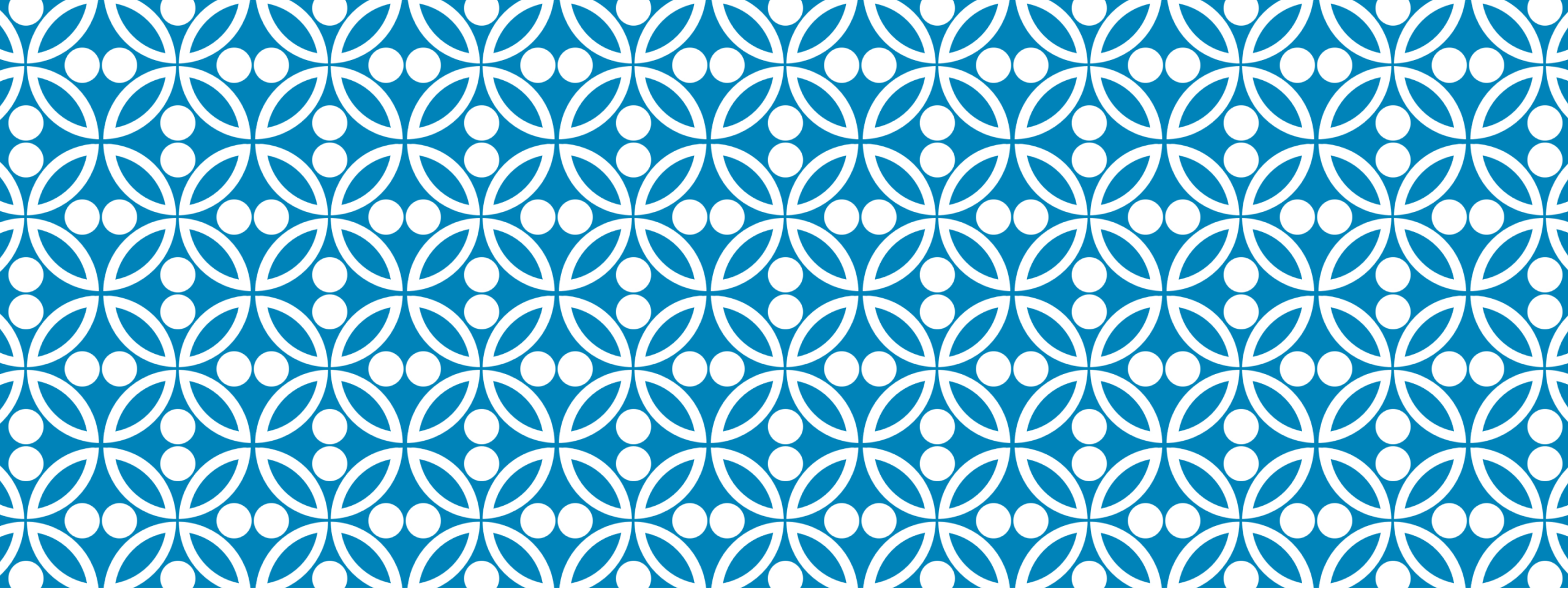


IN SEARCH OF THE INDO-EUROPEANS



HOUSEKEEPING

- Midterm **on Thursday!** Be on time!
- I'm leaving for Europe this afternoon! (I will be back on Sunday)
- You will take the midterm with **Thomas**. Email him first if you have questions!
- Finish up the **sheep + horses**
- **First presentations next week** (Max (T), Jordan and Dawn (Th))



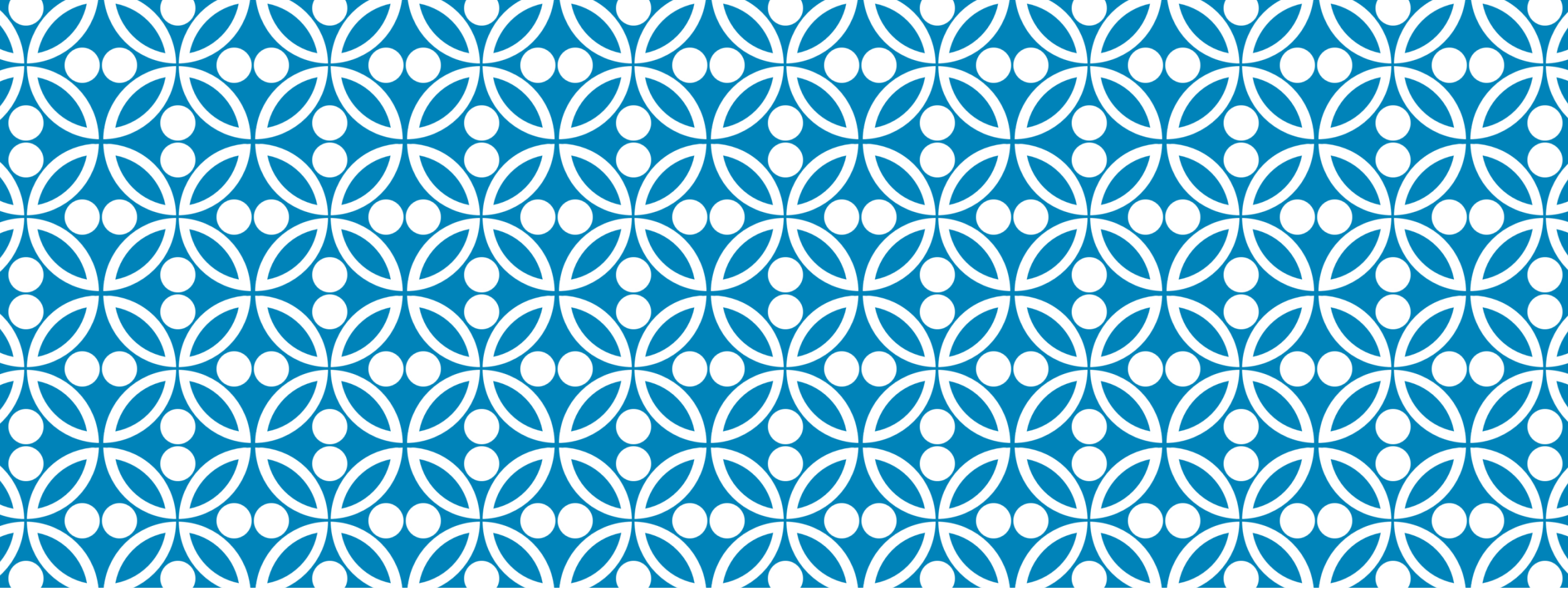
THOSE HORSES AND SHEEP AGAIN |

THE SHEEP AND THE HORSES / 1

1. $h_2\acute{a}u\grave{is} h_1\grave{i}osm\acute{e}\grave{i} h_2\grave{u}lh_1n\acute{a}h_2$ né $h_1\acute{e}st$,
2. só $h_1\acute{e}k\grave{u}ons$ derkt.
3. só $g^w r\grave{h}_x\acute{u}m$ $\grave{u}og^h om$ $\grave{u}eg^h et$;
4. só $m\acute{e}gh_2m\grave{}$ $b^h\acute{o}rom$ $b^h eret$;
5. só $d^h g^h\acute{e}monm\grave{}$ $h_2\acute{o}ku$ $b^h eret$.
6. $h_2\acute{o}u\grave{is} h_1\acute{e}k^w o\grave{i}b^h\grave{i}os$ $\grave{u}e\grave{u}ket$:
7. “ $d^h g^h\acute{e}monm\grave{}$ $sp\acute{e}k\grave{i}oh_2$
8. $h_1\acute{e}k\grave{u}ons-k^w e$ $h_2\acute{a}geti$, $k\acute{e}r mo\grave{i}$ $ag^h nutor$ ”.

THE SHEEP AND THE HORSES /2

1. $h_1\acute{e}k\grave{u}\bar{o}s$ tu $\grave{u}e\grave{u}k\grave{o}nt$:
2. “ $\acute{k}lud^{h_1}i$, $h_2o\grave{u}e\grave{i}$! $t\acute{o}d$ $sp\acute{e}k\grave{i}om\acute{e}s$, $\grave{n}sm\acute{e}i$ $ag^{h_1}nut\acute{o}r$ $\acute{k}\acute{e}r$:
3. $d^{h_1}g^{h_1}\acute{e}m\bar{o}$, $p\acute{o}tis$, $s\bar{e}$ $h_2\acute{a}u\grave{i}es$ $h_2\grave{u}l\grave{h}_1n\acute{a}h_2m$ $g^{wh}\acute{e}rmom$ $\grave{u}\acute{e}strom$ $\grave{u}ept$
4. $h_2\acute{a}u\grave{i}b^{h_1}ios$ tu $h_2\grave{u}l\grave{h}_1n\acute{a}h_2$ $n\acute{e}$ h_1esti .
5. $T\acute{o}d$ $\acute{k}e\acute{k}l\grave{u}u\acute{o}s$ $h_2\acute{o}u\grave{i}s$ $h_2\acute{a}gr\acute{o}m$ $b^{h_1}uget$.



IE CULTURE AND SOCIETY |

IE FAMILIES

**ph₂ter-* ‘father’ > Skt. *pitar-*, Lat. *pater-*, OIr. *athair*, etc.

**atta* ‘daddy’ > Hitt. *atta*, Gk. *átta*, OCS *otice*, Alb. *at*

**māter-* ‘mother’ > Skt. *mātar-*, Gk. *mēter-*, Lat. *māter-*, OIr. *máthair*

**b^hrāter-* ‘brother’ > Skt. *bhrātar-*, Gk. *p^hrēter-*, Lat. *frāter*, Arm. *ełbayr*

**swesor-* ‘sister’ > Skt. *svasar-*, Gk. *eor-*, Lat. *soror*, OIr. *siur*

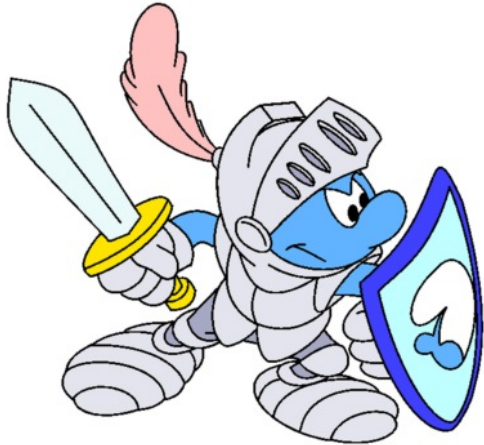
**nep(o)t-* ‘grandson, nephew’ > Skt. *napat-*, Lat. *nepot-*, OIr. *niæ*, OE *neffa* ‘grandson, nephew’

CAN WE REALLY RECONSTRUCT CULTURE?

IE SOCIETY (3 FUNCTIONS)



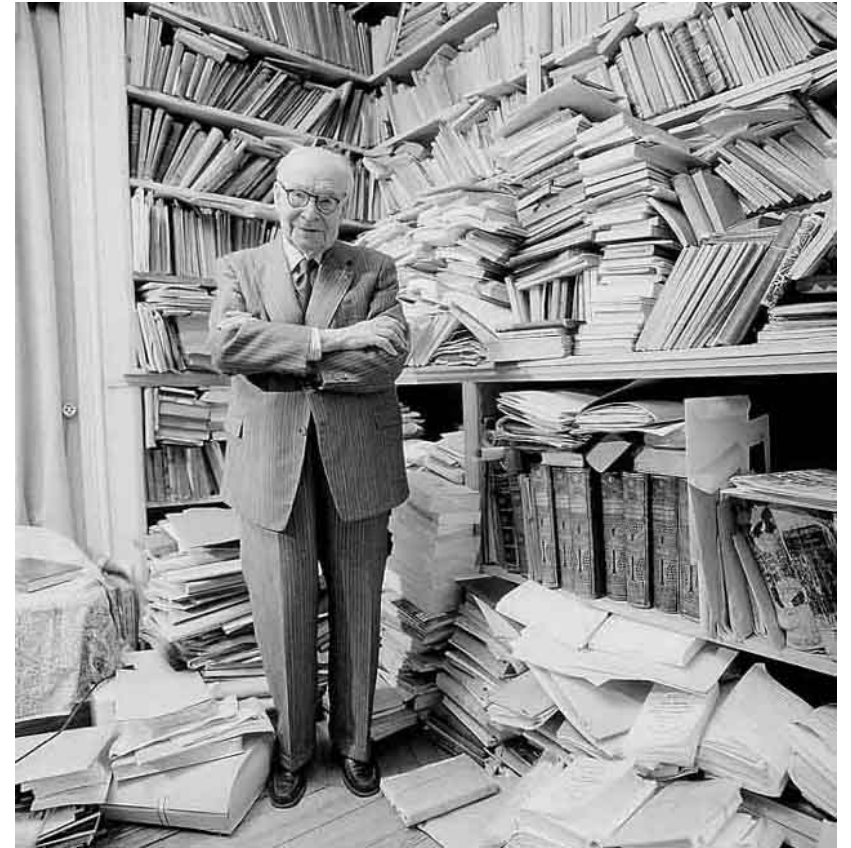
1.king/
priest



2.warriors



3.farmers/
producers



This is **Georges Dumézil (1898-1986)**. He liked to read. He also developed the theory that IE society is **tripartite (divided in 3 parts)**

IE VALUES (GUEST-HOST RELATIONSHIP)



Glaukos (Trojan ally) and **Diomedes** (Greek), meet on the battlefield. After they discover that their ancestors had a guest-host relationship, they agree not to fight and they exchange gifts instead

“Therefore I am your friend and host in the heart of Argos,
you are mine in Lykia, when I come to your country.
Let us avoid each other’s spears, even in close fighting.
There are plenty of Trojans for me to kill...And many Achaeans for you to slaughter.
But let us exchange our armor, so that these others may know
how we claim to be guests and friends from the days of our fathers”
(*Iliad* 6.224-231)

IE VALUES (GUEST-HOST RELATIONSHIP)



violating a guest-host relationship has
very, very bad consequences!

IE RELIGION AND RITUAL

we can reconstruct the names of some gods:

Father Sky: **dié̑us ph₂tér*

- Skt. *dyàus pítar-*
- Gk. *Zéus patér*
- Lat. *Iūppiter*
- Illyrian *Dei-pátrous*

Dawn: **h₂áusōs*

- Ved. *Uṣās*
- Gk. *Ēōs*
- Lat. *Aurōra*
- Lith. *Aušrine*

inherited **epithet:**

- *d^hugh₂ter diuós*
‘daughter of the sky’
- Skt. *duhitā diváh*
 - Gk. *thugatēr Diós*
 - Lith. *diėvo duktė*

IE RELIGION AND RITUAL



A fire sacrifice in Hinduism



Horse sacrifices (Skt. *ásvamedha*) were also a thing!
(they were related to kingship)

MORE ON THE ASVAMEDHA

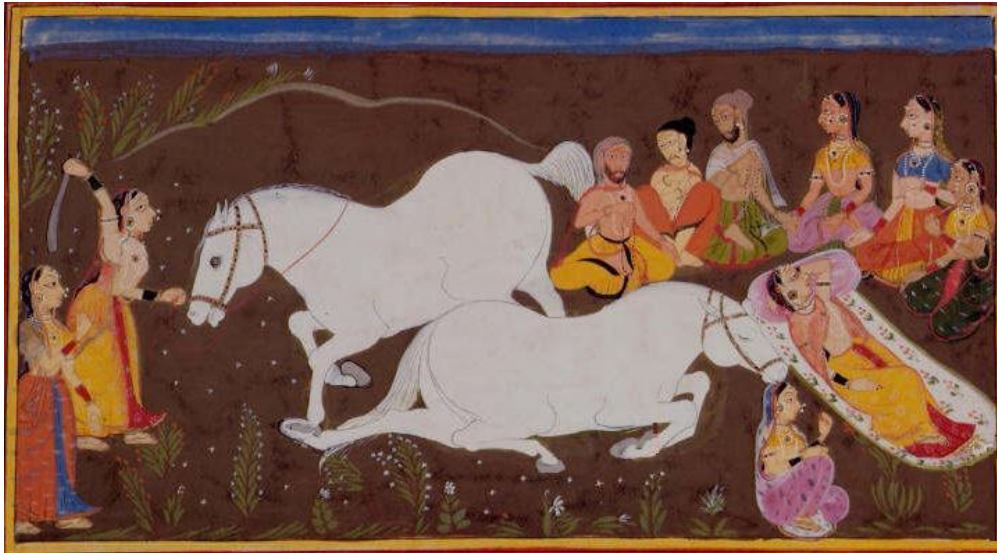
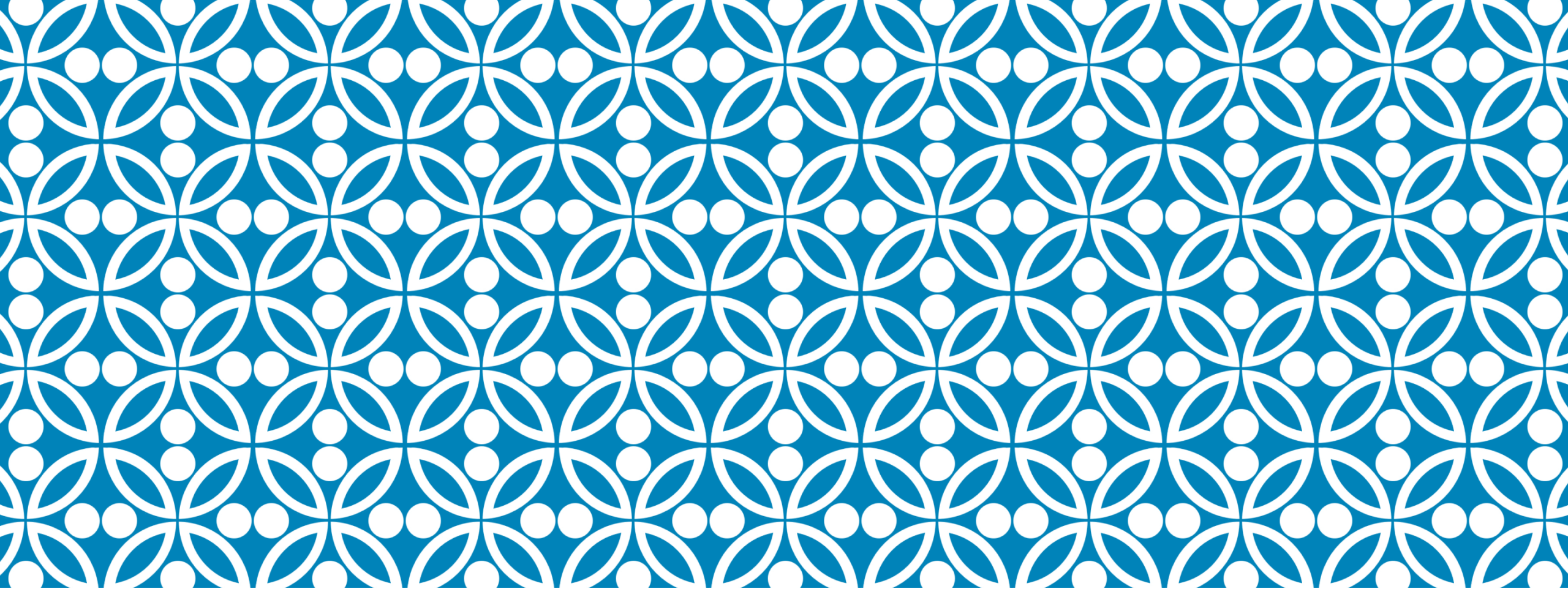


illustration of the **Ramayana** by Sahib Din, 1652. Kausalya (**the wife of the king**) is depicted slaying the horse (left) and lying beside it (right).

From the **Hittite Laws**:

- If a man has sexual relations with a cow, it is an unpermitted sexual pairing; he shall be put to death.
- If a man has sexual relations with a sheep, it is an unpermitted sexual pairing; he shall be put to death.
- If anyone has sexual relations with a pig or a dog, he shall die.
- If a man has sexual relations with **either a horse or a mule, it is not an offense.**



IE POETICS! |

ORAL TRADITIONAL POETRY

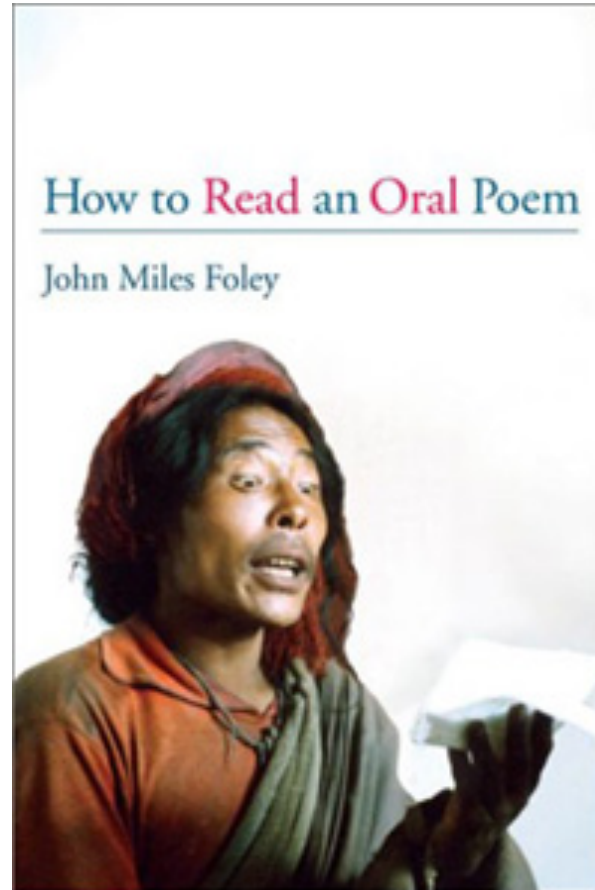


- some genres (long, epic) were improvised
- some genres (short, lyric) were memorized



Avdo Međedović (c. 1875 – 1953) a Montenegrin Bosniak *guslar* (gusle player and oral poet)

KINDS OF ORAL TRADITIONAL POETRY (IE AND NOT) STILL EXIST TODAY!



COMPOSITION IN PERFORMANCE AND FORMULAS



- Being able to compose in performance depends on learning some **automatic behaviors** which aid composition.
- We call these automatic verbal behaviors (fixed phrases) **formulas**.
- Formulas tend to express frequent or important concepts (**themes**).
- They also tend to have a **useful metrical shape** (they help you finish a line).

A COUPLE OF IE FORMULAS

**kléwos nd^hg^{wh}itóm*

‘inperishable fame’

- a. Skt. *śrávas akṣitám*
- b. Gk. *kléos áp^ht^hiton*



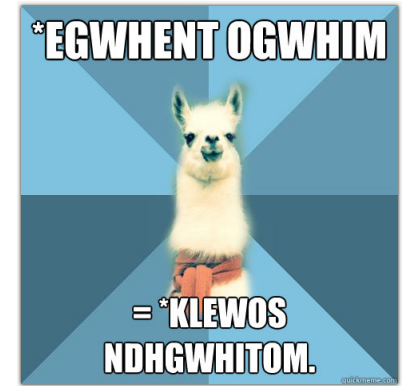
Achilles' Choice

die young → imperishable fame
live long → your fame perishes

A COUPLE OF IE FORMULAS

**(e-)g^{wh}en-t og^{wh}i-m*

‘(he) killed the dragon’



- Ved. *áhann áhim* ‘he (Indra) slew the serpent’
- Gk. *épep^hnen te Gorgóna* ‘he slew the Gorgon’
- Av. *yō janat̪ aźīm dahākəm* ‘who slew Aži Dahāka’
- Hitt. *nu=kan* ^{MUŠ}*illuyankan kuenta* ‘and he slew Illuyanka (the serpent)’
- OE : myth of Sigemund in Beowulf 884-7

Sigemunde gesprong
æfter deaðdæge dóm unlytel,
sylðan wíges heard **wyrm ácwealde**,
hordes hyrde.

To Sigemund came,
after his-death day, no little fame
since the handy battler **killed a serpent**
the guardian of a treasure.

FORMS OF IE POETRY

Quantitative Meter

- fixed number of syllables in each line
- syllables can be *light* or *heavy* [these meters care about **moras**]

– UU – X

Strophic Style

- short lines held together by grammatical/phonological/semantic parallelism
- no fixed line length or syllable count

in sickness and in health
for richer and for poorer

(not an actual IE text)

NOW! LET'S SCAN SOME IE QUANTITATIVE POETRY!

1. we are going to use the signs:

u = short syllable (syllables with no coda whose nucleus is a short vowel)

– = long syllable (all other syllables)

short syllables	long syllables
ka, ta, pra, tri, plm̄	kā, tā, prā, kal, kāl, kaṽ

2. we are going to syllabify all words in a line together:

the magic elephant and I → the.ma.gi.ce.le.fan.tan.di

NOW! LET'S SCAN SOME IE QUANTITATIVE POETRY!

Vedic Hymn to Indra

(11-syllable line)

Indrasya nu vīriyāni pra vōcam

yāni cakāra prat^hamāni vajrī

Greek Hymn to Aphrodite

(11-syllable line)

poikilot^hron' āt^hanat' Ap^hrodita

pais dios doloploke, lissomai se

Remember to **split** extra consonants between syllables:

asya → as.ya

ap^hro → ap^h.ro

NOW! LET'S SCAN SOME IE QUANTITATIVE POETRY!

Vedic Hymn to Indra

(11-syllable line)

Indrasya nu vīriyāni pra vōcam

— — UU — U — — U — X

yāni cakāra prat^hamāni vajrī

— UU — — UU — U — X

Greek Hymn to Aphrodite

(11-syllable line)

poikilot^hron' āt^hanat' Ap^hrodīta

— U — U — UU — U — X

pais dios doloploke, lissomai se

— U — U — UU — U — X

This particular kind of meter must have been inherited!

THE IE POET(S)



The highest-paid professional in his society, engaged in a guest-host relationship with a rich and powerful host.



Other members of IE society probably also practiced some kinds of traditional poetry/oral traditions.

MAKE YOUR OWN I-E NAME!

you can also use PIE words for animals/plants/objects found in Ch. 2 of your textbook

Adjective + Noun name

great fame
good fame
supreme guest
divine fame
great in battle
loud in battle
swift dog

Noun + Verb name

(in PIE, the order is Verb-Noun)

horse tamer
people leader
men ruler
heroes repeller

Noun + Noun name

counsel wolf
dog king
battle king
fame guest

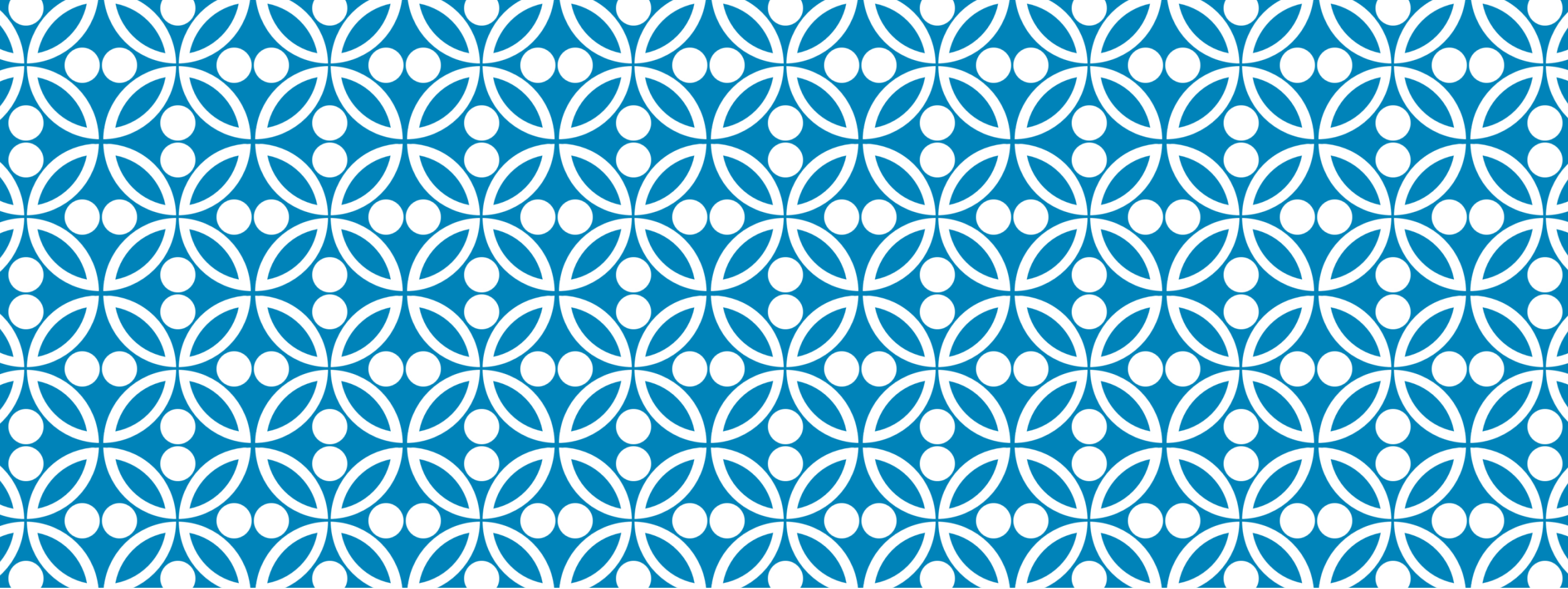
Adjectives: great, good, divine, loud, brave, swift, sweet, white, red

Nouns: fame, battle, horse, people, men, hero, wolf, dog, king, guest, cow, pig, sheep, honey, war (etc.)

Verbs: tame, lead, rule, repel, drive

INTERMISSION





WHERE WERE THEY FROM?



MALLORY QUOTE

‘We begin our search for the homeland of the Indo-Europeans with the deceptively optimistic claim that it has already been located. For who would look further north than [L]ok[a]manya Tilak and Georg Biedenkapp who traced the earliest Aryans to the North Pole? Or who would venture a homeland further south than North Africa, further west than the Atlantic or further east than the shores of the Pacific, all of which have been seriously proposed as cradles of the Indo-Europeans? This quest for the origins of the Indo-Europeans has all the fascination of an electric light in the open air on a summer night: it tends to attract every species of scholar or would-be savant who can take pen to hand. It also shows a remarkable ability to mesmerize even scholars or outstanding ability to wander far beyond the realms of reasonable speculation to provide yet another example of academic lunacy.’

—J.P. Mallory

**WHERE DID THE INDO-EUROPEANS
COME FROM?**



ALIENS!

H
HISTORY.COM

imgflip.com

WHY IS THIS SO **HARD**?



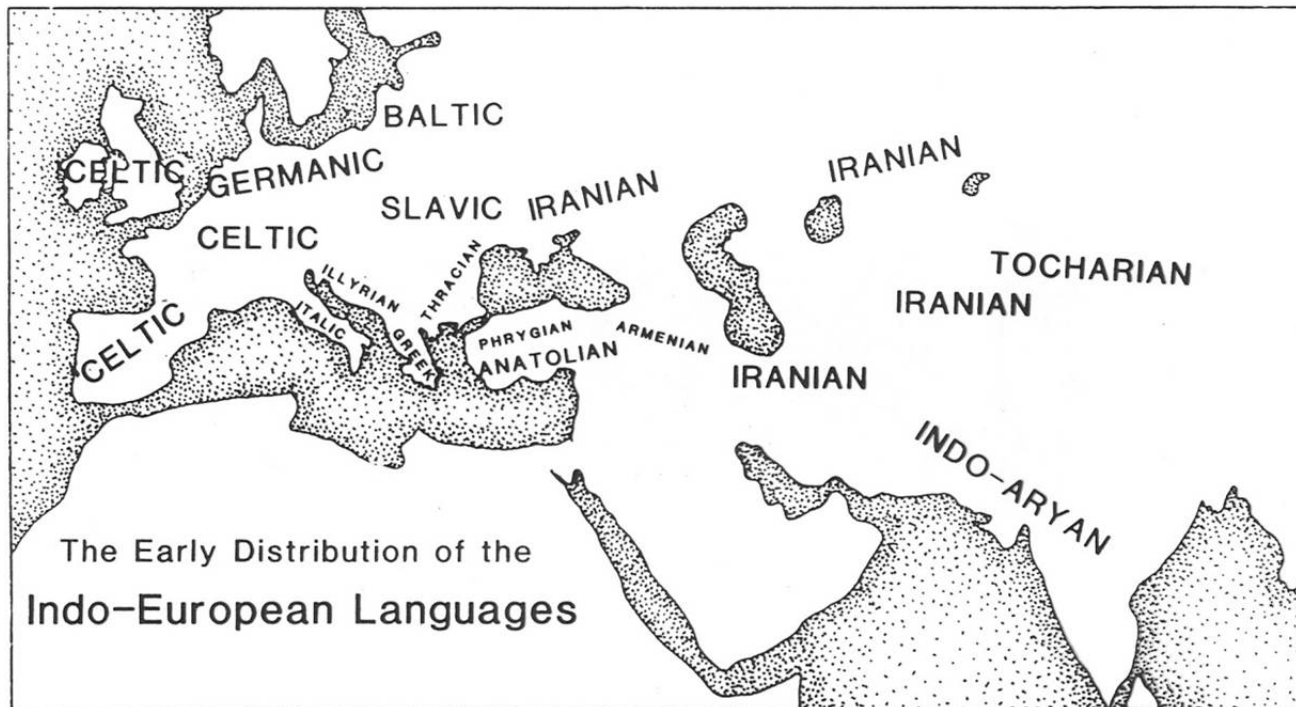
Linguistics



Archeology

- **Pots** (archeological cultures) **are not people!**
- **And pots** (archeological cultures) **don't speak!**
(unless they are inscribed – but they can't be inscribed before writing was invented!)

OK, LET'S LOOK AT A MAP



The early historical distribution of the major Indo-European linguistic groups.

AND NOW AT A LARGER MAP



How do we narrow down our search?

THE NAMES AND THINGS METHOD

- if they had a **name** for a thing, they also probably had that **thing**



- which of these cultures is more likely to have a word for coconut?
 - And which is more likely to have a word for mushroom?

IE ENVIRONMENT - FAUNA

Terms for bear, fox, wolf, beaver, otter, hedgehog, and elk (deer) are reconstructable in PIE:

“hedgehog” (**h₁eǵhi-*)

“boar” (**h₁epero-*)

“bear” (**h₂ǵtkos*)

“wolf” (**w₁kwos*)

“deer, horned animal” (**bhren-to-s* or **jork-*)

A few birds are also available:

**h₃er-* “eagle”

**sperg^{wh}-* “sparrow” (etc.)

all of these are pretty common
throughout Eurasia!



SALMON AND BIRCH FORESTS!

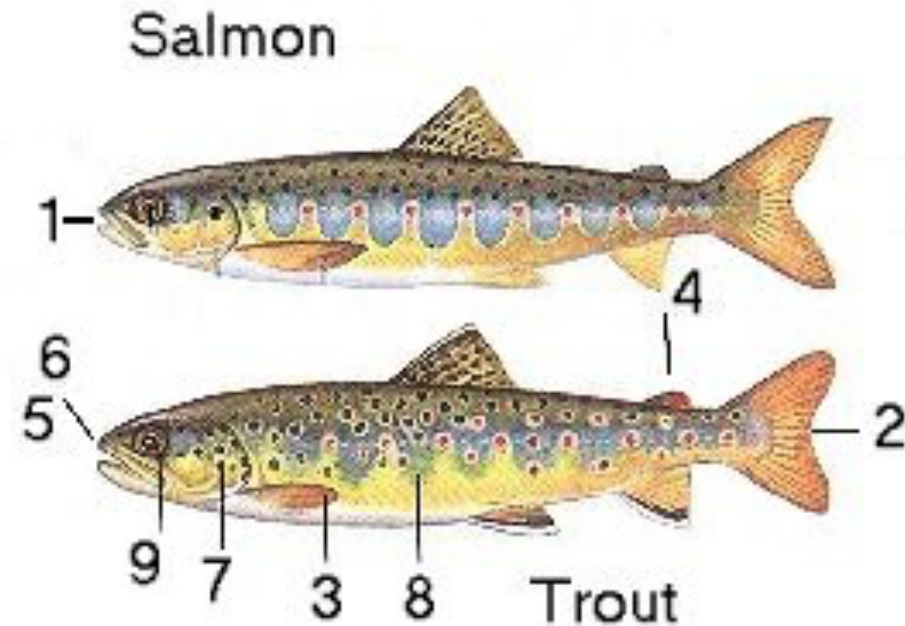


Look! It's a salmon carved out from birch!
(not an actual PIE artifact!)



This would restrict the possible area of the IE
homeland to northern Eurasia (possibly Baltic area)

BUT THE MEANING OF WORDS CAN CHANGE...



Also trouts and salmons basically look the same! (though the trout has a much wider distribution!)

WHAT COULD HELP US IDENTIFY THE IE PEOPLE
IN **THE ARCHEOLOGICAL RECORD?**

IE PASTORALISM



We can reconstruct names for a lot of **domesticated animals!**

- cow, steer, ox, bull

They also had names for **dairy products:**

- sour milk, butter, curds

We also have words for sheep (and wool), ram, lamb, goat, **horse**, and dog.

IE TECHNOLOGY

A) Horses!

We can reconstruct words for 'horse', 'wheel', and 'chariot'.

Horses were first domesticated in the Russian steppes starting around 3700BCE.

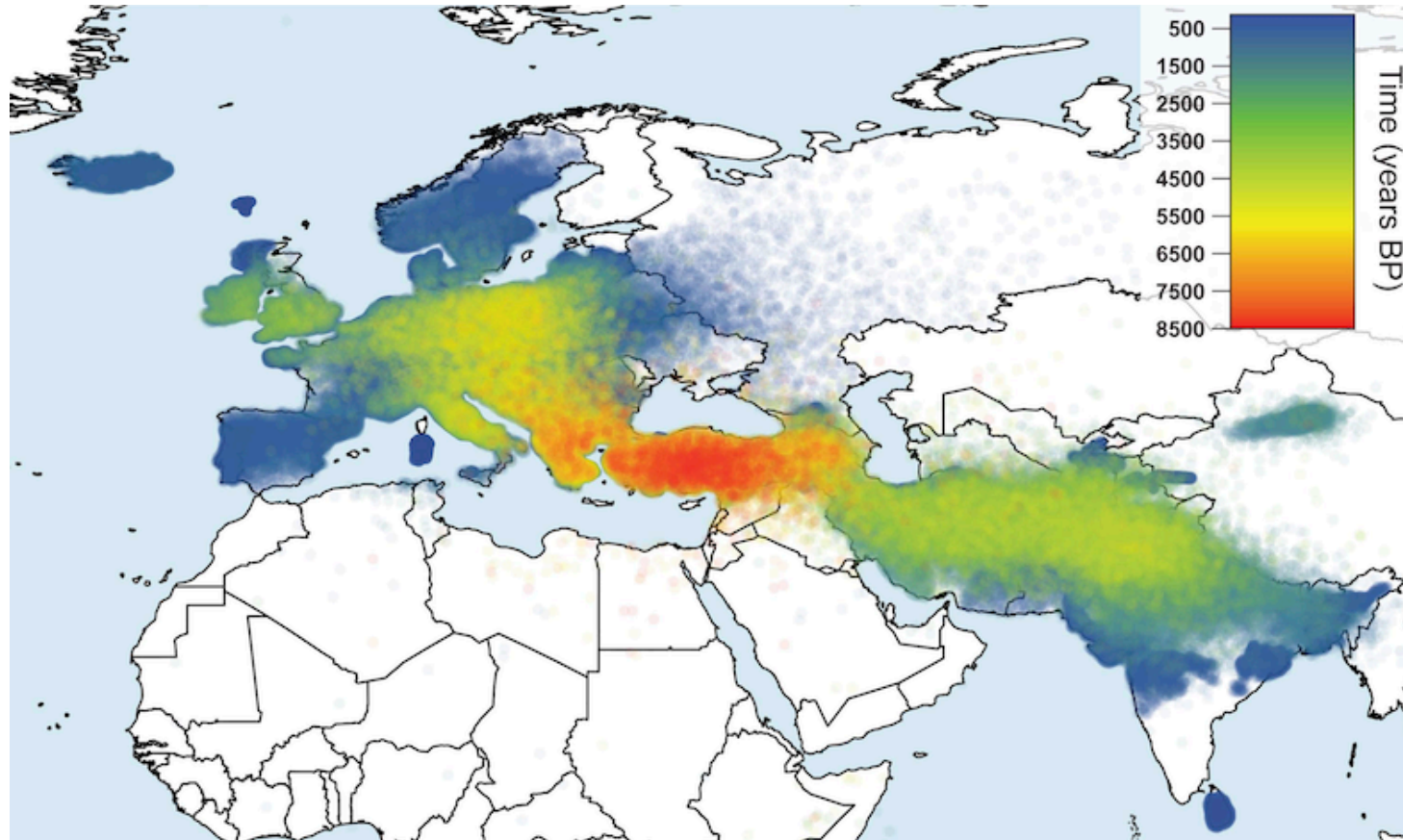
We have wheeled veicles starting 3500-3000BCE.

B) Agriculture!

We can reconstruct a word for 'plow', as well as words for 'field', grains, and some farming implements.

Agriculture spreads through Europe from Anatolia, starting around 7000BCE

THE ANATOLIAN HYPOTHESIS



This map is from:

<http://language.cs.auckland.ac.nz/>

(where you can read more about arguments for this hypothesis)

For this to be right, we would need to date PIE at 7000 BC!
(that's **3000 years earlier** than most linguists would like)

THE KURGAN HYPOTHESIS

kurgans are burial mounds that start appearing in the steppes of southern Russia in the IV millennium BCE



we think these
were Indo-
European
burials!

Sarmatian Kurgan
4th century BC,
Phillipovka, South
Urals, Russia

This hypothesis was first developed by **Marija Gimbutas**, who was Professor of European Archaeology and Indo-European Studies at UCLA from 1963 to 1989.

THE KURGAN HYPOTHESIS



Kurgan cultures have:

- pastoral economy
- hierarchical social structure
- patriarchy
- aggressive warfare
- animal sacrifice
- horses
- wheeled vehicles
- worship of a solar deity



sounds pretty
Indo-European to me!

THE KURGAN HYPOTHESIS

heimat = homeland (territory of origin)



OLD-EUROPEAN CULTURE VS. THE INDO-EUROPEANS

the peaceful, matriarchal
Old-European culture
before the arrival of the
Indo-Europeans

BEFORE



OLD-EUROPEAN CULTURE VS. THE INDO-EUROPEANS

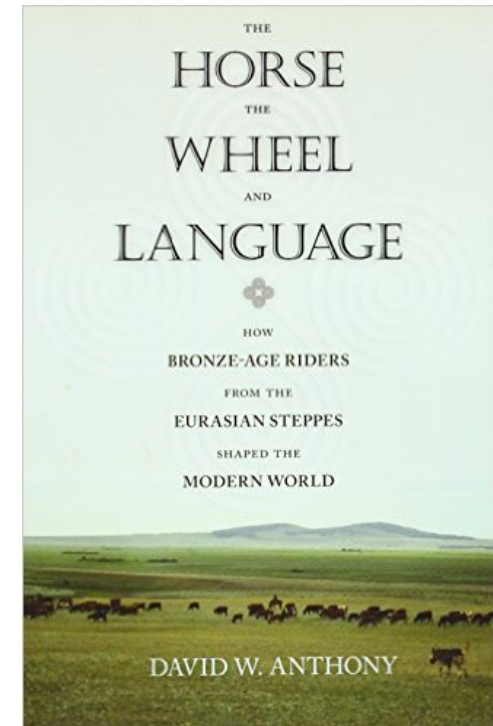
Europe after the arrival
of the war-like, patriarchal
Indo-Europeans

AFTER



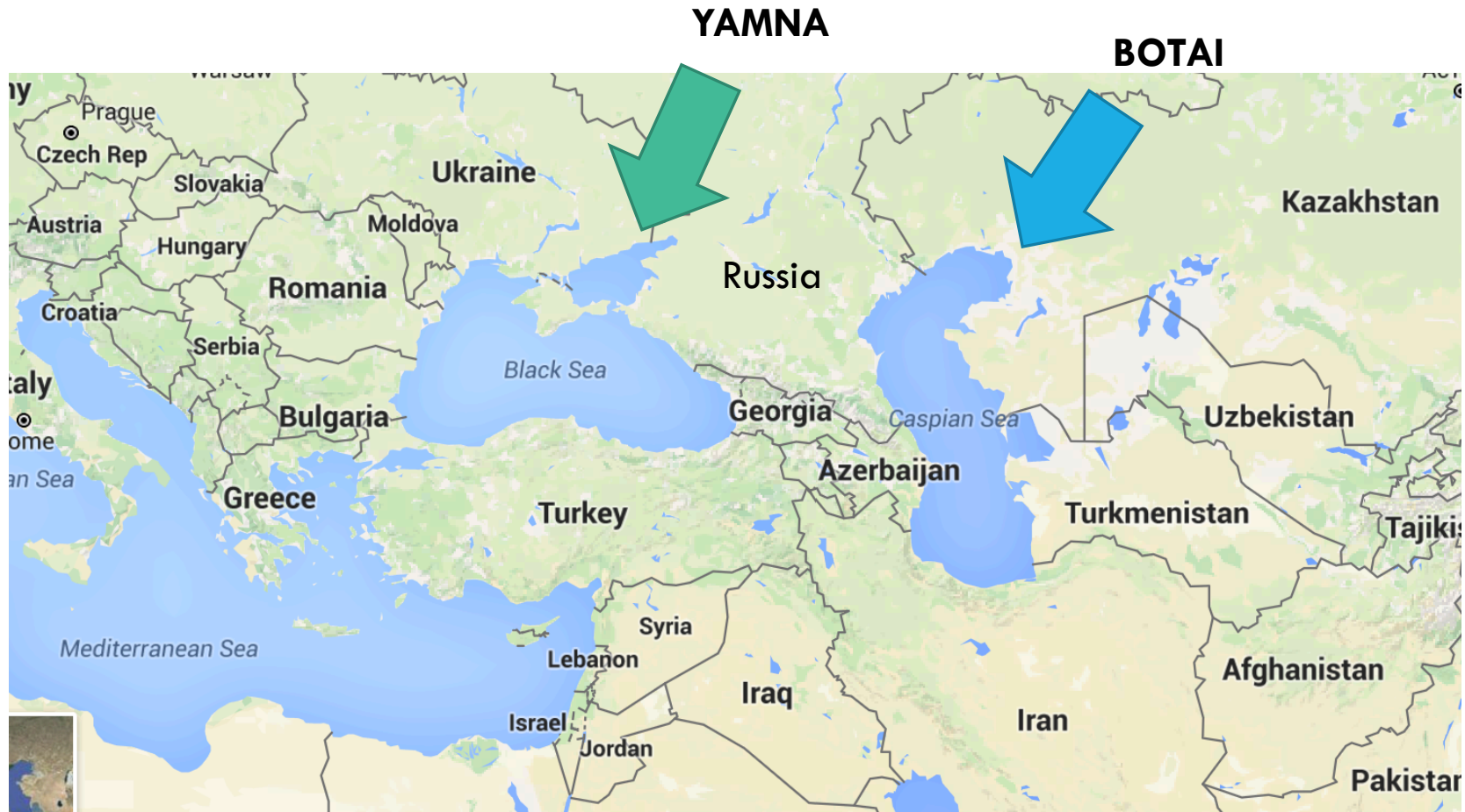
THE HORSE, THE WHEEL, AND THE LANGUAGE

- We can call this the **updated steppe hypothesis**, largely developed by **David Anthony**, who is a professor of Anthropology at Hartwick College.
- Anthony and his colleagues found evidence of early domestication of horses in the **Botai Archeological Culture (3700-3100)** (Kazakhstan), starting in 3700 BCE.
- The Botai Archeological Culture is closely related to the **Yamna archeological culture (3500-2000BCE)**, which looks very Indo-European (they have horses, chariots, pastoralism, etc.). Thanks to the horse, they spread very quickly into the steppes.



WHERE WERE THEY, EXACTLY?

The **Botai culture** (3700-3100) is in modern Kazakhstan
The **Yamna culture** (3500-2000) is in Ukraine and Russia

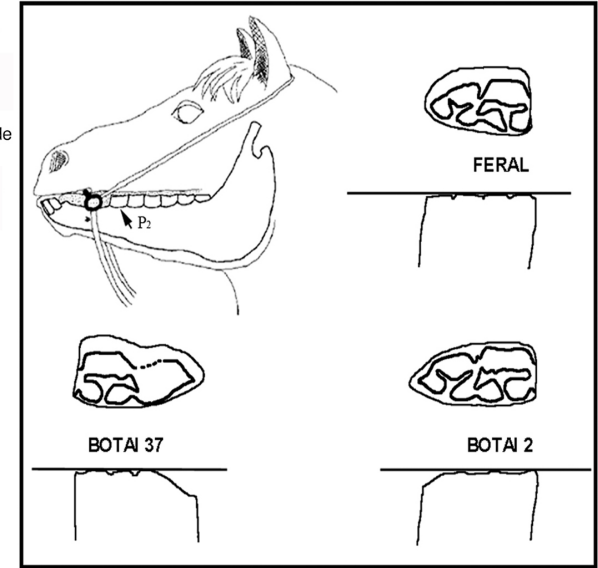
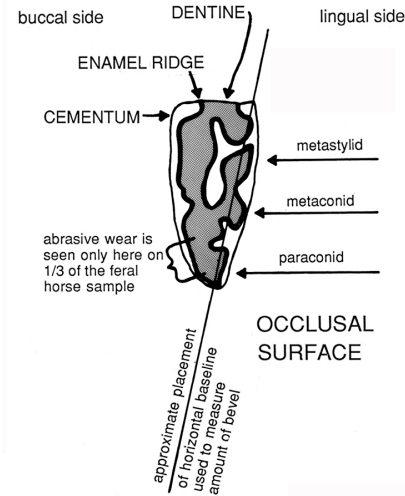


HOW CAN YOU TELL IF HORSES ARE DOMESTICATED?

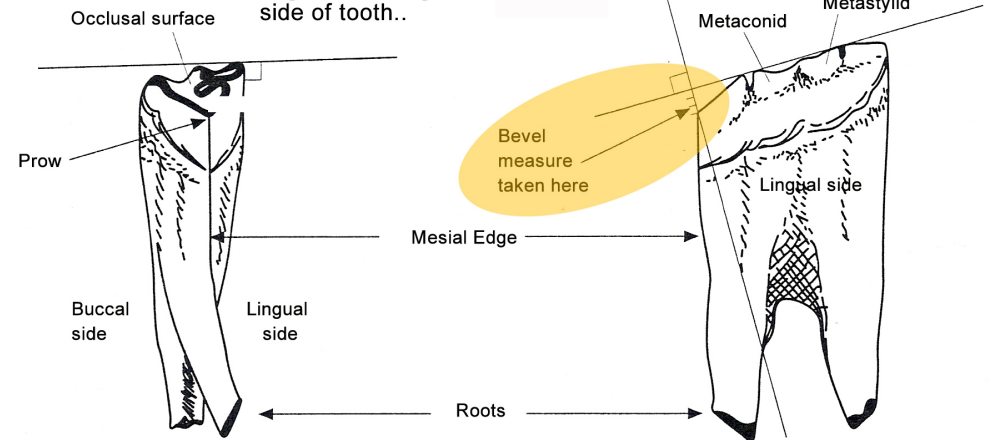
well, you have to look into the horse's mouth!



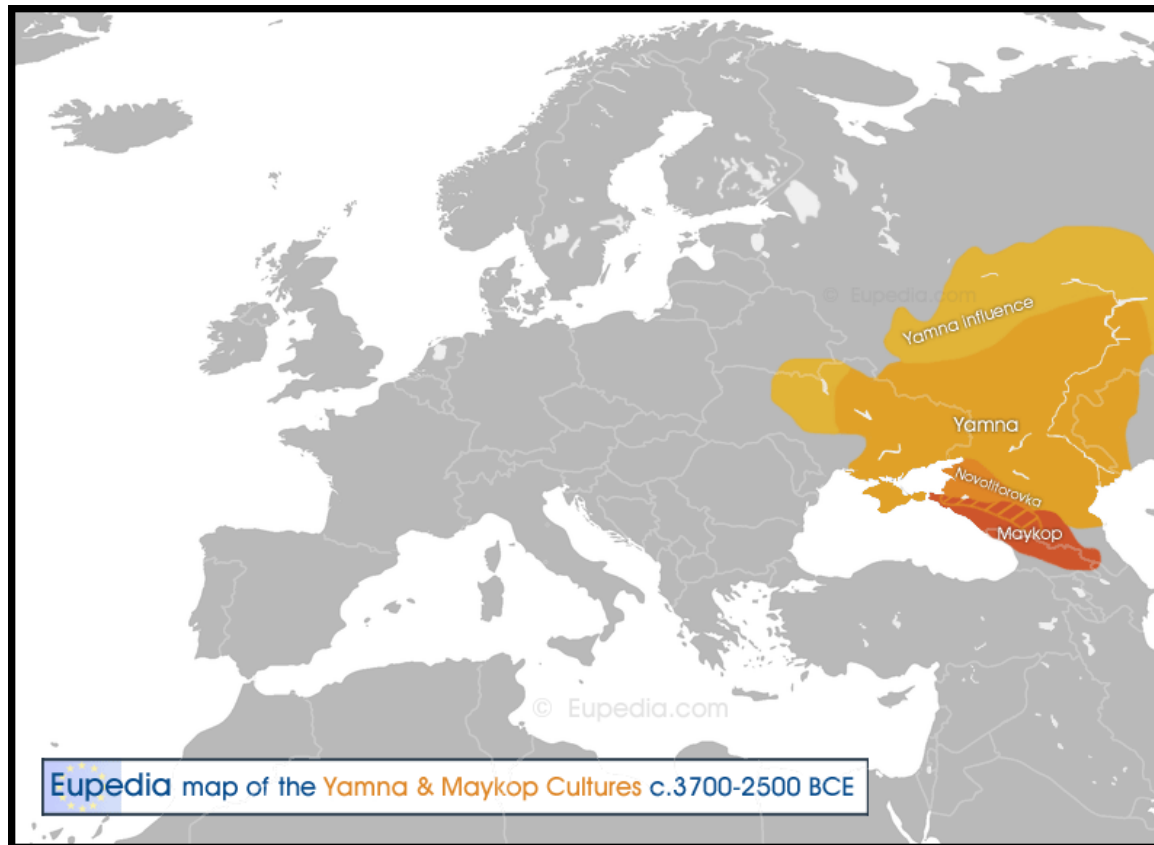
Method of measuring bevel



Horizontal plane is at a 90 degree angle to the lingual side of tooth..



YAMNA CULTURE



We think that these
were the
Indo-Europeans!

Image from: http://www.eupedia.com/europe/Haplogroup_R1a_Y-DNA.shtml, where you can read more

ANDRONOVO CULTURE

we think that these were the Indo-Iranians

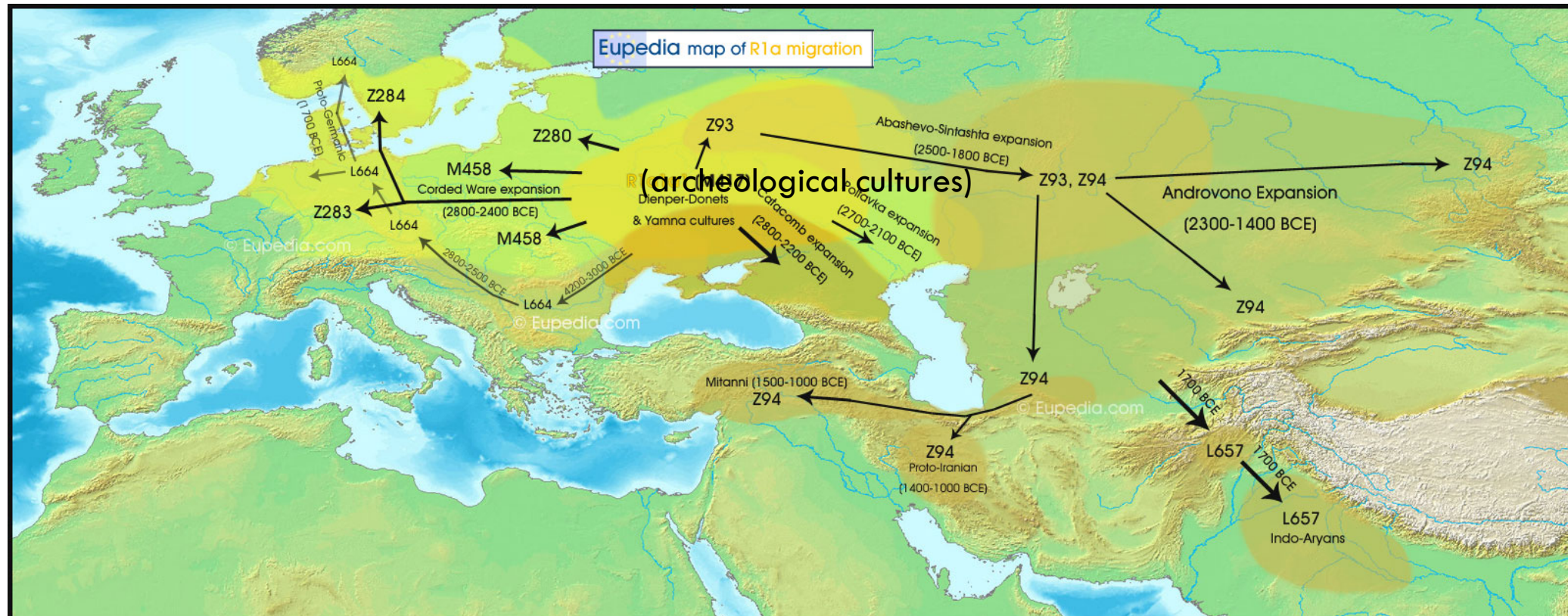


Image from: http://www.eupedia.com/europe/Haplogroup_R1a_Y-DNA.shtml, where you can read more

SEE YOU NEXT WEEK!



QUIZ PREVIEW!

1. D₂ē₂ p₂t₂ h₁ é₂om der₂kt
2. h₂ó₂is ó₂g^{wh}im g^{wh}ent
3. h₁é₂os u₂ó₂hom u₂é₂het
4. h₂á₂ei klé₂os ŋ₂d^hg^{wh}itóm h₁é₂sti
5. klud₂h₁, h₁é₂e!
6. u₂ó₂hom u₂é₂he!
7. ó₂g^{wh}is h₂ó₂im g^{wh}ent.
8. h₂ó₂im g^{wh}ŋ₂d^hi!
9. D₂é₂ p₂t₂, klud^hi mo₂!