The Craft of Scientific Writing

Revised Edition, 2013-2014

Gershom (J.M.L.) Martin,
gershom@weizmann.ac.il
Kimmelman 361

Unit 1

- A brief history of English
- What makes English different?

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Status of English in the world today

- 2nd largest number of native speakers (after Mandarin Chinese)
- mother tongue for 360 million
  - second language for another 380 million
  - total speakers (1st, 2nd, or additional language) over 1 billion
- most commonly taught foreign language worldwide
- de facto *lingua franca* (language of international communication) of the modern era
  - and likely to remain so for the foreseeable future
    - especially in the sciences: 95% of all scientific papers are written in English.

First: the writing system/script? (Latin alphabet)

- **Phoenician abjad/alephbet (from Proto-Canaanite)**
- **Phoenician traders introduced it to Ancient Greece, where adopted (driving out the syllabic script Linear B of Myceanean Greek).**
- **Evolved in different variants. Standardized 403 BCE by Athens: Ionian alphabet (Alphabet Yevvani) became "the" Greek alphabet**
- **Greek colonies in Italy: Etruscans adapted Greek alphabet for own use -> Etruscan alphabet**
- **Early Romans spoke their own "Latin" language (from Latium, the region around Rome: called Lazio in modern Italian). They adopted 21 out of 26 Etruscan letters**
- **A B C D E F Z H I K L**
  M N O P Q R S T V X

Significantly, Greek and its successor languages spell out all vowels. Unlike the Semitic "abjad"/syllabary scripts, Latin script is at least in principle phonetic

- A B C D E F Z H I K L M N O P Q R S T V X

- K was rarely used: generally C for same sound

- 3rd century BCE (era of the Republic): Z dropped, replaced by new letter G

- After conquest of Greece in 1st century BCE, letters Y ("i Graeca"/"Greek I") and Z ("zeta") re-adopted from Greek, placed at end of alphabet.

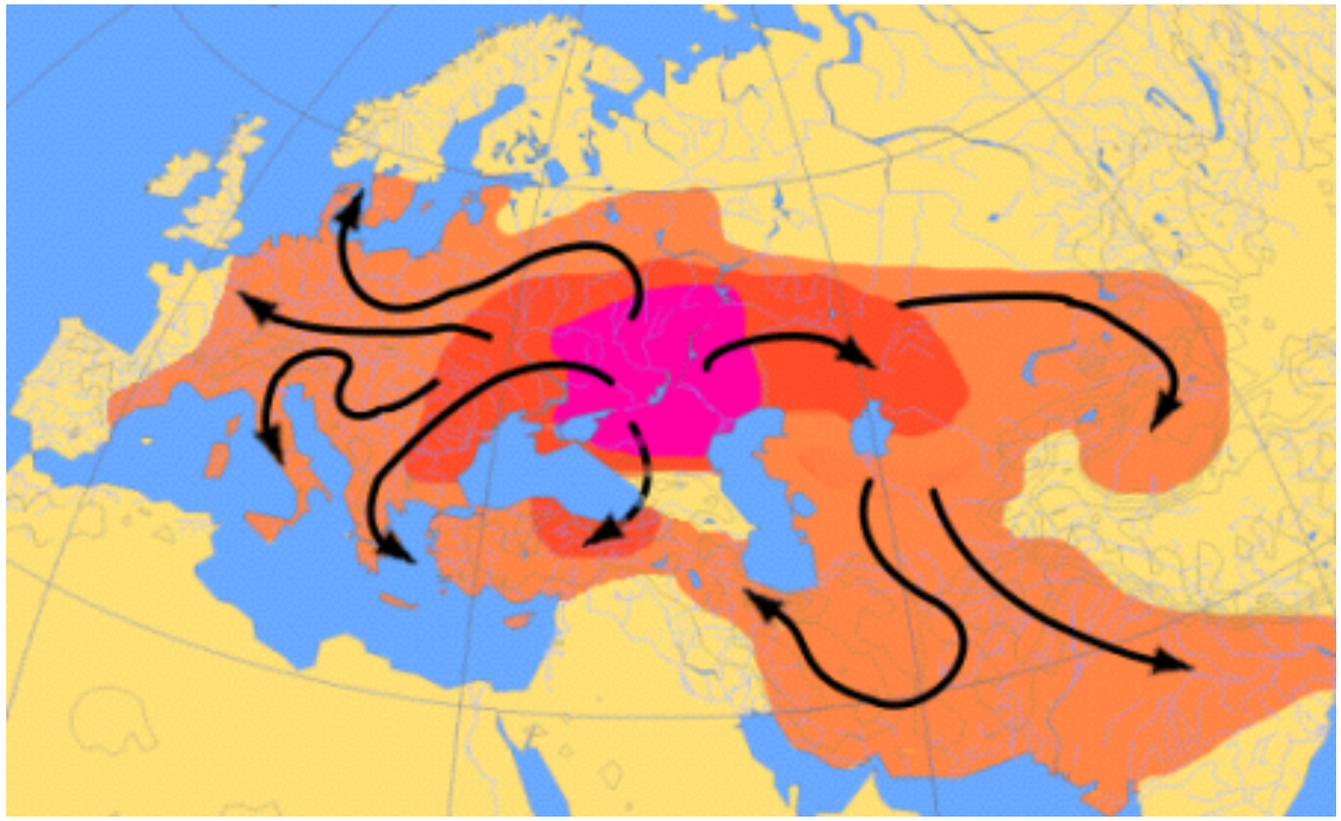
- In Middle Ages, when used to represent early Romance and Germanic languages, use of I for both vowel and consonant became inconvenient: split into "I" and "J". Ditto with "V": split into "U" and "V".

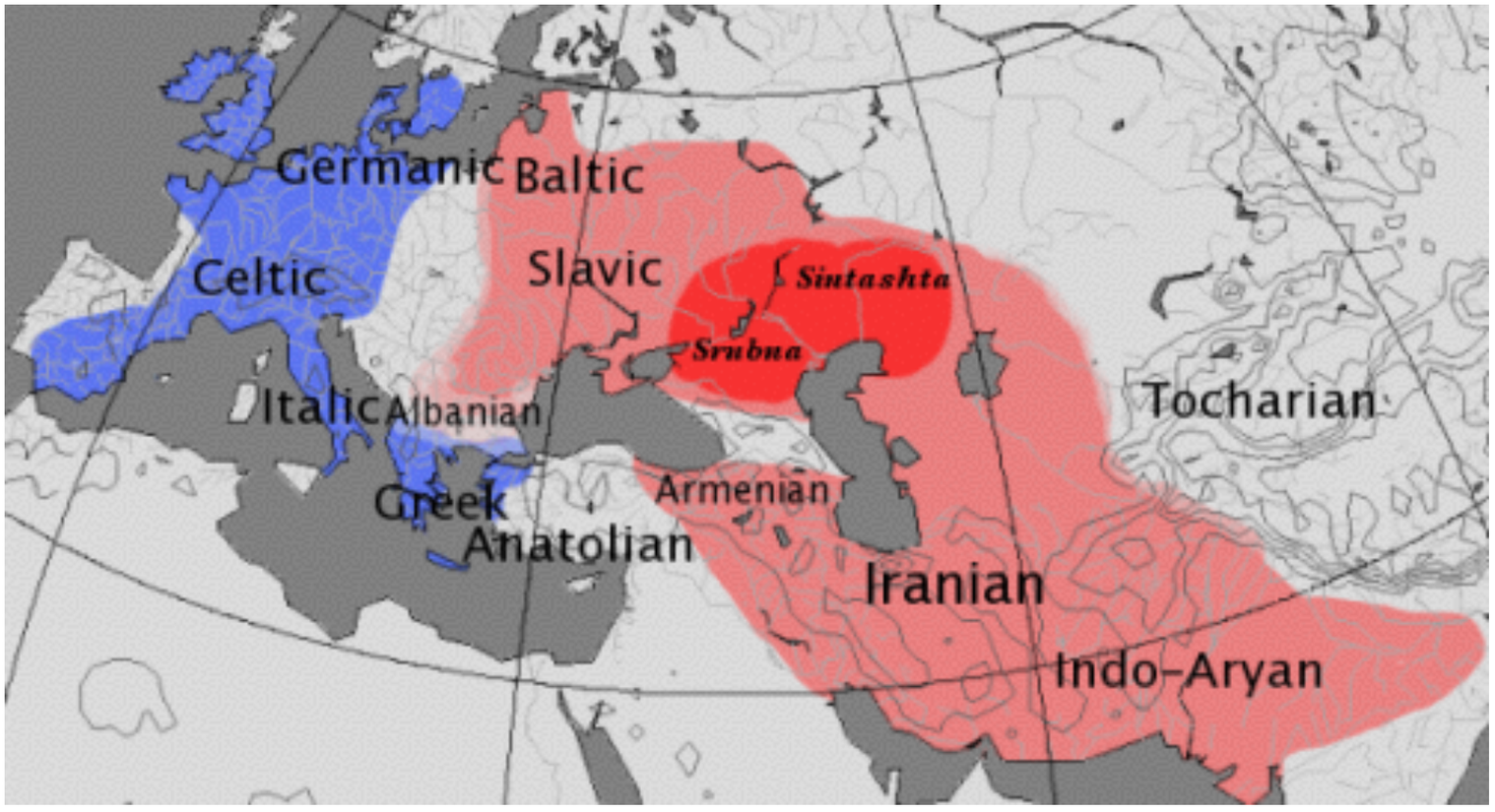
- W evolved from ligature of two Vs (VV: cf. French name "double v", English name "double u"). Used in Old English as early as 7th Century.

- The "thorn" (Þ, þ) for the Old Norse (and Old English) "th" sound: still used in Icelandic language.

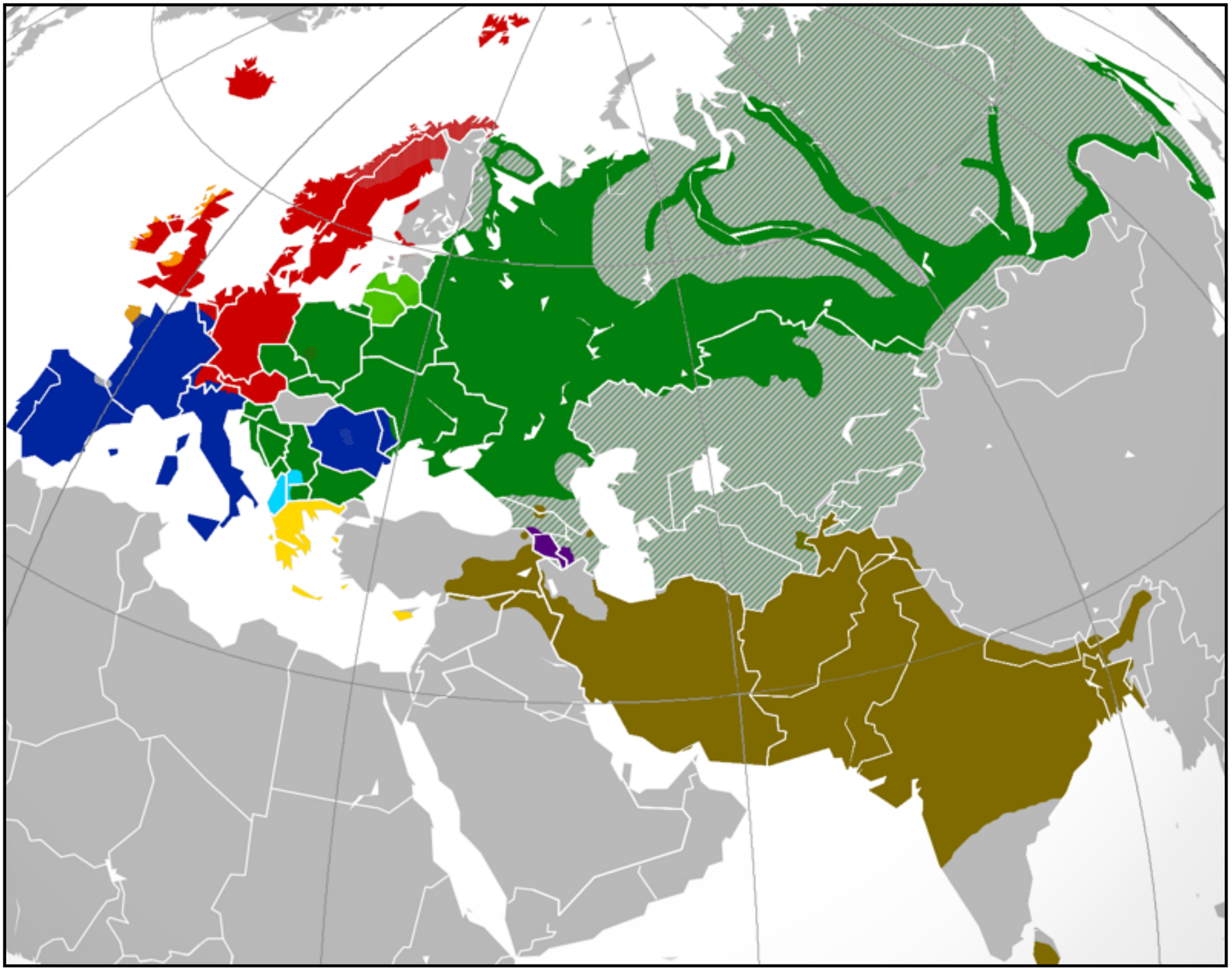
Indo-European languages

- Hypothetical *Urheimat* (birthplace) and spread





- Two principal branches divided along the "satem-centum isogloss" [different words for 100]



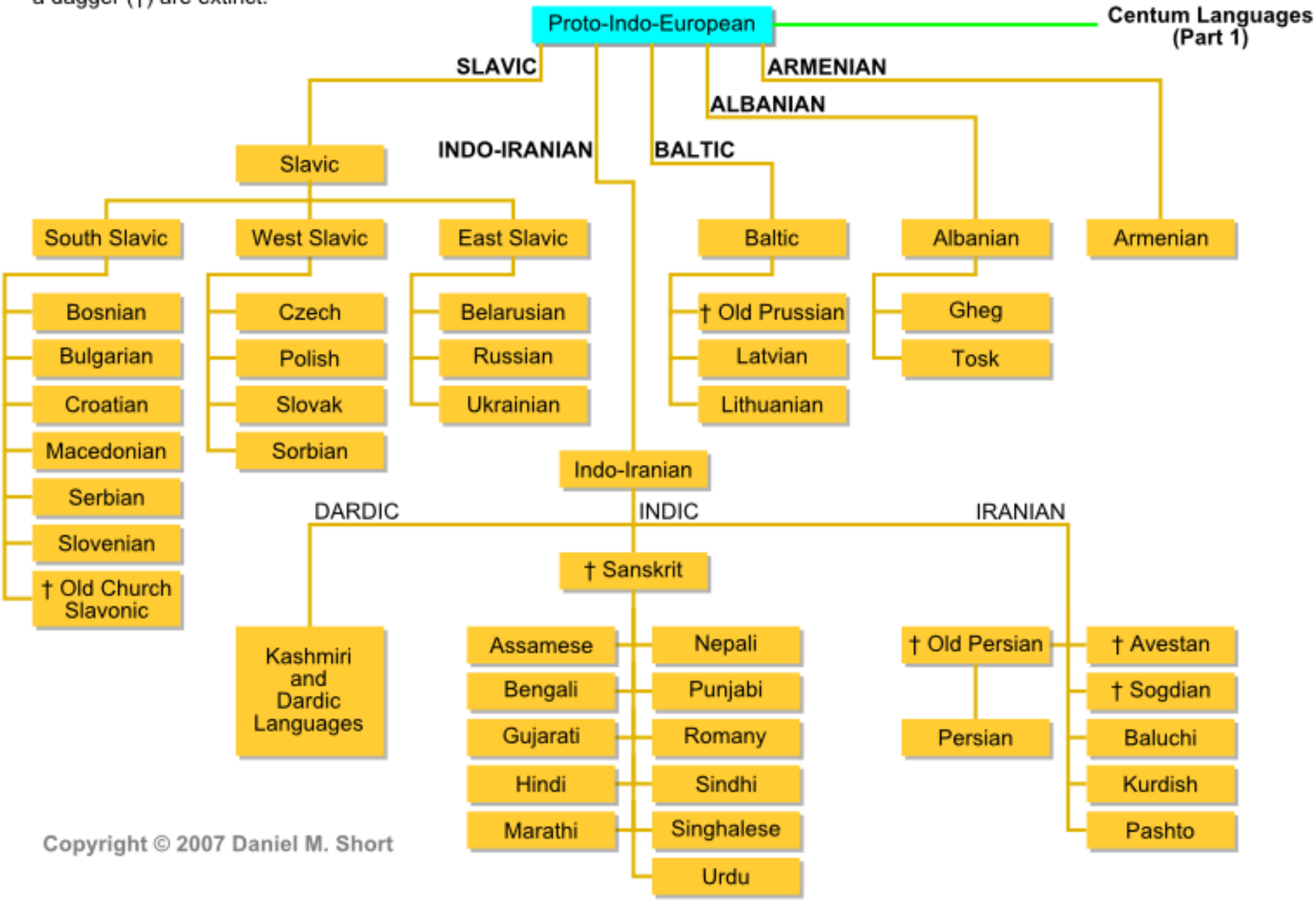
Countries and regions in Europe w. non-Indo-European languages:

- Uralic languages: Finnish, Estonian, Hungarian
- Turkic languages: Turkish
- Maltese is a Semitic language
- Basque is apparently a language isolate (hypothetically last remnant of pre-IEL in Europe)

Indo-European Languages

Part 2: Satem Languages

Languages marked with a dagger (†) are extinct.



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Indo-European Languages

Part 1: Centum Languages

Languages marked with a dagger (†) are extinct.

Proto-Indo-European

Satem Languages (Part 2)

ITALIC

† Latin

† Osco-Umbrian

Catalan

French

Galician

Italian

Portuguese

Provençal

Romansch

Romanian

Spanish

Romance Languages

GERMANIC

West Germanic

East Germanic

North Germanic

† Gothic

Low Saxon/Low Franconian

Low German

Dutch (*)

E. Frisian

Afrikaans

N.&W. Frisian

High German

Yiddish

Old English

Scots

English

† ANATOLIAN

† Hittite

† TOCHARIAN

† Tocharian

HELLENIC

† Ancient Grk.

Modern Greek

CELTIC

† Gaulish

Goidelic

† Manx

Irish Gaelic

Scots Gaelic

Brythonic

Cornish

Breton

Welsh

Old Norse

West

Icelandic

Faroese

Norwegian

East

Danish

Swedish

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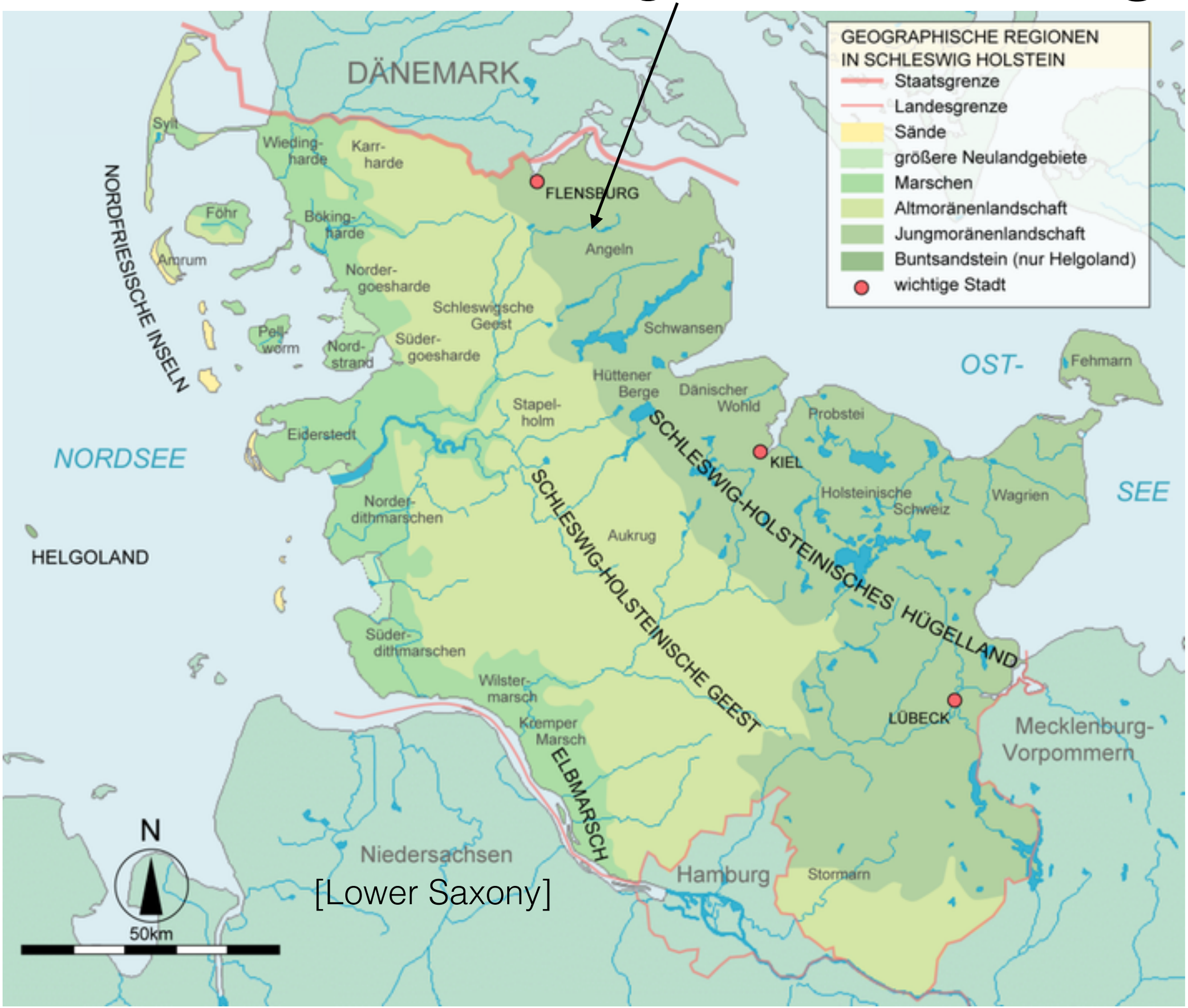
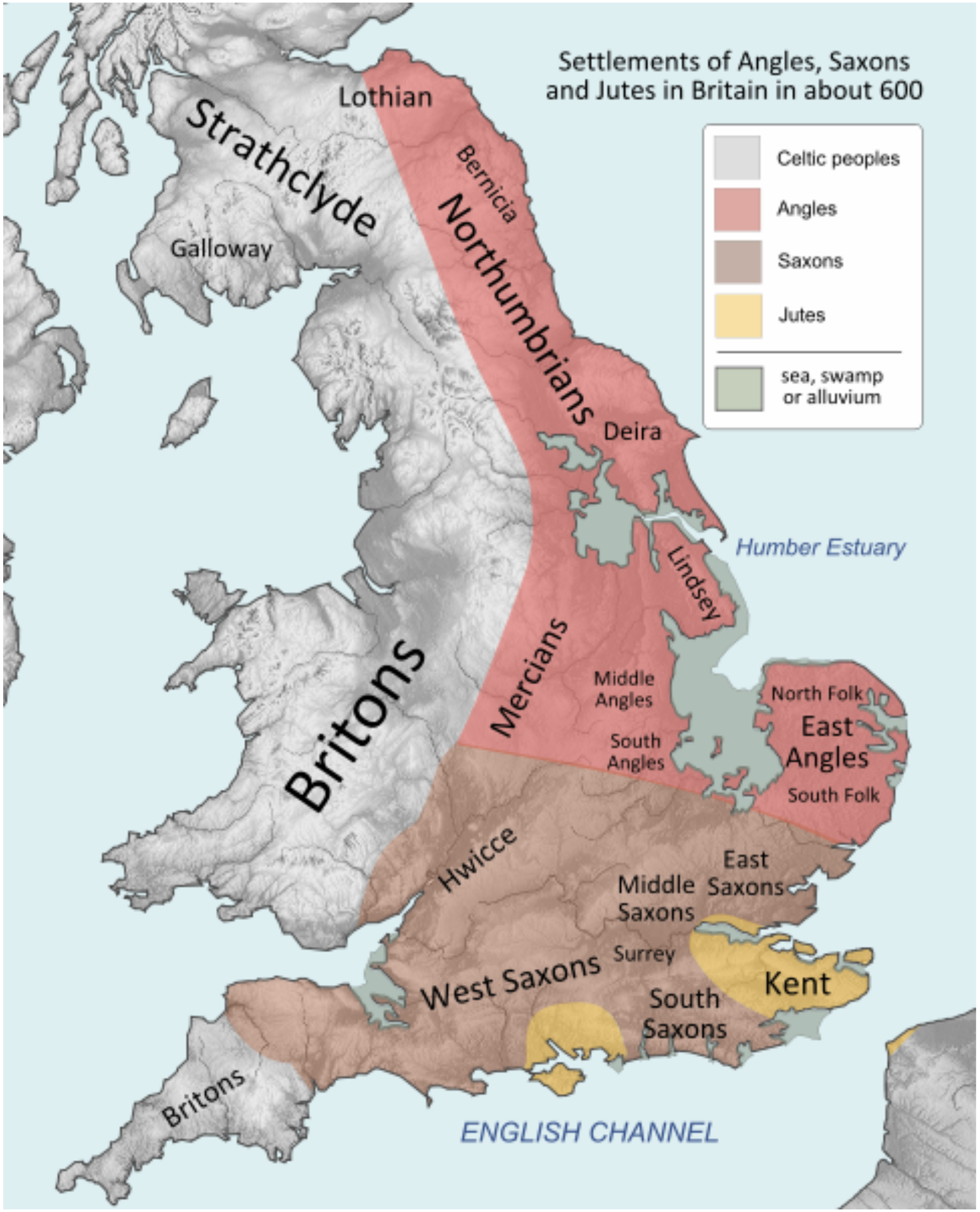
(*) Note added by instructor: contrary to assertions by some linguists who did not grow up in Belgium or Holland, there is no independent “Flemish” language.
(The authoritative “Van Dale” dictionary refers to regional “Flemish” usages as “Zuidnederlands”/“Southern Dutch”.)
The written standard language of Flanders is essentially identical to standard Dutch (much closer than US English is to UK English),
while educated “Flemish” speech is *definitely* closer to Standard Dutch than Austrian German (let alone Swiss German) is to Standard High German.

[Jutes from further North, up here] Angeln and the **Angles**/Anglii



Angles, Saxons, Jutes and (native) Britons around 600 CE in England

Note: some of their settlement regions preserved as British county names: Essex, Middlesex, Wessex, Sussex, East Anglia, Norfolk, Suffolk



The Danelaw

territory occupied by Vikings (“Danes”)
initial capital Jervik (present-day York)
place names ending in -by, -wick, -kirk typically go back to Danelaw era

Old Norse accounts for as much as 10% of English vocabulary

The Danelaw

territory occupied by Vikings ("Danes")

English territory

Danish or Norse territory

Celtic lands

swamp or alluvium

King Canute's

Examples of Old Norse in English

- Nouns – anger (angr), bag (baggi), bait (bæit, bæita, bæiti), band (band), bark (bǫrkʀ, stem bark-), birth (byrðr), dirt (drit), dregs (dræggiaʀ), egg (ægg, related to OE. cognate "æg" which became Middle English "eye"/"eai"), fellow (félagi), gap (gap), husband (húsbóndi), cake (kaka), keel (kiǫlʀ, stem also kial-, kil-), kid (kið), knife (knífʀ), law (lǫg, stem lag-), leg (læggʀ), link (hlænkʀ), loan (lán, related to OE. cognate "læn", cf. lend), race (rǫs, stem rás-), root (rót, related to OE. cognate "wyrt", cf. wort), sale (sala), scrap (skrap), seat (sæti), sister (systir, related to OE. cognate "sweostor"), skill (skial/skil), skin (skinn), skirt (skyrta), sky (ský), slaughter (slátr), snare (snara), steak (stæik), thrift (þrift), tidings (tíðindi), trust (traust), window (vindauga), wing (væ(i)ngʀ)
- Verbs – are (er, displacing OE "sind") blend (blanda), call (kalla), cast (kasta), clip (klippa), crawl (krafla), cut (possibly from ON kuta), die (døyia), gasp (gæispa), get (geta), give (gifa/gefa, related to OE. cognate "giefan"), glitter (glitra), hit (hitta), lift (lyfta), raise (ræisa), ransack (rannsaka), rid (ryðia), run (rinna, stem rinn-/rann-/runn-, related to OE. cognate "rinnan"), scare (skirra), scrape (skrapa), seem (søma), sprint (sprinta), take (taka), thrive (þrífa(s)), thrust (þrysta), want (vanta)
- Adjectives – flat (flatr), happy (happ), ill (illr), likely (líklígʀ), loose (lauss), low (lágʀ), meek (miúkʀ), odd (odda), rotten (rotinn/rutinn), scant (skamt), sly (sløgʀ), weak (væikʀ), wrong (vrangʀ)
- Adverbs – thwart/athwart (þvert)
- Prepositions – till (til), fro (frá)
- Conjunction – though/tho (þó)
- Interjection – hail (hæill), wassail (ves hæill)
- Personal pronoun – they (þæiʀ), their (þæiʀa), them (þæim) (for which the Anglo-Saxons said híe,[27] hiera, him)
- Prenominal adjectives – same (sami)

Post-1066 Realm of William of Normandy
a.k.a.
William the Conqueror
a.k.a.
Guillaume le Conquérant

- Royal court spoke (Norman) French
- Church documents: Latin
- Henry V (15th Century) wrote official dispatches from the Hundred Year War in **English** rather than French:

1st English king to do so!

French	English
monnaie	money
bouteille	bottle
chambre	chamber
ferme	farm
visite(r)	(to) visit
plat	plate
marier	to marry
traiter	to treat
revanche	revenge
aigle	eagle
armé/armée	armed/army
raffiner	refine
raser	to erase
inventer	to invent
rayon	ray
retour(ner)	(to) return
joie	joy
cas	case
jardin	garden
table, figure	table, figure
mésure	measure

French	animal	meat
porc	pig	pork
mouton	sheep	mutton
veau	calf	veal
boeuf	ox	beef

French	legal English
avocat	advocate
atorné	attorney
juge	judge
bailli	bailiff
cour	court
crime	crime
vilain	villain (!)
mort gaigé	mortgage
jurée	jury
parole	parole (!)
forfait	forfeit
félonie	felony
crime	crime
contrefait	counterfeit
tort	torts (דיני נזיקין)

terms for/titles of nobility: mostly from French

French	German	English	remark
écuyer	Schildknecht	squire	L. “scutarius”=shield bearer
sire	Herr	Sir	
chevalier	Ritter	knight	from Knecht
baron	Freiherr	Baron	
pair	Edele	peer	literally “equal”
noblesse	Adel	nobility	in UK: “the peerage”
vicomte	Burggraf	Viscount	“vice-count”
comte	Graf	Count, Earl	Old Norse: jarl
marquis	Markgraf	Marquess	Mark=border province
duc	Herzog	Duke	Orig. Latin “dux” (leader)
prince	Prinz, Fürst	Prince	Orig. Latin "princeps"
roi/royal	König(lich)	king/royal	Orig. Latin “rex”

Another area where (more recent) French usage dominates:

French	German	English	remark
soldat	Soldat	soldier	rank: “Private”
caporal	Gefreiter	(Lance) Corporal	
sergeant	Feldwebel	Sergeant	
adjudant	Stabsfeldwebel	Warrant Officer	
lieutenant	Leutnant	Lieutenant	lieu tenant=ממלא מקום
capitain	Hauptmann	Captain	
majeur	Major	Major	but: maire/mayor (ראש העיר)
(Lt,.-)colonel	Oberst(lt.)	(Lt.) Colonel	
commandant	Kommandant	commander	
général	General	general	

Names of army units from French in many languages (péloton/platoon, compagnie/company, bataillon/battalion, régiment/regiment, brigade, division, groupe d’armée/army group, armée/army… BTW, alarm=“à l’arme!” (to your weapons! Modern French: “aux armes!”)
To my surprise, a number of Russian army ranks from German

Anglo-Saxon

Old Norse

"**Danelaw**": Viking ("Dane") rule in parts of England: on and off 865-1066

Before 1154

Old English

Norman (Old) French

William the Conqueror: **Norman conquest** (1066)

1154 (Plantagenet dynasty)–1470 (William Caxton's **printing press**)

Middle English

Printed Bibles and prayer books => "Chancery Standard" spreads throughout England

1470–ca. 1755
Tudor Era
English Reformation
Book of Common Prayer
King James Bible
Shakespeare

Early Modern English

scholarly Latin, Greek

"**English Renaissance**" **wholesale import of classical vocabulary**

ca. 1755– present

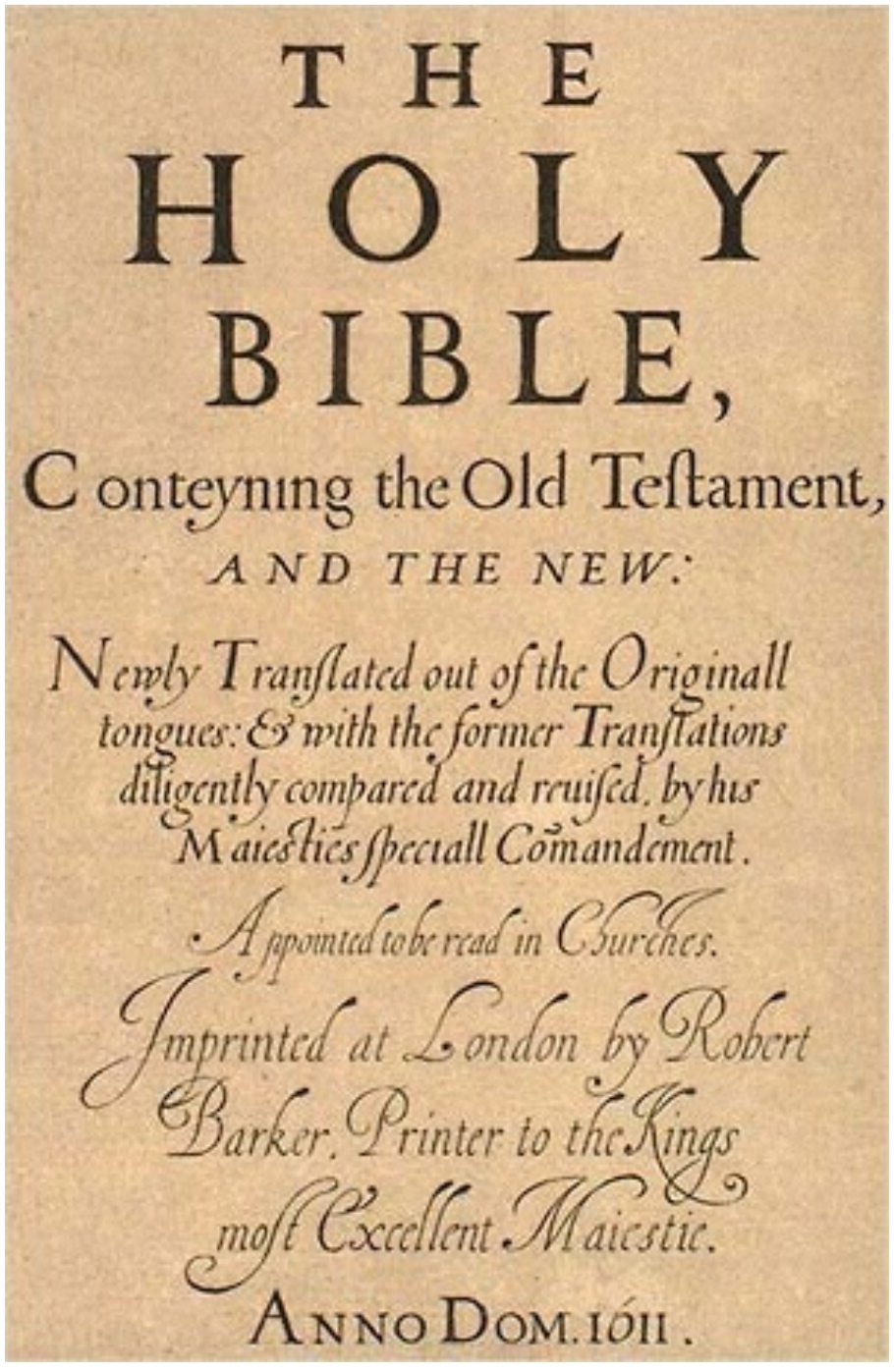
Modern English

1755: Samuel Johnson's dictionary => **standardization of spelling**
Grammar takes on modern form

US-UK split: "two peoples separated by a common language" (G. B. Shaw)

Two books every Anglican had to have — and thus helped standardize the written language

a) King James Bible (1611)
a.k.a. KJV, “Authorized Version”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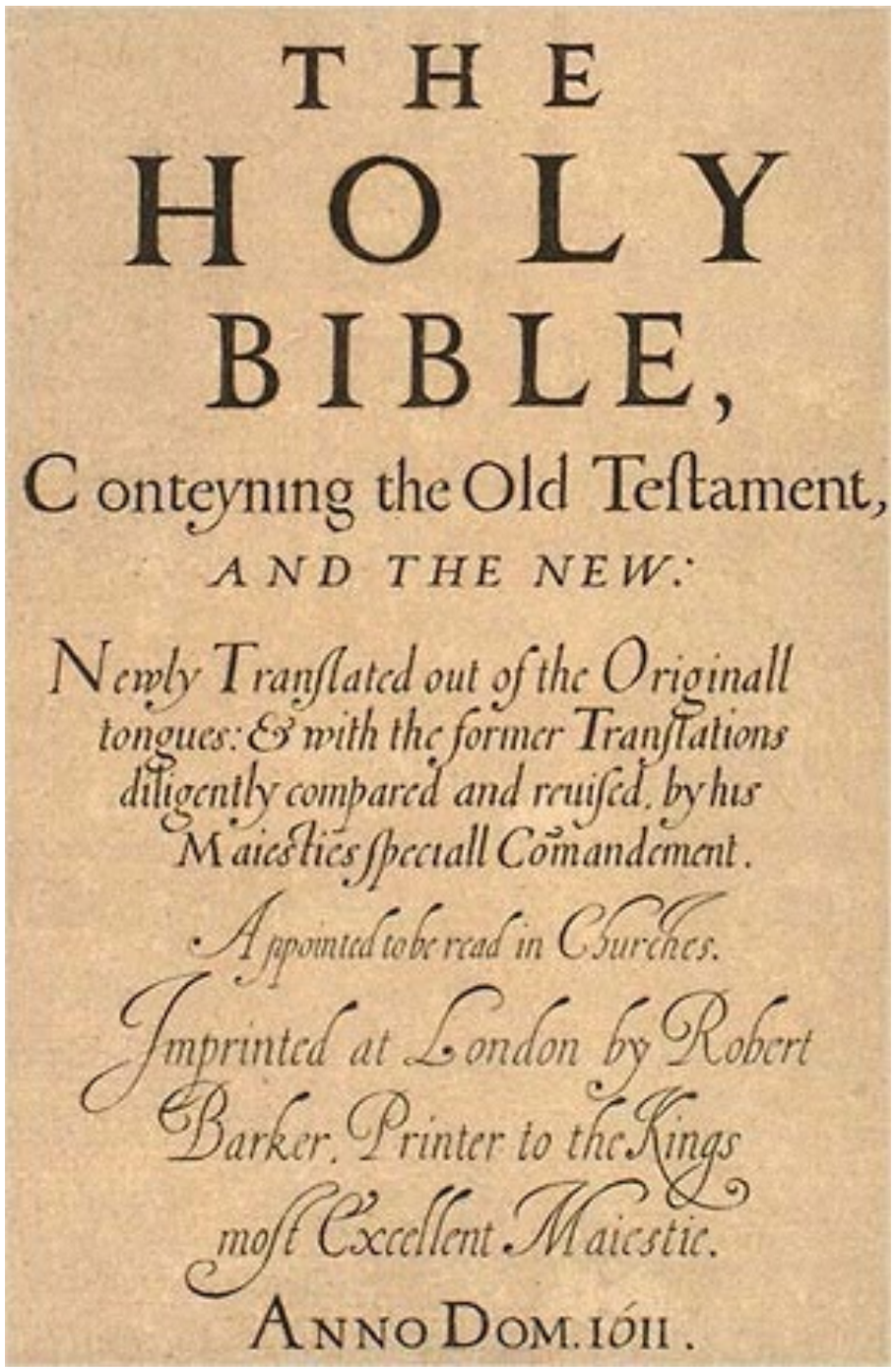
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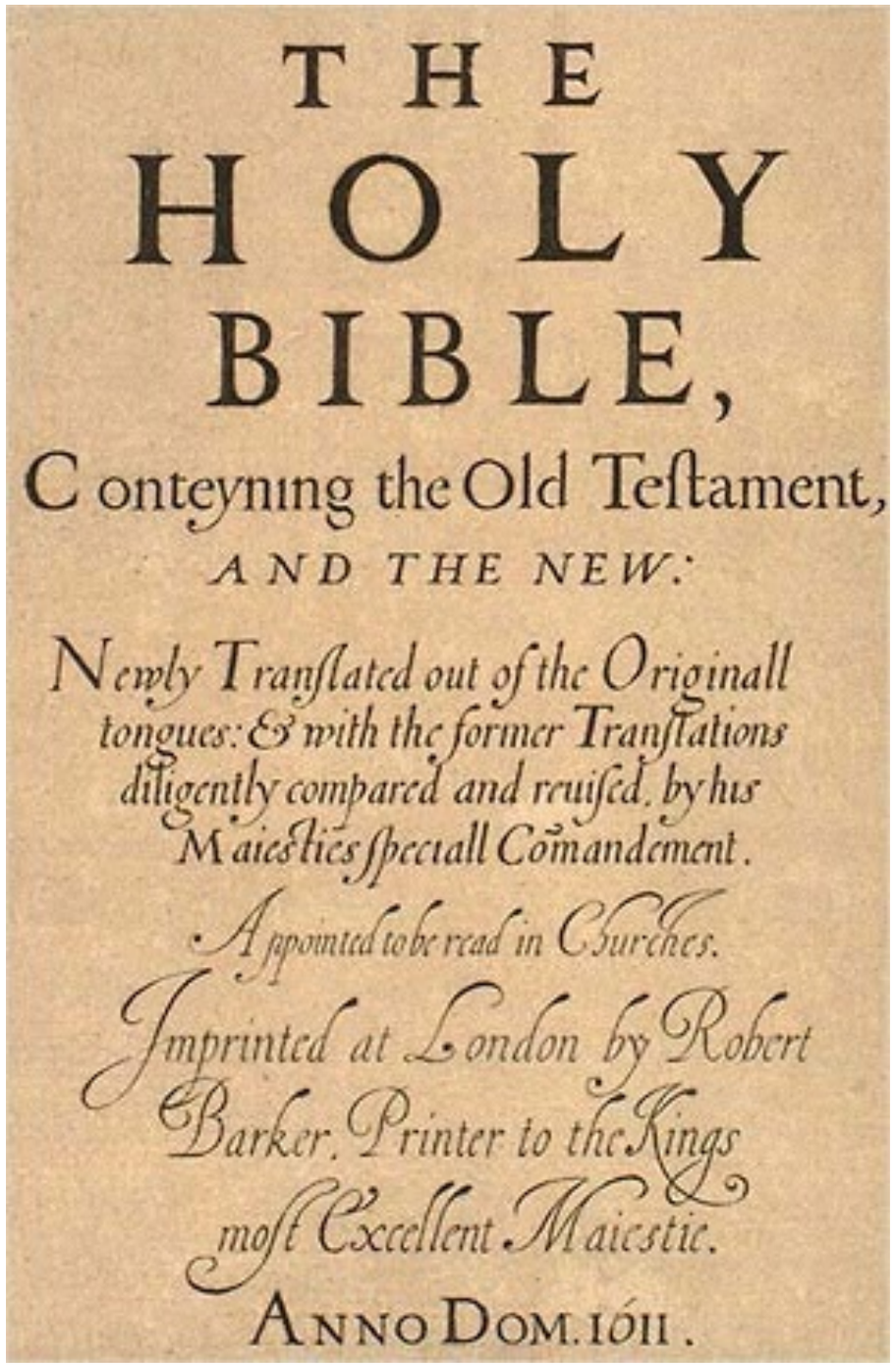
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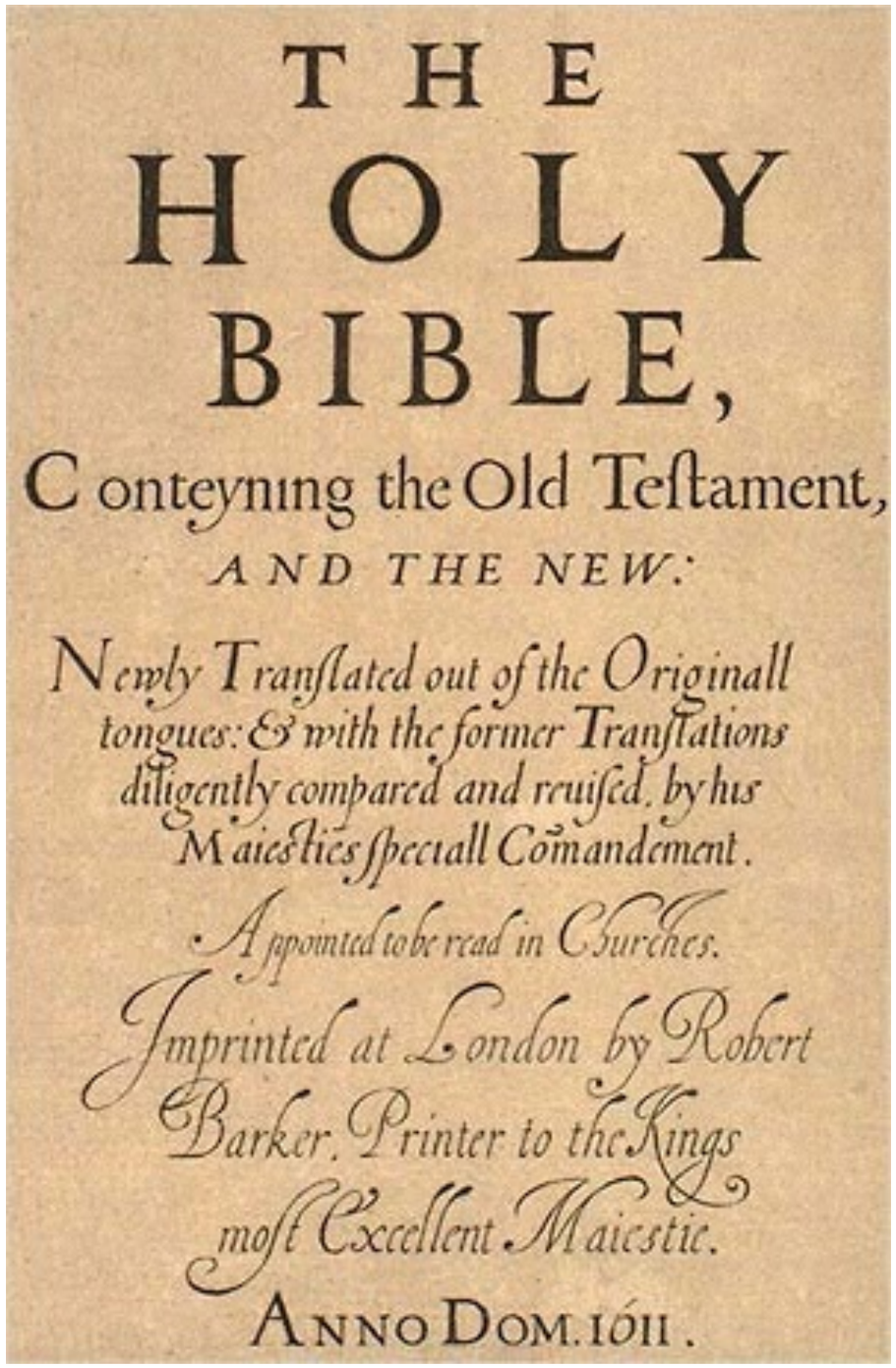
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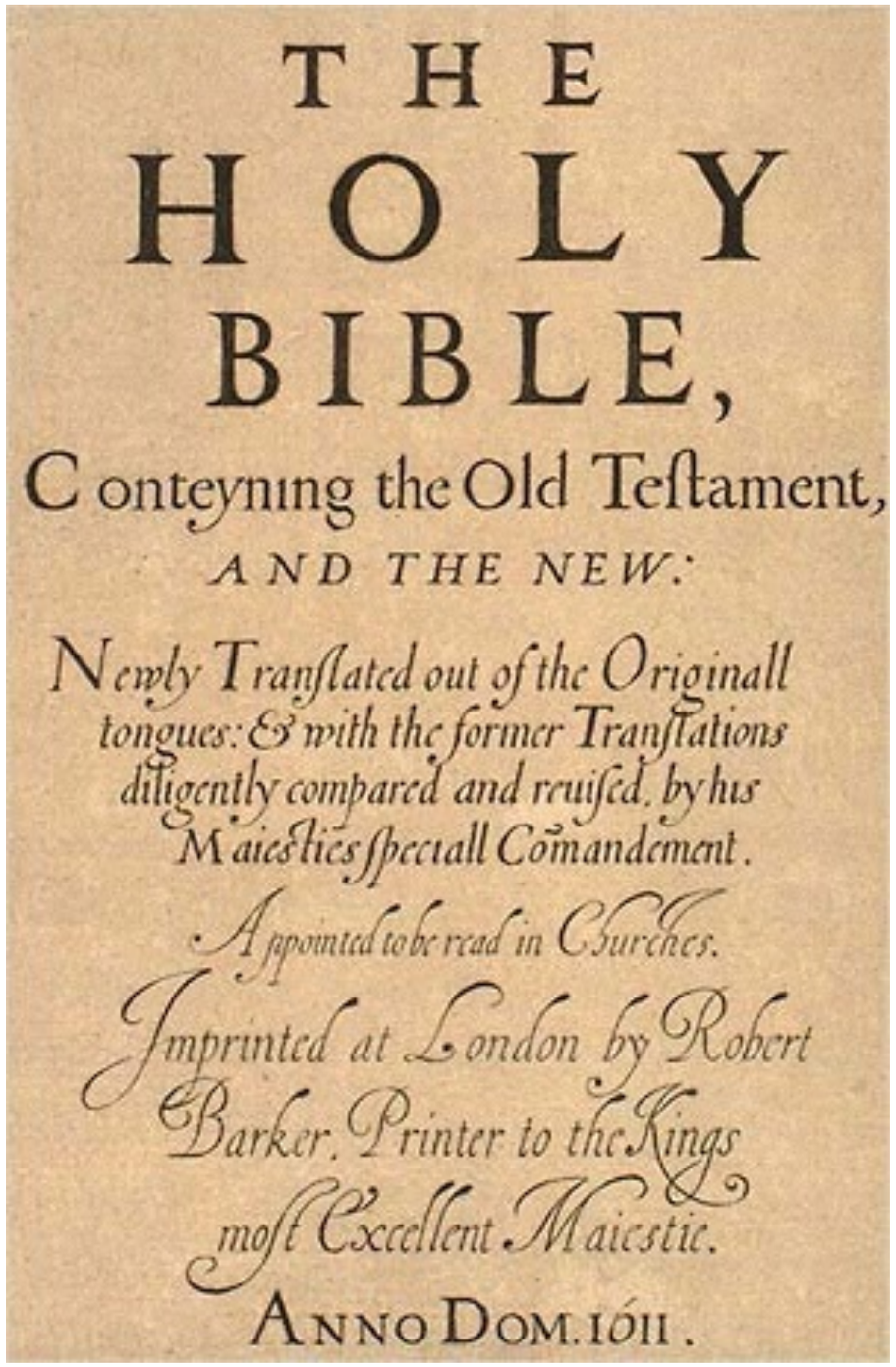
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Phenomenon of religious books setting language standards also occurred for other Germanic languages during the Reformation

- German: Martin Luther's Bible translation
- Dutch: "Statenbijbel"

Greatest secular influence on Early Modern English (a.k.a. "Elizabethan English"): Christopher Marlowe, John Milton,… **above all: William Shakespeare**

• modern English full of idioms and proverbs from especially Shakespeare

Why is English considered a Germanic language, rather than a Romance one?

- [mostly Norman Old] French: 28.3%
- Latin, incl. scientific lingo: 28.2%
- Germanic languages: just 25%!
  - Incl. Old English (10%), Old Norse, Dutch (1%), …
- Greek, incl. scientific lingo : 5.3%
- All other languages: 1%
- No etymology given: 4 %
- Derived from proper names: 3.3%

Sources of English vocabulary
(1973 estimate, based on 80,000 entries in the Shorter Oxford Dictionary)

HOWEVER:

- **of the 1,000 most commonly used words, 83% are Anglo-Saxon**
- **grammar, syntax, and morphology mostly Germanic**
- **clearly not a descendant of Vulgar Latin (=def. of Rom. lang.)**

Religious books setting language standards

“more in sorrow than in anger”
A fool's paradise
A foregone conclusion
A horse, a horse, my kingdom for a horse
A plague on both your houses
A rose by any other name would smell as sweet
A sea change
All of a sudden

All the world's a stage
As dead as a doornail
As pure as the driven snow
All's well that ends well
At one fell swoop
Be all and end all
“Beware the ides of March”
Brevity is the soul of wit

Religious books setting language standards

Also occurred for other Germanic languages during the Reformation

- German: Martin Luther's Bible translation
  - His written German was based on Sachsische Kanzleisprache ("Chancellary/bureaucratic Saxon language")
- Dutch: "Statenbijbel"
- **Greatest secular influence** on Early Modern English (a.k.a. "Elizabethan English"): Christopher Marlowe, John Milton,… **above all: William Shakespeare**
  - modern English full of idioms and proverbs from especially Shakespeare
  - about 2,000 English words first found in Shakespeare

"more in sorrow than in anger"
A fool's paradise
A foregone conclusion
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A small selection of Shakespearian idioms

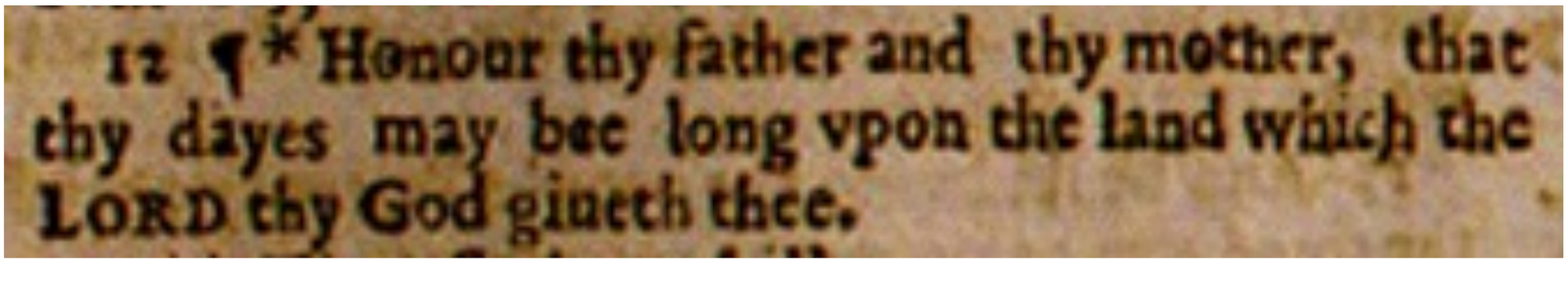
Come what come may
Cry havoc and let slip the dogs of war
Discretion is the better part of valor
Eaten out of house and home
Fair play
Fight fire with fire
For ever and a day
Full of sound and fury, signifying nothing
Good riddance
Hoist by your own petard
Household words
I have not slept one wink
It is meat and drink to me
Lie low
Lily-livered
Make your hair stand on end
Misery acquaints a man with strange bedfellows
More honored in the breach than in the observance
Much Ado about Nothing
Neither a borrower nor a lender be
Night owl
Off with his head
Once more unto the breach, dear friends
[I want my] pound of flesh
[neither] rhyme nor reason
Salad days
Sea change
Send him packing
Setting your teeth on edge
Short shrift
Shuffle off this mortal coil
Some are born great, some achieve greatness, and some have greatness thrust upon 'em
Something is rotten in the state of Denmark
Star crossed lovers
The Devil incarnate
The evil that men do lives on after them, the good is buried with their bones
The game is up
The quality of mercy is not strained
The Queen's English
The slings and arrows of outrageous fortune
There's method in my madness
This is the short and the long of it
To be or not to be, that is the question
To gild refined gold, to paint the lily => “gilding the lily”
To sleep: perchance to dream: ay, there's the rub
Too much of a good thing
Truth will out
Uneasy lies the head that wears a crown
Up in arms
Vanish into thin air
We few, we happy few, we band of brothers
We have seen better days
Wear your heart on your sleeve
What a piece of work is man
What's in a name?

From Early Modern to Modern English

- Standardization of spelling
  - first major dictionary: Samuel Johnson (1755)
  - alphabet takes on final form
    - remaining Old English letter þ discarded
    - separate i/j, u/v/w (“double-u” was once printed “uu”)
      letters v and w introduced => modern alphabet
  - what we now think of as the KJV and Shakespeare’s works “original” text are in fact the spellings from late 18th-Century editions
- prescriptive grammarians rise and fall
- T-V distinction discarded, “you” now all-purpose 2nd person (informal, formal, plural)
  - amusing throwback: “y’all” for 2nd person plural in Southern US dialects
  - “thou” now only survives in religious usage, poetry
- “Great Divide” between US and UK English
  - “Two peoples separated by a common language” (George Bernard Shaw)
- British upper-class “Received Pronunciation”

Early Modern English
vs. Modern English spelling
Example: Exodus 20:13

1633 printing in Roman folio letters:


12 ¶ *Honour thy father and thy mother, that
thy dayes may bee long vpon the land which the
LORD thy God giueth thee.

1769 printing with revised spelling:

12 Honour thy father and thy mother, that
thy days may be long upon the land which the
L-RD thy G-d giveth thee.

[Basically incomprehensible without extensive footnotes or a parallel translation]

Example of Old English ("Beowulf", lines 1-11)

[1]Hwꜩt wē Gār-Dena in geār-dagum,
[2]þeod-cyninga, þrym
[3]hu ða ꜩþelingas ellen fremedon.
[4]Oft Scyld Scefing sceaþena þreatum

[5]monegum mꜩgþum, meodosetla ofteah

[6]egsode eorlas. Syððan ꜩrest wearð
[7]feasceaft funden, he þꜩs frofre gebad

[8]weox under wolcnum, weorðmyndum þah,
[9]oðþꜩt him ꜩghwylc þara ymbsittendra

[10]ofer hronrade hyran scolde,
[11] gomban gyldan. Þæt wæs god cyning!

[1] So. We of Spear-Danes in days of yore,
[2] of the fame of the kings, have heard
[3] How those nobles did great deeds
[4] Often Scyld Scefing, from the army of his enemies,
[5] from many warriors, took the mead-benches
[6] terrified the nobles. After he was first
[7] discovered, a foundling, he gained a consolation
[8] waxed under the heavens, prospered in glory,
[9]until eventually everyone in surrounding tribes,
[10]over the whale-road, had to obey
[11] and yield to him. He was a good king!

[Comprehensible with some practice, at least to a native speaker or functional equivalent thereof]

Example of Middle English

(Geoffrey Chaucer, "Canterbury Tales", ca. 1390 CE; prologue)

Whan that Aprill with his shoures sote
The droghte of Marche hath perced to the rote,
And bathed euery veyne in swich licour,
Of which vertu engendred is the flour;
Whan Zephirus eek with his swete breeth
Inspired hath in euery holt and heeth
The tendre croppes, and the yonge sonne
Hath in the Ram his halfe course yronne,
And smale fowles maken melodye,
That slepen al the niȝt with open ye—
So priketh hem Nature in hir corages—
Than longen folk to goon on pilgrimages,

When April with its sweet showers
has pierced the drought of March to the root,
and bathed every vein in such liquor
from whose power the flower is engendred;
when Zephyr [the West wind] also, with his sweet breath
has blown [into life] in every wood and heath
the tender crops, and the young sun
has run his half-course in the sign of the Ram [Aries],
and small fowls make melody,
who sleep all night with open eye
- so Nature stimulates them in their hearts
- THEN people long to go on pilgrimages,

Example of Early Modern English
(William Shakespeare, 18th Sonnet)

Shall I compare thee to a summer's day?
Thou art more lovely and more temperate.
Rough winds do shake the darling buds of May,
And summer's lease hath all too short a date.
Sometime too hot the eye of heaven shines,
And often is his gold complexion dimmed;
And every fair from fair sometime declines,
By chance, or nature's changing course, untrimmed;
But thy eternal summer shall not fade,
Nor lose possession of that fair thou ow'st,
Nor shall death brag thou wand'rest in his shade,
When in eternal lines to Time thou grow'st.
    So long as men can breathe, or eyes can see,
    So long lives this, and this gives life to thee.

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Example of Early Modern English

(William Shakespeare, "Hamlet", Act 3, Scene 1)

To be, or not to be: that is the question:
Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortune,
Or to take arms against a sea of troubles,
And by opposing end them? To die: to sleep;
No more; and by a sleep to say we end
The heart-ache and the thousand natural shocks
That flesh is heir to, 'tis a consummation
Devoutly to be wish'd. To die, to sleep;
To sleep: perchance to dream: ay, there's the rub;
For in that sleep of death what dreams may come
When we have shuffled off this mortal coil,
Must give us pause: there's the respect
That makes calamity of so long life;
For who would bear the whips and scorns of time,
The oppressor's wrong, the proud man's contumely,
The pangs of despised love, the law's delay,
The insolence of office and the spurns
That patient merit of the unworthy takes,
When he himself might his quietus make

http://www.youtube.com/watch?v=5ks-NbCHUns

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Example of Modern English (1)

(US Declaration of Independence, 1776, preamble)

When in the course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's G–d entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.--That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed, --That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness.[…]

Example of Modern English (2)

(Alfred Tennyson, "In memoriam A. H. H.", 1833)

[Prologue, stanzas 5-7]

[…] Our little systems have their day;
They have their day and cease to be:
They are but broken lights of Thee,
And Thou, O L-rd, art more than they.

We have but faith: we cannot know;
For knowledge is of things we see;
And yet we trust it comes from Thee,
A beam in darkness: let it grow.

Let knowledge grow from more to more,
But more of reverence in us dwell;
That mind and soul, according well,
May make one music as before. […]

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Example of Modern English (3)

(Winston Churchill, speech, June 18, 1940)

[…] Hitler [y″sh] knows that he will have to break us in this Island or lose the war. If we can stand up to him, all Europe may be free and the life of the world may move forward into broad, sunlit uplands. But if we fail, then the whole world, including the United States, including all that we have known and cared for, will sink into the abyss of a new Dark Age made more sinister, and perhaps more protracted, by the lights of perverted science.

Let us therefore brace ourselves to our duties, and so bear ourselves that if the British Empire and its Commonwealth last for a thousand years, men will still say, 'This was their finest hour'.

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Example of Modern English (4)

(Richard P. Feynman, Caltech commencement address, 1974)

So we really ought to look into theories that don't work, and science that isn't science. I think the [...] studies I mentioned are examples of what I would like to call cargo cult science. In the South Seas there is a cargo cult of people.

During the war [WW II, Ed.] they saw airplanes land with lots of good materials, and they want the same thing to happen now. So they've arranged to make things like runways, to put fires along the sides of the runways, to make a wooden hut for a man to sit in, with two wooden pieces on his head like headphones and bars of bamboo sticking out like antennas — he's the controller — and they wait for the airplanes to land. They're doing everything right. The form is perfect. It looks exactly the way it looked before. But it doesn't work. No airplanes land.

So I call these [studies] cargo cult science, because they follow all the apparent precepts and forms of scientific investigation, but they're missing something essential, because the planes don't land.

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Example of Modern English (4)

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Now it behooves me, of course, to tell you what they're missing. But it would be just about as difficult to explain to the South Sea Islanders how they have to arrange things so that they get some wealth in their system. It is not something simple like telling them how to improve the shapes of the earphones. But there is one feature I notice that is generally missing in cargo cult science. That is the idea that we all hope you have learned in studying science in school—we never explicitly say what this is, but just hope that you catch on by all the examples of scientific investigation. It is interesting, therefore, to bring it out now and speak of it explicitly. It's a kind of scientific integrity, a principle of scientific thought that corresponds to a kind of utter honesty—a kind of leaning over backwards. For example, if you're doing an experiment, you should report everything that you think might make it invalid—not only what you think is right about it: other causes that could possibly explain your results; and things you thought of that you've eliminated by some other experiment, and how they worked—to make sure the other fellow can tell they have been eliminated.

Example of Modern English (4)

(Richard P. Feynman, Caltech commencement address, 1974)

Example of Modern English (4)

(Richard P. Feynman, Caltech commencement address, 1974)

Details that could throw doubt on your interpretation must be given, if you know them. You must do the best you can—if you know anything at all wrong, or possibly wrong—to explain it. If you make a theory, for example, and advertise it, or put it out, then you must also put down all the facts that disagree with it, as well as those that agree with it. There is also a more subtle problem. When you have put a lot of ideas together to make an elaborate theory, you want to make sure, when explaining what it fits, that those things it fits are not just the things that gave you the idea for the theory; but that the finished theory makes something else come out right, in addition.

In summary, the idea is to try to give all of the information to help others to judge the value of your contribution; not just the information that leads to judgment in one particular direction or another.

The easiest way to explain this idea is to contrast it, for example, with advertising. Last night I heard that Wesson oil doesn't soak through food. Well, that's true. It's not dishonest; but the thing I'm talking about is not just a matter of not being dishonest, it's a matter of scientific integrity, which is another level. The fact that should be added to that advertising statement is that no oils soak through food, if operated at a certain temperature. If operated at another temperature, they all will—including Wesson oil. So it's the implication which has been conveyed, not the fact, which is true, and the difference is what we have to deal with.

Standards for English

- Many language communities have an authoritative body that sets a *prescriptive* standard (Académie de la Langue Française, Nederlandse Taalacademie, Rat für Deutsche Rechtschreibung, האקדמיה ללשון העברית.) **English does not.**
- There are **two main *descriptive* standards** (language as it *is*, not as it *ought* to be):
  - UK English (**Oxford English**, British English, The Queen's English)
    - Oxford English Dictionary
    - Upper-class "Received Pronunciation"
    - Fowler's "Modern English Usage" is also a *de facto* standard
    - Variants of UK English are spoken/written in former British colonies
      - majority language: Canada, Australia, New Zealand
      - minority language: South Africa
      - administrative and educational language: India, Singapore, Hong Kong SAR
  - **American English**
    - Merriam-Webster Dictionary (heirs to the original Webster)*
    - Most Americans perceive Midwestern speech as accent-less, so "Standard Midwestern" pronunciation became a *de facto* standard in the national media.
    - Interestingly, many American spellings closer to Early Modern English

(*) Anybody with a computer or printing press can legally call his amateur dictionary "Webster", since "Webster" by itself has become a "genericized trademark"

Which is better English? US or UK?

- UK English is spoken and written in the birthplace of English
- On the other hand, US English has by far the largest number of native speakers
- Often people claim “British English is more correct”. Poppycock. Balderdash. Baloney. Horsefeathers. Bovine scatology. What a load of bollocks. **Both standards are correct if used consistently.**
- Your instructor writes American English since that’s what he is most confident in; his spoken accent is “Heinz 57”/מעורב ירושלמי like his dog ;)

- Mother tongue: Dutch
- Lived for many years in a French-speaking area of Brussels
- First learned English watching “Star Trek: TOS” in 1st grade (lead actors: William Shatner and Leonard Nimoy, both Canadian Jews)
- Postdoc advisor: Australian of British origin living in the USA; could turn on a dime from High Victorian English to “South Park”-style slang as coarse as it was varied.
- Wife: an American “army brat” who grew up all over the US and the planet, and picked up features of all major US regional accents (added to a Midwestern base).
- Has to watch out for “Hebrish” influences now ;)

American vs. British spelling

- -ize vs. -ise, -ization vs.-isation,…
- Analog vs. analogue (weaker distinction)
- Anemia vs. anaemia, anesthesia vs. anaesthesia,…
- Fetus vs. foetus, …
- Program vs. programme, …
- Sulfur vs. sulphur,…
- Check vs. cheque, defense vs. defence,…
- Color vs. colour, parlor vs. parlour,…
- Meter vs. metre, fiber vs. fibre,…
- Draft [manuscript, beer,…] vs. draught
- American English disfavors hyphens in compound words:
  - “counterattack” vs. “counter-attack”,

Unlike many other language issues, here you can rely on technology to a large extent: the spelling checker in your word processor can fix most US-UK inconsistencies.

Some other differences between Oxford and American English

- Vocabulary: differences occur for 19th-and 20th-Century concepts (e.g., transportation: boot vs. trunk, pavement vs. sidewalk,…)
  - Some words are “faux amis”/“false friends”: e.g. “table a motion” (UK: להביא לדיון; US: לדחות)
  - Slang: sometimes *dangerously* different
- Usage: “will” vs. “shall”, “would” vs. “should”,…
- Numbers: trillion=10^{12} (US), 10^{18} (UK)
  - In scientific papers, writing 10^{12} or 10^{18} is safest!
- Further reading:
  - http://en.wikipedia.org/wiki/American_and_British_English_differences
  - http://en.wikipedia.org/wiki/List_of_words_having_different_meanings_in_American_and_British_English:_A-L
  - http://en.wikipedia.org/wiki/List_of_words_having_different_meanings_in_American_and_British_English:_M-Z

Sources of English vocabulary

(1973 estimate, based on 80,000 entries in the Shorter Oxford Dictionary)

- [mostly Norman Old] French: 28.3%
- Latin, incl. scientific lingo: 28.2%
- Germanic languages: just 25%!
  - Incl. Old English (10%), Old Norse, Dutch (1%), …
- Greek, incl. scientific lingo : 5.3%
- All other languages: 1%
- No etymology given: 4 %
- Derived from proper names: 3.3%

BUT: of the 1,000 most common words, 83% are Anglo-Saxon in origin

General characteristics of English

- **Humungous vocabulary** (500K+ entries in OED2, plus again as many scientific and technical terms; probably over 1 million unique English words)
  - many redundancies and (sometimes very) subtle nuances
- **Weakly inflected** language
  - **sentence structure becomes very important, or message gets lost**
- Spelling and alphabet: **just 26 standard letters**, no diacriticals
  - except in a few recent loan-words, where often omitted in practice
- **Spelling is *highly* non-phonetic**, pronunciation highly illogical/irregular
  - probably derives from “mixed-breed” character of English
  - people with mild forms of dyslexia will struggle especially hard with English, compared to more phonetic languages like Spanish
- **When English grammar puts its mind to being regular, it is *extremely* so**
  - gender of words: *all* inanimate objects are neuter (except countries and ships, which can be female in literary/poetic usage)
  - rigid distinction between adjectives (modify or qualify nouns) and adverbs (modify or qualify non-nouns). Formation of adverb almost entirely regular: add “-ly” (few exceptions: good->well, fast->fast, …)
- **Highly idiomatic character**: probably more idioms (fixed expressions) than any other language
- **in general: easy to learn, very difficult to master at native speaker level**

But aren’t there spelling checkers nowadays?

- I halve a spelling chequer
- It came with my pea sea
- It plane lee marques four my revue
- Miss steaks aye ken knot sea

- Eye ran this poem threw it
- Your sure reel glad two no
- It's vary polished in it's weigh
- My chequer tolled me sew

- A chequer is a bless sing
- It freeze yew lodes of thyme
- It helps me awl stiles two reed
- And aides mi when aye rime

- To rite with care is quite a feet
- Of witch won should be proud
- And wee mussed dew the best wee can
- Sew flaws are knot aloud

- And now bee cause my spelling
- is checked with such grate flare
- Their are know faults with in my cite
- Of nun eye am a wear

- Each frays come posed up on my screen
- Eye trussed to be a joule
- The chequer poured o'er every word
- To cheque sum spelling rule

- That's why aye brake in two averse
- My righting wants too pleas
- Sow now ewe sea wye aye dew prays
- Such soft wear for pea seas

Homework assignment 1:
(a) Correct above text
(b) Translate original into your choice of Hebrew, French, …

Top stumbling blocks for Hebrew-speaking ESL learners

1. Above all: a different script with a completely different internal logic. Not specific to English however. I have the converse problem with Hebrew ;)
2. Spelling (English couldn't be less phonetic if it *worked* at it)
3. Capitalization (nonexistent in Hebrew, important in English)
4. Idioms (English is literally larded with them, no pun intended)
5. Word order (critical in English since no cases left except genitive)
6. Verb tenses: Hebrew just has present/past/future, English has *many* more
   A. can be rationalized as three different "aspects" of present/past/future: imperfect, perfect, and continuous (I write, I have written, I am writing). Continuous/ongoing aspect of verbs (I am driving, I will be going) does not exist in English (does exist in Dutch, Italian,… but not as common)
   B. Auxiliary verbs and how they work ("I have gone", not "I have went")
7. Pronunciation, especially vowel sounds
8. Indefinite articles ("a/an") do not even *exist* in Hebrew
9. *Strict* adjective/adverb distinction ("a good/bad writer"; "he writes well/poorly")
10. Hebrew has no present tense of "to be"
11. Count nouns/"countable nouns" (discrete quantities) vs. mass nouns/"uncountable nouns" (continuous quantities, indivisible entities) very strict in English, less so in informal Hebrew. Cf. מספר אנשים, כמות סוכר
12. Subjunctive mood (primarily in US English)

Will be covered in next lectures

Any similarities at all between Hebrew and English?

- No “T-V distinction” (familiar/respectful 2nd person distinction)
  - Unlike Dutch (“jij/U”), French (“tu/vous”), German (“Du/Sie”), Spanish (“tu/usted”), Russian (“ty/vy”),…
  - Obsolete *in*formal “thou/thee/thy/thine” became exclusively associated with religious use through King James Version (also survived in poetry)
    - “Thou art/I call upon Thee, my L-rd/Thy hand, Belinda/Thine eyes”
  - “You” originally both 2nd person plural and *formal* 2nd person singular (like “vous” in French or “Sie” in German)
  - [Very formal Hebrew:] 3rd person singular as respectful form of address (כן, כבודו; כבוד הרב ירצה לאכול? י)
  - Distinction count/mass nouns (though less rigid)
- English noun-verb boundary almost as weak as Hebrew counterpart
  - “Shakespeare *gloried* in it; he *showered* the language with new words *coined* with a felicity that *beggars* himself description.” (R. Schoenfeld)
- Sentence structure relatively similar (both are “SVO languages”, i.e. sentence order is subject-verb-object)
- Both English and Hebrew verbs do have indicative and imperative moods
  - Hebrew also has sort-of a subjunctive mood (יחי המלך, **יחי** זיכרו ברוך)
- Anything else?

Top things Russian ESL learner struggles with

1. Different script: less of a handicap, since Cyrillic and Latin scripts have a similar internal logic
2. Spelling (English couldn't be less phonetic if it *worked* at it; Russian is reportedly fairly phonetic)
3. Word order: Russian has six grammatical "cases" (יחסות), i.e., word endings that indicate the grammatical function of a word (subject, direct object, indirect object, possessive, location, means of doing something,…)
    1. "Proto-Indo-European", the ancestor of all Indo-European languages, had eight. In its descendants, fewer through "syncretism" (in grammar, the merger of two or more cases).
    2. In languages with cases, "which word does what" in a sentence is clear, and thus word order becomes quite flexible.
    3. **Not so in English!**
4. Like strongly inflected languages in general, Russian is *much* more tolerant of long, convoluted sentences than English.
5. Russian has neither definite (the) nor indefinite (a/an) articles. Omitted or quasi-random "the" and "a/an" are a dead giveaway for "Slavic English".
6. Russian does have imperfect and perfect tenses/verb aspects, but not (AFAIK) the continuous aspect (which is fairly unique to English).
7. English idioms

Will be covered in next lectures

By way of illustration: grammatical cases (יחסות) in Indo-European languages

Proto-Indo-European	Latin	Greek	German	Russian	Compare in Hebrew:
nominative [subject]	yes	yes	yes	yes	default
accusative [direct object]	yes	yes	yes	yes	את-משהו
dative [indirect obj.]	yes	yes	yes	yes	ל-
ablative [away from]	yes	dative+abs. genitive	genitive	genitive	
genitive [possessive]	yes	yes	yes	yes	סמיכות
vocative [addressing]	yes	yes	no	sort-of	אדוני
locative [place, direction]	ablatives of time, place, means	dative	dative, some accusative, genitive	prepositional case	ב-, צפונה/נגבה
instrumental [indicates means]		dative		yes	ב-, באמצעות

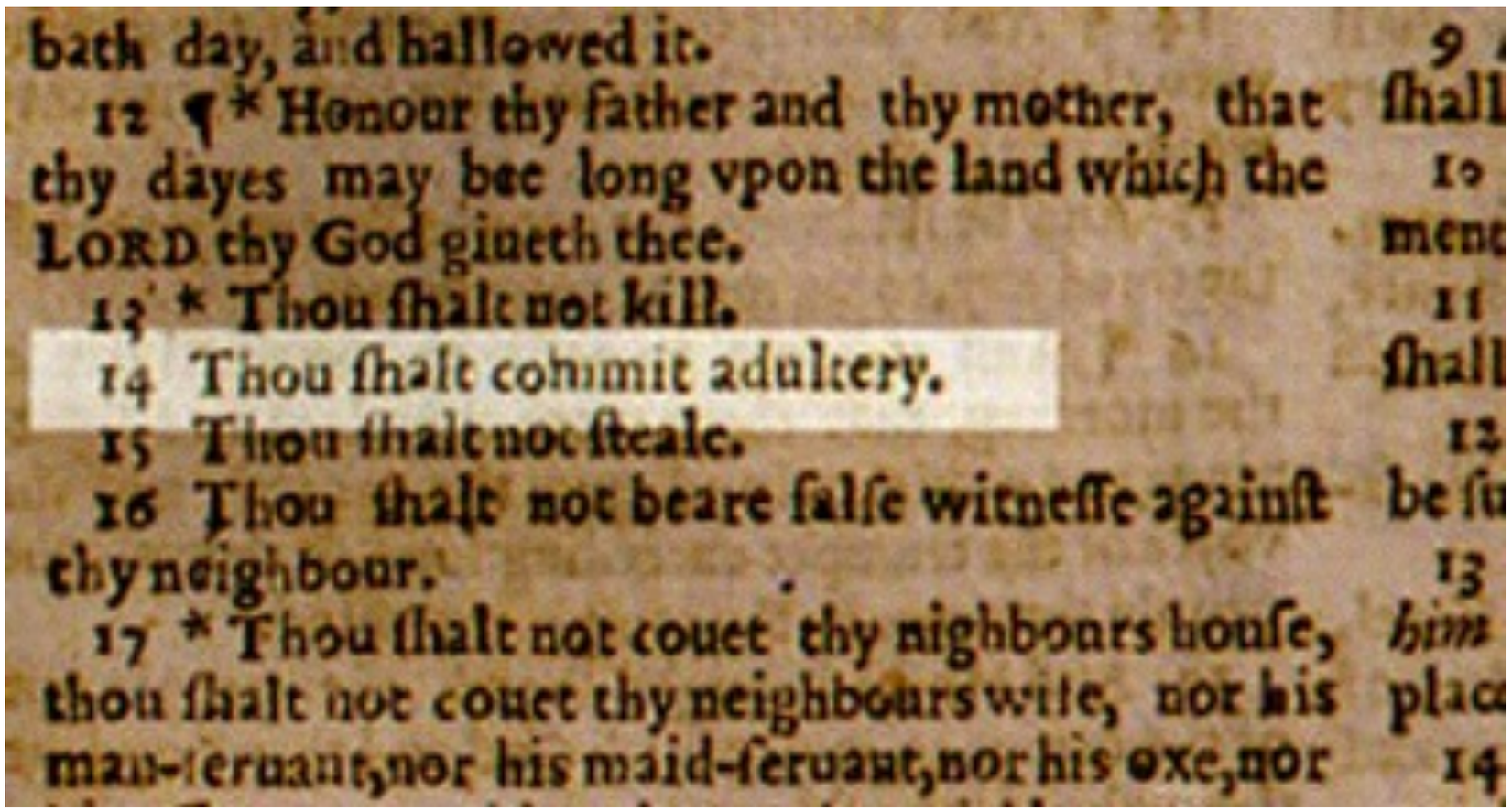
“syncretism” (grammar) = the merging of 2 cases

(b) Grammar (continued)

- Word order can *radically* change meaning
  - The man the woman saw was hungry *(*האיש שהאישה ראתה היה רעב*)*
  - The man saw the woman was hungry (האיש ראה שהאישה רעבה*)*
  - This is a story forgotten by Charles Dickens (i.e., that Dickens forgot about)
  - This is a forgotten story by Charles Dickens (i.e., that the world forgot about)
  - "Dog bites man" (not news) vs. "Man bites dog" (news)
  - I want you to know vs. I want to know you
- Compare, e.g., Latin: "Mercator femin**ae** toga**m** tradit"
  [$\text{trader}_{\text{nominative}}$ | $\text{woman}_{\text{dative}}$ | $\text{robe}_{\text{accusative}}$ | $\text{hands over}_{\text{verb}}$]
  [$\text{trader}_{\text{subject}}$ | $\text{woman}_{\text{indirect object}}$ | $\text{robe}_{\text{object}}$ | $\text{hands over}_{\text{verb}}$]
  all 24 unique word orderings have the same meaning. Same with "Omnium fortissimi sunt Belgae" ["Of all [Gallians], the Belgians are the strongest/bravest" — Julius Caesar, *De bello Gallico*]
- All of these reportedly mean "A cat caught a mouse" in Russian:
  1) Кошка поймала мышь.
  2) Мышь поймала кошка.
  3) Поймала кошка мышь.
  4) Кошка мышь поймала.
  5) Мышь кошка поймала.
  6) Поймала мышь кошка.

And who said proofreading isn't important?

The 1633 reprint of the KJV had a rather "interesting" typo in the Ten Commandments:


bath day, and hallowed it.
12 ¶ * Honour thy father and thy mother, that
thy dayes may bee long vpon the land which the
LORD thy God giueth thee.
13 * Thou shalt not kill.
14 Thou shalt commit adultery.
15 Thou shalt not steale.
16 Thou shalt not beare false witnesse against
thy neighbour.
17 * Thou shalt not couet thy neighbours house,
thou shalt not couet thy neighbours wife, nor his
man-seruant, nor his maid-seruant, nor his oxe, nor

By royal decree, the printer was deprived of his license, fined £300 (a fortune in today's money), and (according to some sources) publicly flogged. The "Wicked Bibles" were ordered burned. A few copies somehow survived and became collector's items, some ending up in museums.