roots
family histories
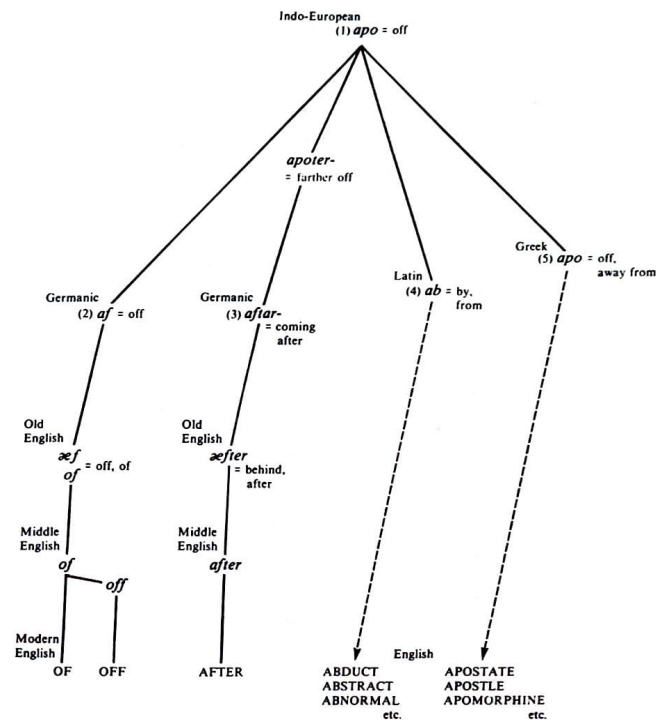## of familiar words

by Peter Davies

apo

1. The Indo-European adverb/preposition *apo* = "off, away, from," appears in Germanic *af* = "off," Latin *ab* = "from, by agency of," Greek *apo* = "off, from, away," and Sanskrit *ápa* = "away from."

2. Germanic *af* appears in Gothic *af*, Old Norse *af*, Old High German *aba*, and Old English *æf* = "from." Old English *æf* had an unstressed form *of*, which became Modern English OF, with a vast spread of prepositional meanings and functions.
   Late Middle English *of* also had a stressed variant OFF, which in the sixteenth century became a separate adverb/preposition meaning "away, separating from," etc.

3. A comparative form *apoter-* = "farther away" appears in Germanic *aftar-* = "coming after," Greek *apotero* = "farther away," and Sanskrit *apataram* = "farther away." Germanic *aftar-* appears in Gothic *aftra* = "again, back," Old Norse *aptr* = "back," Old High German *aftar* = "behind, after," and Old English *æfter* = "behind, after." Old English *æfter* became Modern English AFTER.

4. The Latin preposition *ab* = "from, by" was freely used as a prefix in hundreds of words such as *abdūcere* = "to take away, abduct," *abnormis* = "away from the norm, abnormal," and *abstractus* = "removed from reality, abstract." Many of these, including ABDUCT, ABNORMAL, ABSTRACT, have been adopted into English.

5. The Greek preposition *apo* = "off, away from," was likewise used to form hundreds of compounds, such as *apostatēs* = "one who stands away, a rebel," *apostolos* = "person who is sent away, envoy, apostle." Many of these, including APOSTATE and APOSTLE, have been adopted into English. APO- itself is used as a productive English prefix, as in APOMORPHINE = "a chemical compound derived from morphine."

bhāgos

1. The Indo-European word *bhāgos* ="beech tree" appears in Germanic *bōkō, bōkyō* ="beech," Gaulish Celtic *bāgos* ="beech" (only in place-names), Latin *fāgus* ="beech," and Greek *phēgos* ="edible oak."

The beech is a large deciduous tree yielding edible nuts that have been an important source of forest food since ancient times. The European beech, *Fagus silvatica,* is now native to most of Europe west of the Soviet Union. It has been argued that since the word *bhāgos* proves that the original Indo-Europeans knew the beech, their homeland must have been in central or western Europe. Two relatively recently established facts have nullified this argument. First, the closely related eastern beech, *Fagus orientalis,* still grows in the Caucasus, east of the Black Sea. Second, pollen counts from excavations have shown that both the European and the eastern beech grew on the plains of the Ukraine and south Russia at the time associated with the original Indo-Europeans (4500 B.C.).
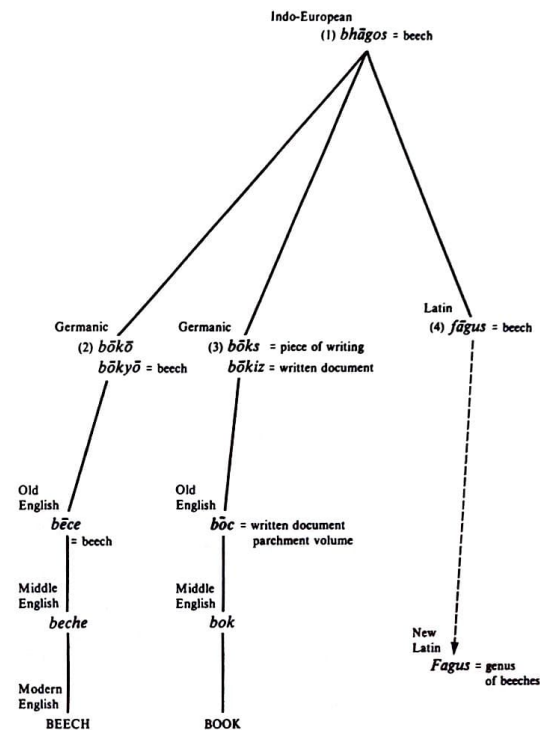
2. *Bhāgos* became Germanic *bōkō, bōkyō* ="beech," appearing in Old Norse *bōk,* Old High German *buohha* (whence Modern German *buche* ="beech"), Middle Dutch *boeke,* and Old English *bēce,* all meaning "beech." The Old English word became Modern English BEECH.

3. The Germanic word *bōks* ="piece of writing," with plural *bōkiz* = "collection of writings, written document," appears in Old Norse *bōk,* Old High German *buoh* (whence Modern German *buch* ="book"), Old Frisian *bōk,* and Old English *bōc,* all meaning "written document, book."

The form of this Germanic word and its various forms in the individual languages strongly suggest that it is the same word as the word for "beech." It is therefore conjectured that the Germanic people of perhaps 200 B.C. used pieces of beechwood or possibly beech bark for writing on. No such documents have survived, but there is other evidence that the Germanic people used wooden—probably beech—staffs or sticks, on which they cut runic inscriptions (their alphabet of runes was modeled on the Etruscan alphabet). The German word *buchstabe* ="letter of the alphabet" is from Old High German *buohstap* ="beech staff." Probably, therefore, the conjecture is correct, and our word for "book" goes back to the very beginnings of writing in northwestern Europe.

By the early Middle Ages (say, eighth century A.D.), the Germanic peoples had adopted the Latin alphabet and the *codex,* or bound volume of sheets made of animal skin, also of Latin origin. Old English *bōc* thus meant "written document, parchment volume"; it became Modern English BOOK.

4. Latin *fāgus* ="beech" was adopted in scientific New Latin as the name of the genus of beeches; hence *Fagus silvatica,* the European beech, and *F. orientalis,* the eastern beech, as above.

Indo-European
(1) *bhāgos* = beech

Germanic
(2) *bōkō*
bōkyō = beech

Germanic
(3) *bōks* = piece of writing
bōkiz = written document

Latin
(4) *fāgus* = beech

Old English
bēce
= beech

Old English
bōc = written document
parchment volume

Middle English
beche

Middle English
bok

New Latin
Fagus = genus
of beeches

Modern English
BEECH

BOOK

bher-

1. Indo-European *bher-* = "to carry" appears in Germanic *beran* = "carry," Old Irish *berim* = "take," Latin *ferre* = "carry," Old Slavic *bĭrati* = "take," Greek *pherein* = "carry," Armenian *berem* = "carry," Tocharian *pär-* = "carry," and Sanskrit *bhárati* = "carry."

This very basic word meant not only "carry" but also "bring forth offspring"; this is proved by the fact that many of the descendant words, including English BEAR itself, preserved both meanings.

2. Germanic *beran* = (a) "to carry" and (b) "to bring forth offspring" appears in Gothic *bairan*, Old Norse *bera*, Old High German *beran*, and Old English *beran*. The last became Modern English BEAR, with both of the original meanings still functioning fully.

3. Two other Germanic derivatives of the root are *barwōn* = "carrying frame, litter," and *burthinja* = "something carried, a load." These became Old English *bearwe* and *byrthen*, becoming Modern English (wheel)BARROW and BURDEN.
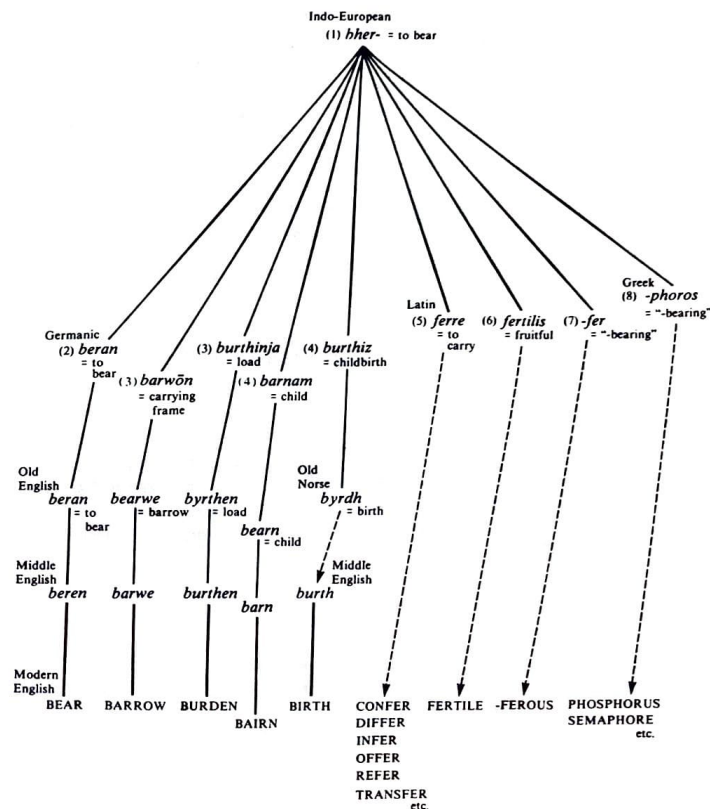
4. Two Germanic derivatives referring to procreation are *barnam* = "child" and *burthiz* = "the act or fact of childbearing, childbirth." *Barnam* appears in Gothic *barn*, Old Norse *barn*, Old High German *barn*, and Old English *bearn*, all meaning "child." Old English *bearn* survives in Scottish BAIRN. *Burthiz* appears in Gothic *ga-baurths* and Old Norse *byrdh*, both meaning "childbearing, nativity." Old Norse *byrdh* was borrowed into Middle English as *burth*, becoming Modern English BIRTH.

5. Latin *ferre* = "to carry, bring" had a large number of compounds and derivatives that yield English words, either by direct adoption or via French. Among them are *conferre* = "to bring together, contribute"; *differre* = "to carry apart, diverge"; *inferre* = "to bring in, make a logical deduction"; *offerre* = "to bring into the presence of, present as a sacrifice"; *referre* = "to bring back to, relate to"; *transferre* = "to carry across"; whence CONFER, DIFFER, INFER, OFFER, REFER, TRANSFER, as well as their derivatives CONFERENCE, DIFFERENT, etc.

6. The Latin adjective *fertilis* = "bringing forth, fruitful" (referring both to animals and plants, and to the earth) was adopted into English as FERTILE.

7. The Latin suffix *-fer* = "-bearing" occurs in adjectives such as *aurifer* = "gold-bearing," adopted into English as AURIFEROUS.

8. The equivalent Greek suffix *-phoros* = "-bearing" occurs in such compounds as *phōsphoros* = "light-bearing" (used of the evening star), which was adopted into New Latin (seventeenth century) as the name of the newly discovered element PHOSPHORUS (which shines in the dark). This suffix has been generalized to form new compounds such as French *sémaphore* (early nineteenth century) = "signal-bearing system," borrowed into English as SEMAPHORE.
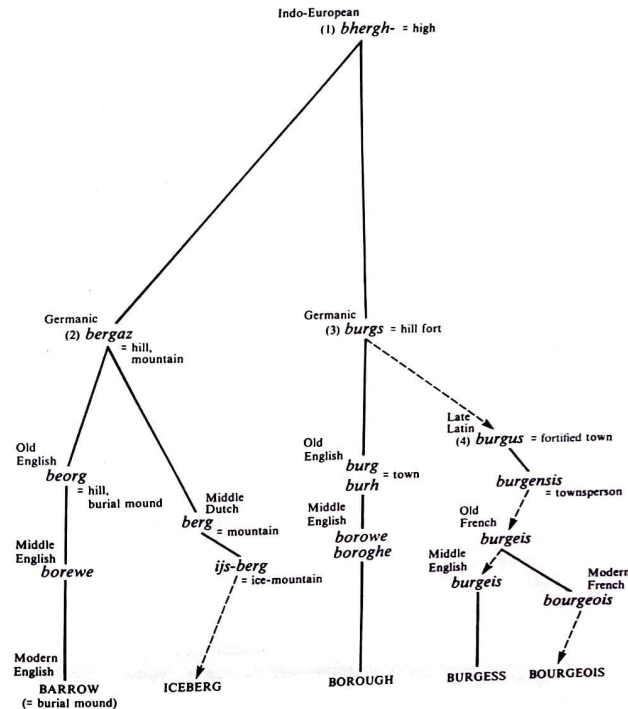
bhergh-

1. Indo-European *bhergh-* = "high" meant both physically high, as a hill, and also "exalted, high-ranking." It appears in Germanic *bergaz* = "hill, mountain," Middle Irish *brig* = "hill," Armenian *berj* = "height," Avestan *bərəzant-* = "high, hill," and Sanskrit *brhánt-* = "high, exalted."

2. Germanic *bergaz* appears in Old High German *berg*, Old Norse *berg*, Middle Dutch *berg*, and Old English *beorg*, all meaning "hill, mountain." Old English *beorg* meant both "hill, hillock" and "burial mound." It became Middle English *borewe*, Modern English BARROW, surviving only in (a) a few place-names, as Bull Barrow (= "hill") in Dorset, England, and (b) the local name in southwestern England for the numerous prehistoric burial mounds in Wiltshire and elsewhere. In sense (b) the word was picked up by archaeologists, who from the seventeenth century onward began to investigate the BARROWS, and has since been generalized to mean any burial mound of earth or stones. (It has no connection with *barrow* = "wheeled conveyance for loads".)

   Middle Dutch *berg* = "hill" was used by sailors in the compound noun *ijs-berg* = "ice-mountain," used of Arctic glaciers seen from the sea and then of detached sections of them floating in the sea. This was borrowed into English (eighteenth–nineteenth centuries) as ICEBERG.

3. Another Germanic derivative is *burgs* = "hill fort, fortified town." This appears in Gothic *baurgs* = "town, tower," Old High German *burg* = "castle," Old English *burg*, *burh* = "(fortified) town." The Old English word became Middle English *borowe*, *boroghe* = "town possessing a royal charter," Modern English BOROUGH. The word survives also in hundreds of place-names.

4. Germanic *burgs* was also borrowed into Late Latin as *burgus* = "fortified town." From this was formed *burgensis* = "townsperson," which was borrowed into Old French as *burgeis*, and thence into Middle English as *burgeis*, becoming Modern English BURGESS = "citizen of a town." Old French *burgeis* became Modern French *bourgeois* = "citizen of a French town, ranking midway between gentry and peasantry." This was borrowed into English as BOURGEOIS, given its sociopolitical value by nineteenth-century writers such as Marx.

Indo-European (1) *bhergh-* = high

Germanic (2) *bergaz* = hill, mountain

Germanic (3) *burgs* = hill fort

Late Latin (4) *burgus* = fortified town

Old English *beorg* = hill, burial mound

Middle Dutch *berg* = mountain

Old English *burg*, *burh* = town

burgensis = townsperson

Middle English *borewe*

Middle English *ijs-berg* = ice-mountain

Middle English *borowe*, *boroghe*

Old French *burgeis*

Middle English *burgeis*

Modern French *bourgeois*

Modern English BARROW (= burial mound)

ICEBERG

BOROUGH

BURGESS

BOURGEOIS

bhrāter

1. Indo-European *bhrāter* = "brother" appears in Germanic *brōthar*, Old Irish *brāthir*, Latin *frāter*, Old Slavic *bratrŭ*, Tocharian *prācar*, and Sanskrit *bhrātar*, all meaning "brother," and in Greek *phrātēr* = "member of a religious kin association."

The original meaning of *bhrāter* was "clan member," rather than "sibling." In Indo-European social structure, the close-knit nuclear family (the two parents plus their children), which to us seems basic, was of relatively little importance. Their basic unit was a clan based on paternal kinship. Each of the males, whatever their individual blood relationships, was a *bhrāter*, equally subject to the clan chief, entitled *pəter*.
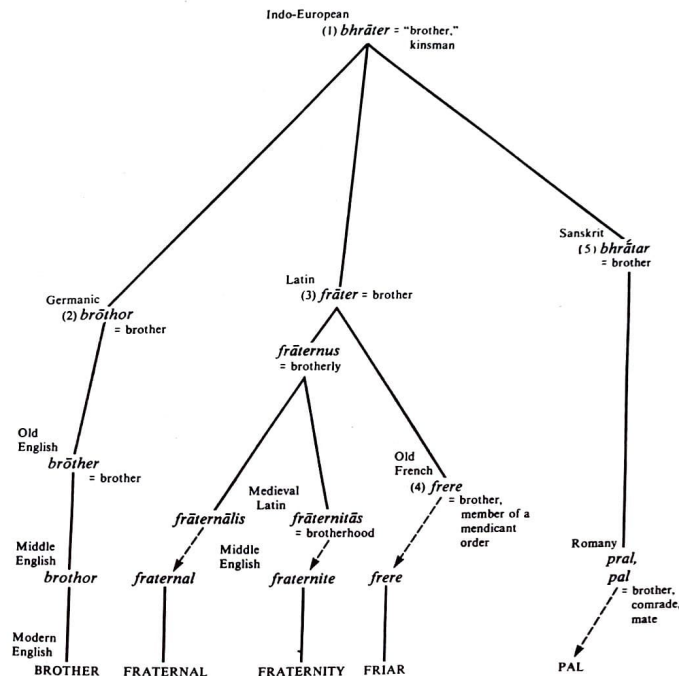
2. *Bhrāter* regularly became Germanic *brōthar*, which appears in Gothic *brōthar*, Old Norse *brōdhir*, Old High German *bruoder* (whence Modern German *bruder*), and Old English *brōthor*, all primarily meaning "male sibling," but also used more widely to mean "fellow-clansman, fellow-countryman," and "fellowman" in general. Old English *brōthor* became Modern English BROTHER.

3. Latin *frāter* also chiefly meant "male sibling." It also preserved vestiges of the Indo-European use, meaning "paternal first cousin" and "brother-in-law." In addition there were several religious cults in which members enrolled as *frātrēs* without necessarily being blood relations.

The adjective of *frāter* was *frāternus* = "of or relating to a brother or brothers." This had a Medieval Latin extended form *frāternālis*, which was adopted into Middle English as FRATERNAL. The Medieval Latin noun *frāternitās* = (a) "the condition of being brothers" and (b) "a brotherhood" was adopted as Middle English *fraternite*, becoming Modern English FRATERNITY. This word, already in the late Middle Ages, was used not only of religious brotherhoods but also of trade associations such as guilds. The American idea of associations of university men was started in the late eighteenth century.

4. Latin *frāter* was inherited in Old French as *frere*. This was used especially of the members of the mendicant orders founded in the later Middle Ages—Augustinians, Franciscans, etc. It was borrowed into Middle English as *frere*, later becoming FRIAR.

5. The Gypsy people, originating in India and speaking an Indic language (Romany) derived from Sanskrit, began to arrive in Europe in the fourteenth and fifteenth centuries. Sanskrit *bhrātar* = "brother" was inherited in Romany as *pral* = "brother" (the form is recorded in the Turkish dialect of Romany). In English Romany the word became *pal*, which was adopted into the "cant" language of thieves and vagabonds, with whom Gypsies inevitably associated. PAL is first recorded in English cant in 1672, meaning "brother, friend, mate"; in the nineteenth century it became familiar in regular English slang.

Indo-European
(1) *bhrāter* = "brother," kinsman

Germanic
(2) *brōthor* = brother

Latin
(3) *frāter* = brother

Sanskrit
(5) *bhrātar* = brother

frāternus = brotherly

Old English
brōther = brother

Old French
(4) *frere* = brother, member of a mendicant order

Medieval Latin
frāternālis

Medieval Latin
frāternitās = brotherhood

Middle English
brothor

fraternal

Middle English
fraternite

frere

Romany
pral, *pal* = brother, comrade, mate

Modern English
BROTHER   FRATERNAL   FRATERNITY   FRIAR   PAL

bhreg-

1. The Indo-European root *bhreg-* = "to break" appears only in Germanic *brekan* and Latin *frangere*, but there is a variant root form *bheg-*, also meaning "to break," which is found in Celtic, Armenian, and Sanskrit.

2. Germanic *brekan* appears in Gothic *brikan*, Old High German *brehhan*, Old Frisian *breka*, and Old English *brecan*, all meaning "to break." The last became Middle English *breken*, Modern English BREAK.
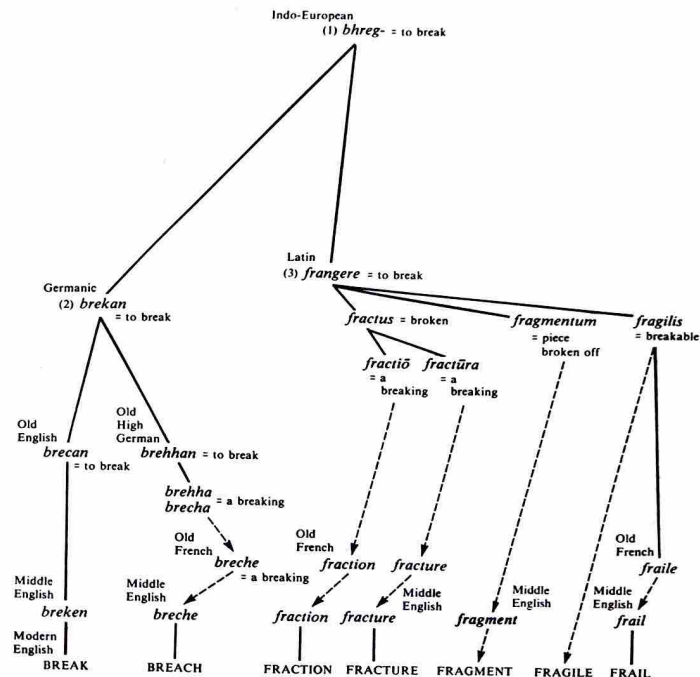
From Old High German *brehhan* was formed the noun *brehha, brecha* = "a breaking, a break." This was borrowed into Old French as *breche*, which in turn was borrowed into Middle English as *breche* = "breaking of anything, breaking of a law," Modern English BREACH.

3. The *n* in Latin *frangere* = "to break" is the "nasal infix" marking the present tense. The underlying stem is *frag-* or *frac-*, as in Latin *fractus* = "broken," *fragmentum* = "piece broken off," *fragilis* = "breakable."

From *fractus* were formed *fractiō* = "a breaking" and *fractūra* = "a breaking," adopted into Old French as *fraction* and *fracture*, and thence into (Middle) English as FRACTION and FRACTURE, each still expressing a somewhat different range of the concept "a breaking."

Latin *fragmentum* = "piece broken off" was adopted as (Middle) English FRAGMENT.

Latin *fragilis* = "breakable" became Old French *fraile*, which was borrowed into Middle English as FRAIL = "physically or spiritually weak." Latin *fragilis* was also adopted direct (seventeenth century—first used by Shakespeare) as FRAGILE, keeping the original sense of "breakable."

deiwos

1. Indo-European *deiwos* = "god" appears in Germanic *Tiwaz* = "war god," Old Irish *dia* = "god," Latin *dīvus* = "divine, god" and *deus* = "god," Lithuanian *diēvas* = "god," and Sanskrit *dēvas* = "god."

The adjective/noun *deiwos* is formed from the verb root *deiw-* = "to shine." *Deiwos* therefore meant "shining, belonging to the bright sky." To the Indo-Europeans, the gods inhabited the upper air and were called "they of the sky," while humans were called "earthlings." *Deiwos* was both the general word for a god and specifically the name of the chief of the gods, who personified the bright or cloudy sky, controlled the weather, and wielded the lightning and thunderbolt. A variant form of the name *Deiwos* was *Dyeus;* the form of address to him used in prayer was *Dyeu-pəter,* which can be translated "O Sky-father!" (*See* **pəter.**)

2. Indo-European *deiwos,* with regular sound-change of /d/ to /t/, became Germanic *Tiwaz,* sky god and war god. In the first century A.D. the Roman historian Tacitus regarded *Tiwaz* as the German equivalent of Mars, the Roman war god.

At some time between A.D. 100 and 400, the Germanic peoples, strongly influenced by the culture of the Roman Empire, adopted the Roman seven-day week, translating the Latin day-names. The third weekday was called in Latin *Martis diēs* = "Mars's day." This was accordingly translated as "Tiwaz's day" in the various Germanic dialects, which by then were splitting, or had already split, into separate languages.

Germanic *Tiwaz* appears in Old Norse as *Tȳr,* in Old High German as *Zio,* and in Old English as *Tiw.* "Tiwaz's day" was thus rendered as Old Norse *Tȳrsdagr,* Old High German *Ziestag,* and Old English *Tiwes-dæg.* The last became Modern English TUESDAY.
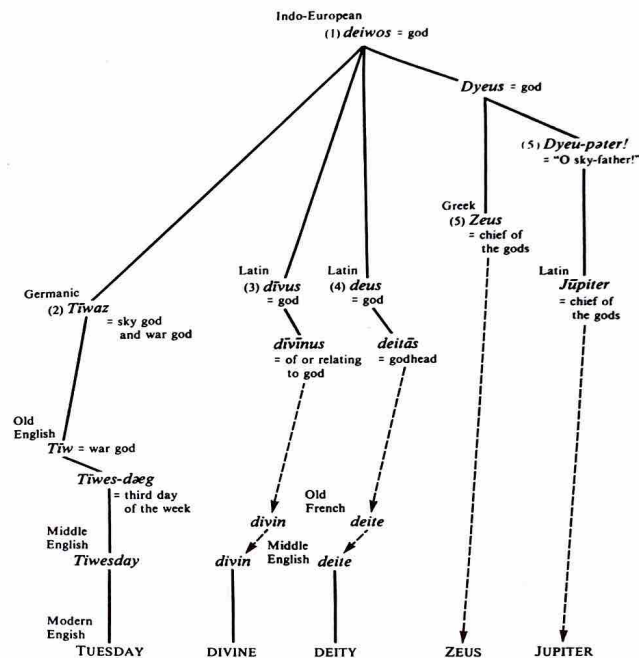
(In the German mythology of the early Middle Ages, Woden, originally god of the dead, had become the war god and had also taken over as chief of the gods. Tiwaz had become a secondary figure.)

3. Latin *dīvus* = "of the gods," also "a god," had an adjectival form *dīvīnus* = "of or relating to a god or gods." This was adopted into Old French as *divin,* which was borrowed into Middle English as *divin,* becoming Modern English DIVINE.

4. Formed from Latin *deus* = "a god" was *deitās* = "godhead, divinity," also "a god." This was adopted into Old French as *deite,* which was borrowed into Middle English as *deite,* later DEITY.

5. The Indo-European variant form *Dyeus* was inherited in Greek as *Zeus,* name of the chief of the Olympian gods; whence English ZEUS. He was addressed in Greek as *Zeu pater* = "O Zeus father!" exactly reproducing the Indo-European vocative *Dyeu-pəter.*

Dyeu-pəter was inherited in Sanskrit as *Dyāuh-pitā* = "Heaven-father," and in Latin as *Jūpiter,* chief of the Roman gods; whence English JUPITER. Both he and Zeus retained the original attributes of the Indo-European weather god, bringing rain and wielding the thunderbolt.

dekm

1. Indo-European *dekm* = "ten" appears in Germanic *tehun*, Old Irish *deich*, Latin *decem*, Greek *deka*, and Sanskrit *dásá*, all meaning "ten."

2. *Dekm* became Germanic *tehun*, with regular change of *d* to *t* and of *k* to *h*. *Tehun* appears in Gothic *taihun*, Old Norse *tiu*, Old High German *zehan* (whence modern German *zehn*), and Old English *tien*, all meaning "ten." *Tien* became Modern English TEN.
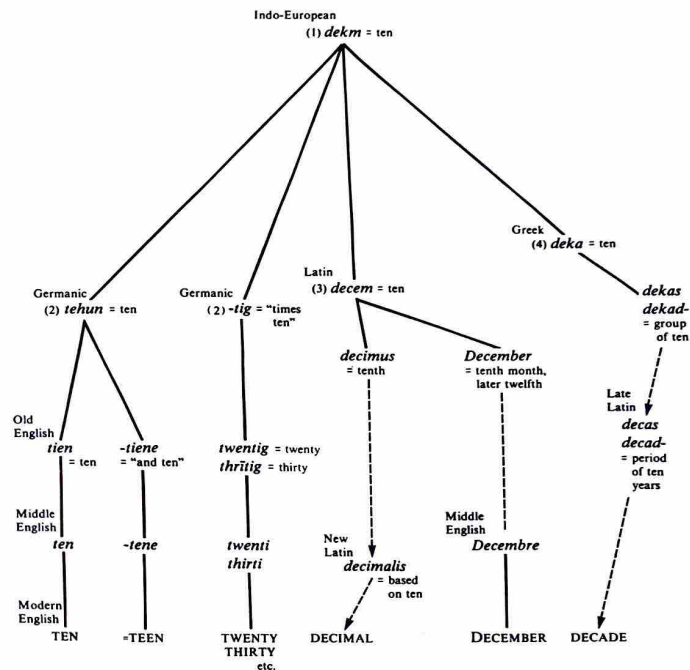
Germanic *tehun* also appears as a suffix in Old English *thrēotiene* = "thirteen," *fēowertiene* = "fourteen," etc., becoming Modern English THIRTEEN, FOURTEEN, etc.

Also related is the Germanic suffix *-tig* = "times ten," as in Old English *twentig* = "twenty," *thritig* = "thirty," etc., becoming Modern English TWENTY, THIRTY, etc.

3. The ordinal adjective of Latin *decem* was *decimus* = "tenth." From this was formed the New Latin (seventeenth-century) word *decimalis* = "based on ten"; adopted into English as DECIMAL.

In the original Roman calendar, in which March was the first month, the last month was named *December* = "tenth month." Later, January and February were added before March, but the name *December*, although no longer appropriate to the twelfth month, was never changed. It was adopted into Middle English as *Decembre*, Modern English DECEMBER.

4. From Greek *deka* = "ten" was formed the noun *dekas, dekad-* = "group of ten." This was adopted into Late Latin as *decas, decad-* = "period of ten years," and thence into English as DECADE.

Indo-European
(1) *dekm* = ten

Greek
(4) *deka* = ten

Latin
(3) *decem* = ten

Germanic
(2) *tehun* = ten

Germanic
(2) *-tig* = "times ten"

*dekas
dekad-*
= group of ten

decimus
= tenth

December
= tenth month, later twelfth

Old English
tien
= ten

-tiene
= "and ten"

twentig = twenty
thritig = thirty

Late Latin
*decas
decad-*
= period of ten years

Middle English
ten

-tene

*twenti
thirti*

New Latin
decimalis
= based on ten

Middle English
Decembre

Modern English
TEN

=TEEN

TWENTY
THIRTY
etc.

DECIMAL

DECEMBER

DECADE

demə-

1. The Indo-European word *demə-* = "to tame" appears in Germanic *tamjan* = "to tame" and *tamaz* (adjective) "tame," Old Irish *damnaim* = "I tame," Latin *domāre* = "to tame," and Sanskrit *dāmyati* = "is tame, tames."

This is originally a technical verb referring to highly significant Indo-European activities: the "breaking" and training of horses and the controlling of semiwild cattle. It was also extended to mean "subdue, overcome an enemy." In Homer the word *hippo-damos* = "horse-taming" is a frequent epithet of heroes. In the *Mahabharata* the word *arim-dama* = "enemy-taming, keeping one's enemies under control." Both horse-training and enemy-subduing were the proper and prestigious pursuits of the Indo-European warrior caste.

2. *Demə-* appears in the Germanic adjective *tamaz* = "tame," with regular change of *d* to *t*. This appears in Old High German *zam*, Old Norse *tamr*, and Old English *tam*, which became Modern English TAME (adjective).
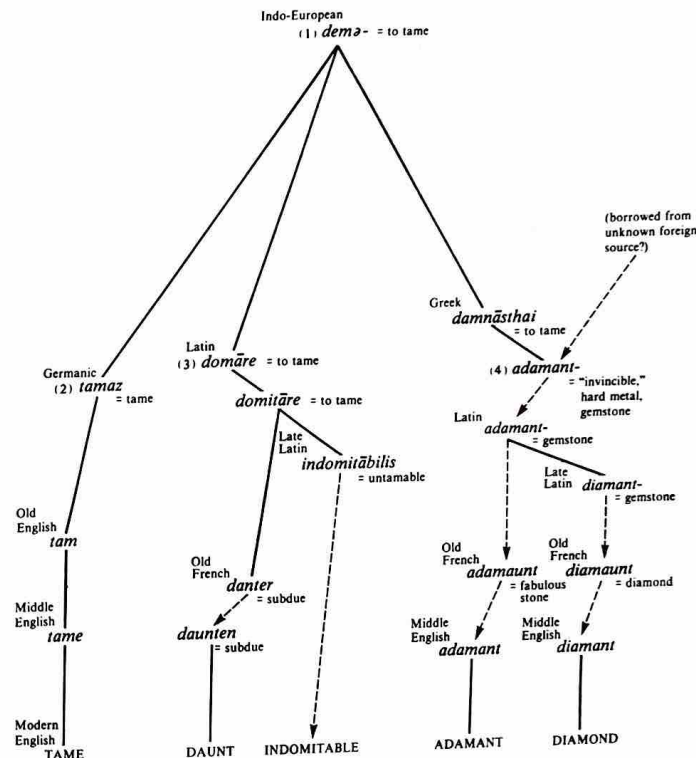
3. Latin *domāre* = "to tame, subdue" had a "frequentative" form *domitāre*, also meaning "to tame, subdue." This was inherited in Old French as *danter* = "subdue," which was borrowed into Middle English as *daunten* = "subdue." The word later acquired the figurative meaning "subdue the spirit of, intimidate"; whence Modern English DAUNT.

Latin *domitāre* also formed a Late Latin adjective *indomitābilis* = "untamable, invincible," which was adopted into English as INDOMITABLE.

4. The post-Homeric Greek word *adamant-* = "hard metal, steel" appears to mean "invincible," from *a-* = "un-" + *dam-* = "to tame" (as in *damnāsthai* = "to tame"). Since the word refers to what was then a new substance, produced by a new technology (i.e., smelting steel), it may in fact be a borrowed foreign word, reshaped so as to "make sense" in Greek. In any case, *adamant-* was perceived as meaning "indestructibly hard, the hardest of all substances," and was applied, in Latin and Greek, to various hard crystals and gemstones.

In Latin, by coincidence, *adamant-* can also be the present participle of the verb *adamāre* = "to love, have a liking for, seek after." The word *adamant-* thus seemed to contain the meaning "seeking after," and acquired associations with the lodestone or magnet. In the alchemy and pseudoscience of the Middle Ages, the *adamant-* was a semimagical stone or substance both indestructibly hard and magnetic, as well as having other marvelous properties. It was adopted into Old French as *adamaunt*, whence Modern English ADAMANT, now chiefly used in its restored sense of "unyielding."

From Latin *adamant-* there appeared a Late Latin variant *diamant-*, "very hard gemstone," later "diamond," whence Old French *diamaunt*, Middle English *diamant*, Modern English DIAMOND.

dent-

1. Indo-European *dent-* or *dont-* ="tooth" appears in Germanic *tanthuz*, Old Irish *det*, Latin *dent-*, Greek *odont-*, Lithuanian *dent-*, and Sanskrit *dant-*, all meaning "tooth."
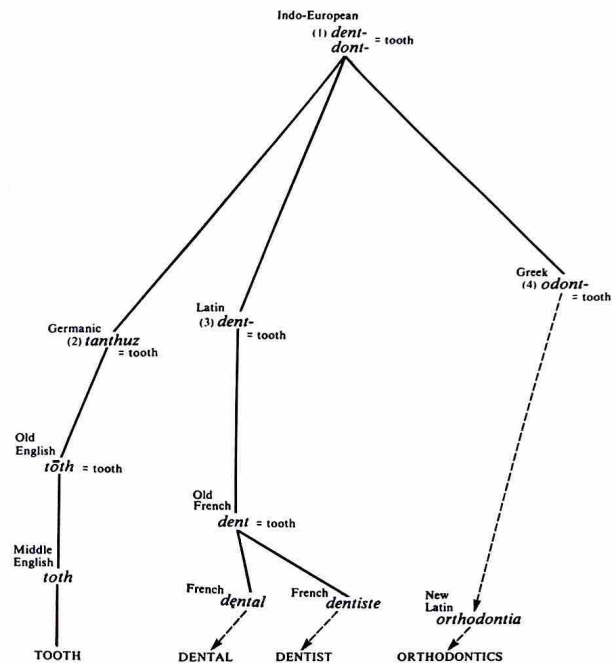
The existence of two forms of the root, containing the vowels *e* and *o*, is a typical Indo-European system of forming inflections and variants. The "basic" form *dent-* appears in Latin *dent-*, while the "o-grade" form *dont-* appears in Germanic *tanthuz*. All of the sound-changes from *dont-* to Germanic *tanth-* are regular: Indo-European /d/ always became Germanic /t/, /o/ always became /a/, /n/ was always retained, /t/ always changed to /th/.

2. Germanic *tanthuz* appears in Old High German *zan*, Old Norse *tonn*, Old Frisian *tōth*, and Old English *tōth*, all meaning "tooth."

In some of the Germanic languages, the plural of this and other nouns came to be formed by internal vowel change. Old High German *zan* had plural *zeni* (whence Modern German *zahn*, *zähne*), Old Norse *tonn* had plural *tenn*, Old Frisian and Old English *tōth* had plural *tēth*. Old English *tōth*, *tēth* became Modern English TOOTH, TEETH.

3. Latin *dent-* (nominative singular *dens*)="tooth" was inherited into Old French and Modern French as *dent*="tooth." From this were formed the adjective *dental* (early sixteenth century)="relating to teeth," and the noun *dentiste* (eighteenth century)="tooth doctor." They were borrowed into English as DENTAL and DENTIST.

4. Greek *odont-* (nominative singular *odōn*) was used to form the New Latin noun *orthodontia* ="corrective dentistry" (*ortho-* from Greek *orthos* = "straight, correct"). This is the source of English ORTHODONTICS.

dwō (I)

1. Indo-European *dwō*, also *duwo, du-*, ="two" appears in Germanic *twai*, Old Irish *dāu*, Latin *duo*, Lithuanian *dù*, Old Slavic *dŭva*, Greek *duŏ*, and Sanskrit *dváu*, all meaning "two."

2. Germanic *twai* (with the regular change of *d* to *t*) appears in Gothic *twai*, Old High German *zwei* (whence modern German *zwei*), and Old English *twegen* (masculine), *twā* (feminine), and *tū* (neuter). The masculine form survives as the now archaic word TWAIN, while the feminine form became the basic form of the numeral, Middle English *twa*, Modern English TWO. (The pronunciation changed from /twā/ to /twū/, and then the consonant *w* was eliminated because of its similarity to the following vowel *ū*; but the spelling was [illogically] standardized as TWO.)

3. In Indo-European languages generally, the numbers *eleven, twelve, thirteen*, etc., were formed from words meaning *one-and-ten, two-and-ten, three-and-ten*, etc. (e.g., Latin, see paragraph 5, below). In Germanic, for reasons unknown, the words for *eleven* and *twelve* (but no others) were formed on an entirely different principle: they were *ain-lif* and *twa-lif*= "one-left" and "two-left," respectively (*lif-* ="leave, left"), evidently meaning "one left over after ten," and "two left over after ten." Germanic *twa-lif* appears in Gothic *twalif*, Old Norse *tolf*, Old High German *zwelif*, and Old English *twelf*, all meaning "twelve." Old English *twelf* became Modern English TWELVE.

4. Latin *duo* ="two," in its feminine form *duae*, was inherited in Old French as *deus* ="two" (Modern French *deux*). *Deus* was borrowed into Middle English (fifteenth century) as DEUCE ="two at cards."
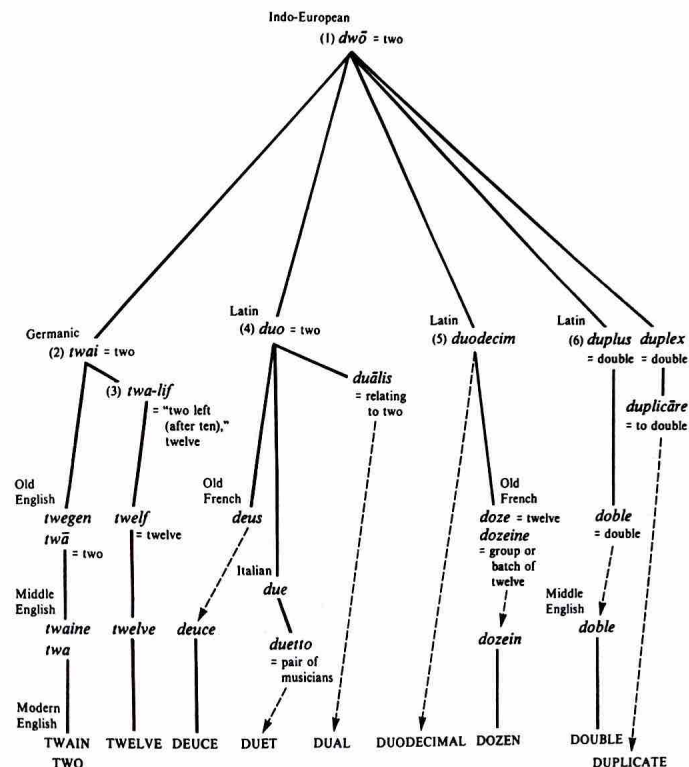
Latin *duo* was also inherited in Italian as *due* ="two." Formed from this was the noun *duetto* ="pair of musicians," borrowed into English in the eighteenth century, with much other Italian musical vocabulary, as DUET.

Latin *duālis* ="relating to two" was adopted in the seventeenth century as DUAL.

5. Latin *duodecim* ="twelve" (*decem* ="ten") was inherited in Old French as *doze*, from which came the noun *dozeine* ="group or batch of twelve." This was borrowed into Middle English as *dozein*, becoming Modern English DOZEN.

6. From the form *du-*, with two different suffixes, are the Latin adjectives *duplus* and *duplex*, both meaning "twofold." *Duplus* was inherited in Old French as *doble*, borrowed into Middle English, becoming Modern English DOUBLE.

From *duplex, duplic-* a verb *duplicāre* ="to make double" was formed, adopted into English as DUPLICATE. *Duplex* itself was adopted in the nineteenth century as DUPLEX.

Indo-European
(1) *dwō* = two

Germanic
(2) *twai* = two

Latin
(4) *duo* = two

Latin
(5) *duodecim*

Latin
(6) *duplus duplex*
= double = double

(3) *twa-lif*
= "two left
(after ten),"
twelve

duālis
= relating
to two

duplicāre
= to double

Old English: *twegen twā* = two   *twelf* = twelve

Old French: *deus*

Old French: *doze* = twelve   *dozeine* = group or batch of twelve

doble = double

Italian: *due*

Middle English: *twaine twa*   *twelve*   *deuce*

duetto = pair of musicians

Middle English: *dozein*

Middle English: *doble*

Modern English: TWAIN TWO   TWELVE   DEUCE   DUET   DUAL   DUODECIMAL   DOZEN   DOUBLE   DUPLICATE

dwō (II)

A variant form of *dwō* was *dwi,* from which the adverb *dwis* = "twice" and the adjective *dwisnos* = "double" were formed.

1. Indo-European *dwi, dwis* appear in Germanic *twiyes,* Latin *bis, bi-,* Lithuanian *dvi,* Greek *dis, di-,* and Sanskrit *dvi-,* all meaning "two" or "twice."

2. Germanic *twiyes* appears in Old Frisian *twîa* and Old English *twige,* both meaning "twice." The latter was given the extra adverbial suffix *-s* (as in *nights* = "at night"), becoming *twiges,* Modern English TWICE.

3. Germanic *twegentig* = "two tens" (*-tig* = "ten") appears in Old High German *zweinzug* (Modern German *zwanzig*), Old Frisian *twintich,* and Old English *twentig,* all meaning "twenty." The last became Modern English TWENTY.

4. From Germanic *twihna* = "a pair" came the preposition *bi-twihna* = "in the middle of two things," appearing in Old English *betweonum,* Modern English BETWEEN.

Closely related was Germanic *twihnaz* = "double thread," appearing in Old Norse *tvinni* and Old English *twin,* both meaning "thread." The latter became Modern English TWINE.
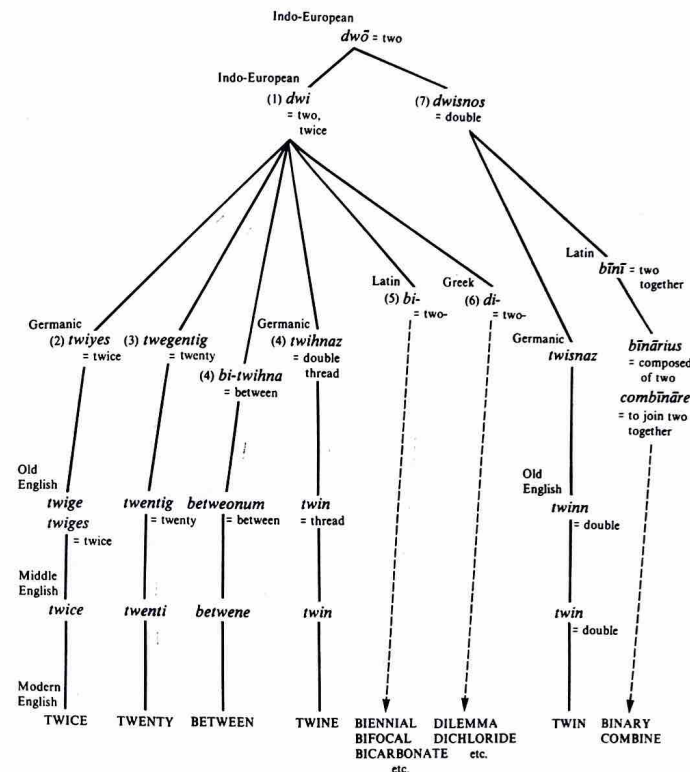
5. Indo-European *dwi* became Latin *bi-,* with regular change of Indo-European *dw* to Latin *b.* Latin compounds such as *biennis* = "lasting two years" (*-ennis* from *annus* = "year") have been adopted into English: BIENNIAL. The prefix itself has also been adopted, forming new compounds such as BIFOCAL, BICARBONATE.

6. Indo-European *dwi* became Greek *di-,* used in compounds such as *dilemma* = "double (i.e., ambiguous) assumption" (*lemma* = "assumption, proposition"), adopted into English as DILEMMA. This prefix, too, has become an active one in English, forming such words as DICHLORIDE.

7. Indo-European *dwisnos* = "double" appears in Germanic *twisnaz* = "double," Latin *bini* = "two together," and Lithuanian *dvynu* = "twins."

Germanic *twisnaz* appears in Old Norse *tvinnr* and Old English *twinn,* both meaning "double." The latter became Modern English TWIN. This word does not seem to have been used of "two children born at a birth" until the sixteenth century.

Formed from Latin *bini* = "two together" was the Late Latin adjective *bīnārius* = "composed of two, based on two." This was adopted as BINARY. Also from Latin *bini* was the verb *combīnāre* = "to join two together" (*com-* = "together"), adopted as COMBINE.
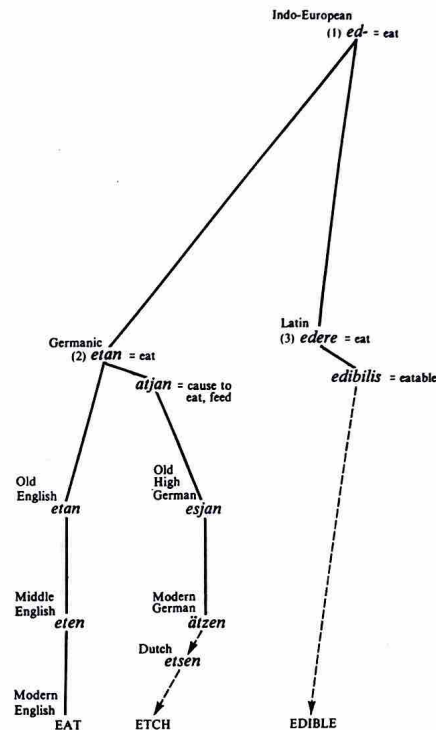
ed-

1. Indo-European *ed-* = "eat" appears in Germanic *etan*, Irish *ith*, Latin *edere*, Lithuanian *edmi*, Greek *edein*, Sanskrit *admi*, all meaning "eat," and in Hittite *etir* = "they ate."

2. Germanic *etan* appears in Gothic *itan*, Old High German *ezzan* (Modern German *essen*), Old Norse *eta*, and Old English *etan*, all meaning "eat." *Etan* became Modern English EAT.

From Germanic *etan* was formed the causative verb *atjan* = "to cause to eat, to feed." This appears in Old High German *esjan*, becoming Modern German *ätzen* = "to eat away, corrode, etch." This was borrowed into Dutch as *etsen* and thence into English (seventeenth century) as ETCH.

3. Latin *edere* formed the Late Latin adjective *edibilis* = "eatable, fit to be eaten," adopted into English as EDIBLE.

gen-

1. Indo-European *gen-, gen∂-* = "to give birth to, be born," with its numerous derivatives such as *genos, gnyos* = "offspring, family," *gen∂ter* = "parent," *gntis* = "family," *gen∂tis* = "birth," appears in Germanic *kunjam* and *kunjaz* = "family," Old Irish *ro-gēnar* = "I was born," Latin *gēns* = "clan" and *genus* = "birth, origin, descent, race," Lithuanian *gentìs* = "relative," and *genesis* = "birth, origin," and Sanskrit Greek *genos, genea* = "family, race" and *genesis* = "birth, origin," and Sanskrit *jánati* = "begets," *janitár-* = "father," and *janitrí* = "mother."

2. Germanic *kunjam* = "family, tribe, race" appears in Gothic *kuni,* Old Norse *kyn,* Old High German *chunni,* and Old English *cyn,* all meaning "family or race." Old English *cyn* became Modern English KIN.

From *kunjam* was formed *kuningaz* = "son of the kin" (the suffix *-ingaz* = "son of, descendant of" appears in hundreds of English family-names, such as *Fanning, Goring, Harding,* and place-names, such as *Nottingham*). *Kuningaz* was a title of Germanic tribal leaders, who did not automatically inherit by primogeniture but were elected from among the male descendants of former leaders. *Kuningaz* appears in Old Norse *konungr,* Old High German *chuning,* Old Frisian *kining,* and Old English *cyning,* all meaning "prince, ruler." The last became Modern English KING.
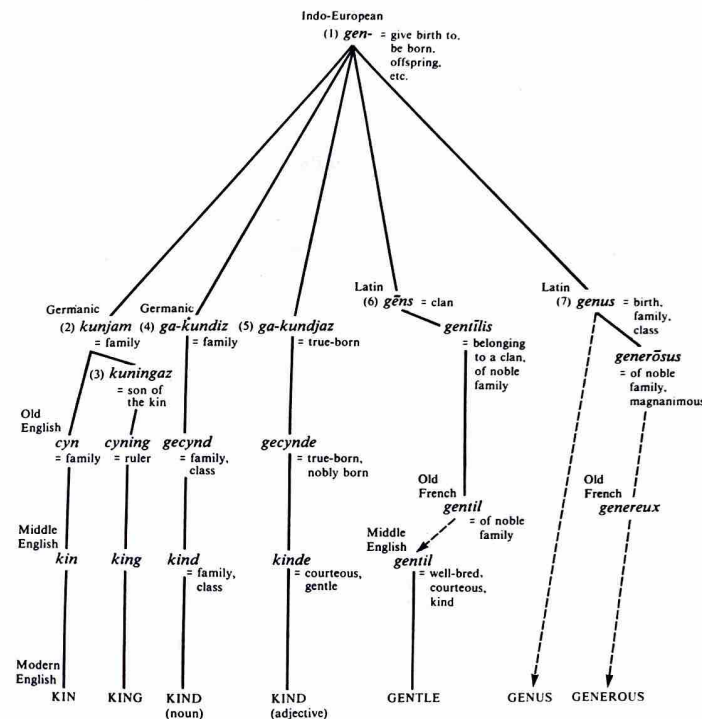
4. Germanic *ga-kundiz* = "family, birth" (*ga-* is a "collective" prefix, not affecting the meaning) appears in Old English *gecynd* = "birth, descent, family, race, class." This word was also used to mean "class, type, species," as of animals, plants, or similar objects. In Middle English it lost the prefix and became Modern English KIND (noun).

5. Germanic *ga-kundjaz* = "native, true-born" (also with the prefix *ga-*) appears in Old English *gecynde* = "nobly born, true-born, well-born," later also meaning "well-bred, courteous, gentle, benevolent." It also lost the prefix in Middle English and became Modern English KIND (adjective).

6. Latin *gēns,* stem *gent-,* = "family, clan" is exactly equivalent to Germanic *(ga)kundiz,* both descending from Indo-European *gntis* = "family." From Latin *gent-* was formed the adjective *gentīlis* = "belonging to a Roman *gens,* or clan," later also "of noble family." This was inherited into Old French as *gentil* = "of noble family," which was borrowed into Middle English as *gentil,* used in a specialized social sense to mean "of a family ranking below the peerage or nobility but entitled to bear arms." It also acquired the meanings "well-bred, courteous, honorable, generous, kind"; hence Modern English GENTLE, also GENTILITY, GENTLEMAN, etc.

7. Latin *genus* = "birth, family, race, class, kind" was used in New Latin (sixteenth century) in logic to mean a large class containing several smaller classes or *species;* this was adopted into English as GENUS.

From *genus* (stem *gener-*) was formed the adjective *generōsus* = "of noble family," hence also "of noble mind, magnanimous." This was adopted into Old French as *genereux,* borrowed thence into English as GENEROUS, now chiefly meaning "open-handed, liberal in giving."

genu

1. The Indo-European noun *genu* or *gonu*, also *gnewom*, ="knee" appears in Germanic *kniwam*, Latin *genu*, Greek *gonu*, Hittite *gienu*, Tocharian *kenī ne*, and Sanskrit *janu*, all meaning "knee."
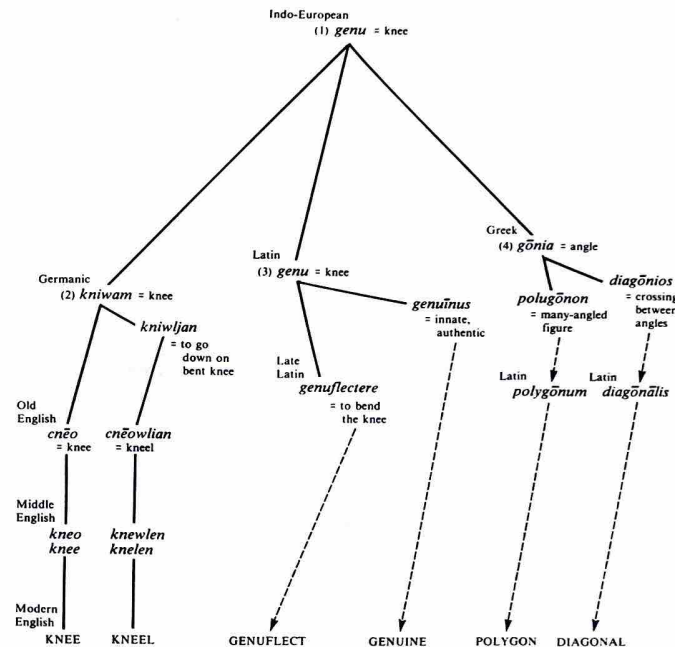
2. Germanic *kniwam* appears in Gothic *kniu*, Old Norse *knē*, Old High German *knio*, and Old English *cnēo*, all meaning "knee." Old English *cnēo* became Middle English *kneo, knee*, then (losing the initial /k/ sound but keeping the old spelling with *k*) Modern English KNEE.

From Germanic *kniwam* was formed the verb *kniwljan* ="to go down on bent knee," appearing in Old English *cnēowlian*, becoming Middle English *knewlen, knelen*, Modern English KNEEL.

3. From Latin *genu* ="knee" was formed the Late (Christian) Latin verb *genuflectere* ="to bend the knee" (*flectere* ="to bend"). This was adopted into English as GENUFLECT, a liturgical word now used mainly by Catholics.

Latin *genuīnus* ="innate, native, authentic" derives from *genu* ="knee" in reference to an ancient custom by which a newborn child was acknowledged by its father by placing it on his knee. This was adopted into English as GENUINE.

4. Related to Greek *gonu* ="knee" is Greek *gōnia* ="corner, angle." From this were formed a number of terms used in geometry, including *polugōnon* ="figure with many angles" (*polus* ="many") and *diagōnios* ="crossing between angles, running from one angle of a polygon to another" (*dia* = "through, between"). These were adopted into Latin as *polygōnum* and *diagōnālis,* and thence into English (sixteenth century) as POLYGON and DIAGONAL.

48

49

ghordhos

1. The Indo-European word *ghordhos* or *ghortos* ="enclosure, garden" appears in Germanic *gardaz* ="enclosure, garden," Welsh *garth* ="garden," Latin *hortus* ="enclosure, garden," Lithuanian *gardas* ="enclosure, hurdle, cattle pen," Old Slavic *gradŭ* ="garden," also "city" (whence *Petrograd, Stalingrad,* etc.), and Hittite *gurtas* ="fortress."

Ghordhos/ghortos is a noun regularly formed from the verb root *gher-, gherdh-* ="to enclose." The basic meaning was therefore "fenced enclosure of any kind," including probably "cattle pen," and especially "fenced area attached to a house, garden." The original "garden" in this case would certainly not have been a flower garden, and may well have been a vegetable garden, fenced against foraging animals. On linguistic evidence, the Indo-Europeans grew an array of legumes, including peas, lentils, beans, and chick-peas.

2. *Ghordhos* regularly became Germanic *gardaz* ="enclosure, garden," with variant form *gardon* (same meaning). This appears in Gothic *garda* = "enclosure," Old Norse *gardhr* ="enclosure, garden," Old High German *gart* ="garden" (whence Modern German *garten*), and Old English *geard* = "enclosure, fence, farmyard, courtyard." Old English *geard* became Modern English YARD ="enclosure, house garden" (not related to *yard* ="three feet").
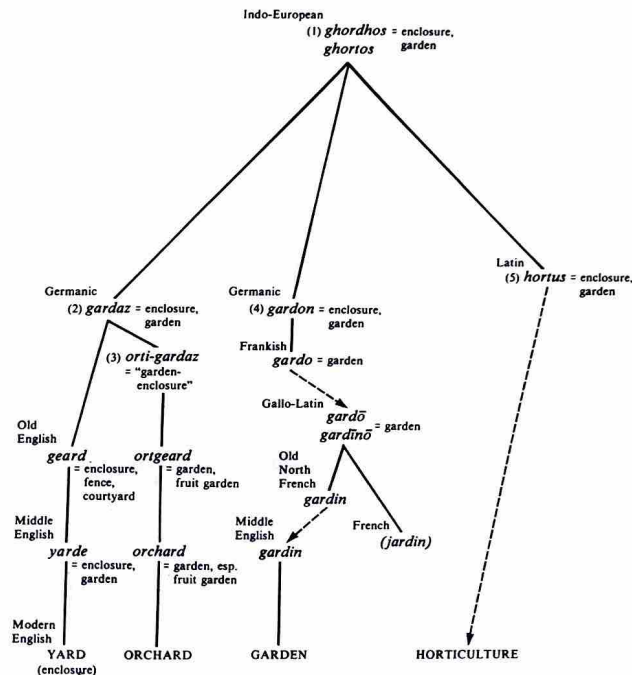
3. The Germanic compound *orti-gardaz* appears only in Gothic *aurtigards* and Old English *ortgeard.* Probably the first part of this compound is a borrowing of Latin *hortus, ortus,* which (unknown to the Germans) was an exact cognate of *gardaz.* The literal meaning was thus "garden-enclosure." The borrowing must reflect some interpenetration of Roman and German gardening practices in the time of the Roman Empire.

Old English *ortgeard* meant also specifically "fruit garden, plantation of fruit trees." By the late Middle Ages, this became its only meaning, as in Modern English ORCHARD.

4. Germanic *gardon* became Frankish *gardo,* a word that is not found in documents but is reliably inferred as the source of Provençal *gardi,* Old French *jardin,* and Old North French *gardin,* all meaning "garden." These three words are all clearly and regularly descended from a form *gardō, gardino,* which must have existed in the variety of Latin spoken in postimperial Gaul, or France. Thus, just as the Germans had earlier borrowed the Latin word *hortus,* so now, the Romanized Gauls borrowed the Germanic word *gardō* from their Frankish overlords.

Gardino became *jardin* in Parisian French, but in the northern French dialects, it kept the "hard" *g.* It was the northern form *gardin* that was later (about the fourteenth century) borrowed by the English, becoming Modern English GARDEN.

5. Latin *hortus* ="garden" was used to form the seventeenth-century English word HORTICULTURE.

ghostis

1. Indo-European *ghostis* appears in Germanic *gastiz* = "guest," Latin *hostis* = "enemy," and Old Slavic *gostĭ* = "guest, friend." *Ghostis* seems to have meant "person who may be my guest or my host." It seems that it originally applied not to strangers but to members of a community or league bound by laws of hospitality and exchange.

2. In Germanic *gastiz*, the regular descendant of Indo-European *ghostis*, the word had narrowed, meaning chiefly "guest." It appears in Gothic *gasts*, Old Norse *gestr*, and Old English *giest*, all meaning "guest." The Old English word would have emerged in Modern English as *yest*, but it died out in the late Middle Ages, being replaced by the Old Norse equivalent *gestr*, with the "hard" /g/. The English word was later respelled GUEST, with the *u* added to show that the *g* was "hard."

3. Latin *hostis* means "enemy." But it has been shown that in the earliest Latin it meant "member of a people allied to the Romans." This meaning was a survival of Indo-European *ghostis* = "fellow-member of a hospitality-league." As the Romans conquered their neighbors, *hostis* ceased to mean "friendly non-Roman" and came to mean "enemy." Its adjective *hostīlis* was adopted into English as HOSTILE.
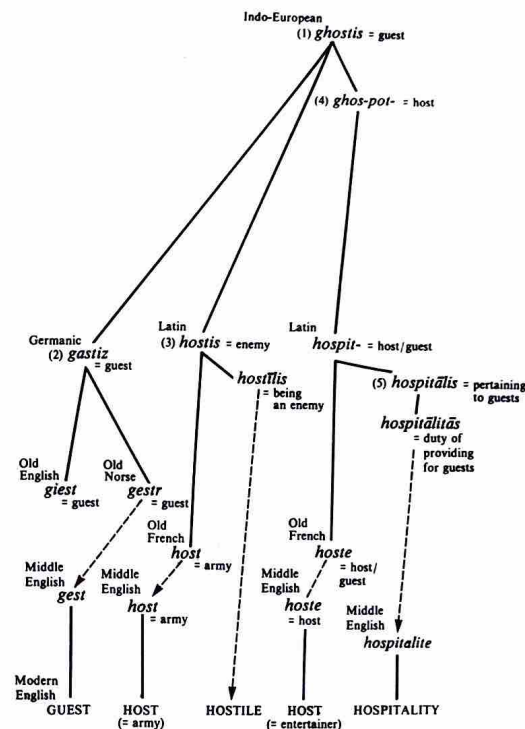
   In Medieval Latin, *hostis* was used to mean "an army." It thus passed into Old French as *host, ost,* which was borrowed into Middle English as HOST (= "army").

4. The Indo-European compound noun *ghosti-pot-* or *ghos-pot-* was formed from *ghostis* + *-pot-,* a suffix meaning "he who presides over or represents." *Ghos-pot-* thus meant "guest-presider, hospitality-master, host."

   Ghos-pot- appears in Old Slavic *gospodĭ* = "lord" (Modern Russian *gospodin* = "sir") and in Latin *hospit-* = "host/guest." *Hospit-* must originally have meant only "host" in Latin; when *hostis* lost its old meaning, *hospit-* took them over.

   Latin *hospit-* was inherited in Old French as *hoste* = "host/guest." (Modern French *bôte*). When this was borrowed into Middle English, the word GUEST already existed; presumably for this reason, the borrowed word *hoste* was used only to mean "dispenser of hospitality," as in Modern English HOST (= "entertainer").

5. Latin *hospit-* formed the adjective *hospitālis* = "pertaining to guests," with abstract noun *hospitālitās* = "the action or duty of providing for guests." This was borrowed into Middle English as *hospitalite,* now HOSPITALITY.

gnō-

1. Indo-European *gnō-* = "to know" appears in Germanic *knōw-*, Old Irish *-gnin-*, Latin *gnōscere*, Lithuanian *žinaŭ*, Greek *gignōskein*, Tocharian *knā-*, and Sanskrit *jānāmi*, all meaning "to know."

2. Indo-European *gnō-* became Germanic *knōw-*, with regular change of *g* to *k*. This appears in Old Norse *knā* = "I can," Old High German *cnāen* = "to know," and Old English *cnāwan* = "to know." Old English *cnāwan* became Middle English *knowen* and, losing the pronunciation of the *k-* but retaining the spelling, KNOW.
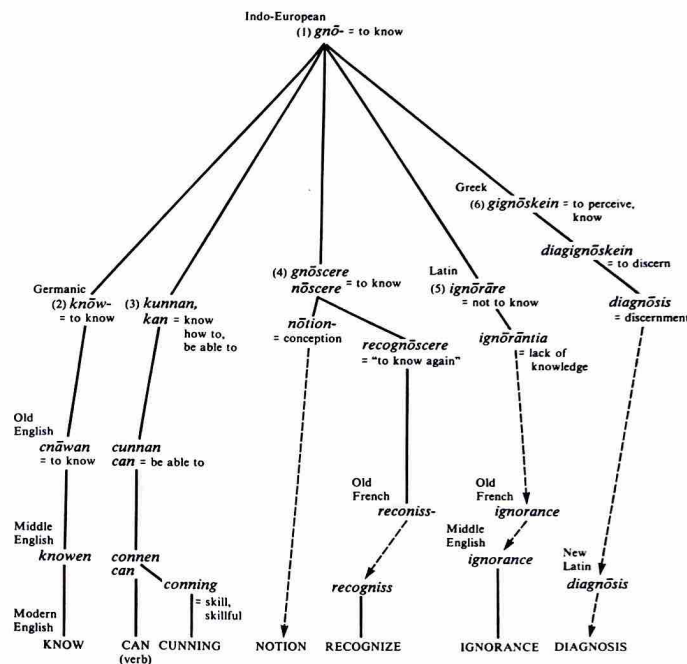
3. The root also appears in Germanic *kunnan* = "to know how to, be able to," with present tense *kan-* = "I know how to, I am able." This appears in Gothic *kunnan, kan*, Old Norse *kunna, kan*, Old High German *kunnan, kan* (whence Modern German *können, kann*), and Old English *cunnan, can*. In Middle English the infinitive disappeared, leaving the auxiliary verb CAN.

The Middle English adjective and noun *conning* = "knowing, skillful, able" and "knowledge, skill, ability" became Modern English CUNNING, now narrowed in meaning to "guileful, guile."

4. Formed from Latin *gnōscere* = "to get to know," losing the *g-* to become *nōscere*, was the noun *nōtion-* = "a getting to know, conception in the mind." This was adopted into English (sixteenth century) as NOTION. A compounded form of the verb, *recognōscere* = "to know again (i.e., something that one had known before)," was inherited in Old French as *reconiss-* = "to recognize." This was borrowed into English (also sixteenth century) as *recogniss*, RECOGNIZE.

5. Also from the root is Latin *ignōrāre* (*i-* = "in-, un-, not") = "not to know," with a noun *ignōrāntia* = "lack of knowledge." This was adopted into Old French as *ignorance*, which was borrowed into Middle English as IGNORANCE.

6. Closely related to Latin *gnōscere* was Greek *gignōskein* = "to perceive, know" (the initial *gi-* being a reduplication of the initial sound of the root). A compound of this verb was *diagignōskein* = "to discern, to distinguish" (*dia-* = "through, all the way through"). The noun formed from this was *diagnōsis* = "discernment, the act of discerning," as in the medical analysis of a case. This was adopted into New Latin as *diagnōsis*, and thence into English (sixteenth century) as DIAGNOSIS.

Indo-European
(1) *gnō-* = to know

Germanic
(2) *knōw-* = to know

(3) *kunnan, kan* = know how to, be able to

(4) *gnōscere nōscere* = to know

Latin
(5) *ignōrāre* = not to know

Greek
(6) *gignōskein* = to perceive, know

diagignōskein = to discern

diagnōsis = discernment

nōtion- = conception

recognōscere = "to know again"

ignōrāntia = lack of knowledge

Old English
cnāwan = to know

cunnan can = be able to

Middle English
knowen

connen can

conning = skill, skillful

Old French
reconiss-

Old French
ignorance

Middle English
ignorance

New Latin
diagnōsis

Modern English
KNOW   CAN (verb)   CUNNING   NOTION   RECOGNIZE   IGNORANCE   DIAGNOSIS
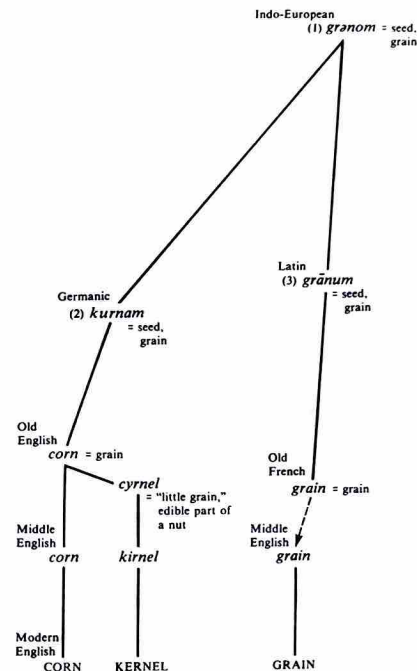
grənom

1. The Indo-European noun *grənom* = "seed, grain" appears in Germanic *kornam,* Old Irish *grān,* Latin *grānum,* and Old Slavic *zrǔno,* all meaning "seed, grain."

2. Indo-European *grənom* became Germanic *kurnam,* which appears in Gothic *kaurn,* Old Norse *korn,* Old High German *korn,* and Old English *corn,* all meaning "seed, grain, especially of the cereal grasses." Old English *corn* became Modern English CORN, still in British English referring basically to the cereal grasses (wheat, barley, oats, rye) in general. In the seventeenth century when the English encountered *mahíz,* or *maize,* in North America, they called it *Indian corn.* Later (eighteenth century) this was abbreviated to CORN, which in American English became exclusively the term for "maize"; the cereal crops therefore were collectively referred to as GRAIN (*see* paragraph 3, below).

    A diminutive formed from Old English *corn* = "seed" was Old English *cyrnel* = "little seed," also "inner and edible part of a nut"; this became Middle English *kirnel,* Modern English KERNEL.

3. Latin *grānum* = "seed, grain" was inherited in Old French as *grain,* and borrowed thence into (Middle) English as GRAIN.

gwei-

1. Indo-European *gwei-* = "to live," with its derivatives *gwiwos, gwĩwos, gwiyos* = "alive" and *gwĩwot-* = "life," appears in Germanic *kwiwaz* = "alive," Celtic *bivotut-* = "life," Latin *vivus* = "alive" and *vita* = "life," Lithuanian *gyvas* = "living," Old Slavic *žiti* = "live," Greek *bios* = "life" and *zōon* = "living thing," and Sanskrit *jivās* = "alive" and *jivātah* = "life."

The sound-changes resulting from Indo-European /gw/ in the various languages are particularly surprising at first sight, but they are supported by plentiful comparative evidence. Indo-European /gw/ regularly became Germanic /kw/, Celtic /b/, Latin /v/, etc., and according to circumstances it could become /b/ or /z/ in Greek.

2. Indo-European *gwiwos* = "living" regularly became Germanic *kwiwaz*, with variant *kwikwaz*, appearing in Old Norse *kvikr*, Old High German *quek*, and Old English *cwicu*, all meaning "alive, living."

Old English *cwicu* became Middle English *quik*, meaning "alive" and "lively, active, vigorous, sharp-witted," then also "moving rapidly, swift." It became Modern English QUICK.
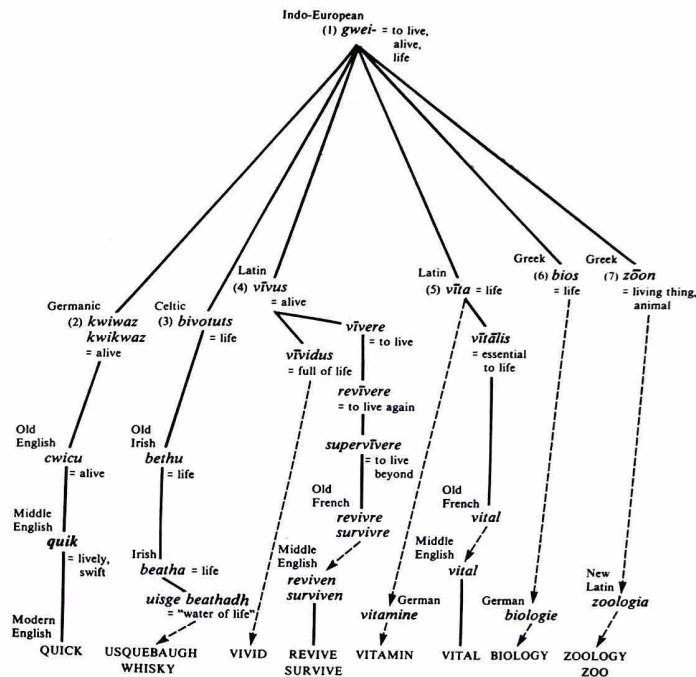
3. Celtic *bivotuts* = "life," appears in Old Irish *bethu* = "life," becoming Modern Irish *beatha*. In the sixteenth century distilled alcohol suddenly became known all over Europe with the alchemical name (Latin) *aqua vitae* = "water of life." In Ireland and Scotland this was translated as *uisge beatha*, from *uisge* = "water" (*see also* under **wed-** = "water") + *beatha* = "life." This was borrowed into English as USQUEBAUGH, later shortened to WHISKY.

4. Latin *vivus* = "alive" is from Indo-European *gwĩwos*. From it were formed: the adjective *vividus* = "full of life," adopted into English as VIVID; and the verb *vivere* = "to live," with Late Latin compounds *revivere* = "to live again" and *supervivere* = "to live beyond (others)." These became Old French *revivre* and *survivre*, and were borrowed into Middle English as *reviven, surviven*, Modern English REVIVE, SURVIVE.

5. Latin *vita* = "life" is from Indo-European *gwĩwota*. From it was formed the adjective *vitālis* = "relating to life, essential to life," which was adopted into Old French as *vital* and thence into (Middle) English as VITAL. In the early twentieth century the German scientist Casimir Funk identified certain biochemical compounds as essential to life and the prevention of specific diseases; believing (wrongly) that these chemicals were *amines* (a type of ammonia derivative), he named them *vitamine*, from Latin *vita* = "life" + *amine*. This was borrowed into English as VITAMIN.

6. Greek *bios* = "life" is from Indo-European *gwiyos*. At the beginning of the nineteenth century it was used in German and French to coin the word *biologie* = "life science" (*-logie* from Greek *-logia* = "study, science"). This was borrowed into English as BIOLOGY.

7. Greek *zōon* = "living creature, animal" is from Indo-European *gwoyom*. In the seventeenth century this was used to coin the New Latin word *zoologia* = "animal science." This was borrowed into English as ZOOLOGY.

gwenā

1. Indo-European *gwenā*, also *gwēnis*, ="woman, wife" appears in Germanic *kwenōn, kwēniz*, Old Irish *ben*, Old Prussian *genna*, Old Slavic *žena* (whence Modern Russian *zhena*), Greek *gunē*, and Sanskrit *jāni-*, all meaning "woman" and/or "wife."
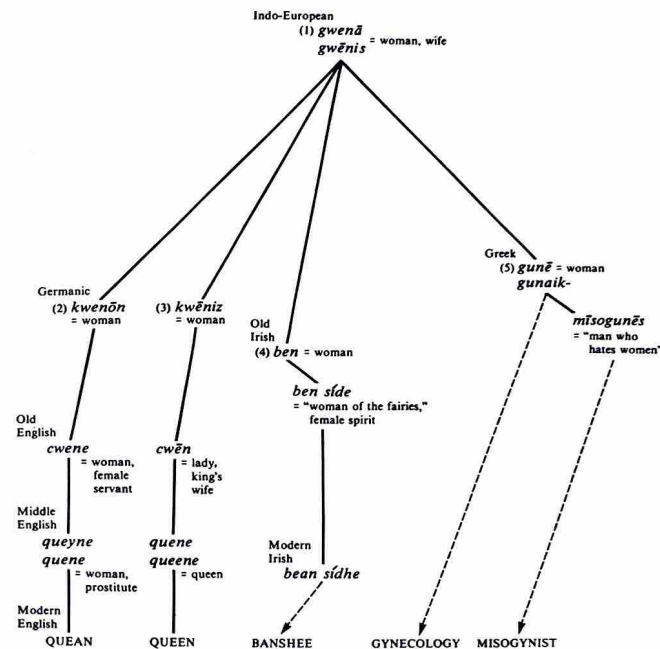
2. Germanic *kwenōn* (short /e/) appears in Gothic *qino*, Old Norse *kvinna*, Old High German *quena*, and Old English *cwene*, all meaning "woman." Old English *cwene*, sometimes used to mean "female servant," became Middle English *queyne, queine, quene* ="woman," used with an increasing sense of social/sexual disapproval: "impudent woman, slut, prostitute." This became Modern English QUEAN, now a relatively rare, rather literary word for a woman who is boldly and openly a prostitute. It is used in a short story (1921) of Somerset Maugham: "Her face was painted, her eyebrows were boldly black, and her lips were scarlet. She held herself erect. She was the flaunting quean they had known at first."

3. Germanic *kwēniz* (long /e/) appears in Gothic *qēns* ="wife," Old Norse *kvæn* ="woman, wife," and Old English *cwēn* ="lady, king's wife, sovereign lady." This became Middle English *quene, queene*, Modern English QUEEN. The striking divergence of meaning between QUEAN and QUEEN, formerly marked by a difference in pronunciation, is now marked only by a difference in spelling. The inevitable pun on the two was suitably made by the woman-obsessed poet Byron in *Don Juan* (1823): "This martial scold, This modern Amazon and queen of queans."

4. Indo-European *gwenā* also became Old Irish *ben* ="woman." (The sound-change from Indo-European /gw/ to Celtic /b/ is regular; *see also* gwōus* ="cow," becoming Old Irish *bó* ="cow.") In Old Irish mythology, the *ben síde* ="woman of the fairies" (*síde* ="fairies") was a female spirit who warned of a coming death in a family by wailing near the house. This became Modern Irish *bean sídhe*, pronounced, approximately, *ban-shee*. It was borrowed into English in the eighteenth century as BANSHEE.

5. Indo-European *gwenā* also appears in Greek as *gunē* ="woman, wife." From this was formed the compound word *mīsogunēs* ="man who hates women" (*mīsein* ="to hate"). This was adopted into English in the seventeenth century as MISOGYNIST.

Greek *gunē* had the stem *gunaik-;* in the Latinized spelling *gynec-* this was used to form the nineteenth-century medical term GYNECOLOGY= "branch of medicine specializing in the treatment of women."

gwōus

1. Indo-European *gwōus* = "cow or bull" appears in Germanic *kōuz*, Old Irish *bó*, Latin *bōs*, Latvian *gùovs*, Old Slavic *govędo*, Greek *bous*, Armenian *kov*, Tocharian *ko*, and Sanskrit *gáuh*, all meaning "cow" or "bull" or both.

While the horse (*see* ekwos) was the sacred animal of the Indo-Europeans, the cow was their animal of economic prestige. The earliest identifiable Indo-Europeans are the Kurgan people of southern Russia, who lived between 5000 and 4000 B.C. Cattle had then already been domesticated for at least two thousand years, and excavations have shown that the Kurgan people herded and ate them in quantity. Oxen were probably also yoked at a very early date, before horses were harnessed (*see* yeug-).

In their later migrations into Europe and the Middle East, the various Indo-European peoples undoubtedly took herds of cattle with them. Throughout the Bronze Age, their ruling caste of warriors reckoned their wealth in head of cattle and regarded cattle-raiding as a legitimate, in fact glorious, form of warfare and profit.
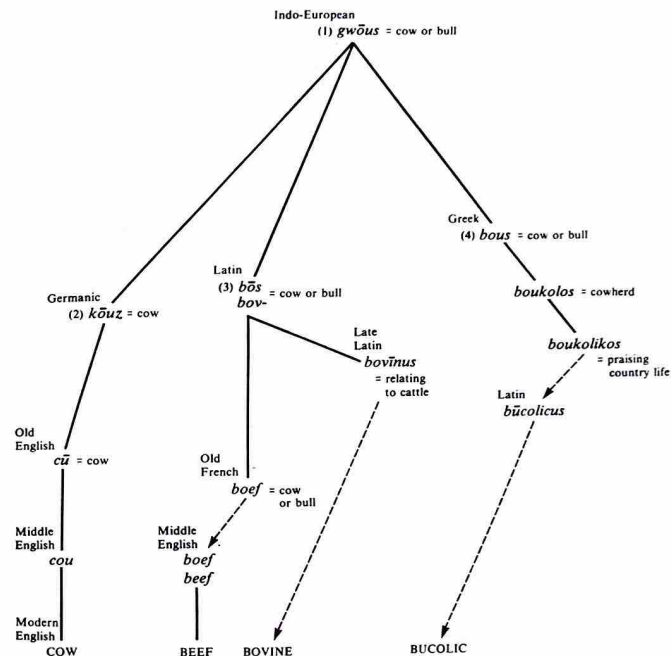
2. Germanic *kōuz* appears in Old Norse *kyr*, Old High German *chuo* (whence Modern German *kuh*), Old Frisian *kū*, and Old English *cū*, all meaning "cow." Old English *cū* became Modern English COW.

3. Indo-European *gwōus* would normally have become *vōs* in Latin, but actually appears as *bōs* = "cow or bull." This is accounted for by the fact that in some Italic dialects closely related to Latin, Indo-European *gw* regularly became *b*. The word *bōs* must therefore have been borrowed into early Latin from one of these dialects, perhaps Sabine, spoken by people who were neighbors of the early Romans.

The stem of Latin *bōs* was *bov-;* from this was formed the Late Latin adjective *bovīnus* = "oxlike, relating to cattle." This was adopted into English (sixteenth century) as BOVINE.

Latin *bov-* was inherited into Old French, including the dialect of Normandy, as *boef* (becoming Modern French *boeuf*). The Normans took their word *boef* into England, and it was borrowed into Middle English as *boef*, also BEEF, used primarily for the meat but also for the animal.

4. Greek *boukolos* = "cowherd" is formed from *bous* = "cow or bull" + *-kol-* = "tend, look after, herd." The highly literate urban Greeks and Romans of the Classical period had an almost romantic admiration for the simple country life, expressed by poets such as the Sicilian Greek Theocritus (third century B.C.). He and others called their rural poems *boukolikai aoidai*, literally meaning "cow-herding songs," but telling of idyllic country life in general, not specifically of cattle-herding. The adjective *boukolikos* thus came to mean "pastoral, praising country life," and was so adopted into Latin as *būcolicus*, and thence into English (sixteenth century) as BUCOLIC.

Indo-European
(1) *gwōus* = cow or bull

Germanic
(2) *kōuz* = cow

Latin
(3) *bōs* *bov-* = cow or bull

Greek
(4) *bous* = cow or bull

boukolos = cowherd

Late Latin
bovīnus = relating to cattle

boukolikos = praising country life

Latin
būcolicus

Old English
cū = cow

Old French
boef = cow or bull

Middle English
cou

Middle English
boef *beef*

Modern English
COW

BEEF

BOVINE

BUCOLIC

kanabis

1. Germanic *hanapiz*, Lithuanian *kanapes*, Slavic *konoplja*, Albanian *kanep*, Greek *kannabis*, and Armenian *kanap*, all meaning "hemp," obviously derive from a common source. It cannot be a word inherited from Indo-European, because an original *k* changed to *s* when inherited in Slavic, Albanian, and Armenian.

The Germanic word, on the other hand, is clearly descended from a pre-Germanic *kanabis*, which must have existed before the Indo-European *k* became Germanic *h* and Indo-European *b* became Germanic *p*—presumably before 500 B.C.
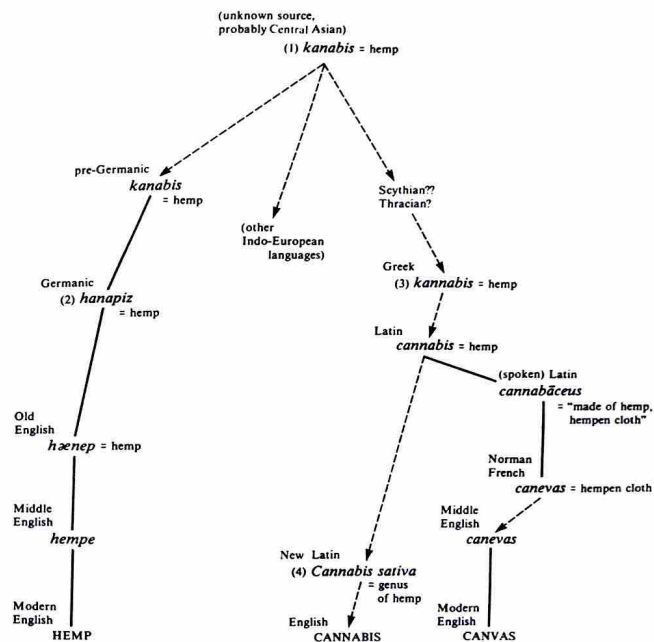
The Greek word was first used by Herodotus in the fifth century B.C., reporting that the plant grew in Scythia (north of the Black Sea) both as a weed and under cultivation, and that the Thracians used it for making cloth. Probably the Greek word itself is borrowed from either Thracian or Scythian, two Indo-European languages of which little has been recorded. The plant is native to Asia, probably Central Asia. It grows wild around encampments of the nomads and is also cultivated by them. It could well have been brought to Europe by the Scythians, whose cultural influence was strong in the period 600–400 B.C.

2. Germanic *hanapiz* appears in Old Norse *hampr*, Old High German *hanaf* (whence Modern German *hanf*), and Old English *hænep*, all meaning "hemp." The last became Modern English HEMP.

3. Greek *kannabis* was adopted into Latin as *cannabis*. An unrecorded Latin adjective *cannabāceus*="made of hemp" was inherited in the Romance languages: Italian *canvaccio*, Provençal *canabas*, Old French *chanevas*, and Norman French *canevas*, all meaning "hempen cloth, canvas." The last was borrowed into Middle English as *canevas*, becoming Modern English CANVAS. Some canvas is still made of hemp, but most is now made of linen or cotton.

4. Latin *cannabis* was adopted in New Latin (Linnaeus, eighteenth century) as the botanical name of the plant, *Cannabis sativa* (*sativa*="cultivated"). This has recently been taken into the general English vocabulary as CANNABIS, the formal term for hemp used as a drug, otherwise known by informal terms such as *grass, marijuana,* etc.

Herodotus describes its use as a religious intoxicant by the Scythians, but this seems never to have spread to Europe until introduced in the nineteenth century from the Middle East and India. The plant has been cultivated for rope and cloth for at least two thousand years in Europe.

(unknown source, probably Central Asian)
(1) *kanabis* = hemp

pre-Germanic *kanabis* = hemp

(other Indo-European languages)

Scythian?? Thracian?

Germanic (2) *hanapiz* = hemp

Greek (3) *kannabis* = hemp

Latin *cannabis* = hemp

(spoken) Latin *cannabāceus* = "made of hemp, hempen cloth"

Old English *hænep* = hemp

Norman French *canevas* = hempen cloth

Middle English *hempe*

Middle English *canevas*

New Latin (4) *Cannabis sativa* = genus of hemp

Modern English HEMP

English CANNABIS

Modern English CANVAS

kap-

1. Indo-European *kap-* = "to grasp, take hold of" appears in Germanic *hafjan* = "to hold, lift" and *habben* = "to hold, possess," Latin *capere* = "to take" and *captus* = "taken," Latvian *kàmpju* (stem *kap-*) = "to seize," Greek *kaptein* = "to gulp down," and some other words.

2. Germanic *hafjan* = "to lift up" appears in Gothic *hafjan* = "to carry," Old High German *heffen* = "to lift," and Old Norse *hefja* = "to lift." The last became Middle English *heven*, Modern English *hebban* = "to lift." The last became Middle English HEAVE, now meaning primarily "to lift with great effort," or "to throw something heavy."
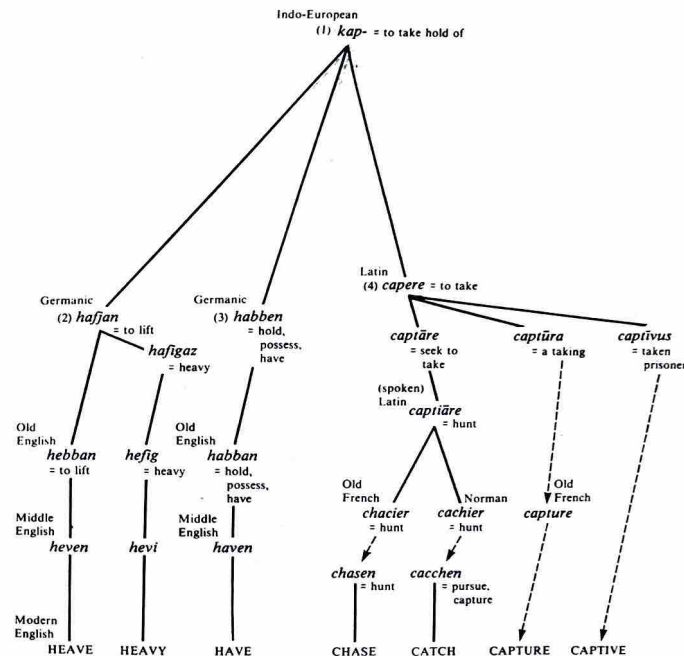
Formed from, or closely related to, Germanic *hafjan*, is Germanic *hafigaz* = "heavy," appearing in Old Norse *höfigr*, Old High German *hebig*, and Old English *hefig*, all meaning "heavy." The last became Middle English *hevi*, Modern English HEAVY.

3. Germanic *habben* = "to hold, possess" appears in Gothic *haban*, Old Norse *hafa*, Old High German *haben* (whence Modern German *haben*), and Old English *habban*, all meaning "to have." In Germanic this verb also came to be used as an auxiliary verb forming perfective tenses (*I have seen, I had seen,* etc.), just as Latin *habēre* = "to have" did in the Romance languages (French *avoir: j'ai vu,* etc.); but although their forms and meanings are so similar, the Latin and Germanic words are not the same—neither is borrowed from the other, nor are they descended from the same Indo-European root. Old English *habban* became Middle English *haven*, Modern English HAVE.

4. Latin *capere* = "to take," *captus* = "taken," and a number of closely related or derived Latin words are the source of over a hundred English words, borrowed through French or directly from Latin.

The noun *captūra* = "a taking" was adopted into Old French as *capture*, borrowed thence into English as CAPTURE (noun, hence verb). The Latin adjective *captīvus* = "taken prisoner" was adopted directly as CAPTIVE.

The "frequentative" Latin verb *captāre* meant "to seek to take, to lie in wait for, to hunt." A group of obviously related words in the Romance languages, Italian *cacciare*, Spanish *cazar*, Old French *chacier*, all meaning "to hunt," are descended from a Latin variant form *captiāre*, which is not recorded in surviving documents and is therefore assigned to the spoken "vulgar" Latin of the Roman Empire. Old French *chacier* (Modern French *chasser*) was borrowed into Middle English as *chasen* = "to hunt," becoming Modern English CHASE. While (spoken) Latin *captiāre* became standard Old French *chacier*, with regular change of *c-* /k-/ to *ch-* /sh-/, in the northern dialects of French it became *cachier*, retaining the "hard" *c-* /k-/. The Norman invaders of England thus brought with them their verb *cachier* = "to hunt," which was borrowed into Middle English as *cacchen* = "to pursue," also "to take, capture," becoming Modern English CATCH.

Indo-European
(1) *kap-* = to take hold of

Latin
(4) *capere* = to take

Germanic
(2) *hafjan*
= to lift

Germanic
(3) *habben*
= hold, possess, have

hafigaz
= heavy

captāre
= seek to take

captūra
= a taking

captīvus
= taken prisoner

(spoken) Latin
captiāre
= hunt

Old English
hebban
= to lift

Old English
hefig
= heavy

Old English
habban
= hold, possess, have

Old French
chacier
= hunt

Norman
cachier
= hunt

Old French
capture

Middle English
heven

Middle English
hevi

Middle English
haven

chasen
= hunt

cacchen
= pursue, capture

Modern English
HEAVE

HEAVY

HAVE

CHASE

CATCH

CAPTURE

CAPTIVE

ker-

1. The Indo-European root *ker-* ="horn, antler," with its derivatives *krnos* ="horn," *kerudos* and *kerwos* ="horned or antlered animal, stag," appears in Germanic *hurnaz* ="horn" and *herutaz* ="stag," Welsh *carw* ="deer," Latin *cervus* ="stag," Old Slavic *srŭna* ="roe deer," Greek *keras* ="horn," and Sanskrit *śrngam* ="horn."

2. Indo-European *krnos* regularly became Germanic *hurnaz* (the Germanic *h* being a /ch/ sound, as in Scottish *loch*). Germanic *hurnaz* appears in Gothic *haurn,* Old Norse *horn,* Old High German *horn,* and Old English *horn,* all meaning "horn." (Horns were used by the Germanic peoples both as musical instruments and as drinking vessels.) The last remains unchanged as Modern English HORN (as Modern German *horn* also remains unchanged).
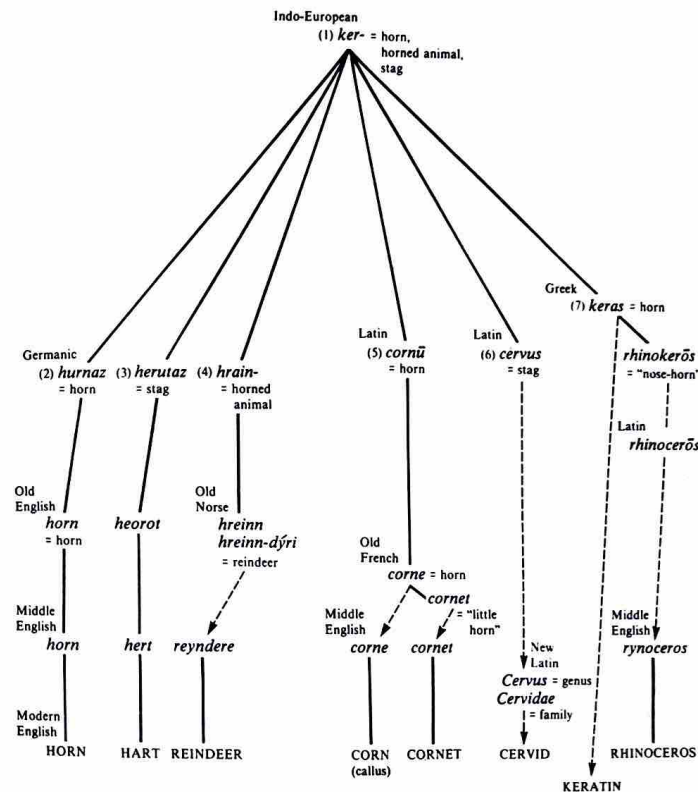
3. Indo-European *kerudos* ="antlered animal, stag" became Germanic *herutaz* (with regular change of *k* and *d* to *h* and *t*), appearing in Old Norse *hjörtr,* Old High German *hiruz,* and Old English *heorot,* all meaning "stag" (note that the stag has antlers, the doe does not). Old English *heorot* became Middle English *hert,* Modern English HART, technically meaning a stag of the red deer over five years old.

4. Also from this root is Germanic *hrain-* ="horned animal," appearing in Old High German *(h)rind* ="bull or cow" (whence Modern German *rind*) and Old Norse *hreinn* ="reindeer" (a deer with conspicuously large antlers, and the only one of forty-one species of deer to have been domesticated, by various peoples in northernmost Eurasia). In Old Norse the animal was also known as *hreinn-dýri* (*dýr* ="deer"). This was borrowed into Middle English (fourteenth century) as *reyndere,* becoming Modern English REINDEER.

5. Closely related to Germanic *hurnaz* is Latin *cornū* ="horn." This was inherited in Old French as *corne* ="horn," also "horny growth of skin on the toe," which was borrowed into Middle English as *corne,* Modern English CORN (no connection with *corn* ="grain"). Formed from Old French *corne* was the diminutive *cornet* ="little horn," musical instrument of the horn or trumpet family, also "cone-shaped object." This was borrowed into (Middle) English as CORNET.

6. Latin *cervus* ="stag" is regularly from Indo-European *kerwos.* It was adopted in scientific New Latin as *Cervus,* name of the basic genus of deer, hence *Cervidae* ="the deer family" (including moose and elk), which was adopted into (scientific) English as CERVID.

7. Greek *keras, kerat-* ="horn" is the basis of numerous modern scientific words such as KERATIN ="fibrous protein in horn, skin, hair, etc.". The Greek compound *rhinokerōs* (*rhis* ="nose")="nose-horn, horned nose," name of an animal the Greeks heard of in Africa, was adopted into Latin as *rhinocerōs.* This was adopted into Middle English (thirteenth century) as *rynoceros,* corrected in Modern English to RHINOCEROS.

kerd-

1. Indo-European *kerd-* = "heart" appears in Germanic *hertōn-*, Old Irish *cride*, Latin *cor, cord-*, Lithuanian * širdìs*, Greek *kardia*, Armenian *sirt*, and Hittite *ka-ra-az*, all meaning "heart."

The Indo-European word already meant not only the heart as a physical organ but also the heart as the supposed residence of life, soul, or spirit.
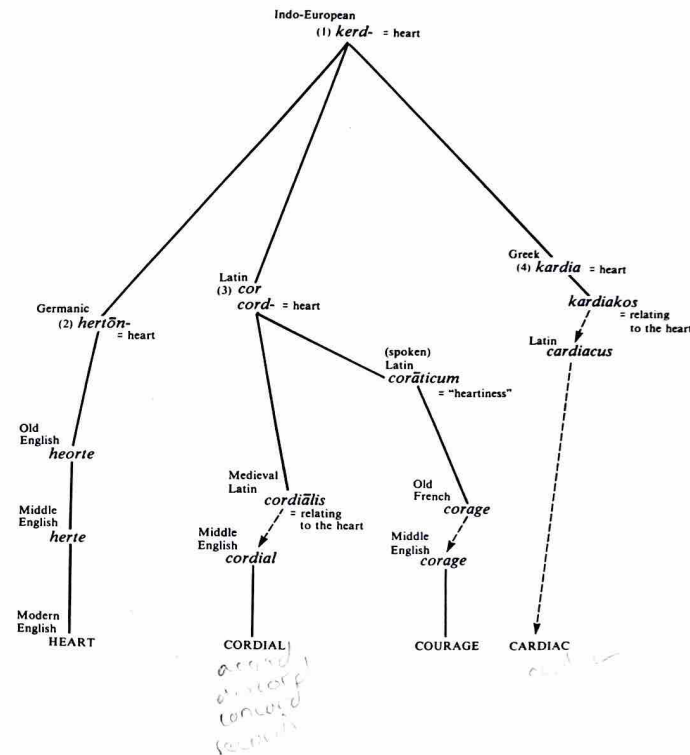
2. *Kerd-* appears in Germanic *hertōn-* = "heart" (with regular change of Indo-European *k* to Germanic *h*, and with an added suffix). This appears in Gothic *hairto*, Old High German *herza*, Old Norse *hjarta*, and Old English *heorte*, all meaning "heart." *Heorte* became Middle English *herte*, Modern English HEART.

3. From Latin *cor, cord-* = "heart" was formed the Medieval Latin adjective *cordiālis* = "relating to the heart." This was borrowed into Middle English, later acquiring (chiefly) the sense "heartfelt," Modern English CORDIAL.

There are several words in the Romance languages meaning (approximately) "courage": Italian *coraggio*, Provençal *coratge*, Old French *corage*, Spanish *coraje*. They are obviously descended from a common ancestor, but no such Latin word has been preserved in records. It is known from numerous other examples that the ending *-aggio*, *-age*, etc., in the Romance languages descends from a Latin noun-ending *-āticum* (compare Old French *vayage*, from Latin *viāticum* = "journey"). The spoken Latin word *corāticum* has therefore been confidently reconstructed, as a derivative of *cor*, meaning (approximately) "heartiness, the quality of having a good heart or spirit." A reconstruction of this kind is assigned to the popular spoken Latin of the Roman Empire, much of which, when it differed from the literary Classical language, was never written down.

Old French *corage* was borrowed into Middle English as *corage*, becoming Modern English COURAGE.

4. Greek *kardia* = "heart," also "stomach," had the adjective *kardiakos* = "relating to the heart." This was adopted into Latin as *cardiacus* and thence into English (seventeenth century) as the medical word CARDIAC.

Indo-European
(1) *kerd-* = heart

Germanic
(2) *hertōn-*
= heart

Latin
(3) *cor*
cord- = heart

Greek
(4) *kardia* = heart

kardiakos
= relating
to the heart

Latin
cardiacus

(spoken)
Latin
corāticum
= "heartiness"

Old
English
heorte

Middle
English
herte

Modern
English
HEART

Medieval
Latin
cordiālis
= relating
to the heart

Middle
English
cordial

CORDIAL

Old
French
corage

Middle
English
corage

COURAGE

CARDIAC

klei-

1. The Indo-European root *klei-* = "to lean, slope, climb," with derivatives including *klein-*, *klin-* = "to lean, slope," *kleiwos* = "a slope, hill," and *kloitr-* = "inclined structure, climbing device, ladder," appears in Germanic *hlinēn* = "to lean" and *hlaidr-* = "ladder," Middle Irish *clīath* = "hurdle," Latin *-clīnāre* = "to lean" and *clivus* = "a slope, hill," Lithuanian *šliēti* = "leans" and *šliṫė* = "ladder," Greek *klīnein* = "to lean," *klinē* = "bed," *klima* = "a slope," and *klīmax* = "ladder," and Sanskrit *śryati* = "leans on."

2. Indo-European *klin-* became Germanic *hlinēn* (with regular change of *k* to *h*, the latter representing a /ch/ sound, as in Scottish *loch*), appearing in Old High German *(h)linēn*, Old Frisian *lena*, and Old English *hlinian*, *hleonian*, all meaning "to lean." The Old English word as usual lost the initial *h-* before a consonant to become Middle English *lēnen*, Modern English LEAN, still precisely conserving the original meaning of the Indo-European root.
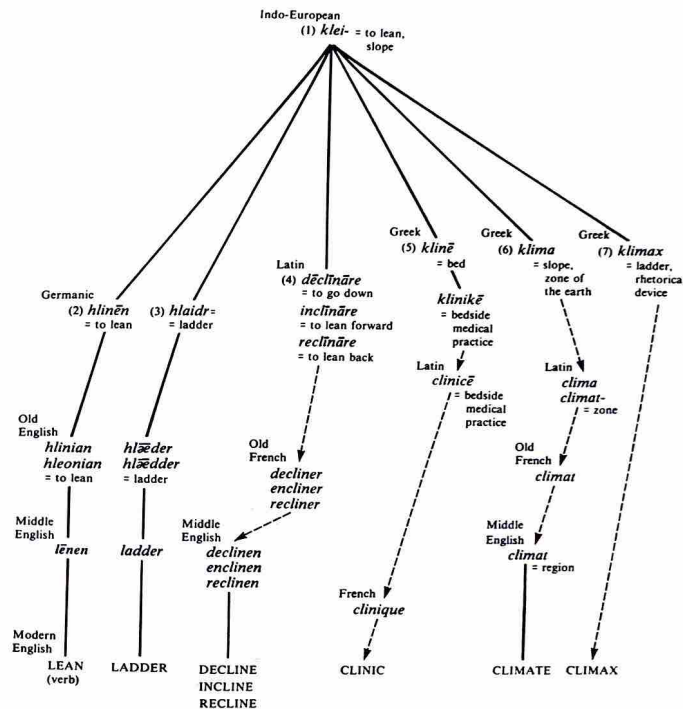
3. Germanic *hlaidr-* = "ladder" (from Indo-European *kloitr-*), appears in Old High German *leitara*, Middle Dutch *ledere*, Old Frisian *hledere*, and Old English *blæder*, *blædder*, all meaning "ladder." The Old English word became Modern English LADDER.

4. Latin *dēclīnāre* = "to go down, turn aside," *inclīnāre* = "to lean toward," and *reclīnāre* = "to lean back" became Old French *decliner*, *encliner*, *recliner*, which were borrowed into Middle English as *declinen*, *enclinen*, *reclinen*, becoming Modern English DECLINE, INCLINE, RECLINE.

5. From Greek *klinē* = "bed" was formed the adjective *klinikos* = "relating to the sickbed," whence *klinikē tekhnē* = "the practice of medicine upon patients in bed" (*tekhnē* = "art, craft"). This, shortened to *klinikē*, was adopted into Latin as *clinicē*, and thence into French (nineteenth century) as *clinique* = "teaching session in which a doctor instructs a class in a hospital ward using patients in bed as case studies." This was borrowed into English as CLINIC, with several subsequent extensions of meaning.

6. Greek *klima* = "slope of ground" was used in the technical geographical sense "one of the latitudinal zones of the earth in relation to the slope of its surface from the pole to the equator." This was adopted into Latin as *clima*, *climat-*, = "zone or region of the earth divided by lines of latitude." This was adopted into Old French as *climat* and thence into Middle English as *climat* = "zone of latitude, region characterized by specific weather (torrid, temperate, frigid, etc.)," becoming Modern English CLIMATE.

7. Greek *klimax*, *klimakt-* = "ladder" was used as a technical term in rhetoric to mean "a sequence of expressions progressively rising in intensity." This was adopted into English (sixteenth century) as CLIMAX. Subsequently the CLIMAX has been understood as being the final culminating point, the point of highest intensity or excitement.

Indo-European
(1) *klei-* = to lean, slope

Germanic
(2) *hlinēn* = to lean

(3) *hlaidr* = ladder

Latin
(4) *dēclīnāre* = to go down
inclīnāre = to lean forward
reclīnāre = to lean back

Greek
(5) *klinē* = bed

Greek
(6) *klima* = slope, zone of the earth

Greek
(7) *klimax* = ladder, rhetorical device

klinikē = bedside medical practice

Old English
hlinian
hleonian = to lean

hlæder
hlædder = ladder

Old French
decliner
encliner
recliner

Latin
clinicē = bedside medical practice

Latin
clima
climat- = zone

Middle English
lēnen

ladder

Middle English
declinen
enclinen
reclinen

Old French
climat

French
clinique

Middle English
climat = region

Modern English
LEAN (verb)

LADDER

DECLINE
INCLINE
RECLINE

CLINIC

CLIMATE CLIMAX

kwetwer (I)

1. Indo-European *kwetwer*, also *kwetr*, = "four" appears in Germanic *fedwor*, Old Welsh *petguar*, Latin *quattuor*, Lithuanian *keturi*, Old Slavic *četyri*, Greek *tessares*, and Sanskrit *catúr-*, all meaning "four."
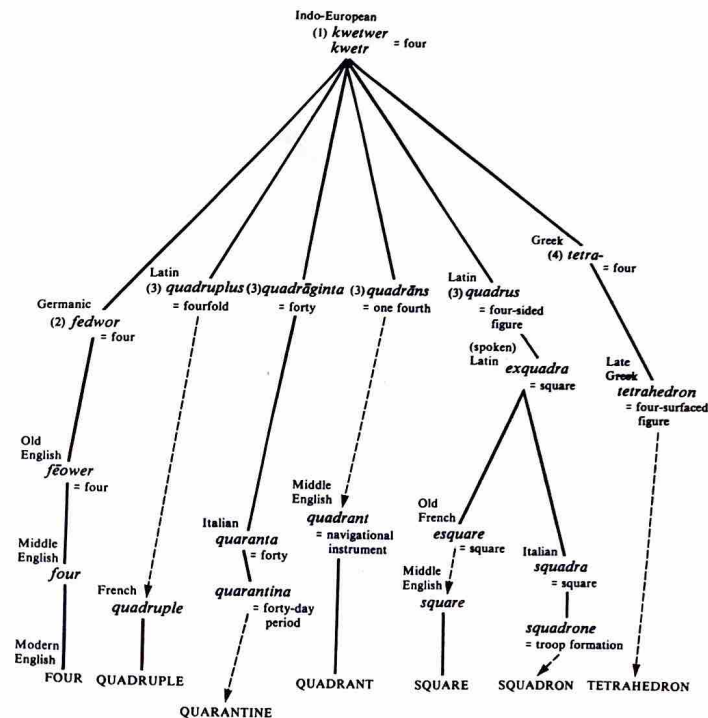
2. Germanic *fedwor* appears in Gothic *fidur-*), Old Norse *fjorir*, Old High German *fior* (whence modern German *vier*), and Old English *feower*, all meaning "four." The last became Modern English FOUR.

3. Latin, besides the basic numeral *quattuor* = "four," had a number of words based on the Indo-European form *kwetr*: (a) *quadruplus* = "fourfold," adopted into French as *quadruple*, borrowed thence into English as QUADRUPLE; (b) *quadrāginta* = "forty," which was inherited in Italian as *quaranta* = "forty," hence *quarantina* = "period of forty days," specifically "period of isolation of possibly contagious ships or travelers arriving at a port or town"—this was borrowed into English (seventeenth century) as QUARANTINE; (c) *quadrāns, -ant-* = "fourth part," adopted into Middle English (fifteenth century) as QUADRANT = "navigational instrument embodying an arc of ninety degrees, or one fourth of a circle"; (d) *quadrus* = "four-sided figure, square." The Romance languages have a group of clearly related words meaning "square"—Italian *squadra*, Spanish *escuadra*, Old French *esquare;* they are derived from an unrecorded Latin noun *exquadra* = "square," from an also unrecorded verb *exquadrāre* = "to square out, make something square," from *ex* = "out" + *quadrus* = "square," as above.

Formed from Italian *squadra* was *squadrone* = "square formation of troops," also "unit of troops or ships"; this was borrowed into English (sixteenth century) as SQUADRON.

Old French *esquare* was borrowed into Middle English as SQUARE.

4. Indo-European *kwetr* also regularly appears in Greek as *tetra-* = "four," in (among other compound words) the Late Greek geometric term *tetrahedron* = "figure having four surfaces" (*hedra* = "surface"). This was adopted into English (sixteenth century) as TETRAHEDRON.

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kwo-

1. Many of the Indo-European interrogative words are formed on the stem *kwe* or *kwo-*. Among them are the pronoun *kwos* ="who?" (with accusative case *kwom* ="whom?" and genitive *kweso* ="whose?"), the adverb *kwei* = "for what cause?" and the adverb *kwū* ="in what way?" These and other derivatives of *kwo-* are the sources of interrogative/relative words in every branch of the language family, e.g.: Germanic *hwas* ="who," Old Irish *cuin* ="when," Latin *quis* ="who," Lithuanian *kàs* ="who, what," Greek *pōs* = "how," Hittite *kuiš* ="who," Sanskrit *kás* ="who."

2. The personal pronoun *kwos, kwom, kweso* (="who, whom, whose") became Germanic *hwas, hwam, hwasa*, with the regular change of Indo-European *k* to Germanic *h*. The Germanic pronoun appears in Gothic *hwas*, Old High German *hwer*, and Old English *hwā, hwæm, hwæs*. The latter became Middle English *hwo/who, whom, whos*, whence Modern English WHO, WHOM, WHOSE.

   From the Germanic pronoun *hwas* was formed the compound word *hwa-līk-, hwe-līk-* ="of what form?" or, "what individual?" (with *līka* = "form, body"), appearing in Gothic *hvileiks*, Old High German *hwelīh*, Old Norse *hvílíkr*, and Old English *hwilc*, all meaning "of what kind?" or "what individual?" Old English *hwilc* became Middle English *whilk*, Modern English WHICH.

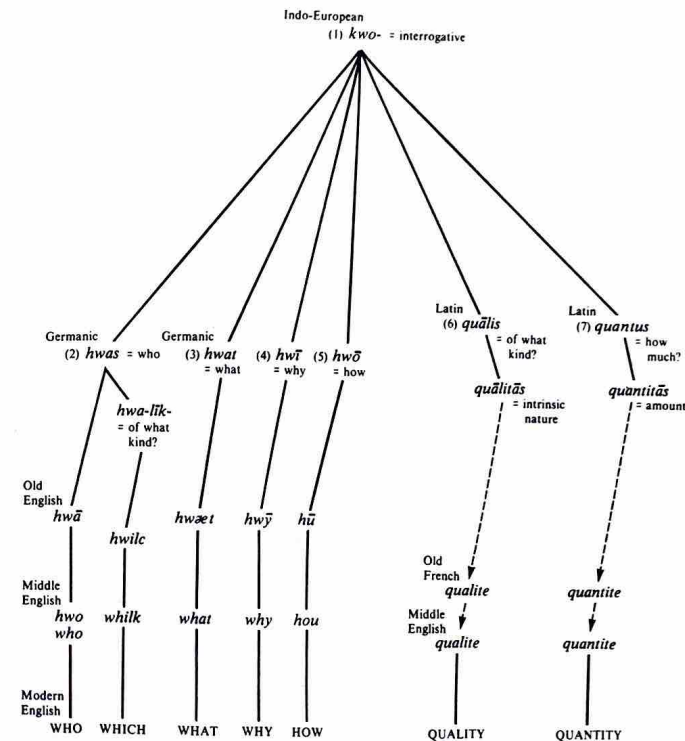3. The Indo-European pronoun *kwos* had the neuter form *kwod* ="which thing?" This regularly became Germanic *hwat*, appearing in Gothic *hwa*, Old High German *hwaz*, Old Norse *hvat*, and Old English *hwæt*. The last became Modern English WHAT.

4. Indo-European *kwei* ="for what cause?" became Germanic *hwi*, appearing in Old Norse *hví*, Old Saxon *hwi*, and Old English *hwȳ*, becoming Modern English WHY.

5. Indo-European *kwū* ="in what way?" became Germanic *hwō*, appearing in Old High German *wuo*, Old Frisian *hū*, and Old English *hū*; whence Middle English *hou*, Modern English HOW. Alone of the derivatives, this word lost its *w* in English, owing to the *w*-like influence of the following vowel *u*.

6. Among the Latin derivatives of Indo-European *kwo* is *quālis* ="of what kind?" From this the Roman scholar Cicero coined the abstract noun *quālitās* ="the intrinsic nature of a thing"; the formation and meaning of this word were modeled on those of its Greek equivalent *poiotēs* ="intrinsic nature," abstract noun of *poios* ="of what kind?" Latin *quālitās* was adopted into Old French as *qualite*, borrowed into Middle English as *qualite*, becoming Modern English QUALITY.

7. Similarly from Latin *quantus* ="how much? how big?" was formed the noun *quantitās* ="the size or amount of something." This was likewise adopted into Old French as *quantite*, whence Modern English QUANTITY.

82

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kwon

1. Indo-European *kwon* = "dog" appears in Germanic *hundaz*, Old Irish *cū*, *con*, Latin *canis*, Lithuanian *šu*, *šuñs*, Greek *kuōn*, Tocharian *ku*, *kon*, and Sanskrit *Śvā*, *śun-*, all meaning "dog." The change of Indo-European *k* to *s* in Lithuanian and Sanskrit is regular.

The dog had already been domesticated several thousand years before the time of the Indo-Europeans. Dog bones have been found in association with their earliest known settlements (north of the Black Sea, *c.* 4500 B.C.).

2. Germanic *hundaz* appears in Gothic *hunds*, Old Norse *hundr*, Old High German *hunt*, and Old English *hund*, all meaning "dog." Old English *hund* became Modern English HOUND. This word, originally the general word for all dogs, was in the Middle Ages especially applied to those bred for hunting in packs—the foxhounds, staghounds, beagles, and some others. The English word *dog*, first appearing from unknown origins in the eleventh century, at first designated some particular breed of dog, possibly of the mastiff type. As *hund* was increasingly restricted to foxhounds, etc., *dog* became the primary general word.

3. Old High German *hunt* became Modern German *hund*, remaining the general word for the animal, without specialization as in English. Hence *dachshund* = "badger-dog" (*dachs* = "badger"); this breed was probably so named, not because the badger was its exclusive quarry, but because the dog itself, with its pointed head and its digging power, resembled the badger. It was adopted into English as DACHSHUND.
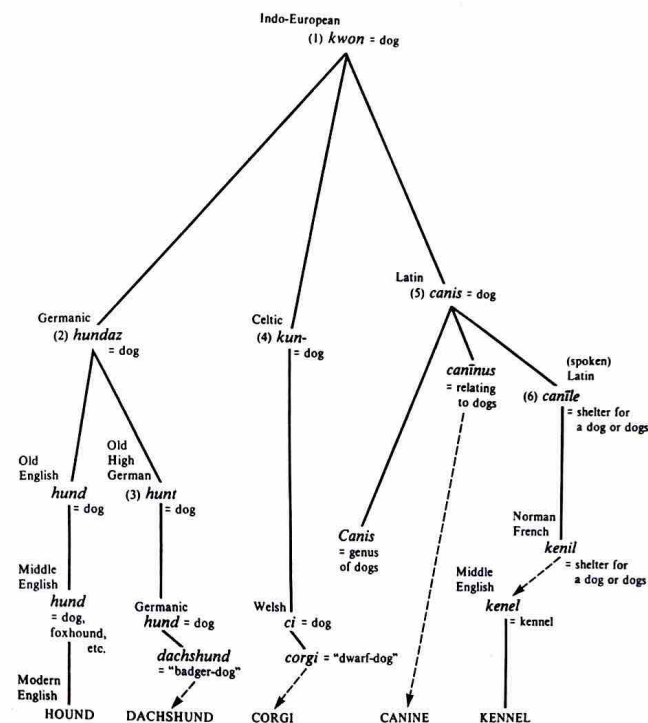
4. Indo-European *kwon* is well represented in the Celtic languages: Old Irish *cū*, Cornish *ki*, Welsh *ci*. Hence Welsh *corgi* = "dwarf-dog" (*corr* = "dwarf"), a short-legged spitz type closely resembling the Swedish spitz. It was so named in contrast to the larger Welsh sheepdogs. It was adopted into English (nineteenth century) as CORGI.

5. Latin *canis*, almost certainly related to this root, is an aberrant form. Indo-European *kwon* should normally yield Latin *quon-*.
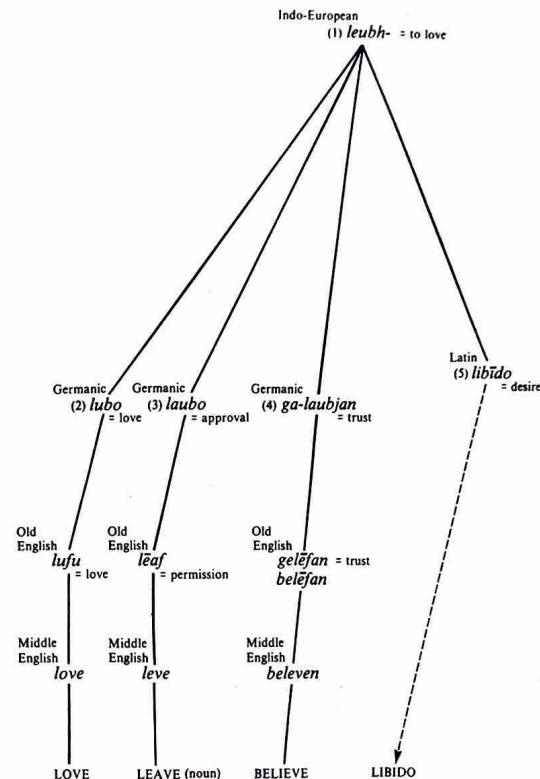
In New Latin the word *Canis* has been adopted as the zoological name of the genus of dogs—*Canis familiaris* = "the domestic dog" (in all its hundreds of varieties), *C. lupus* = "the wolf," and *C. aureus* = "the jackal."

The adjective *caninus* = "being a dog, relating to dogs," has been adopted into English as CANINE.

6. Italian *canile* and Old French *chenil*, both medieval words meaning "a shelter for a dog or dogs," are regularly descended from a Latin word *canile*, which has not survived in documents but is clearly a straightforward derivative of *canis* = "dog." The Middle English word *kenel* = "shelter for dogs," is likewise assumed to be from an unrecorded source, Norman French *kenil*, corresponding to Old French *chenil*. *Kenel* became Modern English KENNEL.

leubh-

1. The Indo-European word *leubh-* = "to love, like, desire" appears in Germanic *lubo* = "love," Latin *libído* = "desire," Old Slavic *lyubu* = "dear," and Sanskrit *lubhyati* = "feels desire."

2. Germanic *lubo* appears in Old High German *luba*, Old Frisian *luba*, and Old English *lufu*, all meaning "love." *Lufu* became Modern English LOVE.

3. In Germanic, several specialized meanings occur. From the notion of "love, like" came the notion "approve of, praise" and "favor, approval." The Germanic noun *laubo* meant "approval, permission," appearing in Middle High German *loube* and Old English *lēaf* = "permission." This became Modern English LEAVE (noun) = "permission" (not related to the verb *leave* = "depart").

4. Another Germanic development was the meaning "to cherish, hold dear, trust, put one's faith in." This appears in the Germanic verb *ga-laubjan* (*ga-* being an "intensive" prefix, not affecting the meaning), becoming Gothic *galaubjan*, Old High German *gilouben*, and Old English *gelēfan*, all meaning "to trust, have faith in." Old English *gelēfan* gave way to the variant form *belēfan* (*be-* being a prefix of the same nature as *ge-*), which became Modern English BELIEVE.

5. Latin *libído*, on the other hand, was specialized in the sense of "desire, erotic love." It was adopted into English in the early twentieth century as the psychoanalyst's term for sexual desire, LIBIDO.

Indo-European (1) *leubh-* = to love

Germanic (2) *lubo* = love
Germanic (3) *laubo* = approval
Germanic (4) *ga-laubjan* = trust
Latin (5) *libído* = desire

Old English *lufu* = love
Old English *lēaf* = permission
Old English *gelēfan* = trust / *belēfan*

Middle English *love*
Middle English *leve*
Middle English *beleven*

LOVE — LEAVE (noun) — BELIEVE — LIBIDO

leuk-

1. Indo-European *leuk-* = "to shine, bright, light" appears in Germanic *liuhtam* = "light," Latin *lux, lūc-* = "light" and *lucēre* = "to shine (etc.)," Lithuanian *laũkas* = "pale," Greek *leukos* = "light," Old Irish *luchair* = "brightness," Latin *lux, lūc-* = "light," and Old Irish *luchair* = "brightness," Hittite *lukk-* = "to shine," Tocharian *luk-* = "white," Armenian *lois* = "light," Hittite *lukk-* = "to shine," Tocharian *luk-* = "to shine," and Sanskrit *rócate* = "shines" and *roká* = "light" (with regular change of Indo-European *l* to Indic *r*).

2. Germanic *liuhtam* is from the Indo-European noun form *leuktom* = "light." *Liuhtam* appears in Old High German *lioht* (whence modern German *licht*), Old Frisian *liacht,* and Old English *lēoht, liht,* all meaning "light." The last became Modern English LIGHT, with the archaic *gh* spelling left over from the original velar sound, which is still present in German *licht* and Scottish *licht.*
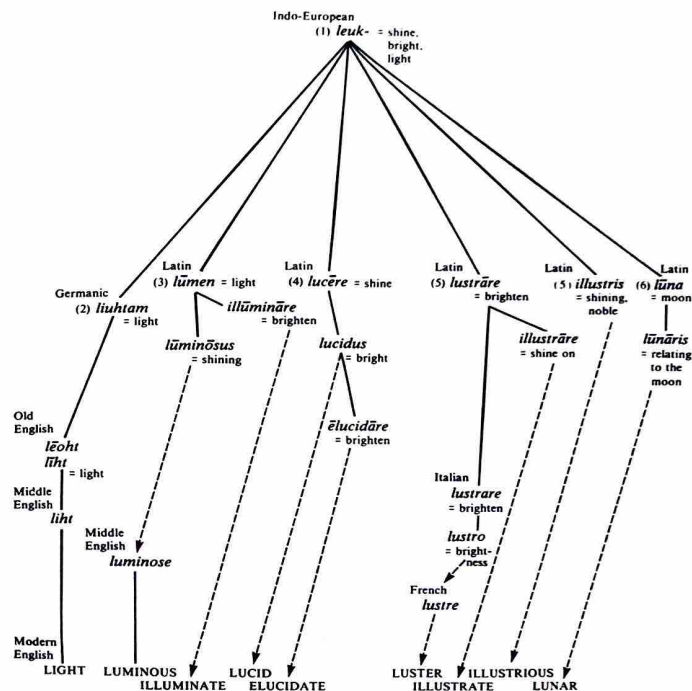
3. From Latin *lūmen* = "light" were formed: (a) the adjective *lūminōsus* = "full of light, shining, bright," adopted into Middle English as *luminose,* Modern English LUMINOUS; (b) the verb *illūmināre* = "to shine light upon, brighten" (*il-, in-* = "upon"), adopted into English as ILLUMINATE.

4. From Latin *lucēre* = "to shine" were formed: (a) the adjective *lucidus* = "shining, bright," adopted into English (sixteenth century) as LUCID, originally meaning "shining, brilliant," now chiefly meaning "very clearly intelligible"; (b) the Late Latin verb *ēlucidāre* = "to make bright" (*e-, ex-* = "out"), adopted into English as ELUCIDATE, now likewise meaning "to render intelligible."

5. Latin *lustrāre* = "to brighten" was inherited in Italian as *lustrare,* forming the noun *lustro* = "brilliance, brightness," which was borrowed into French as *lustre* and thence into English as LUSTER, now meaning "richly diffused light," also figuratively "human splendor," also "glittering piece of glass."

From Latin *lustrāre* also was formed the compound verb *illustrāre* = "to shine light on" (*il-, in-* = "upon"). This was adopted into English (sixteenth century) as ILLUSTRATE, now meaning "to elucidate with examples" or "to embellish a written text with pictures." Latin *illustris* = "shining, noble" was also used figuratively to mean "eminent, glorious, noble," and was so adopted into English (sixteenth century) as ILLUSTRIOUS, now specifically meaning either "of famous and exalted family" or "famous for brilliant achievement."

6. Latin *lūna* = "moon, moon goddess" is from an Indo-European form *louk-sna* = "the shining one" (feminine). The original Indo-European name for the moon (*see* mēn-) was masculine, as it remains in the Germanic languages. In both Latin and Greek it was replaced by feminine nouns (Latin *lūna,* Greek *selēnē*), no doubt reflecting acceptance by the Latins and Greeks of Mediterranean matriarchal moon cults. The adjective of *lūna* was *lūnāris,* adopted into English (seventeenth century) as LUNAR.

magh-

1. Indo-European *magh-* = "to be able, to have power," with its derivative noun *maghtis* = "power," appears in Germanic *magan* = "to be able," *mahtiz* = "power," and *magena* = "power," Old Slavic *mogǫ* = "I can" and *mošti* = "power," Greek *mākhanā, mēkhanē,* = "that which enables, a device, engine, machine," Tocharian *mokats* = "powerful," and Sanskrit *maghá-* = "power."
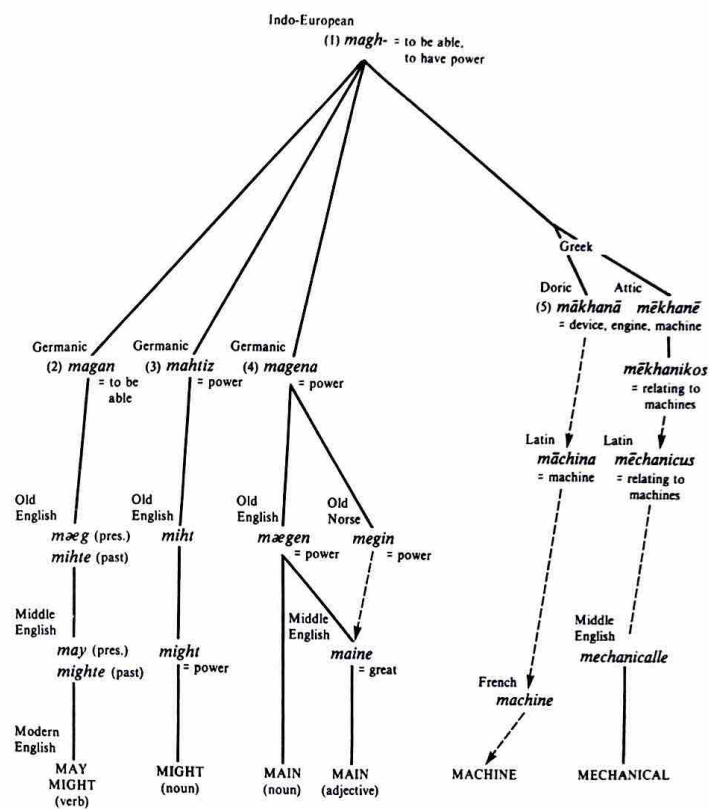
2. Germanic *magan* appears in Gothic *magan,* Old Norse *mega,* Old High German *magan* (whence Modern German *mögen*), and Old English *magan,* all meaning "to have the power, to be able." This verb was used as a "modal auxiliary," like the verb *can.* The Old English inflections *mæg* = "I am able, she/he is able" and *mihte* = "was/were able" became Middle English *may* (present tense) and *mighte* (past tense), Modern English MAY and MIGHT. This verb is now used chiefly to express possible action or permission to act, rather than power or ability to act.

3. Germanic *mahtiz* appears in Gothic *mahts,* Old High German *maht* (whence Modern German *macht*), and Old English *miht,* all meaning "power, strength." The last became Modern English MIGHT, now a somewhat archaic or rhetorical noun.

4. Germanic *magena* appears in Old Norse *megin,* Old High German *magan,* and Old English *mægen,* all meaning "power, strength." The last became the noun MAIN, now surviving solely in the traditional phrase *with might and main.*

Both Old English *mægen* and Old Norse *megin* were used in compound nouns such as Old English *mægenstrengo* = "mighty-strength," Old Norse *meginland* = "large-landmass." From a number of these expressions in both Old English and Old Norse (during the centuries when Norse people settled in Scotland and England) arose the Middle English adjective *mayn* or *maine* = "great," becoming Modern English MAIN (adjective) = "principal, most important."

5. The corresponding noun in Greek is *mākhanā* (Doric dialect), *mēkhanē* (Attic, or Athenian, dialect) = "that which enables, a contrivance, device, engine." The Doric form, used in Doric Greek cities in Italy, was borrowed into early Latin as *māchina* = "device, engine." This was adopted into French as *machine,* and thence into English in the sixteenth century as MACHINE. From the Attic form (the usage of Athens, Classical Greek), the adjective *mēkhanikos* = "relating to machines" was formed. This was adopted into Latin as *mēchanicus,* and thence into Middle English (fifteenth century) as *mechanicelle,* becoming Modern English MECHANICAL.

Indo-European
(1) *magh-* = to be able, to have power

Germanic
(2) *magan* = to be able
Germanic
(3) *mahtiz* = power
Germanic
(4) *magena* = power
Greek
Doric (5) *mākhanā* / Attic *mēkhanē* = device, engine, machine

mēkhanikos = relating to machines

Latin *māchina* = machine / Latin *mēchanicus* = relating to machines

Old English *mæg* (pres.) *mihte* (past)
Old English *miht*
Old English *mægen* = power
Old Norse *megin* = power

Middle English *may* (pres.) *mighte* (past)
Middle English *might* = power
Middle English *maine* = great
Middle English *mechanicalle*

French *machine*

Modern English MAY MIGHT (verb)
MIGHT (noun)
MAIN (noun)
MAIN (adjective)
MACHINE
MECHANICAL

mater

1. Indo-European *māter* = "mother" appears in Germanic *mōthar*, Old Irish *māthir*, Latin *māter*, Old Slavic *mati*, Greek *mētēr*, Tocharian *mācar*, and Sanskrit *mātár*, all meaning "mother."

The baby-language syllable *mā* appears in words meaning "mother" and "breast" in languages all over the world. The Indo-European noun *māter* is formed from this syllable with the suffix *-ter*, which occurs also in the words *pəter* = "father," *bhrāter* = "brother," and *dhugəter* = "daughter." This suffix marks the whole set of words as formal kinship terms, belonging to the "high language" of religion, law, and social obligations. The word *māter* was the formal title of the married woman of full status, the female head of the household.

2. Indo-European *māter* regularly became Germanic *mōthar*, which appears in Old Norse *mōthir*, Old High German *muotar* (whence Modern German *mutter*), and Old English *mōdor*, all meaning "mother." Old English *mōdor* became Modern English MOTHER.

3. The Latin adjective *māternus* = "of or relating to a mother" was adopted into English as MATERNAL. The Medieval Latin noun *māternitās* = "the fact or condition of being a mother" was adopted as MATERNITY.

4. The Latin noun *mātrōna* meant specifically "married lady of high social status." It was adopted into Old French as *matrone*, borrowed thence into Middle English as *matrone*, becoming Modern English MATRON.
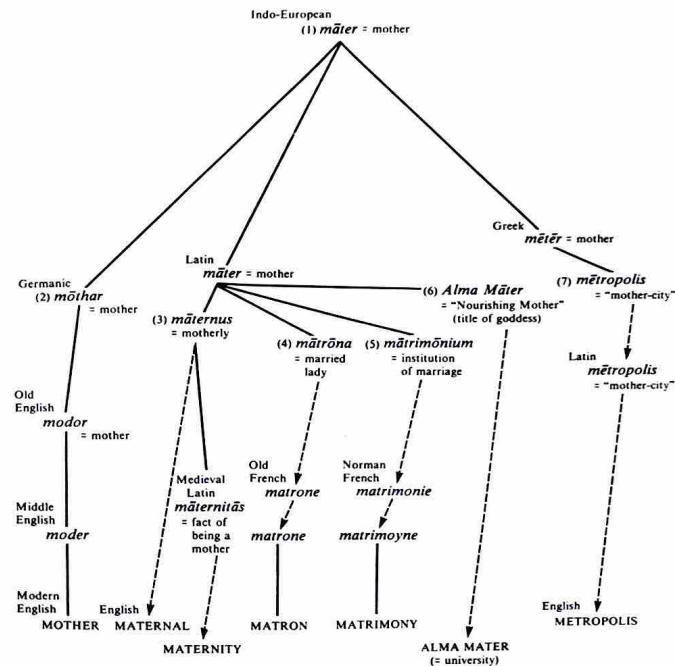
5. The Latin noun *mātrimōnium* meant "the legal institution that defines the *māter*, marriage." It was adopted into Norman French as *matrimonie*, borrowed into Middle English as *matrimoyne*, Modern English MATRIMONY.

6. The rigorously patriarchal Indo-Europeans did not originally worship female deities. But those Indo-European groups that settled in Mediterranean lands, where goddesses of fertility and agriculture had been worshiped for thousands of years before their arrival, were constrained to blend these powerful cults into their own.

The Roman deity Ceres presided over fruit-growing and agriculture. One of the titles given to her by the Romans was *Alma Māter* = "Nourishing Mother" (*māter* here being a term of respect as well as signifying the fertile "parent" of crops). In the seventeenth century this old title was taken over as an affectionate term for a university viewed as the (intellectually) nourishing mother of students (*alumni* = "those who are nourished," foster-children); hence English ALMA MATER.

7. Many of the oldest Mediterranean cities such as Athens were under the protection of female deities whose cults survived the Indo-European incursions. Thus a city itself could be seen as a female, as in the Greek term *mētropolis* = "mother-city" (*mētēr* = "mother" + *polis* = "city"). When a city such as Athens built up an extensive territory or empire, the *mētropolis* could

also be seen as the "mother" of its subject lands. The word was so borrowed by the Romans as Latin *mētropolis*, applied by them to the city of Rome, which itself was regarded as a goddess, *Rōma Māter*, with mother attributes—mother to the entire Roman Empire. The word was adopted into English as METROPOLIS in the sixteenth century.

medhu

1. Indo-European *medhu* = "honey, mead" appears in Germanic *meduz* = "mead," Celtic *med-* = "mead," Russian *med-* = "mead," Latvian *medus* = "honey, mead," Greek *methu* = "wine, strong drink," and Sanskrit *madhu* = "honey, sweet intoxicating drink."

Mead is made of fermented honey and water, sometimes also with malted grain. It can be made as strong as strong beer or even wine.
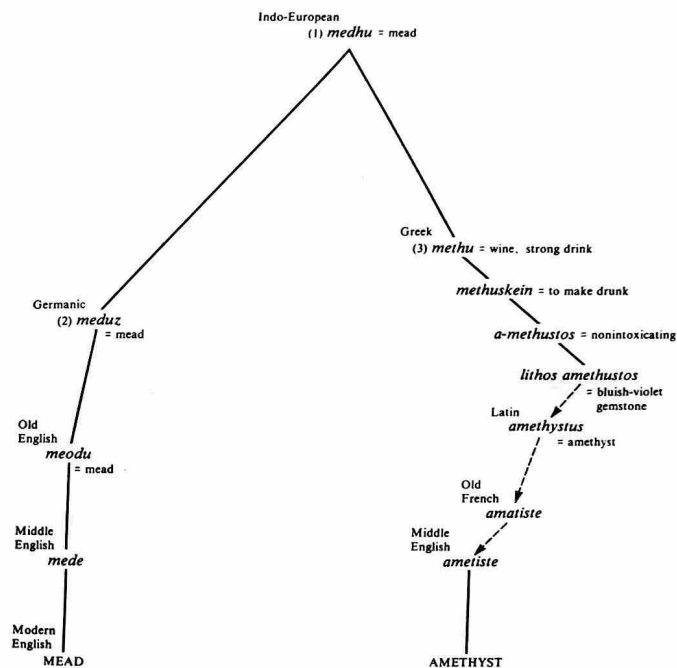
The Indo-European peoples in eastern, northern, and western Europe (Slavs, Balts, Germans, Celts) continued to make mead into historical times, and perhaps still do in some country places. But the forerunners of the Greeks and Romans, when they settled in the already winemaking lands of the Mediterranean, gave up their traditional drink and took to the vine, adopting its local (non–Indo-European) name *woinom:* Greek *(w)oinos,* Latin *vinum* = "vine, wine." Latin discarded the word *medhu* entirely, but Greek kept it on as an archaic and poetical word for strong drink.

2. Germanic *meduz* appears in Old High German *metu,* Old Norse *mjodr,* and Old English *meodu,* all meaning "mead." The Gothic form *midus* was recorded by a Greek writer in 448 A.D. as the name of the drink used "instead of wine" at the court of the king of the Huns. To the Greeks and Romans, mead was the drink of barbarians. Old English *meodu* became Middle English *mede* and Modern English MEAD.

3. Formed from Greek *methu* = "wine, strong drink" are numerous words referring to drunkenness, such as *methuskein* = "to make drunk, intoxicate." It has recently been convincingly suggested that wine was not the only intoxicant used by the Greeks—that they used various inebriating and hallucinogenic herbs mixed with wine and water (see R. G. Wasson and others, *The Road to Eleusis* [New York, 1978]).

The name of a well-known bluish-violet gemstone was *lithos amethustos,* literally seeming to mean "the stone that wards off drunkenness": *lithos* = "stone" + *a-* = "un-" + *methustos* = "drunk-making" (from *methuskein*). *Amethustos* was adopted into Late Latin as *amethystus,* thence into Old French as *amatiste,* and thence into Middle English as *ametiste,* corrected to AMETHYST in Modern English.

Because of the apparent etymological meaning, it has long been imagined that the Greeks must have used the amethyst as a remedy or amulet against intoxication. The etymology is still given in most modern dictionaries, although it was long ago refuted by the Roman scientist Pliny, who pointed out that the name refers to the *color* of the stone, the color of red wine heavily cut with water. *Amethustos* was "the un-drunk-making drink, the beverage of moderation"; the *lithos amethustos* was "the watered-wine-colored stone."

Indo-European
(1) *medhu* = mead

Greek
(3) *methu* = wine, strong drink

methuskein = to make drunk

a-methustos = nonintoxicating

lithos amethustos = bluish-violet gemstone

Latin
amethystus = amethyst

Old French
amatiste

Middle English
ametiste

AMETHYST

Germanic
(2) *meduz* = mead

Old English
meodu = mead

Middle English
mede

Modern English
MEAD

medhyos

1. The Indo-European adjective *medhyos* = "middle" appears in Germanic *midjaz*, Old Irish *mid-*, Latin *medius*, Greek *mesos*, Armenian *mēj*, and Sanskrit *mádhya-*, all meaning "middle."
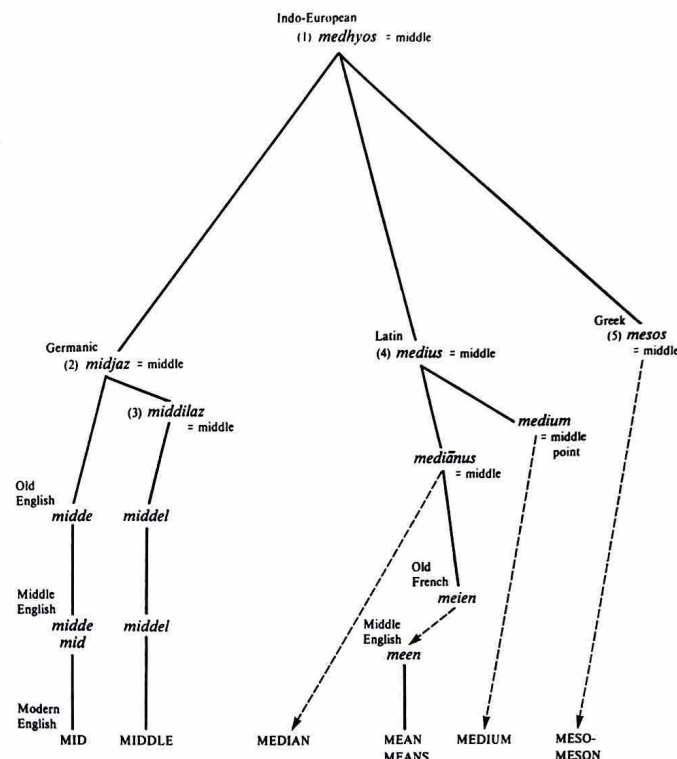
2. Germanic *midjaz* appears in Gothic *midjis*, Old Norse *midhr*, Old High German *mitti*, and Old English *midde*, all also meaning "middle." The last became Modern English MID, now relatively rare as a separate word, but used in combinations such as *midway, midsummer, midtown, midwest*, etc.

3. Alongside the common Germanic form *midjaz* there occurs in Western Germanic the form *middilaz* (with the "diminutive" suffix *-il-*, which in this case does not affect the meaning). This appears in Old High German *mittil* (whence Modern German *mittel*), Old Frisian *middel*, and Old English *middel*, which last became Modern English MIDDLE, now the basic and usual word for this basic concept.
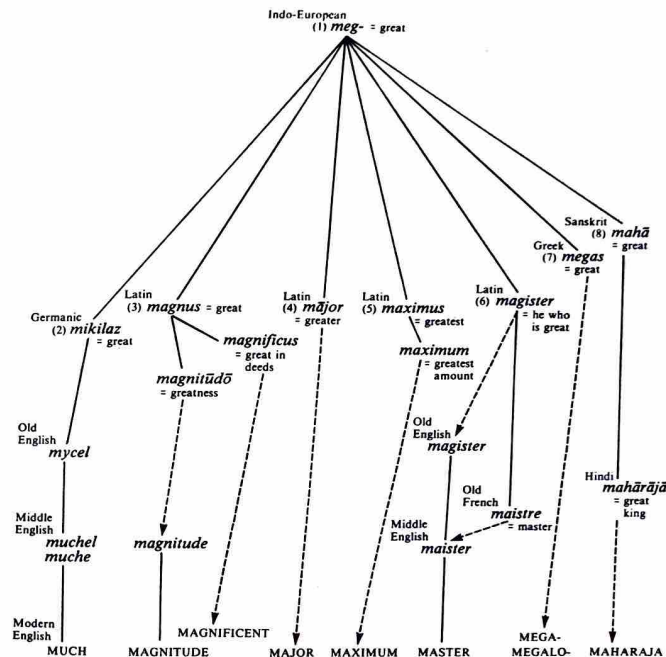
4. Latin *medius* had a (post-Classical) extended form *mediānus* = "being in the middle," which was adopted into English (sixteenth century) as MEDIAN, used chiefly in technical contexts, as in mathematics. Latin *mediānus* was also inherited into the Romance languages as Italian *mezzano*, Spanish *mediano*, and Old French *meien* or *moien* (whence Modern French *moyen* = "middle"). Old French *meien* was borrowed into Middle English as *meen*. This became Modern English MEAN, which as adjective = "middling, intermediate" is now rare except in mathematics (*mean annual rainfall*, etc.), but has proliferated as a noun = (a) "middle point or state" (as in *the golden mean*) and (b) in the plural MEANS = "method, instrumentality."

The neuter of Latin *medius* was *medium*, which was adopted into English (sixteenth century) as MEDIUM = "intermediate agency," later also especially "system of mass communication," with its much-used modern plural MEDIA. MEDIUM is also used as an adjective = "middling."

5. Greek *mesos* = "middle" has also been adopted into technical language to form numerous compounds such as MESOLITHIC = "Middle Stone Age," MESOTHORAX = "the middle part of an insect's thorax," and to form the noun MESON = "subatomic particle that is regarded as intermediate between the lepton and the baryon."

96

97

meg-

1. The Indo-European adjective root *meg-* = "great" appears in Germanic *mikilaz*, Old Irish *mochtae*, Latin *magnus*, Greek *megas*, Hittite *mekkis*, and Sanskrit *mahā*, all meaning "great, large" (both physically and abstractly).

2. Germanic *mikilaz* appears in Gothic *mikils*, Old Norse *mikill*, Old High German *michil*, and Old English *mycel*, all meaning "great." Old English *mycel* became Middle English *muchel*, losing its termination to become *muche*, Modern English MUCH.

3. Formed from Latin *magnus* = "great" was the abstract noun *magnitūdō* = "greatness," adopted into English as MAGNITUDE. Also formed from *magnus* was the compound adjective *magnificus* = "great-doing, great in deeds" (*-fic-* = "doing," from *facere* = "to do"). This was adopted into English as MAGNIFICENT, with a participial ending by analogy with adjectives like *beneficent*.

4. Latin *mājor* = "greater" (originally *mag-yos*) was used as the irregular comparative of *magnus*. It was adopted into English (sixteenth century) as the adjective MAJOR. In seventeenth-century French, the military rank *sergent-major* was that of a field officer ranking above a captain. Shortened to *major*, it was borrowed into English as MAJOR (noun). (*Sergent-major* was later reclassified as a noncommissioned rank, whence English SERGEANT MAJOR.)

5. Latin *maximus* = "greatest" (originally *mag-sam-os*) was likewise used as the irregular superlative of *magnus*. Its neuter form *maximum* = "greatest amount or degree" was adopted into English as MAXIMUM.

6. Latin *magister*, originally meaning "he who is great, man of high rank," was used as a title of high officials of the Roman Republic, including the consuls, and also as a general word for "man in authority, leader, owner." In the time of the Roman Empire, Latin *magister* was adopted by the German peoples on the northern border, becoming Old Norse *meistari*, Old High German *meister* (remaining *meister* in Modern German), and Old English *magister* = "ruler, chief, commander." Latin *magister* was also inherited in Old French as *maistre* (Modern French *maître*). Middle English *maister* is based partly on inheritance of the Old English form and partly on a borrowing of the Old French form; it became Modern English MASTER, with variant MISTER and feminine form MISTRESS, MRS.

7. Greek *megas* = "great," with alternate stems *mega-* and *megalo-*, has been adopted into English for the prefixes MEGA- and MEGALO-, used to form such compound words as MEGAPHONE and MEGALOMANIA.

8. Sanskrit *mahā* = "great" was inherited in Hindi and used to form the honorary title *mahārājā* = "great king" (*rājā* = "king"), used by some of the princes of the Mogul Empire, some later becoming sovereign rulers. This was borrowed into English (first in the seventeenth century) as MAHARAJA.

Indo-European
(1) *meg-* = great

Germanic
(2) *mikilaz*
= great

Latin
(3) *magnus* = great

Latin
(4) *mājor*
= greater

Latin
(5) *maximus*
= greatest

Latin
(6) *magister*
= he who is great

Greek
(7) *megas*
= great

Sanskrit
(8) *mahā*
= great

magnificus
= great in deeds

magnitūdō
= greatness

maximum
= greatest amount

Old English *mycel*

Old English *magister*

Old French *maistre* = master

Hindi *mahārājā* = great king

Middle English *muchel muche*

magnitude

Middle English *maister*

Modern English: MUCH — MAGNIFICENT — MAGNITUDE — MAJOR — MAXIMUM — MASTER — MEGA-/MEGALO- — MAHARAJA

men-

1. The Indo-European root *men-* = (as verb) "to think, to reason, to call to mind" (and as noun) "mind, intellect, reason, thought" appears in Germanic *mun-* = "to think" and *ga-mundiz* = "mind," Old Irish *menme* = "mind," Latin *mēns, ment-* = "mind" and *meminisse* = "to remember," Lithuanian *menù* = "think" and *mintìs* = "thought," Old Slavic *miněti* = "think," Greek *mnāsthai* = "remember" and *mnēmōn* = "remembering," and Sanskrit *mányate* = "thinks" and *mántraḥ* = "counsel, hymn."

2. In Germanic *ga-mundiz*, the *ga-* is a "collective" prefix that has little effect on the meaning of the word. It appears in Gothic *gamunds*, Old High German *gimunt*, and Old English *gemynd*, all meaning "mind, intellect." Like all Old English words with the prefix *ge-*, *gemynd* lost it in Middle English, becoming *y-mund*, then *minde*, and in Modern English MIND.

3. Latin *mēns* (nominative) with stem *ment-* = "mind, intellect, intelligence" is exactly parallel to the Germanic form *ga-mundiz* (both representing an Indo-European noun *mntis* = "mind"). From *ment-* was formed a Late Latin adjective *mentālis* = "belonging or relating to the mind"; this was adopted into Old French as *mental*, and thence into (Middle) English as MENTAL.
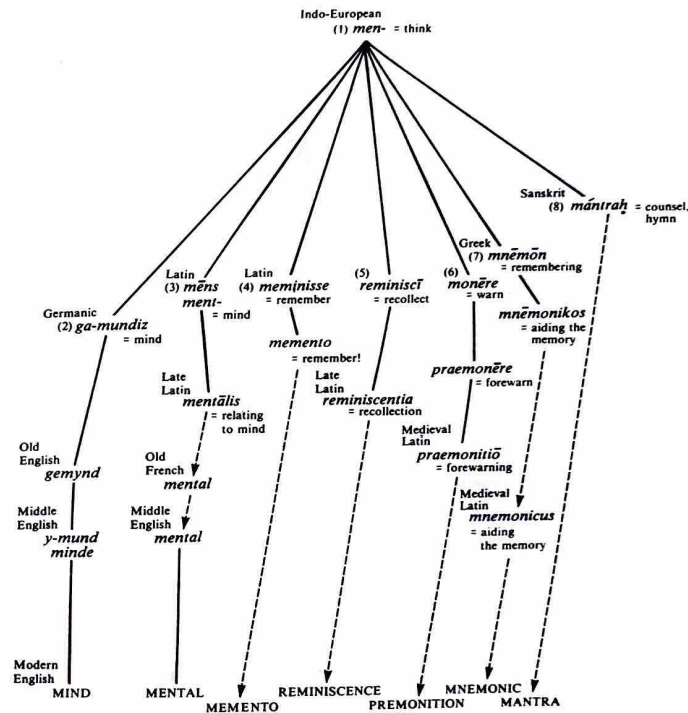
4. In Latin *meminisse* = "to remember," the initial *me-* is a "reduplication" of the stem *min-* and does not affect the meaning. The imperative form of this verb was *memento* = "remember!" This was used in such medieval phrases as *memento mori* = "remember that you must die," a slogan associated with the practice of keeping a skull or "death's-head" as a reminder of human mortality. The word was thus borrowed into English as MEMENTO = "reminder," later merely = "a souvenir of some past time."

5. Another Latin derivative of the root is *reminiscī* = "to call back into mind, recollect" (*re-* = "back, again") forming a Late Latin noun *reminiscentia* = "recollection," adopted into English as REMINISCENCE.

6. Latin *monēre* is formed on *mon-*, the "o-grade" of the root, + the "causative" suffix *-ēyo-;* the underlying meaning is thus "to cause (someone) to think, to bring to someone's mind"; the actual meaning in Latin was "to warn." Among the compounds formed from this verb was *praemonēre* = "to forewarn" (*prae* = "before"), with Late Latin abstract noun *praemonitiō* = "a forewarning." This was adopted into English as PREMONITION.

7. Greek *mnāsthai* = "to remember" and *mnēmōn* = "remembering" contain an extended form of the root *mnā-*. From *mnēmōn* was formed the adjective *mnēmonikos* = "relating to memory, intended to aid the memory." This was adopted into Medieval Latin as *mnemonicus* and thence into English as MNEMONIC.

8. The underlying meaning of Sanskrit *mántraḥ* was "thought, formulated thought," hence (a) "advice, counsel" and (b) "sacred phrase or text, hymn of praise in the *Veda.*" In sense (b) it was adopted into English (early nineteenth century) as MANTRA, now enjoying a vogue in the West with neo-Hindu cults such as the movement for "Krishna consciousness."

mēn-

1. Indo-European *mēn-* = both "moon" and "month" appears in Germanic *mēnoth-* = "month," Old Irish *mí* = "month," Latin *mǣnon-* = "moon" and *mǣnoth-* = "month," Lithuanian *ménesis* = "moon/month," Old Slavic *měsęcĭ* = *mēnsis* = "month," Greek *mēn* = "moon/month," Tocharian *mañ* = "moon/month," and Sanskrit *mā́s* = "moon/month."

The word *mēn-* itself is an extension of the verb *mē-* = "to measure." The moon was thus known as "the measure" or "the measurer" (of days), and the lunar month was known by the same word. It was a masculine noun.

2. Germanic *mǣnon* = "moon" appears in Gothic *mēna*, Old Norse *máni*, Old High German *māno*, and Old English *mōna*, all meaning "moon." The last became Modern English MOON.
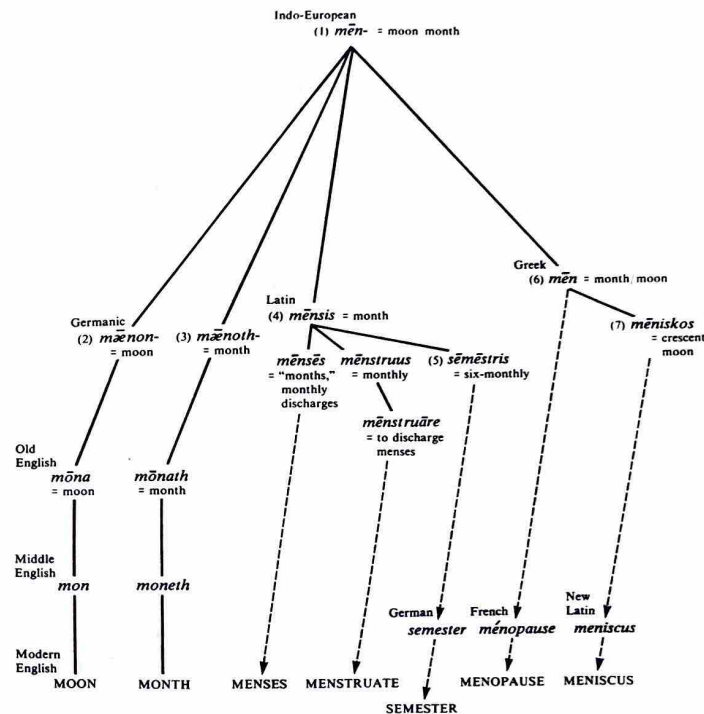
3. Germanic *mǣnoth-* = "month" appears in Gothic *mēnōths*, Old Norse *mánudhr*, Old High German *mānōd*, and Old English *mōnath*, all meaning "month." The last became Modern English MONTH.

4. Latin *mēnsis* = "month" had the plural form *mēnsēs* = "months," also "women's monthly discharges." This was adopted into medical English (sixteenth century) as MENSES. From *mēnsis* the adjective *mēnstruus* = "monthly" formed the verb *mēnstruāre* = "to discharge menses," which was adopted into English as MENSTRUATE.

5. Also from *mēnsis* = "month" was formed *sēmēstris* = "six-monthly" (*sē-, sex* = "six"). This was adopted into German as *semester* = "academic half-year," which was borrowed into English as SEMESTER. (Of similar origin is TRIMESTER = "one of three terms of an academic year.")

6. Greek *mēn* = "moon/month" was adopted into French to form the word *ménopause* = "cessation of menstruation" (Greek *pausis* = "cessation"). This was borrowed into English as MENOPAUSE.

7. From Greek *mēn* = "moon/month" was formed the diminutive *mēniskos* = "little moon, crescent moon," applied to things of crescent shape. This was adopted into New Latin as *meniscus* = "crescent-shaped object," especially "curved surface of a liquid held in a container"; borrowed into English as MENISCUS.

mer-

1. Indo-European *mer-* = "to die," with its derivative noun *mrtis, mrtrom* = "death," appears in Germanic *murthram* = "homicide," Latin *mors, mort-* = "death," Lithuanian *mirstu* = "die" and *mirtis* = "death," Armenian *meranim* = "die," and Sanskrit *marati* = "dies" and *mrtis* = "death."

2. Germanic *murthram* appears in recorded form in only two of the Germanic languages, Gothic *maurthr* and Old English *morthor* = "criminal homicide."

The Old French word *murtre* = "criminal homicide" is obviously borrowed from Germanic; the reconstructed source is a Frankish form *murthr-*, which has not survived in recorded form.

Old English *morthor* became Middle English *morthre*, which would normally have become *morther* in Modern English. But the Middle English pronunciation was influenced by the contemporary Old French word *murtre* to emerge as *murdre*, Modern English MURDER.

3. From Latin *mors, mort-* = "death" was formed the adjective *mortālis* = "subject to death, human," with its reverse *immortālis* (*in-* = "not") = "not subject to death, divine"; these were adopted into (Middle) English as MORTAL, IMMORTAL.

4. The contrast between the human race, doomed to die, and the undying gods is an ancient conception of the Indo-European peoples (though not of course unique to them). At the Indo-European level itself, an adjective *mortos, mrtos* = "mortal" is reconstructible, and so is its complement *n-mortos* = "immortal" (*n-* being a negative prefix). The latter appears in Sanskrit *amrta* = Avestan *amasa* = "immortal," and Greek *ambrotos* = "immortal" and *ambrosia* = "immortality."
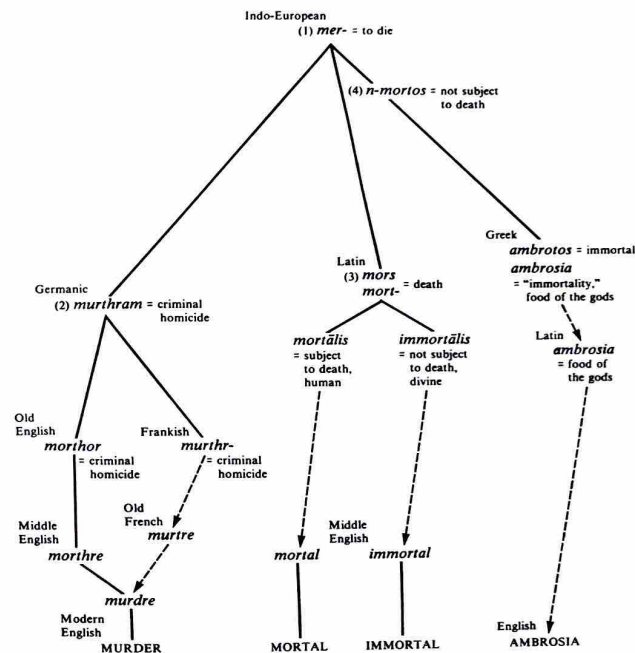
Sanskrit *amrta* = "immortality" is used in the *Rig Veda* as a synonym or title of Soma, a divine substance that when ingested by devotees made them like the gods. The American mycologist R. Gordon Wasson has shown that Soma was the hallucinogenic mushroom fly agaric, which the Indo-Iranians must have known from central Asia, where shamanistic use of fly agaric is very ancient.

Greek *ambrosia*, also understood as meaning "immortality," was the name of the food of the gods, from which they derived or sustained their immortality; it was also given to divine horses and to heroes. It was also used as the name of various herbs.

It is thus possible that the original Indo-European–speaking people, who on archaeological grounds probably lived in south Russia before 4000 B.C., possessed or knew of a "divine" food, the ingestion of which was the center of a religion or cult. If, as Wasson suggests, this was fly agaric, the Indo-Iranians later migrated southward to countries where the mushroom does not grow; they retained the religion, and the hymns of the *Rig Veda* contain recognizable though cryptic descriptions of the mushroom and its

effects; but substitutes were introduced to replace the mushroom itself. The Greeks likewise lost touch with the original substance, and with the cult also, remembering only an "immortal" food that was used by the gods.

Greek *ambrosia* was adopted into Latin as *ambrosia*, and thence into English (sixteenth century) as AMBROSIA.

mori

1. Indo-European *mori* = "sea, lake" appears in Germanic *mari* = "sea, lake," Old Irish *muir* = "sea," Lithuanian *mãre* = "sea," and Old Slavic *morje* = "sea."

This word is solidly represented in the western and northern sectors of the Indo-European world, while in Greek, and to the east, other terms are used. It seems impossible to determine whether the original meaning of *mori* was "sea" or "lake." The only real seas that the earliest Indo-European–speakers are likely to have known (assuming that they were Indo-European–speakers before 4000 B.C.) are the Black Sea and the Caspian.

2. Germanic *mari* = "sea, lake" appears in Gothic *marei* = "sea," Old Norse *marr* = "sea," Old High German *mari* = "lake," and Old English *mere* = "sea, lake, pond." The Old English word survives in Modern English only as the archaism MERE, and in place-names such as *Haslemere, Windermere.*
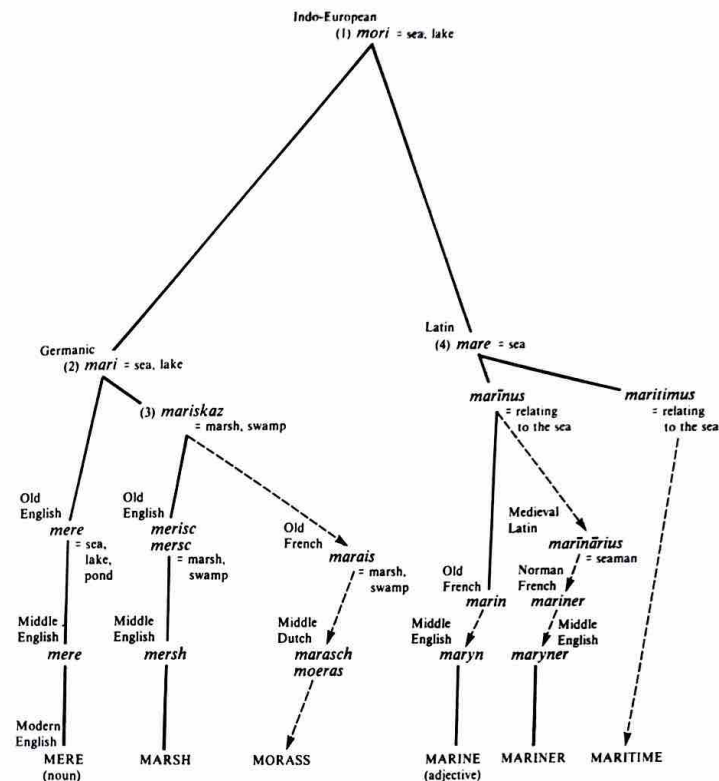
(The word SEA is Old English *sǣ*, from Germanic *saiwiz,* which appears in all the Germanic languages and nowhere else; possibly, therefore, borrowed by the earliest Germanic-speakers from the indigenous inhabitants of northwestern Atlantic Europe.)

3. From Germanic *mari* was formed *mariskaz* = "marsh, swamp" (*-iskaz* being a diminutive suffix), appearing in Middle Low German *maras,* Middle Dutch *mersche,* and Old English *merisc, mersc,* all meaning "marsh, swamp." The last regularly became Modern English MARSH.

Germanic *mariskaz* was also borrowed (probably via Frankish) into Old French as *marais,* and this was borrowed into Dutch as *marasch,* later *moeras.* This last Dutch word was borrowed into English in the seventeenth century as MORASS, no doubt brought to England by the Dutch engineers working on the draining of the fens, or marshes, of East Anglia. The word survives now only archaically in the literal sense of "marsh," but remains in familiar use as a metaphor, or cliché, for a situation full of trouble.

4. From Latin *mare* = "sea" was formed the adjective *marinus* = "relating to the sea." This became Old French *marin* and was borrowed thence into Middle English (fifteenth century) as *maryn,* becoming Modern English MARINE. From Latin *marinus* came a Medieval Latin noun *marinarius* = "seaman, sailor." This became Old French *marinier,* Norman French *mariner,* and was borrowed into Middle English as *maryner,* Modern English MARINER.

Another Latin adjective from *mare* was *maritimus* = "relating to the sea" (*-timus* being an adjectival suffix, as in *lēgi-timus* = "lawful," from *lēg-* = "law"). This was adopted into English (sixteenth century) as MARITIME.

1. The Indo-European negative particle *ne*, also *n-*, appears in Germanic *ne*, Old Irish *ni*, *nī*, Latin *ne-*, Old Slavic *ne*, Greek *nē-*, Hittite *natta*, and Sanskrit *ná*, all meaning "not."

2. Germanic *ne* appears in Gothic *ni*, Old Norse *né*, Old High German *ni*, and Old English *ne*, all meaning "not."

Old English *ne* was used to form a number of negative compound words, including: (a) *ne* + *ā* = "ever," combined as *nā* = "never, not at all," becoming Middle English *na, no,* Modern English NO (adverb—used as the opposite of *yes*); (b) *ne* + *ān* = "one," combined as *nān* = "not one, none," becoming Middle English *nan, non,* Modern English NONE; Middle English *nan, non* was also reduced to *na, no* when occurring before a consonant, hence Modern English NO (adjective—as in *There is no wine*); (c) *ne* + *wiht* = "creature, thing," combined as *nōwiht, nāwiht* = "nothing," becoming Middle English *naught, nought,* Modern English NAUGHT; Middle English *nought* was also reduced to NOT, becoming the most general adverb or particle of negation in English.

3. Latin *ne-* was similarly used to form negative compounds, including (a) *ne* + *uter* = "either," combined as *neuter* = "neither," especially "neither masculine nor feminine," adopted into Old French as *neutre,* borrowed into Middle English as *neutre,* corrected to NEUTER in Modern English; (b) *ne* + *ūllus* = "any," combined as *nūllus* = "none," adopted into Old French as *nul, nulle,* borrowed into English (sixteenth century) as NULL.

4. Formed from Latin *negāre* = "to say no, deny" were the adjective *negātīvus* = "denying" and the abstract noun *negātiō* = "denial." These were adopted into (Middle) English as NEGATIVE (fourteenth century) and NEGATION (sixteenth century).

5. Latin *nōn* = "not" was originally also a compound, formed from *ne* + *oinom* = "one thing." It has been adopted into English as the widely used prefix NON-, as in NONFERROUS, NONSTANDARD.
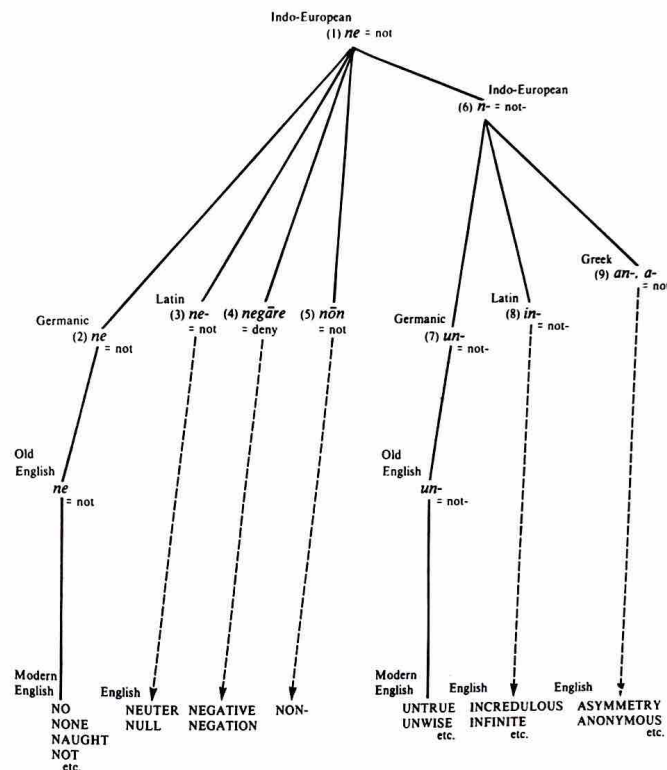
6. The Indo-European particle *ne* had also a reduced form *n-*, used to form such Indo-European compounds as *n-mortos* = "undying, not subject to death" (*see* mer- = "to die"). This form of the particle was also regularly inherited by the various languages, as Germanic *un-*, Old Irish *in-, an-*, Latin *in-*, Greek *an-, a-*, and Sanskrit *an-, a-,* all meaning "not-."

7. Germanic *un-* appears in Gothic *un-*, Old Norse *u-*, Old High German *un-*, and Old English *un-*, all meaning "not-." Old English *un-* survives as Modern English UN-, as in UNTRUE, UNWISE, etc. (But note that there is another English prefix *un-*, not related to *ne*, expressing not mere negation but reversal of an action, as in *undo, untie.*)

8. Latin *in-* = "not-" appears in numerous compounds such as *incrēdulus* = "not credulous," *infinītus* = "not finite," which have been adopted into English: INCREDULOUS, INFINITE, etc.

9. Greek *an-*, also reduced before a consonant to *a-*, = "not-" similarly appears in compounds such as *a-summetria* = "lack of symmetry," *an-ōnumos* = "nameless" (*see* nomen = "name"); many of these, too, have been adopted into English: ASYMMETRY, ANONYMOUS, etc.

(Note that the three resulting English negative prefixes UN-, IN-, AN-(A-), have often subtly different functions of negation: for example, *unmoral, immoral, amoral;* to which *nonmoral* might be added.)
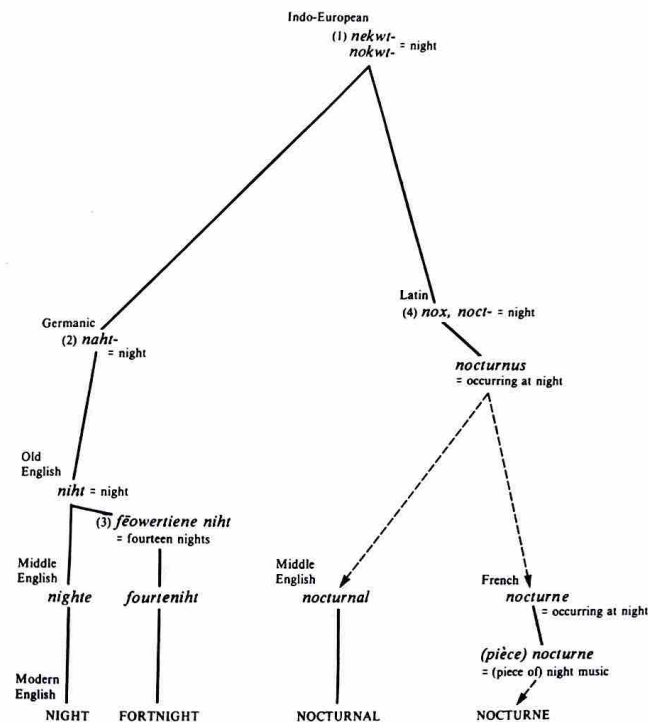
nekwt-

1. Indo-European *nekwt-*, also *nokwt-*, = "night" appears in Germanic *naht-*, Old Irish *nocht*, Latin *nox*, *noct-*, Lithuanian *naktìs*, Old Slavic *nŏstĭ*, Greek *nux*, *nukt-*, and Sanskrit *naktā*, all meaning "night."

2. Germanic *naht-* appears in Gothic *nahts*, Old Norse *natt*, Old High German *naht* (whence Modern German *nacht*), and Old English *niht*. (Note that the Germanic *h* represents the sound /ch/, as in Scottish *loch*.) Old English *niht* became Modern English NIGHT. The /ch/ sound has disappeared from all words of this class, as also in *bright*, *light*, the archaic *gh* spelling being a vestige of it. In the Scottish form *nicht*, and in German *nacht*, the sound has been retained.

3. In Old English the phrase *fēowertiene niht* = "fourteen nights" was used as a customary term for a period of two weeks. This unusual method of reckoning time was noticed by the Roman historian Tacitus, who wrote of the Germans in the first century A.D.: "They do not count the number of days, as we do, but the nights." The Old English phrase became the Middle English noun *fourteniht*, Modern English FORTNIGHT.

4. From Latin *nox*, *noct-*, was formed the adjective *nocturnus* = "occurring at night." This was adopted into (Middle) English as NOCTURNAL.

Nocturnus was also adopted into (Old) French as *nocturne*. In the late eighteenth century, the musical term *pièce nocturne* was used for a dreamy composition, vaguely associated with night scenes and night thoughts. It was borrowed into English as NOCTURNE.

Indo-European
(1) *nekwt-*
nokwt- = night

Germanic
(2) *naht-*
= night

Latin
(4) *nox, noct-* = night

nocturnus
= occurring at night

Old
English
niht = night

(3) *fēowertiene niht*
= fourteen nights

Middle
English
nighte   *fourteniht*

Middle
English
nocturnal

French
nocturne
= occurring at night

(pièce) nocturne
= (piece of) night music

Modern
English
NIGHT   FORTNIGHT

NOCTURNAL

NOCTURNE

newos

1. The Indo-European adjective *newos*, also *newyos*, ="new" appears in Germanic *newjaz*, Old Irish *nūe*, Latin *novus*, Lithuanian *navas*, Old Slavic *novŭ*, Greek *newos*, *neos*, Hittite *newa-*, Tocharian *ñu*, and Sanskrit *náva-*, all meaning "new."
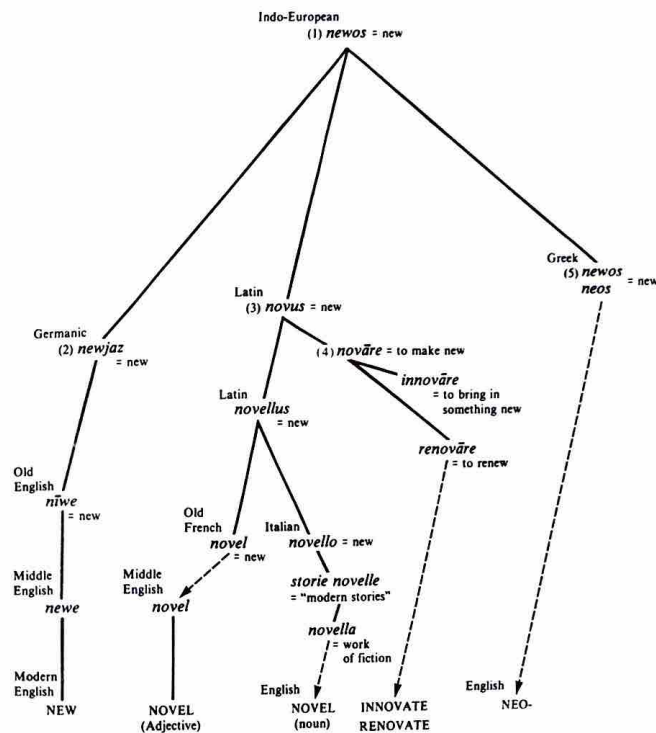
2. Germanic *newjaz* appears in Gothic *niujis*, Old Norse *nyr*, Old High German *niuwi* (whence Modern German *neu*), and Old English *nīwe*, all meaning "new." (Note that the Germanic and Gothic *j* represent the sound /y/.) Old English *nīwe* became Middle English *newe*, Modern English NEW.

3. Latin *novus* had a "diminutive" form *novellus*="new" (the meaning was not affected by the diminutive suffix *-ell-*). This was inherited in Old French as *novel* (becoming Modern French *nouveau*); *novel* was borrowed into (Middle) English as NOVEL (adjective).

    Latin *novellus* was also inherited in Italian as *novello*="new." In the fifteenth century, short stories such as those of Giovanni Boccaccio were known as *storie novelle*="new (or modern) stories"; hence the abbreviation *novella*="story, work of fiction." Italian *novella* in this sense was borrowed into English (sixteenth century) as NOVEL (noun).

4. From Latin *novus* was formed the verb *novāre*="to make new," with its compounds *innovāre*="to bring in something new," and *renovāre*="to make new again, renew." These have been adopted into English as INNOVATE, RENOVATE.

5. *Newos* appears in Greek *newos*, dropping the *w* to become *neos*="new." This has been adopted into English to form the prefix NEO-, as in such words as NEOLITHIC="of the New Stone Age," NEOCLASSICAL="in a revived Classical style," etc.

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nizdos

1. The Indo-European noun *nizdos* is a compound, formed from the adverb *ni* ="down" + the verb root *sed-* (here reduced to *sd-, zd-*)="sit." The literal meaning was therefore "a sitting down, a place where one sits down, a seat," which remained with little change in some branches of the language family; but in the European branches, at some very early date, the word acquired the specific meaning "bird's nest."
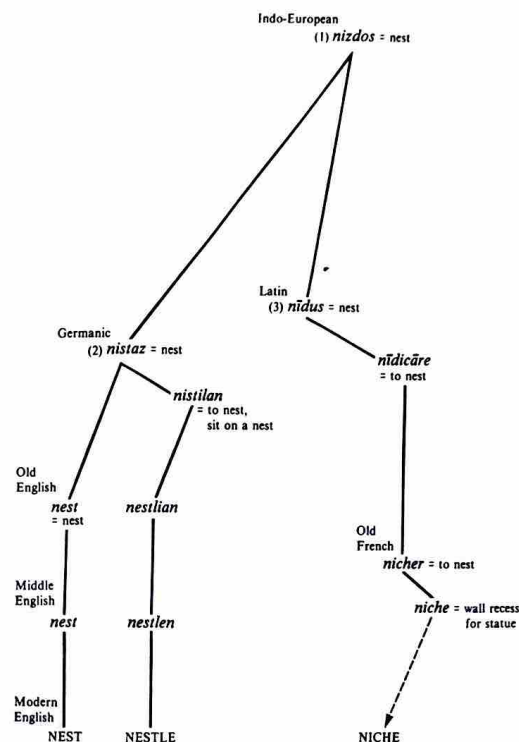
   Nizdos appears in Germanic *nistaz* ="nest," Old Irish *net* ="nest," Latin *nīdus* ="nest," Armenian *nist* ="situation, residence," and Sanskrit *nida* = "resting place, couch."

2. Germanic *nistaz* appears in Old High German *nest* (Modern German *nest*), Middle Dutch *nest,* and Old English *nest,* becoming Modern English NEST.

   The Germanic verb *nistilan* ="to nest, make a nest, sit on a nest" appears in Middle Dutch *nestelen* and Old English *nestlian,* later meaning also "to settle in snugly as a bird does on its nest," becoming Modern English NESTLE.

3. Old French *niche* was the term for a highly characteristic feature of Gothic architecture, "wall recess in which a statue is set." The word is formed from the verb *nicher* ="to nest," which is descended from an unrecorded Latin verb *nīdicāre* ="to nest," from the noun *nīdus* ="nest."

   Old French *niche* was borrowed into English (seventeenth century) as NICHE, remaining an architectural term, but also taking on the meaning "a comfortable spot, a suitable position in life." Very recently a further meaning has been added, in ecology: "the place and function of an organism within its entire environment."
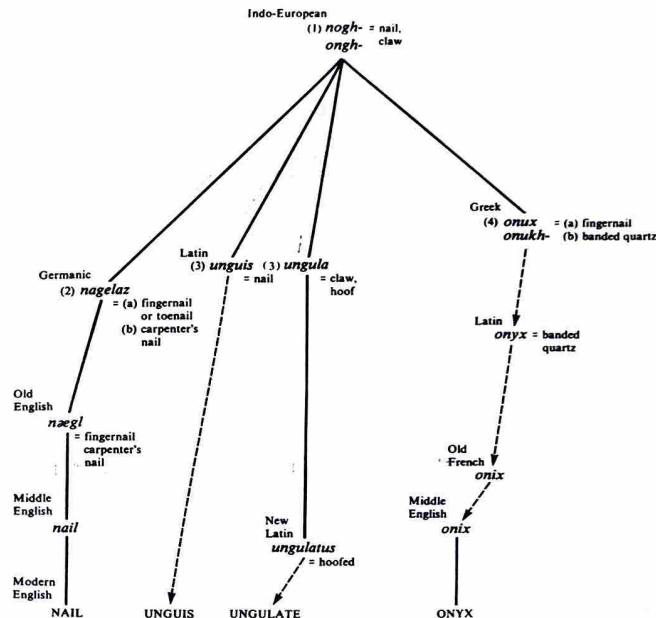
nogh-

1. Indo-European *nogh-* = "nail" had a variant form *ongh-*, and, with the noun suffix *-el-*, two further forms, *noghela-* and *onghela-*.

The word was applied both to human fingernails and toenails, and to animal claws.

It appears in Germanic *nagelaz* = "nail," Old Irish *ingen* = "nail," Latin *unguis* = "nail" and *ungula* = "claw, hoof," Lithuanian *nãgas* = "nail" and *nagà* = "hoof," Old Slavic *nogŭtĭ* = "nail," Greek *onux, onukh-* = "nail, claw," and Sanskrit *nakhás* = "nail, claw."

2. Germanic *nagelaz* meant (a) "fingernail, toenail" and (b) "metal spike used in carpentry." It appears in Old Norse *nagl* = "fingernail, toenail" and *nagli* = "carpenter's nail," Old High German *nagal* and Modern German *nagel* (both meanings), and Old English *nægl* became Modern English NAIL.

3. Latin *unguis* has been adopted into English as UNGUIS, the anatomical term for a claw, hoof, or nail. Latin *ungula* = "hoof" has also been adopted to form the word UNGULATE = "any of the hoofed animals—horses, cattle, deer, elephants, etc."

4. Greek *onux* = "variety of quartz in which flat bands of white alternate with dark" is probably a transferred use of *onux* = "fingernail," referring to the appearance of the white area at the base of a fingernail. (But it is also possible that the word for the quartz was really borrowed from a foreign language, and was reshaped so as to "make sense" in Greek.) Greek *onux* was borrowed into Latin as *onyx*, which was adopted into Old French as *onix*, borrowed thence into Middle English as *onix*, corrected to ONYX in Modern English.

nogw-

1. Indo-European *nogw-* = "naked," with its adjectival forms *nogwedos, nogwdos,* and *nogwnos,* appears in Germanic *nakwedaz, nakwadaz,* Old Irish *nocht,* Latin *nūdus,* Lithuanian *nugas,* Old Slavic *nagŭ,* Hittite *nekumanzas,* and Sanskrit *nagnáh,* all meaning "naked."

2. Germanic *nakwedaz, nakwadaz,* appears in Gothic *naqaths,* Old Norse *noekkvithr,* Old High German *nackut* (whence Modern German *nackt*), Old Frisian *naked,* and Old English *nacod,* all meaning "naked." The last became Modern English NAKED.

3. Latin *nūdus* = "naked" (from Indo-European *nogwedos,* and therefore exactly parallel to Germanic *nakwedaz*) was adopted into English (seventeenth century) as NUDE.

4. The authorities generally agree that Greek *gumnos* = "naked" must belong to this root, but the details remain obscure. In Iranian and perhaps elsewhere, this word underwent "taboo deformation" (the initial *n* was changed to *m* in the Avestan form *magna-* = "naked"). In Greek, besides *gumnos,* a form *lumnos* appears once. This might possibly be a "differentiated" form of *numnos,* which could represent some Indo-European derivative of *nogwnos.* The whole argument may thus seem unconvincing. In its favor at least is that Greek alone of the major branches of the language family lacks a normal form of the common Indo-European adjective for "naked"; instead, it has *gumnos* in identical meaning. Probably the words are somehow related. Nakedness had an important ritual significance in some parts of the Indo-European world (Celtic warriors sometimes went into battle naked), and it would not be surprising for such a word to be irregularly altered by taboo.

Greek athletes performed naked (their games and contests, ritual in origin, were dedicated to gods). From *gumnos* = "naked man, athlete" the verb *gumnazein* = "to practice athletics" was formed; hence *gumnastēs* = "a trainer of athletes" and the noun *gumnasion* = "an athletic school." *Gumnastēs* was adopted into English (sixteenth century) as GYMNAST, at first meaning an expert athlete of any kind, now specifically one who practices certain generally calisthenic exercises. *Gumnasion* was adopted into Latin as *gymnasium,* and thence similarly into English as GYMNASIUM.

Indo-European
(1) *nogw-* = naked

?

Greek
(4) *gumnos* = naked

Germanic
(2) *nakwedaz*
= naked

Latin
(3) *nūdus*
= naked

gumnastēs
= athletic
trainer

gumnasion
= athletic
school

Latin
gymnasium

Old
English
nacod

Middle
English
naked

Modern
English
NAKED

NUDE

GYMNAST

GYMNASIUM

nomen

1. Indo-European *nomen*, with variant form *onomen*, ="name" appears in Germanic *namōn*, Old Irish *ainm*, Latin *nōmen*, Old Prussian *emnes*, Greek *onoma*, *onuma*, Tocharian *nem*, and Sanskrit *nâma*, all meaning "name."

2. Germanic *namōn* appears in Gothic *namo*, Old High German *namo* (whence Modern German *name*), and Old English *nama*, all meaning "name." Old English *nama* became Modern English NAME.

3. Latin *nōmen* ="name" was also used as a grammatical term for a word that is the name of a person or thing. It was inherited in Norman French as *noun*, which was borrowed into Middle English as *nowne*, becoming Modern English NOUN.

The adjective of Latin *nōmen* was *nōminālis* ="of or relating to a name or names." This was adopted into English as NOMINAL. Similarly, the Latin verb *nōmināre* ="to name" was adopted as NOMINATE.

4. From Greek *onuma* ="name" were formed the compound words *anōnumos* ="nameless" (*an-* ="not, un-") and *sunōnumos* ="having the same name" (*sun-* ="together, with"). These were adopted into Latin as *anōnymus* and *synōnymus*, and thence into English as ANONYMOUS, SYNONYMOUS.

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oinos

1. Indo-European *oinos* = "one" appears in Germanic *ainaz*, Old Irish *ōen*, Latin *ūnus*, Old Prussian *ains*, Old Slavic *inŭ*, all meaning "one," and in Greek *oinos* = "score of one at dice."

Oinos was originally an adjective meaning "one alone, single," but came to be used also as the numeral 1 and as an indefinite article.

2. *Oinos* regularly became Germanic *ainaz*, appearing in Gothic *ains*, Old Norse *ainn*, Old High German *ein* (whence Modern German *ein*), and Old English *ān*, all meaning "one."

Old English *ān* became Middle English *an, on, oon, own*, with a variety of spellings and pronunciations in different parts of the country. A form *won, wone, wun* developed in dialects of western and southwestern England, and by 1700 this became the standard pronunciation in London. The spelling, however, was standardized as ONE, originally representing the earlier pronunciation /ōn/ as in *bone*.

The adverbial genitive of Middle English *an, on,* was *anes, ones,* = "at one time." This also acquired the pronunciation with *w-*, emerging as /wuns/, spelled ONCE.

In early Middle English *an* was also used as an indefinite article, and before a vowel was reduced to *a*; hence Modern English A, AN.

3. In the thirteenth century the phrase *al one* = "all by oneself" became a solid adjective ALONE. It was also sometimes written as *a lone*, resulting in the separate adjective LONE, and later LONELY.

4. The Germanic words for the numerals 11 and 12 were *ain-lif-* = "one left (after ten)" and *twā-lif-* = "two left (after ten)," respectively. (*See twā-lif-* under dwō.) *Ain-lif-* appears in Gothic *ainlif*, Old High German *einlif* and Old English *endleofan, elefne*, all meaning "eleven." Old English *elefne* became Middle English *elevne*, Modern English ELEVEN.

5. From Latin *ūnus* = "one" was formed the verb *ūnīre* = "to make into one," adopted into Middle English as *uniten*, becoming Modern English UNITE. Also from Latin *ūnus* was *ūnitās* = "the state of being one," adopted via Old French into Middle English as *unite*, later UNITY.

6. An extended form of Indo-European *oinos* was *oinokos* = "one alone." This appears in Germanic *ainigaz* = "one, any," Latin *ūnicus* = "alone of its kind," and Old Slavic *inokŭ* = "solitary."

Germanic *ainigaz* appears in Old Norse *einigr*, Old High German *einag*, and Old English *ænig*. The Old English word *ænig* = "one (no matter which), any," became Middle English *eny*, Modern English ANY.

Latin *ūnicus* = "alone of its kind" was adopted into French as *unique;* this was borrowed into English as UNIQUE.

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ped-

1. Indo-European *ped-* or *pod-* ="foot" appears in Germanic *fōt* ="foot," Latin *pēs, ped-* ="foot," Lithuanian *pedà* ="footstep," Greek *pous, pod-* = "foot," Hittite *pad* ="foot," and Sanskrit *pad-* ="foot."

The vowel variation in *ped-/pod-* is a basic Indo-European feature. There were also further variations with lengthened vowels, *pēd-/pōd-*.

The Indo-European word was also used from the earliest time, like its Modern English descendant, as a formalized measure of length.

2. The lengthened form *pōd-* became Germanic *fōt-*, with regular changes from *p* to *f* and from *d* to *t*. This appears in Gothic *fōtus*, Old Norse *fōtr*, Old High German *fuoz* (whence Modern German *fuss*), and Old English *fōt*, all meaning "foot." Old English *fōt* became Modern English FOOT.
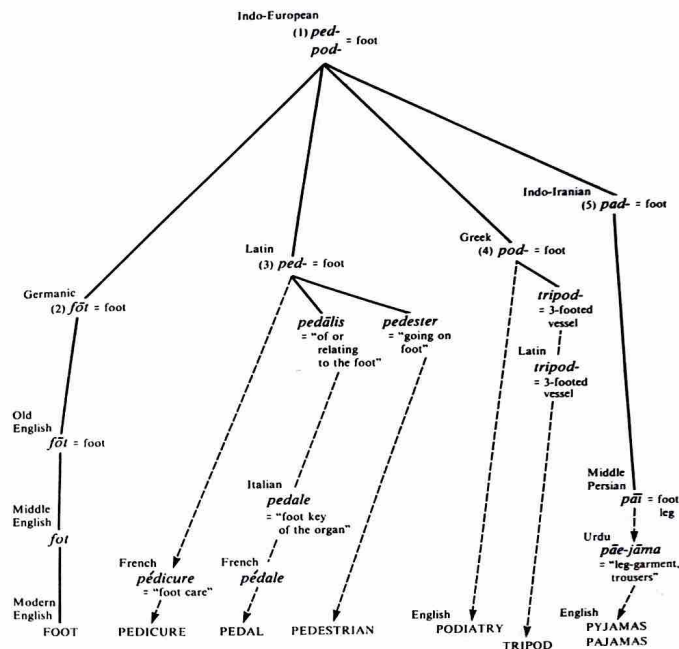
3. The basic form of the root, *ped-*, appears in Latin *pēs, ped-* ="foot." Its adjective *pedālis* ="of or relating to the foot" was adopted into Italian (Renaissance period) to form the term *pedale d'organo* ="foot key of the organ," shortened to the noun *pedale*. This was borrowed into French as *pédale* and thence into English as PEDAL.

Also formed from Latin *pēs, ped-* was *pedester* ="going on foot," which was also used to mean "written in prose, prosaic, not poetic." This was adopted into English (eighteenth century) as PEDESTRIAN, meaning both "going on foot" and "prosaic, uninspired."

Latin *pēs, ped-* was also adopted into French to form the term *pédicure* = "surgical care of the feet" (*cure* from Latin *cūrāre* ="to take care of"). This was borrowed into English as PEDICURE.

4. The *o*-form *pod-* appears in Greek *pous, pod-* ="foot." The compound word *tripous, tripod-* ="three-footed," also "vessel or caldron supported on three feet," was adopted into Latin as *tripūs, tripod-*, and thence into English as TRIPOD. Greek *pous, pod-* was also adopted directly into twentieth-century English to form the word PODIATRY ="foot-doctoring" (Greek *iatreia* = "medical care").

5. The basic form of the root, *ped-*, regularly became Indo-Iranian *pad-*, appearing in Sanskrit *pad-* ="foot" and in Middle Persian *pāī* ="foot," also "leg." In the late Middle Ages when the Muslim Persians invaded India, numerous Persian words were borrowed into Urdu, the Indic language of the Mogul Empire. Among these words was *pāī*, used in the Urdu term *pāē -jāma* ="leg-garment, trousers" (*jāma* ="garment"). These loose trousers of linen or silk, tied around the waist, were worn by Muslim and Sikh men. In the eighteenth century or before, European traders and imperialists in India took to wearing these trousers as a relaxed "undress" garment for males, the word being borrowed into English as *paijamas*, PYJAMAS, (U.S.) PAJAMAS. It was the British of the Victorian period who introduced the pyjama suit into Europe as a sleeping garment (Europeans up to that time had slept naked or in nightgowns).

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penkwe (I)

1. Indo-European *penkwe* = "five" appears in Germanic *fimfi*, Gaulish Celtic *pempe*, Latin *quinque*, Lithuanian *penki*, Greek *pente*, Hittite *panta*, and Sanskrit *pañca*, all meaning "five."

(For other derivatives *see* penkwe, II.)

2. From the basic form *penkwe* occurred a variant form *pempe*, in which the original consonant cluster *kw* has been "assimilated" to the sound of the initial consonant *p*, thus (perhaps) making the word easier to pronounce. *Pempe*, with regular change of Indo-European *p* to Germanic *f*, became Germanic *fimfi*. This appears in Gothic *fimf*, Old Norse *fimm*, Old High German *fimf* (whence modern German *fünf*), and Old English *fíf*, all meaning "five." Old English *fíf* became Modern English FIVE.

3. Another variant of the basic form *penkwe* was *kwenkwe*, in which an exactly opposite "assimilation" has occurred, the initial sound /p/ being assimilated to the cluster *kw*. This became Latin *quinque* = "five." A compound word formed from this was *quinquennis* = "lasting five years" or "renewed every five years" (-*ennis* from Latin *annus* = "year"). This was adopted into English as QUINQUENNIAL.

4. *Penkwe* became Greek *pente* (with a regular sound-change of /kw/ to Greek /t/). Formed from *pente* was the Greek geometric term *pentagōnon* = "five-angled figure" (*gōnia* = "angle"; *see* genu = "knee"), adopted into English as PENTAGON. In the literature of medieval magic, several of the western European languages had words based on Medieval Latin *pentaculum* (formed from Greek *pente* + the Latin suffix -*culum*), meaning "five-pointed star," a mystical figure used in divination and sorcery. This in English (sixteenth century) became PENTACLE.

5. *Penkwe* became Sanskrit *pañca*, which was inherited into Hindi as *panch* = "five." In the seventeenth century, English merchants trading with India began to make a drink, usually hot, which they called PUNCH, by many different recipes on a base of brandy, rum, or arrack, typically mixed with such ingredients as milk, lime juice, tea, and nutmeg. It is probable, but cannot be definitively proved, that there were originally and basically five ingredients, and that the word was coined by the English merchants from Hindi *panch* = "five."

penkwe (II)

1. Formed from Indo-European *penkwe* = "five" was the ordinal adjective *penkwetos* or *penkwtos* = "fifth." This appears in Germanic *fimftaz*, Old Welsh *pimphet*, Latin *quin(c)tus*, Lithuanian *peñktas*, Greek *pemptos*, and Sanskrit *paktha-*, all meaning "fifth."

2. Germanic *fimftaz* appears in Gothic *fimfta-*, Old Norse *fimti*, Old High German *fimfto*, and Old English *fifta*, all meaning "fifth." Old English *fifta* became Modern English FIFTH.

3. Latin *quintus* = "fifth" was inherited in Italian as *quinto* = "fifth," from which came the noun *quintetto* = "group of five," especially "group of five musicians." This, along with many other Italian musical terms, was adopted into English in the seventeenth century as *quintetto*, later standardized (by analogy with *duet*) as QUINTET.

In Greco-Roman science and medieval alchemy, it was held that there were four elements (earth, air, fire, and water), and beyond them a "fifth essence," of which the stars and planets were made and which was also latent in all other natural bodies. In Medieval Latin this was named *quinta essentia*, which was adopted into Middle English (fifteenth century) as QUINTESSENCE.

Two further Indo-European derivatives of *penkwe* = "five" were *penkweros* = "one of a set of five," and *pnkstis* = "set of five."

4. With regular sound-changes, *penkweros* became Germanic *fingwraz* = "finger," appearing in Gothic *figgrs*, Old Norse *fingr*, Old High German *finger* (whence Modern German *finger*), and Old English *finger*, all meaning "finger." The last remains unchanged as Modern English FINGER.

5. Also with regular sound-changes, *pnkstis* became Germanic *funhstiz*, simplified to *fustiz* = "fist." This appears in Old High German *fust* (whence Modern German *faust*), Old Frisian *fest*, and Old English *fyst*, all meaning "fist." The last became Modern English FIST.

pet-

1. Several slightly different Indo-European nouns for "bird's wing, feather" were formed from the verb root *pet-* = "to fly," which is widely attested throughout the language family. Among them were *pet-ra, pet-na,* and *pte-ro-,* appearing in Germanic *fethrō* = "feather," Old Welsh *eterin* = "bird" (with regular Celtic loss of *p*), Latin *penna* or *pinna* = "wing, feather," Greek *pteron* = "wing," Hittite *pattar* = "wing," and Sanskrit *páttram* = "wing."

2. Germanic *fethrō* appears in Old Norse *fjodhr,* Old High German *fedara* (whence Modern German *feder*), and Old English *fether,* all meaning "feather." Old English *fether* became Modern English FEATHER.

3. Latin *penna* or *pinna* = "wing, primary feather" also in Late Latin meant "quill used for writing." This was inherited in Old French as *penne* = "feather, quill," borrowed into Middle English as *penne,* becoming Modern English PEN (writing instrument).

Old French *pignon* = "wing feather" is inherited from an undocumented Latin form *pinniōn-,* a derivative of *pinna. Pignon* was borrowed into Middle English as PINION (noun) = "wing feather." Hence the sixteenth-century verb PINION = "to cut a bird's wing feathers so that it cannot fly," hence also "to tie a man's arms so that he cannot move."

Old French *penon* = "bunch of feathers used as a crest," also "long narrow flag or banner," is similarly inherited from an undocumented Latin form *pennōn-,* derived from *penna* = "feather." *Penon* was borrowed into Middle English as *penon,* becoming Modern English PENNON.

4. Greek *pteron* = "wing" was adopted in scientific New Latin to form the word *pterodactylus* = "wing-finger" (Greek *daktulon* = "finger"), the name given to the flying reptile that was found by geologists in the fossil strata of Europe early in the nineteenth century. This was borrowed into English as PTERODACTYL.

Greek *pteron* was also adopted into French in the later nineteenth century to form the word *hélicoptère* = "spiral-wing" (Greek *heliko-* = "spiral"), a term coined for a possible flying machine that would be powered by horizontally revolving blades. The term was used by, among others, Jules Verne. In the twentieth century the machine became a reality, and the word was borrowed into English as HELICOPTER.

Indo-European
(1) *pet-ra*
pet-na = feather, wing
pte-ro-

Greek
(4) *pteron*
= wing

Latin
(3) *penna, pinna*
= wing, primary feather

Germanic
(2) *fethrō*
= feather

Old English
fether
= feather

(spoken) Latin
pinniōn- *pennōn-*

Middle English
fether

Old French
penne
= quill

pignon
= feather

Old French
penon
= crest of feathers, long banner

Modern English
FEATHER

Middle English
penne
= quill

Middle English
pinion

Middle English
penon

New Latin
Pterodactylus
= "wing-finger"

French
hélicoptère
= "spiral-wing"

PEN   PINION   PENNON   PTERODACTYL   HELICOPTER

pətḗr

1. The Indo-European word *pətḗr* = "father" appears in Germanic *fadar*, Old Irish *athir*, Latin *pater*, Greek *patēr*, Tocharian *pacar*, and Sanskrit *pitár*, all meaning "father."

Unlike our word FATHER, the word *pətḗr* did not primarily designate a man as the physical begetter of children. It was the formal title of the head of a household. The Indo-European social structure was rigorously patriarchal, and the *pətḗr* was its embodiment.

The supreme deity was addressed as *Dyeu-pətḗr*, which can be translated as "Sky-father"; this did not imply that he was the progenitor of the other gods, nor of men, but that he was their chief. (*See* deiwos = "god.")

After the dispersal of the Indo-Europeans, their original clan system disappeared or was modified by contact with other traditions. The word *pətḗr* was then generally retained in the unspecialized and familiar sense of "male parent." But extensive traces of its original significance survived: most notably, in Roman law, the *patria potestās* = "father's power" included the right of life and death over his children and all the members of his household; a wife had the legal status of daughter to her husband.

2. Indo-European *pətḗr* became Germanic *fadar*, with regular changes of *p* to *f* and of *t* to *d*. This appears in Gothic *fadar*, Old Norse *fadhir*, Old High German *fater* (whence Modern German *vater*), and Old English *fæder*, all meaning "father, progenitor," with little trace of the Indo-European juridical role. Old English *fæder* became Modern English FATHER, with the same change of *d* to *th* as in MOTHER and BROTHER.

3. A Latin adjective formed from *pater* was *paternus* = "of or relating to a father, fatherly." A Late Latin extended form of this was *paternālis*, adopted into English as PATERNAL. A noun formed from *paternus* was *paternitās* = "the fact or condition of being a father," adopted as PATERNITY.

4. The members of the Roman Senate, or ruling council of the republic, were collectively called the *Patrēs* = "Fathers," each originally being the head of an independent noble clan. From this came the adjective *patricius* = "belonging to a family of senatorial rank," later a medieval title of nobility. It was adopted into Middle English as *patricien*, now PATRICIAN.

5. Another Latin derivative of *pater* was *patrōnus* = "man who protects the interests of business dependents, lawyer who defends clients." In Medieval Latin it was used to mean "tutelary saint." It was adopted into Old French as *patron*, which was borrowed into Middle English as PATRON.

6. Formed from Greek *patēr* = "father, ancestor" was *patria* = (a) "paternal descent, family, clan" and (b) "ancestral country, homeland." From this in sense (a) came *patriarkhēs* = "head of a clan, tribal chief" (*arkhein* = "to rule"); in the Greek translation of the Bible this was used of the ancestral leaders of the Hebrews; in the early Christian Church it was used as a title

of bishops. It was adopted into Late Latin as *patriarca* and thence into Middle English as *patriarche*, now PATRIARCH.

Also from Greek *patria* was *patriōtēs* = "of the same homeland, fellow-countryman." This was adopted into Late Latin as *patriōta*, thence into Old French as *patriote*, and thence into English as PATRIOT.

reidh-

1. Indo-European *reidh-* = "to ride, travel by horse" is widely attested in Germanic and Celtic, but little elsewhere. It appears in Germanic *ridan* = "to ride" and *raidaz* = "a riding," Gaulish *rēda* = "four-wheeled vehicle," Old Irish *riad* = "a journey," and Latvian *raidît* = "send swiftly."

2. Germanic *ridan* appears in Old Norse *rîdha*, Old High German *rîtan* (whence Modern German *reiten*), and Old English *rîdan*, all meaning "to ride." Old English *rîdan* became Modern English RIDE.

3. Germanic *raid-* appears in Old Norse *reidh*, Middle Dutch *rēd*, Old Frisian *rēd*, and Old English *rād* = "the act of riding, a journey on horseback," also "a mounted expedition or attack." It became Middle English *rode*, Modern English ROAD. Only in the sixteenth century did the meaning "a made track or highway for horses and vehicles" emerge.

In medieval Scottish, Old English *rād* became *rade, raid,* keeping the sense of "a mounted expedition," especially "a sudden attack, a planned foray to inflict damage and carry off plunder." It was a word that found much employment in the perennial feudal, semiprivate warfare carried on in the border country between England and Scotland. In the sixteenth century, English writers wrote of English *roads* (and *inroads*) into Scotland, while Scottish writers wrote of Scottish *raids* into England.

After the seventeenth century, the word in this sense seems to have died out in both countries. It was revived by Sir Walter Scott. In World War I RAID suddenly came into vogue as a term used by the British Army for foot attacks on enemy trenches, and then gradually for larger attacks by land or sea. After that war, journalists used it for surprise swoops by police. In World War II it was used again by the soldiers, and later in the war especially of bombing attacks, or *air raids.*

4. Probably but not certainly connected is Germanic *raidjaz* = "prepared," appearing in Old High German *reiti*, Old Frisian *rēde*, and Old English *rēde* or *ge-rēde,* all meaning "prepared." Presumably, therefore, the Germanic adjective *raidjaz* meant "mounted, prepared for a ride, ready to fight." Old English *rēde* became Middle English *redy,* Modern English READY.

5. Italian *arredare*, Spanish *arrear,* Old French *areer,* and Norman French *araier* all mean "to set in order," especially "to draw up men for battle." It is reliably conjectured that they all descend from a Late Latin word *arrēdāre,* which has not survived in any recorded documents. This verb in turn would be a compound of *ad-* = "toward" + *rēdāre* = "to make ready," probably borrowed from a Germanic verb *raidjan* = "to prepare," closely related to *raidjaz* = "prepared," as in paragraph 4, above.

Formed from Norman French *araier* was the noun *arai* = "attire," also "state of readiness," also "battle order." These were borrowed into Middle English as *araien* (verb) and *araie* (noun), Modern English ARRAY.

Indo-European
(1) *reidh-* = to ride

Germanic
(2) *rîdan* = to ride

Germanic
(3) *raid-* = a riding, a ride

Germanic
(4) *raidjaz* = prepared

Germanic
(5) *raidjan* = to prepare

(spoken) Latin *rēdāre* = to prepare

arrēdāre = to prepare

Old English *rîdan* = to ride

Old English *rād* = a riding, a journey, a mounted attack

rēde = prepared

Norman French *araier arai* = to prepare, draw up

Middle English *riden*

Middle English *rode* = a ride, an attack = a highway

Middle Scottish *rade raid* = an attack

Middle English *redy*

Middle English *araien araie*

Modern English RIDE

ROAD

RAID

READY

ARRAY

sal-

1. Indo-European *sal-* = "salt" appears in Germanic *saltam*, Old Irish *salann*, Latin *sal*, Latvian *sals*, Old Slavic *sol*, Greek *hals*, and Tocharian *sale*, all meaning "salt."

2. Germanic *saltam* appears in Gothic *salt*, Old High German *salz*, and Old English *salt, sealt*, becoming Modern English SALT.
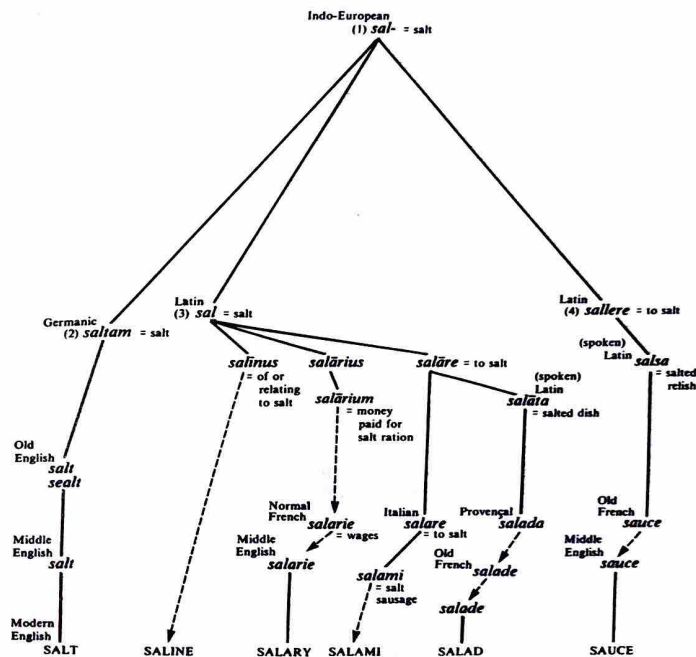
3. Latin *sal* = "salt" formed the adjective *salīnus* = "being or related to salt." This was adopted into English as SALINE, the technical adjective of SALT.

Latin *sal* = "salt" had another adjective *salārius* = "of or relating to salt." This was used as a noun, *salārium*, as the term for money paid to Roman soldiers as an allowance for buying salt (as a food preservative). *Salārium* thus came to mean "wages, regular pay"; it was adopted into Norman French as *salarie*, borrowed thence into Middle English as *salarie*, Modern English SALARY.

The verb *salāre* = "to put salt on" is not recorded in any surviving Latin documents but is assumed to have existed as the ancestor of French *saler*, Spanish *salar*, and Italian *salare*, all meaning "to apply salt to." From Italian *salare* was formed the noun *salami* (originally plural) = "salted pork sausages." This word was later (twentieth century) borrowed into English as SALAMI.

The reconstructed Latin verb *salāre* must also have had past participle *salātus* = "salted," from which a noun *salāta* was formed. This, too, is unrecorded, but must have existed in the Latin of the Roman Empire before it broke up into dialects (fifth century A.D.). *(Herba) salāta* would mean "salted vegetable," and was inherited as Portuguese *salada*, Spanish *ensalada*, Italian *insalata*, and Provençal *salada*, all meaning "cold dish of (raw) vegetables," no doubt of great variety but usually involving salt. Old French *salade*, as the ending *-ade* shows, was borrowed from Provençal *salada*; this borrowing marks the northward transmission of this typically Mediterranean dish. *Salade* was borrowed into Middle English in the fifteenth century, becoming Modern English SALAD.

4. Separately from the noun *sal*, Latin inherited the verb *sallere* = "to apply salt to," with past participle *salsus* = "salted." Here again a Latin noun has been reconstructed from its Romance descendants; Spanish *salsa*, Italian *salsa*, Provençal *salsa*, and Old French *sauce* all regularly descend from the unrecorded Latin word *salsa* = "salted relish" (of some unknown kind). The Old French word was borrowed into Middle English in the fourteenth century.

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1. The Indo-European verb *sē-* = "to sow," with its derivative nouns *sē-men* and *sē-tis* = "that which is sown, seed," appears in Germanic *sēyan* = "to sow" and *sēdiz* = "seed," Old Irish *síl* = "seed," Latin *sēmen* = "seed," Lithuanian *sèti* = "sow," Old Slavic *sĕme* = "seed," and Sanskrit *síra-* = "sowing-plow" and *síta* = "furrow."

This widespread group of words is by itself good evidence that the Indo-European community was familiar with planting techniques. Notice that the basis of the group is the verb denoting the human activity of putting seed in the ground and that the words for "seed" are formed from it; this is the thinking of an agricultural people, not of plant-gatherers or botanists. Notice also that the metaphor of fertility, in which words meaning "plant-seed" are used to mean also "animal or human semen," apparently occurred already at the Indo-European level.

Agriculture, apparently initiated in the northern parts of the Middle East before 9000 B.C., was already old by the time of the Indo-Europeans. Archaeologically, the Early Kurgan people living on the southern Russian plains c. 4500 B.C. are probably the original Indo-Europeans. They were the first planters of barley and wheat in that part of the world, as well as being herders of cattle. The regular and unbroken inheritance of words like SOW and SEED from that day to the present is one of our most impressively direct links with the pioneers of farming.
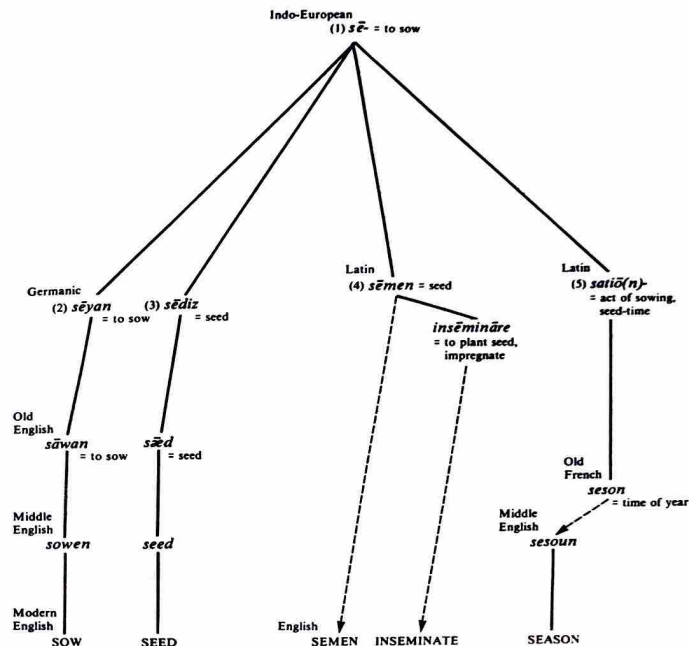
2. Germanic *sēyan* appears in Gothic *saian*, Old High German *sāen* (Modern German *säen*), and Old English *sāwan*, all meaning "to sow." Old English *sāwan* became Middle English *sowen*, Modern English SOW.

3. The noun *sētis* regularly became Germanic *sēdiz*, with regular change of *t* to *d*. This appears in Old Norse *sāth*, Old High German *sāt* (Modern German *saat*), and Old English *sǣd*, all meaning "seed." The last became Modern English SEED.
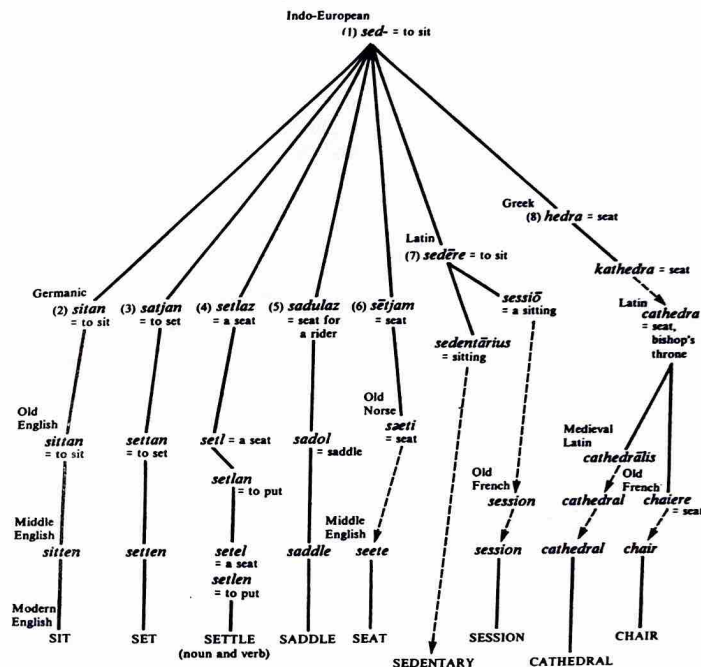
4. The noun *sēmen* appears unchanged in Latin *sēmen* = (a) "plant-seed," (b) "animal semen." It was adopted into English, in the latter sense only, as SEMEN.

Formed from Latin *sēmen* was the verb *insēmināre* = (a) "to plant seed in the ground," (b) "to impregnate a female." This was adopted into English, also only in the latter sense, as INSEMINATE.

5. Another Latin word descended from this root is *satiō(n)-* = "the act of sowing." In later spoken Latin this word was used to mean "time for sowing, seed-time," also "favorable time of year." It was inherited in Old French as *seson* = "one of the four divisions of the agricultural year (spring, summer, autumn, winter)." This was borrowed into Middle English as *sesoun*, becoming Modern English SEASON.

Indo-European
(1) *sē-* = to sow

Germanic
(2) *sēyan* = to sow
(3) *sēdiz* = seed

Old English
sāwan = to sow
sǣd = seed

Middle English
sowen
seed

Modern English
SOW
SEED

Latin
(4) *sēmen* = seed
insēmināre = to plant seed, impregnate

English
SEMEN   INSEMINATE

Latin
(5) *satiō(n)-* = act of sowing, seed-time

Old French
seson = time of year

Middle English
sesoun

SEASON

sed-

1. The Indo-European verb *sed-* = "to sit," with derivative nouns *sedlos*, *sēdyom*, *sedra* = "a sitting, a place to sit, a seat," appears in Germanic *sitan* = "to sit," *satjan* = "to set," and *setjam* = "a seat," Old Irish *sadid* = "sits," "to sit," Latin *sedēre* = "to sit," Lithuanian *sedéti* = "to sit," Old Welsh *sedd* = "sit," Slavic *sĕdĕti* = "to sit," Greek *hedra* = "a seat", and Sanskrit *sídati* = "sits."

2. Germanic *sitan* or *sitjan* appears in Old Norse *sitja*, Old High German *sizzan* (Modern German *sitzen*), and Old English *sittan*, all meaning "to sit." Old English *sittan* became Modern English SIT.

3. Germanic *satjan* = "to cause to sit," i.e., "to set, put, place," appears in Gothic *satjan*, Old Norse *setja*, Old High German *sezzan* (Modern German *setzen*), and Old English *settan*, all meaning "to place or put." The last became Modern English SET.

4. Germanic *setlaz* appears in Gothic *sitls*, Old High German *sezzal* (Modern German *sessel*), and Old English *setl*, all meaning "a sitting-down, a seat." Old English *setl* became Modern English SETTLE (noun). Formed from Old English *setl* was the verb *setlan* = "to put in a particular place," becoming Modern English SETTLE (verb), with many extended and generalized senses.

5. Germanic *sadulaz* appears in Old Norse *sodull*, Old High German *satal* (Modern German *sattel*), and Old English *sadol*, all meaning "seat for a rider on a horse." Old English *sadol* became Modern English SADDLE.

6. Germanic *sētjam* or *ga-sētjam* appears in Old Norse *sæti*, Old High German *gasazi* (Modern German *gesass*), and Old English *gesete*, all meaning "a sitting, a seat." Old English *gesete* died out. In the twelfth century, Old Norse *sæti* was borrowed into Middle English as *sæte*, *seete*, becoming Modern English SEAT.

7. Formed from Latin *sedēre* = "to sit" was the adjective *sedentārius* = "sitting" (of an occupation carried on at a desk, etc.). This was adopted into English as SEDENTARY. Also from Latin *sedēre*, with past participle *sessus*, was the noun *sessiō* = "a sitting." This was adopted into Old French as *session* and thence into Middle English as SESSION.

8. Greek *hedra* = "seat" had the compound form *kathedra*, also meaning "seat, chair" (*kata-* = "down"). This was borrowed into Latin as *cathedra*, used by Christians especially of a bishop's throne, and figuratively of the place where he presided over his diocese. In Medieval Latin the adjective *cathedrālis* occurred in the term *ecclēsia cathedrālis* = "church of the (bishop's) seat," i.e., the chief church of a diocese. This was borrowed into Old French as *eglise cathedral* and thence into Middle English as *cathedral church*. In the sixteenth century the phrase was reduced to the noun CATHEDRAL. Latin *cathedra* was also inherited in Old French as *chaiere* = "seat," which was borrowed into Middle English as CHAIR.

stenə-

1. The Indo-European verb root *stenə-* = "roar, shout, groan, thunder" had a variant form *tenə-* without the initial *s* (a frequent type of alternation in Indo-European). This root appears in Germanic *thunaraz* = "thunder," Latin *tonāre* = "to thunder," Lithuanian *stenu* = "groan," Greek *stenein* = "to groan," and Sanskrit *stanati* = "thunders, roars."

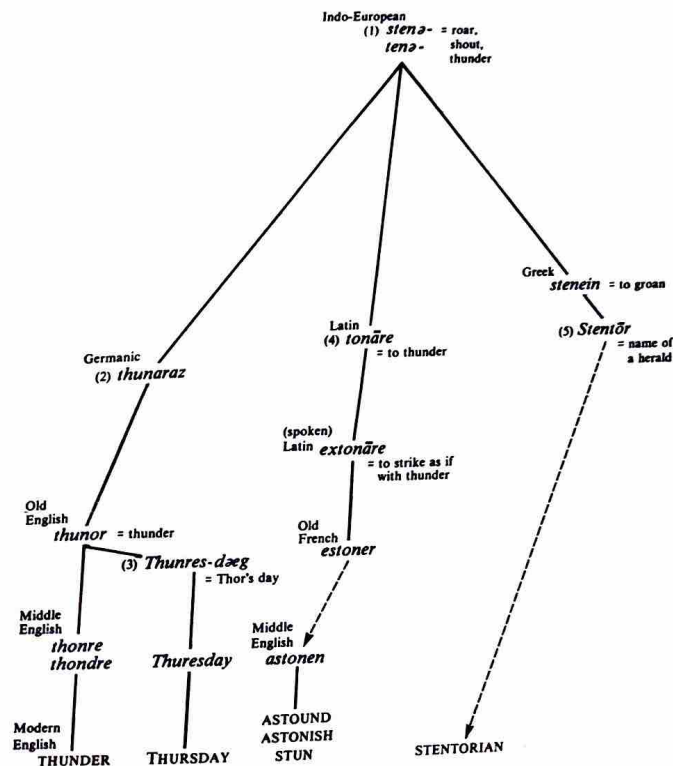The Indo-Europeans evidently regarded thunder as the voice of the weather god they called "Sky-father" (*see* **deiwos** = "god").

2. Germanic *thunaraz* appears in Old High German *donar* (Modern German *donner*), Old Frisian *thuner*, and Old English *thunor*, all meaning "thunder." *Thunor* became Middle English *thonre*, later *thondre*, then Modern English THUNDER.

3. Germanic *Thunaraz* was also used as the name of a thunder god, who appears to be a new Germanic creation, unrelated to the Indo-European *Deiwos*; he was bearded and had a hammer. In Old Norse his name was *Thunar*, later *Thorr*.

In late Roman times the fourth day of the week was called *Jovis diēs* = "Jupiter's day" (whence Modern French *jeudi*, Italian *giovedi*). When the Latin weekdays were adopted and translated by the Germanic peoples, they identified Jupiter with Thor because they both wielded the thunder. In Old English the day-name became *Thunres-dæg* (*thunres*, genitive of *thunor* = "thunder"). The Old Norse equivalent *Thōrsdagr* influenced the Old English word, which became *Thursdæg*, Middle English *Thursday*, Modern English THURSDAY.

4. The root appears in Latin *tonāre* = "to thunder" (usually appearing with Jupiter as its subject). A spoken Latin word *extonāre* = "to thunder out, strike as if with thunder" (*ex-* = "out") is reconstructed from Romance descendants including Old French *estoner* = "to amaze, shock" (whence Modern French *étonner*). *Estoner* was borrowed into Middle English as *astonen* = "to amaze, shock." (a) From its past participle *astoned*, the verb was reformed as ASTOUND. (b) Separately, *astonen* picked up the *-ish* ending found in many verbs borrowed from French (*finish, vanish*, etc.) to produce the variant ASTONISH. (c) Separately again, *astonen* lost its initial vowel, and its verb ending, to produce the third variant STUN.
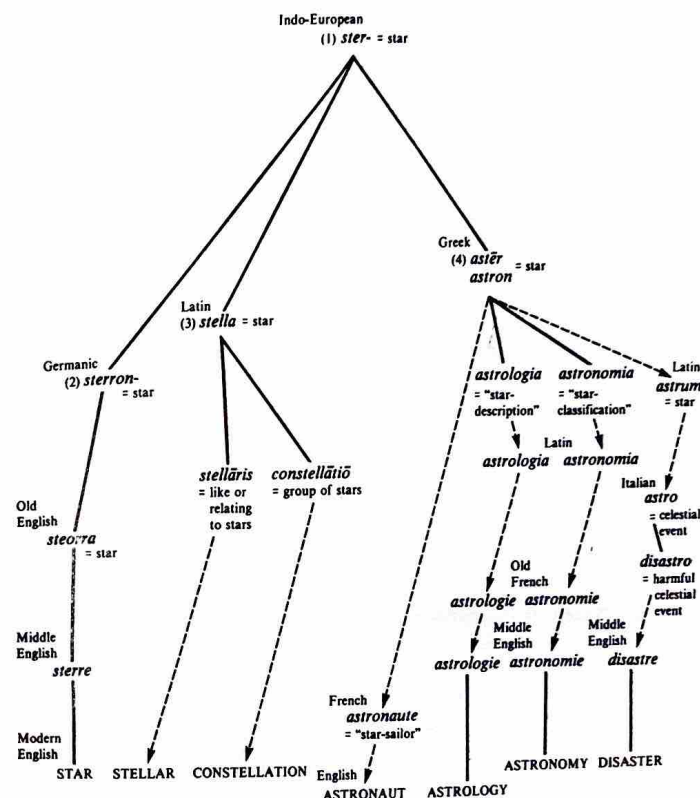
5. Closely related to Greek *stenein* = "to groan" is *Stentōr*, the name of a herald in the *Iliad*. The literal meaning of the name would be "he who shouts"; Homer gives him the epithet "bronze-voiced," and he became proverbial for loudness; hence the English adjective STENTORIAN.

163

ster-

1. Indo-European *ster-* = "star" appears in Germanic *sterron-*, Cornish *sterenn*, Latin *stella*, Greek *astēr*, and Sanskrit *(s)tāra*, all meaning "star."

2. Germanic *sterron-* appears in Old High German *sterro*, Old Frisian *stera*, and Old English *steorra*, becoming Middle English *sterre*, Modern English STAR.

3. Latin *stella* is from a form of the root with a different noun suffix *(ster-la)*. The Late Latin adjective *stellāris* = "like a star, relating to the stars" *(ster-la)*. The Late Latin was adopted into English (sixteenth century) as STELLAR. The Late Latin noun *constellātiō* (*con-* = "together") = "group of stars" was adopted into English as CONSTELLATION.

4. Besides the basic Greek form *astēr* was the form *astron* = "star, anything seen in the sky." Formed from this were the two nouns *astrologia* (*-logia* = "description") and *astronomia* (*-nomia* = "classification, arrangement"), both meaning "the science of the stars, observation and study of celestial phenomena." They were adopted into Latin as *astrologia* and *astronomia*, thence into Old French as *astrologie* and *astronomie*, and thence into Middle English as *astrologie* and *astronomie*, Modern English as ASTROLOGY and ASTRONOMY. Only in the sixteenth and seventeenth centuries did any clear distinction emerge between the two pursuits ASTROLOGY = "study of the stars for their occult influences on human affairs" and ASTRONOMY = "scientific study of the physical universe."

Greek *astron* was also borrowed into Latin as *astrum*, which was adopted into medieval Italian as *astro* = "star, constellation, any celestial event." From this in the fourteenth century astrologers coined the term *disastro* = "harmful event in the heavens, conjunction of stars and planets having a disruptive effect on human affairs" (*dis-* = "ill-, unfavorable"). This was borrowed into Middle English as *disastre* and thence into English (sixteenth century) as DISASTER.

Greek *astron* was also adopted into French in the late nineteenth century to form the science-fiction term *astronaute* = "star-sailor, human who voyages through the universe" (Greek *nautēs* = "sailor"). This was borrowed into English as ASTRONAUT, recently translated from fantasy into reality.

sus

1. Indo-European *sus* or *sūs* = "pig" appears in Germanic *sū-*, Latin *sūs*, Greek *hus*, Tocharian *suwo*, and Avestan *hū*, all meaning "pig"; also in Lithuanian *suvēns* = "young pig." An extended form *sukos* appears in Celtic *sukkos* = "pig, pig's snout," and in Sanskrit *sūkara* = "pig." And an Indo-European adjectival form *suînos* = "relating to pigs" appears, readapted as a noun, in Germanic *swînam* = "pig."
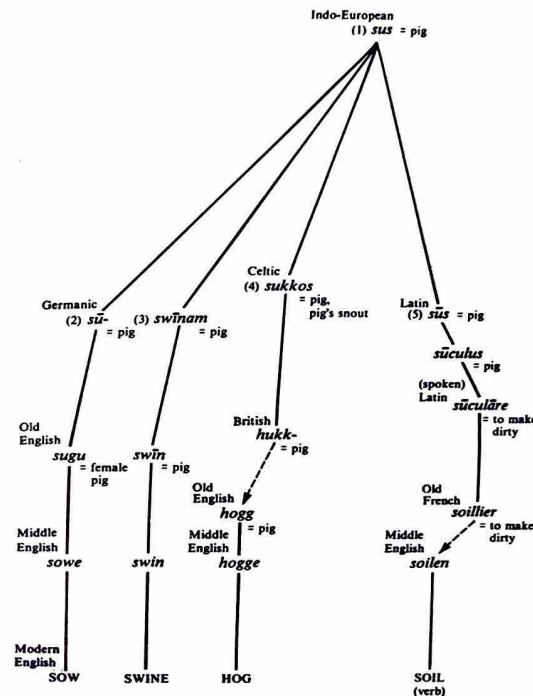
Alongside *sus*, referring to the adult animal, the Indo-European word *porkos* referred to the young pig. There can thus be little doubt that the original Indo-European–speaking people kept pigs, which in Anatolia were domesticated before 6500 B.C. At settlements of the Early Kurgan culture (Ukraine, before 4000 B.C.; thought to be early Indo-European–speaking people) bones of domesticated pigs have also been found.

2. Germanic *sū-* appears in Old High German *sū*, Old Saxon *suga*, Middle Dutch *soge*, and Old English *sugu* = "female pig." The last became Modern English SOW.
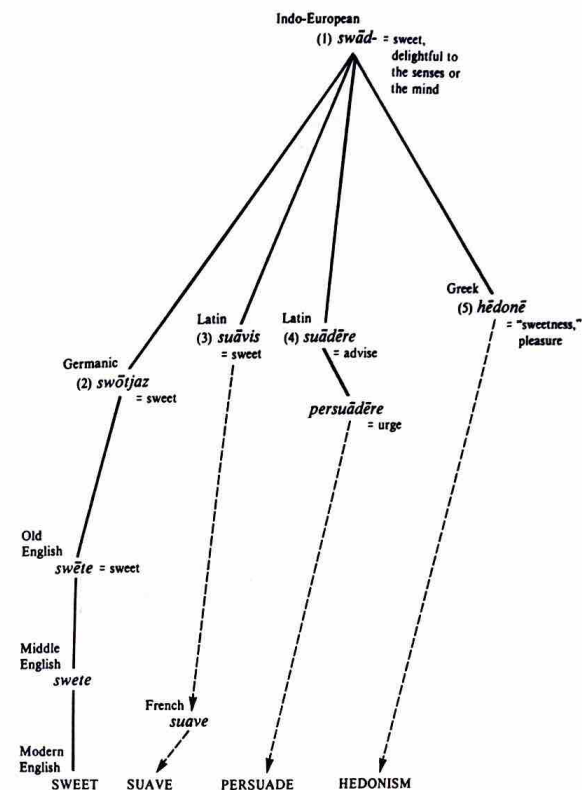
3. Germanic *swînam* = "pig" appears in Gothic *swein*, Old Norse *suin*, Old High German *swin*, and Old English *swîn*. The last became Modern English SWINE, now archaic as a term for the animal itself but remaining in current use as a term of abuse.

4. Celtic *sukkos* = "pig, pig's snout" appears in Middle Irish *soc* = "pig's snout, plowshare," Welsh *hwch* = "pig, sow," Cornish *hogh* = "pig," and British *hukk-* = "pig." (The change of initial *s* to *h* occurs elsewhere in Celtic. British is the language of the Celtic population of Britain, overrun by the Romans in the first century A.D. and by the Anglo-Saxons in the fifth century.) British *hukk-* is not recorded in any surviving document, but has been reconstructed by comparison with the other Celtic words cited above, and also as the source from which Old English *hogg* = "pig" must have been borrowed. It is thus one of the surprisingly small number of words known to have been borrowed by the Germanic invaders of Britain from the Celtic Britons. It became Modern English HOG.

5. Latin *sūs* = "pig" had the diminutive form *sūculus* = "pig." In three of the Romance languages there are comparable verbs meaning "to make dirty, to pollute": Catalan *sullar*, Provençal *solhar*, Old French *soillier*. On the basis of changes undergone by other Romance words inherited from Latin, these words are assumed to be descended from an unrecorded Latin verb *sūculāre* = "to make dirty," derived from the noun *sūculus* = "pig." Old French *soillier* was borrowed into Middle English as *soilen*, becoming Modern English SOIL (verb—not related to the noun SOIL = "earth, ground").

Indo-European
(1) *sus* = pig

Germanic
(2) *sū-*
= pig

(3) *swînam*
= pig

Celtic
(4) *sukkos*
= pig,
pig's snout

Latin
(5) *sūs* = pig

sūculus
= pig

(spoken)
Latin
sūculāre
= to make
dirty

Old
English
sugu
= female
pig

swîn
= pig

British
hukk-
= pig

Old
English
hogg
= pig

Old
French
soillier
= to make
dirty

Middle
English
sowe

Middle
English
swin

Middle
English
hogge
= pig

Middle
English
soilen

Modern
English
SOW

SWINE

HOG

SOIL
(verb)

swād-

1. The Indo-European word *swād-* = "sweet, pleasant" appears in Germanic *swōtjaz*, Latin *suāvis*, Greek *hēdus* (originally *swēdus*), and Sanskrit *svādus*, all meaning "sweet, pleasant, delightful to the senses or to the mind."

2. Germanic *swōtjaz* appears in Old Norse *soetr*, Old High German *suozi*, and Old English *swēte*, all meaning "sweet, delightful." The last became Modern English SWEET.

3. Latin *suāvis* = "sweet, delightful" was adopted into French as *suave* = "sweet," also "smoothly polite," borrowed into English as SUAVE.

4. Latin *suādēre* = "to advise (something) on someone," originally meant "to recommend something, to speak of something as being good." Its compound form *persuādēre* = "to urge (something) on someone" (*per-* being an intensive prefix) was adopted into English as PERSUADE; the object of the verb has changed from the thing urged to the person upon whom it is urged.

5. Closely related to Greek *hēdus* = "sweet, delightful" was *hēdonē* (originally *swēdonē*) = "pleasure." This was adopted into English (nineteenth century) to form the word HEDONISM, the theory that pleasure is the purpose of life.

syū-

1. The Indo-European root *syū-, sū-* = "to sew" is regularly represented in most of the language groups: Germanic *siwjan* = "to sew" and *saumaz* = "a seam," Latin *suere* = "to sew," Lithuanian *siuvù* = "sew," Sanskrit *sívyati* = "sews," *sūtra* = "thread."

Hand-sewing is presumably one of the oldest human technologies, going back long before the earliest reachable Indo-European community. The leather and textiles of that period have of course perished, but among the finds from the Kurgan III culture (Ukraine *c.* 3500–3000 B.C., thought to be an early Indo-European–speaking group) are thin copper awls, some of the first tools to be made from metal. The basic Indo-European word for "sew" was widely retained in core vocabularies from one end of the Indo-European world to the other, and a number of derivatives within the original language can also be recovered with certainty: *syūtos* = "sewn," *syūmen* = "thread," *syūdhla* = "awl or needle." (There were also other sewing terms, including *nētlom* = "needle," from which our word *needle* directly descends.)
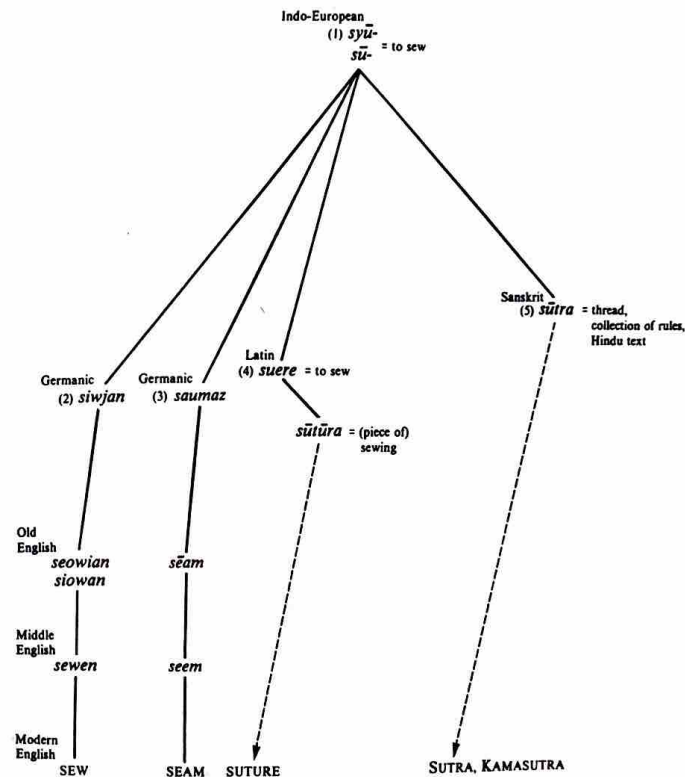
The unbroken tradition of hand-sewing within the family has survived into the industrialized world without fundamental change (although the needle and thread are no longer homemade). This tradition is exactly reflected by the handing down from adult to child, through hundreds of generations, of the word *syū-,* SEW.

2. *Syū-* regularly appears in Germanic *siwjan* = "to sew," becoming Gothic *siujan,* Old High German *siuwan,* and Old English *seowian* or *siowan,* all meaning "to sew." The Old English word became Modern English SEW. The original pronunciation, as the spelling still anachronistically shows, was /sue/, and this survived until the seventeenth century. The reason for the irregular change to /so/ is unknown.

3. The root also appears in Germanic *saumaz* = "a seam," becoming Old High German *soum,* Old Icelandic *saumr,* and Old English *sēam,* all meaning "seam." The last became Modern English SEAM.

4. Indo-European *sū-* and *syūtos* appear in Latin *suere* = "to sew" and its past participle *sūtus* = "sewn." From the latter was formed the noun *sūtūra* = "(piece of) sewing." This was adopted into English as the technical word SUTURE, = "surgical stitching, etc."

5. The Sanskrit word *sūtra* = "thread" was also used to mean a "string" of observations or collection of rules; the *Sutras* are various ancient Hindu texts, for example, the *Kama Sutra,* or collection relating to love; hence English KAMASUTRA.
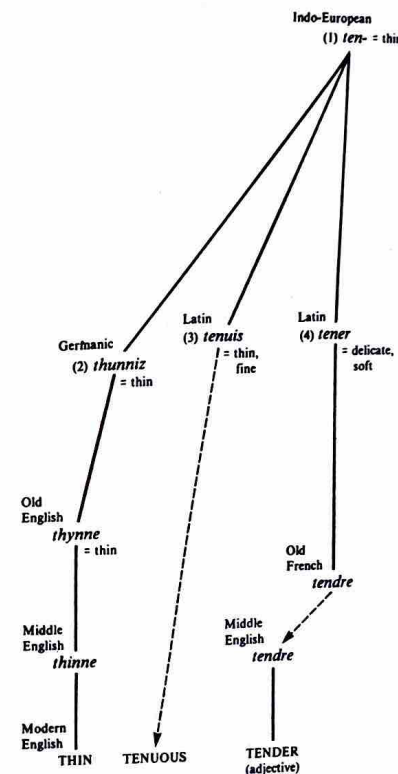

Indo-European
(1) *syū-*
sū- = to sew

Germanic
(2) *siwjan*

Germanic
(3) *saumaz*

Latin
(4) *suere* = to sew

sūtūra = (piece of) sewing

Sanskrit
(5) *sūtra* = thread, collection of rules, Hindu text

Old English
seowian siowan

sēam

Middle English
sewen

seem

Modern English
SEW

SEAM

SUTURE

SUTRA, KAMASUTRA

ten-

1. Indo-European *ten-*, with its adjectival form *tenus, tnus* = "thin," appears in Germanic *thunniz*, Old Irish *tana*, Latin *tenuis*, Lithuanian *ténvas*, Old Slavic *tinŭkŭ*, and Sanskrit *tánus*, all meaning "thin."

This is a derived use of the root *ten-* = "to stretch," hence words meaning "something stretched out," "thin," and "string."

2. Germanic *thunniz* (with regular change of Indo-European *t* to *th*) appears in Old Norse *thunnr*, Old High German *dunni*, and Old English *thynne*, all meaning "thin." The last became Modern English THIN.

3. Latin *tenuis* = "thin, fine, attenuated" was adopted into English (seventeenth century) as TENUOUS.

4. Related to Latin *tenuis* is Latin *tener* = "delicate, soft, tender." This became Old French *tendre*, borrowed thence into Middle English *tendre*, becoming Modern English TENDER.

Indo-European
(1) *ten-* = thin

Germanic
(2) *thunniz*
= thin

Latin
(3) *tenuis*
= thin, fine

Latin
(4) *tener*
= delicate, soft

Old English
thynne
= thin

Old French
tendre

Middle English
thinne

Middle English
tendre

Modern English
THIN

TENUOUS

TENDER
(adjective)

trei (II)

1. The ordinal adjective from *trei* = "three" was *trityos* = "third." This appears in Germanic *thrithyaz*, Latin *tertius*, Lithuanian *trẽcias*, Old Slavic *tretij*, Greek *tritos*, Tocharian *trit*, and Sanskrit *trtiya*, all meaning "third."

2. Germanic *thrithyaz* (with regular change of *t* to *th*) appears in Gothic *thridja*, Old Norse *thrithi*, Old High German *dritto* (whence Modern German *dritte*), and Old English *thridda*, all meaning "third." The Old English variant *thirdda*, first appearing in the Northumbrian dialect in the tenth century, later became the standard English form, giving Modern English THIRD (instead of *thrid*).

Formed from Old Norse *thrithi* = "third" was *thrithjungr* = "third part" (*-ungr* is a noun suffix). From the eighth century to the tenth, large numbers of Norse people settled in northern England. The city of York was for a while the seat of an independent Norse principality. The large region later called Yorkshire was divided into three districts, each called a *thrithjungr* = "third part." Borrowed into late Old English this word became *thriding*. The districts were thus called the *North-thriding*, the *East-thriding*, and the *West-thriding*. By the twelfth century the implicit connection with "three" had been forgotten, and the names were being rendered as North *Riding*, East *Riding*, West *Riding*. They remained the basic administrative divisions of Yorkshire, each as big as a separate county, until abolished by the London government in the 1970s. Emigrant Yorkshiremen have carried their special term *Riding* into various countries. Long Island, New York, was in the seventeenth century divided into *ridings*. And the term has been permanently adopted in Canadian English as the name of an electoral district.

3. Formed from Latin *tertius* = "third" was *tertiārius* = "belonging to a third rank or grade." This was adopted into English (sixteenth century) as TERTIARY.

4. Also from *trei* are a number of derivatives in *tri-*, including Latin *triplus* = "threefold." This was inherited in Old French as *treble*, which was borrowed into Middle English (fourteenth century) as TREBLE. Latin *triplus* was later separately adopted into French as *triple*, which was also borrowed into English (sixteenth century) as TRIPLE.

5. Among the numerous other Latin compounds in *tri-* are *triangulum* = "three-angled figure," adopted into Middle English as TRIANGLE, and *tridens, trident-* = "three-tined spear" (*dent-* = "tooth"; *see* dent-), adopted as TRIDENT.

Similarly, Greek *trigōnon* = "three-angled figure" (*gōnia* = angle; *see* genu = "knee") was adopted into mathematical New Latin (seventeenth century) to form the term *trigono-metria* = "triangle-measurement," whence English TRIGONOMETRY; and Greek *tripous, tripod-* = "three-footed vessel" (*pod-* = "foot"; *see* ped- = "foot") was adopted as TRIPOD.
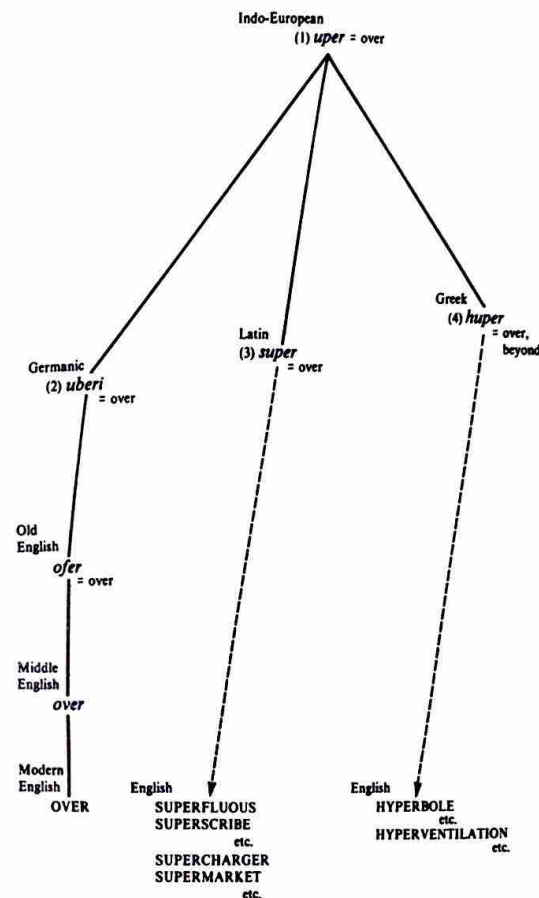
1. The Indo-European adverb/preposition *uper* = "over" appears in Germanic *uberi*, Celtic *for-*, Latin *super*, Greek *huper*, and Sanskrit *upári*, all meaning "over."

2. Germanic *uberi* appears in Gothic *ufar*, Old Norse *yfir*, Old High German *ubar* (whence Modern German *uber*), Old Frisian *over*, and Old English *ofer*, all meaning "over." Old English *ofer* became Modern English OVER.

3. Latin *super* = "over" was used as a prefix to form such words as *superfluus* = "overflowing," *superscribere* = "to write above"; these have been adopted into English as SUPERFLUOUS and SUPERSCRIBE, along with many others. *Super-* itself has been adopted as a prefix, forming new words such as SUPERCHARGER, SUPERMARKET.

4. Greek *huper* = "over, beyond" was likewise used as a prefix to form, for example, *huperbolē* = "a throwing beyond, exaggeration," adopted into English as HYPERBOLE. The prefix HYPER- has also become productive in English: HYPERCORRECTION = "excessive correction"; HYPERVENTILATION = "abnormally deep breathing," etc.

Indo-European
(1) *uper* = over

Germanic
(2) *uberi* = over

Latin
(3) *super* = over

Greek
(4) *huper* = over, beyond

Old English
ofer = over

Middle English
over

Modern English
OVER

English
SUPERFLUOUS
SUPERSCRIBE
etc.
SUPERCHARGER
SUPERMARKET
etc.

English
HYPERBOLE
etc.
HYPERVENTILATION
etc.

upo
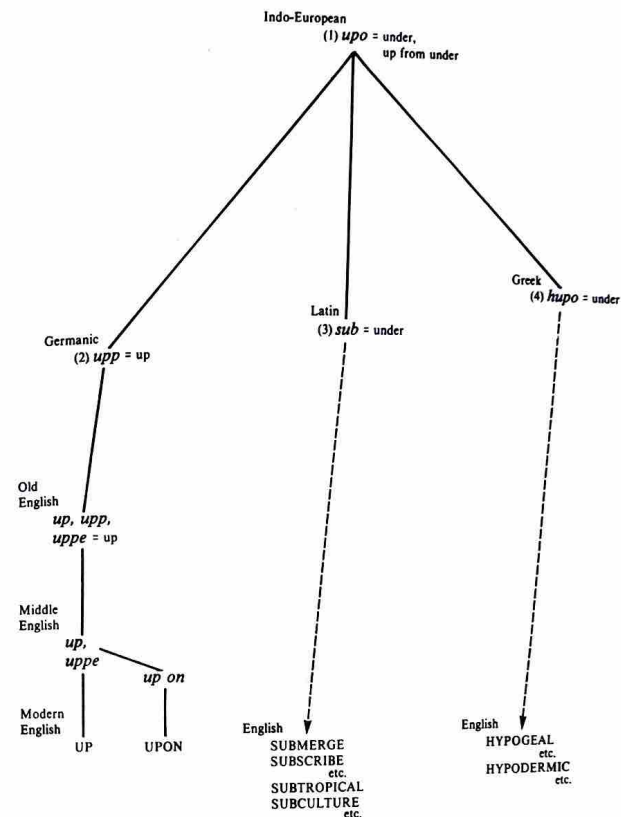
1. The Indo-European adverb/preposition *upo*="under," also "up from under," appears in Germanic *upp*="up," Old Irish *fo*="under," Latin *sub* ="under," Greek *hupo*="under," and Sanskrit *upa*="at, by."

2. Germanic *upp* appears in Old Norse *upp*, Old High German *uf* (whence Modern German *auf*), and Old English *up, upp, uppe,* becoming Modern English UP.

In Middle English the prepositional phrase *up on* appeared, becoming Modern English UPON.

3. Latin *sub*="under, up from under" was freely used as a prefix, forming such compounds as *submergere*="to sink under water" and *subscribere*="to write (one's name) under." Many of these have been adopted into English: SUBMERGE, SUBSCRIBE. The prefix itself has also been adopted, forming new English words such as SUBTROPICAL, SUBCULTURE, etc.

4. Greek *hupo*="under" was also used as a prefix in such words as *hupogaios*="underground," adopted into English as HYPOGEAL. This prefix, too, has been adopted into English: HYPODERMIC="under the skin," etc.

Indo-European
(1) *upo* = under, up from under

Germanic
(2) *upp* = up

Latin
(3) *sub* = under

Greek
(4) *hupo* = under

Old English
up, upp, uppe = up

Middle English
up, uppe   *up on*

Modern English
UP   UPON

English
SUBMERGE
SUBSCRIBE
etc.
SUBTROPICAL
SUBCULTURE
etc.

English
HYPOGEAL
etc.
HYPODERMIC
etc.

1. Indo-European *wē-* = "to blow" appears in Old Irish *feth* = "air," Lithuanian *vejas* = "wind," Old Slavic *vejetŭ* = "blow," Greek *awesi* = "blows," and Sanskrit *vắti* = "blows."

Its derivative noun *wedhrom* = "wind," also "state of the wind, weather," appears in Germanic *wedram* = "weather," Lithuanian *vidras* = "storm," and Old Slavic *vedro* = "good weather."

Another derivative noun *wēntos* = "wind" appears in Germanic *windaz*, Welsh *gwynt*, Latin *ventus*, Tocharian *want-*, and Hittite *hu-want-*, all meaning "wind."

2. Germanic *wedram* appears in Old Norse *vedhr*, Old High German *wetar* (whence Modern German *wetter*), and Old English *weder*, all meaning "weather." Old English *weder* became Middle English *wethyr* (with the same change of *d* to *th* as in *mother, father*), and Modern English WEATHER.

3. Germanic *windaz* appears in Gothic *winds*, Old Norse *vindr*, Old High German *wint* (whence Modern German *wind*), and Old English *wind*, all meaning "wind." Old English *wind* became Modern English WIND.

Formed from Old English *wind* was *windwian* = "to ventilate threshed grain so that the chaff is blown off"; this was done with a device for throwing or tossing the grain up, in a suitable cross-draft. Old English *windwian* became Middle English *winwen*, Modern English WINNOW.
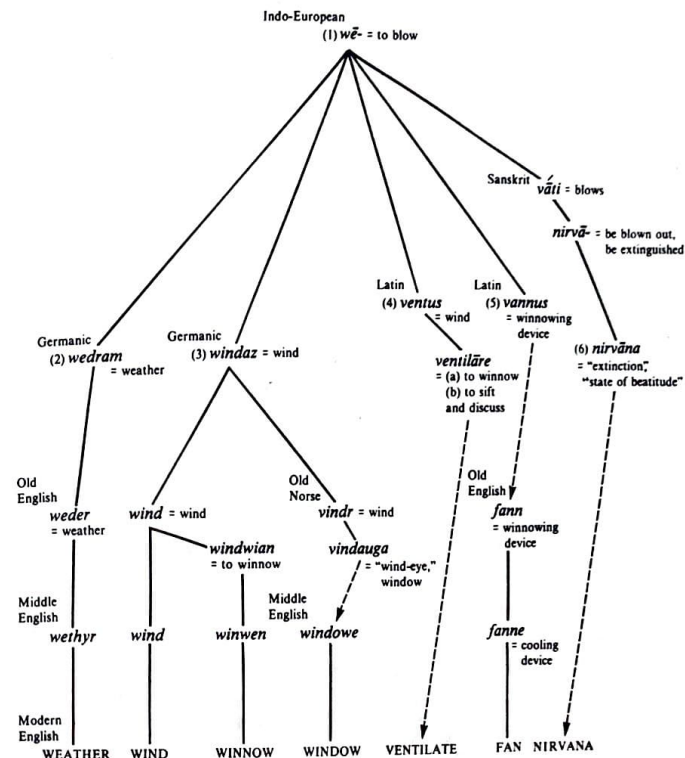
The Old Norse word *vindauga* = "window" literally meant "wind-eye," from *vindr* + *auga* = "eye." It was borrowed into Middle English as *windowe*, becoming Modern English WINDOW.

4. Latin *ventilāre* = "to expose to wind" is formed from *ventus* = "wind" in a similar manner to Old English *windwian* from *wind*. The meaning was also the same; *ventilāre* meant "to winnow threshed grain" and also "to sift out a subject, open it up for discussion." It was adopted into English as VENTILATE, at first meaning "to sift and discuss," and later also "to bring fresh air into a building, etc."

5. Also from this root, and presumably originally meaning "blower," is Latin *vannus* = "winnowing device." The basic form of this was a scoop or shovel by which the grain was shaken or tossed in the air, preferably in a cross-breeze, so that the chaff blew off and the grain remained.

This was borrowed into Old English as *fann* = "winnowing device," becoming Middle English *fanne*. In the sixteenth century this word began to be used also to mean a hand-held device for ventilating oneself with a cooling breeze. It became Modern English FAN.

6. Sanskrit *nirvāna* = (in Buddhism and Hinduism) "the state of absolute beatitude when the self and its passions have been extinguished"; its literal meaning was "the blowing out, extinction," from *nirvā-* = "to be blown out": *nir* = "out" + *vā-* as in *vắti* = "blows." This was borrowed into English in the nineteenth century as NIRVANA.

wed-

1. The Indo-European root *wed-* ="wet" has variant forms *wēd-*, *wod-*, *wōd-*, and *ud-*, and derivative nouns *wodōr, udōr* ="water." They appear in Germanic *wēt-* ="wet" and *watar* ="water," and in Old Irish *uisge*, Old Slavic *voda*, Greek *hudōr*, Hittite *wātar*, and Sanskrit *uda*, all meaning "water."

2. The root-form *wēd-* regularly became Germanic *wēt-*, appearing in Old Norse *vātr*, Old Frisian *wēt*, and Old English *wǣt*, al meaning "wet." From Old English *wǣt* came the verb *wǣtan* ="to make wet," becoming Middle English *weten*, with past participle *wette* ="wetted." This became the Modern English adjective WET. (If the Old English adjective *wǣt* itself had survived, it would have become Modern English *weet*.)

3. The noun form *wodōr* ="water" became Germanic *watar*, appearing in Old High German *wazzar* (whence Modern German *wasser*), Old Frisian *weter*, and Old English *wæter*; the last became Modern English WATER.

4. The root-form *ud-*, with a suffix *-ski-*, appears in Old Irish *uisge* = "water."

   The art of distilling alcohol from wine, unknown to the Greeks and Romans, was probably discovered in the twelfth century by alchemists working at Salerno. The resulting liquor was named in Latin *aqua vītae* = "water of life." Thereafter it was manufactured in monasteries under conditions of secrecy, until in the sixteenth century hundreds of monasteries were abolished in the Reformation. Distillation then suddenly became known all across Europe, and the term *aqua vītae* was rendered into the various languages, becoming, for example, Swedish and Danish *akvavit*. The Gaels of Ireland and of Highland Scotland learned the technique at this time, and translated the name as (Irish) *uisge beathadh* and (Scottish) *uisge beatha*, both meaning "water of life" (for *beatha* ="life"; *see* **gwei-**). These were borrowed into Elizabethan English as USQUEBAUGH. This was later changed to *whiskybae*, and then shortened to WHISKY.

5. The root word *wod-* appears in Old Slavic *vod-*, as in Russian *voda* = "water." Distillation also began in Russia in the early sixteenth century. The liquor was called *vodka* ="little water," doubtless also a partial translation of *aqua vītae*, as above. VODKA was borrowed into English in the nineteenth century.

6. The noun form *udōr* appears in Greek *hudōr* ="water." This, in its Latinized spelling *hydr-, hydro-*, has been adopted into English as a word-forming element, as in HYDROELECTRIC, etc.

Indo-European
(1) *wed-* = wet, water
wod-

Greek
(6) *hudōr* = water
hudr-

Germanic
(2) *wēt-* = wet

Germanic
(3) *watar* = water

Old Irish
(4) *uisge* = water

Old Slavic
(5) *vod-* = water

Old English
wǣt = wet   *wæter* = water

wǣtan = to wet

Middle English
weten   *water*

wette = wetted

Irish
uisge beathadh = "water of life"

Russian
voda = water

vodka = "little water"

Modern English
WET   WATER   WHISKY   VODKA   HYDRO-

wegh-

1. Indo-European *wegh-* = "to go, to travel, to ride in a vehicle, to carry by vehicle," with its derivatives *weghnos* = "vehicle," *weghos* = "a going, travel," *weghtis* = "a carrying, transportation," appears in Germanic *wagnaz* = "vehicle," *wegaz* = "road," *wigan* = "to carry," Old Irish *fēn* = "vehicle," Old Latin *vehere* = "to transport in a vehicle," Lithuanian *vežimas* = "vehicle," Old Slavic *vozŭ* = "vehicle," Greek *(w)okhos* = "vehicle, chariot," and Sanskrit *vahanam* = "chariot, ship" and *váhati* = "he carries in a chariot."

Wheeled vehicles may have been invented in Mesopotamia *c.* 4000 B.C., or by the Indo-European Kurgan people living in southern Russia at the same date. A further Indo-European contribution was probably the harnessing of the horse. The subsequent large-scale migrations of Kurgan elements south through the Middle East and west into Europe, almost certainly resulting in the dissemination of the Indo-European languages, was largely assisted by four-wheeled wagons, as shown by finds of pieces of vehicles buried in high-status graves and by numerous pottery models of vehicles, covering the period 3000–2000 B.C. The light war-chariot with two spoked wheels was developed before 2000 B.C. and thereafter was a favorite weapon of separate Indo-European warrior aristocracies.

(See also **ekwos** = "horse," **kwekwlos** = "wheel," and *yugom* = "yoke" [in **yeug-** = "to join"].)
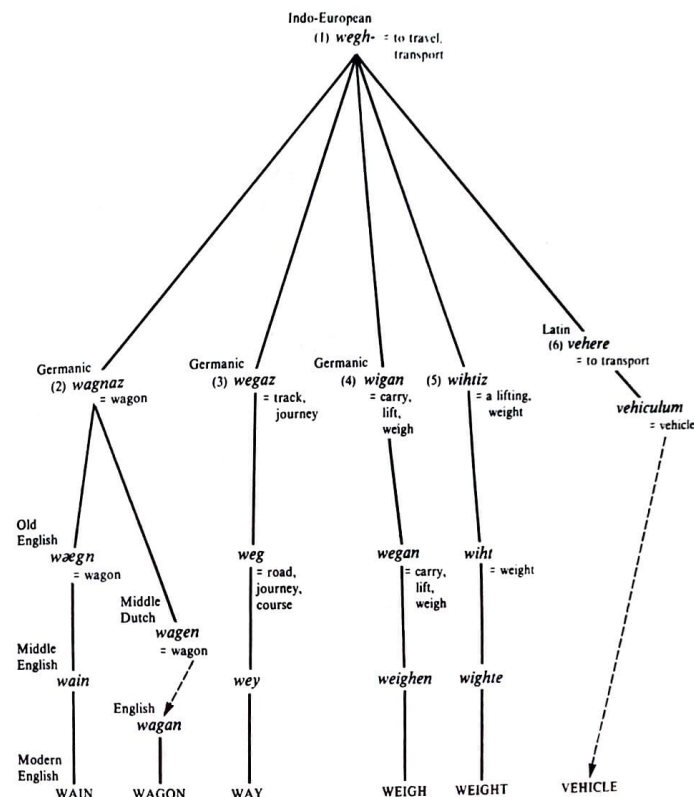
2. Germanic *wagnaz* = "vehicle" appears in Old Norse *vagn,* Old High German *wagen* (whence Modern German *wagen* as in *Volkswagen* = "people's vehicle"), Middle Dutch *wagen,* and Old English *wægen,* all meaning "vehicle." Old English *wægn, wægen, wæn* became Modern English WAIN, surviving only in rural dialects in England, and in poetry. Later the English borrowed the Dutch word *wagen,* which became WAGON or WAGGON.

3. Germanic *wegaz* = "track, road, journey" appears in Gothic *wigs,* Old Norse *vegr,* Old High German *weg,* and Old English *weg* = "road, path"; the last became Modern English WAY.

4. Germanic *wigan* = "to transport, carry" had also the meaning "to lift on a balance or scale, to ascertain the weight of"; it appears in Old Norse *vega* = "to lift, weigh," Old High German *wegan* = "to move, weigh," and Old English *wegan* = "to carry, weigh"; the last became Modern English WEIGH, retaining only the secondary Germanic meaning except in the nautical phrase *to weigh anchor* = "to lift the anchor."

5. Germanic *wihtiz* = "a lifting, carrying," hence "a weighing, the amount something weighs," appears in Old Norse *vett, vætt,* Old Frisian *wicht,* and Old English *wiht* = "weight," becoming Modern English WEIGHT.

6. Latin *vehere* = "to transport in a vehicle" was also used in the passive *vehī* to mean "to travel in a vehicle." From it was formed the noun *vehiculum* = "a conveyance of any kind," which was adopted into English (seventeenth century) as VEHICLE.

weid-

1. The Indo-European verb *weid-, wid-* meant "to see," especially in the sense "to see intellectually, to perceive, to understand," with derivatives in the perfect tense meaning "to have seen and understood," hence "to know," and further derivatives referring to knowledge. It appears in Germanic *wit-* = "knowledge," *wissaz* = "having knowledge," and *witan* = "to know," Latin *vidēre* = "to see," Old Slavic *viděti* = "see" and *věděti* = "to know," Greek *(w)eidenai* = "to know" and *(w)idea* = "appearance," and Sanskrit *vetti* = "knows" and *vēda* = "knowledge."

2. Germanic *wit-* = "knowledge, understanding" appears in Gothic *un-witi* = "ignorance," Old Norse *vit* = "understanding," and Old English *wit, witt* = "understanding, intelligence." The last became Modern English WIT (noun), now usually meaning "verbal humor" but also retaining its original meaning "native intelligence."

   The Germanic noun *wit-nass-* = "knowledge, cognizance" appears in Old English *witnes* = "knowledge, legal attestation of a fact, testimony," becoming Modern English WITNESS.

   The Germanic verb *witan* = "to know" appears in Old English *witan*, now surviving only as an archaic word, WIT (verb) = "to know."
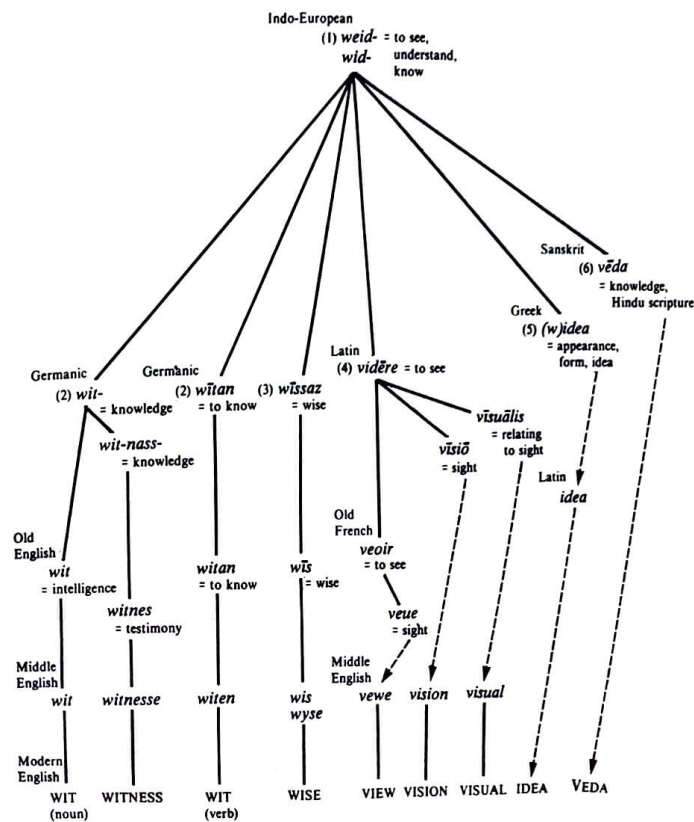
3. Germanic *wissaz* (representing Indo-European *weidtos* = "provided with experience and understanding") appears in Gothic *-weis*, Old Norse *víss*, Old High German *wîs*, and Old English *wîs* = "having good judgment, wise"; becoming Modern English WISE.

4. With Latin *vidēre* = "to see" was the noun *vīsiō* = "ability to see, sight, something seen." This was adopted into Old French as *vision*, and thence into (Middle) English as VISION. Similarly, Latin *vīsuālis* = "relating to sight" was adopted as VISUAL.

   Latin *vidēre* was also inherited into Old French as *veoir* = "to see," with past participle *veue* = "seen," also "something seen, a sight, a prospect." This was borrowed into Middle English as *vewe*, becoming Modern English VIEW.

5. Greek *idea* (originally *widea*) = "appearance, form, ideal form, mental conception" was adopted into Latin as *idea* and thence into English (sixteenth century) as IDEA.

6. Sanskrit *vēda* = "knowledge," also "sacred knowledge, sacred text," was used as the name of the four sacred scriptures of the Hindus, of which the oldest is the *Rigvēda* = "Praise-Scripture" (*ric* = "praise"). *Vēda* and *Rigvēda* were adopted into English (eighteenth century) as VEDA and RIGVEDA. The form of Sanskrit in which the *Vedas* are written is called VEDIC (most of the Sanskrit words cited in this book are in Vedic).

wel-

1. Indo-European *wel-* = "to wish (for)" appears in Germanic *wilyan* = "to wish," *wilyon* = "desire," and *wel-* = "desirably," Middle Welsh *gwell* = "better," Latin *volō* = "I wish," Lithuanian *pa-vélmi* = "wish," Old Slavic *veljĕ* = "will," Greek *(w)leiein* = "wish," Avestan *var-* = "choose, wish," and Sanskrit *varayáti* = "wish for oneself" (with regular change of Indo-European *l* to Indo-Iranian *r*).

2. The Germanic verb *wilyan* appears in Gothic *wiljan*, Old Norse *volja*, Old Frisian *willa*, and Old English *willan*, all meaning "to wish," and also used as a "modal auxiliary" forming future tenses (as in *I will go*). The last became Modern English WILL (verb).

The Germanic noun *wilyon* appears in Gothic *wilja*, Old Norse *vili*, Old High German *willo*, and Old English *willa*, all meaning "desire, wish." The last became Modern English WILL (noun).
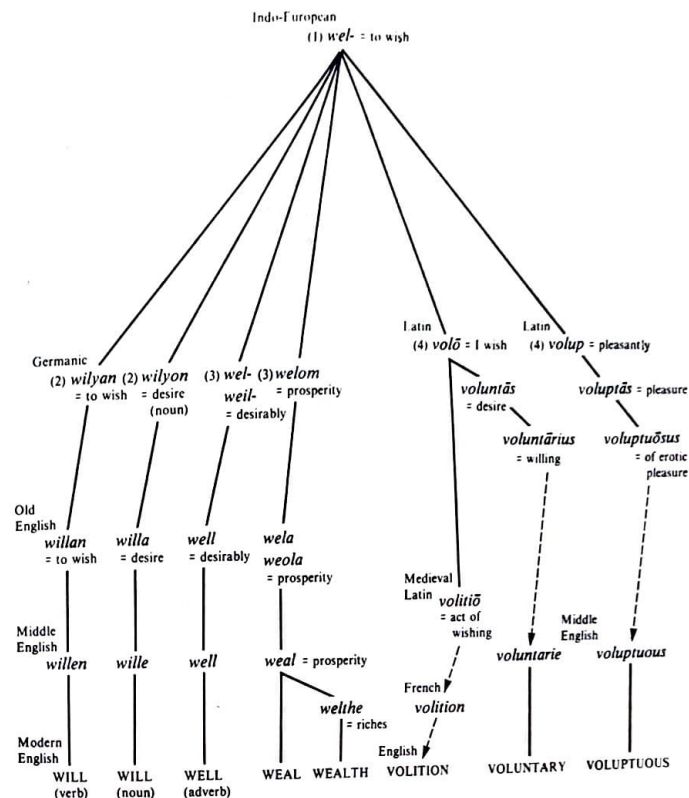
3. The Germanic root *wel-*, *weil-* was used adverbially to mean "as one would wish, in accordance with one's preferences, desirably, satisfactorily." It appears in Gothic *waila*, Old Norse *vel*, Old High German *wola* (whence Modern German *wohl*), and Old English *well;* whence Modern English WELL (adverb).

The Germanic noun *welom* = "happiness, prosperity, riches" appears in Old Saxon *wela* and Old English *wela*, *weola* = "prosperity, riches." The latter became Middle English *weal* (whence the archaic noun WEAL); from this also was formed the noun *welthe* (with abstract suffix *-th* modeled after *health*) = "riches," Modern English WEALTH.

4. From Latin *volō* = "I wish" was formed the Medieval Latin abstract noun *volitiō* = "wish, the act of wishing." This was adopted into French as *volition* and thence into English as VOLITION.
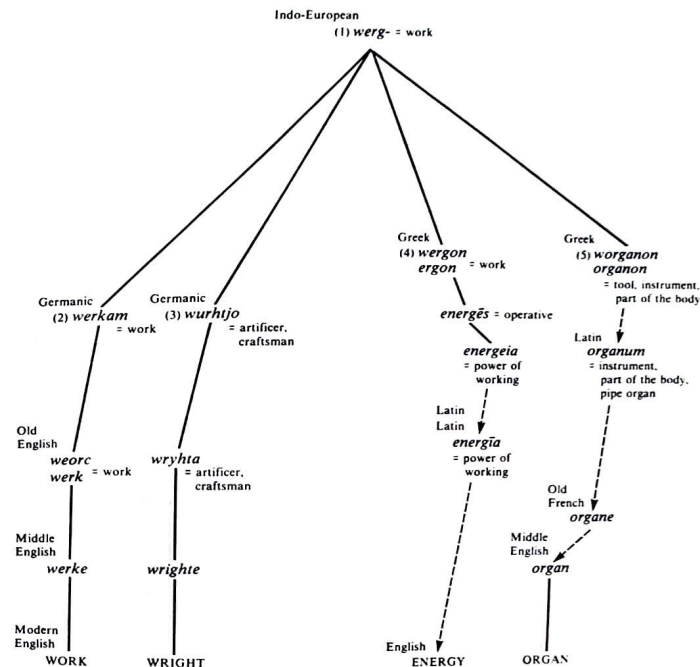
From *volō* also was formed the noun *voluntās* = "desire, goodwill, consent, agreement, will"; hence the adjective *voluntārius* = "according to one's will, willing," which was adopted into (Middle) English as *voluntarie*, becoming Modern English VOLUNTARY.

Closely related to *volō* was Latin *volup* = "pleasantly," with the noun *voluptās* = "pleasure," used especially of erotic pleasure. From this was formed an adjective *voluptuōsus* = "of or devoted to erotic pleasure," which was adopted into (Middle) English as VOLUPTUOUS.

werg-

1. The Indo-European verb *werg-* ="to work," with its derivative noun *wergom* ="work," appears in Germanic *werkam* ="work" and *wurhtjo* = "artificer," Old Breton *guerg* ="efficacious," Greek *(w)ergon* ="work" and *(w)organon* ="tool," Armenian *gorc* ="work," and Avestan *varəz-* ="to work, make."

2. Germanic *werkam* appears in Old Norse *verk*, Old High German *werc*, and Old English *weorc, werk*, all meaning "work." The last became Modern English WORK.

3. Germanic *wurhtjo* appears in Old High German *wurhto*, Old Frisian *wrichta*, and Old English *wryhta*, all meaning "artificer, craftsman." The last became Modern English WRIGHT, now surviving chiefly in a few terms such as *cartwright* and *shipwright*, referring to crafts now all but obsolete, and in the literary (seventeenth-century) term PLAYWRIGHT; and in numerous English surnames.

4. From Greek *ergon*, originally *wergon*, ="work" was formed the adjective *energēs* ="working within, effective, operative" (*en* ="in"), from which Aristotle coined the noun *energeia* ="the ability to operate, the power of working." This was adopted into Late Latin as *energia* and thence into English as ENERGY, now defined in physics as a fundamental property of matter.

5. Greek *organon*, originally *worganon*, basically meant "tool, instrument." It was used in various specialized senses, including "musical instrument" and "part of the body regarded as a tool," such as the eye or the tongue. It was adopted into Latin as *organum* ="instrument, musical instrument," applied by early Christians especially to a church instrument in which pipes were played by means of a bellows. It was adopted into Old French as *organe*, and thence into (Middle) English as ORGAN, at first meaning only "pipe organ," later (fifteenth–sixteenth centuries) receiving also the Greek and Latin meanings of "specialized part of a plant or animal."

1. The Indo-European root *yeug-* = "to join," with derivatives referring to the yoking of draft animals, especially the noun *yugom* = "a yoke," appears in Germanic *yukam* = "yoke," Old Welsh *iou* = "yoke," Latin *jungere* = "to join" and *jugum* = "yoke," Lithuanian *jùngiu* = "join" and *jùngas* = "yoke," Greek *zeugnūmi* = "join" and *zugon* = "yoke," Hittite *iugan* = "yoke," and Sanskrit *yunákti* = "harnesses, joins" and *yúgam* = "yoke."

The yoke is a heavy bar of wood, carved to fit rigidly over the necks of two draft animals, fastened around their necks, and attached to a pole between the animals by which they are made to pull a plow or vehicle. It has been used from the earliest times, especially with oxen, whose great strength makes them almost impossible to harness without the rigidity and weight of a yoke. The Indo-European word *yugom* is so widely and exactly represented as to be a guarantee that the earliest Indo-European–speaking people (probably before 4000 B.C.) possessed this fundamental device for harnessing ox power.

2. Germanic *yukam* appears in Gothic *juk*, Old Norse *ok*, Old High German *juch*, and Old English *geoc*, all meaning "yoke." *Geoc* (pronounced /yōk/) became Modern English YOKE.

3. In Latin *jungere* = "to join" the *n* is a "nasal infix." Jungere was inherited into Old French as *joindre*, with the stem *joign-*, which was borrowed into Middle English as *joinen*, becoming Modern English JOIN. From Latin *jungere* was also formed the abstract noun *junctiō* = "a joining"; this was adopted directly into English (sixteenth century) as JUNCTION.

4. From Latin *jugum* = "yoke" was formed the diminutive noun *jugulum* = "little yoke," hence "collarbone, neck." This had the Late Latin adjective *jugulāris* = "relating to the neck," which was adopted into medical English as JUGULAR, referring especially to two major veins in the neck.
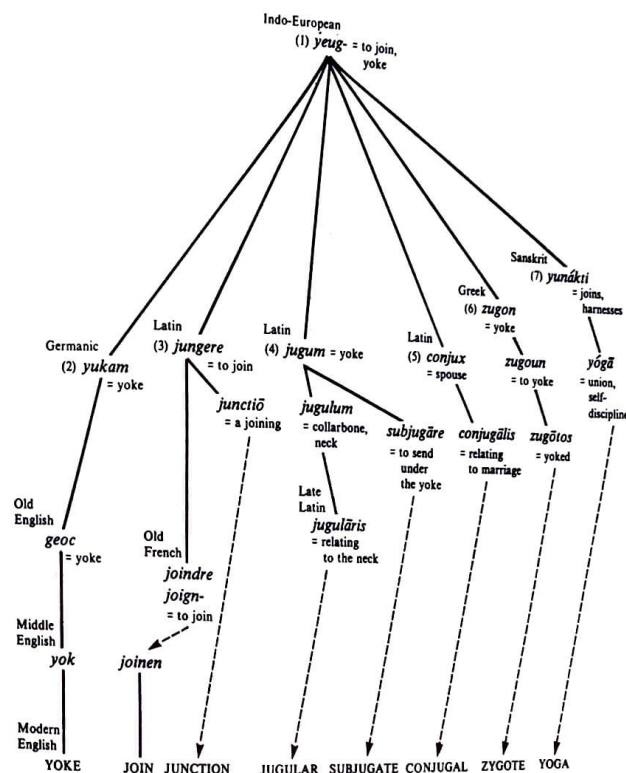
To the Romans (as to others) the yoke was a symbol of domestication and servitude. A traditional practice of victorious Roman armies was to set up after the battle a symbolic yoke formed by two spears stuck in the ground, with a third forming the crosspiece, and to make the defeated enemy pass under it as a ritual of total surrender. The verb *subjugāre*, from *sub* = "under" + *jugum* = "yoke," meant "to send an enemy under the yoke," and thence also "to conquer," whether or not the ritual was used. This was adopted into English as SUBJUGATE.

5. Latin *conjux*, with stem *conjug-*, meant "spouse." It seems originally to have meant "yokefellow" (the prefix *con-* = "together"), and there are comparable nouns in Germanic, Greek, and Sanskrit. From it was formed *conjugālis* = "relating to marriage," adopted into English as CONJUGAL.

6. With the Greek noun *zugon* = "yoke" was the verb *zugoun* = "to yoke," hence an adjective *zugōtos* = "yoked." This was adopted into scientific

English (nineteenth century) as ZYGOTE = "cell formed by the joining of a sperm cell with an egg cell."

7. Closely related to the Sanskrit verb *yunákti* = "joins, harnesses" is the noun *yógā* = "union, a harnessing, self-discipline." This was used as the name of several Hindu systems of spiritual self-discipline, some combined with physical exercises: borrowed as YOGA.

selection of sound-changes

(occurring at the beginnings of words)

Indo-European	Germanic	Celtic	Latin	Greek	Slavic	Sanskrit
p	f	(zero)	p	p	p	p
t	th	t	t	t	t	t
k	h	k	k	k	s	s
b	p	b	b	b	b	b
d	t	t	t	t	t	b
g	k	g	g	g	z	t
bh	b	b	f	ph	b	j
dh	d	d	th	th	d	bh
gh	g	g	h	kh	z	dh
s	s	s	s	h	s	h
m	m	m	m	m	m	s
n	n	n	n	n	n	m
r	r	r	r	r	r	n
l	l	l	l	l	l	r *or* l
w	w	w	v	(zero)	v	l *or* r
						v