Once More on "Der griechische verbalaccent"

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Πᾶν ῥῆμα βαρύνεται ἢ περισπᾶται· γράφω, τύπτω, ποιῶ, βοῶ…
(Ps.-Arc. 170, p.309 Roussou (2018); cf. Jo. Alex. Τον. παρ. 90.1, and further apud Roussou ad loc.)

1. Synchronic statement of recessive accentuation of the verb in Dieu (2022: 195): "[l]'accent des formes verbales conjuguées remonte généralement le plus possible selon la loi de limitation."

2. LoL in synchrony since the law "must have a reasonable synchronic analysis in order to have existed at all" (Probert (2023: 129). A first informal, descriptive statement (cf. Sandell 2023: 490)

    Law of limitation (informal statement, skipping further nuances)
    In prosodic words of three or more syllables, the surface accent (high tone, H) is limited to a window of the three rightmost syllables (further restrictions govern accent types: σωτῆρα rule, etc.)
    (λεγόμενος/*le.gó.me.nos* 'being said' is possible but *λέγομενος/*lé.go.me.nos* is not)

    Recessive accentuation
    Accent as far left as the LoL allows; if the final syllable is heavy, accent no farther than the penult
    (φερόμην 'I was carrying' unaug. impf. is possible, [X]φέρομην not)

3. Diachronically, Probert (2006: 86) deems it "the most important [accentual] innovation of Greek."

4. Historical problem perspicuous: Vedic has an unbounded stress system, no window restriction but accent controlled by morphology. Question: *How did the Greek innovation arise*?

5. Today: Against traditional enclitic verb – Wackernagel (1877) "Der griechische verbalaccent" – I build on a new proposal by Probert (first 2012, cf. 2023 and esp. *fthcm.*) that formalizes the LoL and begins from an *accented* (not *enclitic*) verb in Proto-Greek. I bolster by producing more evidence for a PIE accented verb and ask why Greek verbs (but not nominals) are consistently recessive.

Roadmap
- §1 Description of the Greek verbal accent
- §2 "Der verbalaccent" as "enclise" in Vedic and PIE? [Wackernagel (1877), Dieu (2022)]
- §3 German V2 as WL enclisis? [Wackernagel 1892]
- §4 Greek evidence reconsidered: Building on Probert (2012), (2023)
- §5 Conclusions

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§1 Πᾶν ῥῆμα βαρύνεται

6. Ancient Greek (Attic-Ionic) finite verb, basic rule: accent almost all finite verbs with "recessive" accent (≈ancient *barytonesis*) restricted by the LoL. Exceptions are few [Sources: Dieu (2022: ch.7)]

   a) Five second aorists **imperatives**: εἰπέ, ἐλθέ, εὑρέ, and in Attic ἰδέ, λαβέ.
   [And Attic πιέ, φαγέ? (discussion in Vessella 2018: 199)]
   b) Second aor. **middle imperatives**: λαβοῦ, λιποῦ (not Ion. -εο, e.g., πύθεο); cpd. ἐπιβαλοῦ, ἀπολιποῦ
   c) εἰμί and φημί are enclitics with some complications (e.g., "existential" ἔστι; note impv. φαθί)
   d) **Compounds** of monosyllabic aorist imperatives accent the last syllable of the preverb: ἀπόδος 'give back!' (not ˣἄποδος), κατάθες, συναπόδος, συμπρόες (ἵημι), ἐπίσχες
   e) Accent does not recede beyond the **augment**: κατέσχον 'I obtained' (not ˣκάτεσχον).
   f) Contract verbs accented "**before contraction**" ἐφιλοῦμεν (not ˣἐφίλουμεν)
   ["Late" word-level accent assignment, post-lexical vowel contraction: discussion in Probert (2010)]

7. LoL: φέρω, φέρομεν, or with words showing the scope of the law: φερόμεθα, ἀναγκαζόμεθα, etc.

8. Nothing like this in Vedic! Sesquipedalian *ápratidhr̥ṣṭaśavasam* '(Indra) of irresistible strength' (RV I.842b) is fine. Ancient Greek innovation (bounded system) is perfectly clear, typologically common (Kager 2012). Words falling outside the LoL (Anatolian after Yates 2017: 112)

	Vedic	Anatolian	Greek
4-σ	*bháramāṇāḥ* 'carrying' (pres.mid.ptcp., nom.pl.m.), *pratibúdhyamānāḥ* 'awaking to you' (nom.pl.m)	*pēdumeni* 'we bring' [pé:tumeni] *pūnuššanzi* 'they question/interrogate' [pónus:antˢi]	φερόμενοι 'bearing' (ˣφέρομενοι illicit)
5-σ	*r̥tájātasatyāḥ* '(Dawns) really born of truth' (IV.51.7)	*tittanuwanzi* 'they install' [tít:anuwantˢi]	ἐϋκνήμιδες 'staunch-greaved' voc.pl. (not ˣἐϋκνημιδες)
6-σ, etc.	*ánipadyamānam* 'not settling down', pres.mid.ptcp., acc.sg.m. (RV I.164.31a = X.177.3a)	——(?)	ἀναγκαζόμεθα 'we are being compelled' (not ˣἄναγκαζομεθα)

9. Reconstruct PIE without a window or edge-restriction. Accent is unbounded, determined morphologically as a lexical accent system, as discussed by Lundquist & Yates (2018: 2121–2133).

10. The real wrinkle: matrix clause Ved. *bharanti* 3pl. 'they carry' but subordinate or sentence/*pāda* initial the verb is accented *bháranti* (overview in Macdonell 1910: §95-101).

11. For Wackernagel (1877), *anudātta* means enclitic; the Greek verb he derives from earlier enclisis. Accented by "l'accent d'enclise" (Dieu 2022:149): just as Gk. ἄνθρωπον but ἄνθρω<u>πόν τινα</u>, so enclitic *φερομεν would be φέρομεν. Longer forms like *ἄνθρωπος φερεται are deemed uncertain. But everything in this account hinges on the Vedic *anudātta* being indeed enclitic…

12. *Status quaestionis*:
   - Judicious appraisal by Fortson (2010: 109–110, §5.63): "finite verbs were prosodically weaker" (with phonetic correlates of weaker stress or lower pitch) especially in main clauses. IE facts suggest that finite verbs were prosodically deficient – but that verbs were "true clitics," had no stress, formed an accentual unit (i.e., were incorporated into a new prosodic domain), etc., is judged "uncertain, but is a position defended by many Indo-Europeanists." Finally, weaker prosodic status of verbs (vs. nouns) is typologically common.

   - Fortson (2010: 168) comments, "[t]here is as yet no theory of diachronic prosody–how prosodic systems change historically in the course of a language's development." See now leaps forward in Sandell (2023); we are in a better position than in 2010.

13. Dieu rejects the (incompatible) account by Probert (2012: 178–9), who does not begin from an enclitic verb in PIE, of which she is "agnostic." (see now Probert 2023, *Fthcm*). I build on Probert's account but first dispute more than agnostically these theoretical bases of an enclitic verb in PIE.

§2 Contra an Enclitic Verb for PIE: Vedic Verb Accent Revisited

Sample passage (VII.81.3, Dawn, *br̥hatī/satobr̥hatī* in *pragāthas*)

> *práti tvā duhitar diva / úṣo jīrā́ abhutsmahi /*
> *yā́ váhasi purú spārháṃ vananvati / rátnaṃ ná dāśúṣe máyaḥ //*

> In response to you, o Dawn, Daughter of Heaven, we lively ones have awakened -- you who convey much to be coveted, you winner, (who convey) pleasure, like a treasure, to the pious one.
>
> (tr. Jamison & Brereton 2014)

14. Three *anudātta*'s for three different reasons:
   a) pronoun *tvā* a standard "special" clitic; I won't expatiate but refer to Hale (2007: ch.9). This "2P" *not* the same as, e.g., verse 1: *práty u adarśy āyatī́ ucchántī duhitā́ diváḥ* (VII.81.1ab)

   b) Vocative phrase *duhitar diváḥ*. An entire phrase not a likely clitic! Wackernagel (1896: 289, §248b): "Der Vokativ" is "enklitisch" like "enklitisch" pronominal forms. No; vocatives place high tone on the first syllable *úṣaḥ* (stem *uṣás-*). Vocative "chant" Gussenhoven (2004: 313–315) or "calling contour" Hale (2021); not a "barytonesis/stress" retraction (Gunkel 2017 is contra).

   c) verb *abhutsmahi* is *anudātta* in a main clause vs. *udātta* in the subordinate (relative) *váhasi*

15. We must not lump verbs and vocatives. *anudātta* and clitics aren't the same! Weiss (2020: 117): "The non-accentuation of verbs in main clauses in Vedic has nothing to do with enclisis of the more general sort."

16. What's going on with the Vedic verb? Beginning with Klein 1992:96 (and esp. 1997: 271–280), the unaccented verb "emphatically cannot be a Wackernagel's Law type enclisis" but comes instead from the falling pitch (downtrend) at the end of the sentence where the verb would be.

17. Taken up in a series of publications by Hock. Klein model as summarized by Hock (2014)

[12] a. Original canonical word order: S   O   V#
    b. Original canonical clause order: DC   MC
    c. Accentual effects on V: [S O V↑]$_{DC}$ [S O V]$_{MC}$##
                           [anti-final acct.]   [- acct]
    d. Grammaticalization, extension to other contexts, such as [1a], where MC precedes DC.

18. Two later papers. Hock (2015: 69–72): verb final a valid and common linearization; Hock (2019) a falling intonation at sentence end of assertive main clauses is the cross-linguistic norm.

19. Diachrony, with Hale (2021): What diachronic "noise" triggers this de-accentuation in verb-final structures? The normal declination of tonal contour in declarative clauses leads to a compressed space to realize pitch-contrasts at utterance-end – "harder for an acquirer to perceive than broadly contrastive encoding, given the nature of the human perceptual system." (cf. Hale 2007: 135–144).

20. Hock (2014: 163–173) diverges from Klein (and I from Hock) when he explains the Vedic verb via an accent retraction. Strikes me as introducing unnecessary complications (*op.cit.* 168)

[21]	Development into Vedic:	Without prefix	With prefix
	MC pattern:	*yú-ñ-j-anti	prá=yu-ñ-j-anti
		→ **yu-ñ-j-anti**	
		(verb unaccented)	
vs.	DC pattern:	yu-ñ-j-ánti	pra=yu-ñ-j-ánti
		(verb accented)	

21. Hock (2014: 174) finds further support by explaining the Greek accent by this shared innovation

[29]   PIE *di /e-déO-mi   :   Gk. *dí-dō-mi* 'I give'
    a. Usual assumption: *didṓmi > *didōmi > dídōmi
       (with accent loss, followed by retracting dummy accent)
    b. This proposal: *didṓmi > dídōmi
       (with generalized accent retraction, starting utterance-finally)

22. Contra:
- No such stage as Vedic *yúñjanti
- Not a clearly shared innovation: Hock relies on a shared univerbation of preverbs...
- But preverbal *prá=yuñjanti* (leading to hypothetical *yúñjanti) is not the sole linearization of the preverb – an objection Hock (2014: 170n.11) attributes to Stephanie Jamison and does not answer. A shared innovation is costly.
- Related to the above, the apparently shared traditions of *tmesis* speak against an innovation.

23. Rather, Vedic verb with Keydana (2021: 201) owes its non-accent to "the low boundary tone (L%) associated with the right edge of the ι[intonational]-phrase in assertive utterances," or in terms developed by Sandell (2023: 296–304), in apparently unaccented verbs, "the intonational tone may override the default prominence tone /H*/ and prevent the latter from being realized."

24. Lowered tone *not* the same thing as enclitic; *anudātta* in verbs and vocatives diverge–neither one a clitic–and again both split from the pronouns and particles (which are enclitic). Verbs are polysyllabic and an open class lexical category: *not* at all likely to be clitic across the board.

25. Diachronically: we cannot begin our Greek story from a Vedic enclisis if there was none.

§3. Contra an Enclitic Verb for PIE: Germanic Revisited

26. Dieu (2022: 197) "les données germaniques permettent sans doute également de postuler l'enclise du verbe en proposition principale ou indépendante." What "données"?

27. Cites Wackernagel (1892: §12, p.427) extending his 1877 argument: V2 in German represents the same clitic movement as WL. Therefore, the German(ic) verb was likely enclitic early on.
    Wackernagel verbatim: "…daß in der Grundsprache das Verbum des Hauptsatzes, weil und insofern es enklitisch war, unmittelbar hinter das erste Wort des Satzes gestellt worden sei. Mit andern Worten: das deutsche Stellungsgesetz hat schon in der Grundsprache gegolten." (my emph., JL)

28. Untenable. Most scholars would decouple these two "second positions": no WL "second position" (Hale 1995, Hale 2017), and German V2 is better done via syntax (T to C raising), not prosody. Not even clear that V2 held consistently in ancient Germanic tongues (Eythórsson 1995: 324–332 [no V2 in topicalization in older continental WGmc.]; survey in Harbert 2007: 396–401).

29. The evidence for a categorical clitic verb is non-existent: incontrovertible proof of an inherited accent arises as *grammatischer Wechsel*: Verner's Law variants seen in, e.g., Old English 3sg. *wearþ* 'became' but 3pl. *wurdon* < **wurðón.*

30. Germanic must have inherited a PIE verbal accent; whether the verb was prosodically weaker in main clauses in a Vedic-like way remains murky (Ringe 2017: 24) – but see below…

31. Dieu cites Suzuki (2008)–a PhD under Hock–but the author in fact argues a more nuanced point: Old English had clitic verbs but only unstressed light verbs qualify (e.g., *wæs ~ wǣron, sceal, wearð, mæg*). Suzuki maintains that metrically unstressed verbs are *not* clitics.

32. "Metrically unstressed"? Consider the OE poet (*scop*) and Sievers' Rule of Precedence: where verse positions are filled by a noun and a verb, the noun preferentially alliterates (Minkova 2014: 301–2).

33. Modern and Continental West Germanic languages, older Germanic, complements are prosodically stronger than verbs (<u>Minkova 2017: 66</u>). Matching meter and linguistic continuity "is a good argument for projecting this prosodic contour to Old English" (Minkova *op.cit.*).

34. Older than Old English? No less a metrical master than Watkins (1995: 23) made this point, citing the celebrated Gallehus Horn, runes running *ek **h**lewagastiR **h**oltijaR **h**orna tawido* 'I, Hlewagastiz of Holt, made this horn'; with Watkins, this snatch of staves "must reflect very ancient Germanic prosodic practice." (on the same verse, e.g., Russom 2017: 46)

35. A relatively weaker prominence of the verb is not the same thing as a clitic! Fortson (2008: 266): "for the other Indo-European languages, even if verbs were atonic or lower in pitch, there is no evidence that they were clitics except for special instances, and, as in Latin, the strongest evidence of cliticization and/or weaker accentuation comes from mono- and disyllabic forms."

36. Typological trend tracked in Indo-Iranian and now Germanic: nouns are prosodically privileged (making more contrasts) over verbs (Smith 2001, Haspelmath 2012).

37. Fazit: Germanic verbs inherit accents. Greek verb beginning from a PIE clitic should be scrapped.

§4. If not from enclitics, then from where? Another approach (Probert 2012)

38. *In nuce*, Probert (2012) proposes that the LoL arose via a *reanalysis* of existing forms that "obeyed" the LoL *avant la lettre*. PGk. *$*p^h éronti$* (Skt. Class I) could be parsed as accented within a trisyllabic window at the word's right edge. Ved. *bháranti* = PGk. *$*p^h éronti$* still a *comparandum* at this stage.

39. Important point in Probert (2023): the LoL must have a "reasonable synchronic analysis in order to have existed at all." We must provide a synchronic analysis; Dieu does not (criticized by Lundquist 2025). Diachronically, the problem becomes how learners parsed available forms to converge on this structure against whatever structures once competed with it; what was the "diachronic noise"?

40. For the sake of argument, with Probert (2023, formalized with OT constraints in Probert *fthcm*), let's entertain the proposal of Steriade (1988) in a metrical model.

41. Greek foot structure would look something like the following, assuming a L-R parsing into quantity insensitive moraic trochees, final C extrametricality (cf. ἄνθρωπος vs. ἀνθρώπου), R-most light syllables extrametrical; accent the leftmost syllable of the rightmost complete foot.
    [based on Steriade (1988), (2014), Probert (2010), thorough overview in Sandell (2023)]

    $(e.p^h e.)(ró.mee.)<n>$ = ἐφερόμην 1sg.impf.mid. 'I was carrying'
    $(e.p^h e.)(ró.me.)<t^h a>$ = ἐφερόμεθα 1pl.impf.mid. 'we were carrying'

42. This accent is known as "recessive," can be metrically calculated, not lexically assigned (i.e., syllable weight matters, not morphemes and their accentual properties). Clearly in Greek, the accentual horizon is bounded: only the rightmost three syllables can bear the accent.

43. Probert (2012) suggests that Greek inherits verbal accents from PIE. These Proto-Greek verbs could be parsed as obeying a moraic structure. A paradigm parsed into a moraic structure:
 (φέρω), (φέρεις) [*(p^hé.re)<si>], (φέρει) [or *(p^hé.re.)<ti>], (φέρο)<με><ν>, (φέρε)<τε>, (φέρον)<τι>.

44. Some accents would fall too far left (*φέρομεθα) and be realigned; other fall too far for the weight restrictions (*φέρομην); these exceptions are heavily outnumbered (Probert 2012). The LoL originates via reanalysis of an operative part of the grammar (footing) and extends as a regularity across the lexicon (cf. "restructuring" Hayes 2009: 224–234, Harris & Campbell 1995: 61–119).

45. By reanalysis, accent becomes metrically (not morphologically) calculated: φέρομεν because the string is parsed (p^he.ro)<me><n> and then accented by footing (p^hé.ro)<me><n>. This is like Latin and unlike Sanskrit (either root *bhár-a-* or, likelier, preaccenting morpheme |*bhar-´a-*| → *bhára-*).

46. Once this reanalysis emerges, important consequences follow. Once accent is assigned to the string (p^he.ro)<me><n> as (p^hé.ro)<me><n>, surface PGk. *p^héromen* etc. *looks* the same as Class I accent – but it's not! No more is φέρω, φέροντι (or φέρουσι) an equation with Vedic *bhárāmi, bhárāmaḥ, bháranti* than is Lat. *férō, férimus, férunt* (or Goth. *baírand* 3pl., etc.) even though the same syllable of the same cognate word is accented. The point is subtle but important for comparativists (cf. Lundquist 2021: 145 *contra* Fritz & Meier-Brügger 2021: 161).

47. Note *not* all verbs recessively accented (recall aor. imperatives, ἐλθέ, etc.; cf. *infra*) but clearly most verbs are. Why so thoroughgoingly recessive in the verb but not nominals?

48. Not all nominals are recessive: adjectives like μαθηματικός, λιγυρός, etc., are cases in point. Can be handled differently but an inherently accented suffix like adjectival -κό- or -ρό- will surface: (μαθη)(ματι)(κό)<ς> (guarded from extra-metricality). Consider how many lexically accented suffixes *of the noun* Proto-Greek inherits from PIE: vast is their number (cf. Dieu 2022: 271–370).

49. But mull over how many *verbs* had accented suffixes in late P-Greek, à la Vedic or Anatolian. Any?

50. Dieu chides Probert for failing to recognize the extent of *tudáti* presents but this is a red herring: they are not thick on the ground with γράφω, γλύφω the only decent candidates.
 [E.g., Willi (2018: 351–353) "Greek *'tudáti* Presents'?" and Ringe (2024: 189).]

51. This present class (Skt. VI) unlikely to have exerted real influence; but how many verbal categories would have lexically "broken" the proto-recessive accent in Proto-Greek?

52. Mostly being metamorphosed the suffixes of erstwhile "imperfective stem formation" (Lundquist & Yates 2018: 2159–2165), e.g., a sampling:

<u>Thematic</u>
o *-é- class VI (*tudáti*): irrelevant to Greek
o *-sḱé/ó-*: ἔρχεται (cp. Ved. *r̥chάti* VI), βάσκε/ο- 'come, go' (with *gáchati,* I). Resurgence of this moribund suffix in Ionic likely owed to Anatolian influence (Watkins 2001; Bianconi 2019: §3.1, but cf. Willi 2024) against other branches (Zerdin 1999)
o *-i̯é/ó-*, primary βαίνω, τύπτω, etc., with Vedic class IV (*dī́vyati* 'gamble'): various outcomes in Greek, all changed upon the loss of yod (phonologically opacified).
o Or secondary denominal *-i̯e/o-*: transformed in -αίνω, -ίζω, -άζω, etc. Original accentuation? Kümmel (2018) accented recessive–in Kiparsky's sense– *-é-ye/o-* ("housecleaning" in Vine 2016)

<u>Athematic</u>
o *-né- ~ -n-* accented as Vedic VII *yunákti ~ yuñjánti* (also V, IX, etc.), reformed in Anatolian (Yates 2015: 148–150, et ubique): refashioned everywhere in Greek (Sturm 2021)
   a) externalized: ζεύγνῡμι, -νῠμεν (ablauting after -νη- ~ -να- < *-ne-h₂- ~ -n-h₂*, Skt. IX)
   b) thematized: τέμνω (beside Ion. aor. ταμεῖν inf.)
   c) doubled and thematized: λιμπάνω [Fortson (2010b), Jasanoff (2022), Ringe (2024: §4.2.1)]
   d) Inherited old roots in *h₂* but resegmented after H-loss: δάμνημι, -νᾰ- < *dm̥-né-h₂-ti* (I disagree with Probert's late chronology of *δαμνᾶμι, *δαμναμέν)

53. What's going on in the Greek verb? Inherited suffixes with lexical accents are resegmented, transformed, lost. *Any* present-forming suffixes likely to be inherited with a lexical accent? (mull over *-éi̯e/o-*, reduplicated presents, obsolescent root presents, etc.). On s-aor., see Probert (2012).

54. When these verbs lost their internal segmentation, either through sound change (δάμνησι with laryngeal loss) or resegmentation of a suffix (βασκε/ο- as a stem), lexical accents would be lost; once lost, the stem accent would be recalculated. This cycle of loss and reassignment of accent Probert (2006) elucidates: "demorphologization" and "default" accentuation (cf. Yates 2015).

55. The late P-Greek verb maintains few if any accentually dominant derivational suffixes in the verb. The change to a recessive accent for the verb was not inevitable but the likelihood increased as counterevidence from an accented morpheme decreased – root-accented stems flood the market.

56. Non-recessive verbs? Recall a handful of imperatives are rare exceptions: ἰδέ (inf. ἰδεῖν, ptcp. ἰδών, ἰδοῦσα), εἰπέ (εἰπεῖν, εἰπών, εἰποῦσα), mid. λαβοῦ in Attic, and athem. present φαθί.

57. Gk. εἰπέ, εἰπεῖν, etc. < *u̯e-uku̯-é-* retains the accent proper to a reduplicated aorist (cf. Gk. πεφνεῖν). We match Greek's accented suffix with the zero-grade root vocalism–doubtless, an archaism. I disagree with Rix (1992: 216) and Gotō (2013: 112 with n.252): the stem is thematic *ab ovo*.

58. Vestigial εἰπέ (εἰπεῖν; εἰπών, εἰποῦσα) makes one of the only cases known to me where Greek retains the archaism contra Vedic: Ved. *vóca-* is mainly injunctive (cf. Gotō 2013: 112), showing the demorphologized outcome of an erstwhile reduplicated aorist from IIran. **va-uč-á-* (OAv. *vaoca-*).

59. Dovetailing nicely with an observation by Jasanoff (2018: 152 n.61): "the accentuation of Ved. *vócat*(*i*)*, vócaḥ,* etc. must be secondary vis-à-vis that of the optatives *vocéyam, vocéma, vocéyuḥ.*"

§5. Conclusions

60. *No PIE enclitic verb*: neither Vedic nor Germanic needs it, and both are better explained without it; we begin from Proto-Greek within a lexical accent system, plausibly with a relatively weaker prominence of the verb. Vedic main clause verbal *anudātta* appears to be an Indic innovation.

61. By Proto-Greek, the verbal system became reanalyzed from lexical to metrical accentuation. The verb will have had few if any lexical overrides–inherently accented suffixes–to break the budding recessivity. Verbal accent would be learned as obeying the LoL and being accented recessively. Greek conforms to the typological generalization: the noun is prosodically privileged.

62. Proposal could be further sharpened by more explicit constraint ranking (Probert *fthcm*) and studies in learnability of diachronic systems (Sandell 2023); but for today, that's enough. I believe this trajectory is more viable than previous proposals for the "griechische verbalaccent."

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