

Historical Change



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Sir William Jones (1746-1794)

The Sanskrit language, whatever be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either, yet bearing to both of them a stronger affinity, both in the roots of verbs and in the forms of grammar, than could possibly have been produced by accident; so strong indeed, that no philologer could examine them all three, without believing them to have sprung from some common source, which, perhaps, no longer exists: there is a similar reason, though not quite so forcible, for supposing that both the Gothic and the Celtic, though blended with a very different idiom, had the same origin with the Sanskrit; and the old Persian might be added to the same family, if this were the place for discussing any question concerning the antiquities of Persia.

SIR WILLIAM JONES
THE THIRD ANNIVERSARY DISCOURSE, ON THE HINDUS

Delivered 2 February, 1786, to the Royal Asiatic Society

	<i>Sanskrit</i>	<i>Greek</i>	<i>Latin</i>	<i>Gothic</i>	<i>Old Irish</i>	<i>Lithuanian</i>	<i>Old Church Slavonic</i>	<i>Basque</i>	<i>Hungarian</i>	<i>Turkish</i>
1.	ékas	hei:s	u:nus	ains	oín	víenas	jedinŭ	bat	egy	bir
2.	dvaú	dúo:	duo	twai	da	dù	dŭva	bi	kettő	iki
3.	tráyas	trei:s	tre:s	þreis	tri	try:s	trĭje	hiru	három	üç
4.	catvá:ras	téttares	quattuor	fīdwor	cethir	keturi	četyre	lau	négy	dört
5.	páñca	pénte	quinque	fimf	cóic	penki	pęti	bost	öt	beş
6.	ṣaṭ	hék	sex	saihs	sé	šeši	šestĭ	sei	hat	altı
7.	saptá	heptá	septem	sibun	secht n-	septyni	sedmĭ	zazpi	hét	yedi
8.	aṣṭaú	októ:	octo:	ahtau	ocht n-	aštuoni	osmĭ	zortzi	nyolc	sekiz
9.	náva	ennéa	novem	niun	noí n-	devyni	deveřti	bederatzi	kilenc	dokuz
10.	daśa	déka	decem	taihun	deich n-	de:šeimt	desęti	hamar	tíz	on

Which of these languages are related?

Jacob Grimm



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1822

Jacob Grimm formulates "Grimm's Law".

Grimm's law describes a regular correspondence between the stop consonants of:

Latin, Greek and Sanskrit

and the consonants of the

Germanic languages.

	<u>Latin</u>	<u>Greek</u>	<u>English</u>		<u>Latin</u>	<u>Greek</u>	<u>English</u>	
p~f	<i>ped</i> -e	<i>pod</i> -e	<i>foot</i>	b~p	<i>lab</i> ium		<i>lip</i>	
	<i>pisc</i> -is		<i>fish</i>	d~t	<i>duo</i>		<i>two</i>	
	<i>pater</i>	<i>pyr</i> <i>pater</i>	<i>fire</i> <i>father</i>		<i>decem</i>	<i>deka</i>	<i>ten</i>	
t~θ	<i>tres</i>	<i>treis</i>	<i>three</i>	g~k	<i>genu</i>		<i>knee</i>	
	<i>dent</i> -e	<i>dont</i> -e	<i>tooth</i>			<i>gno</i> -sco		<i>know</i>
k~h	<i>cord</i> -e	<i>kard</i> -ion	<i>heart</i>	p ^h ~b	<i>fer</i> -o	<i>pher</i> -o	<i>bear</i>	
	<i>can</i> -e	<i>kuon</i>	<i>hound</i>			<i>frater</i>	<i>phrater</i>	<i>brother</i>
	<i>cannabis</i>	<i>kannabis</i>	<i>hemp</i>	t ^h ~d		ery th -os	red	
	<i>cornu</i>		<i>horn</i>			vid u a	(w)ei th eos	wid o w
	<i>centum</i>	he k aton	<i>hundred</i>		g ^h ~g	h ostis		g uest

Reality check:

we *know* these languages are all related:

French	Italian	Spanish	Portuguese
cher	caro	caro	caro
champ	campo	campo	campo
chandelle	candela	candela	candeia

(French *ch* is \int)

and a regular sound law does distinguish French from the others!

Two lexical items that share a common ancestor are called
cognates.

French	Italian	Spanish	Portuguese
cher	caro	caro	caro

"French *cher* and Italian *caro* are cognates"

Some Indo-European languages

Albanian: Geg, Tosk dialects

Armenian

Balto-Slavic: **Baltic:** Latvian, Lithuanian

Slavic: East (Russian, Ukrainian, Byelorussian), West (Czech, Slovak, Polish, Sorbian/Wendish, Old Prussian), South (Bulgarian, Macedonian, Serbo-Croatian, Slovenian)

Celtic: **Brythonic:** Welsh, Breton, Cornish **Goidelic:** Irish, Scottish Gaelic, Manx

Continental: Gaulish

Germanic: **Gothic**

Scandinavian: Icelandic, Faroese, Norwegian, Danish, Swedish

West Germanic: German, Dutch, Frisian, English, Afrikaans, Yiddish

Hellenic: Greek

Anatolian: Hittite, Luwian, Lydian, Carian, Palaic

Indo-Iranian: **Iranian:** Farsi [Persian], Pashto [Afghanistan], Kurdish

Indic: Hindi-Urdu, Bengali, Punjabi, Marathi, Gujarati, Romany

Italic: *Ancient:* Latin, Oscan, Umbrian.

Modern (= Romance) Spanish, Portuguese, Catalan, French,

 Occitan, Provençal, Romansch, Sardinian, Italian, Romanian, Haitian

Tocharian: Tocharian A, B

Indo-European languages spoken here (non-gray)

Image removed due to copyright restrictions. To see an Indo-European language map, please go to: <https://www2.bc.edu/~stantoro/en307/handouts/ie.htm>.

All languages change:

1. lexicon (all fields of the database)
2. phonology
3. morphology
3. syntax

Relatedness is best established on the basis of the lexicon:

- Because there are an unbounded number of possible words, finding the same sets of words in multiple languages is low-probability. Also: UG doesn't say anything (as far as we know) about the sound-meaning correspondences in lexical entries except that they exist.
- UG limits the range of variation among syntactic systems. There is a substantially smaller number of possible syntactic systems, so finding the same syntax in multiple languages is higher-probability. Recall the discussion of V2 on four continents.

But be careful!

A sound-change in Italian

Latin	Italian				
1. flamma	fjamma	'flame'	9. kla:ma:re	kjamare	'shout' (L), 'name' (I)
2. flokkus	fjokko	'flock of wool'	10. kla:rus	kjaro	'clear' (L), 'bright' (I)
3. flumen	fjume	'river'	11. ekkle:sia	kjeza	'assembly'(L), 'church' (I)
4. ple:nus	pjeno	'full'	12. klawstrum	kjostro	'enclosure'
5. plakere	pjatfere	'please'	13. klawdere	kjudere	'close'
6. plumbus	pjombo	'lead' (= Pb)	14. glakies	gjatfio	'ice'
7. plu:ma	pjuma	'feather'	15. glu:to(ne)	gjottone	'glutton'
8. klawis	kjave	'key'			

(Same chart in Latin and Italian orthography)

Latin	Italian				
1. flamma	fiamma	'flame'	9. clamare	chiamare	'shout' (L), 'name' (I)
2. floccus	fiocco	'flock of wool'	10. clarus	chiaro	'clear' (L), 'bright' (I)
3. flumen	fiume	'river'	11. ecclesia	chiesa	'assembly'(L), 'church' (I)
4. plenus	pieno	'full'	12. claustrum	chiostro	'enclosure'
5. placere	piacere	'please'	13. claudere	chiudere	'close'
6. plumbus	piombo	'lead' (Pb)	14. glacies	ghiaccio	'ice'
7. pluma	piuma	'feather'	15. gluto(ne)	ghiottone	'glutton'
8. clavis	chiave	'key'			

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7. plu:ma	pjuma	'feather'
8. klavis	kjave	'key'
9. kla:ma:re	kjamare	'shout' (L), 'name' (I)
10. kla:rus	kjaro	'clear' (L), 'bright' (I)
11. ekkle:sia	kjeza	'assembly'(L), 'church' (I)
12. klawstrum	kjostro	'enclosure'
13. klawdere	kjudere	'close'
14. glakies	gjatfio	'ice'
15. glu:to(ne)	gjottone	'glutton'
16. plakare	plakare	'calm'
17. floridus	florido	'flowery'

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17. floridus	florido	'flowery'
18. albus	bjanko	'white'
19. servus	skjavo	'slave'

Which two languages are related?

	A	B	C
'two'	er	erku	duo

Which two languages are related?

	Mandarin	✓ Armenian	✓ Greek
'two'	er	erku	duo

"Looking similar" is neither necessary nor sufficient to establish a genetic relationship.

Proto-Indo-European *dw > Armenian *erk*

	Armenian	Greek
'two'	erku	duo
'fear'	erki-	dwi-
'long'	erkar	dwa:ron

Mbabaram	English
dog < * <i>gudaga</i> Yidiñ <i>gudaga</i> Dyirbal <i>guda</i>	dog < OE <i>docga</i> 'mastiff'

"Looking similar" is neither necessary nor sufficient to establish a genetic relationship.

Mbabaram
dog

English
dog

Persian
bad

English
bad

Malay
mata 'eye'

Greek
mati 'eye'

English	Kaqchikel
mess	mes
man	ač'i
mouse	č'oy
moon	qatiʔt

Proto-World?
maliq'a 'swallow' (Ruhlen & Greenberg)

Arabic	<i>m-l-j</i>	'suckle'	(Afro-Asiatic)
English	<i>milk</i>	'milk'	(Indo-European)
Saami	<i>mielga</i>	'breast'	(Finno-Ugric)
Tamil	<i>melku</i>	'chew'	(Dravidian)
Yupik	<i>melug-</i>	'suck'	(Eskimo-Aleut)
Kutenai	<i>u'mqolh</i>	'swallow'	(Almosan)
Tfaltik	<i>milq</i>	'swallow'	(Penutian)
Akwa'ala	<i>milqi</i>	'neck'	(Hokan)
Cuna	<i>murki</i>	'swallow'	(Chibchan)
Quechua	<i>malq'a</i>	'throat'	(Andean)

False cognates:

English *have*

Latin *habere*

In fact:

English *have* is related to Latin *capere* 'take'
by a known sound law — called...

False cognates:

English *fuck*

Latin *futuere*

In fact, Germanic **fuk-* is probably from earlier
pug-* (peig-*) by Grimm's law

(and may be related to Latin *pug-* 'fight' though opinions differ)

Sound-Meaning correspondences are themselves unstable:

OE *(ge)bed* 'prayer'

> ModE *bead*

OE *steorfan* 'die' (cf. German *sterben*)

> ModE *starve*

OE *cniht* 'servant'

> ModE *knight*

Sound-Meaning correspondences are themselves unstable:

Latin *niger, nigra*, etc. 'dark-colored', 'black' >

Fr. *nègre* 'black man' >

Haitian Creole *nèg* 'man'

Traditional dates for the history of English

Old English (Anglo-Saxon): 450-1100

Middle English: 1100-1500

Modern English: 1500-

fæder ure þu þe eart on heofonum si þin nama
gehalgod tobecume þin rice gewurpe þin willa on
eorðan swa swa on heofonum urne
gedæghwamlican hlaf syle us to dæg and forgyf us
ure gyltas swa swa we forgyfað urum gyltendum and
ne gelæd þu us on costnunge ac alys us of yfele
soplice.

Old English (West Saxon Gospels, 10th C.)

9. fæder ure þu þe eart on heofonum

10. si þin nama gehalgod tobecume þin rice gewurþe þin willa on eorðan swa swa on heofonum

11. urne gedæghwamlican hlaf syle us to dæg

12. and forgyf us ure gyltas swa swa we forgyfað urum gyltendum

13. and ne gelæd þu us on costnunge ac alys us of yfele soþlice.

Middle English (Wycliff 1380)

9. Oure fadir þat art in heuenes halwid be þi name;

10. þi reume or kyngdom come to be. Be þi wille don in herþe as it is doum in heuene.

11. yeue to us today oure eche dayes bred.

12. And foryeue to us oure dettis þat is oure synnys as we foryeuen to oure dettouris þat is to men þat han synned in us.

13. And lede us not into temptacion but delyuere us from euyl.

Early Modern English (King James 1611)

9. Our father which art in heauen, hallowed be thy name.

10. Thy kingdom come. Thy will be done in earth as it is in heauen.

11. Giue us this day our daily bread.

12. And forgiue us our debts as we forgiue our debtors.

13. And lead us not into temptation, but deliuer us from euill. Amen.

Old English: 450-1100

Verb-second/head-final

þæt hus hæfdon Romane to ðæm anum tacne geworht
that building had Roman with the one feature constructed
(Willom 6.52)

...but subject pronouns precede the finite verb and do not necessarily count for verb-second purposes:

scortlice ic hebbe nu gesæd ymb þa þrie dælas...
briefly I have now spoken about the three parts
(Or 0.18)

Old English: 450-1100

Three genders (masculine, feminine, neuter)


Nouns marked for case (subject, object, etc.)

	Masculine 'fox'	Feminine 'learning'	Neuter 'animal'	Masculine 'foot'
SINGULAR				
<i>subject</i>	fox	lar	deor	fot
<i>object</i>	fox	lar-e	deor	fot
<i>possessive</i>	fox-es	lar-e	deor-es	fot-es
<i>indirect obj</i>	fox-e	lar-e	deor-e	fet
PLURAL				
<i>subj/obj</i>	fox-as	lar-a	deor	fet
<i>possessive</i>	fox-a	lar-a	deor-a	fot-a
<i>indirect obj</i>	fox-um	lar-um	deor-um	fot-um

Middle English: 1100-1500

Loss of verb-second, and rise of V-to-I movement...


þe barnis þat ere yunge þat vnderstandis noht ___
the children that are young that understand not

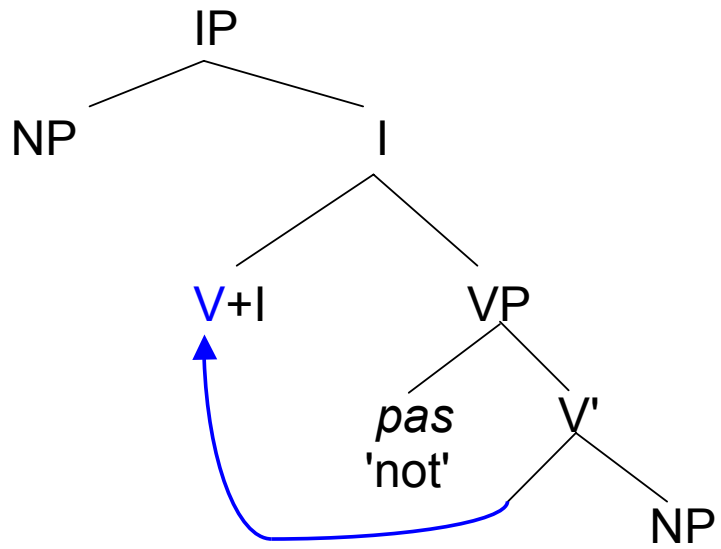


what paine fallis til cursing
what punishment falls to cursing

...which is a feature of (surprise, surprise!) *French!*

Pierre ne-parle pas _____ français
Pierre *ne*-speaks not _____ French





Middle English: 1100-1500

Case-marking gradually lost.

	Masculine 'fox'	Feminine 'learning'	Neuter 'animal'	Masculine 'foot'
SINGULAR				
<i>subj/obj</i>	fox	loor	deer	foot
<i>possessive</i>	foxes	loor-(e)	deer-es	foot-es
<i>indirect obj</i>	fox-(e)	loor-(e)	deer-(e)	foot
PLURAL				
<i>subj/obj</i>	fox-es	loor-e	deer	feet
<i>poss/ind.obj.</i>	fox-es	loor-e	deer-(e)	foot-(e)

compare Old English:

PLURAL				
<i>subj/obj</i>	fox-as	lar-a	deor	fet
<i>possessive</i>	fox-a	lar-a	deor-a	fot-a
<i>indirect obj</i>	fox-um	lar-um	deor-um	fot-um

Whan that Aprille, with hise shoures soote,
The droghte of March hath perced to the roote
And bathed every veyne in swich licour,
Of which vertu engendred is the flour;
Whan Zephirus eek with his swete breeth

Inspired hath in every holt and heeth
The tendre croppes, and the yonge sonne
Hath in the Ram his halfe cours yronne,
And smale foweles maken melodye,
That slepen al the nyght with open eye-

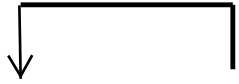
So priketh hem Nature in hir corages —
Thanne longen folk to goon on pilgrimages
And palmeres for to seken straunge strondes
To ferne halwes, kowthe in sondry londes;
And specially, from every shires ende

Of Engelond, to Caunturbury they wende,
The hooly blisful martir for to seke
That hem hath holpen, whan that they were seeke...

[Geoffrey Chaucer, *Canterbury Tales*, ca. 1385-1400]

Modern English

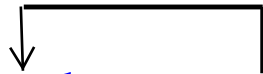
Loss of V-to-I movement, still alive in Shakespeare:



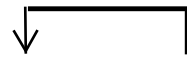
He heard *not* ___ that.



I care *not* ___ for her.



My master seeks *not* ___ me.



Demetrius loves her and he loves *not* ___ you.

V-to-I movement is not completely dead even in Modern English:

"Ask not what your country can do for you; ask what you can do for your country"

...AND NOW...

THE GREAT

VOWELS

SHIFT

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