steep mountain range stretching roughly from south to north and subdivided into three main parts: Sarıçınar Dağı in the North, Tahtalı Dağı, the highest point of the range (2366 m) probably called in Antiquity Ὀλυμπος or Φοινικουῶς (Str. 14.3.8)⁵, in the middle, and Görece Dağı in the South. The mountain range virtually cuts off the narrow eastern coastal strip from the rest of the peninsula: even today there are only two roads leading from here to the West, the main one (Kemer-Kumluca), which was probably used already in Antiquity, in the southern part, and much smaller one (Kemer-Ovacık) traversing the range in its middle part. The eastern coast of the peninsula probably never was a part of Lycia in either linguistic or cultural sense, since one finds here neither Lycian inscriptions nor tombs typical of Lycia, and the fact that the Rhodians were able to establish here a colony at an early date (Phaselis, founded from Lindos in

⁴ For a more detailed overview, including a discussion of the routes, see Keen 1998: 13–21 and Şahin-Adak 2007: 95–115.

⁵ For an alternative identification of Olympos with Musa Dağı, a small south-western spur of the range in the region of the cities Olympos and Korykos, see Adak 2004.

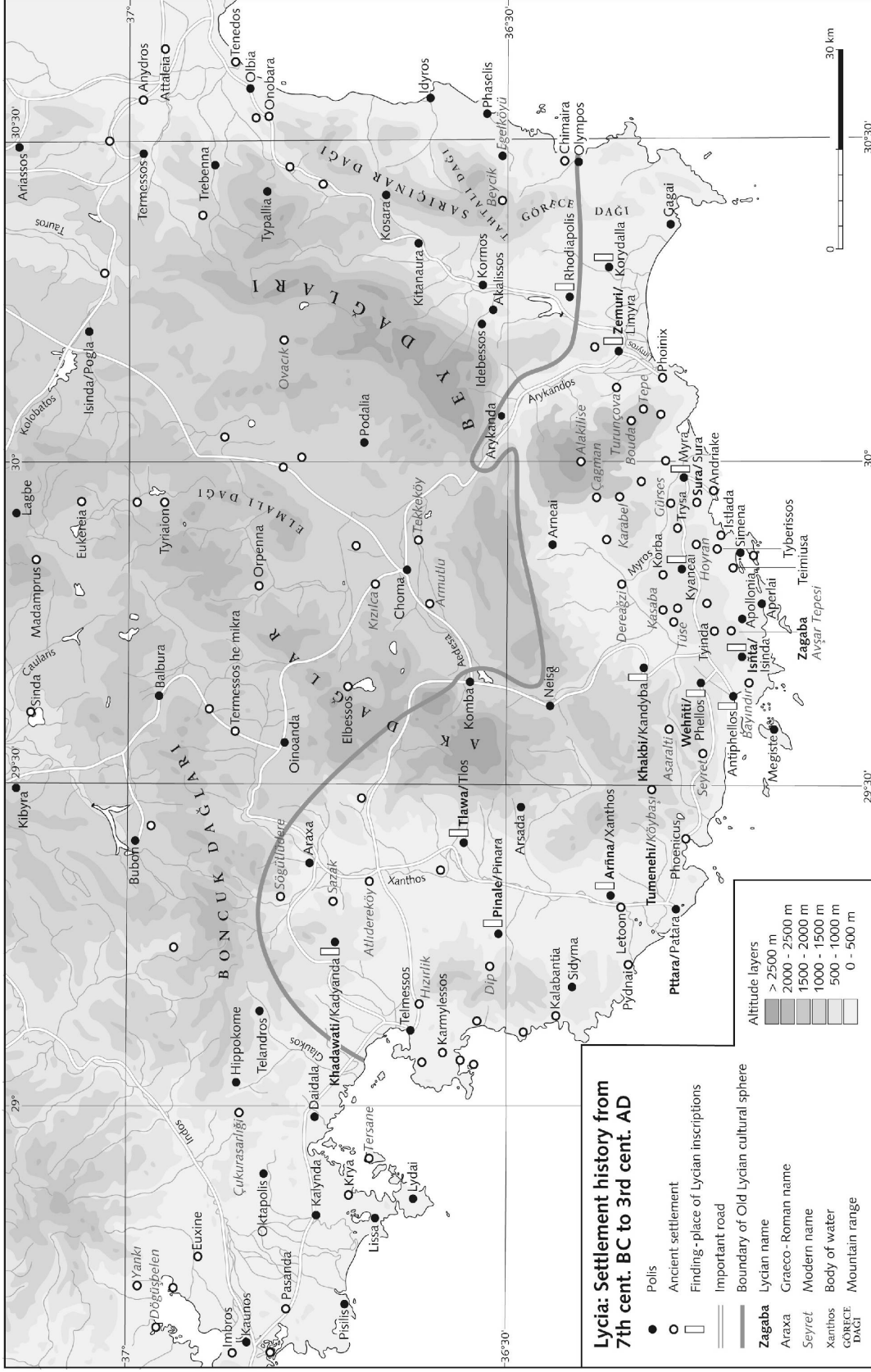


Fig. 1. Map of Lycia after Tübinger Atlas des Vorderen Orients (TAVO), B V 15.2: Lykien und Pamphylien, von Kai Buschmann und Katja Sommer, 1992. Copyright Dr. Ludwig Reichert Verlag, Wiesbaden

691/90 BC) also indicates that the situation in the region was different from that in Lycia⁶. Geographically and probably also culturally this easternmost part of the peninsula belonged rather with Pamphylia, to which it was in fact sometimes ascribed⁷.

The central part of the Teke Peninsula is almost entirely occupied by mountains. The two main ranges are Bey Dağları (with the highest point 3086 m) stretching from the SW to the NE in the central-eastern part and Ak Dağları (with the highest point 3024 m) in the western part, which goes from the coast first to the North and then curves in the NE direction. The two lesser ones are Susuz Dağı, which virtually continues Bey Dağları down to the coast, and Alaca Dağı, a relatively compact massif between Bey Dağları and the coast. The ancient name Μασίκυτος probably referred generally to the mountains rising from the southern coast, i.e. collectively to Susuz Dağı, Alaca Dağı and Bey Dağları⁸. The mountains leave only two small patches of flat land near the coast: a somewhat larger plain between Görece Dağı and Alaca Dağı, where Rhodiapolis, Gagai and Limyra were situated, and a smaller plain of Myra to the south-west of Alaca Dağı. Other settlements, which are surprisingly numerous (no less than three dozens), were situated either directly on the coast (Andriake, Simena, Aperlai, Antiphellos/Habessos etc.) or on the slopes and in the small valleys usually no more than 15 km from the coast. Only a few settlements (as Arykanda, Kandyba, Arneai, Nisa and Komba) are situated further inland. This quite compact group of settlements close to the southern coast builds one of two principal zones of Lycian ethnocultural area, as suggested by the joint evidence of Lycian inscriptions and tomb architecture. It is noteworthy that it was isolated to a degree from the second zone, the Xanthos valley (cf. below), since the southern sections of Ak Dağları and Susuz Dağı, which rise directly from the coast, made communication by land rather difficult.

The region to the North was, however, not sheer rough terrain: between Ak Dağları and Bey Dağları lies the fertile highland plateau of Elmalı, which is connected to the southern coastal regions by two roads passing respectively to the West and to the East of Susuz Dağı. The Elmalı Plateau corresponds to the ancient region of Μιλυάς. There is only one Lycian inscription found in this region (at Kızılcı), and both its name, connected with ethnic name Μιλύαι, and the general character of material culture suggest that Μιλυάς was a region distinct from Lycia both linguistically and culturally.

To the west of Ak Dağları lies the fertile valley of the Xanthos River (now Eşen). It is rather long (about 50 km) and narrow, being confined on the West by yet another mountain range, Baba Dağ (with the highest point 1969 m), which goes roughly parallel to the southern portion of Ak Dağları. The ancient name of Ak Dağları was probably Κράγος and that of Baba Dağ Αντίκράγος⁹. As mentioned, the Xanthos Valley was the second principal zone of the Ly-

⁶ For Phaselis cf. Hansen-Nielsen 2004: 1140–41 and for further discussion of the Greek colonisation of the region cf. Adak 2007 and 2013.

⁷ Phaselis is defined as πόλις Παμφυλίας by Aristodemos (FGrHist 104, Fr. 1, 13.2) and Stephen of Byzantium (s.v. Φάσηλις). Contra Hansen-Nielsen 2004: 1140–41, *Suda* (121 Φάσηλις) says nothing to the point, and the Lindos Temple Chronicle C, XXIV (= FGrHist 532 Fr. 3) does not actually locate it ‘in Solyma’, since ‘ἀπὸ Σολύμων’ of the passage refers obviously to the *battle* with the *Solyimi* in which the helmets and sickle-swords mentioned in the passage were taken.

⁸ Thus with Şahin-Adak 2007: 97–100 and contra *Barrington Atlas* (map 65), which identifies Masikyotos with Alaca Dağı alone.

⁹ The identification by Ruge (1921) of Κοάνος with Avdancık/Sandak Dağ, a rather inconspicuous (the highest point 1009 m) continuation of the Baba Dağ range in the southern direction, still followed in *Barrington Atlas* (map 65; cf. also Hailer in DNP: s.v. Cragus) is clearly obsolete, see the discussion by Şahin-Adak 2007: 97–100 (cf. Hild-Hellenkemper 2008: s.v. Kragos). Indeed, there can be little doubt that Κράγος was considered first of

cian ethnocultural area, which included four of the most powerful Lycian cities: Tlos, Pinara, Xanthos and Patara. The valley was confined in the North by the mountain range of Boncuk Dağları, which, together with Ak Dağları, geographically separated Lycia from Kibyris/ Kabalis situated in the highland region further north. However, the Xanthos valley had in its upper part an easy access to the region of the Telmessos Bay (Fethiye), the westernmost part of Lycia. Besides Telmessos, the principal city of the region, Lycian inscriptions were found in Karmyessos to the South of it and Kadyanda to the North-East. The region to the East of Telmessos likely was a transitional zone between Lycian and Carian ethnolinguistic areas, since neither Daidala Mountains nor the River Indus (Dalaman Çayı), sometimes mentioned as a frontier between Lycia and Caria, constituted a considerable geographical barrier.

The geographical realities of Lycia sketched out above allow one to identify four principal ‘ethnocultural interfaces’: the lines of contact along which linguistic and cultural interaction between the Lycians and other peoples took place:

I. *Maritime Interface*: obviously the most important interface for the entire Lycia from the plain of Limyra in the East to the Xanthos Valley and the Bay of Telmessos in the West. The geographical sphere of the ‘Maritime Interface’ of Lycia could embrace in theory the entire Mediterranean basin (and beyond), but the extant evidence allows one to practically confine it to the eastern part, from the Aegean in the West to the Levant in the East and Egypt and Libya in the South.

II. *North-Eastern Interface*: the ‘mountain interface’ of the southern ethnocultural zone. It includes first and foremost interconnections with Milyas, but also more dispersed ties which should have existed between the southern coastal settlements of Lycia and its northern and eastern mountainous hinterland.

III. *Western Interface*: the interconnection between the region of Telmessos and its western (and north-western) neighbours inhabiting eastern Caria.

IV. *Northern Interface*: the interconnection between the northern part of the Xanthos Valley and the regions to the North and North-West of it, Kabalis and Kibyris.

To these four geographical interaction zones may be added a further source of linguistic/cultural influences in Lycia, which lies rather in sociolinguistic dimension: the foreign presence correlating with military/political control over Lycia at some periods of its history. The main factor was doubtless the Achaemenid control of Lycia in the 6th–4th centuries BC.

all as the mountain range culminating in the Mount Ak Dağı (3024 m) which dominates the eastern part of the Xanthos Valley. The prominence of the mount is reflected, inter alia, in the legendary tradition which makes Kragos a son of Τεουίλης, the eponym of the Lycians/Τεουίλαι, and the second husband of Μιλύη, the eponym of the Milvans, who lived on the eastern side of Ak Dağı (cf. St. Byz., s.v.v. Μιλύαι, Κόανος (citing Alexander Polyhistor = FGrH 273 F5) and TAM II 174 (= FGrHist 770 F5)). In contrast, a more likely identification for Ἀντίκοανος still appears to be Baba Dağ, as in Ruge 1921, and not Boncuk Dağları, as suggested by Şahin-Adak 2007: 97–99. This is implied first of all by the semantics of ἀντί ‘over against, opposite’ which presupposes a clear spacial/visual *contrast* between Kragos and Antikragos (cf. Tauros vs. Anti-Tauros or Lebanon vs. Anti-Lebanon). This makes a very good sense with Ak Dağları vs. Baba Dağ which face each other across the Xanthos valley, but is by far not obvious with Ak Dağları and Boncuk Dağları. This identification also agrees well with Strabo’s description (14.3.4–5) which in essence presents the Lycian *shoreline* and associates Antikragos with Telmessos and Karmyessos. It is further quite possible that one could use ‘Kragos’ as a shorthand for ‘Antikragos’ (cf. Mela’s (1.82) *mons Gracius* and the association of Pinara and Sidyma with Kragos). It seems dubious that Kragos ever included Boncuk Dağları, and Ptolemy’s (Geogr. 5.3) extension of the area of Kragos onto three cities located at Boncuk Dağları (Kydna, Symbra and Oktapolis, for their possible locations see Hild-Hellenkemper 2008: s.v.v.) reflects probably an imprecise use of the term for ‘western Lycia’.

§2. Southern coasts of Caria and Rhodos

2.1. The first point worth noting is that contact between the two main ethnocultural zones of Lycia, the South and the Xanthos Valley, went apparently first of all by sea: it is arguably much easier to set sail from almost any Lycian city of the southern coast to Patara and then move up the valley than to take the precipitous route along the southern slopes of Susuz Dağları, especially if one brings along some goods. Given the fact that the sea route from the plain of Limyra to Patara is practically as long as the one from Patara to Kaunos or to Rhodos (and actually less dangerous), it is clear that the maritime communication between western Lycia and the southern coasts of Caria and the neighboring islands should have played a major role. Moreover, seen from a geographical point of view, the spatial arrangement of the shorelines around the *Lycian Sea* practically inevitably suggests an idea that Lycia, southern Caria and Rhodos might have built a sort of maritime *koine*, at least cultural, but possibly also ethnolinguistic. This perspective raises several important questions: when and why the ethnolinguistic distinction between the Lycians and the (southern) Carians has arisen; is it possible that the ‘proto-Lycian’ ethnolinguistic sphere was originally wider, and whether Rhodos, before the Greek colonization, might belong to it as well? It is clearly impossible to discuss all these questions here in full, but several considerations bearing on the problem are in order.

It is generally agreed that the geographical name *Lukkā* found in Hittite cuneiform texts and in several Hieroglyphic-Luwian inscriptions (*lu-ka*(REGIO)) is associated with the region of Lycia¹⁰. However, the precise geographical or ethnolinguistic content of the term is quite unclear. There is little doubt that *Pinale*, *Awarna* and *Tlawā*, which appear as a more or less coherent group of toponyms in YALBURT (blocks 12–14), the EMİRGAZİ block and several cuneiform texts (‘Milawata Letter’ and KUB 23.83), correspond to Lycian names *Pinale* (= Pinara), *Arīna* (Aram. *’wrn* = Xanthos) and *Tlawā* (= Tlos) respectively¹¹. It is, however, by far not obvious that these cities made a *part* of *Lukkā* rather than being simply its neighbors. Several other toponyms, such as *K(u)walabašša* (cf. Telmessos and Kolbassa) or *Ḫinduwa* (cf. Kandyba and Kindye), may be generally associated with south-western Anatolia, but their relation to *Lukkā* is even less clear.

2.2. However it is, there are several pieces of evidence found both in Hittite and in Greek texts which seem to imply that the original ethnolinguistic area of the *Lukkā* people was not confined to Classical Lycia. The first clue comes from the spelling of the name in the Annals of Ḫattušiliš III (KUB 21.6+): the plural ‘lands of *Lukkā*’ (KUR.KUR^{MEŠ} URU*Lukkā*). As Lycia is a rather compact geographical area, it would be strange to apply to it the term ‘lands’, which is otherwise used for extensive and rather loosely defined geographical entities (cf. KUR.KUR^{MEŠ} URU*Arzawa* and KUR.KUR^{MEŠ} URU*Kaška*)¹². The fragmentary character of the text leaves it not quite clear which, if any, of other toponyms mentioned in the Annals of Ḫattušiliš III belonged to the lands of *Lukkā*. However, it is not impossible that the lands listed after KUR.KUR^{MEŠ} URU-

¹⁰ For an overview of relevant evidence see Gander 2010. It is noteworthy that there was in all probability also another, northern *Lukka* (spelled with a short final *a*) which can be localized in the eastern Troad, in the region of *Zeieia* (see Oreshko 2019: 156–159, cf. Simon 2006: 321–22). It is not clear if there is any direct etymological connection between these two names.

¹¹ To these one usually adds an identification of (MONS)*pa-tarali* mentioned in YALBURT block 4, §1a with Lycian Patara. However, (MONS)*pa-tarali* is a *mountain*, and the immediate context of attestation does not necessarily support this, suggesting rather that the name refers to the site of YALBURT itself. The issue will be addressed in detail elsewhere.

¹² For attestations see del Monte-Tischler 1978: s.v.v.

Lukkā in KUB 21.6a rev. 4’ (although after a paragraph divider) were counted among the *Lukkā* lands. These toponyms can generally be localized along the coasts of southern Anatolia, especially in Rough Cilicia and possibly Pamphylia, but *not* in Lycia¹³.

The second piece of evidence is found in the so-called ‘Tawagalawa Letter’. The initial preserved lines of the text report that, when the city *Attarimma* had been destroyed (by an unknown enemy), it was the *Lukkā* people who notified both the Hittite King (probably Ḫattušiliš III), the sender of the letter, and Tawagalawa, apparently a Mycenaean Greek ruler, about this event¹⁴. The context clearly suggests that the *Lukkā* people had some interest in *Attarimma*, but leaves the question open whether they really *inhabited Attarimma* or these were, for instance, some trade or military dealings. And yet, the most straightforward assumption would be that the *Lukkā* people lived if not in *Attarimma* itself, then in the region immediately adjoining it. Now, the joint evidence of the ‘Tawagalawa Letter’ and the Annals of Muršili II allows one to identify *Attarimma* with Λώρουμα located on the southernmost tip of the Carian Chersonesos, and the two cities mentioned in conjunction with *Attarimma*, *Hu(wa)ršanašša* and *Šuruda*, with Χερσόνησος (Χερρόνησος) and Σύρωνα respectively, which are located somewhat further north in the same micro-region (see Oreshko 2019: 171–175). The identification of this geographical cluster is further supported by the possibility to identify *Puranda*, mentioned in the Annals of Muršili II as a refuge place of the people from these three cities, with Πύριδος, which appears to be the old Carian settlement on the westernmost tip of Knidian Peninsula, where the polis of Knidos has been moved in the mid-4th century BC (see Oreshko 2020).

There are two further pieces of evidence confirming the presence of the early Lycians in the region of Carian Chersonesos and Rhodos. First, quite a number of Greek inscriptions from the city of Rhodos and at least one from Kamiros attest an ethnic Τλωεύς or Τλωῖος/Τλωῖα¹⁵. The ethnic, as it seems, is based on Τλωῖς, but, given the geographical context, it clearly cannot refer to the Lycian city. Hiller von Gärtringen (1902) suggested that this Τλωῖς should be sought in the Rhodian Peraia, assuming that Τλωεύς/Τλωῖος may be an ethnic referring to the inhabitants of *Phoinix* located to the NE of Loryma¹⁶. The idea is quite arbitrary, and now virtually refuted by the fact that there is still no attestation of the ethnic in the inscriptions from Rhodian Peraia itself (cf. Blümel 1991). Judging from the available evidence, Τλωῖς should be a κτοίνα (‘tribe’) located in the northern part of the island, quite probably between Rhodos and Kamiros. This curious toponymic correspondence between Rhodos and the Xanthos Valley suggests, at the least, that both regions once belonged to the same ethnolinguistic area; more specifically, it may be interpreted as a clue for the existence of an old colony established on the island from the Lycian Tlos.

Whatever is the case, this evidence finds curious support in a further Hittite text (possibly a letter), KBo 18.86, which mentions *T(a)lawa*, *Huwaršanašši* and *Annaššara*. The broken context

¹³ The list includes: *Walma*, *Watta-*, *Nahita*, *Šalluša*, *Šanhata*, *Šuri[mma]*, *Walwara*, *Hawali*, *Inaššara* (KUB 21.6a rev. 5’-9’), see Gurney 1997: 130–135 and Forlanini 2013: 25–27. From this list only *Nahita* finds a straightforward correspondence in Νάγιδος, located in the central part of the coast of Rough Cilicia. This Cilician connection suggests that *Walma* may refer to *Holmoi* located in the central-eastern part of the same region. Other cities can be tentatively localized in Pamphylia (*Hawali*) and Rough Cilicia on the basis of other indications of Hittite texts, found notably in the Bronze Tablet. *K(u)walabašša* mentioned in the next line (10’) is very likely *Tel(e)messos* (Lyc. *Telebehi*) and not *Kolbasa*.

¹⁴ For the full text of the letter see Hoffner 2009: 296–313.

¹⁵ See, e.g., IG XII, 1, Nrs. 4 II 47 and III 38; 184; 309–316; 1449, 1453 (Rhodos) and 697, 4 and 5 (Kamiros).

¹⁶ Meritt et al. 1939–1953: 512 further suggested that *Gelos* attested by Mela (I, 84) as a port in Rhodian Peraia (not far from Thyssanusa) may correspond to Τλωῖς (which is tentatively followed also by Fraser 1954: 58–59). From a linguistic point of view, this is rather incredible.

leaves relative distances between the places and the course of events unclear, but the text in any case implies some connection between *Huwaršanašši*-Chersonesos and *Tlawā* (which, in theory, might refer not to the Lycian, but to the *Rhodian* Tlos). As for *Annaššara*, which is attested elsewhere also as *Innaššara* (e.g. in KUB 21.6a, cf. fn. 13), it is reminiscent of Νίσορος, the name of the island located to the SW of the tip of the Knidian Peninsula¹⁷. Seen in this perspective, it is probably no accident that in a later text, the Lycian Xanthos Trilingual, one finds references to locations situated in exactly the same region: lines 44a: 52–53 mention a military encounter with the Greeks from Ialysos (*Ijānā Ijalusas*)¹⁸ near the Carian Chersonesos (*Krzz[ā]nase*). Besides Mycale (*Mukale*), *Sāma* (Samos) and the Mount Thorax (*Turaxssi*), mentioned in the following lines, these are the only non-Lycian locations found in Lycian texts.

2.3. In this context it is appropriate to touch upon the question of ethnic names of the Lycians. No term which could be linguistically connected with Hitt. *Lukkā* and Greek Λύκιοι is found in the Lycian texts. Instead, one finds the term *Trmīmile/i*, which is also attested in Near Eastern sources (Akk. *Tarmilaya*, Elamite *Turmila-* with numerous spelling variants) and was known also in the Greek scholarly tradition as Τερμίλαι (e.g., Hdt. 1.173)¹⁹. The former ethnic name is attested also in Egyptian sources dating to the 13th century BC as *rw-k3* or *rw-k-w* and in an Amarna letter (EA 38) as *Lukki* (cf. below). The origin of either ethnic name remains unclear, since none of the explanations proposed so far seems quite convincing (see Eichner 2016 with further refs.). A direct connection of *Trmīmile/i* with *Attarimma* now proves to be rather unlikely in view of the probable location of the city far from Lycia (cf. above); at best, the two names *might* go back to the same root. A connection with *tarmali-* ‘nail, peg’ (CLuw. and Hitt.), with an assumption of a semantic shift to ‘mountain summit’, does not seem credible either: the idea to call mountains ‘nails/pegs’ may appear plausible only to an armchair mountaineer, and in any case the Lycians are actually *not* ‘mountain dwellers’²⁰. As for *Lukkā*/Λύκιοι, Eichner (2016) recently argued that it is an *exonym* and defended its connection with the word for ‘wolf’ (PIE **ulku-*). This does not seem quite plausible either: no Greek source gives any hints on wolfish associations of the Lycians, and Hittite word for ‘wolf’ is actually *ulip(pa)na-*, usually hidden behind the Sumerogram UR.BAR.RA, apparently corresponding to Luw. *walipna/i-/ulipna/i-* (cf. Tischler 2010: s.v.); a borrowing of the ethnic term from Greek to Anatolian is clearly unlikely. In Lycia itself, there is absolutely no evidence which might lend support to the association of the Lycians with wolves, which one would expect, if there were one (e.g., such as a representation on coins). In fact, a connection with PIE root **leuk-* ‘white’ is a far more obvious possibility. Color terms, especially ‘black’ and ‘white’, are often indeed figure in names for different ethnic or ethnocultural groups, cf., e.g., Sumerian self-designation *saĝ-giĝ-ga* ‘Black Heads’, Italic *Lucani* (Λευκανοί), north-Anatolian Λευκοσύροι ‘White Syrians’, White

¹⁷ Cf. Oreshko 2020: 557–558, fn. 24.

¹⁸ For the reading *Ijalusas* (contra **Ijaeusas*) see Oreshko forthcoming §1 with fn. 5 and §9. I interpret the form as a derivative from the toponym *Ijalusa* (= Ἰαλυσός) with the ethnic suffix *-s*, which is seen also in *Arñna-s* (N320: 31–32), *Zemuri-s* (N312: 5), *Kerθθi-s* (TL 82), *Ijāni-s-ñ* (TL 44b: 27, acc.), cf. Eichner 2016: 63.

¹⁹ See Bryce 1986: 21–22 and Tavernier 2015 respectively.

²⁰ It is, however, not impossible that the name is connected with the root *tarmali-* in some other way. For instance, the name might be based on the verb *tarmāi-* ‘nail down, fix’ and refer to ‘fixed’, i.e. ‘settled’ population. Or the root might have some more technical meaning in Lycian, for instance, ‘to fix > moor a ship’ or ‘to found a settlement’. Alternatively, one may ponder a connection with Lycian *tri-* ‘three’, seeing in **trmīmi-* something like ‘threefold’ or ‘tripled’, which might refer to some old confederation of three tribes or cities (e.g., three main cities of the Xanthos Valley: Tlos, Xanthos and Pinara). It is noteworthy that many Lycian coins demonstrate a three-partite symbol of the *triskeles* type, which may or may not have a connection with the ethnic name of the Lycians. Needless to say, this all remains entirely speculative without more tangible evidence.

Croatians, *Kara-kalpaks* ‘Black-hats’, the Algonquin *Siksikáwa* (Blackfoot Nation) etc.²¹ Whatever the etymology, there is actually nothing which could confirm the idea that the name *Lukkā*/Λύκιοι is an *exonym*: the term does *not* have a transparent etymology in either Greek or Hittite or any other language of the eastern Mediterranean. The question, then, is what could be the distinction between the *endonyms* *Lukkā*/Λύκιοι and *Trm̃mile/i*. One possible answer is to connect it with the changes in the borders and the structure of the Lycian ethnocultural area between Bronze and Iron Age. The name *Lukkā*/Λύκιοι, which is clearly older, refers probably first of all to the *maritime* population of the western section of the south-Anatolian coast (which might extend even up to Cilicia, cf. below) which was the first region to come into contact with Greeks, Egypt, Levant and Cilicia (whence the term most probably came into Hittite). In other words, the term is probably not an ethnic *strictu sensu* but rather an *ethnocultural* term connected first of all with the maritime way of life (sea trade and piracy) and then with an only loosely defined geographical region. The term *Trm̃mile/i*, so far not attested in the Bronze Age, probably originates in the realities of the 1st millennium BC and is connected with the formation of the Lycian ethnolinguistic area centered on Lycia as we know it (for which cf. below, 6.7). Thus, the region to the west of Lycia can be defined as the region most immediately connected with Lycia, not merely its neighbor, but, in a way, a ‘*Lycia Major*’.

§3. Pamphylia

The considerations put forward above may well apply to the region to the East of Lycia, equally open for maritime connections. There are, however, some nuances in the geographical organization of the region which preclude it from being regarded simply as a mirror image of the situation in the Lycian Sea. The Gulf of Antalya (Pamphylian Sea) is quite literally a *sinus*: a rather deep recess in the South-Anatolian shoreline. Unlike Rhodos or southern Caria, which lie directly on the bustling sea route from Lycia (and Levant) to the Aegean, Pamphylia, situated at the back of the Gulf of Antalya, appears to be almost a backwater. While it seems very probable that the people *from* Pamphylia could have visited Lycia simply because it lies on the way to the Aegean, the region probably played a much less prominent role in the Lycian agenda. The differences in the trajectories of ethnolinguistic development of the two regions are remarkable: in contrast with Lycia, which retained its Anatolian linguistic identity until at least ca. 330 BC, the Pamphylian Plain has been colonized by the Greeks and, probably, other peoples from the Aegean, already quite early (the end of the 1st millennium BC), retaining only pockets of older Anatolian population (Sidetic); only its northern mountain hinterland remained largely Anatolian (Pisidians). Neither Hittite nor Greek texts seem to present evidence implying some special ties between *Lukkā*/Lycia and Pamphylia. There is, however, a curious piece of evidence found in a Lycian text which shows that there existed some sort of exchange between the two regions.

It is found in the funerary monument of *Pajawa* once located at Xanthos (now in the British Museum), which is provided with a set of short inscriptions on its four sides (TL 40a-d)²². From the text 40d one can conclude that *Pajawa* was at the military service of the Persian satrap Αὐτοφραδάτης (*Wat[aprd]ata: xssadrapa: pa[rz]a*) in the first half of the 4th century BC, who has apparently granted *Pajawa* the monument (or means to construct it) in recognition of his service. What makes the story of *Pajawa* even more interesting, is the fact that he was in all

²¹ Cf. Simon 2006: 315 and Oreshko 2019: 159.

²² For a discussion of the monument see Schürr 2012: 29–32 with further refs.

probability not a Lycian. This is suggested by his name, which is not found elsewhere in Lycia and structurally does not look as such. The same name is, however, attested twice (on the same stele) in Aspendos as Παιάφας and Παιάβιας, and can be probably interpreted as a specifically Pamphylian name related to *Παιᾶφων, seen as Παῖων in Homeric Greek, Παιών in Attic-Ionic and Παιάν in West-Greek and Πάων in Aeolic²³. Two further features in the Lycian text support the identification of *Pajawa* as a Pamphylian. First, the second clause of TL 40d makes a mention of ‘Lycian troops’: *pddē: telēzi: epatte: Trm̄milise*: ‘He took *before/with* the Lycian troops...’. A slightly strange — given that the monument is erected in Xanthos — emphasis on the ethnic ‘Lycian’ makes good sense in view of the probable non-Lycian origin of *Pajawa*. Second, the term *manaxine* (40a: 1 and 40b: 1) is not attested elsewhere in the Lycian corpus, and it is not excluded that it is a foreign word in a way connected with the origin of *Pajawa*, although it is difficult to be quite sure²⁴. This piece of evidence, singular so far, shows that there existed some channels of communication between Lycia and Pamphylia, which might have left some traces on the level of language as well.

§4. Rough Cilicia

In contrast with Pamphylia, Rough Cilicia is situated directly on the way from Lycia to the Levant, although somewhat further than Caria and Rhodos. In geographical terms, the coast of Rough Cilicia is quite similar to that of southern Lycia: a narrow coastal strip with mountains steeply rising in the background. The population of the two regions, both in its maritime way of life and in ethnic terms was probably also quite similar, as is demonstrated, *inter alia*, by numerous parallels in onomastics (cf. Houwink ten Cate 1961)²⁵. No inscriptions in epichoric language (or languages) of Rough Cilicia are known, but it is clear that it was not identical to Lycian, being probably closer to the Luwian dialect of Plain Cilicia.

The two regions might have been even closer in the 2nd millennium BC. As mentioned above, the evidence of the Annals of Ḫattušiliš III may be interpreted in the sense that the western part of Rough Cilicia was also covered by the umbrella term ‘the *Lukkā* lands’. There are two further pieces of evidence which would be not incompatible with such a broader definition of ‘the *Lukkā* lands’. In the famous Amarna letter EA 38, sent by a king of *Alašiya* (Cyprus) to an Egyptian pharaoh (possibly Akhenaten) around 1350–40 BC, the former reports that ‘The men of *Lukki*, year by year, seize villages in my own country’ (cf. Moran 1992: 111). The context seems to imply that the king of *Alašiya* responds to an accusation by the Egyptian pharaoh that the men of *Alašiya* allied with the ‘*Lukki* people’ to undertake similar raids on the Egyptian territories (either Egypt itself or the southern Levant). This is immediately reminiscent of the fact that the *Lukku* (*rw-k-w*) figure together with the ‘Sea Peoples’ as allies of the

²³ Cf. Brixhe 1976: 235 and Schürr 2012: 32. It is not excluded that the same name is attested in Pamphylian alphabet as *Pojaw*, as suggested by Pérez Orozco (2003: esp. 105 and 108), although the reading of the last letter as /w/ is quite uncertain and the *o* in the first syllable is unexpected. There are also reasons to identify a very close name (*Pajafus*) in Lydia, which will be discussed in detail elsewhere.

²⁴ For an overview of interpretations proposed so far see Neumann 2007: s.v. The idea to interpret *manaxine* as a rendering of Greek μονογέννης does not seem especially illuminating, and a connection with Luwic root *mana-* ‘see’ suggested by Schürr (2012: 32) is not impossible, but hardly leads any further. Most probably, *manaxine* somehow indicates the origin of *Pajawa*, and, since it is not a usual patronymic (at least from a Lycian point of view), one may see in it rather an ethnic or a sort of toponymic adjective.

²⁵ There are also some toponymic correspondences: for instance, in the western part of Rough Cilicia, to the east of Selinous, there was another Mount Kragos (for the Lycian Kragos see above).

Libyans whom Merneptah fought in the region of the Nile Delta in his 5th regnal year (ca. 1207 BC); besides that, *Lukka* (*rw-k3*) were known to the Egyptians as ‘allies’ (or rather mercenary troops) of the Hittites in the Battle of Kadesh in the 5th year of Ramesses II (ca. 1274 BC)²⁶. Now, a rather similar piece of evidence about piratic activities of *Lukka* around *Alašiya* cropped out in a letter from Ortaköy (*Šapinuwa*) Or. 90/1511. In it, a Hittite official Tattamaru reports that ‘Ships of *Alašiya* were attacked in the sea (*arūni anda*) by the people of the cities ^{URU}*Ītrūra*(?) and ^{URU}*Ḫahḫada* of the land *Lukkā*’ (obv. 11’-15’)²⁷. Of course, it is quite possible that both EA 38 and the letter from Ortaköy refer to the sea raids involving specifically the people from Lycia. However, the geographical context, the regular character of the raids and the later fame of Rough Cilicia as a land of pirates *par excellence* — explicitly contrasted by Strabo (14.3.2) with the civilized character of Lycia, ‘inhabited by reasonable people’ (ὕπὸ ἀνθρώπων συνουκόμενος σωφρόνων) — make one wonder if the raids did not originate in a closer section of the south-Anatolian coast directly opposite Cyprus. A probable alliance between the Cypriots and the *Lukki* people, alleged by the Egyptian king, would well agree with it. In this context one may also note that the following lines of the Ortaköy letter (rev. 19ff.) mention an agreement (*takšul*) between a ruler of *Alašiya* (LÚ^{KUR}*Alāšiya*) and the city of *Ura(ši)*, which is quite probably identical with *Urā* located in the eastern part of Rough Cilicia (possibly = Ὑρα/Seleukia)²⁸. The context may imply that the raids of the people of the two cities of *Lukkā* infringed the terms of this agreement, which would support their location in Rough Cilicia. If the perception that ‘the *Lukkā* lands’ embraced the entire south-Anatolian coastal zones from south-western Caria to the western part of Rough Cilicia (i.e. the part beyond the western limits of Kizzuwadna) is correct, then there are good chances that this region represented in the Late Bronze Age also a relatively unitary *ethnolinguistic* zone.

§5. The Levant

5.1. Regardless of whether western Rough Cilicia was a part of the ‘*Lukkā* lands’ or not, there can be little doubt that both the *Lukkā* people were in a regular communication with the more eastern parts of Mediterranean and that at least some bigger ports of Lycia, such as Telmessos or Patara, were frequented by the ships from the East. In addition to the texts mentioned above, which testify for less sophisticated methods of interaction, there is also evidence reflecting more peaceful aspects of the ethnocultural contact in the region, such as trade. These are first of all three letters from Ugarit²⁹. A passage from a letter of the last known king of Ugarit

²⁶ For refs. see Adams-Cohen 2013: 646–47.

²⁷ The letter has been presented by A. Süel in a talk at the 9th Congress of Hittitology in Çorum (2014), cf. Eichner 2016: 61, fn. 10. The name of the second city is spelled *Ḫa-ah-ḫa-da* (thus with a non-geminate dental, contra Eichner) and the first name was given as ^{URU}*I-it*(?)*-ru-u-ra*(?). The name *Ḫahḫada* is reminiscent of Γάγα in eastern Lycia, but their identity cannot be proven.

²⁸ Cf. Forlanini 2013: 25 with further refs. The form *Uraši* may be tentatively interpreted as Luwian genitival adjective based on *Ura* standing in agreement with the preceding LÚ^{MEŠ}.

²⁹ For the texts see Lackenbacher 2002: 193–194 (RS 20.238) and Malbran-Labat-Lackenbacher 2005 or Beckman-Bryce-Cline 2009: 253–262 (RS 94.2523 and RS 94.2530). for an important discussion of the latter see Singer 2006. In contrast. the evidence of the so-called Abishemu Obelisk. found in Bvblos and dating to ca. 1800 BC. which is sometimes adduced to the problem of early presence of the Lycians in the Levant (e.g., Bryce 1974: 395–396). is problematic and most probably irrelevant. Albright (1959) read the name of the seal-bearer mentioned in the inscription as *Kwkw n š3 Rwa* and saw in *Rwa* (= *Rwkk*) personal name based on the ethnic ‘Lycian’. This interpretation of *Rwkk* is in itself problematic, since the normal Egyptian spelling for Lycia/Lycians is different:

Ammurapi (ca. 1215–1180 BC) addressed to a king of *Alašiya* (RS 20.238: 22–24) mentions that all ships of Ugarit are in the land of Lukka, which makes the city vulnerable to the sea-born attacks of some enemy (possibly ‘Sea Peoples’). A light on the puzzling absence of the Ugaritic fleet is shed by two closely connected letters, sent to the same Ammurapi by Šuppiluliuma II (RS 94.2523) and a Hittite official Penti-Šarruma (RS 94.2530) respectively. Both make a reference to the fact that the *Hiyaw(i)* people — apparently the Mycenaean Greeks — who stay in the land of *Lukkā* are waiting from Ugarit for a consignment which is termed PAD^{MEŠ} and should be dispatched there with a certain *Šatalli* (a Hittite, judging by name). The term PAD^{MEŠ} probably refers to ‘ingots’, whether copper or tin, and the consignment expected from Ugarit is thus immediately reminiscent of the cargo of the Uluburun and Gelidoniya ships sunken not far from the Lycian shores. In all probability, the absence of the Ugaritic ships referred to in RS 20.238 is due to a similar trade expedition to Lycia. The evidence, however terse it is, excellently highlights the complexity of ethnocultural contact in Lycia: not only does it imply a regular communication between Ugaritic and Mycenaean merchants with the Lycians, but also shows that at least sporadically also the central-Anatolian Hittites participated in it.

5.2. It is quite possible that Lycia continued to participate in the trade between the Levant and the Aegean also in the Early Iron Age, although due to the changes in the ethnic and political map of the region its role might have changed more or less significantly. There is no *direct* textual evidence for the connection of Lycia with the East in the 1st millennium BC. There are, however, some indirect clues. These are first of all quite numerous toponyms attested in Lycia which call into mind the Phoenicians: Φοινίκη (Thuc. 2.69.2) probably corresponding to modern Finike and a river Φοινίξ nearby (Const.Porph. De Them. 1.14), *Phoenicus* (Liv. 37.16.6) possibly located in the region of modern Kalkan, and the Mount Φοινικοῦς, another name for the Lycian Olympus (Str. 14.3.8)³⁰. Their connection with the Phoenicians is everything but certain: judging from the absence of Greek colonies in the region and the density of the local Lycian settlements, it seems hardly possible that the Phoenicians could establish here a full-fledged independent colony. On the other hand, these names might be connected simply with φοινίξ ‘date-palm’, which are indeed found in the region, or ‘purple/crimson’, if they are not corruptions of some local names.

And yet, the existence of a ‘Phoenician quarter’ in a Lycian port does not seem improbable, and there is a curious piece of evidence which might support this possibility. A short Greek epigraph following the Lycian inscription TL 115 originating from Limyra located several kilometers to the NE of Φοινίκη — which was probably its port — attests a person named Φοίνικος Τυρίω. The Greek inscription is apparently somewhat later than the Lycian text, and represents probably the name of a later ‘tenant’ of the tomb (the practice of ‘leasing’ of burial grounds being normal for Lycia). The form Τυρίω is strange, but given that the first name is apparently a gen.sg. of Φοινίξ, attested elsewhere as a PN, there is hardly any other option than to see in it a corrupt form of gen. *Τυρίου. It can be interpreted either as patronymic or, which is likelier, simply as an ethnic agreed with Φοίνικος, i.e. ‘(the tomb) of *Phoinix* (‘Phoenician’), the Tyrian’. In any case the Phoenician ancestry of the person buried in the tomb is very

rw-k3. *rw-k-w* (cf. above) or *rw-k-3/i* (the Onomastikon of Amenemope). In fact, even the reading of the name may be false: Bietak (2019: 178) reads the name as *Rwtt*. and this seems not impossible, since at least the left of the two small signs has a clear curving right side incompatible with *k* (although the signs seem to be too high for *t*). As for *Kwkwn*, it is quite probably neither Phoenician nor Egyptian, and may be connected with *Kukunni* and/or *Kúkroc*, as assumed by Albright. However, it can hardly be Lycian: the phonetically similar, but apparently unrelated Lycian feminine name *Xuxune* (TL 139: 2) would be rendered in Egyptian with *h*-signs.

³⁰ For details cf. Keen 1998: 225–227.

likely, and then there are good reasons to see in him a Phoenician ‘naturalized’ in Lycia — which also explains the problems he had with Greek inflection. An attestation of a Phoenician just in the city whose port was called ‘Φοινίκη’ can hardly be quite accidental, and one can tentatively conclude that there indeed existed a small Phoenician community at least in the region of Limyra³¹.

5.3. There can be little doubt that the contact with the Near East reflected in the letters from Ugarit has left some traces in the Lycian language. First of all, one can expect a number of oriental borrowings connected with trade be present in Lycian, such as terms for goods of Eastern origin, terminology for measures, vessels, possibly also some sea-ship terminology. In the extant Lycian corpus there is only one word which can be identified as a borrowing from the Levant, namely *sixli-*. The word is attested in two texts: in the Letoon Trilingual (TL 320: 22), where the form *sixlas* corresponds to δύο δραχμάς of the Greek version (l. 20; no corresponding part in the Aramaic version), and in TL 57 as *sixli* (l. 5) and *sixla* (l. 6). The contexts make it clear that *sixli-* refers to a coin, probably the most common Lycian coin type (‘stater’ weighting 8,3–8,6 g, see Frei 1977: 70–71), which, however, in no way excludes that it was used also as a weight measure. The word obviously comes from a Semitic source, just as Greek σίγλος/σίκλος does, reflecting a measure name based on the root *šql* ‘weight’. There are no special reasons to think that it has been brought to Lycia by the Persians, also because Persian *siglos* seems to correspond in weight to Lycian *ada* (5,5–5,6 g, cf. Frei 1977: 69–70). Both vocalization and historical considerations allow Hebrew (*šeqel*) to be excluded, and a direct borrowing form Akkadian (*šeqlu*) does not seem probable either. There remain Ugaritic *ṭql* and Punic (and consequently also Phoenician) *šql*, whose vocalizations are unclear. In view of the evidence adduced above, the first option seems to be preferable, and it is quite possible that the borrowing goes as far back as Late Bronze Age³².

Due to a rather modest volume of the Lycian corpus and its genre specifics, many other potential Oriental borrowings are simply not yet attested (or identified). However, it would hardly be far-fetched to assume that the majority if not all words identifiable in Greek as early borrowings from an Oriental source were present in Lycian as well. Given the trade contacts, it is quite possible that other terms for measures were also present in Lycian, such as, for instance, **m(V)na*, cf. Greek μνᾶ < poss. from Ugar. *mn* (cf. Akk. *manū* etc.), as well as some technical terms from this domain, cf. Greek ἀρραβών ‘caution-money’ connected with Ugar. *ʿrbn* ‘guarantor, surety’, Phoen. *ʿrb* ‘to guarantee’ etc.³³ One can also hardly doubt that the Lycians knew a term corresponding to Greek χιτών/κιθών (Myc. *ki-to*) ‘linen, linen tunic’, which

³¹ Worth mentioning in this context is also a Lycian pottery graffito from Xanthos (N313a) which reads *Pinike*. The context makes it likely that it is a personal name. Its ethnic identity is, however, not quite certain. The name may well be an aphaeretic form of Greek Ἐπινίκιος, as suggested by Neumann (cf. Neumann 2007: s.v.). The latter name is indeed once attested in Xanthos, which is its only attestation in Lycia, contrasting with rather numerous attestations in Caria (22 tags registered in LGPN V.B.: s.v.). In view of its popularity in Caria, *Pinike* may even be a *Caro-Greek* name in Xanthos. On the other hand, an interpretation of the name as reflecting Greek Φοινίξ as suggested by Metzger (see ref. in Neumann 2007: s.v.) is unlikely, due to the phonetic discrepancies. Nevertheless, since the Lycian form of the ethnic name for the Phoenicians is unknown, there are still chances, albeit rather slim, that *Pinike* is a Lycian ‘Phoenician’.

³² There is no place here to go into discussion of the exact values of Lycian sibilants (*s* and *z*), which *might* affect the question, but probably rather not, since there is quite wide variation in renderings of Iranian and Greek names in Lycian, and both *š* and *ṭ* of the Semitic source could probably be reflected as *s* in Lycian.

³³ For these and further examples and a general discussion of the words of Near-Eastern origin in Greek see, first of all, a sober treatment in Masson 1967; cf. a more recent discussion by Rosół 2013 which claims many more oriental borrowings in Greek.

is connected with Ugar. *ktn*, Phoen. *ktn* ‘linen, linen tunic’, Akk. *kitû*, *kitinnu* ‘linen’, and other comparable terms for specific types of fine cloths (as βύσσος or σινδών); or a word for ‘sesame’ corresponding to Greek σήσαμον (Myc. *sa-sa-ma*), Phoen., Ugar. *ššmn*, Akk. *šamaššammu* and Hitt. *šapšama*, as well as other comparable terms (as κύμινον); or terms for oriental aromatic substances as ‘myrrh’, cf. Greek μύρρα which goes back though Phoen. or Ugar. *mr* and to Arab. *murr* (cf. also βάλαμον and λίβανος).

On the other hand, one should note that the Ugaritic evidence pointed out above suggests that Lycia might also have been a likely place for language contact between Greek and the Levantine languages, on par with the Levantine coast itself or Cyprus.

5.4. To the case of *sixli-* discussed above a further word can be added, which represents a more interesting example of an Oriental influence in Lycia, presenting, moreover, a clear clue that the Lycians were rather ‘reasonable people’ already in Late Bronze Age. In a recent discussion of the Xanthos trilingual (Oreshko forthcoming) I presented arguments for interpretation of a part of the text on side A (TL 44a: 41–55) containing a recurrent term *hātahe* and apparently describing the victories won by the author as a *summary* of a longer text which has been incised on a different monument similar. This monument is referred by the term *prulija* in l. 41, which is probably the Lycian word for ‘pillar monument’. It is furthermore probable that the text part immediately preceding the *hātahe*-passage (ll. 31–40) describes other parts of the same monument, beginning with ‘bovine protomes’ (*wawadra*, l. 32) on the cornice and proceeding to the reliefs with different scenes (as archery/hunting) in the upper part of the column, closely corresponds to the decoration of the pillar monument containing TL 44 as testified by the archaeological finds.. Now, the two lines immediately preceding the *hātahe*-passage (ll. 38–40) have a peculiar structure containing two practically identical clauses:

³⁸*tupelijā: Trm̄milis[. (.)]* ³⁹[. . qa]Kadunimi: puwejehñ:
tupelijā: s!l/m̄[(.)] ⁴⁰[. . .]: qaKadunimi: puwejehñ:

An interpretation of the lines as referring to a certain ‘*QaKadunimi* son of *Puweje*’³⁴ makes little sense, since it does not explain the unusual structure of the passage. Instead, one may note that the word *tupelija* is strikingly reminiscent of the HLuw. **tupaliya-* (SCRIBA-*li-ia-*) ‘writing, script’ and that the structure of the Lycian passage finds a curious parallel in KARKAMIŠ A15b, §19, a passage describing the writing skills of Yariri:

...]URBS-*si-ia-ti* | SCRIBA-*li-ia-ti*
Sū+ra/i-wa/i-ni-ti(URBS) | SCRIBA-*li-ia-ti-i*
A-sū+ra/i(REGIO)-*wa/i-na-ti*(URBS) | SCRIBA-*li-ia-ti-i*
Ta-i-ma-ni-ti-ha(URBS) SCRIBA-*li-ti*

‘...in the script of the city [= Hieroglyphic Luwian], in the script of Tyre [= Phoenician alphabet], in the script of Assyria [= cuneiform], in the script of **Taima*’. The interpretation of *tupelija* as ‘writing’ is further supported by the possibility to recognize in *puwejehñ* a derivative of the Lycian root *puwe-* ‘write’. The distinction between *tupelija* and **puweja-* possibly consists in that the latter refers to *script*, while the former to the physical *writings/text* incised in stone. Consequently, the passage should refer to writing the text in two scripts/languages³⁵.

³⁴ Cf. Melchert 2004: s.v.v. *Kadunimi* and *Puweje* and Schürr 2009: 161–163. Neumann (2006: s.v.v. *Kadunimi* and *puweje-*) also takes *Kadunimi* for a personal name, but suggests no definitive interpretation for *puweje-*.

³⁵ The interpretation of the passage has quite important consequences for identification of the second non-Greek language of the Xanthos Trilingual, which will be addressed in detail in the second part of the present contribution.

In addition to *tupelija*, one can identify in the Lycian corpus two further words which are likely connected to it. The first is *tupelezije* (poss. dat.sg.) found twice in the Xanthos Trilingual (44b: 63–64) and possibly in TL 35: 5 in an erroneous spelling *tupazalije* (standing for **tupalazije*). The word is apparently a derivative with the agentive suffix *-z-*, found also in *maraza-* ‘commander’ or *prñezi(je)-* ‘household member’, and can be interpreted as ‘scribe’. This interpretation agrees well with the context of TL 44b: 63–64, which follows a passage mentioning Persian kings Darius (*Ñtarijeus*) and Xerxes (*Ertaxssiraza*), as one can readily identify in the combination *tupelezije: xñtawatije:* a Lycian counterpart of γραμματιστής βασιλῆιος ‘royal scribe’, mentioned, for instance, by Herodotus in the context of the Persian court at Sardis (Hdt. 3.128). The second word is *tupa* found several lines before *tupelija* (TL 44a: 36), where it is followed by a clause *esbedi: hmñenedi: Trñmil[i]je³⁷di: se Medezedi* which can be interpreted as ‘with shooting/hunting on the horse-back in the Lycian and Median (Persian) style’. Given that the passage likely describes a scene depicted on the pillar monument, *tupa* can be interpreted as ‘image’, ‘relief’ or the like.

Identification of this word set has quite important implications for the question of linguistic and cultural contact between Lycia and the East. The HLuw. **tupaliya-* (SCRIBA-*li-ia-*) is based on **tup(p)ala-* ‘scribe’ standing behind the common HLuw. title SCRIBA-*la-* ‘scribe’ and attested in full phonetic form in the cuneiform title *tup(p)alanura-* ‘chief scribe’ (< **tup(p)ala(n) + ura-* ‘big, great’)³⁶. The word **tup(p)ala-* is based in its turn on Luw. **tup(p)ali-* corresponding to Hitt. *tuppi-* ‘(clay) tablet’, both of which finally go back, through Akkadian and Hurrian intermediary, to Sum. *dub* ‘clay tablet’³⁷. Both **tup(p)ali-* and **tup(p)ala-* represent thus important Bronze Age terms associated with the Ancient Near Eastern cultural sphere and scribal tradition, and their presence in Lycian demonstrates that both the art of writing and the media for it — quite probably wooden rather than clay tablets³⁸ — were well known to the *Lukkā* people. It is noteworthy that this linguistic evidence confirms, once again, the extraordinary ability of the Homeric text to encapsulate historical reality in small details which may seem insignificant or accidental on the first glance. The only mention of writing in the Iliad (Hom. Il. 6.168) — the ‘baleful signs incised in a folded tablet’ (σήματα λυγρὰ γράψας ἐν πίνακι πτυκτῶ) given to Bellerophon by Proitos — is notoriously associated, albeit indirectly, with Lycia, and it is quite possible that this fact reflects memories of the early Lycian literacy testified by Mycenaean merchants coming there to trade metal and other Oriental goods. Also, the discovery of the wooden diptych tablet in the cargo of the Uluburun ship sunken close to the Lycian coast (about 10 km from Kaş/Antiphellos) is probably not as accidental as it may seem, even if the final destination of the ship and the kind of script used to write on the tablet remain quite uncertain³⁹. It is not impossible that the script the tablet was most frequently exposed to was not the Ugaritic cuneiform alphabet or Linear B — which might seem to be the most straightforward assumptions — but a script which could be understood in Lycia and which there are good reasons to identify as Hieroglyphic Luwian⁴⁰. The exact source of the borrowing of the

³⁶ The reading of the HLuw. title is quite certain given the semantics of the word and the usage of the sign SCRIBA with a phonetic value <TÛ>, cf. Hawkins 2000: 33. For a discussion of *tuppalanura-* see Tischler 1991–1994: s.v. and Yakubovich 2017: 41–43.

³⁷ For Hittite evidence see Tischler 1991–1994: s.v. *tuppi-*.

³⁸ The writing on wood in Anatolia (and elsewhere) cf. Waal 2011 with further refs.

³⁹ The usual assumption is that the ship sailed to the Aegean, cf., e.g., Bachhuber 2006, Cline-Yasur-Landau 2007 or Goren 2013 with further refs. This is indeed quite possible, but by far not certain. In fact, the evidence of the letters from Ugarit adduced above may well suggest that the ship was sailing to — or at least intended to visit — Lycia.

⁴⁰ The evidence of Hieroglyphic Luwian in southern Anatolia is extremely scarce, which is due probably first of all to the fact that it was written on perishable media, such as wood, and that the practice of sealing was less

scribal terms into Lycian is not entirely clear. In any case, there are no special reasons to connect it with the Hittite military involvement in the region, attested first of all by the YALBURT inscription (cf. above), which has probably never led to the establishment of a Hittite administration in Lycia, as demonstrated, inter alia, by the fact that in the reign of Tudḫaliya ‘III/IV’ (ca. 1227–1209 BC) the region was considered as lying outside the Empire⁴¹. A most likely place for such a borrowing appears to be Plain Cilicia (*Kizzuwadna*), although a port city of the northern Levant, such as Ugarit where Luwian and Hittite scribes were certainly present, cannot be excluded either.

§6. The Aegean

6.1. Geographically, the Aegean lies even closer to Lycia than the Levant, and, if *Attarima-Λώρυμα* was indeed one of the regions covered by the term ‘*Lukkā* lands’ (cf. above), the early Lycian ethnolinguistic area practically overlapped in part with the Aegean cultural sphere. There are no special reasons to doubt that Lycians visited the Aegean at least sporadically; the description of the venture of the author of the Xanthos trilingual (TL 44a: 53–55) into the region of Samos and Mykale is merely one example of such a visit. The material culture of the Classical Lycia demonstrates quite a few instances of Greek influence, and there can be no doubt that the Greek regularly visited Lycia and possibly even settled there from at least 800 BC (cf. below). However, Greek presence in Lycia dates to an even earlier time, and it seems that it went beyond simple contacts.

Greek literary tradition connected the very *origin* of the Lycians with the Aegean. There were two strands in this tradition⁴². The first one, reflected in the *Iliad* (6.152–205), associates Greek settlement in Lycia with Bellerophon, son of Glaukos and grandson of Sisyphos, whose homeland was Ephyra/Corinth. Sarpedon and Glaukos, the Lycian leaders in the Trojan war, were his descendants. The other strand of the tradition, known to later authors (Hdt. 1.173,

spread than in Central Anatolia. There is, however, one curious piece of evidence: a seal coming from a Late Mycenaean tomb at Ialysos on Rhodes (cf. Boardman 1966: 47–48 with fig. 2). I was able to examine the seal in the British Museum in July 2013, for which I am greatly indebted to Alexandra Villing and Andrew Shapland. Unlike some seals found in the Aegean (as the Perati seal), which appear to be simply coarse emulations of Luwian writing without any actual meaning, the epigraph of the seal makes an impression of being a genuine Luwian example. However, reading of the epigraph is not obvious. One can immediately identify only two signs on Side B: the title URCEUS and the last sign of the name, which is <ni>. The sign above <ni> is probably <wa/i>, despite the odd oblique position of its central element. The reading of the central sign is particularly difficult, since the shape does not exactly correspond to any attested sign. The two theoretical possibilities would be to see in it either a schematic representation of an *animal head* or a *hand*, although no attested HLUw. ‘hand’-signs have a triangular element in the upper part. Given the reading of the last two signs, one may tentatively propose to identify the sign as a very schematic form of CANIS.ZU(WA), which stands for *zu(wa)nali-* (for the combination cf. Oreshko 2013: 413–416). Lastly, the upper sign *might* be a simplified form of BOS = <u>. Accordingly, the name can be read (u-)CANIS.ZU(WA)-wa/i-ni. While *Uzuwani* remains a possibility, a reading *Zuwan(n)i* is more sensible, since such a name is indeed well attested (cf. Laroche 1966: s.v.v. *Zuwanna*, *Zuwanni*, *Zu(w)ania*: Σύννεσις, attested in later sources (cf. recently Simon 2019), is clearly its extension). On the Side A, in the central field there seems to be only one sign, which does not correspond to any HLUw. sign, but is quite reminiscent of a representation of a *ship*. This makes good sense in the geographical context of the find, and there are good chances that we are dealing with a seal which once belonged to a *Lukkā* man.

⁴¹ Cf. the evidence of §10 the ‘Tudḫaliya Instructions for Lords, Princes and Courtiers’ (CTH 255.1) which mentions the ‘frontier posts’ (*auri-*) between Hatti and *Lukkā*, see Miller 2013: 286–287.

⁴² For details see Bryce 1986: 11–41, cf. also Keen 1998: 22–26.

Str. 12.8.5, Paus. 7.3.7, Apollod. Bibl. 3.1.1–2), saw in Sarpedon a brother of Minos and, accordingly, connected the origin of the Lycians with Crete. Since Lycian is an Anatolian language, one cannot take this tradition quite literally: it is clear that a significant or even major part of the Lycian population in the 1st millennium BC, as well as its culture in general had local roots. However, it would be equally unwise to simply dismiss this Greek tradition as pure fantasy, as sometimes alleged⁴³. In fact, accounts of settlement of Lycia from the Aegean agree rather well with the phenomenon of sea-born migrations from the Aegean to the East at the end of the 2nd millennium BC which can be glimpsed both from the epigraphic and historical record. These migrations resulted in Aegean settlement in Rhodos, Pamphylia, Cyprus, Plain Cilicia (Cilician *Ahhiyawa*), the Amuq Plain (*Palastina/i*) and even southern Levant (the Philistines)⁴⁴. In this context, it seems very likely that Lycia indeed received *some* Aegean ethnic element in this period, even if this has not resulted — in contrast with Rhodos, Pamphylia or Cyprus — in the establishment of Greek as the main idiom. Rather, the opposite process was the case: the Aegean settlers eventually switched to Lycian, becoming a part of the Lycian *ethnos* as we know it, a scenario which has parallels in Cilicia and the Amuq Plain⁴⁵. From a sociolinguistic perspective, it appears very likely, almost inevitable, that this process left some traces in the Lycian language.

6.2. There is no need to argue for the importance of the Greek factor already in pre-Hellenistic Lycia: the Greek influence clearly manifests itself in Lycian art and architecture, as well as in the existence of Greek-Lycian bilinguals and the presence of Greek names in Lycian inscriptions⁴⁶. However, we have next to no historical evidence bearing on the *sociolinguistic* framework within which the Lycian-Greek interaction took place, and reconstructing the details of this process is definitely not a trivial task. As a matter of fact, after the conquest by the Persian general Harpagos around 546/45 BC, Lycia stayed for almost two centuries under more or less strong Iranian/Achaemenid influence, even if it still enjoyed a great deal of political autonomy⁴⁷. After the campaigns of Kimon in south-western Anatolia around 470 BC, Lycian cities joined the Delian League, but by the beginning of the Peloponnesian War (431 BC) most of them (except Tel(e)messos) defected from the Athenians, subsequently siding with the Persians and the Peloponnesian League, as is reflected *inter alia* in the Xanthos Trilingual composed around 400 BC. After ca. 360 BC Lycia came under the control of the rulers of the Carian Hekatomnid dynasty, who remained under Persian authority only nominally, leading a conscious politics of Hellenization, an important aspect of which was the usage of Greek as the official written language.

While contact with the Greeks and acquaintance with Greek culture is beyond doubt in pre-Hellenistic Lycia, it is far from obvious what effect this contact could have had on the Lycian language. Neither the participation of the Lycian cities in the Delian League, nor their dealings with the Peloponnesians should necessarily have led to any perceptible Hellenization of Lycians in a linguistic sense, although this interaction certainly increased the awareness of Greek in Lycia⁴⁸. The influence of the Hellenizing policy of the Hekatomnid dynasty, testified

⁴³ See, for instance, Keen 1998: 26 with further refs.

⁴⁴ For the Aegean element Cilicia and the Levant cf. in general Singer 2013 and Oreshko 2018a with further refs.

⁴⁵ Cf. Oreshko 2018a and, for Plain Cilicia, Yakubovich 2015.

⁴⁶ Cf., for instance, Keen 1998: 66–69 with further refs.

⁴⁷ For the political history Lycia see in general Keen 1998, esp. 61–70 on the Iranian and Greek cultural influence in Lycia.

⁴⁸ Thus contra Rurthereford 2002: 201–202 and Colvin 2004: 51–53. Rurthereford assumes usage of Greek as an ‘imperial language’ in Lycia already during the Lycian alliance with the Delian League and counts with an increasing presence of bilingual speakers during the Dynastic and the Carian period. Such a scenario is quite

by several extensive monuments in Lycia written in Greek, including the Letoon Trilingual, might have been somewhat stronger, and in any case in the 4th century BC Greek was already on the way of becoming a *lingua franca* of the Eastern Mediterranean. However, the attitude of the Lycians to the Greek of the Carian administration should not necessarily be entirely positive, and again it is not clear how deep its influence on the Lycian communities in general might have been. On the other hand, we have very little evidence about the time and circumstances of Greek settlement in Lycia in the 5th and 4th century BC, and whether the Greeks formed in Lycia a strong linguistic community before the Macedonian conquest in 334/333 BC. The evidence of bilingual inscriptions is ambiguous, since it testifies only to the *existence* of a linguistic community, but ultimately says nothing about its size and language attitudes. Ironically, the presence of bilinguals may indicate that bilingualism was just not that widespread in the community. Greek names in Lycian inscriptions, which constitute less than 10% of attested names, do not constitute evidence for a *massive* presence of the Greeks in Lycia⁴⁹. In fact, judging from the general historical context, one would rather think that settlement of the Greeks in Lycia before ca. 350 BC was most probably a matter of private business, connected first of all with trade activities and professional domains, such as architecture, sculpture and possibly pottery production.

6.3. In support of this two pieces of epigraphic evidence may be adduced here. The first is TL 25, a text associated with statue bases intended as a dedication to Apollo in Tlos⁵⁰. The text combines a Lycian and a Greek part, which closely, although not quite exactly, correspond to each other⁵¹. The dedication is made by a Lycian from Tlos, *Xssbezē* (= Πόρπαξ in the Greek part), on behalf of himself and his family (wife, daughter and a niece). However, the statues were created by a Greek, which is indicated in the Greek epigraph found separately on the next block: Θεόδωρος Ἀθηναῖος ἐπόησε. It is very likely that Theodoros had been specially invited by *Xssbezē* to work on the statues in Tlos, and this was probably a more or less established practice, judging from the Greek artistic influences in other Lycian tombs. It is not clear whether Theodoros stayed in Lycia or returned to Athens, but it appears quite probable that at least some Greek artists decided to stay and work in Lycia, attracted by the local demand.

dubious especially for the 5th century, and virtually refuted by the evidence of the Xanthos Trilingual which has 138 lines in Lycian, 103 lines in ‘Lycian B’ and only a short (12 line long) Greek poetic part written probably by an invited versifier (cf. below). These Greek verses give also quite a clear idea of the level of mastery and perception of Greek in Lycia at this time, since it contains over 12 lines at least 8 mistakes (letter omissions).

⁴⁹ Cf. Colvin 2004: 51–52. In fact, the actual percentage may be closer to 5%, since a part of Greek names are attested in the Xanthos Trilingual, which has nothing to do with settlement of the Greeks in Lycia. It is not clear what exactly stands behind Colvin’s (2004: 51) statement ‘In the fourth century approximately 66 per cent of the recorded names are still Lycian’. Most importantly, it is not clear what part of these inscriptions dates after 333 BC. Moreover, the percentage of Greek names should not exactly reflect the percentage of Greek speakers, since some Lycians might have adopted Greek names out of considerations of prestige.

⁵⁰ Judging from the letter forms of the Greek text, the monument belongs to the 4th century BC, possibly ca. 380–350.

⁵¹ The Greek text lacks words referring to the object of dedication, which is *ebeis tikedris* ‘these statues’ (acc.pl.) in Lycian, and a verb, which is *tuwetē* ‘set up’ (pret.3.pl.) in Lycian. The Lycian text, as we have it, lacks the name of a deity to which the statues are dedicated, which is Ἀπόλλωνι (dat.sg.) in Greek. The addressee of a dedication is, however, a very important, even crucial element of a dedicatory text, and there is every reason to think that precisely this element is lost in the gap at the end of line 1 of the Lycian text. Kalinka (TAM 1: 24) tentatively reads the damaged letter at the edge of the gap as M. However, one would rather suggest that the letter is N, and the name is *Natri*, the Lycian counterpart of Apollo. Accordingly, the first clause of the text can be restored as *ebeis: tikedris: N[atri=ti] tuwetē*: lit. ‘These (are) the statues which to Apollo dedicated ...’ (cf. already Oreshko forthc., §3, fn. 61).

The next, even more curious piece of evidence is preserved in a monument (a statue base) of Arbinas, a Lycian dynast who ruled in the early 4th century BC (see Bousquet in Metzger et al. 1992: 155–165). The stone contains two rather long Greek poems, one of which is preserved almost completely, and its two last lines give information about the composer of the poem(s). The author is Σύμμαχος Εὐμήδεος Πελλᾶνέυς, a ‘blameless seer’ (μάντις ἀ[μύμων]), thus a Greek from the Achaean Πελλήνη (Dor. Πελλᾶνᾱ; less likely from the Spartan Πελλᾶνᾱ, which was probably too small at this time to produce a seer). As suggested by Bousquet (in Metzger et al. 1992: 162), the presence of the Pellenian poet in Lycia may be connected with the fact that his native city was a part of the Peloponnesian League, and thus the ships from Pellene might have been involved in the Peloponnesian activities in the region of Lycia at the end of the 5th century BC. While one can only guess about the details of the peculiar poetic career of Symmachos, his poems offer very interesting insight into the sociolinguistics of Greek in Lycia. On the one hand, the very presence of the poems clearly testifies in favor of an interest of the Lycian elite in the Greek literary culture, and a certain prestige associated with it. It also shows that in the early 4th century BC there were people in Lycia who were able to read and appreciate Greek. This is precisely what one might assume by looking at the Lycian artistic monuments of this period, such as the Nereid Monument (ca. 390 BC), or the somewhat later funerary monument of *Pajawa* (ca. 370–360 BC). On the other hand, the poetic skill of the ‘blameless seer’ is arguably one of a rather technical character, hardly much higher than that of an average educated Greek well-read in Homer, and the fact that it was necessary to bring him to Lycia from the far-away Pellene — which is due probably more to circumstances rather than to actual premeditation — seems to indicate that the Greek community in Lycia was still not very strong and the formation of the Greek culture in Lycia was only at the initial phase. Keeping in mind these sociolinguistic considerations, we may now revisit the evidence adduced so far in the discussion of Greek-Lycian language contact⁵².

6.4. Lexical Borrowings. There are two substantives attested in Lycian corpus which can be readily recognized as Greek words. The first is *trijere*, which is attested in the Xanthos Trilingual (TL 44b: 22 and 23) in the context of what appears to be a sea battle. The word apparently corresponds to the common Greek τριήρης ‘trireme’ (< τρίς ‘thrice’ + ἐρέτης ‘rower’), which is originally an adjective used with ναῦς ‘ship’. One should note that the context of the attestation is quite specific: the passage seems to refer to ‘Chian trireme(s)’ (*trijerē Kijezē*), thus Greek ships. It is not clear whether Lycian ships could also be called that way; in other words, *trijere* may be a *foreign* word in Lycian, i.e. a not fully embedded term connected to a specific cultural phenomenon (just like *trireme* in modern English). The second word is *sttala*, well attested in the corpus (six attestations, cf. Neumann 2007: s.v.), which reflects Greek στάλα ‘stele’, being borrowed either from Doric or from another dialect preserving *ā*. What is curious is that Lycian also has the root on which *sttala* is based, *stta-*, which seems to have the basic meaning ‘stand’. The connection between *sttala* and *stta-* was clearly felt by the Lycians themselves, since both appear as a *figura etymologica* in 44c: 5 and 7. The case is ambiguous and interesting. On the one hand, there are no words in Lycian beginning with the cluster *st(t)-* which can be doubtlessly defined as inherited,⁵³ and the immediate association of *sttala* and *stta-* suggests that both originate from the same source, i.e. *stta-* is a borrowing of the Greek ἵστημι/ἵστώ

⁵² For the data see primarily Rutherford 2002 and Melchert 2014, which should be consulted for further refs.

⁵³ From a formal point of view, it is not impossible to derive the verb from PIE **steh₂-* (see Melchert 2018a: 31–32). However, the fact is that no other Anatolian language suggests the presence of the initial *s-* in the root, cf. Luw. *ta-* ‘stand’ ((CRUS)*ta-*) and Hitt. *titti-* and *tittanu-*. It is not excluded that the prothetic *s-* is a later feature, introduced in some IE dialects after the split of the Anatolian branch.

(see Schürr 2014 [2016] with further refs., cf. Melchert 2016: 31). On the other hand, the verb *stta-* has a very basic meaning and its use was clearly *not* confined to combinations with *sttala* or similar objects (cf. *sttāti* in 44b: 35 in connection with *erbbi* ‘battle’ and *sttati=ti* in damaged context in TL 93: 2), and it seems odd that this verb might have been borrowed from Greek (cf. Neumann 2007: s.v.; for a possible solution of the paradox see below).

Other cases of possible Greek borrowings are more dubious. Neumann (cf. 2007: s.v. with further refs.) suggested that the term *ānīmāma-* (five attestations in the corpus) may correspond to Greek ἄμωμος ‘blameless’; Melchert, following Starke (for refs. see Melchert 2003: s.v.), interpreted it as ‘fine, penalty’. It is quite difficult to decide between these two options: the latter is more straightforward, but it is striking indeed that all contexts seem to associate *ānīmāma-* with *animals* ‘paid’ to certain deities⁵⁴, which matches rather well the usage of ἄμωμος as an epithet of sacrificial victims in Greek. It is not impossible that the word could be borrowed into Lycian as a specific ritual *terminus technicus*, but at present this remains only a possibility. Two further cases are even less certain⁵⁵. The word *manaxine* found on monument of *Pajawa* (cf. above §3 with fn. 24) represents either a title or a sort of ethnic connected with the Pamphylian origin of *Pajawa*, and its connection with Greek μονογέννης is quite arbitrary. The suggestion that *garāi*, attested in TL 44b: 62 (followed by *zeusi*), represents an adoption of Greek ἀγορά (Shevoroshkin 2011: 34, cf. Melchert 2014: 68) is equally problematic. The relevance of the attestation of *neleze Tarqqñt-* = Ζεὺς ἀγοραῖος in the bilingual N324 is questionable, since it may be asked why one did not use *neleze* also in TL 44b, and it is difficult to either give a convincing Lycian interpretation of the morphology of the word or to explain the phonetic development of *garāi* from ἀγοραῖος⁵⁶. But even if *garāi zeusi* is an odd phonetic rendering of Ζεὺς ἀγοραῖος, it in no way suggests that **gara-* was present in Lycian as an independent word, since in this context it would merely be an *epithet* of a foreign deity. In fact, both its bizarre phonetic form and the evidence of N324 which *translates* ἀγοραῖος with *neleze* plainly runs against the assumption that ἀγορά was present as a borrowing in Lycian.

On the other hand, there are two terms which can be identified as Lycian borrowings in Greek, although their usage was clearly localized. One is μίνδης (and μενδίτης, derived from it), which reflects Lyc. *miñti*. The term likely referred to the local community as a whole, representing a close counterpart of Greek δῆμος, and not to ‘cemetery administration’ as sometimes claimed (see in detail Oreshko 2019: 105–117 with further refs.). The other term is πιάτρα

⁵⁴ ‘Cow’ (*wawa-/uwa-*) in TL 111:4, TL 131: 4 and TL 149: 9; *puwa* in TL 102: 3, possibly ‘goat’; and *kerut[i]* in TL 111: 3, which appears to refer to a ‘horned’ animal (cf. Neumann 2007: s.v.).

⁵⁵ One should mention that Melchert (2003: s.v. *sttrat[]*), adopting an old suggestion by Savelsberg (see ref. in Neumann 2007: s.v.), tried to see in the fragmentary *sttrat[]* in TL 44b: 18 a reflection of Greek στρατηγός. This is quite unlikely, since, in all probability, the word picks up the Greek name attested several lines above in the text (ll. 15–16) *Stt[...]āni[...]*he). Whether the restoration *Stt[rat]āni[da]*he suggested by Stoltenberg (cf. refs. in Neumann 2007: s.v.) is correct or not, the name should be in any case a composite Greek name based on στρατός.

⁵⁶ Formally, *garāi* looks like comm.nom.pl. of an *n*-stem (cf. *mahāi* ‘gods’ or *tahñtāi* = οἰκήματα, for which cf. below), and, despite the formal discrepancies, should probably be connected with the preceding *ebeija* ‘these’ (nom.-acc.pl.neutr.), since independent usage of pronouns seems to be otherwise not attested in Lycian. It may be noted that the idea to interpret *zeusi* as a dat. form of Zeus strikes one as rather bizarre, despite the phonetic similarity of the words. As a matter of fact, the Lycians ‘translated’ the name of gods, even when they were used in Greek contexts, cf. the epigraphs on the vessel with the scene of the Judgement of Paris (N307), which features *Pedrita* (Aphrodite), *Alixssā[tra]* (Paris-Alexander) and *Mal[ija]* (Athene); or *Turaxssa[l]i; Natri* in TL 44c: 47–48 who is Greek Apollo of the Mount Torax; or translation of the personal name Ἀπολλόδοτος as *Natrbbijēmi*. To this should be added the odd dative form in *-si*, which would presuppose the perception of nom.sg. ending as part of the stem. It seems that the level of knowledge of Greek in Lycia around 400 BC was still higher than one which could allow for such a blunder. In sum, *zeusi* is probably not Zeus at all.

which is a feminine kinship term, possibly referring to ‘daughter-in-law’ (see Schürr 1999). As argued by Schürr, the word may be based on the Anatolian root ‘to give’ (*piya-*), thus designating ‘one who bears gifts = dowry’⁵⁷. The fact that one adopted the Lycian term instead of using a Greek term, such as *νύος* or *νύμφη*, is due apparently to the specific local character of marriage regulations and the legal status of daughters-in-law.

6.5. Lexical and semantic calques. Several words have been suggested to represent Lycian literal translations (‘calques’) of Greek terms. Creation of calques is possible even in the situation of only relatively slight language contact, and the level of Greek-Lycian relationships was in any case enough for that. However, the evidence is not too impressive. Rutherford (2002: 204–205) suggested that the term *kumehe/i-* found in the Letoon Trilingual (N320: 27) as a noun ‘sacrificial animal’ — as contrasted with its usual adjectival sense ‘sacred’ — is a calque of Greek *ἱερεῖον* ‘sacrificial animal’ used in the Greek translation of the respective clause. This seems entirely possible in the context of the text, but it is not clear whether it is a real sociolinguistic phenomenon, or simply an effect of translation of this particular text from Lycian into Greek. On the other hand, the idea is so trivial that one did not probably even need a Greek word to produce something similar in Lycian. Equally trivial is another pair tentatively adduced by Rutherford (2002: 205–206) as an example of calque: Lyc. *prĩnezi(je)-* ‘household member’ vs. Greek *οἰκεῖος*. ‘Household members’ obviously existed in Lycia before the Greek settlement there, and one does not actually need the Greek word to explain the transparent semantic and morphological structure of the Lycian one. The third example comes again from the Letoon Trilingual and concerns Lyc. *ahñtāi* (N320: 17). This word was traditionally translated as ‘possessions’ and connected with the Lyc. verb *es-/ah-* ‘to be’, which automatically suggests a correspondence with Greek (τὰ) ὄντα or οὐσία (cf. Neumann 2007: s.v. and Rutherford 2002: 205). However, *ahñtāi* is most probably simply a phantom word. As pointed out by Schürr (2016: 125 with fn. 6) and Melchert (2018b, *ad 11abc*), there is no motivation for the presence of the enclitic particle *-te* having a locative semantics in the clause N320: 17–18, and the sequence *setahñtāi* can be interpreted simply as *se-tahñtāi*. Moreover, the Lycian word corresponds in Greek not to (τὰ) ὄντα or οὐσία, but to οἰκήματα ‘dwellings’, and there are thus no reasons to assume any interference between the two terms⁵⁸.

To these, one further piece of evidence may now be added. In a recent article (Oreshko 2019: 95–101, esp. 100) I suggested that the Lyc. term *alaha-* ‘concede’ is based on the Luwic word for ‘place’ (Lyc. *ala(d)-*) and means literally ‘to let somebody (into) a place’, thus finding

⁵⁷ Thus contra Brixhe (1999: 89–91) who supported a connection with *πάτρα* (‘father’s sister, aunt’) presented in LSJ.

⁵⁸ Schürr (2016: 125–126) suggested that the term *tahñta-* may be connected with *θθε-* (< **tahē*) which in combination with *kumezijē* ‘sacred, sacrificial’ corresponds to Greek *βωμός* ‘altar (with base), raised platform’ in the Letoon Trilingual, and with Lycian B *tasñtuwadi*. The latter connection is unverifiable, but the connection with *θθε-* looks plausible. It was convincingly argued by Schürr that there is no reason to derive either *θθε-* or Luw. *tasali-*, connected with it by Eichner (1983: 60–61), from PIE **d^heh₁s-* ‘holy, divine’. A connection with PIE **d^hh₁-*, more positively assessed by Schürr, is possible, but is neither compelling. Luwian evidence implies rather that *tasali-* means simply ‘stone block’ and may be an Anatolian areal term. The context of CEKKE §15 strongly suggests that FINES-*ha+rali-ia ta-sa* are ‘border stones’, and the interpretation of *tas(al)i-* as ‘stone block’ well agrees with the context of KARKAMIŞ A6 §27–28 which features *tasali-* parallel to another term for ‘stone (block)’, SCALPRUM-*su(wa)-* (= *asu(wa)-*). It is not impossible that (“*256”) *tà-sá-* found in KULULU 2, §6 represents the same word, although the context does not unequivocally support this, and the difference in spelling (<tà> vs. <ta>) may be significant. It is noteworthy that neither attestation of the word features an ideogram hinting at an action (e.g. CRUS or PONERE), which implies that synchronically the term was not regarded as a derivative of a verb. Accordingly, *tahñta-* = οἰκήματα probably just designated something built of stone blocks (rather than ‘installation’).

a close semantic correspondence in Greek συγχωρησαι ‘concede, let’, which is based on χῶρος. Given the striking correspondence in the underlying semantics of both terms built around the idea of ‘place/space’ (*ala(d)-* and χῶρος), which is not that trivial, it would be natural to assume that one of the terms influenced the other. Since the meaning ‘concede, let’ is normal for συγχωρησαι, the direction should be Greek > Lycian, even if it may seem strange that a term connected with a specifically Lycian burial culture would have been influenced by Greek. Lastly, one should mention the idea of Seyer (2006: 727) that the common specification used in Lycian funerary inscriptions (*hrppi:*) *atli: ehbi* ‘for himself’ is an attempt to render in Lycian Greek the word ἑαυτῶ. The idea is interesting, but is difficult to verify. Contra Melchert (2014: 69), in the context of meticulous stipulations of the Lycian funerary inscriptions the usage of *atli: ehbi* does not seem especially redundant. The question is what one would expect to find in a Luwian inscription in a region outside the contact area with the Greeks.

6.6. Structural Influence. Besides borrowing and calques, Rutherford (2002) and Melchert (2014) have discussed several possible instances of a finer *structural* interference between Greek and Lycian. Doubtlessly the most intriguing case is the semantics of the Lycian adverbial element *epi* ‘upon’ and the composite *hrppi* ‘upon’ (< *hri* ‘above’ + *epi*). The semantics of both Lycian adverbs seems to correspond to that of Greek ἐπί rather precisely, but is far from the semantics of its presumable etymological counterparts, Luwian *āppi* and Hittite *āppa*, both of which mean ‘back(ward), again’. In the preserved texts, Lycian *epi* does not have the meaning ‘back’ at all, although the very existence of the composite *hrppi* might imply that it was still present in the simple form *epi*. It is noteworthy that the Lycian usage of *hrppi* might in its turn have influenced the mode of usage of Greek ἐπί (cf. Rutherford 2002: 206). The next feature concerns the Lycian usage of the connective *se* which quite exactly corresponds to that of Greek καί, starkly contrasting with the exclusive preference of Luwian (*-ha*), Hittite (*-al-ya*) and Lydian (*-k*) for enclitic conjunctions following the second member. Furthermore, this is not the only unusual feature of the Lycian clause architecture, since Lycian syntax is different from what one can usually see in Hittite and Luwian texts in other respects as well. This is particularly noticeable in the typologically rare OVS word order as seen in the common Lycian funerary formulas (cf. Rutherford 2002: 214), and in the generally quite flexible clause structure seen especially in the longer texts, such as the Xanthos and the Letoon Trilinguals⁵⁹.

Lastly, it has been suggested that the formation of some Lycian personal names might have been influenced by Greek names. In particular, this might be the case with Lycian names containing a participle in *-mi-* in the second part of the composite, such as *Natr-bbijē-mi* ‘Given-by-*Natr(i)*’ which corresponds to Ἀπολλόδοτος in the Letoon Trilingual. It seems that names of this structure were indeed largely restricted to Lycia with sporadic irradiation to Pisidia (cf. also Melchert 2013: 41–42), while in other Luwian areas it was enough to use a simple verbal root, either in the first or second part of the name. To this a further possible example of an onomastic influence may be now added. In the discussion of the *hātahe*-passage of the Xanthos trilingual, I have argued that *Herikle* mentioned in TL 44a: 50 has nothing to do with the mythical Herakles, as is usually claimed, but refers to a real person, in all probability a late 5th BC

⁵⁹ It is noteworthy that in a recent article Mouton-Yakubovich (2020) make an attempt to establish links between the unusual Lycian syntax and the proleptic construction found in Luwian. In particular, they suggest that Lycian OVS clause construction with a nasalized preterits (e.g., *prīnawatē*) — which probably contain an enclitic *-(e)n* (comm.acc.sg.) (for the interpretation see refs. there) — should go back to a proleptic construction which would be directly comparable with the ones observed in Luwian. I am not convinced that such a reconstruction would be the only possibility for Lycian. However, the many interesting examples adduced by Mouton-Yakubovich demonstrated that Luwian syntax was flexible enough and that the tendencies which later lead to the Lycian OVS construction *might* have been present already on the early language stage.

century governor (*sehaxlaza*) of Kaunos (Oreshko forthcoming, §9). The name *might* correspond to Ἡρακλᾶς sporadically attested in the Classical period, but there is actually no real necessity to interpret it in this way, especially given that *Herikle* was a governor installed by the *Persian* administration. The same is probably true also for another Lycian name of a comparable structure, *Perikle*, who is well known as an early 4th century BC dynast of Limyra: it is difficult to suspect pro-Athenian sentiments in a Lycian dynast, still wholly in the sphere of the Persian influence; even more difficult to see in *Perikle* an admirer of Thucydides whom the Athenian statesman Περικλῆς arguably owes a great deal of his present fame. In fact, both names can well be genuine Lycian composite names: the first parts *heri-* and *peri-* may be easily explained as Anatolian adverbial elements (cf. Lyc. *hri* ‘up, on (top)’ and **peri* = Luw. *pari* ‘beyond, exceeding(ly)’), and the root *kle-* might well be present in Lycian as well⁶⁰. However, interpretation of *-kle* as ‘fame’ (= Greek κλέος) makes a good sense: *Heri-kle* and *Peri-kle* can be interpreted as ‘Upmost-Fame’ and ‘Exceeding-Fame’ respectively. It is not quite impossible that Lycian could preserve a native reflex of PIE **kleu-* (with a loss of *u* in the syllable-/word-final position), but in the areal context it seems likelier that the popular Greek names in *-κλῆς* played a role in the introduction of the pattern of names in *-kle* in Lycia.

6.7. Summarizing the evidence, one can note the following principal points:

1) The number of Greek lexical borrowings in Lycian is in fact very low. Both *trijere* (if it was indeed embedded in Lycian) and *sttala* are cultural terms, and their adoption does not presuppose any *intensive* language contact, let alone bilingualism. If one accepts the connection of *āimāma-* with ἄμωμος, this would provide an interesting glimpse of an influence of Greek *ritual* terminology in Lycia. In view of this, the case of *stta-* ‘stand’ looks quite strange.

2) The number of possible calques is not much higher. The closeness of morpho-semantic structure of *kumeheli-* = ἰσχεῖον, *prñnezi(je)-* = οἰκειός and *alaha-* = συγχωρήσαι is certainly notable, but ultimately it demonstrates similarity in *thinking* rather than a straightforward linguistic influence of Greek.

3) The structural similarities are more impressive and intriguing. Even if the number of arguable cases is still not too high, it would be fair to say that from a structural point of view, Lycian is closer to Greek than, for instance, Luwian or Hittite.

Seen from a sociolinguistic perspective, the picture is quite puzzling⁶¹. On the one hand, neither the actually attested lexical borrowings, which are the *clearest* and *most basic* indicators of the language interaction at its initial phases, nor the general sociolinguistic situation as it can be reconstructed for the 5th and the early 4th century BC Lycia hint at a significant level of Greek-Lycian bilingualism. Greeks were clearly present in Lycian cities as merchants and artisans, but the Greek community was probably still rather slim, and there is no question of a ‘Greek-Lycian’ ethnocultural merge at this time. On the other hand, the structural similarities between Greek and Lycian suggests a very high level of bilingualism in the whole community, when two languages begin literally to intertwine and to align their structures in the minds and on the tongues of the speakers.

The paradox can be explained if one goes beyond the chronological framework imposed by the definition ‘Greek-Lycian contact’ — 6th-4th centuries BC — and brings into the picture the early migration to Lycia from the Aegean reflected in the Greek legendary tradition. One

⁶⁰ Cf. *hrkkeledi* (instr.) in N324: 11; *muni-klei-mē* in TL 107a:2, as contrasted with *muneite* in TL 127: 2 and *muneita* in TL 44b: 20; and Lycian B *kllei-me* (*kllei-ma* in 44c: 45, *kllei-me* in 44d: 61 and *kllei-me-di* in 44c: 49 and 60).

⁶¹ For the typology and scale of contact-induced language changes see Thomason-Kaufman (1988: 74–95), cf. Thomason 2001: 59–98, esp. 70–71. Cf. Oreshko 2018b: 95–102 for general observations on the sociolinguistics of Greek-Anatolian language contact.

may suggest a different model of the ‘Lycian-Aegean’ ethnolinguistic contact than applied hitherto: one assuming two essentially different phases and associated phenomena. The first phase is connected with the migration from the Aegean, for which the associated events in other parts of Eastern Mediterranean (Rhodos, Pamphylia, Cyprus, Plain Cilicia etc.) suggest a rough dating to the 12th–11th centuries BC. This migration has probably resulted in the settlement in the Xanthos valley of a more or less substantial group of Aegean migrants, who were not necessarily exclusively Greeks, and their subsequent intermingling with the local Anatolian population with the formation of a largely bilingual community. For reasons that remain unclear, the community eventually switched completely to Lycian, but the process left a number of traces in the language, primarily on the structural and conceptual level. It is noteworthy that the time depth assumed for the phenomenon — 500–600 years before the actual epigraphic attestation — agrees rather well with the apparent *embedded-ness* of the ‘Aegean features’ in Lycian.

The second phase is the ‘Lycian-Greek’ language contact proper. In the 6th and 5th centuries the contact was probably rather slight, while the Persian influence played a more important role. In the 4th century BC, Lycians became probably much more exposed to Greek, both through the increased presence of the Greeks in Lycia and through the Hellenizing policy of the Hekatomnid dynasty. However, it is not clear whether even on this phase the Lycian-Greek contact led to a wide-spread bilingualism in Lycia. It is quite obvious that the Lycians has a very strong sense of ‘national’ identity, expressed *inter alia* in a highly developed written culture, and it is by far not obvious that Greek was perceived as a ‘prestige language’ outside the class of Lycian elite connected first of all with the cities of the Xanthos valley. Thus, the switch from Lycian to Greek after the Macedonian conquest might have been rather abrupt, induced both by the loss of the political independence and the integration of Lycia in the wider Hellenistic world, although more epigraphical material of the 4th century BC is needed to clarify the details.

6.8. The proposed scenario has important implications both for the Lycian language and the ethnolinguistic identity of the Lycians, since it presupposes a deep Aegean layer in both. There is no place here to discuss the issue in full. However, three linguistic features may be mentioned which agree well with the proposed scenario lending it further support. The first is connected with the problem of the verb *stta-*. As already mentioned above, its status in Lycian represent a crux: on the one hand, it is clearly connected with *sttala*, which is a borrowing, and its specific phonetic form supports its foreign origin; on the other hand, the root has a basic meaning, and in the absence of evidence for a *heavy* influence of Greek on Lycian in the early period, its adoption from Greek seems strange. An attempt by Schürr (2014 [2016]) to explain the adoption of the verb as a term specifically connected with installation of stone monuments and in general with Greek written culture, does not look very convincing: as far as one can see, the verb is not used transitively, and there is absolutely nothing specific in the meaning ‘stand, be placed’ to justify a borrowing in the usual contact scenario. As mentioned, the Lycian verb has no *exclusive* association with standing stone monuments. Now, the paradox can be plausibly explained, if one interprets both *stta-* and *sttala* as *early* Greek borrowings in Lycian going back to the 12th-11th centuries BC, resulting from the situation of a high-level Greek-Lycian bilingualism.

The second lexical item for which the explanatory model is immediately relevant is the verb *tta-* ‘pay (as a fine)’ and its possible derivative *tija-* ‘penalty, amends’ (cf. Melchert 2003: s.v.v.). Two factors in combination suggest that it may well be an early Aegean/Greek borrowing. First, the verb seems to find a nearly exact semantic doublet in *tta(e)i-* ‘pay’, which is apparently a specifically Anatolian term. Second, *tta-* closely corresponds to Greek τίνω ‘pay’

which is connected with τίω ‘punish, avenge’, both verbs being based on PIE **k^uei-* ‘fine, exact payment’. The verb is absent in other Anatolian languages and, besides Greek, has a secure reflex only in Indo-Iranian (cf., e.g. Beekes 2010: s.v. with further refs.). Given these factors, it would be more natural to interpret Lycian *tⁱ-* as an Aegean borrowing, rather than an independent IE reflex. Its preservation as a doublet of Anatolia *t^l(e)ⁱ-* is possibly due to some specific legal regulations related to fines/payments connected with the Aegean settlers⁶².

The third feature concerns Lycian phonetics. There are two innovative phonetic peculiarities in Lycian, which separate it from Luwian and ‘Lycian B’ (and possibly all other Luwic languages), but are shared with Greek. The first is the development *k^u > t* before front vowels (*e/i*) (cf. Melchert 1994: 303), which resulted, for instance, in that both Greek and Lycian have identical pronominal forms τί and *tⁱ* (nom.acc.neutr.sg.) developed from the PIE relative pronoun **k^ui-*. The development is quite non-trivial, and is not found (at least in exactly this form) in any other IE language. The second is the change **s > h*, shared by Lycian and Greek (as well as its close relative Phrygian). The feature is cross-linguistically more common, but its presence, from all the languages of the Anatolian branch, only in Lycian is remarkable. As peculiarities of articulation of the first language may well affect the phonetics of the second language, one can now naturally interpret these two Lycian sound changes as having been introduced by the early Aegean settlers in the region.

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⁶² The issue of the meaning of ‘Lycian B’ *kiki-* (TL 55: 5) remains open, since the context does not make it possible to verify its meaning.

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P. Н. Орешко. Этнические группы и языковой контакт в Ликии (I): «морская контактная зона»

В статье предлагается обзор проблемы языковых контактов в Ликии в эпоху Поздней Бронзы и Раннего Железа (ок. 1400–330 до н.э.), обусловленных морскими связями этого региона с другими частями Восточного Средиземноморья. Вопрос рассматривается как с исторической, так и с этно- и социолингвистической точек зрения. Вслед за кратким очерком географии Ликии и определения ее «этнокультурных контактных зон» (§1) в статье последовательно обсуждается вопрос связей Ликии с южным побережьем Карики и Родосом (§2; там же параллельно затрагивается вопрос об этнических названиях ликийцев *Lukkā/Λύκιοι* и *Trmīmile/i*); Памфилией (§3); побережьем (горной) Киликии (§4); Левантом (§5) и Эгейдой (§6). В части, посвященной Эгее, дается критический обзор материала, касающегося греческо-ликийских языковых контактов и предлагается новая модель, которая позволяет объяснить необычную картину сочетания незначительного числа прямых лексических заимствований с элементами, свидетельствующими о глубинном структурном влиянии греческого на ликийский.

Ключевые слова: греческо-анатолийские контакты; языковые контакты; этнолингвистика; социолингвистика; эгейские миграции; анатолийские языки; ликийский язык; лувийский язык; греческий язык.

The Sabellic accusative plural endings and the outcome of the Indo-European sibilants in Italic

This work aims to clarify the phonetics and phonology of sibilants and sibilant clusters in the Italic languages, and will specifically attend to the outcomes of /ns/ and /rs/ in different positions. The structure and meaning of a number of Sabellic words and sentences will be reanalysed and reinterpreted, with a special focus on Oscan and one of its dialects, Marrucinian. An appendix containing a novel interpretation of the new «Opic» inscription of Niumsis Tanunis is included.

Keywords: Indo-European linguistics; Sabellic languages; Ancient Italy; general phonetics.

Introduction¹

The consonant system of the Italic branch of Indo-European is still subject to debate. To begin with, we have to rely, as usual, on written materials. These consist of comparatively few and often fragmentary or barely readable remains, some of which show defective spellings. Many words are attested only once, and our paradigms are often incomplete, so that new documents, however short, often come as a surprise and scramble pieces in our puzzle that we had thought were reasonably well fitted. In addition, there is no consensus as to which languages may be classified as «Italic» in the genetic, not geographical sense. In this, as in former works, I shall assume that Latin, Venetic, Oscan, Umbrian and South-Picene go back to a single ancestor which can be labeled as Proto-«Italic», and whose origins are somewhere in central or Western Europe. When or how this unity was broken is on the whole unknown, but I further take it that there have been at least two waves of advance that brought speakers of Italic into the Peninsula that gave them its name. One of them, which I dare call Latino-Venetic, may have been the earliest people of Indo-European ancestry to traverse the Alps and leave us unequivocal traces of their language and culture, albeit the existence of other substrate populations has been occasionally claimed. Over time, the impact of other Italic populations, which may be globally termed «Sabellic», severed the former continuum into two halves and settled down in Central Italy, where it underwent further dialectalisation². Thereupon, an indeterminate number of mostly prosodic and phonetic innovations took place that affected variable areas of the Italic territory, in this way blurring the original genetic relatedness of the extant dialects beyond recognition.

This work aims to recover some of the common traits of Italic and its subgroups from a different perspective than usual. As we are going to see, both the mechanic reconstruction of a Proto-Sabellic stage and the tacit assumption that secondary, contact-induced phenomena -which changed the appearance of dialects even after they have acquired a personality as individual entities- are scarce or dubious, may have given us a strongly biased vision of the relative chronology of Italic sound shifts. What is more, sound changes have been traditionally

¹ The Spanish government has (again) explicitly refused to fund this work.

² See on this depiction of the events Bonfante (1988).

taken for granted exclusively on the grounds of the apparent cognacy of forms containing them. Interestingly, however, they have never been justified in purely phonetic terms, albeit they are often based on a single example. General linguistics, including contact linguistics, general phonetics and what we know about the typology of sound change, will accordingly play an important role in my arguments. As a result, I shall not only take issue with the widely accepted views on the evolution of consonant clusters containing sibilant sounds and the resulting relative chronology, but also reexamine the way the different writing systems were used, the attribution of specific forms to a paradigm or word class, the plausibility of their etymologies and external connections, and the interpretation of the syntactic structure of the texts in which they occur.

1. The Oscan accusative plural endings and the form *iaf*³

Two identical Oscan forms, namely Marrucianian *IAFC* (MV 1, Rapino, Chieti, c. 250 BC) and south-Oscan *iaf* (Lu 62, Roccagloriosa, Salerno, probably 3rd C. BC) are universally held to continue the acc. pl. fem. of the anaphoric pronoun **eĭā(n)s*. The alternative previously defended by Wallace (1985: 100, fn. 16) considered this and other forms as suggestive of the mixed ancestry of Marrucianian, which purportedly displayed Umbrian phonetic traits. In fact, this has always been exclusively predicated on the existence of U. *eaf* ‘eas’ (Um 1 Ib 42).

When the Roccagloriosa inscription was uncovered, the existence of the Oscan form became suddenly problematic not to say contradictory, since the finding places of the Rapino and Roccagloriosa inscriptions (respectively a *lex sacra* and a legal text concerning theft), are separated by more than 300 km. The assumption of a Proto-Sabellic, that is to say, not specifically Umbrian generalisation of *-f* as the acc. pl. ending has since become, if often not professedly, essential to salvage both the attribution of Marrucianian to the Oscan dialectal constellation and the interpretation of *iaf* and *IAFC* as full matches of U. *eaf*. To my knowledge nobody has put forward a theory that questions their accepted etymology or their cognacy with the Umbrian pronoun.

The uniform, but in principle unexpected spelling *i-* is apparently a minor inconvenience for the established etymology **eĭā(n)s*, but it is nonetheless surprising that this pronoun is also transmitted in Roccagloriosa B, l. 9, in the nom.-acc. pl. neuter as *ειοκ* (cf. the formally similar fem. sg. *íúk* in Cm 1, Abella). In fact, it stands to reason that *iaf* has been written in this way because it begins by *ĭ-*. While it is true that in the Roccagloriosa document we apparently find (few) cases of <ι> alternating with <ει> and <ε> to render /e/ from /e:/ and /i/ when flanked by consonants⁴ (in fact all of them contain the pronoun *πικς*, *πιδ*), when <ι> precedes a vowel it stands for etymological *ĭ-*: *ιουφετουδ* ‘iubeto’ (B8), *φακτιεδ* (uninterpreted) (B9) and *πινδιουμ* ‘of weights’ (B11). Conversely, there is no case in which *ĭ-* is spelt in any other way. What is more, *e-* in hiatus, going back to **eĭ-* with Proto-Italic loss of intervocalic *-ĭ-*, is never spelt <ι> in southern Oscan, witness *μεια{ια}να[σ]* (Lu 39, Anxium) and *ειοκ* above. The same can be said of Rapino, where *IAFC*, *IOVES* and *IOVIA* are in all likelihood rendering *ĭ-*. There is consequently every reason to call into question the idea that Oscan *IAFC/iaf* is bisyllabic and begins by /e/.

Before we proceed to account for Oscan *iafc/iaf*, some words are in order regarding their alleged etymology. In one of his most influential works, Rix (1986) offered two different ex-

³ Unless otherwise indicated, all Sabellic texts follow *ST*. All texts in the Latin alphabet are in small capitals, and texts in the national alphabets are in italics.

⁴ See McDonald et al. (2012: fn. 2).

planations of the evolution leading to the attested forms of the accusative plural masculine and feminine in Sabellic, which deserve some comment in view of their universal success.

According to his first scenario, all but the consonant stems show a uniform Proto-Sabellic acc. pl. ending *-s* with compensatory lengthening of the preceding vowel. Accordingly, Rix starts from the following *Ursabellisch* endings: 1st *-ās*, 2nd *-ōs*, *-i*-stems *-īs*, consonant stems *e. g. *-r-ŋs* (> *-r(e)f*). Thereupon, Umbrian generalised the ending *-f* of the consonant stems by a simple proportion. Oscan, in contrast, apparently conflated both allomorphs, *-s* and *-f*, into **-fs*. This proceeded through two stages: first, *-s* was added to *-f* in the consonant stems (allegedly under the influence of the dat.-abl. pl. *-fs*, which is most incredible since it would have *ipso facto* driven the inflection into unnatural syncretism). Second, *-fs* was generalised to all the stems, ousting *-s*. Finally, *-fs* became *-ss* by regressive assimilation. Why this uneconomical crossing should have taken place escapes me. I believe it to be nothing but an *ex post facto* explanation, with the particular circumstance that there is no trace of *-f* left in Oscan, and that the posited *-fs* would give very marked codas in the case of the consonant stems *usurs* and *aginss* (*ex hypothesi* presupposing an unattested stage **-rfs* and **-nfs*). The evolution in the feminine form must then have been **-ās* >> **-āfs* > *-ass*, attested in *viāss*, etc. The *other* Oscan pronominal ending *-af* we are discussing remains unexplained.

Let us now take a look at the second scenario, according to which the Proto-Sabellic outcome *-f* is regular in more inflectional types. Rix starts from the following Proto-Italic endings: 1st **-ās*, 2nd **-ōns* > *-ōf*, *-i*-stems **-īns* > *-īf*, consonant stems **-r-ŋs* (> *-r(e)f*). Thereupon, *-f* was generalised in Umbrian, whereas Oscan, again, followed a different path: It is fundamentally the 1st declension ending **-ās* (and presumably the diphthongal stem **g^uou̯ns* > **bōs*) that triggered the spread of *-s* to the rest of the forms, giving rise to 2nd **-ōfs*, consonant stems **-r(e)fs*, and then, in a completely unnecessary turn of the screw, was contaminated by these and corrected into **-āfs*, eventually yielding *-ass*. It should be noted that Rix believes compensatory lengthening to have taken place at the stage in which the cluster *-ns* still existed, which thereupon evolved into *-f*. I find this incredible, in spite of the phonetic account that he offers in passing some lines before (1986: 586): «Primäres und sekundäres *-ns* ergaben dann schon ursabellisch *-f*, wohl über *-np* > *-nf* (oder eher, was hier nicht zu diskutieren ist, über *-nz -nδ -nf* > *-b*)», which tiptoes around the problems of the nasal-to-fricative transition I shall review below, as well as the unlikely voicing of fricatives after nasals, and offers no parallels for the proposed changes.

Again, the pronominal ending *-af* was disregarded by Rix, probably under the tacit assumption of Umbrian influence or appurtenance, which as we have seen is no longer acceptable. Firstly, there is no explanation for the fact that the pronoun shows a different ending from the noun. Secondly, the phonetic side cannot be right: if one gives any credit to Rix's first scenario, the pronominal ending *-af* would have come into being by way of substitution (in analogy to the consonant stems) followed by preservation of *-f* in the pronoun as opposed to addition of *-s* to the noun stem, which is not the tenor of Rix's account and makes no sense. Following his line of reasoning, by contrast, it is impossible to come to terms with our pronoun, since the ending *-s* has been pervasively replaced by *-fs*. This, in turn, means that **ēāfs* has unaccountably lost its *-s* instead of evolving into *†ēāss*. Things fare no better for Rix's second scenario, which demands that pronominal *-ās* first contaminated the rest of the paradigms, then was changed into *-āfs*, only to lose its final distinctive *-s* in this particular pronoun only. As a consequence, Rix's strenuous achievement of a uniform acc. pl. ending is distorted by an unexplained, *non-phonetic* turn of events which arbitrarily introduced an otherwise unattested plural ending⁵.

⁵ This account is generally and rather uncritically accepted as far as I know (*e.g.* WOU: 356, Tikkanen 2011: 33), and not refuted, at least in its general lines, by Clackson (2013: 28–29), who simply remarks that, in view of

Finally, the acc. pl. fem. *ekass, ekask* ‘these’ (Po 1, 14, Pompei) discredits the idea that IAFC and $\iota\alpha f$ contain an acc. pl. ending beyond any shadow of doubt. There is a sequence *fitias estas amgenas* in South-Picene (Sp AP 3; *IItal.* I: 183, Falerio 1) which could be a phrase in the acc. pl. fem. including a pronoun *estas* and thus revealing another Sabellic case of pronominal $-\bar{a}s$, but this cannot be proven beyond doubt (Dupraz 2012: 38).

As a consequence, the very idea that the Oscan accusative plural feminine *ever* contained $-f$ is a matter of personal belief. It is based on a number of requirements, none of which is unassailable: a) the input for the whole process must be $*-ns > -f$. This change goes first in the diachronic sequence of shifts leading to the attested forms, and consequently necessitates a primitive, *unitary* output; this is placed in a canonical Proto-Sabellic stage in Rix’s rigidly genealogical conception of language relatedness; b) the *secondary* shift $*-nts > -nss > -ns > -f$ is shared by all the Sabellic languages and therefore must also be situated as early as Proto-Sabellic; c) all this happened before final vowel syncope, and in this way the nagging obstacle of a potential phonetic merger of $-ns$ with postsyncope $-n(V)s$ can be circumvented.

As implied above, Rix’s ideas on the history of the Oscan accusative plural endings are in his view borne out by the abl. pl. $*-fos > -fs > -ss$, but the comparison is off the mark. To begin with, there is no single case of an acc. pl. preserving the cluster $-fs$ which, as we have seen, is an essential intermediate stage in both variants of his reconstruction. Next in Rix’s argument comes a subtle phonetic fallacy: while the sequence $-ss$ in the abl. pl. is obviously the product of assimilation, it is *not* directly indicative thereof, since in all likelihood it is synchronically marking a tense sibilant of whatever origin in word final position. To account for the fact that $*-ns\#$ gave rise to a tense sibilant [s:] in Oscan and [f] in Umbrian and South-Picene, we have to take a fresh look at the phonetic reasons behind the divergent evolutions. But first of all, I shall try to make sense of *iaf*.

2. Oscan *iaf* revisited

What the forms IAFC and $\iota\alpha f$ have in common is the fact that they precede a verb in the 3rd person singular, and that this verb is in both cases in the future tense, respectively FERET⁶ and $\kappa\lambda\omicron\pi\omicron\upsilon\sigma\tau$ (see below 3. for a more precise description of the syntax of these texts). The only Oscan form that could conceivably end up in $-af$ and, additionally, could *agree* with such a verb form in person and number, is an active present participle bearing the suffix $-nt-$, a category thus far attested in Oscan *kúnsif* (*IItal.* II: 1183, Pentri/Terventum 22), the unclear *statif* (Sa 1, Agnone), and possibly in the disputed form *staef* ‘standing’ (if $< *sta-\bar{e}-nt-s$), as per Rix (1986: 596), *WOU*: 697, but recently read as *ta<v>ffúd* (*IItal.* II: 895, Capua 22). The outcome $-f$ is shared by Umbrian, as in *zeřef* ‘sedens’ (Um 1 Ia 25, 33, 34), *restef* ‘re-stans, restoring?’ (Um 1 Ib 9), *kutef* ‘in silence’ (Um 1 Ia,b, *passim*). I consequently trace *iaf* back to Proto-Italic $*\dot{i}ant-s$, and further identify this form with L. *iēns*, Ven. *ia.n.t..s.* (personal name, Vicenza, *LV*: 124), Skt. *yant-*, Gk. $\acute{\iota}\omicron\nu\nu$, possibly Hitt. $\dot{i}iant-$ ‘sheep’, ultimately from IE $*h_1i-ent-s$, $*h_1i-nt-$.

Athematic root participles are a dying category in Italic, and Latin preserves only a few, like the lexicalised forms *cliēns* (see Fortson 2017: 842), as well as probably *parēns* (*EDLIL*: 445–446). A number of them is preserved in the onomastic corpus of Venetic, for instance the per-

IAFC/ $\iota\alpha f$, the process must have been more complex than envisaged by Rix. One does not easily see, however, how it could be still more entangled without calling to question the basics of historical morphology.

⁶ If it goes back to an athematic form $*feresti$ like U. *ferest* (Um 1 Ila 26) with weakening of /s/ in coda position. Alternatively it may be a 3rd sg. present indicative.

sonal name in the dative *La.n.te.i.* (Padua). In their edition of this text, Marinetti et al. (1994: 189–190) mention similar names, like *Vants* and *Iants*, but offer no account of their make-up beyond the purely descriptive information that they contain «Ca + -nt-». In fact, *La.n.te.i.* may continue a root participle **ulant-*, from **ulH-nt-* ‘ruling’⁷. Any attempt to come to terms with the unexpected phonotactics of this and similar forms containing **-l/ɾH-nt-* has proved futile in the past: the expected outcome of **ulH-nt-* is **ual-ant-*. As in the case of **trH-nt-* ‘through’, reflected in L. *trāns*, U. *traf* ‘through’ and OIr. *trá* ‘so, indeed’, we probably have to reckon with early laryngeal resyllabification into **ulH₂-nt-*, **trH₂-nt-*, etc.⁸ In addition, *La.n.te.i.* cannot possibly be a Celtic form, or it would have been adopted in Venetic as *†flant-*. Finally, *Vants*, *Vanta*, etc. (personal names, LV: 9, 53, 78, Este) come from **g^u(e)h₂-nt-* ‘going’, attested in Gk. βᾶς. Whether all these onomastic remnants of aorist participles reflect synchronically living verb forms is impossible to ascertain, but on the most likely assumption they were already archaisms, and their systematic replacement by other forms that conduced to a drastically reduced system with one single active participle for all stems had begun long before our first attestations.

It has recently been proposed (Prósper 2018a) that the universally accepted idea that all the Italic languages except Latin and Venetic have remodeled the endingless nom. sg. *-ō* (> *-ū*) of the masculine nasal stems as **-ō-ns* somewhere down the line is erroneous: This is not the case in South-Picene, where in my view we find a nasal stem *panivú* ‘monument’ (and not **panivúf*) that agrees with an adjective *meitims* ‘most gentle, best’ in the nom. sg. masculine (Sp TE 5, Penna Sta. Andrea)⁹. It is not proven that Umbrian partakes of this analogical extension, either, since the relevant forms show no ending: cf. *tribriçu* ‘trinity’ (Um 1 Va 9) and *karu* ‘meat’ (Um 1 Va 24, 27, Vb 4). In my view, the Oscan nom. sg. in *-uf* is definitely *not* the outcome of earlier **-ns*, but simply the product of the spread to nasal stems of the ending *-f*, which could only go back to **-nt-s*. Moreover, O. *-uf* is only attested with absolute certainty in one document from Campania, and only in **(t)ī-ō-*, *-(t)i-n-* stems: *fruktatiuf* ‘use, enjoyment’, *úittiuf* ‘use’ and *tribarakkiuf* (Cm 1 A21, B14, A11–12, Abella). In other words, the spread of *-f* is comparatively late and contributes nothing to the resolution of the chronological problems of the acc. pl. endings. This morphological innovation, whatever its causes, is not even certain to encompass the whole of the Oscan territory: if Marrucian BABV is a nasal stem, it has not undergone this innovation, either (see immediately below). In turn, we have to reckon with the possibility that the intrinsically unstable sequence **-nt-s* was restored in the individual dialects. But, if what we actually find is the direct, expected Sabellic outcome of **-nt-s*, this would only mean that this particular sequence, which was unique in containing a complex coda with a segmental /t/ and word-final /s/, became *-f* early on. In spite of Rix’s convoluted arguments, there cannot have been a Proto-Sabellic evolution **-nts* > **-nss* > **-ns* > *-f* (which actually goes counter to universal phonetic tendencies) and consequently it cannot be detrimental to my starting point that the Oscan and Umbrian acc. pl. endings have no common source **-ns* > *-f* in any inflectional stem.

⁷ A sequence **ulV-* was simplified early in Italic, as transpires from Ven. *leno* (LV: 12, 14, 25, Este).

⁸ Sergio Neri (Munich) has kindly made the point to me that he would reckon with the inversion of Lindeman’s Law in this case, by which an unstressed epenthetic vowel **CR₂HV-* > **C₂RV-* would be syncopated in a trisyllabic form, giving **CRV-*: e. g. dat. **ulh₂nt-éi* > **ualnt-éi* > **ulnt-éi*. Cf. Neri (2019: 50).

⁹ A kind reviewer reminds me that the ascription of SP. *panivú* to the nasal stems is not assured. However, even if the following form *meitims* were not a superlative adjective as I contend, but a noun, both a credible attribution of *panivú* to another paradigm, or an alternative syntactic analysis that invites one to consider its inclusion in a different word class, are lacking. At all events, the burden of the proof still falls on those postulating the addition of *-f* to nominatives of nasal stems in Proto-Sabellic.

Now to the semantics of *iaf*: if we had to translate this sequence of present participle + verb in personal form into a modern European language, we would have to resort to a verbal hendiadys or pseudo-coordination by which two consecutive verbs, the first of which is often a verb of movement which becomes grammaticalised, come to express one single state of things, and no longer a sequence of separate but related events. The first verb comes to be superfluous and only emphasises the voluntary nature of the action, and thus underscores *the subject's decision to do something: the subject is animate and acting both intentionally and immediately*. In essence, the whole construction refers to a single event¹⁰. But by using it, the speaker may even be going so far as to decry this event as too daring or even paradoxical. In modern languages, both verbs are coordinated and used in personal form and agree in tense and mood, as in 'he goes and says' (a variety of expressions of this kind is also quite common in English: see Stefanowitsch 2000), Sp. 'coge y se va', It. 'prendo e me ne vado'.

This construction is usually, though not universally, and not exclusively, ingressive, and at all events the inclusion of the first verb form is only intended to modify the inner aspectuality of the second. On the pragmatic side, it has taken on some vulgar nuances. On the other hand, the process of grammaticalisation is often not completed, as transpires from the fact that an array of introductory verbs can be used according to the degree of expressiveness, and that the superfluous verb may even take a direct object. Besides the Western European languages, this construction is well known in the Balkans, specifically in Medieval Greek, in which constructions with *πιάνω* and *ἀρχίζω* are found. In some languages like Rumanian, the construction can be paratactic and the conjunction can be omitted (see Wagner 1955). By contrast, the introductory verb has been fully grammaticalised in Arabic, to the point of becoming a particle, as in the ingressive particle of verbal origin *qām* 'get up' and its dialectal variants, which modify the aspect of the main verb and can be freely translated as 'suddenly' or 'without delay' (Naïm 2016: 349–353).

The participial construction illustrated by Oscan *iaf* + 3rd pers. verb is, *mutatis mutandis*, the hypotactic equivalent of this structure, and is known to have enjoyed currency in Ancient Greek: for instance, Coseriu (1936: 53) drew attention to the «pleonastic use of *λαβών*» attested from Homer onwards; he even thought that the modern paratactic construction can be traced back to the hypotactic one, which conveys a similar meaning: cf. *τί μ'οὐ λαβών ἔκτεινας* 'why didn't you go and kill me?' (Soph., *O.T.* 1391), *μολών λαβέ* 'come and take them (the weapons)' (attributed to Leonidas at Thermopylae by Plutarch, *Ap. Lac.* 225c), *ἐξάγγελλ' ἰών* 'go and tell' (Soph., *O.C.* 1393), *ὄσην κατ' αὐτῶν ὕβριν ἐκτείσαιτ' ἰών* 'how great a hybris he had gone and avenged on them' (Soph., *Ai.* 304), *τὴν ἐμὴν κίστην ἰών / ξύλλαβε* 'go and take my basket' (Ar., *Eq.* 1211–1212), etc.

Since we lack anything near a real corpus of Italic texts containing this or similar expressions, we are at a loss as to how far the process of grammaticalisation had progressed, whether other auxiliaries carrying different pragmatic nuances could be employed, or, at the opposite end of the scale, whether *iaf* had been fossilised into an ingressive particle. Finally, Greek influence from Magna Graecia that could have contributed to the development of this structure cannot be ruled out¹¹.

¹⁰ For instance, the dictionary of the Real Academia de la Lengua Española (ed. 1992) includes this as a secondary meaning of *coger* 'to get, catch': «unido a otro verbo por la conjunción *y*, decidir y cumplir inmediatamente la acción significada por éste».

¹¹ In point of fact, since the hypotactic construction is alien to Latin syntax, Coseriu points to Late Greek as the model for the paratactic construction in the Romance languages, especially as regards the Italian dialects and Rumanian.

3. The text architecture of Roccagloriosa and Rapino

Line 7 of Roccagloriosa has been plausibly segmented as [-?- ου]στ αυτ ιαφ κλοπουστ [-?-] by Rix (Lu 62), who in this way privileges one of the alternative segmentations considered by the original editors (see Poccetti et al. 2001: 220–222). They had correctly favoured this analysis, but called for prudence regarding the interpretation of ιαφ as an acc. pl., in view of the spelling (for expected †ειαφ, see above), and because it crucially differs from the Oscan synchronic ending *-ass* and consequently has to be regarded as a remarkable archaism (whatever that means since, as we have seen, no theory of the diachronic evolution of this ending, however elaborated, has been able to accommodate this form thus far)¹². The translation offered by McDonald et al. (2012: 32) reads: ‘he shall have [-?-] or he shall have stolen them (fem. pl.)’.

My own, alternative translation would provisionally run as follows: ‘whoever/if somebody should [...] or should intentionally steal [...]’ (with a DO in the lost part). In the preceding section of the text there is no single form to which an anaphoric pronoun ιαφ could refer, but this can be put down to the unknown number of letters that have been lost. At all events, if the two perfective futures are paratactically coordinated and stand in immediate proximity, and further precisions that would separate them and hamper comprehension are lacking, the anaphoric reference to the DO does not seem indispensable. One thing seems clear to me: the active participle underscores the intentionality of an illegal action, which for this very reason is not simply an action, but the commission of an offence. In essence, the participle points to premeditation, and the legal consequences require that the action has been completed, which explains the future perfect.

The bronze tablet of Rapino is conducted in Marrucian, plausibly defined as a northern Oscan dialect. It raises many different questions relating to ritual and even to the divinities involved, and its reading is far from clear, since all we possess are drawings and the original document was lost in WWII. In contrast, its syntax seems to be comparatively unproblematic for current scholarship, not least because the transmitted text has been subject to a number of «improvements». I shall argue, however, that the accepted translation is the product of a chain of misconceptions affecting the central part of the document, and that a more elegant account can be reasonably defended. It is impossible in a single study to do justice to all the previous interpretations, and my analysis will zero in on the problems posed by lines 5–10. This part, which arguably depicts the second stage of the ritual, pivots around the form IAFC, which, as should be clear by now, has been unanimously interpreted as a feminine pronoun in the acc. pl. The text reads (according to Mommsen 1846):

AIOS PACRIS TOTAI / MAROVCAI LIXS / ASIGNAS FERENTER / AVIATAS TOVTAI / ⁵MAROVCAI IOVES /
PATRES OCRES TARIN/CRIS IOVIAS AGINE / IAFC ESVC AGINE ASVM / BABV POLEENIS FERET /
¹⁰REGEN[--] PEAI CERIE IOVIA / PACRSI EITVAM AMATEN/S VENALINAM NI TA[G]A NIPIS PED/I SVAM

As in Roccagloriosa, the spelling is IAFC, and not †EAFC,¹³ and it precedes a 3rd person singular future verb form. In Rapino at least, the construction might be fully grammaticalised, which would account for the use of enclitic *-k* (possibly also present in Roccagloriosa if we had

¹² The alternative segmentation ιαφκ λοπουσ (Tocco 2001), which straightforwardly identifies the alleged DO with Marrucian IAFC, can probably be disregarded, but see immediately below. See more recently McDonald et al. (2012), with a discussion of former views, the interpretation of Roccagloriosa as a legal text concerning theft and its consequences.

¹³ Anyway, raising of /e/ in hiatus after early loss of intervocalic *-i-* could justify this rendition, since the whole document has <D> for /e/.

to read $\iota\alpha\phi(\kappa)$ $\kappa\lambda\omicron\upsilon\upsilon\sigma\tau$ with omission of the first $-\kappa$), which served an emphatic or demarcative function that reinforced the syntagmatic unity of participle and the verb¹⁴. And then, $\iota\alpha\phi\kappa/\iota\alpha\phi(\kappa)$ would have become little more than an adverbial, synchronically marking ingressive aspect. In that case, it would be no different from the external aspect marking in Arabic dialects. As implied above, it is difficult to say whether we are speaking about a syntactic calque from the Greek dialects of Magna Graecia but this possibility cannot be rejected out of hand.

The sentence $\iota\alpha\phi\kappa$ $ESVC$ $AGINE$ $ASVM$ $BABV$ $POLEENIS$ $FERET$ is variously translated, e. g. as ‘*eas hac pompa *asum Babo Polenius fert*’ (Bottiglioni 1954: 331), and more recently as ‘these, in the ceremony of these, the Babu, the poleenis, take [them] to roast [them]’ (Dupraz 2012: 193), and ‘at the festival of these (divinities) *babu polfenis* (or *babu* and *polfenis*) will carry these (perhaps pieces of meat) for roasting (*asum*)’ (Weiss 2010: 136–137, fn. 58). Naturally, the only reason to view $ESVC$ as a genitive plural form is the prior assumption that *we have already found the DO of FERET*. But, if $\iota\alpha\phi\kappa$ is ruled out as an acc. pl., the only forms that qualify to replace it in the unoccupied syntactic slot are $ESVC$ and $ASVM$.

Some words are in order as to the intrinsic plausibility of identifying $ESVC$ as a genitive plural form, which crucially hinges on the identification of its stem. It is usually held to be an anaphoric pronoun going back to **eiso-* (see Dupraz 2012: 195–196). Here is where we find the first obvious obstacle: There must have been either monophthongisation, by which $/ei/$ yields $/e:/$ contrary to expectations, or a misspelling, by which $\langle i \rangle$ has been simply omitted. Neither assumption is especially problematic, since l. 1 reads $TOTAI$ for $TOVTAI$, but both require special pleading, and a solution that respects the extant text is preferable.

Secondly, the text is said to refer to a number of divinities mentioned two lines above, which justifies the genitive plural $ESVC$. But this is by no means an unassailable idea, either. In fact, the only divinity mentioned in direct connection to the ritual is $IOVIA$, an epithet that can refer, as traditionally contended, to Demeter, but also to the goddess who was her child by Iuppiter, that is to say Persephone. The only possibility of finding more than one divinity to which $ESVC$ could refer is to coordinate $IOVIAS$ with $IOVES$ $PATRES$ and make both depend on $AGINE$; this is syntactically unconvincing and makes the syntax of the whole text intractable, and it is intriguing that Iuppiter is never mentioned again. As we are going to see, $IOVES$ $PATRES$ depends on $TARINCRIS$. Accordingly, the reference is to one, not several divinities. This is independently suggested by the corollary $IOVIA$ $PACRSI$ which, despite the repeated attempts to correct it into $IOVIAI$, means nothing but ‘may Iovia be favourable’¹⁵.

Thirdly, even under acceptance of the above premises, $ESVC$ is undeniably superfluous from a pragmatic point of view: The reader does not need to be reminded of the destinaries of the festival, *ex hypothesi* Iuppiter and Iovia, nor does their festival need to be distinguished from another one in such a short inscription and in an otherwise unambiguous context. In sum, the translation «in the festival of these» entirely relies on the premise that $ESVC$ *must* be a genitive plural because $\iota\alpha\phi\kappa$ *must* be an accusative plural because it *must* anaphorically retrieve $ASIGNAS$.

I would naturally derive $ESVC$ from **ekso-*. According to Dupraz, there is no single anaphoric example of this pronoun. As we have seen, this compels him to accept a monophthong-

¹⁴ As in English ‘*now* he goes and says’, Sp. ‘*y/pues* va y le dice’.

¹⁵ What is more, the preceding part reading $REGEN[-]$ $PEAI$ $CERIE$ may also refer to her as a Cerean divinity, since she is Ceres’ daughter, but the ending is difficult to assess (see Rocca 1997; Prosdocimi 1997). The readings differ substantially at this point, and we have ST : $REGEN[EI]$ $PEOI$ $CEREI$ $IOVIA$ $PACRSI$; *Ital.*: $REGEN[EI]$ $PIOI$ $CER\langle E \rangle$ $IOVIA\langle I \rangle$ $PACRSI$ (accepting the conceivable but unwarranted correction to $CEREI$ $IOVIA\langle I \rangle$ by Meiser 1987: fn. 51). This problem lies beyond the scope of this work.

isation of **ejso-* for the Marrucinian form (2012: 200), a possibility gainsaid by EITVAM. Note that the idea that *ESVC AGINE* is a phrase with both forms agreeing in the abl. sg., meaning ‘in this festival’ *vel sim.* (see recently Rocca 1997) ails from the same problem: either the pronoun has undergone monophthongisation or its anaphoric nature is not guaranteed¹⁶. But then, this may not be an anaphoric pronoun. It could be a text deictic ablative **eksōd-k(V)* ‘with regard to the above’ > ‘accordingly’ or even ‘thereupon, from there on’, in agreement with the sense reconstructed by Dupraz for **ekso-*.

In turn, the hitherto non-negotiable interpretation of *IAFC* as an acc. pl. introduces distortion in the following section of the text, since no other accusative is expected to occur after *IAFC*. In order to bypass this objection, *ASVM* has been understood as a supine **ad-tu-m* ‘in order to roast’, which expresses the purpose of the action and goes back to the accusative of an action noun, of which *IAFC* is the DO: ‘in order to roast them’, ‘for them to be roasted’. By this expedient, the problem inherent in the lack of agreement vanishes. The resulting construction is then compared to similar Italic ones, like L. *ad visitatum Ciceronem* or U. *anzeriato avef* ‘in order to watch the birds’.

All this is unnecessary if we start from the idea that *IAFC* agrees with the subject of the sentence, *BABV*, and *ASVM* is a substantivated participle **ad-to-* in the acc. sg. neuter that naturally takes its place as the DO of *FERET*. If *ASVM* is a match of U. *ASO* (Um 1 VIb, 50) and L. *assum* ‘roasted’, the meat is not taken to be roasted at the feast; on the contrary, once the meat has been roasted, it is taken to be offered to the divinity. Nonetheless, the meaning of U. *ASO* is unclear. The sentence reads *ERIHONT ASO DESTRE ONSE FERTV*, translated by Weiss as ‘the same person should carry [...] on the right shoulder’. Weiss opens up a number of interpretations for *ASO*, some of them unrelated to roasting (which is not favoured by the general context), and even proposes a meaning ‘axe’ (**akso-*). The Umbrian and the Marrucinian sentences look amazingly similar in that Umbrian *ERIHONT* (a *hapax*) is the subject, *ASO* the DO, *FERTV* (fut. impv.) vs. *FERET* a verb that indicates that someone should bring something, and *DESTRE ONSE* vs. *POLEENIS* the way or instrument in which it should be carried. In the second case, *POLEENIS* stands in the abl. pl., and then, contrary to previous assumptions, it is not a nom. sg. of an adjective or family name in **-ijos* agreeing with the subject *BABV*¹⁷. There is little more that can be said about this with any degree of certainty, except that both *ASO* and *ASVM* are accusatives, both occur as a DO, and both could designate the same thing. To recap, I translate the sequence as ‘the *babu* shall thereupon go and carry the roasted? (meat) at the feast in arms/trays? (as an offering) to [...]’.

Let us now take a look at the immediate antecedent of this sentence. *TARINCRIS* is nearly unanimously believed to be the gen. sg. of a place name in apposition to *OCRIS* or a divine

¹⁶ Note the problems surrounding the origins of the ending *-<E>* of *AGINE*: if it were an ablative, we would expect †*AGINVD*. And if it was a locative ending (whatever the synchronic value), the locative *PEDI* in the last line would be unaccounted for. Accordingly, this is an instrumental *-ē* from IE **-eh₁*, as reconstructed for the Umbrian ablative *-e* (Rix 1994: 26), Tikkanen (2011: 29). According to Meiser (1987: 112) it is down to the alleged South-Picene substrate. On the most economical assumption, it is suggestive of a Common Sabellic ending **-ē*, only later replaced in Oscan by the thematic ending, but preserved in peripheral Oscan varieties (the same would apply to Pael. *AETATE*).

¹⁷ One can hardly resist the temptation of identifying the protagonist of this ritual with Greek *Baubo*, also attested since Hellenistic times as *Babo*, originally an old woman who, according to the myth, managed to make the distressed goddess Demeter laugh. This character is also found in the form *Babo* on inscriptions as the receiver of cult beside other divinities (*IG V: 12, 227*), and still present nowadays in fertility folk rituals held in Thrace and Greece, where she (or he, since it is often a man in the guise of a woman) carries a basket or a cup. The appearance of a character with mythological associations is easier to explain than an otherwise unknown personal name, devoid of the slightest hint of an Italic ancestry and unexpected in a ritual prescription.

name agreeing with IOVIAS. Meiser (1987: 113, fn. 50) stated that there is no paradigm of which this form could be the genitive and corrected into TARINCRIS, which is entirely unwarranted¹⁸. What is more, the resulting syntax has never been cogent. These are some of the advanced translations: Pisani (1953: 115): «Prosciae ferantur auspicatae civitati Marrucinae Iovis patris ocris, Tarincris Ioviae pompa» (una località chiamata Tarincris Iovia). Vetter (1953: 153) does not fare better when he translates «non prosectae accipiuntur a marruco populo Iovis patris arcis Tarincris Ioviae causa». More promising is Bottiglioni's approach (1954: 331), who translates «Iovis patris ocris Tarincris Ioviae pompa». More recently, *IItal.* I: 232 is both non-committal and forced: 'the portions [...] by the pronouncement (?) of Jupiter the father - of the Tarincrine Mount - (and of) Jouia, are brought'.

The correction of TARINCRIS into TARINCRIS has proved, if anything, detrimental to the global comprehension of the text. TARINCRIS can be taken at face value as an appellative noun in the ablative plural, and the sequence IOVES / PATRES OCRES TARIN/CRIS IOVIAS AGINE can be translated as 'in the festival of Iovia, (held) at the top of the hill (= acropolis) of Iuppiter'. This is consistent with the fact that Italic cult sites were often situated in peaks, especially those related to Iuppiter. TARINCRIS 'high-mountain' is a compound similar to L. *mediocris* 'middle-mountain' > 'average', and may go back to **tarn(o)-okri-βos*. While the expected ending as a result of final vowel syncope and assimilation is *-iss*, it has passed largely unnoticed that this document simply does not use double spelling, and consequently does not note geminates, nor, as in this case, the difference between tense and lax sibilant sounds. Medial syncope would have had the same effect as in O. *patensins* < **pat̥sē-* < **patna-sē-*, but the resulting form would have undergone context-sensitive raising **tarẽkri-* > *tar̥kri-*, and is in this respect comparable to ASIGNAS (*-sĩn-* < **-segn-*). The form *Tadinates* occasionally brought to bear on this matter (under the assumption that its base might have been rhotacised in Marrucian) is in all likelihood unrelated.

The nearest cognates of TARINCRIS are ^BToch. *tarne* 'summit, peak', Hitt. *tarna* 'head, skull', from **tr̥(H)-no-* (see DTB: 298, EDHIL: 845–846). DTB quotes a suggestion by Craig Melchert to the effect that both forms could be grouped under a single preform **tr̥H-no-*. In that case, the Italic form would become their full match under the modified version of the «*palma*»-rule, according to which **C̣r̥H.CV-* yields Italic **Cár.CV-* (see Prósper 2020). TARINCRIS consequently meant 'high-mountain' and designated the summit of a hill devoted to Iuppiter in which the rites were performed.

4. The fate of Indo-European sibilants in Oscan: an overview

At this point, it is necessary to revisit the Oscan phonemic system, which must be established starting from documents attested in three different alphabets and is fraught with indeterminacies and apparent contradictions, especially as regards sibilants (cf. Lejeune 1970; Zair 2016). Even factoring out scribal errors or hesitations in the rendition of geminate segments, the extant testimonies are compatible with the following scenario:

a) Oscan had a lax phoneme /s/ that was contextually realised as a voiced [z] (in intervocalic position, in coda position before a sonorant or a lax/voiced obstruent, and in post-syncope onsets after a sonorant) or as a voiceless [σ] (in coda position before a tense/voiceless obstruent, in auslaut, or in internal post-syncope onsets after voiceless stops). The latter variant may have been prone to aspiration and eventual effacement.

¹⁸ Cf. MV 1, *IItal.* I: 231, WOU: 735.

b) In early Oscan, /s/ stood in contrast with a tense /s:/ which mostly went back to clusters. As implied above, I provisionally assume that the phonemic contrast was one of lax vs. tense, and additionally suggest that it arose when the first intervocalic clusters including a sibilant, like IE *-tst-¹⁹ and *-ts-, became /s:/ (to which we may add *-ks-, *-ps- > /s:/²⁰). The process as a whole may have started in Proto-Italic, since /s/ already had a voiced intervocalic allophone at that stage²¹. Unlike Latin, Oscan had lax sibilants in word-final position, so that, for instance, the suffix of an -s-stem contained a phonemic lax sibilant in every case of the paradigm.

c) The contrast /s/ - /s:/ was neither consistently spelt nor, in all likelihood, existent in all positions from the beginnings of written Oscan (for instance, it was certainly neutralised in initial position). It was mostly rendered <s> vs. <ss> in the Oscan alphabet, <ζ>/<σ> vs. <σ>/<σσ> in the Greek alphabet, and <z> vs. <s> in the Latin alphabet.

d) As far as epigraphy in the national alphabet is concerned, the contrast is attested in medial and final position, both intervocalically (cf. *fluusai* ‘to Flora’, Sa 1, Agnone, vs. *essuf* ‘there’, Sa 4, Pietrabbondante), in onsets after sonorants (*patensíns* ‘aperirent’, Cm 1, Abella, vs. *kenssurineís*, Cp 24, Capua), in codas (*fiínsnú* ‘temple’, Cm 1, Abella, vs. *kerssnaís* ‘dinners’, Cp 31, Capua; *fust* ‘will be’, Cp 31, Capua, vs. *ess-kazsiúm* ‘access’, Cm 2, Campania), and in word-final position (as in *aasas* ‘altars’, Sa 1, Agnone, vs. *feihúss* ‘walls’, Cm 1, Abella, *meddiss* ‘magistrate’ <*-k-s, Cm 6, Nola). There are several examples of <h> for final /s/ before word-initial <s>-, namely *upsatuh sent* ‘operati sunt’ (Si 4, etc., Teanum) and *puiieh sum* ‘cuius sum’ (Cp 41, Capua). Final <s> is also sometimes omitted in the nom. sg. of proper names. This is undoubtedly indicative of lenition²².

e) We have few instances of IE intervocalic /s/ in the Greek alphabet, and they show contradictory spellings: εἰζίδου, εἰσειδου (Lu 5, 11, Rossano di V.), φλουσοι (Lu 13, Tricarico), as opposed to the gentilic κωσσωνω (*IItal.* III: 1475–77, Petelia 2), etc. It should be noted that <ζ> is used in medial position (*IItal.* III: 1485, Caulonia 2, see below 5.4) long before the only text containing it in initial position. The epithet accompanying the dative ζωφῆι ‘Jove’ in Lu 35 is πιζῆι. Lejeune (1970: 310) reconstructed a stem *pīd-es- «du nom de la source, cf. grec πίδαξ», which is most unconvincing²³. By the same token, one could propose an -i-stem action noun

¹⁹ From now on, I shall use this notation for any IE clusters containing a dental sound in immediate contact with /t/, in my view yielding the same outcome.

²⁰ As in Vestinian OSIIINS (MV 2), with a four-stroked allograph of <s> reflecting a tense sibilant, <PItal. *op-s- ‘made’, and O. OSINS <*op(i)-sī- ‘adsint’ (Lu 1, Bantia); cf. Rix (1993: 336).

²¹ Cf. Untermann (1968), Stuart-Smith (2004: 91). This contrast cannot be equated to that of simple vs. geminate obstruents or sonorants, however. We cannot assert that what I represent as /s:/ actually behaved like a cluster and closed the first syllable in intervocalic position, or that the contrast was one of length rather than, for instance, a combination of other features, like aspiration or voice. In some contexts the intervocalic sibilant must have been weakened and dropped earlier. Cf. Weiss (2017); Prósper (2018a) for superlative forms, and now Prósper (2019a) for these and other instances of Venetic and Italian Gaulish *-VzV- > *-VhV- > -V̄-.

²² If this is a valid criterium in order to establish an etymology, it follows that the recently uncovered *nestrúis* on a tile cannot possibly go back to the comparative corresponding to the superlative *nessimas* ‘next, closest’ (as per La Regina 2017). It would have given Sabellic **nessistro-*, matching the superlative form **nedzizVmo-* > **nessimo-*, to judge from SP. *meitistrúí*, matching the superlative **meitizVmo-* > **meitimo-* > *meitims* ‘most gentle, dearest’, or the Lucanian place name Νουμίστρων (Ptol. 3, 1, 65), *Numistro* (Livy, *Ab Urbe* 27, 2), from **nomh₁-is-tero-*. It may alternatively be traced to **nes-tero-* ‘our’, L. *noster* (the root vocalism was modified in analogy to **ues-tero-* ‘your’), a possibility already considered by WOU: 499. The same probably applies to *nistrus* (Cp 37, Capua). In MINSTREIS (<**ministero-*), syncope of both the second and third syllables, which may have operated at different stages, neither compromised the semantics nor gave rise to undesirable phonotactics. Additionally, we have to reckon with analogy, e. g. **maīs* / **maīstro-* ‘more’ vis à vis **mins* / **minstro-* ‘less’, so the processes involved are not entirely clear.

²³ The rest of the hypotheses about this name presuppose errors in the anlaut or declensional type and can be outright rejected (see WOU: 562).

**k^uejs-i-*, **k^uis-εj-* ‘survey’ (from **k^uejs-* ‘auf etw. achten, wahrnehmen’, *LIV*: 381) which eventually became an agent noun, and relate this formula to *Iuppiter Quirīnus* (< **k^uisi-h₁n-o-*) or even to the *Quirītes*, a name that designated the citizens of Rome in peacetime duties, when they were seeing to their own or public business corresponding to their capacities (if one is allowed to reconstruct **k^uisi-i-t-* ‘survey-goer’; the multifarious, often untenable associations put forward for this name since ancient times lie beyond the scope of this work). In that case, <ι> would stand for /ε/, as is sometimes the case.

The Greek alphabet reflects no contrast in codas any longer, since the phoneme distribution was by that time contingent on the voice specification of the following consonant, as in αἰζυῖω ‘bronze-’ (Lu 5, Rossano di V.) vs. εστουδ ‘let him be’ (Lu 62, Roccagloriosa), the loanword κραιστοσ (Lu 6, 7, Rossano di V.), and we no longer find the double spelling <σσ> in any case.

The contrast between a voiced and a voiceless sibilant emerges in initial position only after **dj-* has been fricativised, as transpires from one single case in the Greek alphabet, the dative ζωφηι ‘to Jove’ (Lu 35, Rossano di V., around 200 BC). By contrast, this name is rendered *diúvei* (Sa 1, Agnone) or *iúvei* (Cm 9, Cumae) in the national alphabet. As regards phonetics, *all* the synchronic contrasts are now likely to translate into [z] vs. [s] in onsets, that is to say in initial position and word-medially. This is suggestive of a reorganisation of the phonemic contrast, which has been abandoned in coda position but has arisen in word-initial position, where it was previously non-existent. I am agnostic as to whether this is a dialectal (cf. Zair 2016: 110–112) or a chronological problem, or both²⁴.

f) We find exactly the same distinction in the Latin alphabet, but it is much more systematically spelt: cf. ZICOLOM vs. SVAE, CENSAZET vs. ESVF (Lu 1, Bantia), though in the Oscan dialects it is ignored in favour of a cover-symbol <S>, as in Paelignian and Marrucinian. There is no trace of the double spelling anymore, in spite of the same document containing <LL>, <DD>, and in codas the contrast has been given up wholesale, as in MINSTREIS (cf. L. *minister*), MEDDIS, etc. It cannot be put down to chance that both the Greek and the Latin alphabet have chosen these letters for the same contrast²⁵. A subphonemic spelling system would be comparatively anomalous, but in this case we would find no fewer than two; this is hardly conceivable when it comes to the use of the Latin alphabet, in which <Z> played a very minor role. It follows from the abovesaid that the Greek and Latin alphabets are noting a phonemic contrast that is no longer one of tenseness, but of voice.

g) All this has some bearing on the problem of why Oscan borrowings from Greek or Latin show a geminate in unexpected slots, specifically in the sequence <sst>: cf. *kvaísstur* (Po 3, 4, Pompei), *perisstyl[eis]* (Cm 1, Abella), *passtata* (Po 5, Pompei), as opposed to the well-integrated Latin loanword *trístamentud* (Po 3, Pompei), etc. Zair (2016: 163–164) notes that «the spelling of this sequence as <sst> is restricted to loan-words from Latin and Greek», and that «there is evidence of gemination (or ambisyllabicity) of /s/ before /t/ in both Greek and Latin» (fn. 27); he further observes that «we do not find <σσ> in these environments in the Greek inscriptions: κραιστοσ (Potentia 9/Lu 6, Potentia 10/Lu 7) [...] This could be a difference in the orthography of double letters between the Oscan and Greek alphabets ([sst] in borrowed words treated as any other geminate in the Greek alphabet, while being nearly always written in the Oscan alphabet)».

²⁴ Concerning the date of the adoption of writing rather than that of the individual inscriptions, which in the case of the national alphabet can be situated in the second half of the 5th C. BC at the latest.

²⁵ This is timidly conceded by Stuart-Smith (2004: 91, fn. 111): «This convention may have arisen because [z] from /-s-/ became identified with /z/ (< **dy-*), which was represented with <ζ>». Sometimes, this is described as the intervocalic allophone [z] of /s/ (cf. Zair 2016: 105–109; 129–130), which is contradictory, given the obvious contrast in initial position.

In my view, the use of <σ> in borrowings attested in Oscan in the Greek alphabet is simply reflecting neutralisation of sibilants in coda position. By contrast, <ss> in the Oscan alphabet is not noting a geminate proper, but a tense sibilant that was still phonemic in that context at that time and place. <sst> cannot have been restricted to loanwords, even if no vernacular sequence [s:t] is attested ([s:k] in *esskazsium* is strictly equivalent, however). In fact, speakers of languages possessing the phonemic contrast /s/ — /s:/ in intervocalic position, like Greek or Latin, tend to maximise it not only by lengthening the articulation of /s:/, but also by shortening /s/ as much as possible. In coda position, however, where it is usually non-contrastive, /s/ tends to have an allophonically longer duration, and preconsonantal resistance to aspiration is then greater. This may be the ultimate reason for the sporadic writing <σστ>, <σσκ>, etc. in Greek epigraphy: it is not likely to reflect the ambisyllabicity of /s/, as occasionally suggested, but is more plausibly related to the *longer* phonetic duration of /s/ in codas, which made it phonemically ambiguous for the speakers²⁶.

Conversely, as observed above, Oscan had a weak sibilant /s/ which came to stand in contrast with /s:/, the product of the simplification of some preconsonantal clusters, both in intervocalic and in coda position. As a consequence, Latin or Greek sibilants, which were usually realised as tense in codas, were identified by the Oscans with their own tense phoneme, and systematically rendered <ss> in the national alphabet. In Oscan in the Greek alphabet, as we have seen, the contrast was often expressed by <ζ> vs. <σ> but had been neutralised in codas, where their use is contingent upon the voice specification of the following segment. As a consequence, we do not *a priori* expect to find <σστ>, <σσκ>, etc., whether in patrimonial forms or in loanwords from Greek (unless, of course, one could prove that blind imitation of Greek written models exhibiting this particular anomaly was at play).

5. The Indo-European sequences *-ns-, *-ns# and *-nt^st- in Italic

The changes associated to the unstable cluster /ns/ in Italic are far from well known. Contrary to common belief, the phonotactic side is not irrelevant, and it is necessary to distinguish carefully between the prevocalic and preconsonantal outcome.

5.1. The IE sequence *-Vn.sV- may have passed to -V̄sV- in all the dialects, possibly at an early date. In fact, loss of the heterosyllabic nasal segment in this context is a widespread phenomenon in the Indo-European family: it is a very early change in Celtic, and occurred in several Germanic branches (specifically Anglo-Frisian and Scandinavian) and Balto-Slavic. The poverty of reliable information coming from Sabellic stops us from venturing any far-reaching assumptions. While some scholars (notably Buck 1904: 72) have proposed an early Sabellic evolution -Vns- > -Vn^s- on the strength of forms like U. *menzne*, *uze*, O. *keenzstur*, *kenzsur*, these are unreliable pieces of evidence: the whole lexical family of the Oscan form is now considered to be a borrowing from L. *cēnsor* (WOU: 382–386). On the Umbrian forms see below 5.4. Since the forms containing this inherited sequence are comparatively few, it may have been the case that the resulting intervocalic sibilant in -V̄sV- was phonemicised as a tense/voiceless sibilant, which possibly merged in Sabellic with the one going back to geminates and clusters. In other words, loss of the nasal segment, however early, necessarily *followed* Proto-Italic voicing of intervocalic /s/, and consequently stands in a counterfeeding relation to it. IE /s/ never became voiced by the action of a preceding nasal, and the cross-linguistic generalisation obtains that

²⁶ See Méndez Dosuna (1996) for these typological considerations and their application to the Greek case.

fricatives, as opposed to stops, usually fail to undergo voicing after nasals²⁷. Let us now examine our extant evidence:

U. *iseçeles* (abl. pl. fem., Um 1 IV 7, held to stand for correct *tiseçetes*) is said to go back to a past part. **en-sek-eto-* ‘cut’ with loss of /n/ and lengthening of /e/ across morpheme boundaries. It is immediately preceded by *aseçetes* (abl. pl. fem., Um 1 IV 7), and earlier by *aseçeta* (abl. sg. fem., Um 1 IIa 29), in turn possibly from a very similar compound **an-sek-eto-* ‘not yet cut’. This could point to early loss of the identity of the preverbs, which would indicate that *-VnsV-* generally gave *-V̄sV-* in Umbrian. Couples like *snata* vs. *asnata* (Um 1 IIa 19), which are equally held to contain the same privative prefix *an-* but *systematically* omit the nasal in writing, are also likely to have undergone early nasal loss and probably lengthening even when the sibilant preceded another consonant, at least across a morpheme boundary (see below 5.4 for Sabellic *-n#s-* > *-nʰs-*). We have no information about the evolution of **-VnsV-* in Oscan²⁸.

The arguably early date of this phenomenon as a whole is seemingly belied by the regularity of the Latin notation of /n/ in its original loci. The first attestation of forms without the nasal is the epitaph of Scipio Barbatus’ son (*CIL* I²: 8, 9; 3rd C. BC, Rome), where we find *CESOR* and *COSOL* (borrowed in Oscan as *kúsúl*, Po 54, Pompei, cf. Poccetti 2006). Relative chronology is of little help here. In point of fact, a number of examples have been invoked in favour of the idea that the change deleting nasals before fricatives was not early, since it was *preceded* by vowel reduction in closed syllables and raising of *-enK-*, in turn *later* than vowel reduction (see Weiss 2009: 120). But the validity of the first obstacle is contingent upon the chosen etymology (if *anhēlus* is from **anaslo-*, not **an-anslo-*, the problem vanishes)²⁹.

Let us suppose that /n/ had been effaced in this context before the creation of the Latin alphabet, but later than the Proto-Italic voicing **-VsV- > -VzV-*. As regards etymological **-Vn.sV-*, it would be feasible to recover the lost nasal segment (even if the preceding vowel had already been denasalised, which is debatable), from synchronic morphophonemic alternations, *id est* from sequences going back to **-ntʰt-*, which may have been simplified and lost the nasal in Latin some time later, but possibly before or around the time at which the alphabetic writing was adopted. In these sequences, the existence of an underlying nasal was recoverable in view of such morphophonemic alternations as *fendō - fēnsus*, in which according to this hypothesis the nasal had been effaced in the past participle. In imitation of these cases, which were comparatively frequent, such forms containing the inherited heterosyllabic sequence **-n.s-* as *ānsa* [a:sa:] ‘grip’, *ēnsis* [e:sis] ‘sword’ could be rightly interpreted as underlying /ansa:/, /ensis/ and were accorded a distinctive spelling which prevented confusion and promoted orthographic uniformity, and vowel length in a sequence *-V̄s-* was correctly parsed as derived from the underlying nasal (it should be clear by now that, at any rate, the upper or cultivated classes might have preserved vowel nasalisation longer). By that time, intervocalic sibilants had been voiced and progressively weakened into an approximant, as in /a:sa:/ [a:za:] ‘al-

²⁷ According to one theory (Vaux 1998), voiceless fricatives are specified as [+spread] and voiced fricatives are specified as [-spread]. Since the feature combination [+nasal][+spread] is not allowed, nasals cannot spread voicing to a fricative.

²⁸ Poccetti (2016: 357) argues that *-ns-* is generally preserved in Oscan, but none of his examples reflects etymological *-ns-*: *patensins* is the product of samprasarana, *censaum* is a loanword, and $\phi\epsilon\nu\sigma\epsilon\omicron\lambda$ /*fensernum* on coins (nCm 6a, b) goes back either to a **-tV-* derivative of **g^{wh}en-d^h(h₁)-* ‘attack, kill’ or to **d^heh₁nes-* ‘yield’, as in L. *fēnus* ‘interest’.

²⁹ As for the second, Weiss (fn. 19) invokes **k^uenk^u-noj* > **k^umx-noj* > *quīnī* ‘five at a time’. But, beside the fact that these two changes are in principle independent, vowel raising between two velar sounds must be quite early since the best term of comparison is **kenk-to-* > L. *cinctus*, U. *šihitu*. I would then start from **k^uijx-to-/no-* > **k^ui(x)tos* >> *quīntus*, **k^ui(x)noj* > *quīnī* vs. a cardinal **k^uojk^ue*.

tar' > *āra* (where the underlying /s/ could be positively recovered from alternations like **flōs*, *flōz-es*)³⁰.

In short, Latin might have used morphophonemic writing from the beginning, a well-known means of keeping the visual uniformity of the paradigm. Once the spelling of the main allomorph, in this case the one synchronically preserving the nasal, as in *fendō*, *condō*, was chosen and assigned to the morphologically derived forms like the past participles and the action nouns, the spelling <NS> naturally spread to the rendition of forms that showed identical phonetics but lacked the requisite inner-paradigmatic alternations. The «correct» usage in forms which were not individually subject to these alternations fell out from this practice straightforwardly: in fact they were a minority, and they could often be parsed as past participles, as in *ānsa*, *dēnsus*, or nominal derivatives, as in *mēnsis*, as well as the origonyms in *-ēnsis*, which may have contained *-tst-. The erstwhile existence of a nasal could be additionally retrieved in compounds like *cōnsol*, *cōnsulere*, which would definitely have favoured morphological spelling. On the other hand, the overgeneralisation of the pattern to forms without alternations of either origin would have had a distortion effect if there had been more than one source for these forms. In other words, if there had been any other IE sequence giving *-V̄s-* in non-alternating contexts, hypercorrection leading to insertion of <n> would probably have occurred. This implies that degemination in the context *-V̄ss-*, as in *cāsus*, *causa*, took place posterior to the emergence of Latin orthographic conventions, and that at that time there were contrasting pairs like /ansa:/ 'handgrip', /a:sa:/ 'altar', /a:s:a:/ 'burnt'.

Later on, the distinctions were largely obscured by rhotacism, geminates were simplified after long vowels, and for most speakers, especially when they were illiterate, *ānsa* and *āsa* 'burnt' were simply homonymous, and there was no reason to accord them a different phonemic status anymore. Consequently, spellings like FORMONSVS constitute the *late*, hypercorrect side effect of this merger. Only the literate, educated individuals persisted in the distinction and even made a point of pronouncing the nasal as a token of high status and distinction. More crudely put, the pronunciation of a nasal in this context is entirely artificial and based on the psychological tendency to establish a biunivocal one-to-one correspondence between alphabetic signs and phonemes that makes Latin orthography so easy and English orthography so tricky to learn. Classical testimonies about the alternation of the realisations [V:s], [V:ns] or [Vns] simply reflect the perplexity of the upper literate classes, who had nothing close to the modern notion of diachrony, but suspected that what was in fact only spelling pronunciation must have been more «correct» or elevated than everyday usage. Specifically, the occasionally reported realisation [V:ns] introduces the effect of nasal loss without nasal loss, because it unduly conflates written and spoken word, and testifies to the distance between spelling and phonetics³¹.

³⁰ To judge from cases like L. *cēnseō* < **k̑ns-eh₁-*, this change presupposes [ŋ] > [æn], which in turn must have been quite early. One could, for instance, object that a two-stage evolution [ŋ] > [an] > [æn] is more plausible and brings Latin into line with Venetic and Sabellic. But then, forms like *grandis*, *scandō* or *sanciō* must have missed the last shift for some reason. At any rate, forms like *inscēnsiō* are likely to be the product of an analogical proportion on the present indicative, in this case *inscendō* (*vis à vis scandō*; *scānsus*) and not the direct outcome of *-skansso- through reduction [a] > [e] followed by loss of /n/.

³¹ When Cicero reports in his *Orator* a pronunciation *in-doctus* but *in-sanus* he is accordingly testifying to the morphological restoration of the nasal in compounds, not to its preservation, since he fails to eliminate the vowel length resulting from nasal effacement. That he (or the high class as a whole) opted for partial restoration of the prefix (undoubtedly aided by the ironclad stability of the Roman orthography) is immaterial to the fact that he was said to pronounce *foresia*, *hortesia*, *Megalesia* by Velius Longus (incidentally, *-ēnsis* is probably the best example of a non-lexical intramorphemic cluster [V:s], and the only one in which omission of <N> was by that time widely tolerated in writing). The isolated Latin sequences MENSSES (Rome), COMITATENSSI (Picenum, 4th C. AD) are most

If, as I contend, the designers of the earliest Latin writing system felt it was convenient to introduce nasals for the sake of homogeneity and economy in places in which they were being progressively given up or no longer actually realised by at least lower social layers, their decision amounted to deduction. In spite of much of current scholarship, it is idle to invoke the authority of Greek or Oscan borrowings: they are often taken from the written language, and are accordingly as likely to be diagnostic of the preservation of the nasal segment at that time as contemporary Sp. *defensa*, *cónsul* or *infierno* to bear witness to the Latin pronunciation of, possibly, any period after the writing tradition set in³². The fact that the effects of nasal loss and the ensuing compensatory lengthening surface in the Romance languages transparently cannot mislead us into thinking that Late Latin is the only conceivable *terminus ante quem*, and that, as universally assumed, this must be a comparatively late phenomenon.

Only in absolute final position (or, more generally, in complex codas) was the original nasal segment impossible to restore in Latin, as in the acc. pl. ending **-ons* > *-ōs*, since the outcome of *-V̄s* was identical. In these endings, the resulting form eventually merged with nasalless forms, e. g., the fem. sg. *-ās*, in contrast to such proclitics and prefixes as *trāns*, which often appear preceding a vowel, and in such cases of final vowel syncope as *mōns*, *montis* or present participles in *-ēns*, where it was also restored in writing for morphophonemic reasons.

To recap, the shift **-Vn.sV-* > *-V̄.sV-* is likely to be shared by all the Italic languages, even if it may have been an independent process taking place at different dates and language stages, and we can at most vaguely speak of a Common-Italic tendency. The change may have been gradual and socially stratified, and the date(s) in which nasal effacement was completed cannot be ascertained, but in any event it may have preceded the period of our earliest documents.

5.2. **-ns(-)*, **-ŋs(-)* in coda position including auslaut

5.2.1. The sequence *-Vns.C-* becomes *-VssC-* in Oscan, *-VfC-* in South-Picene and probably Umbrian, and *-V/V̄sC-* in Latin and probably Venetic (note that in the extant examples the cluster is additionally intramorphemic).

L. *mōnstruum* and SP. *múfqlúm* ‘monument’ are habitually traced to **mones-tr/lo-* (Marinetti 1985: 118, 127; cf. *WOU*: 480), but Vine’s alternative reconstruction **mons-tlo-* (1993: 127–130) is more compelling (since, to begin with, post-syncope *-ns-* would not be certain to yield *-f-* in South-Picene). The erstwhile existence of a nasal segment could be deduced in *mōnstrum* from the verb *moneō*, but was ignored in the less transparent *mōstellāria*, as in *mēnstruum* vs. *trimēstris*. But the regular, *inherited* forms could have been **mōstrom* and **mēstruom*. In that case, *mostellaria* and *sēmestris* would not only have regularly lost the nasal segment, but would additionally have contained short vowels all along.

As for SP. *múfqlúm*, the first vowel is reflective of raising of /o/ before the nasal, and the vowel may consequently never have been long³³. Interestingly, if we assume a homogeneous behaviour of nasal + fricative clusters in codas, this is suggestive of compensatory lengthening

unlikely to be rendering a non-existent phonetic sequence [ns:]. they reflect a compromise solution between orthography and the usual hesitation [V:C]/[VCC], usually termed «*Iuppiter*» or «*flamma*»-rule, which has given rise to the uncommon spelling *MESSSES* (Transpadana, Britannia, Proconsularis). Poccetti (2006) believes all the variants to be somehow phonetic, which I deem very unlikely. See Adams (2013: 178–182) for the opinions of the ancient grammarians on this matter.

³² In spite of this, most educated native speakers would swear these forms are patrimonial and have always contained [n], and handbooks often misleadingly speak of «preservation» of the nasal in learned words.

³³ <úm> and <om> then reflect the respective outcomes of IE **-om#* and **-ōm#*. According to Weiss (1998), the former has been raised to *-om#* (<úm>) before the latter was shortened and lowered into *-om#* (<om>).

in the Proto-Italic sequences **-nx.n-* and **-nx.t-* having taken place only *after* the progressively lenited (post-)velar sound had become debuccalised into /h/³⁴.

It follows that <ω> stands for /o/ in O. κωσ(τ)ιτ (?3rd pers. pl., Lu 5, Rossano di V.), to judge from examples like πωμπονις (in the same document), or the acc. sg. ending -ωμ. The nasal segment was trivially omitted in writing but probably never lost in a transparent compound **kom-st-*. Consequently, *eestint* (3rd pers. pl., Sa 1, B1, Agnone), if from **en-st-*, would be the only case of lengthening in codas after nasal loss. In fact, as often remarked, it is more likely to continue the Sabellic prefix *ē-* from **ek-* attested as O. *eh-*, U. *ehe-* (Meiser 1986: 167) and *eestint* can then be translated as ‘exist’, or possibly ‘outstand, be remarkable’.

Conversely, O. *esskazsium* ‘disembarkation (point)’ (Cm 2, Campania), which WOU: 235, in the footsteps of Mario Russo, compares to L. *ēscēnsiō* and traces back to **esskansseom* (< **eks-skand-tej-o-*), is much more likely to go back to **en-skand-tej-o-*, a full match of L. *īnscēnsiō* ‘embarking’. This noun may have had a specialised meaning ‘embarkment place’; alternatively, it simply designated the staircase access that ran upwards from the sea to the temple of Minerva. As observed above, an ablative prefix would be expected to give **ē-*, and the attested form would have been *teeskazsium*.

5.2.2. The word-final sequence **-ns#*, attested only in the accusative plural endings, shows the same outcomes in Sabellic as in coda position, and a preceding short vowel regularly undergoes syncope in athematic inflections

In the consonant stems, **-ns#* is attested in O. *usurs* ‘?’, *fakinss* ‘actions’, *aginss* ‘actions, rituals’, U. CAPIF ‘offering tray’ (< **kapid-ns*), *frif* ‘fruits’ (< **frūg-ns*), U., SP. *nerf* ‘(noble)men’ (< **ner-ns*, respectively Um 1 VIa and SP TE 6, Penna Sta. Andrea).

In the *-i-*stems, the acc. pl. **-i-ns#* surfaces in Umbrian as AVIF, AVEIF, AVEF, which reflects *-ef* (without compensatory lengthening), and not *-if* (from **-if* or **-īs*). Restoration of the stem vowel *-i-* may have been favoured by the undesirability of an outcome **auf* > **ōf*, however. In SEVACNE(F) ‘sollemn’, vowel loss would have resulted in samprasarana, creating a skewed paradigm. In turn, TREIF/*tref* ‘three’, straightforwardly renders /trɛf/ (from **trins*) and may have partly served as the model for the other forms (and one does not see why it should have been refashioned from earlier, allegedly regular **trif* or **trīs*).

There is additionally no reason to believe that U. *manf* ‘hands’ is not a *-u-* stem like the abl. sg. *mani* or the loc. sg. *manuve*, and in that case it must have undergone regular syncope without subsequent restoration of the stem vowel, since, in contrast to the above *-i-* stem examples, it caused no real disturbance to either the uniformity or transparency of the paradigm³⁵.

The Oscan thematic acc. pl. forms *feihúss* and *bravús[s]* (Cm 1, Abella) are hardly diagnostic, since for probably dialectal reasons peculiar to Samnium and some parts of Campania, these forms show a short vowel /o/ in line with the rest of the endings in which a long vowel would be expected, like abl. sg. *-úd*, nom. pl. *-ús*. By contrast, Umbrian shows <u>/<v>, which points to /o:/ > /u:/ (*turuf*/TORV). Consequently, the synchronic endings are O. *-oss/-üss*, U. *-ūf*. In my present view, these forms have reinserted the thematic vowel by analogy with the

³⁴ This is fully compatible with the idea that this segment has undergone *j*-prevocalisation in Venetic, see Prósper (2018b).

³⁵ In spite of virtually all previous scholarship, summarised by WOU 450. Klingenschmitt (1992) simply ignores the obvious solution when he states that this acc. pl. has been remodeled on that of **ped-f* ‘feet’, for which there is no reason whatsoever. For the stem **manu-* in Oscan *manim* and a new reading μανο[υμ] of Lu 62, B7, Rocca gloriosa, cf. now Zair (2016: 207). On the origins of **manu-*, cf. Neri (2012: 185, fn. 6).

nom. pl. *-ōs after final vowel syncope, since all the plural forms contained a thematic vowel -ō/ō-. For all we know, this may have happened independently in the two branches of Sabellic.

If the feminine correlate of *-ons was Proto-Italic *-ās, and not *-āns, with Indo-European loss of the nasal, the attested Sabellic endings, O. -āss (*vīass, ekass*), U. -āf (*vitlaf, eaf*), must have come into being by analogy with the masculine. By contrast, the South-Picene acc. pl. fem. ending -as in *qoras* ‘stone monument (vel sim.)’ (Sp TE 7, Penna Sta. Andrea), otherwise identical to O. *kúrass* (Sa 10, Pietrabbondante) may be the only Sabellic ending to continue the inherited *-ās unchanged.

Latin shows -V̄s in all the inflections: cf. L. *eās, deōs, patrēs*. Venetic is ambiguous: our best example thus far is *te.r.mon.io.s de.i.vo.s* ‘deos terminales’ (LV: 125, Vicenza). But one early example reads *donal.s.to .a..i.su.ś* ‘donavit deos’ (LV: 243, Gurina), where the acc. pl. still shows the symbol <ś> for the tense sibilant that later fell into disuse, probably because of the progressive weakening and eventual effacement of the lax sibilant in a number of contexts. This leads me to suspect that Venetic may have teamed up with Oscan in this respect, and that *-ns# > *-n^ts# may have been an areal feature covering Sabellic and Venetic (cf. Prósper 2018a for the similar northward expansion of other innovations).

To recap, Proto-Sabellic *-ens, *-ins and *-uns regularly lost their stem vowel by syncope somewhere down the line. The undesired grammatical consequences of this change were counteracted by partial restoration of the stem vowel where needed. Contrary to one widespread idea, it is illogical to take syncope to have exclusively happened in the consonant stems, in which *-ens goes back to *-n̥s. If the nasal remained vocalic long enough, it could even have escaped syncope³⁶. There is also every reason to cast doubts on the assumption that compensatory lengthening *must* have taken place, and that the allegedly Proto-Italic thematic ending -ōf/-ōs is regular and the rest of the stems, failing to show the expected outcome -ēf, -īf and -ūf, are the product of analogical processes.

5.2.3. A phonetic explanation

The divergent outcomes of -ns in coda position have never been properly accounted for beyond mere description. This has always included a number of versions of an unwarranted shift -s > -θ, which for some reason only took place when a nasal or rhotic immediately preceded the sibilant. In point of fact, in the world’s languages it is usually the nasal that adapts its articulation to the following obstruent. This is the norm with stops but not with fricatives, however, the resulting clusters often remaining non-homorganic (see Repetti 2002). Accordingly, it is unlikely that the whole process was set in motion only because the apico-alveolar sibilant had spontaneously advanced its place of articulation to the point of becoming [θ], and exclusively in this particular context.

In my view, the first stage, common to all the Sabellic languages, can be described as blocking of the difficult nasal-fricative transition by an epenthetic homorganic stop, a phenomenon attested in Hittite, Tocharian, Basque, a sizable number of Italian dialects, a number of Modern Greek dialects, optional realisations of British English words, like *mince* [mɪn(t)s], and most American English dialects. It is due to mistiming in the coordination of several articulators: see Ohala (1997), Warner et al. (2001). The velum is raised before the oral cavity is opened and the air is released. This suggests, firstly, that the Sabellic outcome of -Vns# reflects

³⁶ This would make the actual outcome *ipso facto* analogical, a path tentatively followed by Rix (1986: 584–585) which I find rather speculative, and that he later on (588) replaced by an allegedly regular, *Ursabellisches* ending -(e)f.

the preconsonantal sandhi variant, and that it has undergone excrescence of a subphonemic homorganic dentoalveolar stop and became $-n^t s$ ³⁷. It should be noted that, while the excrescence of a homorganic stop to block the nasal-fricative transition generates highly marked codas, some dialects, notably American English, only show this phenomenon in coda position (as in *false* vs. *falsity*). Thereupon, the nasal segment was lost, probably leaving a trace in the nasalisation of the preceding vowel, and $-ts$ became phonemic. This was possible because there were no morphophonemic alternations that allowed the speaker to recover the underlying $-ns$, and perhaps also because the epenthetic stop was no longer linked to the presence of a nasal in the speaker's conscience, though this is not strictly necessary: as we are going to see, the intervocalic sequence $-ns-$ no longer existed and $-ntss-$ had an underlying stop and evolved in Sabellic in exactly the same direction as $-n^t s$ ³⁸.

Thereupon, $-ts$ was weakened to a fricative. In turn, this was probably favoured by the comparatively high tendency of coronal sounds to assimilate to following sounds. In Oscan, the resulting sound merged with the tense sibilant ($> -ss$). In Umbrian and South-Picene, the new sibilant $*(V)\underset{\text{̄}}{s}$ preserved its dentoalveolar articulation, subsequently became an interdental voiceless fricative $*(V)\theta$ ³⁹, and eventually merged with $/f/$ by acoustic similarity, since these sounds are easily confusable. In both cases, the difference with original $-V/\bar{V}s$ was preserved, and consequently syncretism of the acc. pl. with the nom. pl. never took place. In fact, this is an inescapable conclusion given the similar, earlier change involving an inherited sequence $*-nts\#$, which became $*(n)\theta\#$ and eventually $-f\#$ in all the Sabellic dialects in the nom. sg. of $-nt$ -stems.

The course followed by Umbrian is reminiscent of the change $-t\underset{\text{̄}}{i} > -ts > -\underset{\text{̄}}{s} > -\theta$ that took place in Spanish in the 16th C. AD (cf. *martio* $>$ *março* $>$ *marzo*; *sperantia* $>$ *esperança* $>$ *esperanza*), and was probably due to the need of maximising the contrast between sibilants: the dental voiceless $/\underset{\text{̄}}{s}/$, the apicoalveolar voiceless $/s/$ and the palatoalveolar voiceless $/\underset{\text{̄}}{ʃ}/$. By contrast, the Spanish variety spoken in America and vast areas of southern Spain simply abandoned the (cross-linguistically infrequent) phonemic contrast between the inherited $/s/$ and $/\underset{\text{̄}}{s}/$, which are usually realised as a dental sibilant $[\underset{\text{̄}}{s}]$. The phoneme $/\underset{\text{̄}}{ʃ}/$ is also known to have existed (at least after syncope eliminated the phonetic conditioning) in Umbrian and South-Picene, whose national alphabets have a special symbol for $/\underset{\text{̄}}{ʃ}/$, but did not exist, or not so early, in Oscan. This suggests that Umbrian already had $/\underset{\text{̄}}{s}/$ in its phonemic inventory by the time it became $/\theta/$ because the threefold contrast tended to be maximised and eventually merged with $/f/$, reducing the number of phonemic contrasts. In Oscan, our sibilant was smoothly integrated in the system and simply fed the preexistent contrast $/s:/ - /s/$.

Consequently, this goes some steps towards explaining the limited distribution of the change $[ts] > [\underset{\text{̄}}{s}] > [\theta] > [f]$ in Italic. It is difficult to say whether there was a last *common* Sabellic phonetic stage before final vowel syncope ($-n^t s$ never merged with post-syncope $-ts$ anyway) or whether syncope affected two already differentiated sequences, e. g. O. $-Vss$ and U. $*-V\underset{\text{̄}}{s}/*-V\theta$.

5.2.4. A different question is whether compensatory lengthening is expected after loss of the nasal segment, and then, which inflections show analogical leveling. In my view, compensatory lengthening is *a priori* not expected in codas, since the nasality was reassigned to the

³⁷ From now on, the symbol $\langle \text{ } \rangle$ will be used to note the product of the rule by which a subphonemic $[t]$ is optionally inserted, and not a specific phonetic content; accordingly, it will not be used inside square brackets (cf. on this notational problem Akamatsu 2011).

³⁸ While the subphonemic status of the epenthetic stop raises some questions, Akamatsu (2011) has argued that $[nt]$, in which $[t]$ is epenthetic, is an allophone of $/n/$.

³⁹ By neutralisation of stridency as per Hamp (1972), who introduces this step to account for the Proto-Italic shift $(-)\underset{\text{̄}}{sr} > (-)\theta/\underset{\text{̄}}{dr} > (-)\underset{\text{̄}}{f}/\underset{\text{̄}}{br}$.

vowel and the nasal segment may have disappeared before the excrescent stop became phonemic and the resulting *-ts* underwent weakening. As claimed above, the Sabellic evolution, in order to be credible, must be envisioned as a many stage process $*-ns > *-n^ts > *-\xi > *-\theta/-ss > -f/-ss$, whose second stage would actually have prevented lengthening.

In the last years, a number of approaches have pointed to a perceptual basis for compensatory lengthening. According to Ohala et al. (1995), the margins of vowels preceding fricatives have an acoustic effect that mimics nasalisation. If there is a nasal segment, listeners could regard it as illusory and discount it. Along the same lines, Kavitskaya (2002: 58–60) has further argued that nasal deletion before fricatives triggers lengthening «since nasalized vowels are phonetically longer than oral ones and thus can be reinterpreted as long with loss of the nasal.» She, however, adds that some exceptions shown by a number of Greek dialects (Cyrenaean, Thessalian, Arcadian) which have an acc. pl. form in *-ōs*, fail to show lengthening because, in her own words, «word-final syllables stay closed regardless of the n-loss. Thus, it can be argued that, even if nasalized vowels in the last syllable in the word are as long phonetically as nasalized vowels word-medially, they do not necessarily get reanalyzed as long»⁴⁰. The same loss, without consequences for the length of the vowel, which is only expected if the language already possesses a length contrast in the vowel system, is also reported to be occurring in contemporary Romance languages: see Recasens (2018: 165) for dialectal Catalan *tens* ‘you have’ > *tes*, etc.

5.3. Indo-European $*-nt^st-$ in Sabellic

The outcome of $*-nt^st-$ merged with the outcome of intervocalic $*-ns-$ in Latin, but yielded Oscan *-ntss-*, Umbrian *-f-*, and Venetic *-nss-*.

In Oscan, this transpires from the context-bound use of <zs> in *esskazsium* [es:kants:jom] and in *kenzsur* ‘censor’. Oscan borrowed the family of *kenzsur*, *keenzstur* (redone as $*kēns-tōr-$), etc. from the Latin written language and interpreted the cluster at face value: it must have sounded similar to their own agent nouns and past participles built from roots ending up in a dentoalveolar sound. In other words, the Oscan scribes overestimated the phonetic reality of the Latin spelling <NS>⁴¹. In such forms as *húrz* ‘garden’ (< $*g^h$ ortos), <z> is rendering an affricate phoneme /ts/. Accordingly, the Oscan tense sibilant /s:/ had a post-nasal variant [ts:] which was spelt <ss> in *kenssurineis*, but may have been more or less regularly spelt <zs>. As for Umbrian, $*-nt^st-$ yielded *-f-* with nasal loss: cf. *mefa* (if identical to L. *mēnsa*), possibly SPEFA, the form that follows it in some passages (in Um 1 VIa/b, VIIa), and *spafu* (if < $*spnd-to-$, Va 20)⁴². Compensatory lengthening cannot be ascertained.

All this points to the existence of a common Sabellic stage $-Vn.tssV-$, which apparently remained unchanged in Oscan, but underwent the expected changes into $*-V\tilde{\xi}- > *-V/\tilde{\theta}- > -Vf-$ in Umbrian. The reasons for positing an underlying, not excrescent homorganic dentoalveolar sound in this context will become clear at the end of this work. This contrasts with the pan-Italic evolution $*-Vt^stV- > -VssV-$: cf. U. FISO (divine name, Um 1 VIb, < $*b^hid^h-to-$), and also $*-ts-$,

⁴⁰ See also Alonso-Déniz (2011) for nasal loss without lengthening in the Greek sequence $*-VnsC-$, which he puts down to the fact that the mora count stays stable after nasal loss. This means that, even if the nasal segment had survived until a (Common Sabellic?) stage $*-n\xi-$ had been reached, it is reasonable to assume that this sequence would have lost the nasal without lengthening in preconsonantal and final position.

⁴¹ Like, for instance, *-ns-* was artificially transferred from written Latin to spoken Romance, as revealed by doublets like the Spanish abstract *defensa* vs. the inherited concrete *dehesa* ‘pasture’ < ‘enclosure for cattle’.

⁴² Cf. Meiser (1986: 70, 77), WOU: 463–464, 688–689, etc.

*-dz- > -ss-, as in O. *nessimass* ‘closest, nearest’ (Cp 24, Capua), U. *nesimeī* (Um 1 VIa) < **nedz-izVmo-* < **nezd-ismHo-*.

Scribes may have hesitated as to whether it should be written or not, which explains <(n)zs> vs. <nss>. The (in most cases) post-syncope sequence *-ts(-)* carrying no morphological information became a new affricate phoneme /ts/ in Sabellic. This is the case with Oscan forms like the conjunction *puz* ‘that’ (Po 39), the preposition *az* (if < **ads* or **atVs*, Sa 1, Agnone), or the dative *vezkeī* (< **uetesk-*, Sa 1, Agnone). The digraph <zs> accordingly looks like a compromise spelling between <z> and <ss>. But it may have been designed to distinguish /nts:/ from a postsyncope cluster /nts/. That is to say, the former may have become phonemically ambiguous if speakers of higher registers started to parse /ts:/ as a distinct *tense* dentoalveolar affricate phoneme. Lower registers may have tended to merge it with -ss-. The case of *kvaizstur* (Po 8, Pompei) for expected **kvaisstur* may consequently be put down to hypercorrection.

The Venetic appellative *a.n.šore.s.* (nom. pl., LV: 203, Calalzo) occurs in a fragmentary context. It goes back to an Italic agent noun **ant^stōr-*, ultimately (as if) from **h₂n-* + *d^heh₁-tor-* ‘constructors; officials?’ with zero-grade of the root by virtue of the «Italic» rule, according to which agent nouns are derived from synchronic past participles (see Prósper 2018b). The symbol <š> notes a *tense* sibilant. A much later, indirect instance of the preservation of this sequence is Ven. TATSORIAE in Emona/Šmarata (personal name, CIL III: 10722, Pannonia Superior), the full match of L. *tōnsor* (as if < **tond-tōr*). In this case, however, the excrescent dentoalveolar stop may be the product of misperception of foreign names by Gaulish scribes who did not have that sequence in their native language, and the actual realisation of the stem may have been either [təns:o:r]- or [tənts:o:r]- (see Prósper 2019b: 52)⁴³.

5.4. The post-syncope cluster *-n(V)z-*

The cluster going back to Italic **-nVz-* (< IE **-nVs-*) evolved in different directions in Sabellic, too. As observed in 5.1., there is every reason to believe that post-nasal voiced fricatives are cross-linguistically dispreferred.

In Oscan, the weak sibilant, probably realised as [z] when it was still intervocalic, was spelt in the national alphabet as <ns>, and the verb form *patensíns* < **pət-na-sē-* ‘aperirent’ (Cm 1b 24–25, Abella) is our best example. As for Oscan in the Greek alphabet, the content of <ζ> in *Ἰεζεις* (*IItal.* III: 1485, Caulonia 2)⁴⁴, *Ἰενζηι* < **uen(H)-es-* ‘Venus’ (Lu 31, Rossano di V.), is not quite certain: while Lejeune (1970), followed by Stuart-Smith (2004: 97) believes it to be rendering an affricate, itself the product of the insertion of an excrescent dentoalveolar sound, it is more likely to represent a phoneme /z/⁴⁵. Finally, *MINSTREIS* (Lu 1, Bantia) goes back to **ministero-*. Across compound boundaries, *-n#s-* was probably realised as [ns:], as in O. *κωσ(τ)ιτ* (Lu 5, Rossano di V) and perhaps *kúnsif deívúz* < **kon-sent-s deǵuot-s*, the divine name corresponding to the *deī cōnsentēs*, according to Poccetti (2013b: 35)⁴⁶. Cf. *IItal.* II: 1183, Pentri/Terventum 22, c. 150–100 BC⁴⁷.

⁴³ The Celtic outcome of **-Vnt^st-* was *-V̄ss-*, a sequence preserved in Eastern Gaulish and variously rendered attested in the Venetic record as <š>, <ss> or <s>. For instance, the personal names *le.s.sa* (LV 208, Cadore), *leso* (LV 93, Este) are Gaulish derivatives from **splend-tu-* ‘splendor’ (in OIr. *lés* ‘light’). Cf. Prósper (2019a: 151).

⁴⁴ Omission of the nasal in coda position is trivial across languages and writing systems and is not necessarily caused by phonetic weakening and loss (see Méndez Dosuna 2007).

⁴⁵ As observed above, by this time, or in the southern region, the contrast had become one of voice, and /z/ was phonemic in every position except probably in auslaut and in codas, where the contrast had been abandoned and the sibilant acquired the voice specification of the following consonant.

⁴⁶ To my mind, however, *deívúz*, in view of its final letter, can hardly be a singular form, but a nom. pl. **deǵuot-es*, *mutatis mutandis* a match of the Latin expression. This leaves us with an insoluble problem that cannot

In Umbrian, medial vowel syncope gives rise to an undesired sequence which, again, became stabilised by the intrusion of an epenthetic sound that blocked the nasal-fricative transition, yielding **-nʰs-*, which was subsequently phonemicised: cf. *uze*/ONSE ‘shoulder’ (< **omeso-*, Um 1 Iib 27–28, etc.), the full match of L. *umerus*⁴⁸. At any rate, we must assume an evolution **-nVz- > *-ns- > -nʰs- > -nts-*⁴⁹. The sequence *-nʰs-* across synchronically recognisable morpheme boundaries underwent the same stop excrescence and eventually became *-nts-*, as in U. *anze-riatu*, ANSERIATO ‘let him watch’⁵⁰. This is also the case with sequences containing an underlying dentoalveolar segment, like *-nt/dʰs-* (as in the 3rd pl. dep. fut. OSTENSENDI, Um 1 VIa 20, from **op(i)-stend-s-*). Syncope in forms containing an inherited segmental /t/ gave rise to a new Umbrian phoneme /ts/ spelt <z>, as in *kazi* ‘kettle’ (< **katesim*, Um 1 III 16, 18), *ezariaf* ‘food’ (< **edesāsijō-*, Um 1 IVa 27), *pihaz* ‘piatus’ (< **piātos*, Um 1 Ib 7). As a consequence, the secondary, postnasal cluster was interpreted as phonemic.

The form *menzne* (loc. sg., Um 1 IIa) is habitually traced back to **mēn-s-(e)n-i* ‘moon’, an adjectival derivative of **mēns-* ‘month’ (cf. *WOU*: 471)⁵¹. Accordingly, the assumption that

be addressed here given our lack of evidence: *kúnsif* would have to be traced back to post-syncope **-V(:)nts*, either regularly or by analogy with the singular form.

⁴⁷ After finishing this work, I have become aware of a very recent one by Fortson and Weiss (2019). They trace *kúnsif* to **kōns-eje-* an iterative present of **kēns-* in Skr. *ā-sāmsaya* ‘give hope’, MW. *dan-gos-* ‘show’, and reconstruct PItal. **kōnsē-* and **kēns-e-*, later conflated into **kēns-ē-*. The Oscan form would mean ‘decreeing, approving’. This is a brilliant idea, if an early generalisation of the stem **kōns-eje-* as in Latin is accepted (the original sequence is **kōns-ejō-nt-*). As they say (fn. 14) <i> has been reintroduced in analogy to forms containing *-ē-*, which cannot be the case with *-sents*. On the other hand, given the plethora of Latin loanwords of this root, *kúnsif*, if its immediate predecessor was /ko:se:/-, could have been influenced by them as regards preservation of <ns> in this lexical field, or, like L. *cōnsentes*, could have been reanalysed as a compound, especially if the legal term only attested in *PRÆSENTID* (Lu 1, Bantia) had already been borrowed.

⁴⁸ Most recently, Höfler (2018) has reconstructed a preform **h₁emH₂so-* for this form and L. *umerus* ‘shoulder’, but the difference is in principle immaterial to the present argument.

⁴⁹ Even if a cluster [nz] had survived unchanged, epenthesis is unusual between two voiced segments, since continuous voicing causes less air pressure build-up and the stop burst is hardly audible, at least in the sequence [lz] *vis à vis* [ls] (Ohala 1974: 359; cf. also Akamatsu 2011: 91 on [nz] > [ndz]). The sibilant was probably devoiced after syncope and before stop excrescence. Apparent exceptions, like the Yiddish forms *Gandz* ‘goose’ and *Haldz* ‘throat’ may not presuppose a former stage with word-final voicing [ns] > [nz], [ls] > [lz], as often assumed, but epenthesis [gans] > [gants], [hals] > [halts] and subsequent voicing of the affricate (probably not before the dental sound was perceived as phonemic), as opposed to *Fentster* ‘window’ from [fenster], in which voicing is blocked. The same explanation may apply to [ndza'lata] ‘insalata’ in Neapolitan, cf. [kan'dzone] ‘canzone’ (Rohlf's 1968: 363). Note that epenthesis is very rare, for instance, in English plurals like *ten-s* [tenz], in which *-z* is not the improbable product of voicing after a nasal, but the basic inherited morph *vis à vis* secondary *-s* and *-əz*. By contrast, it is the usual realisation of American English *tense* [tents].

⁵⁰ Excrescence is absent in English compounds, e. g. *gunshot* [gʌnʃɒt] vs. *mansion* [mæntʃ(ə)n], because in the first case the speaker is aware of a virtual pause (see Akamatsu 2011: 109). But in the Umbrian case, *an-* is a recognisable but not especially productive bound morpheme; accordingly the boundary is ignored and excrescence occurs. Note, however, that excrescence does not occur or is dissimilated in *anstiplatu* ‘instipulato’ (Um 1 VIa).

⁵¹ Note that the consistent Umbrian spelling <NS> in the Latin alphabet probably means that the sequence had been fricativised by the time the Tables were transliterated. It is the same in *pihaz*/PIHOS ‘piatus’ and consequently does not mean that we have two different outcomes in Umbrian and its dialects, one in which the sibilant has been voiced «qui ne peut être occasionée que par la proximité de [n]» and another with effacement of the nasal and no voicing that would be similar to Latin and supported by *MESENE* and *ASERIATO*, *pace* Poccetti (2006: 34), who believes Etruscan <z> to be employed in Umbrian in this context because it was noting a voiced sound [z]. This is implausible, since the alphabetic usage is essentially phonemic and the allophonic voicing when a nasal precedes is unlikely to be consciously perceived as relevant and reflected in writing. Additionally, as we have seen, an evolution [ns] > [nz] is hardly possible.

original intervocalic *-n.s-* yielded U. /nts/ favoured the reconstruction of a single form **mēns-* for all the Italic languages. In view of the arguments displayed above in 5.1., however, one cannot attach much credence to the idea that primary **-ns-* would have undergone preservation of the nasal segment and, in addition, epenthesis. Note, by way of comparison, that the Latin cluster *-nsn-* is simplified even across (different) morpheme boundaries, as in **trans#snō* ‘I swim across’ > *trānō* and **kon#snouð/β-ijō-* > *cōnūbium*⁵².

The original structure of the word for ‘month’ is much of a *locus desperatus* of Indo-European reconstruction. It is usually held to have been a holokinetic noun of the *genus commune*, with a nom. sg. **meh₁n-ōs*, acc. **meh₁n-es-ŋ₁*, gen. **mh₁n-s-és* (>> **meh₁n-s-és*) ‘moon-cycle, month’⁵³, and then an original collective or simply an abstract derived from a *-s-* stem. Its locative would have been **meh₁n-es(-i)*, with early analogical spread of the /e/ grade of the root and regular /e/ grade of the suffix. While the Baltic languages have forms going back to **mēn-es-*, like Lith. *mėnuo* ‘month, moon’ gen. *mėnesio*, alternative nom. *mėnesis*, or Latv. *mēnes(i)s*, Proto-Slavic inherited a stem **mēn-s-* (cf. Derksen 2015: 311–312). This points to a primitive paradigmatic alternation resolved by the daughter languages in different directions, and this may well have been the case with Sabellic **mēnes-* vis à vis L. *mēns-i-*. The Latin form could actually go back to the genitive **meh₁n-s-és*, which became the base of a *-i-* stem (with spread of the /e/ grade of the root)⁵⁴.

I consequently assume that U. *menzne* has undergone medial vowel syncope and must be traced back to **mēn-es-n-ej₁*, the dat.-loc. of a possessive adjective **mēn-es-ō(n)*⁵⁵. The following alternative derivational paths are conceivable: a) The stem **mēnes-*, extracted from the accusative or locative form of the holokinetic formation, was thematicised into **mēn-es-o-* and then received a nasal possessive suffix. b) A locative in *-en*, namely **mēn-es-en*, gave rise to an exocentric nasal stem derivative **mēn-es-ō(n)*. This is reminiscent of Nussbaum’s classic explanation of L. *homō* as a derivative of a «double full grade» locative **d^hg^hem-en*, whether primitive or remodeled (1986: 189–190, 289). c) Finally, the bare stem **mēnes-*, could have constituted the base for the construction of an adjectival derivative **mēnes-ō(n)*⁵⁶.

Original **mēnsnV-* would hardly have become the attested Umbrian form, but probably **mefnV-*, or possibly **mēnnV-* or **mēznV-*, which would have contained stable consonant clusters. The traditional view equally falls short of explaining U. *anter:menzaru* ‘intermenstruarum; occurring between two moons’ (gen. pl. of an *-ā-* stem, Um 1 IIa). In fact, if the habitually reconstructed sequence **mēnsV-* had undergone *early* stop epenthesis and become **mēn^tsV-*, nothing would have prevented it from becoming **mēfV-*, especially since inherited /ns/ would be intramorphemic. In any event, the reconstruction of a preform **mēnso-*, with preservation and fortition of intervocalic **-ns-*, is unconvincing, in spite of its close Avestan cognate *antarə-*

⁵² Cf. Weiss (2009: 179) for other comparable sequences.

⁵³ See Beekes (1982, who starts from a *-t/-s-* alternation in the suffix, however), as well as Ruijgh (1967: 237) for Myc. *me-no-e-ja* /me:no:heja/, an adjective derived from **meh₁n-ōs* and meaning ‘decorated with moons’; more recent works in defense of the above holokinetic paradigm are, with slight discrepancies, e. g. Meißner (2006: 147–150), Vijūnas (2009: V.9), and Rasmussen (2016: 325).

⁵⁴ This would mean that Italic exclusively inherited the holokinetic paradigm, not, as often believed, that of OIr. *mís*, Gk. *μήν*, Skt. *mās*, in turn a homogeneous stem **meh₁n-s-*, secondarily created from the genitive form.

⁵⁵ Syncope of the medial vowel in a closed syllable is equatable to that of U. MERSTO, from **med-es-to* (cf. L. *modestus*). In fact, short vowel syncope in closed syllables which terminate in /s/ is regular in Sabellic and perhaps related to the fact that the resulting, seemingly complex codas must be parsed as coda + extrasyllabic sibilant, e. g. *-VR.s.CV-*. On the extrasyllabicity of Latin sibilants in this position, cf. Cser (2012).

⁵⁶ Cf. Doric *αἰέξ* from **h₂eiy₁-es*, probably the locative of an equally holokinetic **h₂eiy₁-ōs*, as suggested by Peters (1980: 79), and see Meißner (2006: 151) for *αἰέι* < **h₂eiy₁-es-í*.

māḡha- ‘between the moons’. It could be identical to the base of L. *intermēstris*, if from **mēnes-ri-*, and then both forms would go back to a hypostatic compound **h₁nter+meh₁nes-*, in which the preposition governs an endingless locative (or alternatively an accusative, which would have an identical stem)⁵⁷.

As regards Oscan and its dialects, the related Vestinian form *MESENE* (VM 9, *MESENE FLVSARE* ‘in the month of Flora’)⁵⁸ may have gone through the stages **mēnesnV-* > **mēneznV-* > **mē(n)znV-* > **mē(n)zenV-* through voicing, syncope, nasal loss (or possibly just defective spelling) and anaptyxis⁵⁹. Oscan post-syncope *-ms-* became *-m^{ps}-* by epenthesis in the divine name $\nu\mu\psi\delta\omicron\iota\ \mu\alpha\mu\epsilon\rho\tau\omicron\iota$ (dat., Lu 28, Rossano di V., c. 300 BC), which goes back to **numasi \check{i} o-*⁶⁰.

In sum, Oscan and Umbrian differ as regards the outcome of post-syncope *-ns-*: while Umbrian consistently blocked the nasal-to-fricative transition by stop epenthesis, giving rise to *-n^ts-*, the Oscan post-syncope cluster was spelt <*ns*>, and <*vç*> in the Greek alphabet, since /*z*/ now enjoyed phonemic status.

The so-called «Opic» or «Pre-Samnite» dialect that is often linked with South-Picene in the wake of Helmut Rix, but seems to share a number of traits with its Oscan superstrate, equally shows <*ns*> and <*ms*> in the recently uncovered inscription of *Niumsis Tanunis* (see below 8.). Venetic and Latin have followed different paths, since medial vowels are not regularly synco-pated: the Latin voiced sibilant has undergone rhotacism, as in *umerus* ‘shoulder’. In at least some Venetic areas, the voiced sibilant [z] was further weakened into an approximant, debuc-calised and eventually effaced, as in the personal name *voltigenei* (dat. sg., LV: 56, Este, 6th-5th C. BC) which must be traced back to **-genehe \check{i}* < **-geneze \check{i}* < **-genh₁-es-e \check{i}* ‘having a x-birth/lineage’ (cf. Prósper 2019a: 8–14).

6. Italic sequences of rhotics and sibilants

The above evolutions are partly paralleled by those of original *vis à vis* secondary clusters of rhotics and sibilants:

IE **-rs-*, possibly with an early voiced realisation of /*s*/, is preserved in Umbrian, but assimilated in Latin, as transpires from unobjectionable cognates: cf. **torsē-* ‘chase’ > U. *tusetu*, TVRSITV (fut. impv.), L. *torreō*, **torsā* > divine name U. *turse*, *tuse*, TVRSE (dat. sg.), TVRSA (voc.), and **fars-* > U. *farsiu*, L. *farreum* ‘made of, or related to, wheat’. The Oscan outcome of Italic **-rs-*

⁵⁷ As repeatedly asserted in the literature, we would expect an adjectival form in **(i)jo-*, and it has been suggested that it is a noun for ‘Kalends’ (cf. Weiss 2010: 28). It could consequently belong to a more archaic layer than the typical parasynthetic pattern found in Latin *pomoerium*, *procastria*, *proverbium*, *suburbium*, or the productive *interdigitium*, *intermundium* (see Bader 1962: 283). That is to say, the compound is of Proto-Italic date and belongs to the exocentric type originated in the thematicisation of a prepositional phrase attested in Gk. $\epsilon\nu\ \acute{\alpha}\lambda\iota\ \rightarrow\ \epsilon\nu\acute{\alpha}\lambda\iota\omicron\varsigma$ ‘living in the sea’, $\iota\gamma\nu\acute{\upsilon}\eta$ ‘hollow at the back of the knee’ (< **en- \acute{g} nuu \check{u} -ā*, cf. Forssman 1964: 29), Skt. *ati-rātr-a-* ‘lasting more than one night’, *adhas-pad-a-* ‘found under the feet’, and Av. *antara-māḡh-a-*.

⁵⁸ See Segenni (2007) for this dialectal attribution.

⁵⁹ The new Oscan form *minnaris* is taken from **mēns-n-* by Poccetti (2013a: 213), who identifies it with the base of the Umbrian form. In view of the above considerations, his alternative, by which this is a reflection of **mēnā*, possibly identical to L. *Mēnā* and Gk. $\mu\acute{\eta}\nu\eta$ ‘moon’ is more compelling (see more recently Poccetti 2016 in defense of the latter possibility). But this is not a usual context for the «*flamma*»-rule, which has led Weiss (forthc.) to identify it as a correlate of L. *minuō* ‘diminish’.

⁶⁰ According to some scholars, the epithet contains a further suffix **-id-(i)jo-* (Lejeune 1970). This is refuted by Poccetti (2009: 230) who compares the name $\Nu\mu\sigma\delta\eta\iota\varsigma$ (Me 1–2, Messana) and ingeniously treats this as a case of rendition of /*z*/ by means of <*σδ*>, but these testimonies are too distant and it would be really remarkable that this spelling norm was exclusively applied to this name.

is $-\bar{V}r-$, as in *teer[úm, tereí, etc.* (< **terso-*, cf. L. *terra*; Cm 1, Abella). This probably means that this evolution aligned with that of Latin, and that at an intermediate stage the cluster $-rr-$ was simplified with compensatory lengthening of the preceding vowel before medial vowel syncope.

IE * $-rt^st-$ becomes Proto-Italic * $-rtss-$ (cf. L. *vorsus* ‘turned’). This sequence survived into Proto-Sabellic. In Oscan, it evolved into $-r(t)ss-$, as in the agent noun $\text{F}\epsilon\text{q}\text{o}\text{o}\text{q}\epsilon\text{i}$ ‘Tropaios’, epithet of Iuppiter (< * $\text{u}\epsilon\text{r}t^st\bar{o}r-$; Lu 25, Vibo Valentia) and in Umbrian into * $-r\text{s}\bar{s}-$ > * $-r\theta-$ > $-rf-$ in the adverbial past part. *trahuorfi* ‘transverse’ (< * $\text{u}\bar{r}t^sto-$; Um 1 VIIa 25). See further details in the conclusions of this work.

IE * $-VrVs\#$ yields $-\bar{V}r$ in two nom. pl. forms going back to * $-er-es$: U. *frater* (Um 1 Va, etc.), *frateer* (Vb 16), O. **neer* (recovered from a putative gen. pl. *neer[um*, cf. *IItal.* II: 674, Pompei 32). This indicates that final vowel syncope was followed by progressive assimilation, simplification of the geminate sound and compensatory lengthening of the preceding vowel: * $-Vrs\#$ > * $-Vrr\#$ > $-\bar{V}r$.

IE * $-rVs-$ is unanimously held to show disparate outcomes in Sabellic: in Oscan, after voicing and syncope, * $-rz-$ undergoes assimilation and surfaces as $-rr-$. The symmetry is destroyed by the alleged Umbrian outcome $-rf-$ (or $-r\beta-$). And yet, none of the examples adduced thus far in favour of the latter evolution is compelling: crucially, Weiss (2017) has recently disposed of the validity of the traditionally accepted equation of U. *çerfe/SERFE* (Um 1 Ib, VIb, etc.), Pael. CERFVM,⁶¹ O. *kerrí* ‘Cereri’ (dat. sg. < **kerez-ēj*, Sa 1, Agnone), etc., all of them traditionally traced to * $\text{ker}VzV-$ and identified with the divine name *Ceres* or derivatives thereof. Weiss has favoured a connection of the first two forms with Skr. *śardha-* ‘(military) troop’, usually applied to the *Marutas*. This is much more compelling since it furnishes an explanation for the apparent alignment of Paelignian with Umbrian, and spares us from accepting divergent outcomes within the Oscan family.

As a consequence, we are now left with a single instance of the evolution * $-rVz-$ > $-rf/\beta-$: the birdname U. *parfam/PARFA* (Um 1 Ib, VIa), purportedly identical to L. *parra* ‘small bird’, and traditionally traced back to * $\text{par}VzV-$. *Parfa* and *parra* probably designate a sparrow or another sort of small bird involved in ritual divination in Umbrian and related to either ill or favourable omen in Latin, where it is attested since Plautus⁶².

To begin with, the acceptance of an Umbrian sound shift * $-rVz-$ > $-rf-$ silently relies on the idea that Latin $-rr-$ must inevitably go back to IE * $-r(V)s-$. What is more, the purported Umbrian evolution runs up against serious difficulties: as we have seen, Umbrian * $-nVz-$ evolved into $-n^ts-$. In logic, we would expect * $-rVz-$ to yield Umbrian $-rs-$, or to undergo progressive assimilation to $-rr-$, as in Latin and Oscan, or even to undergo epenthesis and surface as <*rz*> /*rts*/ (see more on this possibility in the conclusions). The acceptance of a sound change * $-rVz-$ > $-rf-$ simply begs the question and takes advantage of the untenable assumption that /s/ in a number of contexts may straightforwardly become /θ/ (and eventually /f/) in Umbrian without intermediate stages that look minimally plausible⁶³. I conclude that, since forms of a

⁶¹ In the renowned *Herentas*-inscription (Pg 9, Corfinium).

⁶² Plautus mentions *parra* as the herald of good omen: *picus et cornix ab laeva, corvoos, parra ab dextera consuadent* (*Asin.*, 260–261). Cf. Fisher (2014: 79–81) on the possibility that the couple U. *peico/parfa* vs. *picus/parra* continues an inherited list of augural birds belonging to a single archaic Italic ritual complex; the Iguvine Tables prescribe that the *parfa* should be seen from the right, too (*parfam tesvam*, PARFA DERSVA). This points to these forms being identical after all. In turn *pārus* ‘tit’ could be the inverse, hypercorrect product of the «*flamma*»-rule. Note that if *pārus* were original and *parra* its alternative realisation, *parra* and *parfa* would be *ipso facto* unrelated.

⁶³ Bear in mind that this objection does not apply to the shift $(-)\text{sr-}$ > $(-)\theta/\delta r-$ > $(-)\text{ff}/\beta r-$. $(-)\text{sr-}$ is a comparatively unnatural or difficult cluster, resolved in western Indo-European by stop insertion $(-)\text{sr-}$ > $(-)\text{str-}$ (as in Germanic, Slavic, Old Prussian, Latvian and most Balkanic dialects), by assimilation /*sr*/ > /*r*/, or by loss of stridency (as in Italic and part of Celtic).

comparable structure in other languages are lacking, and the proposed evolution reveals a blatant internal asymmetry with that of *-nVz-*, an etymology containing an intervocalic sibilant is unreliable, and post-syncope **-rz-* is unlikely to have evolved into *-rf/β-* anywhere. It should be clear by now that a Sabellic sibilant only surfaces as Umbrian and South-Picene *-f-* in the neighbourhood of */n/* and */r/* when there is *also* a dentoalveolar sound at play, whether inherited or intrusive, but never in post-syncope environments. A birdname (itself a class of names very prone to borrowing) with ritual associations and far from transparent origins does not qualify as a candidate to fill the gaps of Italic sound-change reconstruction.

In addition, the word-formation presupposed by the traditional etymology is far from convincing: the root is usually held to be **(s)per-* ‘fly’ (see *LIV*: 579), but evidence for a *-s-*stem of this root is non-existent. Recently, Höfler (2017: 17–18) has ingeniously traced U. *parfa*, L. *parra* to an adjective **spr̥H-s-ó-* ‘feathered’ (belonging to the *russus*-type), allegedly paralleled by the Hesychian gloss *σπαράσιον* ‘a bird resembling a sparrow’, a diminutive formation which he ascribes to Magna Graecia. But, even if the last point were true (albeit there is not the slightest hint of it in our only extant source), late loss of word-initial *s-* in the attested Italic forms calls for an explanation⁶⁴. It has been suggested (Prósper 2020) that the so-called «*palma*»-rule should be formulated as *#C̣RH.C- > #CáRH.C- > #CáR.C-* with laryngeal loss and lowering of the central vowel under the accent. In fact, the traditionally posited outcome *#CáR.Hə.C-* is phonotactically suspect and unparalleled, except for the dubious case of Greek which has always constituted its model. This would make the intermediate structure **parazV-* ipso facto unwarranted: we would expect either PItal. **prāzā* (> U., L. **prārā*) or **parsā* (> U. **parsā*, L. *parra*)⁶⁵.

I alternatively reconstruct this birdname as **(s)pr̥(H)-g^hh₁u-ol-eh₂* ‘flying-goer’, which straightforwardly accounts for U. *parfa*. It should have given L. *†parva*, but underwent expressive gemination (as in other animal names like *peccus*, *cattus*, *vacca* and probably *vīverra* ‘ferret’), which prevented homonymy with *parva* ‘small’, and glide absorption. While this resyllabication of a heterosyllabic structure *-C.u-* is well attested in epigraphy, as in *IANNVARIVS*, *FVTTVERE*, *ACQVA*, and probably indicative of a lower phonostyle, the eventual loss of the glide (in fact very common in the Romance continuants of these forms), may be put down to the auditory difficulties inherent in the perception of a cluster **-rru-*, owing to the minimum distance of its constituents in the scale of strength⁶⁶. This phenomenon also lurks behind the Umbrian evolution **-ru- > -rr-* in **kateruā > *katerrā*, as reflected in the denominative verb *kateramu* ‘arrange yourselves in *catervae*’ (Um 1 Ib 20)⁶⁷.

The conceivable cognacy of Italic and other European bird names may now be explored: OPr. *spurglis* ‘sparrow’ reflects a diminutive of the same form. Gk. *σποργίλος* ‘sparrow’ (Ar., Av. 300), which can equally be derived from our reconstructed **(s)pr̥(H)-g^hh₁u-* or to **(s)por(H)-g^hh₁u-*, is particularly interesting because it has undergone all the sound laws proposed by

⁶⁴ Additionally, there is the minor inconvenience that the Italic form would be **(s)parazo-* with a voiced sibilant; unless Hesychius’ sources were very early, we would expect this phoneme to be spelt <ζ>.

⁶⁵ We could perhaps even expect L. **prassā* if this was an originally rustic word preserving the original **prāzā* reinterpreted in urban Latin as */Vss/*, as per Vine (2016, to explain *grossus*, *crassus*). Given the Latin fate of IE */Vns/*, we could alternatively expect **prāzā* to be adopted as **prāsā* <*pransa*> which, given the expressive nuances associated to these forms, could surface as *prassa* by the «*flamma*»-rule.

⁶⁶ See Méndez Dosuna (1994) for this phenomenon in Greek.

⁶⁷ One could of course assume that the early outcome of IE **-rg^hu-* was **-rfu-*, which may have become Proto-Latin **-rru-* by (context-bound!) assimilation of a glottal fricative to a preceding sonorant. Such an intermediate stage is phonetically plausible and may be reconstructed for Proto-Italic. In the *mutatis mutandis* comparable case of **h₂(e)ng^h-i-* > L. *anguis* ‘snake’ we reckon with a PItal. stage **-ngu-* with occlusivisation after a nasal segment. Since we lack any other instance of the evolution of this cluster in Latin, this argument cannot be pursued here.

Vladimir Georgiev for Pelasgian, an unidentified Indo-European substrate language which is only known through a number of Greek borrowings, like τύμβος, the match of τάφος ‘tomb’, or πύργος ‘tower’, the match of Goth. *baúrgs*, Celtic *brig-* ‘elevated village’, etc.⁶⁸ In fairness, there are variants of this very form which do not conform to the pattern in that they show the full grade of the first member, like the Greek gloss σπέργουλος ‘a bird’ (Hesychius) or OPr. *sperglawanag* ‘hawk’. While, mostly on the strength of the Germanic forms, some forms are said to come from a variant form **spVr-uo-*, the examples adduced to this effect are very doubtful: OE. *spearwa*, etc. ‘sparrow’ can be traced to **(s)por(H)-g^hh₁u-o-*. ^BToch. *šparā-yäkre* ‘kind of bird’, related to ^AToch. *špār* ‘sparrow?’, is traced to earlier **špārā*, and ultimately to **spērueh₂*, by DTB: 730, but the reconstruction of a suffix *-uo-* is ungrounded⁶⁹. Gk. σπαράσιον is also taken from **σπαρF-άσιον* by EDG: 1375 on the strength of the Germanic forms. But, again, the reconstructed **-u-* has left no trace, and consequently there is neither comparative nor internal basis for introducing it.

As conceded in passing by LIV: 579, the aniṭ nature of the root **(s)per-* is disputable. Koch (1990 I: 431) has drawn attention to its seṭ character in Slavic. Both Albanian *fier* ‘fern’ and OCS. *pero* ‘feather’ reflect **(s)per(H)om*⁷⁰. The Tocharian forms ^A*špār*, ^B*šparā-* can consequently be traced back to a possessive vrddhi-derivative **(s)pērHo-* ‘endowed with feathers’ > ‘bird’. If the Greek form σπαράσιον is correctly transmitted⁷¹, it could contain the regular outcome of an earlier **sprH-ó-*, which saves us from resorting to the Lindeman effect. What is more, it might not even contain a diminutive suffix *-άσιον-*. We could analyse it as a diminutive derivative of the root participle **sprH-nt-* ‘flying’, which would make this form the only remainder of the verbal inflection of this root outside Slavic. A new suffix *-άσιον-* may in fact have been metanalysed from original **-nt-ijo-* once this structure became opaque, as already contended by Solmsen (1907).

Along the same lines, Zair (2012: 98) has tentatively suggested that MB. *frau*, B. *frav* (m.) ‘crow, jackdaw’, from **sprǎuo-*, is similar to Goth. *sparwa*, etc. and perhaps L. *parra*, U. *parfa*, and has posited «a root **(s)perH-*, in which case the Greek and Germanic forms would represent *o*-grade **sporH-u-on-* and **sporH-g-* respectively (with loss of laryngeal in Greek by the Saussure effect), Old Prussian the zero-grade (though with a formation extremely close to that of Greek), and Italic a derivative of an old *s*-stem, hence **prH-es-eh₂*. The Celtic forms would then point to **sprH-uo-* > **sprǎuo-*».

As we have seen, however, there is no basis for reconstructing a suffix **-uo-*. The inclusion of the Celtic form in this group is accordingly contingent upon the assumption that the Brittonic (and Gaulish) outcome of IE /g^{uh}/ and /g^hu/ or /g^hu/ in intervocalic position is *-u-*⁷². Note,

⁶⁸ Most recently, Mihaylova (2016) has vindicated the validity of Georgiev’s tenets and has enumerated the features of this lost IE dialect: Grassmann’s law, post-Grassmann consonant mutation, delabialisation of labiovelars and [u], [o] as the outcome of vocalic sonorants, which probably means that a sound [u] was variously parsed according to context. Under these premises, our form may have undergone the following changes: [ɾ] > [ʊr], delabialisation **-g^hu-* > **-g^h-*, and «Grimm»’s mutation **-g^h-* > *-g-*. The word-initial cluster **sp-* is an exception to the rule because, as in Germanic (E. *stand*, etc.), the sibilant blocks the fricativisation of the voiceless stop in order to avoid an undesirable sequence of fricatives.

⁶⁹ The very idea that IE **-ru-* gives PToch. *-r-* relies on the prejudice that an inherited suffix **-uo-* must have been there because other cognates have it: thus, ^BToch. *šmare* ‘oily, sleek’ may be a match of PGerm. **smerwa-*; needless to say, this is strictly hypothetical, and fatally gainsaid by the preservation of the approximant in ^BToch. *šerwe* ‘hunter’, which contains the same sequence.

⁷⁰ Cf. Schumacher et al. (2013: 218), Derksen (2007: 396).

⁷¹ It is, in fact, misplaced, since the gloss occurs as nr. 1398, which would be fitting if the reading were τσπαλάσιον.

⁷² As contended by Koch (1992) in the footsteps of Cowgill (1980), who first put forward the idea that IE /g^{uh}/ was preserved as a voiced labiovelar in Proto-Celtic. This is based on the equation OIr. *guidid* = Gaul. *uedilumI*

additionally, that original **spr̥H-uo-* would be expected to become **sφr̥āuo-*, not **sφr̥āuo-*⁷³. Conversely, the short vowel would probably be regular if we start from Proto-Celtic **sφr̥āg̥uo-*⁷⁴.

To recap: there is not a single indication that there have ever been any *-s-*derivatives of the root **sper(H)-* ‘fly’; all the conceivably related compounds or suffixal derivatives are in principle compatible with a sequence **-g^hu-*, not *-u-*. We may consequently reconstruct a secondarily thematised compound **(s)pr̥H-g^hh₁u-* which evolves into the expected forms in Italic (under acceptance of the «palma»-rule), Celtic and Baltic, and possibly the Greek substrate borrowing, whereas Germanic certainly reflects an /o/ grade and Baltic and Greek have variant forms with the /e/ grade of the first member, which show no trace of a laryngeal. This leads me to suspect that they may be due to a crossing of **(s)pr̥H-g^hh₁u-* with the external derivative of an acrostatic noun **spe/orḡ^hu-* ‘speedy thing’. In fact, the root **sperḡ^h-* ‘hurry up’ (LIV: 581) is likely to go back to a univerbation of **sper(H)-* + *ḡ^heH-* ‘move’ (cf. LIV: 153)⁷⁵.

Let us say, as a corollary, that there is at least one form in which **-rVs-* may be held to have eventually become *-rz-* (or *-rs-*, since rhotacism never occurred): *çersiaru* is an adjective in the gen. pl. fem., or more probably a month name (see Weiss 2010: 28), accompanying *antermenzarum* (Um 1 Iia). While WOU: 391 provides a number of reconstructions, the most promising of which presuppose a base **kerts-* or **kers-*, the identification of this form with an adjective **keres-ijō-* is satisfactory in phonetic, formational, semantic and cultural terms. This preform is then identical to Pael. CERRIA, O. *kerrīai*, etc. (L. *cereālis* may be dissimilatory or haplological for **cerer-ālis*, or even replaces a syncopated **cerr-ālis*) and only the problems concomitant with the equation of U. *parfa* and L. *parra* and their stubborn attribution to a non-existent *-s-*stem have presented an obstacle to the obvious solution⁷⁶. If we rule out U. *çerfe*, etc. as allusions to the goddess Ceres in the wake of Weiss (2017), the rich Umbrian pantheon is deprived of one of the most important Italic divinities, unless we call other flawed reconstructions into question. A very ancient adjective **kerh_{1/3}es-ó-*, based on the early but innovative double-full-grade oblique stem, is probably attested in the L. divine name *Cerus*, only attested by Paulus ex F. 109 Lindsay «in Carmine Saliari *Cerus Manus* intellegitur creator bonus», and *duonus Cerus* in Varro. Either this form or more probably its nominal base **kerh_{1/3}es-* ‘Ceres’ was enlarged by a relational suffix **-ijō-* (as in *Venus, venerius*) and became Proto-Italic **kerVz-ijō-*. This form was

(Chamalières) ‘pray’, later confirmed by the root participle **g^{uh}ed^h-ont-* in the Celtib. family name *kuezontikum* (gen. pl., Botorrita III, see Beltrán et al. 1996: 144), and also on the equation of OIr. *gonaid*, W. *gvanu*, confirmed by the Celtib. personal name GVANDOS, in my view from the past part. **g^{uh}ē-tó-* (Peñalba de Villastar), which is identical to OIr. *goite* (gen. pl., Milan Gl. 77a19).

⁷³ As per Schumacher (2004: 136), partly on the strength of **pr̥H-ti-* ‘fern’ > PCelt. **φrati-*. Cf. also Lith. *papártis* ‘fern’.

⁷⁴ Note that the set of names presumably meaning ‘shining’ like *Baedro, Baedronenses*, the personal name BAE-DARI (gen., CIL III: 1585, Dacia), the ethnonym *Baeduī*, which can be traced back to **g^{uh}eh₂id-* (Prósper 2019a: 8) on the strength of Gk. φαίδρός ‘bright’, Lith. *giēdras, gaidūs, gāišas* ‘glow’ (**g^{uh}eh₂id-s-o-*; cf. **φαίδος* in the Hesychian gloss φαίδει: ὄψει) must have undergone the influence of **b^heh₂-* ‘shine’.

⁷⁵ For both roots, only the Avestan testimony speaks in favour of the reconstruction of a palatal sound. Given the existence of Skt. *vanar-gú-* ‘traversing the wilderness’, etc., compared with Lith. *žmogùs* ‘man’, from **d^hḡ^hmeh₂-g^{uh}h₂u-* ‘walking on earth’ by García-Ramón (1985: 56; the appurtenance of the second member is ambiguous in Baltic), we can start from **(s)pr̥H-g^{uh}h₂u-*. This explains the Greek form straightforwardly (a similar compound *πρέσβυς* has a dialectal variant *πρέσγυς* ‘old man, ambassador’), but not U. *parfa*.

⁷⁶ Burroni (2016) definitely abandons the connection of *çersiaru* with Ceres and ingeniously proposes a ‘harvest month’, either from a root **kers-* ‘reap, cut’, via an action noun **kersó-*, or from an (unparalleled) sibilant stem, and then from **ker-s-ó-* ‘having a cutting’. In his footsteps, Weiss (2017: 373) reconstructs **kers-ijō-* ‘pertaining to cutting’ and compares Gk. ἀ-κερσε-κόμης ‘with unshorn hair’. Of course, this only works under the assumption that **-rVz-* must become *-rf-*.

as likely a candidate to acquire a specialised meaning as a month's name as many other adjectives derived from divine names in Italy by means of the same suffix. In other words, IE *-rs- and IE *-rVs- simply merged in Umbrian after medial vowel syncope⁷⁷.

7. Conclusions

As repeatedly observed by previous scholarship, Proto-Sabellic is especially difficult to reconstruct as a homogeneous language previous to differentiation is Oscan, Umbrian and South-Picene, because it has undergone such a plethora of innovations crossing the territory from different points and at different times (and often shared by Latin, Venetic and Etruscan) that a genealogical tree cannot be drawn with any confidence.

As implied above, one of the battlehorses of the Sabellic controversy is the date of medial and final vowel syncope. Benediktsson's assertion that the final vowel syncope took place after the shift *-ns* > *-f/-ss*, and for this reason the new, post-syncope cluster *-ns* was never affected by further changes,⁷⁸ is quite plausible. The preconception that syncope must have occurred prior to the dialectalisation of Sabellic has no basis, and the respective outcomes of Pre-Samnite and Oscan on the one hand, and Umbrian and South-Picene on the other, often differ simply because they are independent. Rix's ideas are further conditioned by the prejudice, already to be found in Buck (1904: 72), that the evolution of **-nt-s* (> *-f*) presupposes an intermediate stage *-ns* and is therefore posterior to that of original **-ns* (O. *-ss*, U. *-f* in the acc. pl.). This makes the homogeneous outcome of **-nt-s* impossible to come to grips with and generates a complex battery of unwarranted steps, essentially intended to account for the disparate outcomes of «primary» **-ns*.

Languages respond differently to the problems inherent in the nasal + fricative transition. Sometimes, the nasal segment is effaced, often, but not necessarily, with concomitant lengthening of the preceding vowel. As we have seen, this change has been recently explained as auditory in nature. In my view, this is what actually happened at one or more stages to the Proto-Italic sequence *-Vn.sV-*. By contrast, *-ns-* > *-ss-* is a less likely evolution (see the arguments against an assimilation /ns/ > /s:/ in Recasens 2018: 165–167). For instance, the fact that the primary sequence **-VnsV-* yields a tense sibilant in Hittite, as in **densu-* > <*da-aš-šu-*> 'powerful' need not be indicative of regressive assimilation, but of a process very similar to the one depicted for Italic in this work: loss of /n/ created a secondary contrast between the new intervocalic tense sibilant (in turn lenited in Hittite in some contexts) and a lax sibilant that continued IE intervocalic /s/, while the contrast between **-Vns#* and **-Vs#* may have been abandoned early on⁷⁹.

⁷⁷ Note that the Latin adjectives *sin-cērus* 'sound, whole' possibly < 'of one growth', and especially *prōcērus* 'tall' < 'having a high growth', usually taken from **kērh₁₀-* or **kreh₁-ro-* (see EDLIL: 491 for details), could alternatively go back to this very form **kērh₁₃esó-*, which would phonetically give **kerro-* but could have undergone hypercorrection (undoing the action of the «*flamma*»-rule and perhaps thereby favouring a less «rustic-flavoured» sequence), and it could merit a separate research to find out whether this is more likely to happen in compounds. It should be borne in mind that the divine name *Cerus* may have undergone the same process, and the testimonies of Paulus and Varro may thus have contained a long vowel /e:/ instead of a long /r:/ that was not noted in their early Latin sources. In fact, these forms could be thematicised residues of the ancient compositional schema X-R(e)-S(e)- exemplified by IE **h₁su-ġenh₁-és*, etc. See more on the involved root and the reconstruction of L. *crassus* as **k₁rh₃-s-ó-* in Vine (2016: 138–139).

⁷⁸ Cf. Benediktsson (1957: 258).

⁷⁹ The idea that we have to start from a Proto-Anatolian tense sibilant /s:/ in the context *-VnssV-*, *-VmssV-* > *-VssV-* is not contradicted by examples hinting at a tense sound, as in IE **-VsnV-* > Hitt. *-VssnV-* and *-VsrV-* > *-VssrV-*

Occasionally, however, progressive assimilation takes place. As a result, a sequence *-Vn.nV-* emerges. This, however, is favoured by a weak realisation of the sibilant, which may have evolved into an approximant-like [s̥] or a glottalic [h]. This was never the case in Italic, though it might explain the Oscan and Latin assimilation **-Vr.sV- > *-VrrV-*⁸⁰.

Finally, an excrescent homorganic stop may block the contact between the sonorant and the sibilant. This is an articulatory phenomenon, but the reason why the epenthetic sound is reproduced intentionally by the listener lies in his failure to understand the hearer's intention and discount it; as a consequence, the excrescent sound is phonemicised and reflected in writing (see Ohala 1997). In their classical study, Fourakis et al. (1986) observe that the non-etymological dentoalveolar sound is slightly shorter in duration than the inherited one. Recent experiments have shown that conscious perception of unintentionally produced excrescent sounds is comparatively high (but far less frequent than that of intentionally produced sounds). It is comparatively unusual that excrescent stops are parsed as underlying segments and trigger historical sound change over time, which may be partly explained by the influence of orthography besides production variability (see Warner et al. 2001: 81–82). In this work, I have tried to show that it is the previous existence of an underlying segment /t/, but also, in some contexts, the excrescence of a dentoalveolar sound, that constitutes the ultimate explanation for a number of Sabellic sequences at a pre-documentary stage.

The above assumption allows us to bridge the distance between original /s/ and Umbrian /f/. The comparative verisimilitude of a Sabellic language having merged the IE voiced aspirates /g^{uh}/, /b^h/, /d^h/ and the fricative /s/ into /f/ is contingent upon the situation of the cluster in question in the following hierarchy: the (Indo-European) presence of an underlying dentoalveolar segment > the (Sabellic) emergence of an excrescent dentoalveolar sound > the (post-syncope, exclusively Umbrian) emergence of an excrescent dentoalveolar sound.

a) The presence of an inherited segment /t/ generates Oscan, Umbrian and probably South-Picene /f/ in word-final position.

Only original **-nts#* became **(n)θ#* and eventually *-f#* in all the Sabellic dialects, probably at a very primitive, Proto-Sabellic stage. These dialects show *-f* in the nominative singular masculine of the active participles, which results from the fusion of the suffix *-nt-* and the nominative ending of the common gender *-s*. Later on, Oscan, or perhaps only its Campanian variety, transferred *-f* to the nom. sg. if the *-n-*stems. This transfer probably never took place in South-Picene and cannot be claimed for Umbrian, as has been previously done, on the meager grounds that the *-f* is not reflected because of late Umbrian weakening or defective spelling. As a consequence, Oscan *iaf* cannot be the acc. pl. of a feminine anaphoric pronoun **eḡiā*, but only the nom. sg. masc. of the root participle **i-nt-s* (<< **hi-ent-s* by paradigm leveling), preserved in L. *iēns* and Ven. **iant-*. The word final sequence **(V)nts#* merged with **(V)ns#* in Latin and eventually surfaced as *-ṽs*.

As in the case of U. *traf* 'trans' < **trānts*, it is unclear whether *iaf* has undergone compensatory lengthening or not. The Umbrian forms in *-ef* have undergone Osthoff's Law at the stage **-ē-nt-s* and are invariably spelt with <e>. This means that the Oscan present participles *statif* and *kúnsif*, whether they ultimately go back to **-ent-s* or **-ē-nt-s*, should in principle have been

vis à vis the lax outcome of /s/ in *-VsmV-*, *-VsIV-* and the assimilation in *-VrsV- > -VrrV-*. There is no other case of the alleged regressive assimilation of /s/ in any consonant cluster, even those which constitute a cross-linguistically favourable context, like *-ts-*, *-ks-*: they preserve the stop and undergo fortition of the sibilant, like *Clsv-*, *CrsV-* (cf. EDHIL: 71–73). A homogeneous treatment of the Hittite internal evidence runs counter to the suggested assimilation. On the other hand, Simon (2020) has vindicated the contrast between voiceless and voiced phonemes in Hittite, which can be extended to sibilants.

⁸⁰ For Greek **-Vr/n.hV- > -VrrV-*, *-VnnV-*, see Méndez Dosuna (1994: 111).

rendered †*kúnsef* and <í> (phonemic /e/) must be analogical. This is unclear in view of our paltry evidence.

b) The inherited sequence **-Vt^stV-* became Proto-Italic *-VssV-*, but **-Vn/rt^stV-* became *-Vn/r.tssV-*.

Consequently, /t/ was an underlying segment in this context. Later, *-n.tss-* became *-f* and *-r.tss-* became *-rf-* in Umbrian and possibly South-Picene, but remained *-tss-* in Oscan, at least in the neighbourhood of nasals. Given the post-syncope emergence of an affricate phoneme /tʰs/, its phonemic status may have become ambiguous and it is rendered <ss> but also <zs>⁸¹.

c) IE **-ns.C-*, **-ns#* and **-n^s#* in coda and word-final position result in Umbrian and South-Picene *-f*, but Oscan (and probably Venetic) *-ss*, and Rix's postulation of a common stage *-f*, followed by a cascade of analogical processes, has nothing to recommend itself. What is more, the evolution *-ns* > *-f* tacitly demands a leap of faith. It can hardly be explained in phonetic terms except by admitting the intrusion of a (subphonemic) dentoalveolar sound that blocked the nasal-to-fricative transition and yielded Sabellic (and probably Venetic) **-n^ts*. This turns the scales in favour of a radically different relative chronology from the one assumed so far.

After the nasal was lost, compensatory lengthening of the preceding vowel did not take place, either because the syllable stayed closed or because the epenthetic dental stop was still there; the Sabellic thematic endings are consequently analogical. The Latin outcome *-V̄s* is suggestive of the generalisation of the prevocalic outcome, but one could go so far as to posit an evolution **-Vn^ts* > **-V̄ss* > **-Vss* > *-V̄s* (where compensatory lengthening would be due to simplification of the geminate and not to nasal loss). Final *-s* and *-ss* never contrasted in Latin, and *-V̄s* eventually merged with the nom. sg. **-Vnt-s* anyway. Under a completely unitary picture, we could place the Italic languages at different stages of an evolution **-Vn^ts* > **-V̄ts* (> *-V̄_g* > *-(V)θ* > *-f* in Umbrian) > *-V̄ss* > *-Vss* (Venetic; *-ss* by final syncope in Oscan) > *-V̄s* (Latin). Even if the first stage had been *shared* by all the dialects, it can only have been reached *after* Proto-Sabellic **-nts* evolved into **-(n)θ*.

As we have seen above, the hypercharacterisation of the nom. sg. of nasal stems can at present be held to have affected Oscan (or at least its central dialects), and cannot be described as a process **-ns#* > *-f*, but as a mere transference of the synchronic ending *-f* from the *-nt-* stems to most or all nasal stems⁸².

d) In Umbrian, the post-syncope cluster *-n.s-* and the cluster *-n#s-* across a compound boundary underwent excrescence of a dentoalveolar stop, yielding *-n.^ts-*; this onset was phonemicised as /tʰs/ and spelt <z> and experienced no further changes. In Oscan, the cluster *-n.s-* suffered no visible changes. The originally intervocalic sibilant was parsed as a lax phoneme, and later (or dialectally) as a voiced phoneme judging by the orthographic conventions, but

⁸¹ This is why the Italic word for 'dinner' is unlikely to go back to **kert-snā* (EDLIL: 106). The rendition of the sibilant in this context shows some hesitation in O. *kerssnais*, *kersnu*, *kerssnasiais*, *kersna<t>iais*. It is the full match of U. *çesna* 'food' (Um 1 Vb 9), *çersnatur* 'having had dinner' (Um 1 Va 22, past part., nom. pl.) and L. *cēna*. According to WOU: 393, this form ultimately goes back to **kertesnā*, but this is unwarranted, since it would have become L. **certēna*. This form may be traced to **kers-snā* (LIV: 355–356 **kers-* '(ab)schneiden').

⁸² The extension of this idea to the *-r* stems, whose nom. sg. would have been remodeled as **-rs* in Proto-Sabellic according to Rix (1986: 592–593) fares no better, since it is exclusively predicated on the high spelling frequency *vis à vis* omission of final *-r* in Umbrian. In Rix's words, **-rs*, like the syncopated nom. pl. *-res*, has preserved a «strong» *-r*, the product of progressive assimilation. The question actually revolves around the analysis of two forms in *-tōr*, *āřfertur*, AR(S)FERTVR and *kvestur*, in which *-r* is more consistently spelt than in the passive endings in *-r*. Nominal stems have been strongly influenced by the rest of the paradigm, however. If the nom. pl. U. *frateer*, O. **neer* bear witness to compensatory lengthening of the preceding vowel, the reasons for the preservation of a «strong» *-r*, which additionally would play no visible grammatical role, escape me.

needless to say, there are no reliable data about its actual phonetic realisation in this particular context, in which voicedness is disfavoured⁸³.

e) The sequence **-r.s-*, whether original or secondary, tends to assimilation, regressive or progressive, or deletion of the rhotic.

In Umbrian, a post-syncope cluster *-r.z-* did not undergo rhotacism. It merged with the outcome of IE **-r.s-*, which in turn shows a tendency to simplification to judge by the spelling hesitation in **torsā* > divine name U. *turse, tuse*, etc.⁸⁴ In sum, it never underwent excrescence, since no factor favoured it. In point of fact, stop excrescence in this context, by which **-r.s-* yields **-rʰs-*, is very uncommon, although sporadic cases are reported⁸⁵. Conversely, while an evolution **-sn-* > *-sʰn-* is less common than **-ns-* > *-nʰs-*, every Indo-Europeanist knows a sizable number of cases of **-sr-* > *-sʰr-*, given the stronger realisation of the rhotic in *-s.r-* (with a trill [r]) unless epenthesis occurs, e. g. *-s^{d/t}r-* or *-s^ʰr-*) than in *-r.s-* (with a tap [ɾ]). This indicates that our *only* plausible example of this phenomenon, U. *trahuorfi* ‘transverse’ (< **-urʰstō-*; Um 1 VIIa 25), had a segmental /t/, which would in turn mean that **-n/rtʰt-* directly yielded Sabellic *-n/rtss-*, as contended immediately above (5.3., 6.).

Accordingly, since **-r.s-* > **-rʰs-* is infrequent (and **-r.z-* > **-r^dz-* nonexistent, see fn. 49 above), the last argument that could be reasonably invoked to rescue the validity of the change **-rVs-* > **-r.s/z-* > **-rf-* vanishes. In a nutshell, the traditional etymologies of *parfa* and *çerfe* have been underpinning each other, but both lack comparative support and phonetic plausibility. What is more, they have been instrumental in sacrificing the self-evident cognacy of the outcomes of the Italic divine epithet **keres-ijō-*.

In Oscan, as in Latin, **-r.z-* underwent progressive assimilation and became *-rr-*. This allows us to place our three major dialects at two different stages of the natural evolution **-rVz-* (Italic) > **-rz-* (> *-rs-*, Umbrian) > *-rr-* (Oscan, Latin⁸⁶).

As regards the outcome of Sabellic **-nVs#* and **-rVs#* after final vowel syncope, the first sequence yields Oscan and Umbrian *-ns*, also in the secondary 3rd pl. ending (in all likelihood remodeled after the 1st pl. ending **-mes* > *-ms*), and the second *-ŕr* (nom. pl. *-ēr* in O. **neer*, U. *frater*). Venetic *-rVs* undergoes syncope at least in trisyllabic forms, as in **teuṭeros* > *te.u.te.r.s.* (Padua, cf. Prósper 2018c)⁸⁷.

⁸³ This change has a parallel in Hittite, where only particular sequences of the form *-ns-*, *-ms-*, *-rs-* undergo epenthesis: **nsós* > <*an-za-a-aš*> ‘us’ (gen.), **h₂msosio-* > <*a-an-za-a-aš-ša-*> ‘descendant’, besides forms in which these segments were separated by a laryngeal, as in **ġenh₁su-* > <*ge-en-zu*> ‘lap, womb’, or in the nom. sg. in *-r-* + *-s*, as in **h₂stēr-s* <*ha-aš-te-er-za*> ‘star’ (see EDHIL: 70–74). In Tocharian, this change might have occurred in intervocalic position only after syncope, judging by ^BToch. *āntse* ‘shoulder’ (if <**h₂omVso-*>) but ^AToch. *es, kentse* ‘rust’ (if <**koniso-*>), *intsu* ‘which, what kind of’ (<**h₁eno-* + *sV-*>), *ontsoyṭte* ‘insatiable’ (a compound of privative **ŋ-* + *sV-*), *kwants* ‘firm’ (if <**kuneso-*, cf. DTB: *passim*).

⁸⁴ This is in fact the most common evolution for this cluster across languages: see Recasens (2018: 177–178).

⁸⁵ Epenthesis [rs] > [rts] is reported to happen in the Romansch dialect of Bergün (Switzerland) and in central and southern Italian dialects (Old Romanesco *perzona* ‘persona’, Calabrian *purza* ‘borsa’, etc.). Cf. Rohlfs (1968: 381). It is sporadically attested elsewhere in particularly difficult clusters, for instance in ^AToch. *kursār* ‘mile, vehicle’, obl. pl. *kursārwaḷkurtsru*; in a couple of cases in Old Languedocian (the singular forms *chartz*, *cavalliertz*, cf. Chabaneau 1879, who considers these two forms as scribal errors, as opposed to comparatively more widespread <*ntz*>, <*ltz*>); and in some Modern Greek dialects like Pontic (cf. Moutsos 1976). Even sporadic epenthesis in this particular context always presupposes comparatively regular epenthesis in /ns/ and /ls/, suggesting it is more unnatural. In the conclusions of his study of epenthesis in /ns/ and /ls/ in a Catalan dialect, Recasens (2012: 88), observes that «the failure for /rs/ to undergo stop insertion and to exhibit a well-defined burst may be attributed to a weak closure resulting from the antagonistic manner requirements involved in the performance of the tongue tip vibration for a syllable final trill and the generation of audible turbulence for the lingual fricative».

⁸⁶ If and only if the regular phonetic outcome presupposes syncope, that is to say if L. *ferre* ‘bring’ is from **b^heresi* and *Cererī*, by contrast, has reinserted the medial vowel.

⁸⁷ Interestingly, the Etruscan divine name *Fufluns*, in all likelihood an inherited adjective in **-ōno-* of Sabellic origin (cf. Meiser 1986: 215) is occasionally attested as *Fuflunz*, reflecting a pronunciation [nts].

f) This change *a fortiori* never affected IE $*-Vn.s-$, nor $*-Vr.s-$. The often repeated assumption that IE $*-Vn.sV-$ becomes Proto-Sabellic $*-Vn'sV-$ has no basis, and for all we know it may have passed to $-\bar{V}sV-$ early on. As we have just seen, $*-Vr.s-$ is preserved in Umbrian (possibly with voicing of the sibilant, which at any rate never underwent rhotacism), but yielded $-\bar{V}r-$ in Oscan and $-Vrr-$ in Latin. Again, this places our major dialects at three different stages of the evolution $*-VrsV-$ (Umbrian) $> *-VrzV-$ $> *-VrhV-$ $> *-VrrV-$ (Latin) $> *-\bar{V}rV-$ (Oscan), which may have started independently or may have spread as an areal feature.

8. APPENDIX. Observations on the Pre-Samnite vase of Niumsis Tanunis

The recently uncovered «Opic» or «Pre-Samnite» vase of Niumsis Tanunis dates from the end of the 5th or beginnings of the 4th C. BC, hails from somewhere in Campania and is conducted in the Oscan national alphabet (see Agostiniani et al. 2012). Face A reads: *Niumsies Tanunies est* ('(it) belongs to Niumsis Tanunis'). Face B reads: *ʔpaplamtensatriiam fufuhud niumsis tanunis eises ulsu dunum dedum* (conducted in *scriptio continua*).

Martzloff (2017) has recently offered several alternative analyses of $\langle paplamtensatriiam \rangle$ at the beginning of face B (in fact the only sequence of controversial segmentation). He pays heed to the possibility, suggested by the editors, that the right division is $\langle paplam tens atriiam \rangle$, meaning 'close to papla atria' or 'for papla atria'. In turn, 'papla atria' is to be explained either as the recipient of the vase 'for Papla Atria' (in which *tens* goes back to a preposition $*tenos$, cf. L. *tenus*) or as the vase itself (*papla*) that is a present for a woman called Atria⁸⁸.

Martzloff alternatively reckons with a more convincing segmentation $\langle paplam tensatriiam \rangle$. This provides a DO for the following ${}^v fufuhud$ ${}^s Niumsis Tanunis$ 'Niumsis Tanunis has made', which has been topicalised and attracted to the beginning of the sentence. Martzloff offers no compelling account of the word formation. In my view, however, it paves the way for a connection with U. *tenzitim*/TESEDI (acc. sg., Um 1 Ib 6; VIb 46), a hitherto uninterpreted form designating something one has to bring out at some moment of the ritual, and, in view of the voiced segment $\langle D \rangle$, perhaps going back to $*tenes-nt-ijō-$ or $*tenes-ē-nt-ijō-$. If these forms are related at all and designate something in the sphere of pots or vessels, they must contain a stem $*ten-Vs-$.

The first cognate that comes to mind is L. *tenōr* 'course', *tenus* 'snare' and compounds like Gk. διατενής 'stretching itself', which ultimately continue an *-es-* stem derivative of the root $*ten-$ 'stretch'. If we start from a denominative stem $*tenesā-$, the «Opic» form can reflect an adjective $*tenesā-tr-ijō-$, derived from an instrument noun in $-ā-tro-$ (cf. the similar derivational history of *ōrāculum*). The meaning is not clear, but 'preserver' or simply 'container, tray' (L. *tenere*, *con-tinere*, U. *tenitu* 'let him hold' belong to the same root) are conceivable. It could also mean 'portable' in view of the description given by the editors, who explain the holes in the grips as designed so that the skyphos could be held and carried by a temporarily fitted handle. Its formation is thus roughly comparable to that of L. *tenāculum* 'holder' $>$ 'tongs'.

Neither *tensatriiam* nor *Niumsis* (in all likelihood an Oscan name) show post-syncope epenthesis, at least not in writing. From a slightly different angle, the denominative verb could be derived from the past participle of L. *tendō* 'stretch', U. *ustetu*/OSTENDV (3rd p. sg. fut. impv.,

⁸⁸ Triantafillis (2014) has contributed a new interpretation of *paplam* as 'teat-shaped vase', which is retained as correct in the following lines. Her own translation 'has poured a substance (*atria*) into the papla', however, has no parallels and her analysis of *fufuhud* as a perfect form of the root $*g^heu-$ (with *f-* for *h-*) is unwarranted, as observed by Martzloff.

Um 1 *passim*) ‘prepare, show, exhibit’?, like L. **tēnsāre*, not directly attested but preserved in most Romance dialects. L. *tēnsa* is a kind of chariot for the exhibition of the *exuviae deorum*, a still unclear ritual performance. Apparently, instrument nouns built to different enlarged variants of the root **ten-* gained considerable productivity in Italic. While this must remain merely speculative, if we accept that *paplām* refers to the vase itself, it could be argued that it literally means “instrument/container of nurture”, and that it goes back to a collective form **peh₂-d^hleh₂*, which would have regularly given **pāβlā* and then **pāplā* by sporadic assimilation of labials or a scribal perseverative error. In turn, this error could be favoured by the fact that several words in this text contain the same consonant in consecutive syllables and still more understandable if the scribe was actually copying from a written model. This form could then be ultimately identical to L. *pābulum* ‘sustenance’.

The interpretation of the verb form and the various syntactic possibilities compatible with it are problematic, too. In view of their superficial resemblance, *fufuhud* has been taken to be identical to *fufuFoδ* (Tortora), with <h> marking the hiatus, a device attested in Oscan, and to mean ‘has/have been’ (Agostiniani et al. 2012: 138). This idea looks formally attractive but is at odds with a number of facts. Firstly, it is not certain that /h/ was no longer realised at that time, and that the letter used for the aspiration could now be put to service in this way or to mark vowel length, as in the rest of Sabellic. Secondly, this is not exactly like other hiatuses: it must have contained a transitional [ɥ] that would probably be represented in a different manner, as in Tortora⁸⁹. Thirdly, the preceding accusative *paplām tensatriiam* requires a transitive verb. Finally, if we interpreted *tens* as a preposition, as Agostiniani et al. (2012) have done, we would hardly expect it to govern an accusative of direction with the verb ‘to be’. Martzloff (2017: 140) tentatively reconstructs **d^he-d^hoig^h-* ‘has fashioned, modeled’. A sound change /oṽ/ > /u:/ would be underpinned by South-Picene *persukant*, if from **soṽk-* (as per Meiser 1986: 88). Note, however, that this attractive etymology is exclusively based on Umbrian forms of the same root: the 3rd pers. pl. fut. perf. *prusikurent* ‘confirm, declare’, traced back to **seṽk-*, and, crucially, the fut. impv. *sukatu*, which Meiser traces back to a denominative verb **soṽkā* (in turn the *only* instance of the alleged sound change /oṽ/ > /u:/ in Umbrian). All these forms, however, are generally traced back to **sek^u-* ‘say’ (LIV: 526). Cf. WOU: 712, Weiss (2010: 187, fn. 164). The change /oṽ/ > /u:/ is borne out by a *single form* but is proposed for two languages, whose testimonies underpin each other. Consequently, the hypothesis, however seductive at first sight, incurs circularity and remains unproven. There is, in addition, a minor problem of pragmatic redundancy: it is somewhat outlandish that Face A states that the object belongs to Niumsies Tanunis (*Niumsies Tanunies est*) and Face B that he is the artisan who has actually created it.

The possible objections against the assumed shift and the reconstruction of two different Sabellic preterites may be bypassed by the alternative postulation of a perfect **d^he-d^hug^h-* ‘has produced, made ready’ (LIV: 148–149 **d^heug^h-* ‘treffen’), directly comparable to Gk. τέτευχα ‘have produced’, and possibly Mycenaean n. pl. *te-tu-ko-wo-a* ‘prepared, set up’, τέτευχώς ‘wrought’, which can be taken to mean that this perfect was originally stative. Crucially, this verb would have merged in Italic in a number of forms with the outcome of **b^heug-*, as in L. *fungor*, which may have favoured its eventual disappearance. Under these premises, the reduplication vowel /u/ is straightforwardly accounted for, as in Vedic *dudóha* ‘has milked’. In ad-

⁸⁹ If Willi (2010) is right and Italic inherited a perfect **b^hu-b^hu-e(-i) > *fuβuεi*, which somewhere down the line became opaque and was dialectally recharacterised by a new reduplication, the underlying approximant would hardly be expected to be spelt <h>. On the other hand, SP. *súhuh* < **souōd* (TE 1, S. Omero) does not qualify as a counterexample. According to Weiss (2002: 356–357), [ɥ] was lost in this context and <h> notes the subsequent raising of the first /o/.

dition, this sets the stage for an alternative syntactic analysis: *tensatriiam* could be not the determinans of *paplam*, but a predicative complement. A very tentative translation would then run: ‘Niumsis Tanunis has made the *papla* as / to serve as, play the role of [---]’⁹⁰.

Additionally, we have an interesting sequence *eises ulsu* in the same text, immediately following *fufuhud Niumsis Tanunis*. In line with former interpretations, I translate ‘eius iussu’, ‘by his will’, *vel sim*. The first form is in all likelihood the gen. sg. masc. of an anaphoric pronoun, and the second is an ablative or instrumental singular and has been given a number of etymological interpretations without foothold in Italic itself (see Martzloff 2017, with references). As observed by Agostiniani et al. (2012: 136), the actual form may actually have been *ulsud*, with the habitual omission of the final consonant when the next word begins by the same one.

I trace *ulsu(d)* to a thematic derivative $*u_lHti\text{-}\bar{o}(d)$ of the action noun $*u_lHti\text{-}$ ‘power; will’. Its base is thus equatable to OIr. *flaith* ‘sovereignty’ and the first member of the Venetic personal names *vo.l.tigno.s.*, *voltigenei* (LV: 63, 56, Este). Interestingly, Euganean Venetic is characterised by a similar formula closing a number of inscription: *o.p. vo.l.tiio leno* ‘by free/sovereign will/power’ (LV: 12A, Este, translated in 12B as [D]O[NOM] DEDIT LIBENS MERITO). Thus, *ulsu(d)* and *vo.l.tiio*⁹¹ are identical forms that occurred exactly in the same context: *ulsu(d)* is immediately followed by the formula *dunum dedum* ‘I gave as a gift’, which closes the text. Palatalisation, subsequent affrication and perhaps eventual fricativisation of $-tj\text{-}$ were probably only possible at such an early date for a Proto-Italic sequence $*-tjV\text{-}$, not $*-tjV\text{-}$, and the actual phonetic realisation may have been closer to [ts]⁹². We would consequently expect $\dagger uolsu$. The spelling *ul-* can be due to assimilation $*u_lw\text{-} > *u_lu\text{-}$ and ensuing reduction or simply graphic omission of /u/⁹³. Either *ulsu(d)* was substantivised or the expression was reproduced in abbreviated form, but at any rate *eises ulsu(d)* looks like a very old formula⁹⁴. The destinatory of the vase might have been a person, a divinity or a group of them, which would have been left unmentioned; face B could mean something like ‘the vase ?... made Niumsis Tanunis; in fulfilment of his will, I gave it as a gift’. The subject of the enunciation and of the sentence ‘I gave’ is the person who, *ex hypothesi*, fulfilled the vow of the deceased Niumsis Tanunis or placed it in his tomb to ensure him a safe journey to the underworld.

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⁹⁰ Under a still more daring assumption, which is little more than a guess, one could ascribe to the root $*d^heug^h\text{-}$ an ancient meaning ‘to milk’ which is hitherto only known from Indo-Arian. Since *paplam* has been associated to L. *papilla* and taken to mean ‘breast vase’, which must be a metaphorical designation in view of the shape of the vase (see Triantafyllis 2014; Martzloff 2017) this could be a cheerful way of celebrating Niumsis’ main hobby: ‘has milked the breast ...’ would simply be a humorous allusion to drinking wine.

⁹¹ This form has been traced back to $*u_lti\text{-}$ by Lejeune himself (cf. LV: 341).

⁹² Cf. the Italic personal names VOLSO, VOLSONI attested in Dalmatia and Venetia et Histria; VOLSA in Samnium and Picenum, VOLSARIA in Venetia et Histria, and, for the latter coalescence, BANSAE for \dagger BANTIAE (Lu 1, 100 BC). Bear in mind that LECIONIBVS MARTSES (CIL I: 5, Luco dei Marsi, from $*martij\text{-}$) is already attested in the 4th C. BC.

⁹³ The root-final laryngeal was in my view lost in this position early in Italic, as shown by all the extant cognates of this root (cf. Prósper 2017).

⁹⁴ Needless to say, this sets the stage for the possibility of tracing *tensatriiam* to $*ten\text{-}tj\text{-}\bar{a}\text{-}tro\text{-}$, with palatalisation of the cluster $*-tj\text{-}$. Cf. Skr. *tanti-*, *tantu-* ‘thread’, Gk. $\tau\acute{\alpha}\sigma\iota\varsigma$ ‘lengthening’, OIr. *tét*, and, of course, the base of Latin compounds like *con-tentiō*.

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Б. М. Проспер. Окончания множественного числа аккузатива в сабельских языках и развитие индоевропейских сибилантов в италийской ветви

Цель настоящей работы — прояснить особенности фонетического и фонологического развития сибилантов и кластеров, содержащих сибиланты, в италийских языках, с особым упором на рефлексии сочетаний /ns/ и /rs/ в различных позициях. В статье предлагается новая интерпретация для целого ряда сабельских слов и предложений (в первую очередь относящихся к оскскому языку и одному из его диалектов — маррукинскому). В приложении дается новое прочтение «опийской» («до-самнитской») надписи Ниумсиса Тануниса.

Ключевые слова: индоевропейское языкознание; сабельские языки; древняя Италия; общая фонетика.

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Alwin Kloekhorst and Tijmen Pronk (eds.).

The Precursors of Proto-Indo-European: The Indo-Anatolian and Indo-Uralic Hypotheses

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The volume consists of fifteen chapters, most of which are based on talks presented at “The Precursors of Proto-Indo-European” workshop held in Leiden on July 9–11, 2015. It covers a wide range of topics that reach beyond the Proto-Indo-European reconstruction including the Indo-Uralic and Indo-Anatolian hypotheses, as well as pre-Proto-Indo-European phonology, morphology, and syntax.

The Indo-Uralic hypothesis and branching of Proto-Indo-European: In the context of the Indo-Uralic hypothesis, **Alwin Kloekhorst** and **Tijmen Pronk** (“Introduction: Reconstructing Proto-Indo-Anatolian and Proto-Indo-Uralic”, Chapter 1) revise the Indo-Anatolian (= Indo-Hittite) hypothesis which implies that a significant number of innovations occurred in the proto-language after the split of the Anatolian branch. The authors present a list of 34 isoglosses that set Anatolian apart from the proto-language of the remaining branches. This list constitutes a substantial contribution to the discussion of the Indo-Anatolian hypothesis and should become a subject of close examination going beyond the present review. The controversial nature of some isoglosses can be illustrated by the reconstruction of a Proto-Indo-Anatolian (PIA) aspectual pair **h₁es-* ‘to sit’ and **h₁e-h₁s-* ‘to sit down’ that is claimed to have been replaced by the Proto-Indo-European (PIE) pair **h₁e-h₁s-* ‘to sit’ and **sed-* ‘to sit down’. The root **sed-* is analyzed as a post-Anatolian innovation; it is implied that the dynamic PIA stem **h₁e-h₁s-* became stative in post-Anatolian PIE and replaced the older stative **h₁es-*. One might argue, however, that the post-Anatolian PIE verbal system was based on regular opposition of tense-aspect stems (inflectional and/or derivational). Within such system, the shift in the aspectual meaning of **h₁e-h₁s-* and the introduction of a suppletive root **sed-* instead of a morphological derivative of **h₁es-* are unexpected. It would seem more economical to assume that (pre-)PIE had complementary verbs **h₁es-* and **sed-* showing a contrast of lexical aspect parallel to PIE **kei-* ‘to lie’ and **leg^h-* ‘to lie (down)’. It has been argued that such pairs were opposed to each other as

describing a non-volitional state vs. a controlled state / entering into a state of a volitional subject correlated with the use of neuter and common gender marking of the subject, respectively (cf. Lehmann 2002: 27). Even though some of the listed post-Anatolian innovations evoke doubts, taken together the presented evidence constitutes a serious challenge for critics of the Indo-Anatolian hypothesis.

Kloekhorst and Pronk point out the importance of establishing time depth in reconstructions and estimate the gap between the split of the Anatolian branch (the mid-4th millennium BCE) and the breakup of the remaining branches within the range of 1000–1200 years (with Tocharian possibly breaking off earlier, 800–1000 years after Anatolian). Given that the same set of phonemes is accepted for reconstructions with and without Anatolian cognates, the stability of the phonological system, required by the proposed chronology, is suspicious. Allophonic variation and conditioned sound changes aside, not a single change in the phonemic inventory is listed among the post-Anatolian innovations. One may ask whether the authors would agree to recognize the phonologization of **a* and long vowels as a post-Anatolian phenomenon, marking the transition from the two-vowel PIA system to the ten-vowel PIE system? Whatever be the probative value of the phonological argument, one is left in uncertainty on what is the methodological basis for the proposed dating and why exactly an alternative interval of 800 years or less would be an unlikely estimate. While discussing the time depth of Proto-Indo-Uralic (PIU), the authors do refer to a limited number of etymological correspondences between the basic lexical items as a means to estimate when Proto-Uralic (PU) and PIA diverged (p. 10–11). However, no reference to lexicostatistic methods and results is given in relation to the suggested chronology of the internal PIA branching.

Petri Kallio offers an exciting and tragic story of Daniel Europaeus’ life and scholarly work (“Daniel Europaeus and Indo-Uralic”, Chapter 5). A predecessor of Vilhelm Thomsen and Holger Pedersen, Eu-

ropaeus was perhaps the first to discuss the Indo-Uralic hypothesis on scientific grounds in a self-published study as early as 1853. Far ahead of his time, Europaeus was deprived of a merited recognition during lifetime and has long been forgotten. Kallio's detailed overview of Europaeus' achievements, in particular, as one of the pioneers of the Nostratic hypothesis is a noticeable contribution to the history of linguistics.

Simona Klemenčič ("Bojan Čop's Indo-Uralic Hypothesis and Its Plausibility", Chapter 6) offers a review of Bojan Čop's rich scholarship on Indo-Uralic. It is a laudable overview of Čop's research on many aspects of the PIU reconstruction that he published in over a dozen of papers and monographs, some of which are difficult to access. A critical discussion of Čop's reconstructions, at times inconsistent with each other, requires a monographic study. Klemenčič's arrangement and presentation of Čop's views on the PIU phonemic inventory, accentuation, root structure, and morphology is an important step forward.

Michaël Peyrot ("Indo-Uralic, Indo-Anatolian, Indo-Tocharian", Chapter 13) discusses the Tocharian evidence for the Indo-Anatolian and Indo-Uralic hypotheses. The author cautiously accepts that Tocharian was the second branch to split off after the Anatolian one. Having revised seven post-Indo-Anatolian innovations, identified by Kloekhorst (2008: 8–10), Peyrot confirms that the Tocharian evidence allows to consider them as post-Indo-Anatolian: Tocharian unambiguously agrees with the post-Anatolian languages on five innovations, has a lacuna for **mer-* (PIA 'to disappear' > post-Anat. IE 'to die'), and allows for competing interpretations with respect to PIA nom.sg. **d^huég₂tr* → post-Anat. IE **d^hugh₂tēr*. This evidence supports the Indo-Anatolian hypothesis but is not in itself an argument in favor of Tocharian being the second branch to spit off. Peyrot then proceeds with the analysis of possible isoglosses shared exclusively by Anatolian and Tocharian. It is pointed out that the match between Hitt. *eku-zi* and Toch. *yok-* from **h₁eg^{wh-}* 'to drink' is not significant given that the same root is found in Lat. *ēbrius* 'to drunk' and Gk. *νήφω* 'to be sober', unless one accepts the semantic change 'to drink' > 'to be drunk' as a post-Indo-Tocharian innovation. A detailed critical revision is offered for the alleged link between PA **h₁eg^{wh-}* and the PU verb for 'to drink' (Fin. *juo-*, etc.). The chapter is concluded with a discussion of the interrogative stem **mV-*, reflexes of which are often claimed to be found only in Anatolian and Tocharian branches next to the **k^wV-* stem found in these and other branches. Peyrot claims that, firstly, this isogloss is of limited value for proving that Ana-

tolian and Tocharian were the first branches to split off because competing **k^w-*interrogatives could have replaced **m-*interrogatives independently in the remaining branches and, secondly, because of possible traces of **m-*interrogatives in Celtic (OIr. *má* 'if', etc.). It must be added that the Vedic and Armenian cognates of **m-*interrogatives, cited in Dunkel 2014: 518–523 and rejected by Peyrot, might still prove to be relevant. In particular, Arm. *omn* 'someone', *imn* 'whichever' may be derived from PArm. **om-* and **im-* with onset vowels analogical to *ok'* 'someone' and *ik'* 'somewhat' added to a pronominal stem **mV-*. Peyrot accepts the comparison of the two Proto-Indo-Anatolian interrogative stems to the Uralic *m-* and *k-*interrogatives (cf. Hungarian *mi* 'what' and *ki* 'who') as a reliable piece of evidence in favor of the Indo-Uralic hypothesis.

Phonology: Chapters 8 and 9 concern overlapping issues of pre-PIE phonology related to the origin of PIE *mediae*, traditionally reconstructed as voiced stops. **Martin Kümmel** ("Thoughts about Pre-Indo-European Stop Systems", Chapter 9) presented arguments in favor of a particular phonetic reconstruction of the Proto-Indo-Anatolian (= Proto-Indo-Hittite) system of stops and its implications for the PIU phonology. According to Kümmel, the typology of sound changes favors the reconstruction of a system with the opposition of voiceless, voiced and voiced implosive stops rather than a system with voiceless fortis, lenis, and preglottalized stops as suggested by Kloekhorst (2016). While Kloekhorst's reconstruction implies a change from length to voicing contrast as a joint innovation of non-Anatolian languages, Kümmel's reconstruction rather points to an inner-Anatolian innovation. The typological argument builds on the extreme rarity (or non-existence) of evidence for an unconditioned change of voiceless to voiced stops (Kümmel 2007: 47–54). Having critically revised other potential innovations of post-Anatolian IE, the author comes to a conclusion that the PIA stop system need not be different from PIE and could have voiced explosives, voiced implosives and voiceless stops, from which the "classical" system of voiced aspirated, voiced and voiceless stops had evolved in the common ancestor of Greek, Indo-Iranian, and probably some other branches. An assessment of such reconstruction in the perspective of the Indo-Uralic hypothesis is presented in the second part of the chapter. It is concluded with a useful appendix summarizing morphological and lexical correspondences (including new suggestions) between the PIA and PU. Having argued against inner-Anatolian phonological innovations, Kümmel keeps using the term "Proto-Indo-Anatolian" to de-

note the common proto-language, which affects a terminological contrast between “Proto-Indo-Anatolian” and “Proto-Indo-European”. A disclaimer on the validity of the evidence of Western Armenian for the change of voiceless to voiced stops (fn. 2, p. 117; also in Kümmel 2007: 47) invites to a detailed discussion of the dialectal Armenian material for which such change has been postulated (cf. Pisowicz 1997; Martirosyan 2018 with literature).

Building upon Čop’s (1972) equation between PIE $*g$ and PU $*\eta$ and his earlier observation (Kümmel 2012), Kümmel suggests, albeit very cautiously, that the PIU plosive series might have split into PU voiceless stops and nasals. Apart from a set of lexical correspondences supporting this view, Kümmel evokes typological evidence in favor of a change from implosives to nasals rather than vice versa. This view contrasts with a hypothesis developed in Chapter 8 by **Guus Kroonen** (“The Proto-Indo-European Mediae, Proto-Uralic Nasals from a Glottalic Perspective”). In his earlier publication (Kroonen 2018), Kroonen suggested that PIE preglottalized voiced stops developed from PIU preglottalized or implosive nasals based on a set of PIU lexical correspondences, which partly overlap with those adduced by Kümmel. While Kümmel argues that a change from nasals to any kind of non-nasal stops is cross-linguistically rare, Kroonen mentions a change from preglottalized nasals to implosives in Wambule (the Kiranti language family). In Chapter 8, Kroonen provides additional arguments in support of his hypothesis by showing that it allows to explain the distribution of the PIE suffix $*-no-$ which, according to him, was originally limited to PIE roots ending in $*-d-$ (= $*-ʔd-$) and in that respect was in complementary distribution with $*-to-$. He assumes that PIE $*-no-$ developed from $*-to-$ by the following chain of phonetic changes: $*-ʔnto- > *-ʔnno-$ (assimilation) $> *-dno-$ (buccalization). As is often the case with internal reconstructions, the suggested sound changes are not supported by independent evidence and are justified only by their explanatory power for a peculiar distribution of PIE suffixes. Additionally, Kroonen applies his reconstruction to explain Skt. *viṃśatī* ‘twenty’ next to Av. *vīśaiti*, etc. He derives the former from pre-PIE $*iṇui-ʔnkm̥ti-$ $> *iṇui-nkm̥ti-$ (dissimilation) $> *ʔui-nkm̥ti-$ (dissimilation) $>$ PIE $*h_1uinkm̥ti-$. The comparison of Kümmel’s and Kroonen’s PIU phonological reconstructions immediately evokes the question of plausibility of the resulting phonological systems. In that respect, explicit reconstructions of complete PIU consonant systems accepted by each of the authors would be helpful. One wonders, for example, whether Kroonen counts PIU $*ʔn$ (found in the recon-

struction of a word for ‘tongue’, p. 112) as a different phoneme than PIU $*ʔn$, and whether he assumes that all PIU nasals were preglottalized?

Morphology: **Mikhail Zhivlov** offers an insightful paper on the PIU origins of the PIE ablaut (“Indo-Uralic and the Origin of Indo-European Ablaut”, Chapter 15). Zhivlov suggests six rules that aim to explain the PIE ablaut and accentuation out of PIU word templates with disyllabic roots. The first five rules predict the rise of pre-PIE word forms with one vowel — $*o$ in the descendants of the PIU $*i$ -stems, and $*e$ elsewhere. Exceptionally, the second vowel $*e$ is licensed in front of final $*-t > *-s$. The sixth rule describes an accent shift to the first syllable with a high tone in a word or to any first syllable of a word with no high tones yielding the PIE accentuation (with no direct connection between ablaut and accent, cf. e.g. $*h_2f_2k̑tos$ ‘bear’ and $*septm̥i$ ‘seven’). The second part of the chapter contains an outline of the development of two types of root nouns and eight types of suffixed nouns starting from PIU with regard to the suggested rules.

Zhivlov emphasizes that the presented analysis is not circular because the PIU word templates were reconstructed on the basis of Proto-Uralic independently of the PIE data. And yet, according to him, a set of “simple phonological rules” allows one to arrive at the PIE ablaut paradigms reconstructed on the basis of internal evidence of the IE languages. Indeed, the structural contrast between PIU acc.sg. $*CVCi-m$ and (gen.)-abl.sg. $*CVC-ta$ (with the loss of $*-i-$ before a suffix containing a vowel as reconstructed based on the Uralic evidence) looks parallel to PIE acc.sg. $*CoC-m$ and gen.sg. $*CeC-s$ of the acrostatic root nouns (as reconstructed based on the Indo-European evidence).

However, the author’s claim of non-circularity may be contested. Some of the rules are less “simple” than others and yet they drive the analysis towards given PIE reconstructions. For example, the ablative ending PIU $*-ta > *-t$ is claimed to yield PIE abl. $*-s$ according to a general rule but exceptionally $*-d$ in pronouns with CV-shaped stems (cf. abl. $*me-d$ of 1st sg. pronoun). Similarly, all PIU unstressed vowels are assumed to be reduced at stage “B”, except for the position before the final $*-t$, which does not seem to be a trivial phonological rule and is introduced, it seems, for no other reason than to explain PIE nom.pl. $*-es$. More importantly, the tones and their effects on accentuation are introduced at stage “F” without any apparent relation to the PIU state of affairs in order to account for the rearrangement of accents in what would otherwise be an expected result of the rules “A” to “E”. The suggested rules do not explain the $*o$ -grade in the suffix of amphikinetic nouns (Type 5,

p. 229). In order to account for that, the author assumes an analogical influence of the hysterokinetic type at a stage when the analogical **e* changed to **o* in unstressed syllables (another additional sound change introduced to reconsolidate the outcome of the assumed pre-PIE rules and PIE reconstructions). No Indo-Uralic correspondences have been presented that would confirm the validity of the suggested correlation between the PIU **a-* and **i-* stems and PIE **e-* and **o-*grades for any of the considered types of paradigms. These reservations do not, however, undermine the value of the presented analysis, which relies on a coherent set of assumptions and sound internal logics.

Frederik Kortlandt (“Indo-European *o*-grade Presents and the Anatolian *hi*-conjugation”, Chapter 7) suggests an explanation of the origin of the PIE *o*-grade presents taking into account the changes that took place on the way from the PIU verbal system to the PIE one. Kortlandt suggests that the *o*-present evolved from the original thematic verbs with the zero-grade of a root. Roots of the **CeC-* type, which could not have the zero-grade, changed to **CoC-* within the thematic formation at the stage when an automatic apophonic alternation between **e-* and zero grade was replaced by an automatic alternation between stressed **e* and unstressed **o*. The *o*-grade eventually spread to thematic formations containing roots of the **CeRC-* type. The *e*-grade thematic formations such as **b^here-* were analogically built at a later stage when both the root and the ending could have a full *e*-grade and after the split of the Anatolian branch.

Some components of Kortlandt’s analysis are less explicit than others. For example, he claims that the PIE transitive thematic injunctive emerged through a “partial addition of the perfect endings” to an impersonal verb that had endings **-e* (PIU demonstrative pronoun) in the singular and **-o* (PIU reflexive pronoun) in the plural. However, the similarity is incomplete between the perfect endings and the original thematic endings reconstructed for the specified stage D (cf. Perf. **-q₂e*, **-tq₂e*, **-e*, **-mq₂e*, **-q₂e*, **-er* vs. Pres. **-o-q₁*, **-e-q₁*, **-e*, **-o-mq₁*, **-e-tq₁*, **-o* as indicated in the unnamed tables on pp. 104 and 105) even if one takes into account the sound law **q₂* (uvular stop = **h₂*) > **q₁* (glottal stop = **h₁*) before and after **o* as suggested by Kortlandt for that matter.

In his contribution “The Proto-Indo-European Suffix **-r* Revisited” (Chapter 2), **Stefan Bauhaus** argues that the locative **-r* which underlies, for example, Av. *zəm-ar-* ‘on/in earth’ (next to Skt. loc. *kṣám-i*), was a PIE case ending, which originally characterized only nominal and pronominal forms, rather than an endingless locative of the heteroclitic stems or an adverbial

ending, which could be added to nominal, pronominal, and adverbial stems. He further assumes that the case ending was reanalyzed as an adverbial ending **(e)r* and suffix **-ter-* at a later stage of PIE by means of the following grammaticalisation path: locative case of a noun > local adverb > adposition. Based on the suggested analysis, the author reconstructs a set of PIE root nouns, e.g. PIE **h₁(e)up-* ‘top; surface’, loc. **h₁up-er* → PIE adv. **h₁uper* ‘above’. He further derives the comparative suffix **-tero-* from spatial local adverbs within the model of semantic change ‘above’ ≈ ‘more to the top compared to a reference point’.

According to Bauhaus, the locative **-r* was opposed to directive in **-o* (thus, loc. **h₁up-er*, dir. **h₁up-o*) in early PIE, an opposition that could in theory continue the PIU opposition of adessive and allative cases.

Bauhaus considers the temporal meaning of formations in **-r* as secondary compared to the spatial meaning. However, the most secure of the presented examples for nouns and pronouns demonstrate both types of meaning, e.g. loc. **h₂us-ér* ‘at dawn’, loc. **ǵ^him-er* ‘in winter’ next to loc. **d^hǵ^hm-er* ‘on/in earth’, etc. It is probable that location in time and space could be expressed by the same morphological constituent at the earliest reconstructible stage of the proto-language. Moreover, the author favored the comparison of PIE **k^wor* (Skt. *kar-hi* ‘when’) with Komi-Zyrianic *kor* ‘when’, in which case the reconstruction of the temporal meaning of **-r* would be justified at the PIU stage.

Bauhaus argues that **k^wur*, represented by clear Baltic, Albanian, and Armenian cognates (Lith. *kuĩ*, Arm. *ur* ‘where’, Alb. *kur* ‘when’), replaced early PIE **k^wor* (attested, in particular, in Indo-Iranian, cf. Skt. *kár-hi* ‘when’) by analogy to **k^wu-* of other pronouns. If correct, this isogloss may be relevant for establishing the internal relationships within the *satəm* branches setting Indo-Iranian apart from Baltic, Albanian, and Armenian.

Alexander Lubotsky (“The Indo-European Suffix **-ens-* and Its Indo-Uralic Origin”, Chapter 11) offers suggestive evidence for the reconstruction of a PIE suffix **(e)ns-*, which could be used to derive deverbal adjectives, e.g. **ǵ^hh₂-ens-* ‘goose’ (= ‘gaping’) from **ǵ^heh₂-* ‘to gape’ and **meh₁-ns-* ‘month’ (= ‘measured’) from **meh₁-* ‘measure’. According to Lubotsky, the adjective had a patientive meaning when derived from a transitive verb, and an agentive meaning when derived from an intransitive verb similarly to the PIE **nt-*participle. Lubotsky further suggests that **-ens-* and **-ent-* were once parts of the same paradigm, the alternation of **s* and **t* within which was parallel to that of the perfect participle in **-uos-/uot-*. With that,

*-ens- is considered an outcome of PIE *-ent-i, a locative form of the PIU participle undergoing the sound change PIU *ti > PIE *si. This solution brings together the PIE *nt-participle, verbal adjectives in *(e)ns-, and the PU nominal suffix *-nt-. It is not entirely clear whether the author also derives PIE perf. ptc. *-uos-, mentioned as a parallel to *-ens-, from PIU loc. *-uot-i. It would raise the issue of explaining the secondary spread of the locative form of the suffix within the PIE participial paradigm (see an overview of alternative explanations of the PIE perfect participle in Herzenberg 2006 among others).

Rasmus Gudmundsen Bjørn (“Pronouns and Particles: Indo-Uralic Heritage and Convergence”, Chapter 3) explores the cogency of PIE and PU pronominal systems, in particular, derivatives of interrogative *ku (PU *ku-, PIE *ku- > *k^w-), *ki- (PU *ki, PIE *k^wi-) and *ko- (PU *ku-, PIE *k^wo-), anaphoric *i/e- (PU, PIE *i-), and demonstrative anim. *so- (PU *so(n), PIE *so) next to inanim. *to- (PU *to/tu, PIE *tod). The author assumes that PIE *k^wi- and *k^wo/e- expressed the contrast between the direct and oblique cases. He favors Dunkel’s analysis of PIE *k^wi- as continuing a pre-PIE compound of the interrogative particle *ku, which is at odds with the equation PU *ki and PIE *k^wi- discussed in section 1.1. The author further assumes a sound law PIU *t^s > PU *t^s, PIE *s/t (where PIU *t^s > PIE *t is not supported), which allows to change the reconstruction of the PIU demonstrative pronouns to *t^so-/to-. According to the author, the parallelism in the contrast of animate vs. inanimate expressed by the *t^so- and to-demonstrative pronouns constitutes important evidence in favor of the Indo-Uralic hypothesis.

Michiel de Vaan (“Proto-Indo-European *sm and *si ‘one’”, Chapter 14) suggests an insightful analysis of two (pre-)PIE lexemes meaning ‘one’ — *(s(e)m- and *si-. While the former is well attested in the majority of the IE branches, the reflexes of the latter are only attested in Anatolian and possibly also in Tocharian and Greek. According to de Vaan, these two numerals go back to two different deictic pronouns, which developed the identificational meaning ‘one’ and then turned into the numeral ‘one’ independently and at different chronological stages (*si in PIE and *sm after the split of the Anatolian branch). He further hypothesizes that the deictic *si is akin to the demonstrative *so ‘that’ (nom.sg. of *to-) and shows the i/o alternation of vowels seen, for example, in *k^wi(d) ‘what’ and *k^wo ‘who’. These *si and *so are ultimately derived from pre-PIE inanimate absolutive and animate nominative of an identificational pronoun, respectively. Furthermore, the author sees traces of pronouns *sm and *si in the oblique forms of demonstrative pronouns, cf.

masc./neut. obl. *h₁e-sm- and *to-sm- and fem. obl. *h₁e-si- and *to-si- (with a change from inanimate to feminine gender semantics of deictic *si after the split of the Anatolian branch).

While the semantic change ‘one’ > ‘that one’ or ‘someone’ is rather trivial, particularly as a source of indefinite articles, a reverse change from an identificational meaning ‘that one’ to numeral ‘one’ looks problematic, and yet it is assumed to have taken place independently two times at different stages of PIE. Additional justification of such semantic development would strengthen the suggested analysis.

Syntax: Dag Haug and Andrei Sideltsev (“Indo-Anatolian Syntax?”, Chapter 4) address the reconstruction of a particular syntactic feature, the position of so called “bare interrogatives” (interrogative pronouns used as indefinite ones) in PIE. The chapter is based on an earlier study (Haug 2016) dedicated to bare interrogatives in principal ancient Indo-European languages, and offers an in-depth analysis of the Anatolian evidence. Based on the material of Old Hittite and other Anatolian languages, the authors argue that Proto-Anatolian (PA) had no bare interrogatives in conditional clauses and after negation markers. Such phenomena in Middle Hittite and in post-Anatolian IE must then be independent innovations. This assumption is further supported by the wider scope of usage of bare interrogatives in post-Anatolian IE than in Middle Hittite. Reconstructing PIE bare interrogatives of the Middle Hittite type would contradict a typologically justified generalization that bare interrogatives widen the scope of their uses over time (Haspelmath 1997). The presented analysis of the uses of Anatolian pronouns in different syntactic constructions constitutes an important contribution to the PIE syntax.

Milan Lopuaä-Zwakenberg (“The Anatolian “Ergative”, Chapter 10) revisits the issue of neuter nouns that take a special marker when expressing the subject of transitive constructions in the Anatolian languages (Hitt. sg. -anza, pl. -anteš). The author starts with an overview of four competing analyses of that phenomenon: -ant- is a derivational suffix of personification; -ant- is an inflectional suffix that marks a change of morphological gender in the subject position of a transitive construction; -anza/-anteš is an ergative case; -anza is an ablative case used in the ergative function. Based on KBo 25.107, 4–6, where *appuzzi* and *appuzzianza* ‘animal fat’ do not show any lexical contrast, the author concludes that -ant- could have a purely syntactic function already in Old Hittite. Taking into account the Middle Hittite evidence of the same syntactic function, the author excludes the hypothesis of a

special ergative case in Old Hittite and hence in PA. The presented Cuneiform and Hieroglyphic Luwian examples point to derivational and inflectional functions of the suffix *-ant-* in these languages. For Lycian, the author tentatively assumes that the ergative case developed from an inflectional suffix, although the evidence is admittedly very poor. The Lycian ergative finds a parallel in the development of *-anza/-anteš* into an ergative marker in the later Hittite, which, according to Lopuää-Zwakenberg, represents an independent innovation. As for the function of the underlying suffix **-ont-* in Proto-Anatolian (PA), the position of the author is less clear. On p. 145, one finds the following formulation: “...there existed a semantic suffix **-ont-* in Proto-Anatolian that had personification as one of its functions. Furthermore, we can regard the syntactic suffix **-ont-* as a degrammaticalisation of the semantic suffix **-ont-*.” The cited statement is a plausible account of the presented evidence (although the term “grammaticalisation” might be more appropriate in this context). However, on the next page, one reads: “Since we find the syntactic suffix **-ont-* in all Anatolian languages in which the agentive is attested, we should reconstruct this grammatical suffix into Proto-Anatolian, which means that a suffix **-ont-* that could only be used syntactically must be of pre-Proto-Anatolian date.” (Italic mine — PK). Thus, the derivational semantics of PA **-ont-* is discarded without good reasons together with the Anatolian evidence in its favor (for a more detailed analysis of the derivational semantics of *-ant-* in Anatolian now see Goedegebuure 2018 with literature). Does the author mean that the suffix of personification developed a syntactic function in PA or PIA? Was a syntactic function the only function of **-ont-* at any stage of PA? In conclusion, the author offers a suggestive hypothesis that the Anatolian constraint on the use of neuter nouns in the position of the subject of the transitive construction should be reconstructed for PIA and that the spread of the accusative ending to the nominative of neuter nouns is a plausible post-Anatolian innovation.

Rosemarie Lühr (“Headedness in Indo-Uralic”, Chapter 12) investigates the head directionality parameter within the Indo-Uralic hypothesis, based on the assumption that PIE and PU were SOV languages. The study presents the comparison of head directionality features (such as the position of verb, adpositions, adjectival and genitival expressions, possessor, and relative clauses) in Old Hungarian, Hittite and Vedic. Lühr comes to a conclusion that Hittite and Old Hungarian show more common features characteristic of the SOV type than Vedic. Consequently, if PIU existed, its PIE descendant must have been closer to the

Hittite type rather than the Vedic one with respect to word order.

Terminology: The reviewed volume exposes a terminological issue that concerns other publications in the field. A rather wild array of terms, often referring to identical notions, can be found in the descriptions of the internal structure of the Indo-European language family. For example, the proto-language after the split of the Anatolian branch is labelled as “narrow IE” (Haug, Sideltsev; Zhivlov), “Classical Indo-European (CIE)” (Lopuhaä-Zwakenberg), “Late Proto-Indo-European (LPIE)” (de Vaan). Due to the lack of a unified terminology, the authors specify such terms in several chapters. In my view (partly in line with a recent discussion of this issue in Olander 2019), given that the notion of a language family refers to all Indo-European languages the relation of which is universally accepted, it is appropriate to retain the traditional term “Proto-Indo-European” as a designation of the family common ancestor at the expense of “Proto-Indo-Anatolian”. The differences in hypotheses related to the internal structure of the family should not affect the name of the family, which as such does not contain any specific implication of a branching scenario. These are internal nodes that require operational labels, exclusive (e.g. “Post-Anatolian Indo-European”, “Post-Tocharian Indo-European”, etc.) or inclusive (e.g. “Italo-Celtic Indo-European”, “Greco-Armenian Indo-European”, etc.) within each given hypothesis.

To conclude, the reviewed volume is a stimulating contribution to the discussion of the internal structure of the Indo-European language family and the Indo-Uralic hypothesis. On the one hand, it highlights methodological issues concerning the internal reconstruction and distant comparison and, on the other hand, proposes new evidence and solutions. The volume is thoroughly edited and represents an exemplary piece of scholarly literature.

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