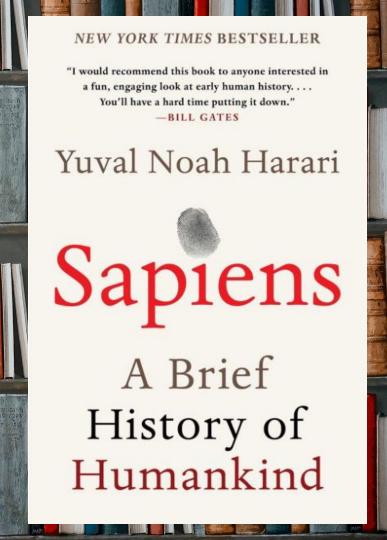
Introduction to Course



The genus *homo* has been around for about 2 million years.

During that time there has been various species of *homo* (e.g. *homo habilis*, *homo erectus*, *homo neanderthalensis*, etc.) which have overlapped in their existences.

They are all now extinct save one: Sapiens (see Harari 2015, chapter 1).



Homo sapiens emerged between 300,000 to 200,000 years ago.

By 150,000 years ago, Sapiens had already populated Eastern Africa.

About 100,000 years ago, some Sapiens migrated north but were beaten back by Neanderthals.





This has led some researchers to believe that the neural structure of those Sapiens (circa 150,000 years ago) wasn't quite like ours yet.

70,000 years ago they migrated again and this time beat out the Neanderthals.

It was this period, from about 70,000-30,000 years ago, that constitutes the cognitive revolution.

The advanced language skills that were **somehow** acquired during this period allowed Sapiens to build robust social groups, via the use of social constructs, and dominate their environment, to the detriment of other *homo* species (see Harari 2014, chapter 2).



THE Dopaminergic Mind in Human Evolution and History

FRED H. PREVIC

What brought about the cognitive revolution is disputed.

In fact, some argue that <u>it doesn't</u> <u>strictly-speaking exist</u>.

What is indisputable, though, is that between 15,000 to 12,000 years ago (the so-called Neolithic), Sapiens' capacity for **collective action** increased dramatically.

THE Dopaminergic Mind in Human Evolution and History

FRED H. PREVIC

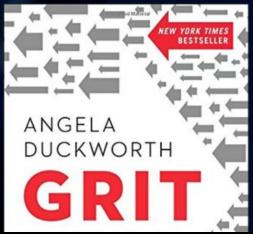
Relatedly, Hawks (et al. 2007) calculates that over the last 40,000 years our species has evolved at a rate 100 times as fast as the previous evolution.

Important Concepts

Theory

A theory is a set of sentences that have some <u>explanatory</u> <u>power</u>, i.e., some capacity to explain a phenomenon.

"A theory is an explanation.



A theory takes a blizzard of facts and observations and explains, in the most

basic terms, what the heck is going on.

By necessity, a theory is incomplete: it oversimplifies.

But in doing so, it helps us understand" (Duckworth 2016: 31).

1	$ \forall x \exists y (Px \land Qy) $	ass.
2	$\exists y(Pa \land Qy)$	$1,(\forall E)$
3	$Pa \wedge Qb$	ass.
4	Pa	$3, (\wedge E)$
5	Pa	$3-4, (\exists E)$
6	$\forall x P x$	5, $(\forall I)$
7	$Pa \wedge Qc$	ass.
8	Qc	7, $(\wedge E)$
9	$\exists xQx$	$8,(\exists I)$
10	$\exists xQx$	7–9, $(\exists E)$
11	$\forall x P x \land \exists x Q x$	$6, 10, (\wedge I)$
12	$\forall x \exists y (Px \land Qy) \rightarrow \forall x Px \land \exists x Qx$	1–11, $(\rightarrow I)$

Two or more statements are logically consistent if it is possible that they are true all true simultaneously.





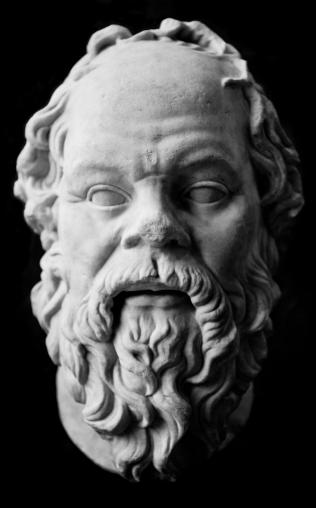




An argument is a set of sentences given in support of another sentence, i.e., the conclusion.

A premise is a member of the set of sentences that supports the conclusion.

The conclusion is the sentence being argued for.

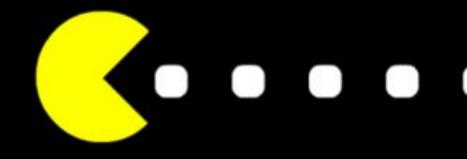




conclusion

E.g., of an argument

- 1. All men are mortal.
- 2. Socrates is a man.
- 3. Therefore, Socrates is mortal.



Food for thought...

Sometimes, just putting the argument into

standard form will help you see if it is



HAVE YOU HEARD THIS BEFORE?



Vegan Dude:

Heeey, did you know that humans are the only animals that drink the milk of other mammals?

HAVE YOU HEARD THIS BEFORE?



- 1. If an activity is done by humans, but not by other mammals, then that activity is morally wrong.
- Drinking the milk of other mammals is something only humans do.
- Therefore, drinking non-human milk is morally wrong.







HAVE YOU HEARD THIS BEFORE?



- 1. If an activity is done by humans, but not by other mammals, then that activity is morally wrong.
- 2. Drinking the milk of other mammals is something only humans do.
- Therefore, drinking non-human milk is morally wrong.

Cognitive Bias

A cognitive bias is a psychological impulse that can unconsciously cause a person to form a judgment or belief (or perform a behavior) from poor, irrelevant, or insufficient data.

COGNITIVE BIAS OF THE DAY

Confirmation Bias, sometimes called *my-side bias*, is the unconscious tendency to seek, interpret, or selectively recall information in a way that confirms one's existing beliefs (<u>Nickerson 1998</u>).

RELATED, BELIEF BIAS IS THE TENDENCY TO RATE THE STRENGTH OF AN ARGUMENT ON THE BASIS OF WHETHER OR NOT WE AGREE WITH THE CONCLUSION.

For example...

VOLUNTEERS GIVEN PRAISE BY A SUPERVISOR WERE MORE LIKELY TO READ INFORMATION PRAISING THE SUPERVISOR'S ABILITY THAN INFORMATION TO THE CONTRARY (HOLTON & PYSZCZYNSKI 1989).



FOR EXAMPLE Also...

KITCHEN APPLIANCES SEEM MORE VALUABLE ONCE YOU BUY THEM (BREHM 1956),

JOBS SEEM MORE APPEALING ONCE YOU'VE ACCEPTED THE POSITION (LAWLER ET AL . 1975),

AND HIGH SCHOOL STUDENTS RATE COLLEGES AS MORE ADEQUATE ONCE THEY'VE BEEN ACCEPTED INTO THEM (LYUBOMIRSKY AND ROSS 1999). In their 2006 study, Taber and Lodge gave participants a variety of arguments on controversial issues, such as gun control. They divided the participants into two groups: those with low and those with high knowledge of political issues.

THE LOW-KNOWLEDGE GROUP EXHIBITED A SOLID CONFIRMATION BIAS: THEY LISTED TWICE AS MANY THOUGHTS SUPPORTING THEIR SIDE OF THE ISSUE THAT THOUGHTS GOING THE OTHER WAY.





THEY FOUND SO MANY THOUGHTS SUPPORTING THEIR FAVORITE POSITION THAT THEY GAVE <u>NONE</u> GOING THE OTHER WAY.



FOR EXAMPLE





FOR EXAMPLE

Ethical Theory

Ethical Theory, aka Normative Ethics, is a subfield of Philosophy concerned with the development of a philosophical system that prescribes how one ought to act; i.e., it attempts to prescribe how one should live.

