

the things we create

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science



Make an observation

Make an observation

Formulate a theory

Make an observation

Formulate a theory

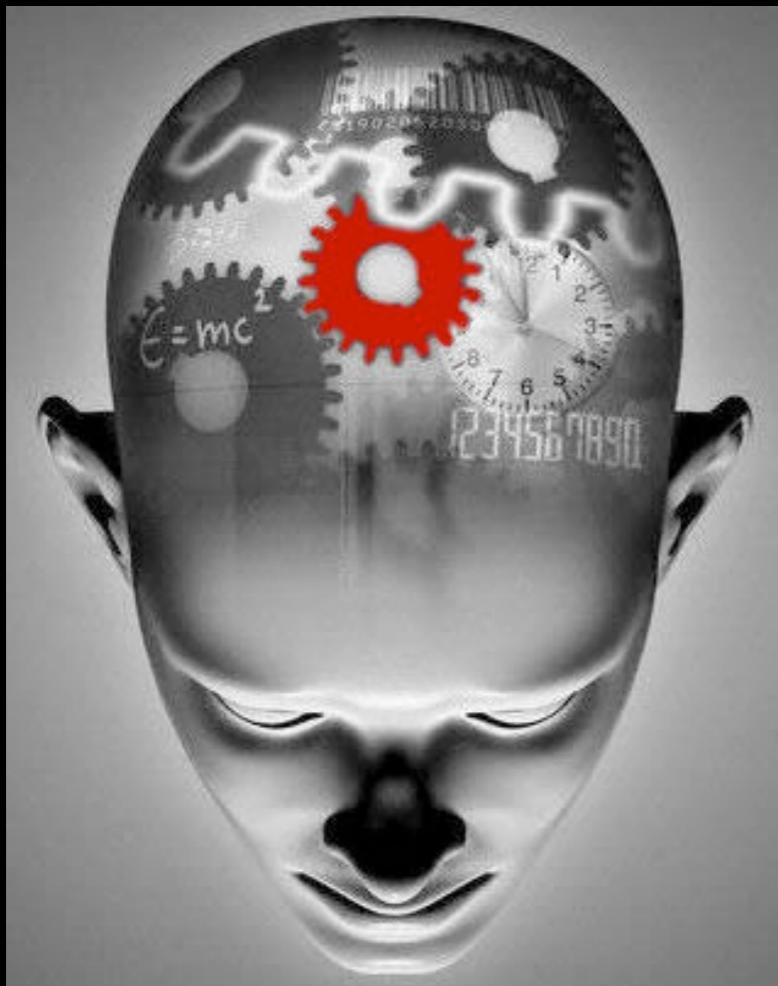
Run an experiment

Make an observation

Formulate a theory

Run an experiment

Measure and revise



Make an observation

Formulate a theory

Run an experiment

Measure and revise

Make an observation

Look at existing
phenomenon (apps)

Formulate a theory

Run an experiment

Measure and revise

Make an observation

Look at existing
phenomenon (apps)

Formulate a theory

Redesign the system
(language)

Run an experiment

Measure and revise

Make an observation

Look at existing phenomenon (apps)

Formulate a theory

Redesign the system (language)

Run an experiment

Build a new system

Measure and revise

Make an observation

Look at existing phenomenon (apps)

Formulate a theory

Redesign the system (language)

Run an experiment

Build a new system

Measure and revise

Make apps in the new system

art



Ars Technica

Ars Technica
the art of technology

artifact





Saturday, February 2, 13



Skill

It comes from practice.

art

humans

nature

forms

technology

sciences

Stories

Agriculture

Physics

Painting

Bridges

Chemistry

Theatre

Language

Biology

Music

Radio & TV

Astronomy

Mathematics

Telephone

Geology

Programing

Electric Power

...

Religion

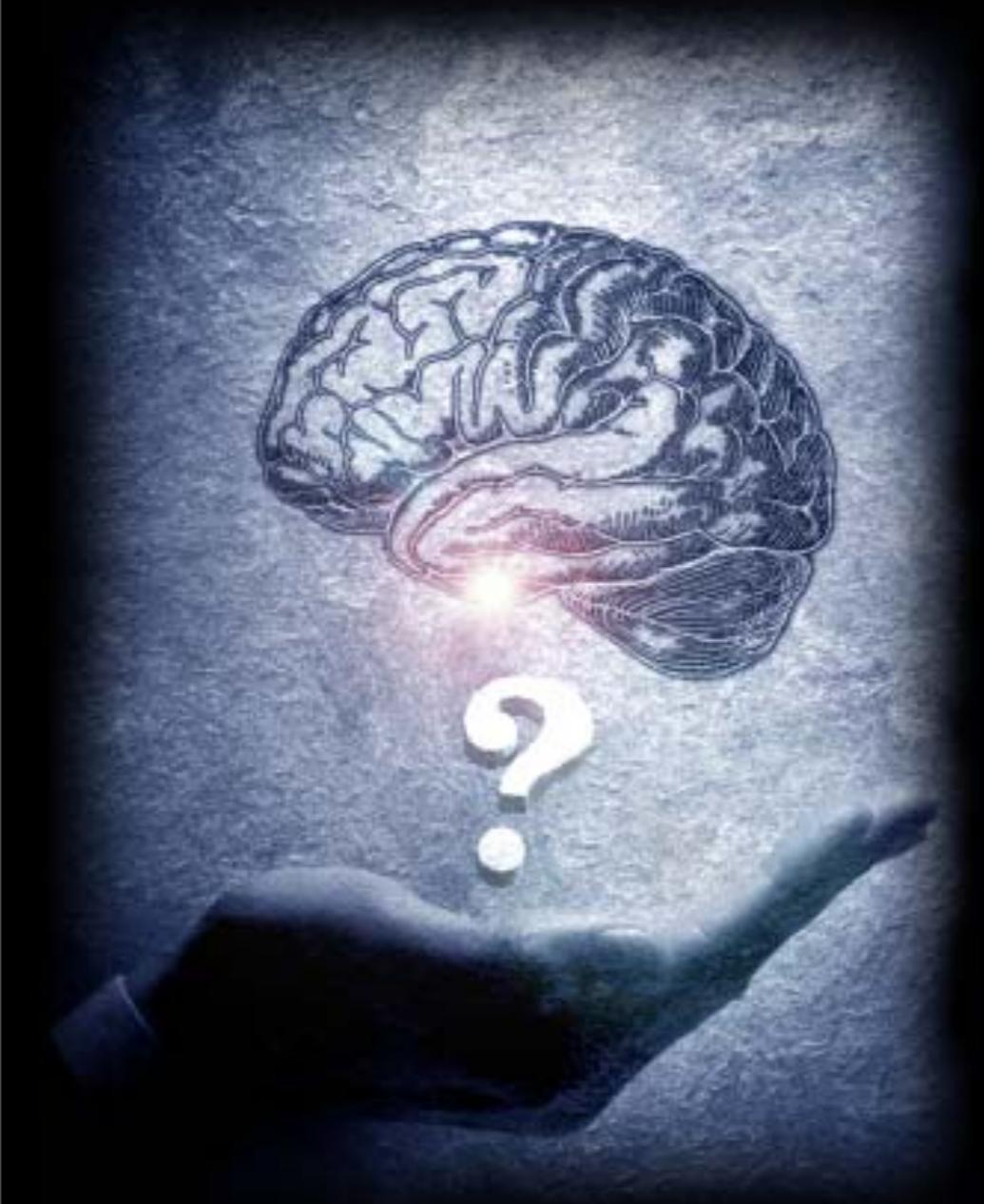
Cars

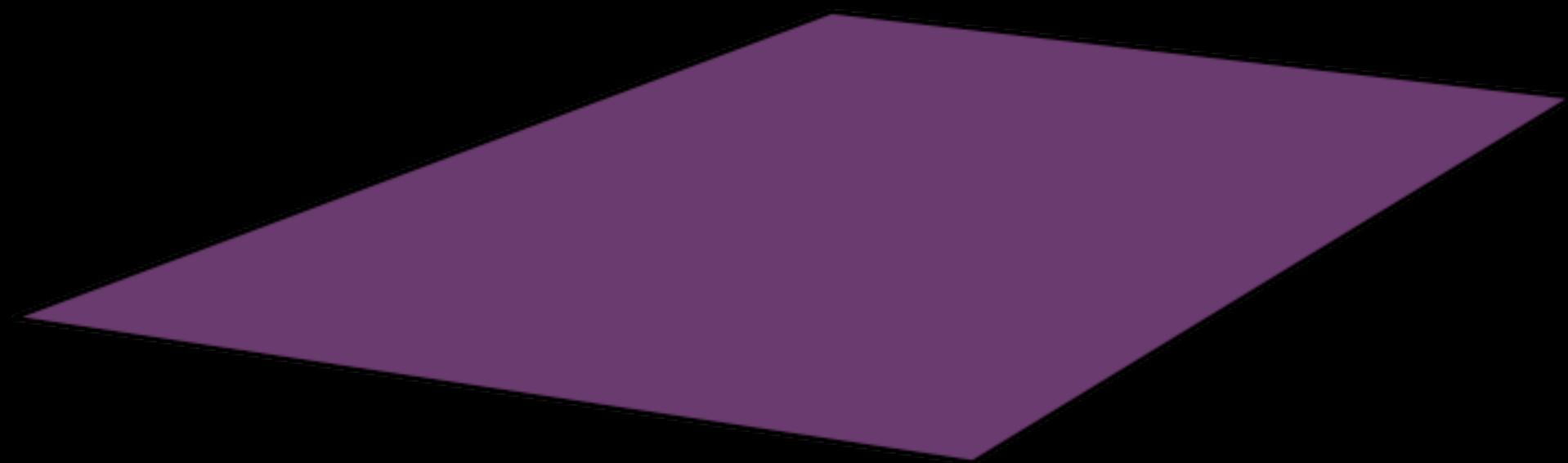
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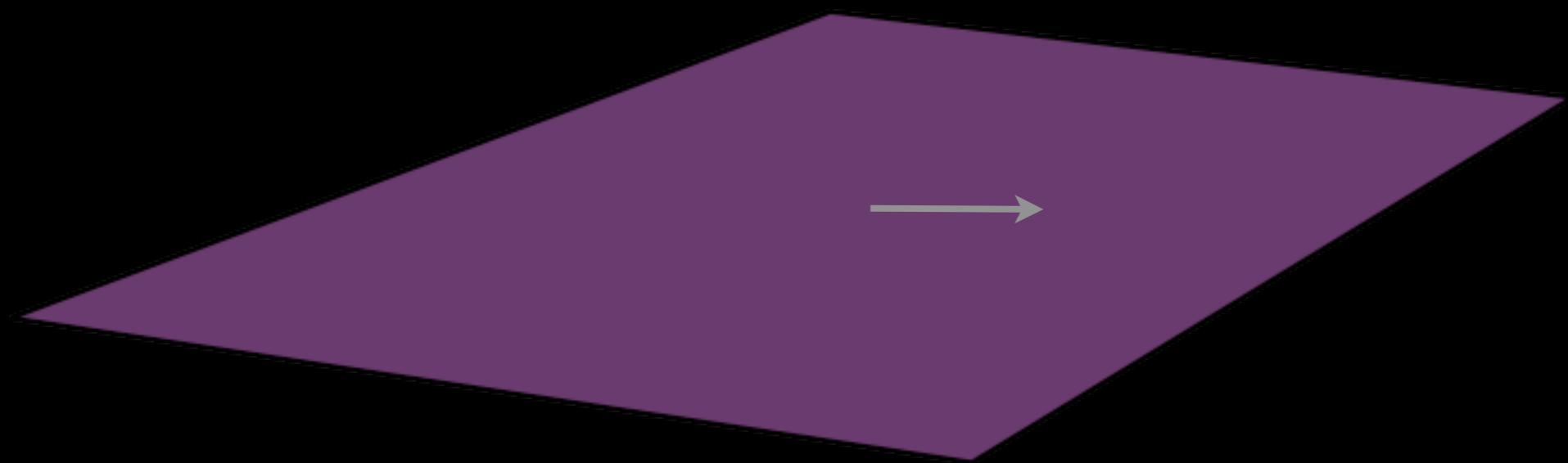
Computers

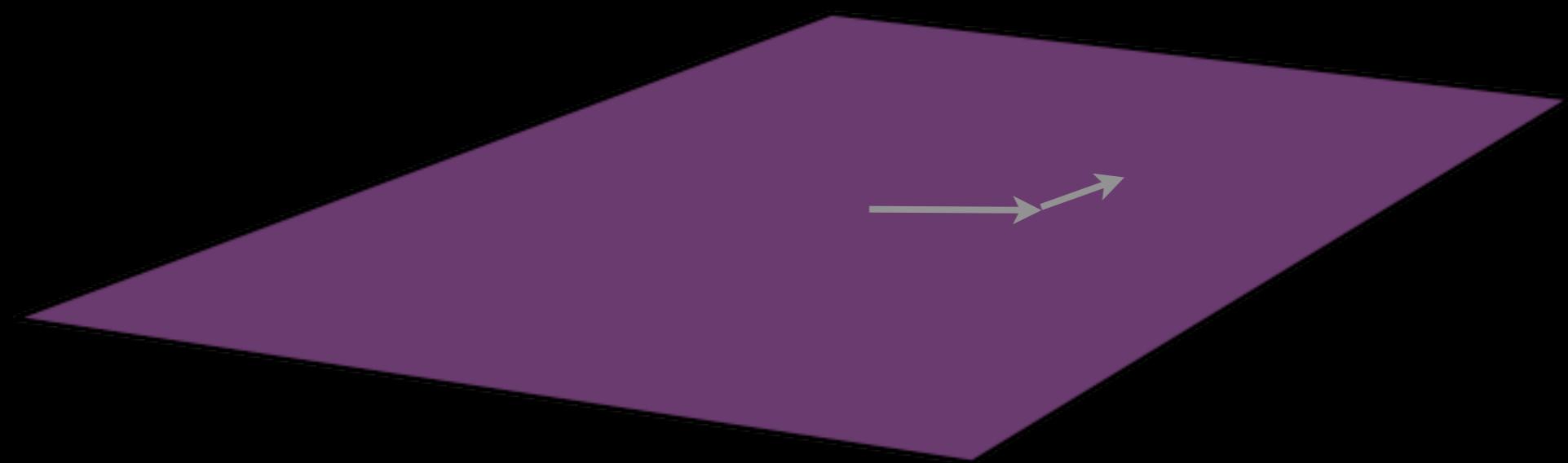
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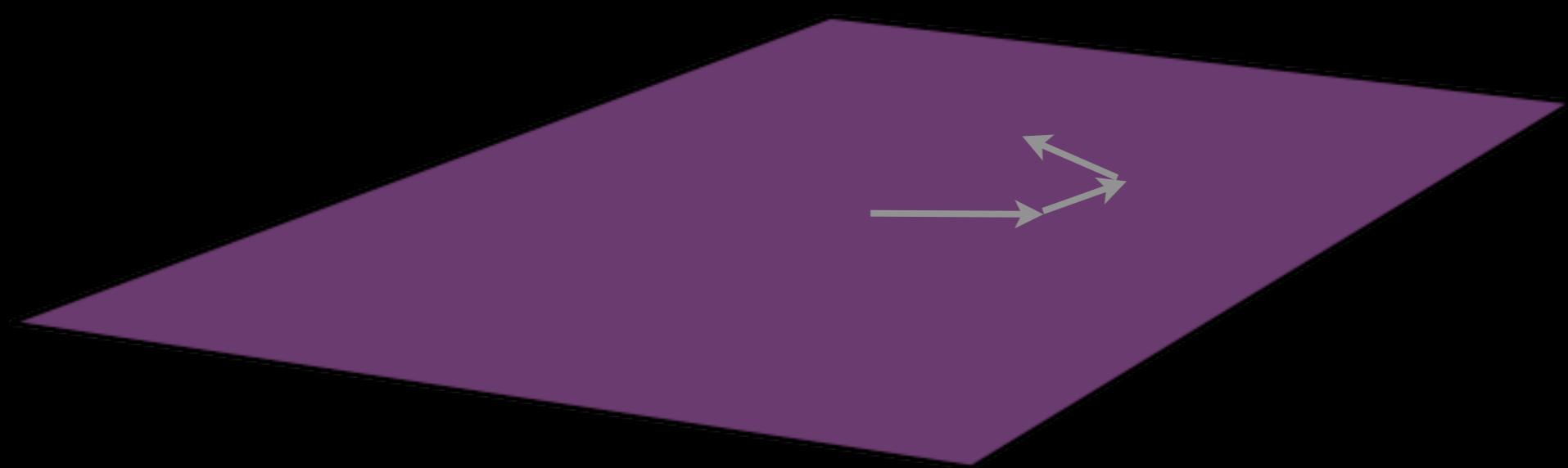
Idea-genesis

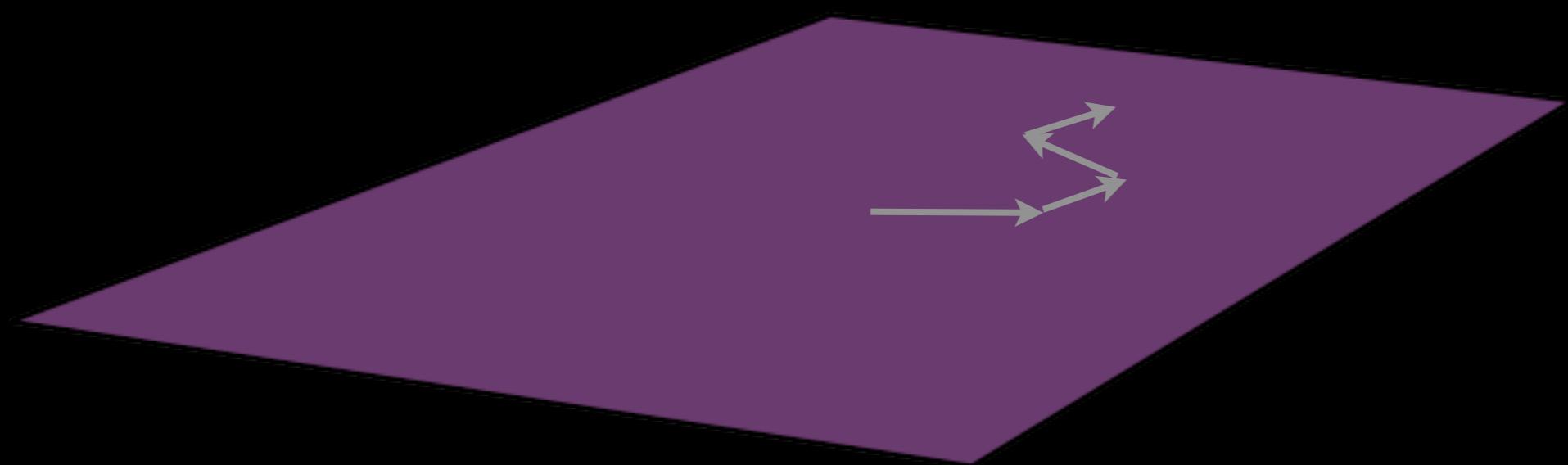


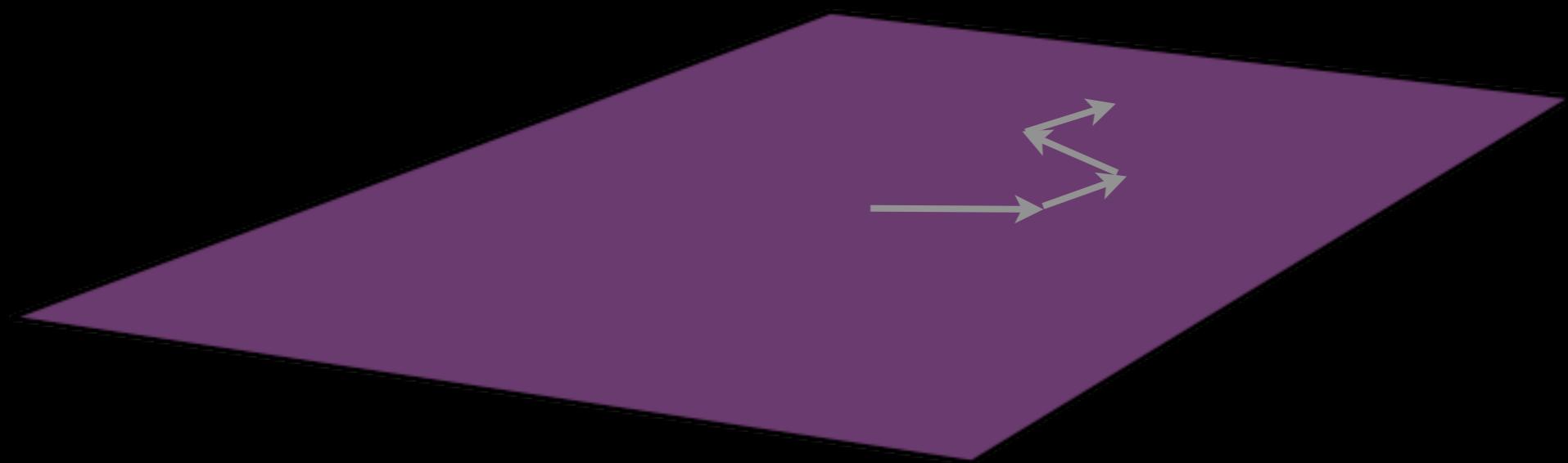


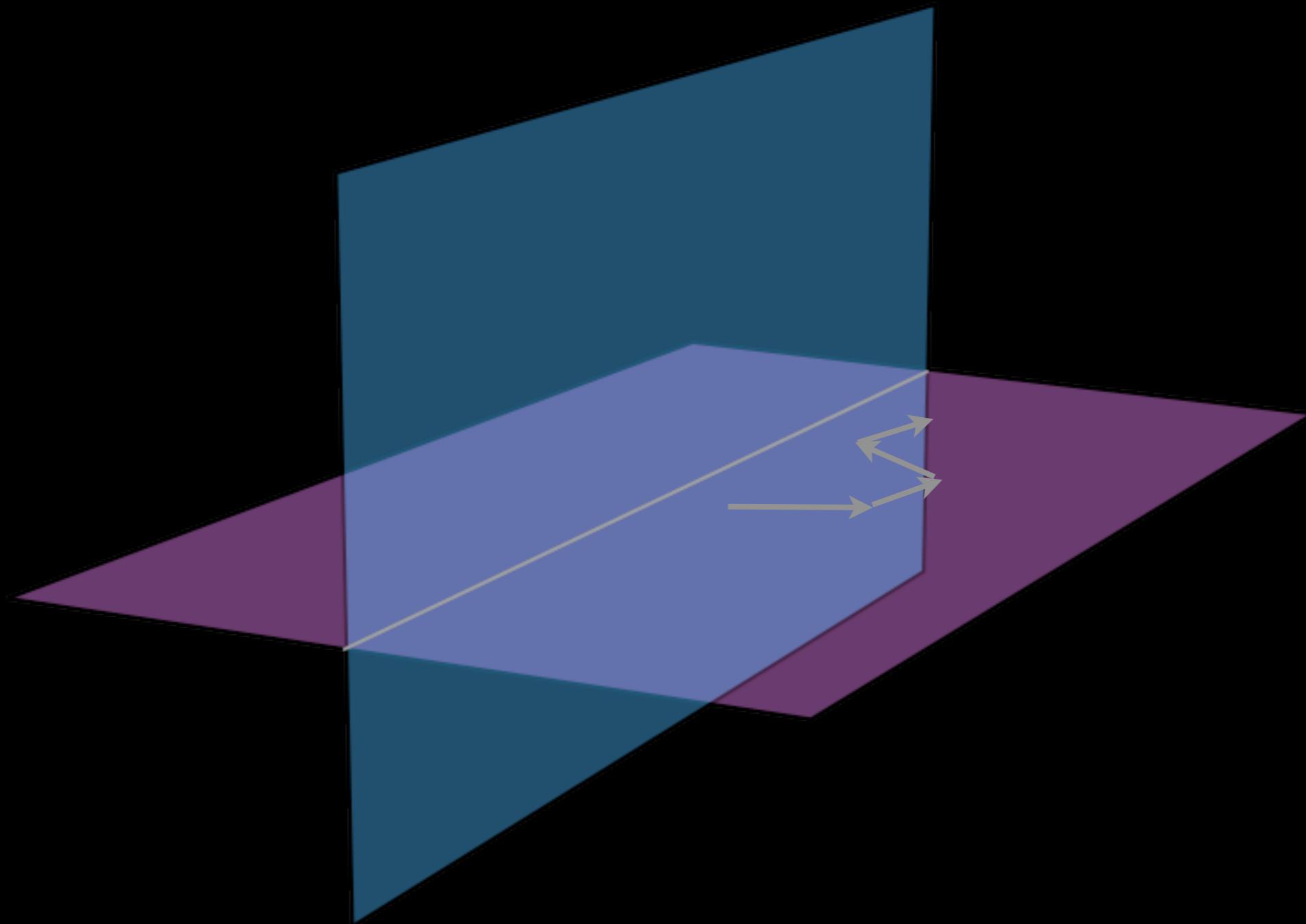


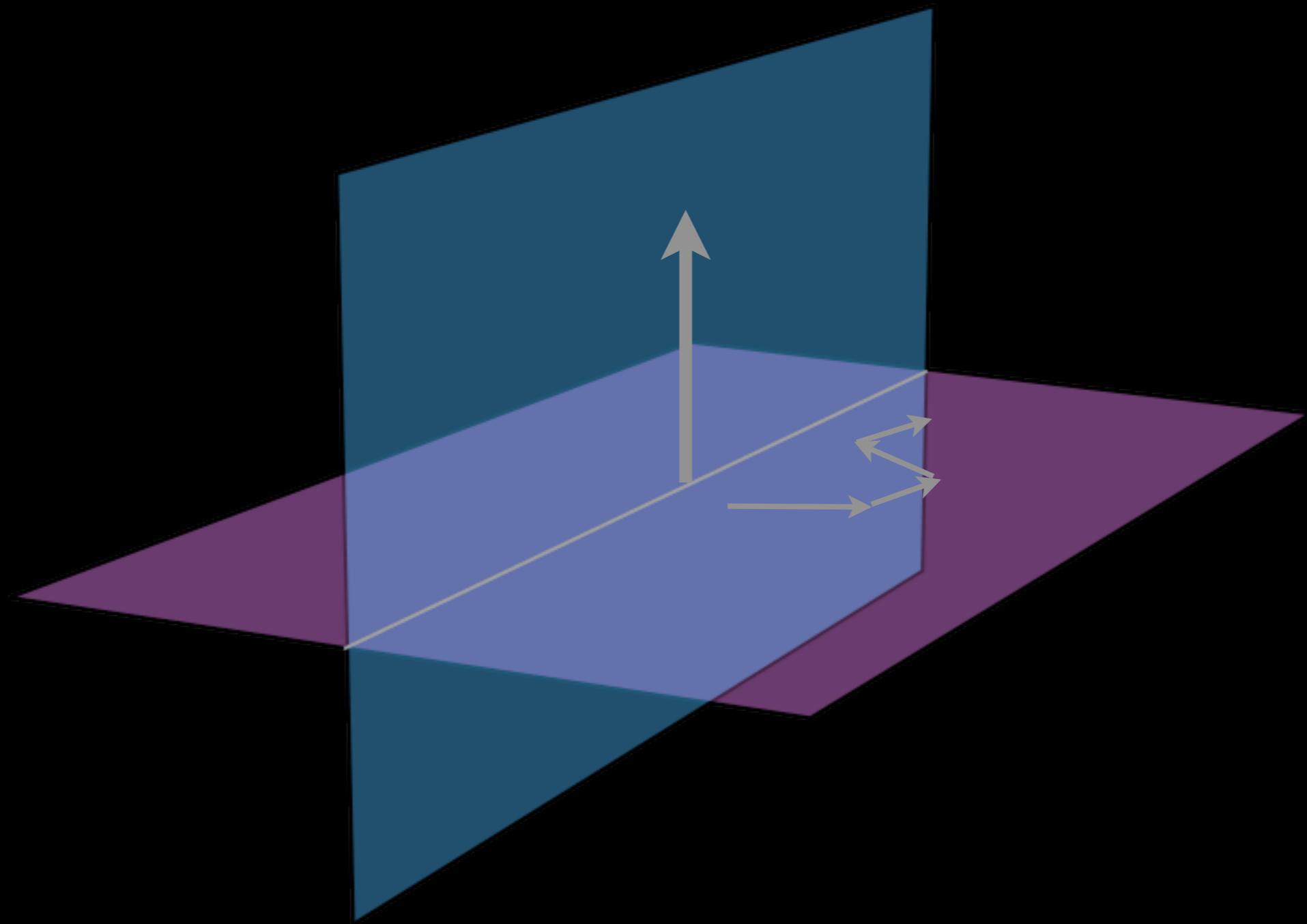












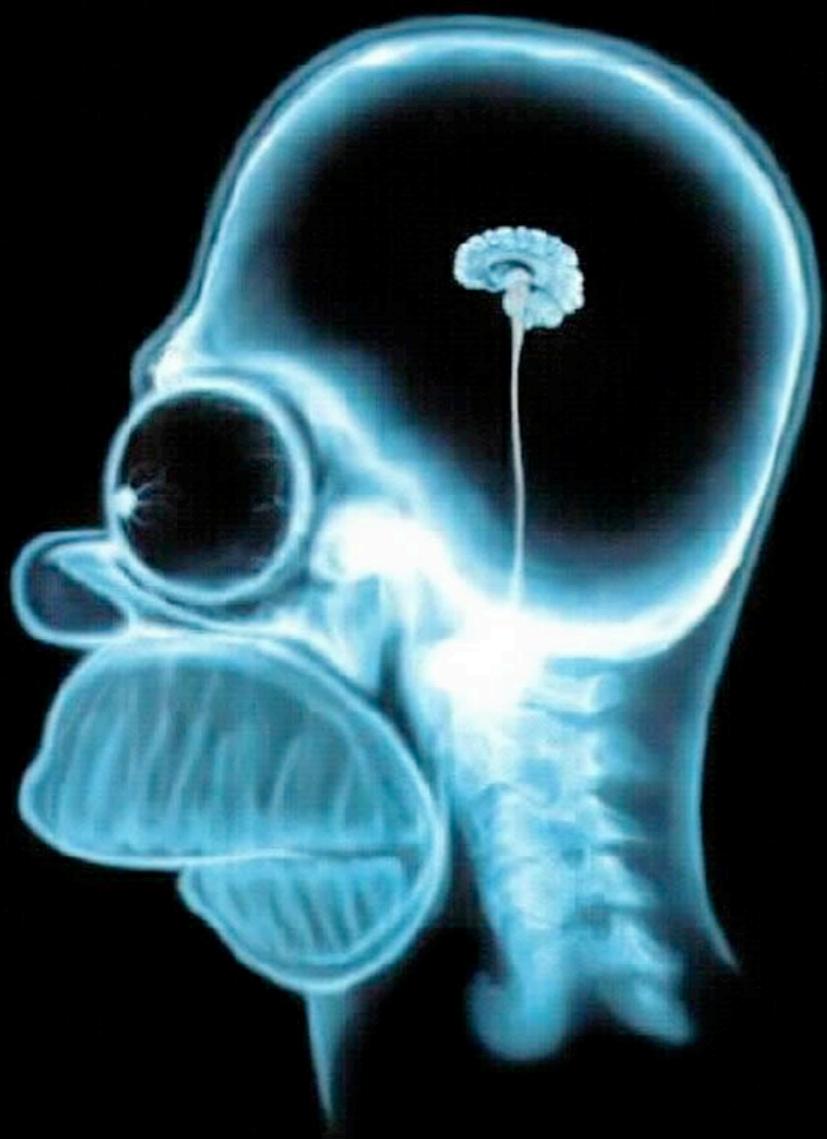
The Act of Creation

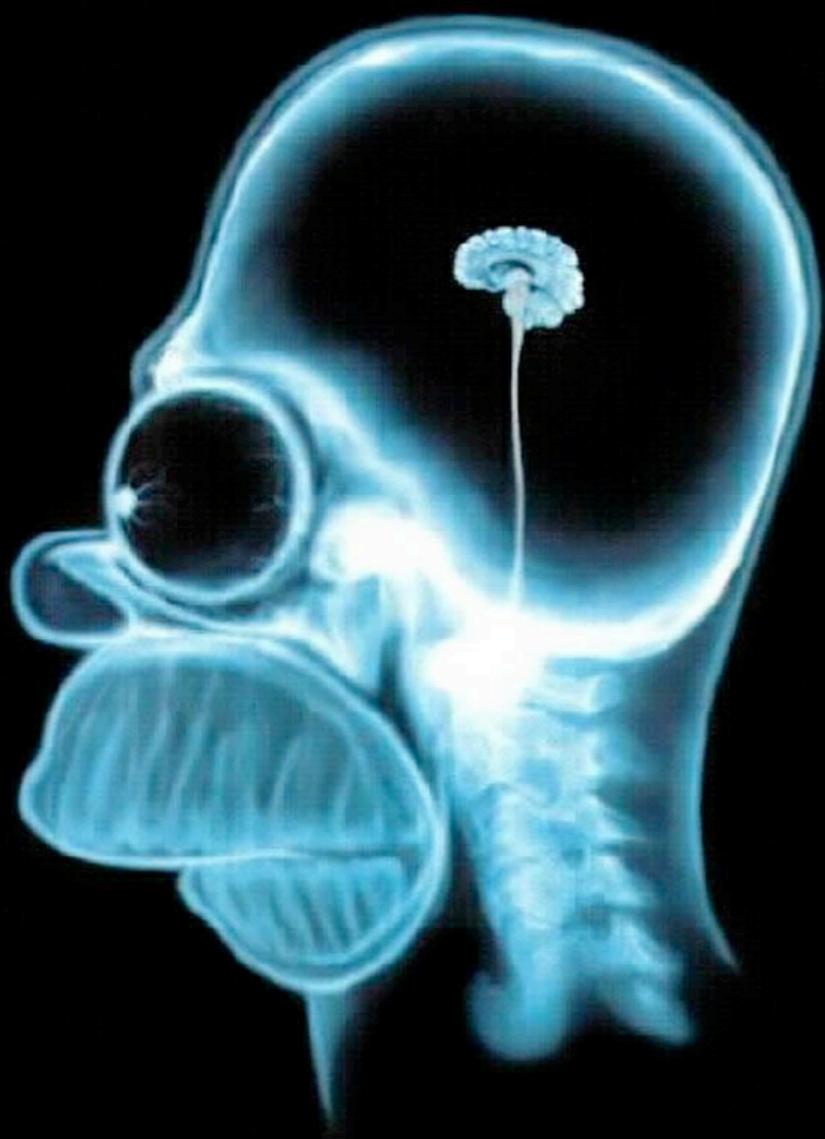
Arthur Koestler

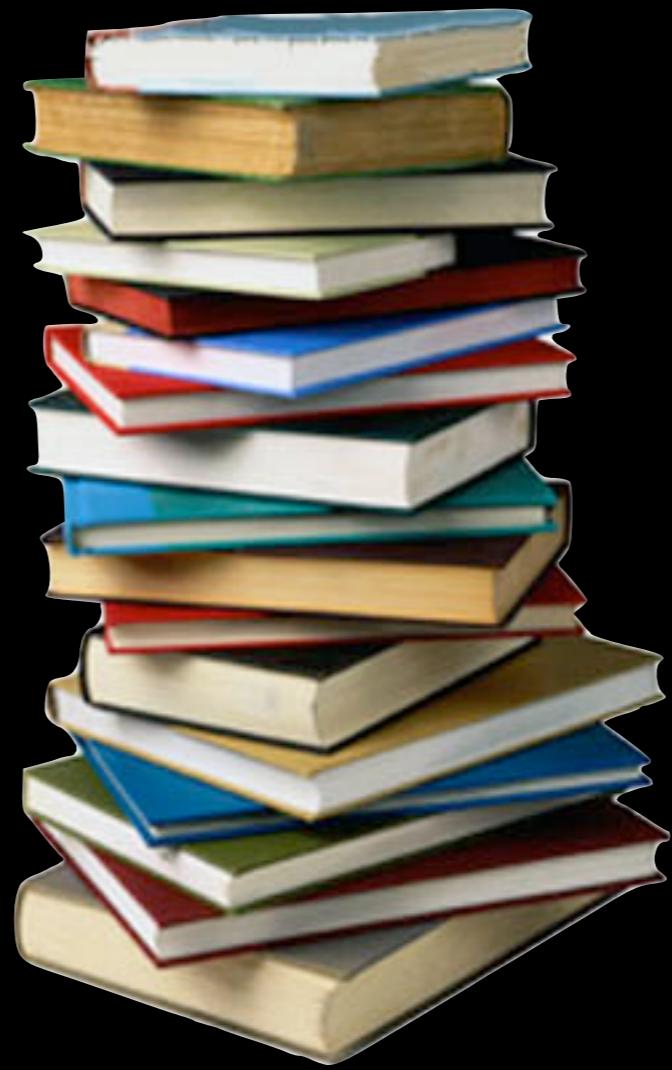
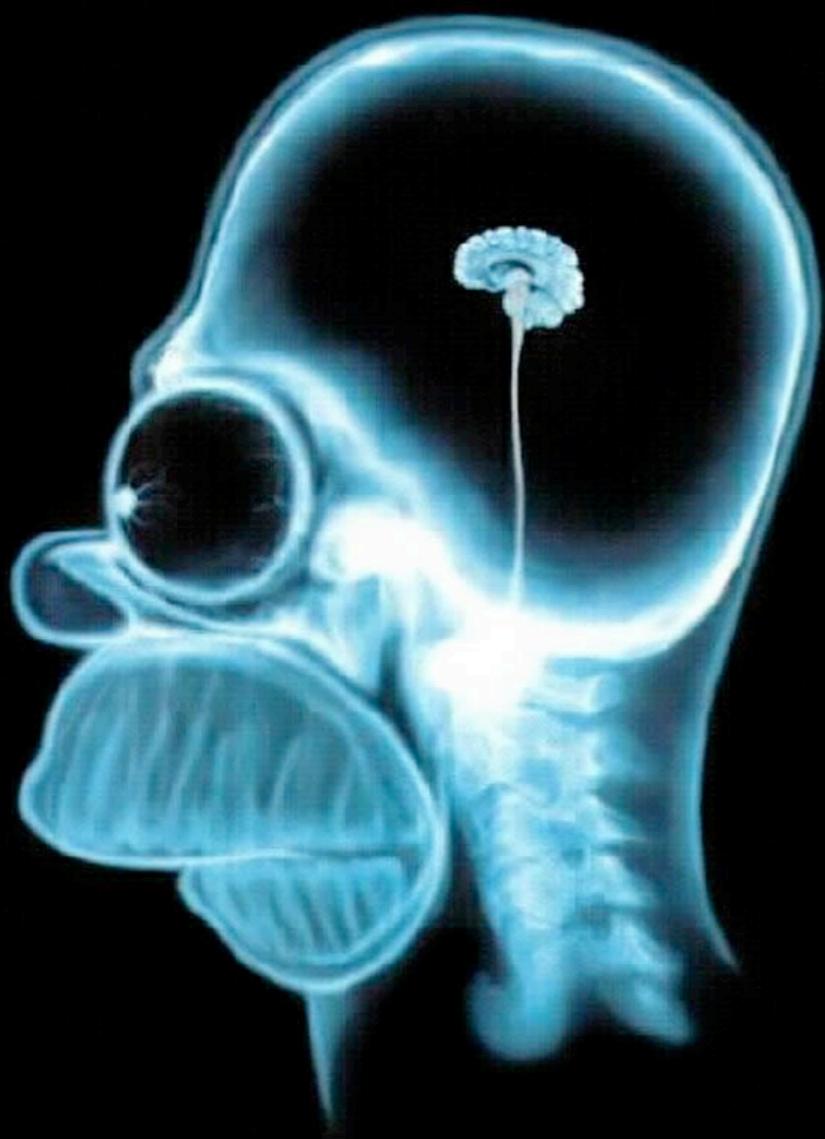


IQ

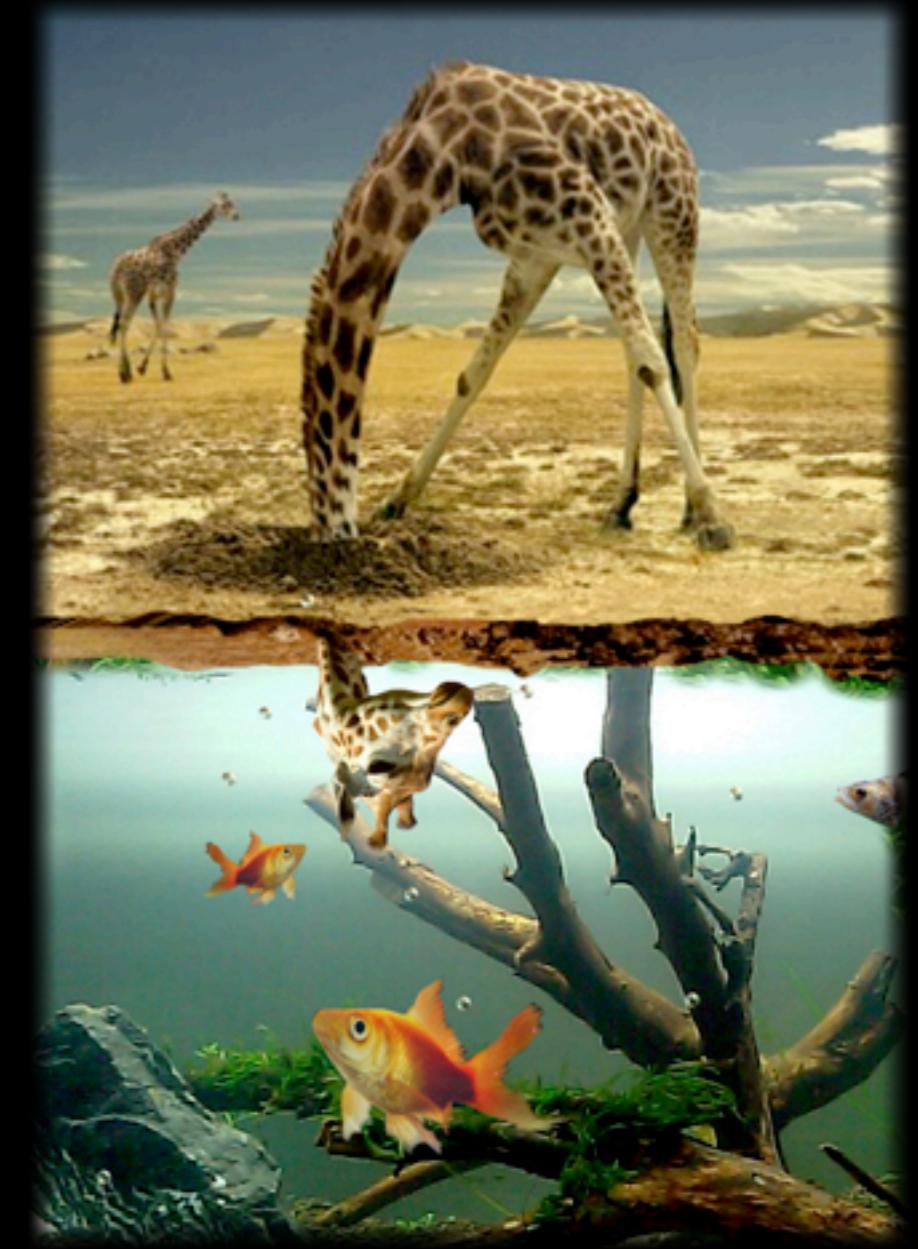
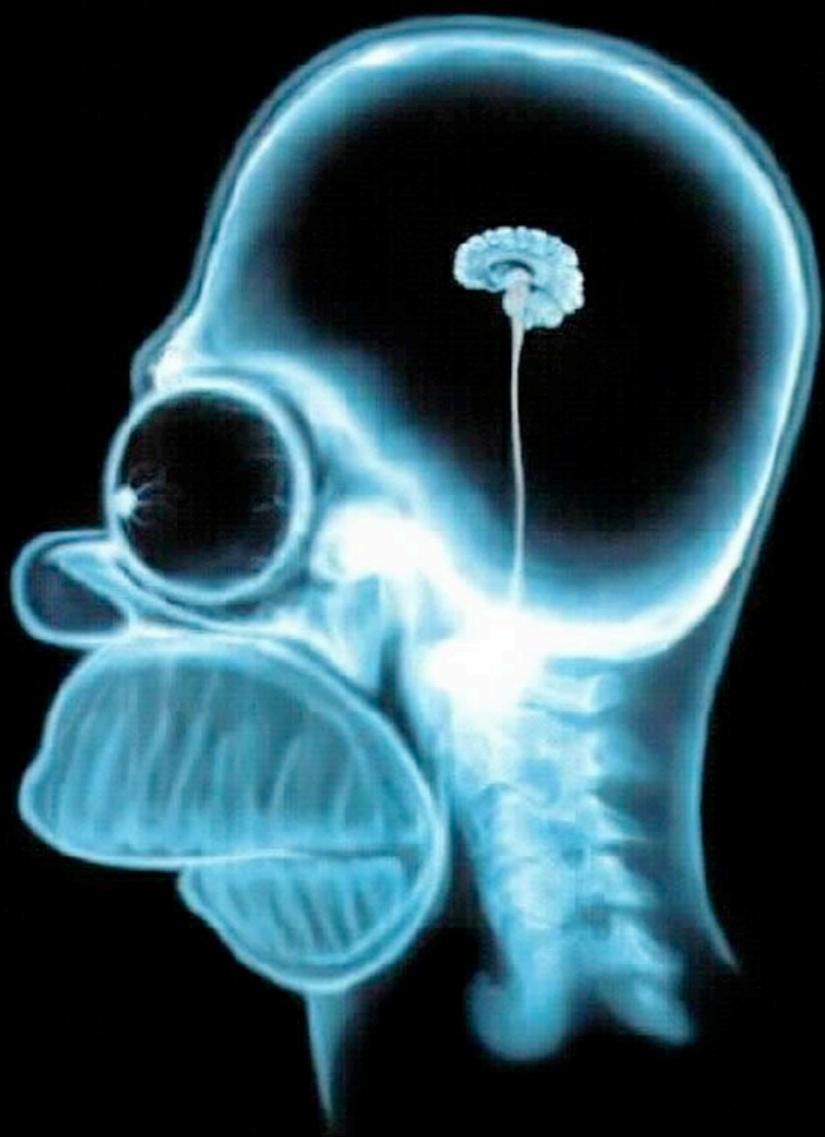






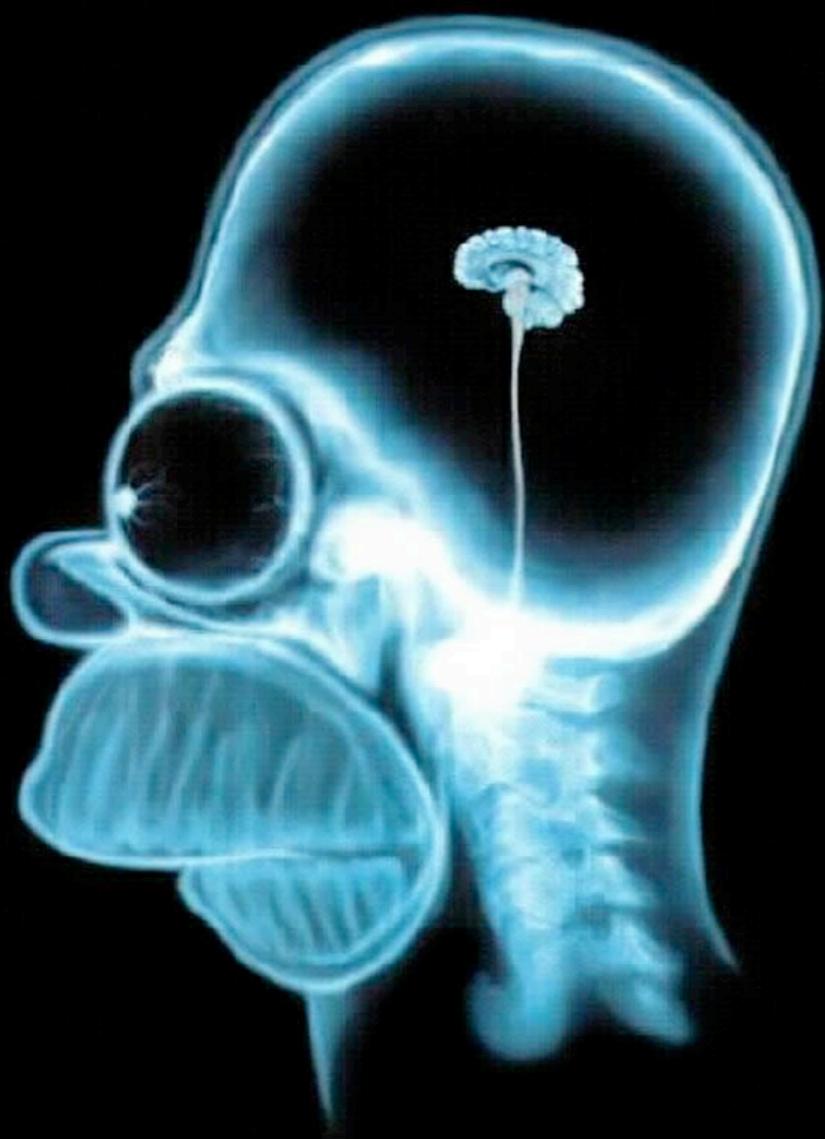


Silver



Silver

Gold



Lead



Silver

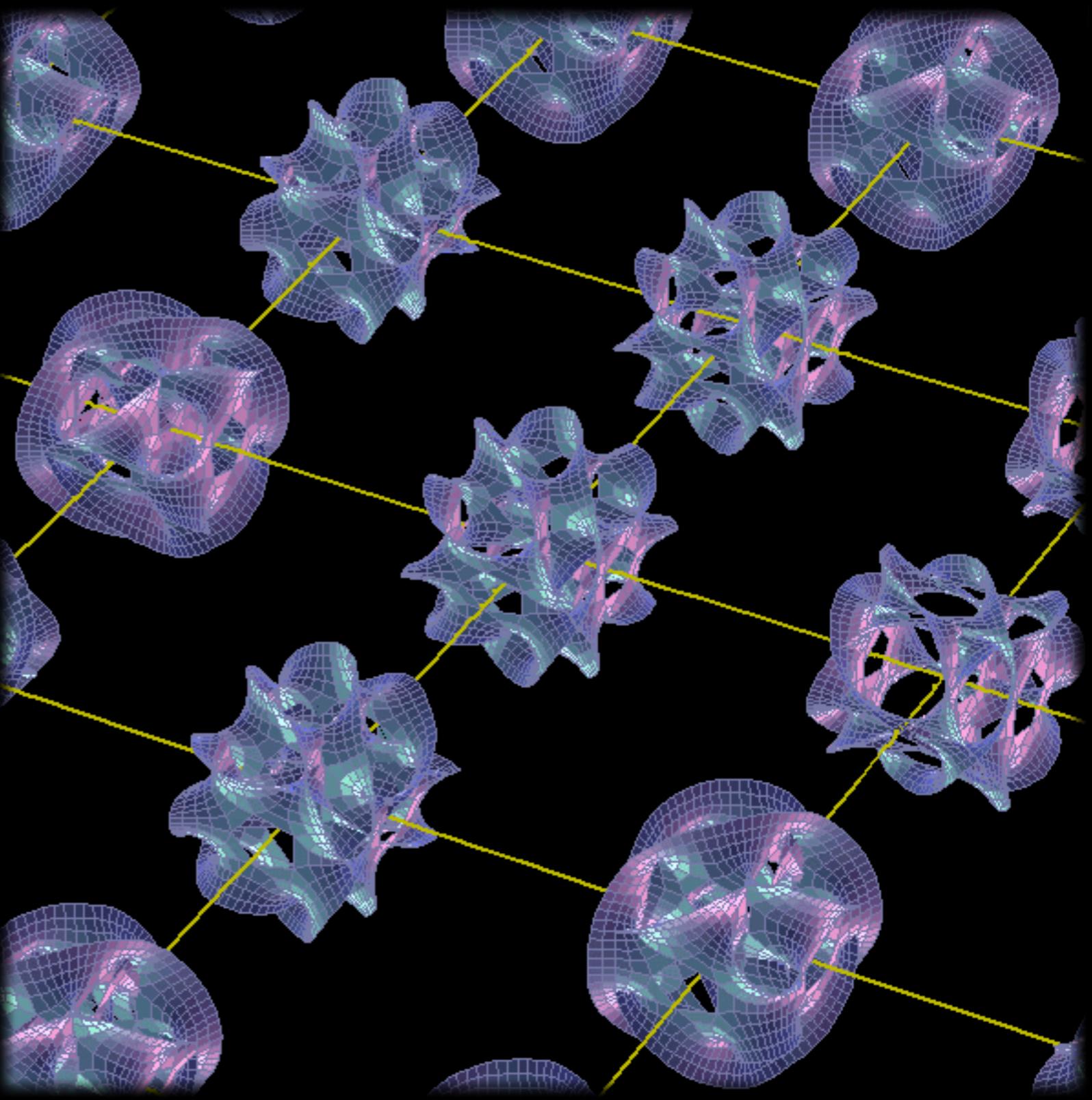


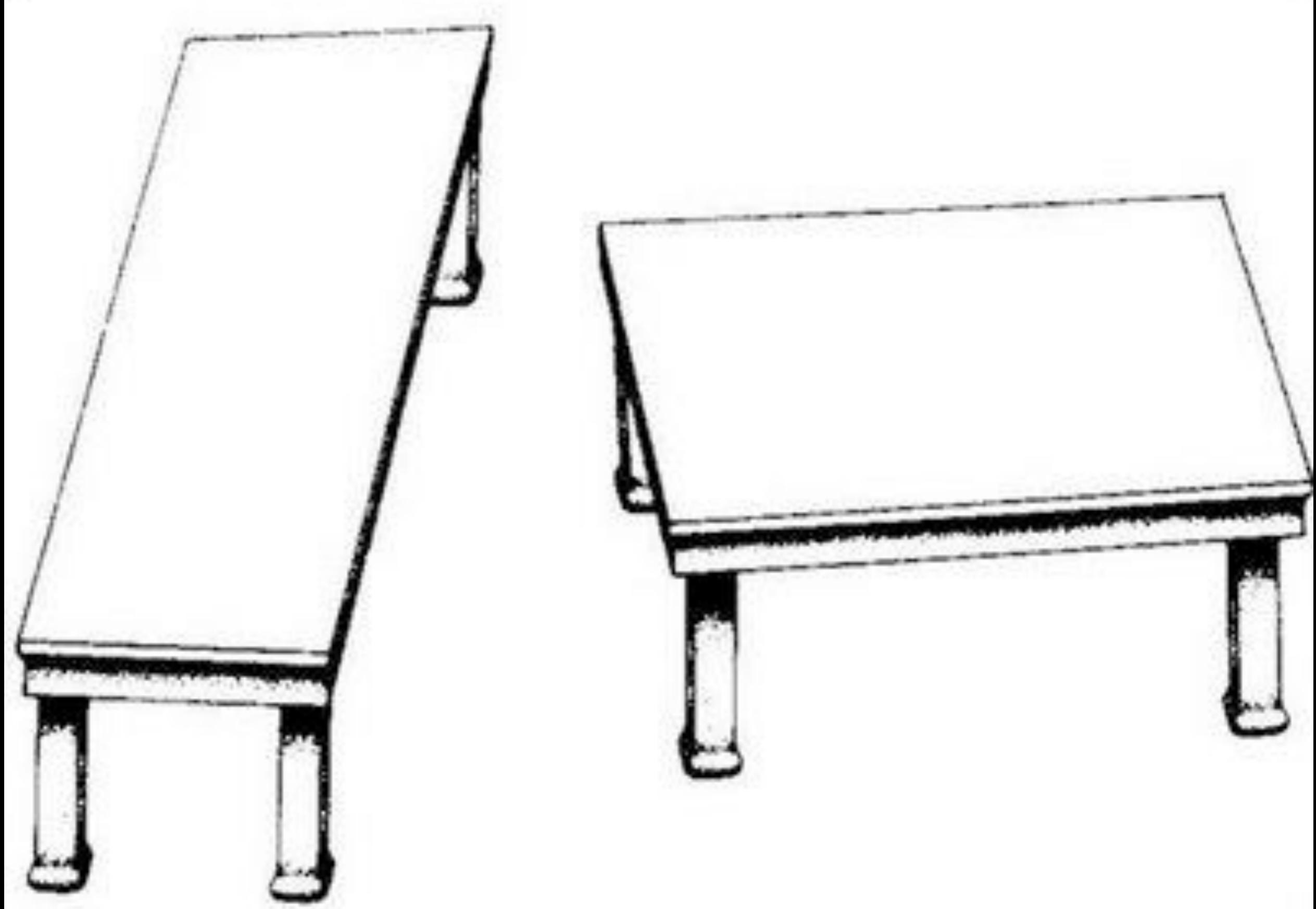
Gold

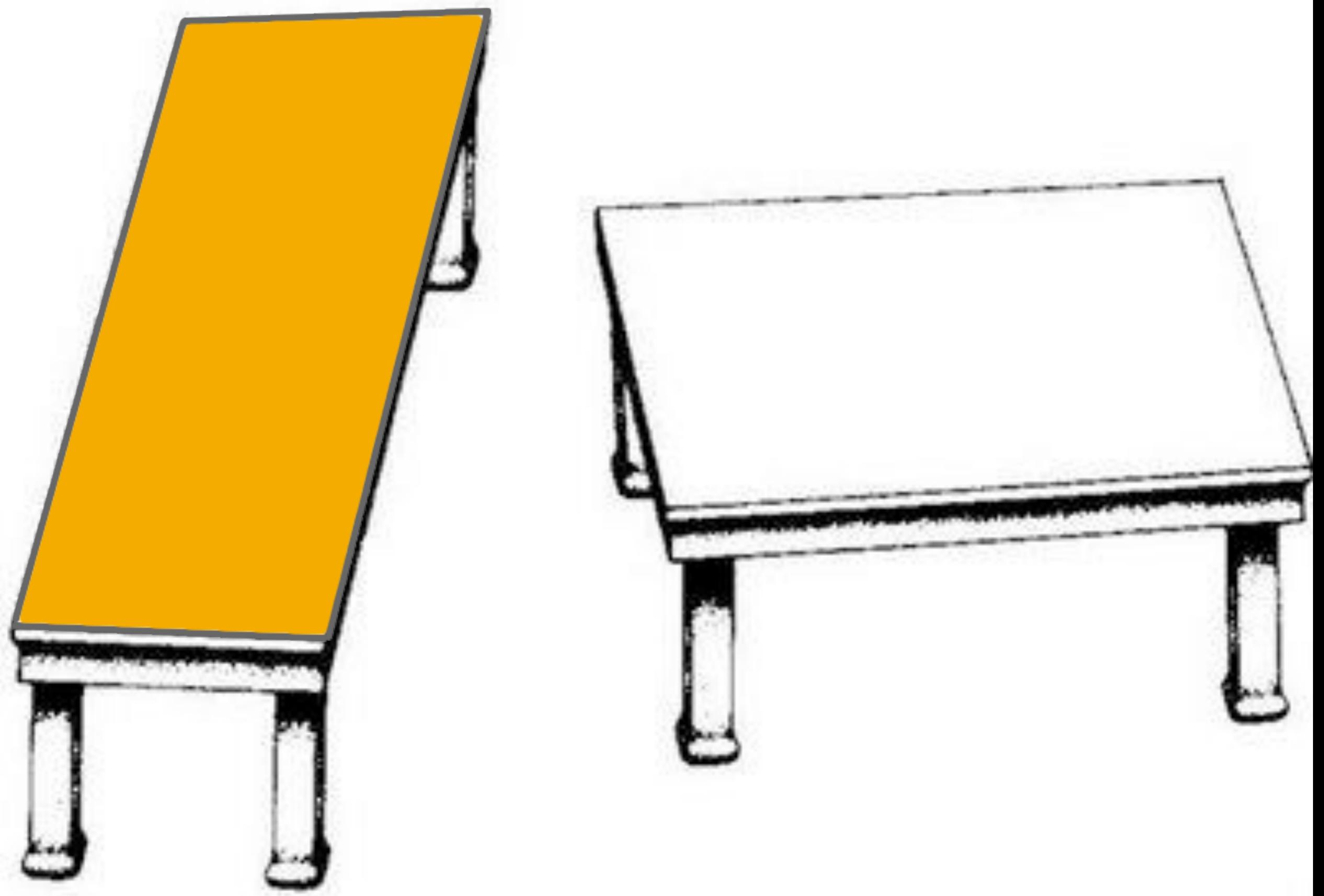


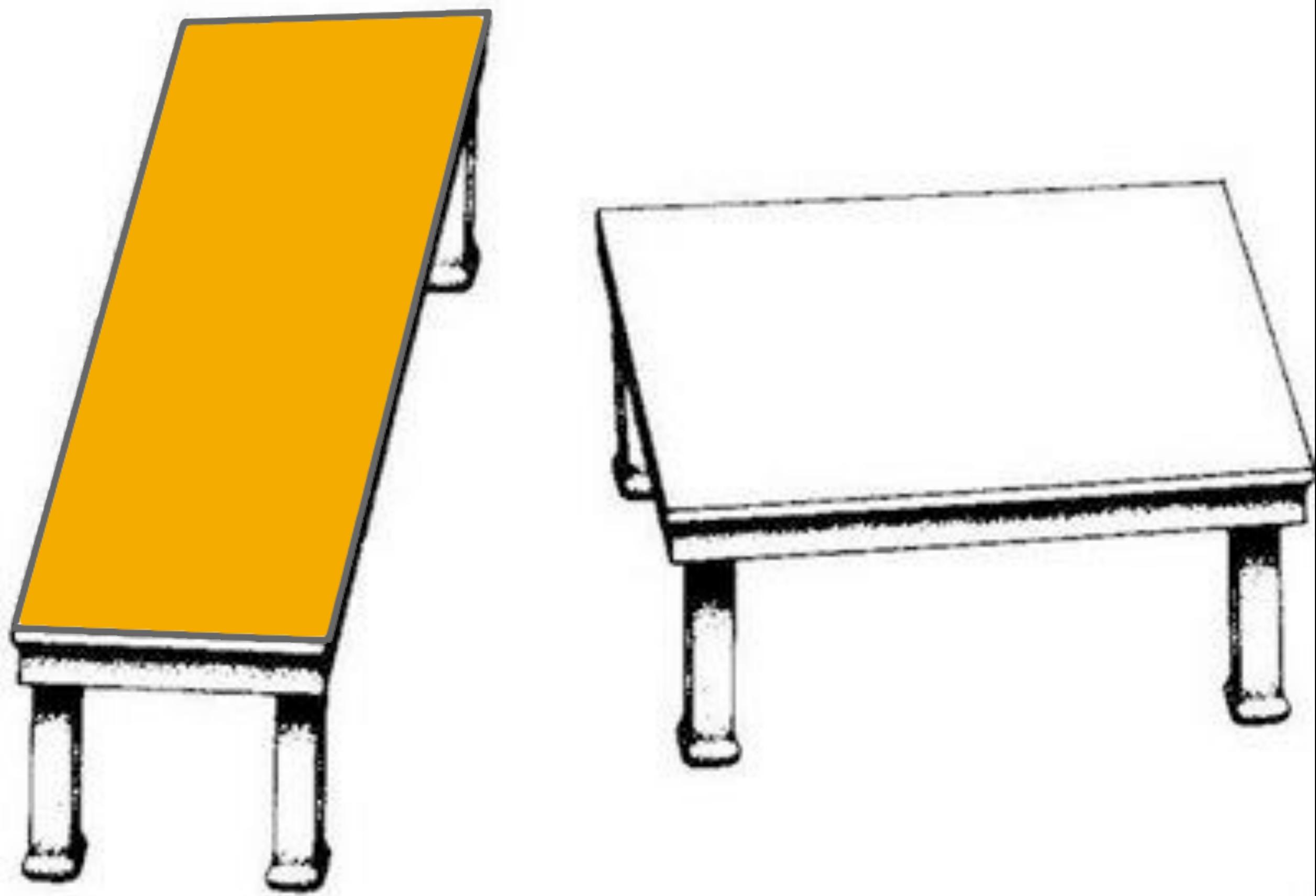


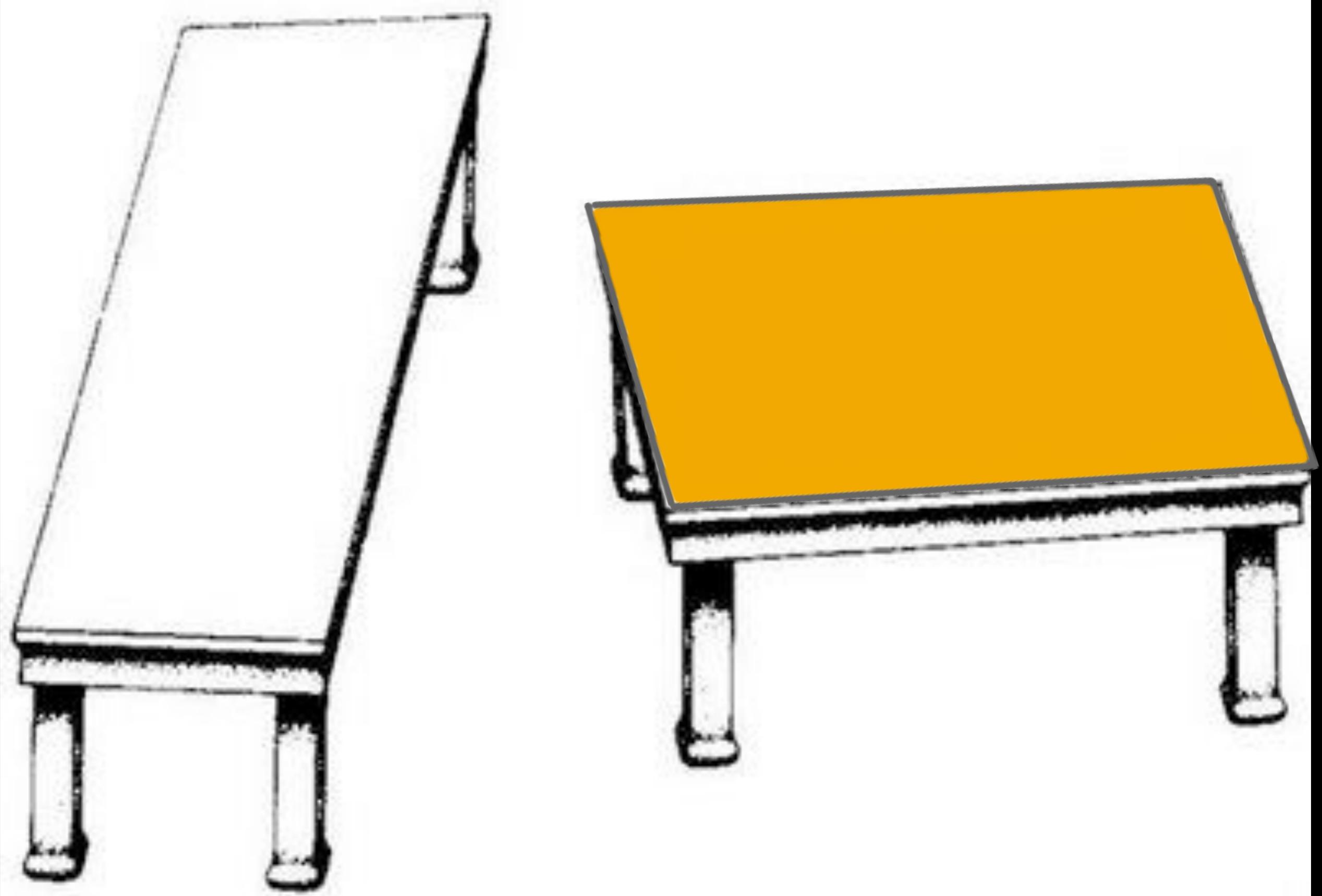
Everything is invented

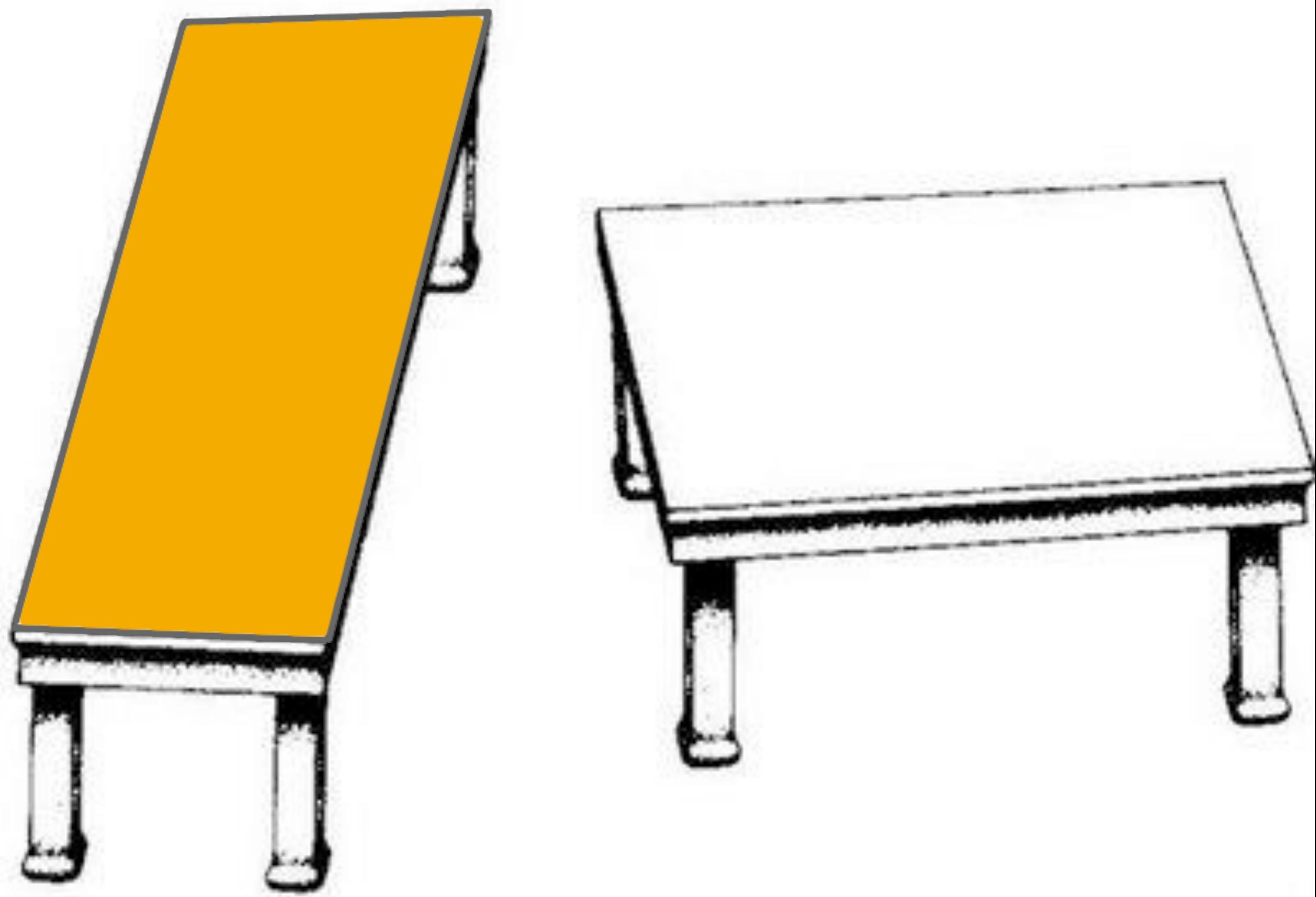


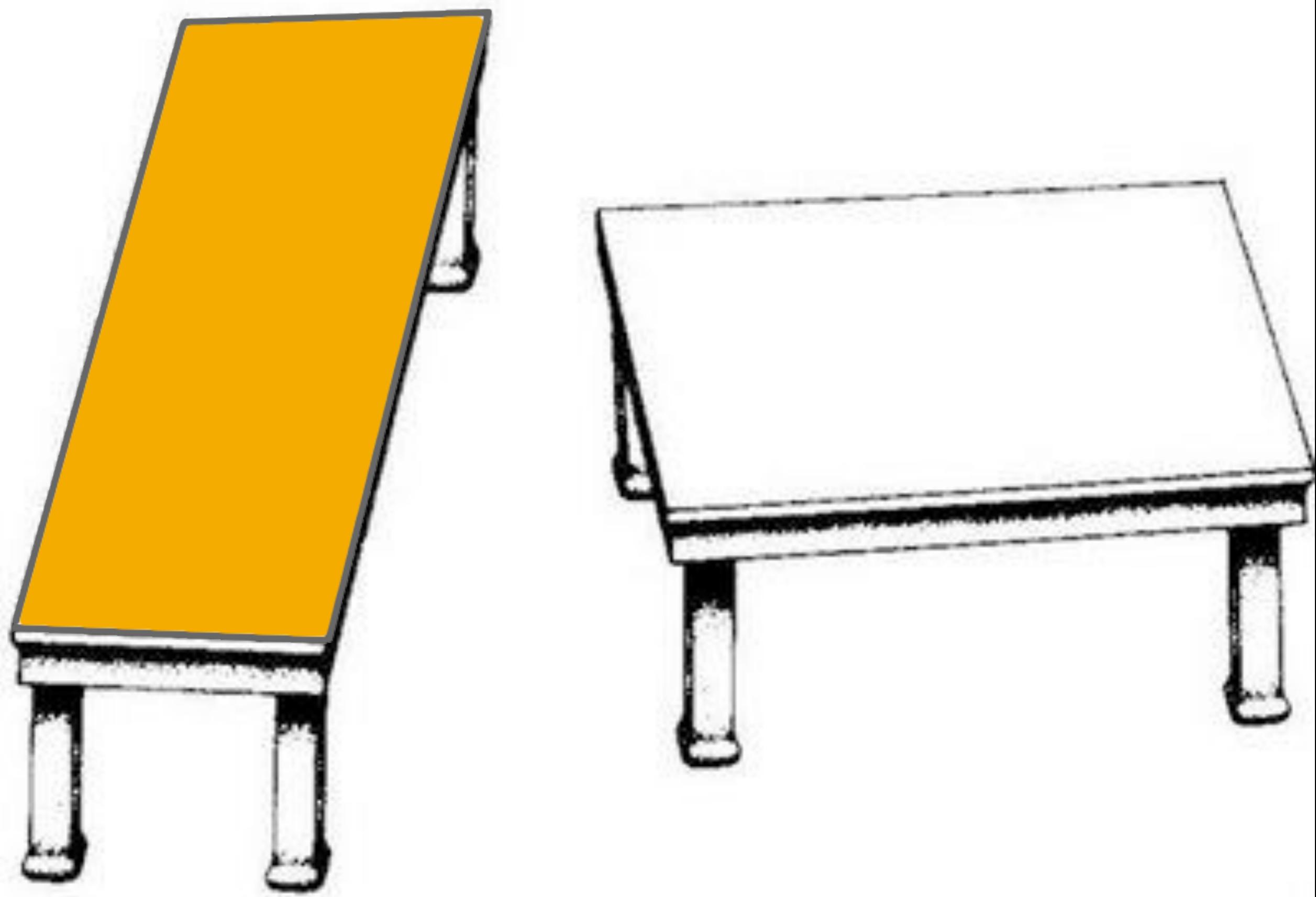


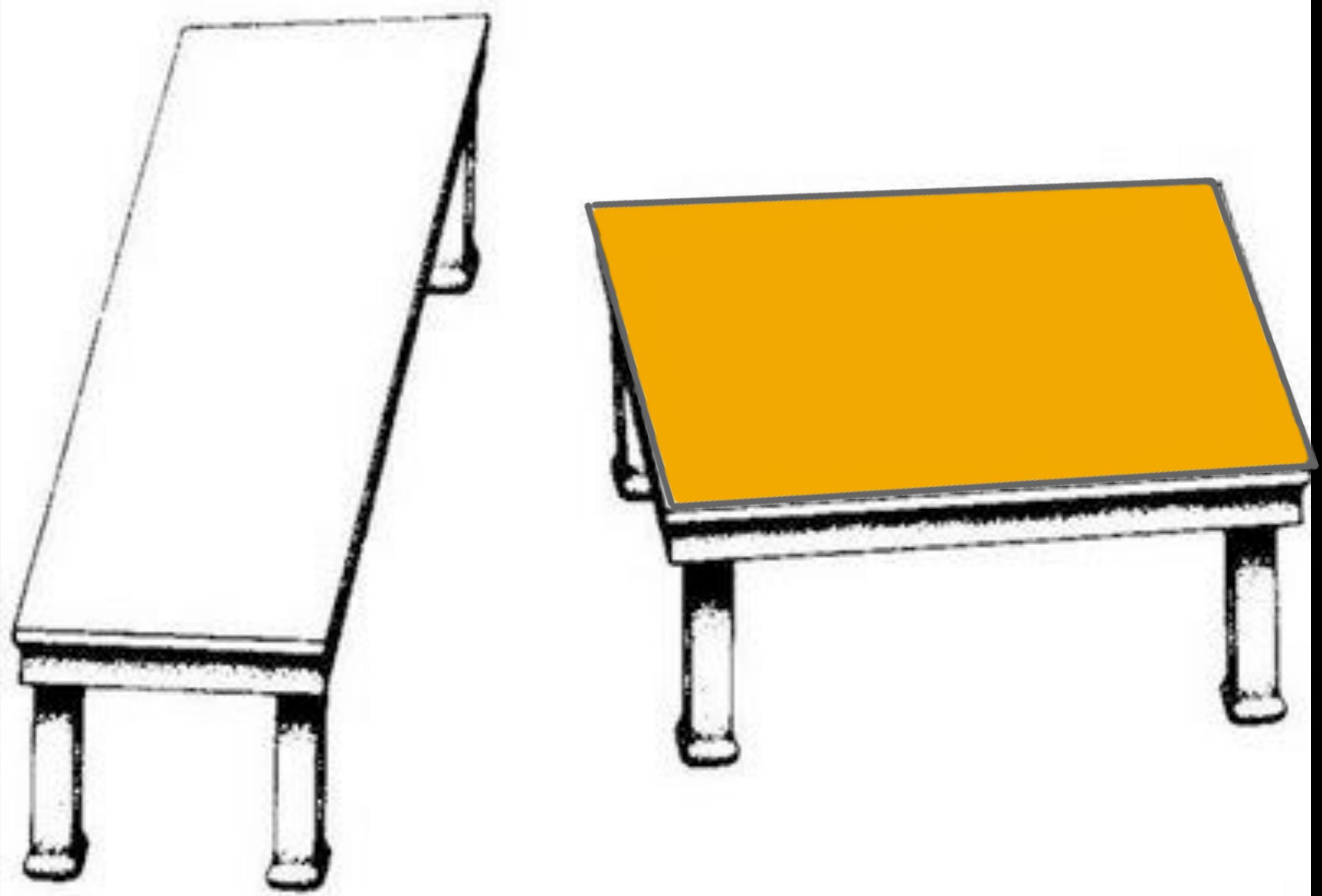


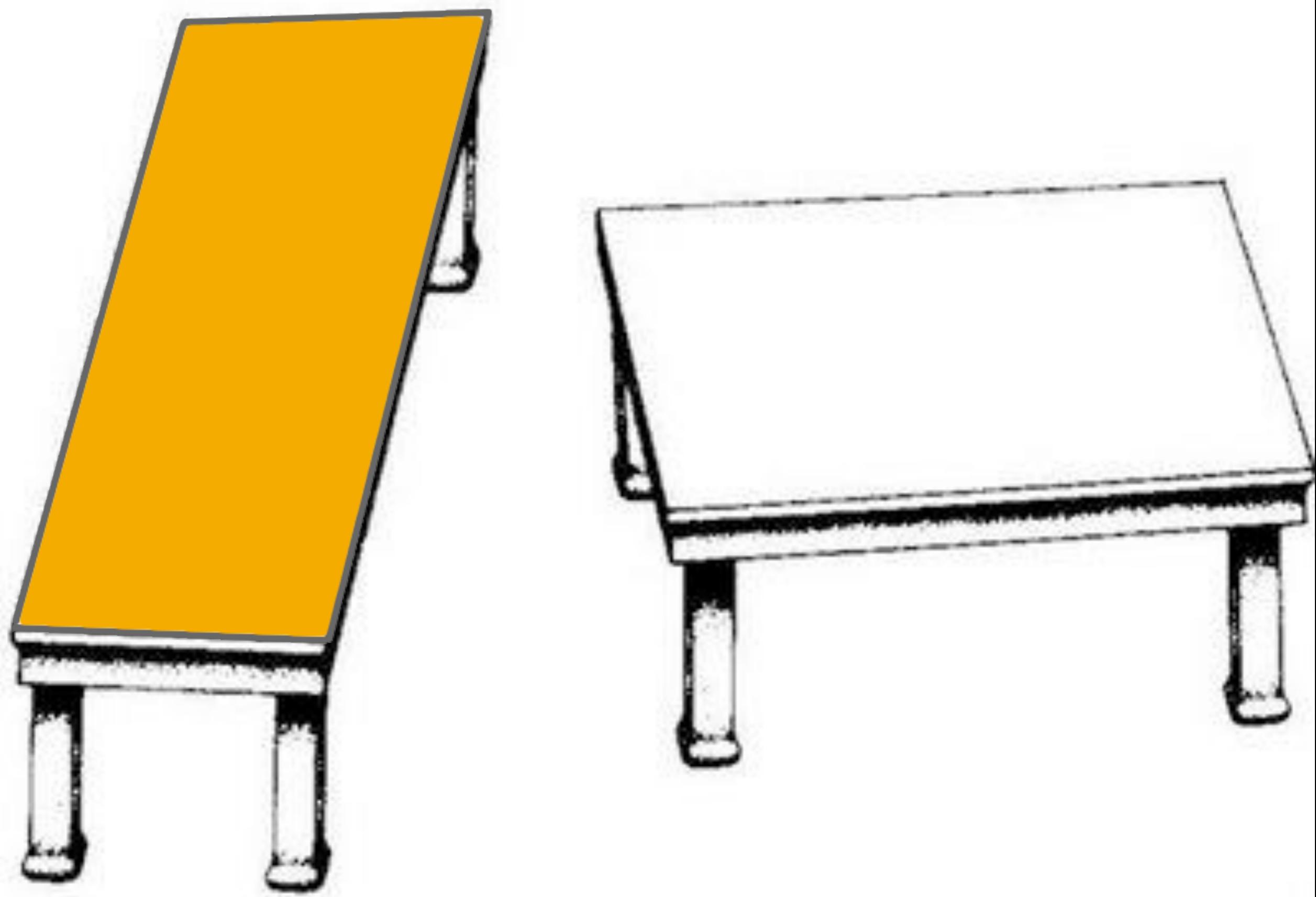


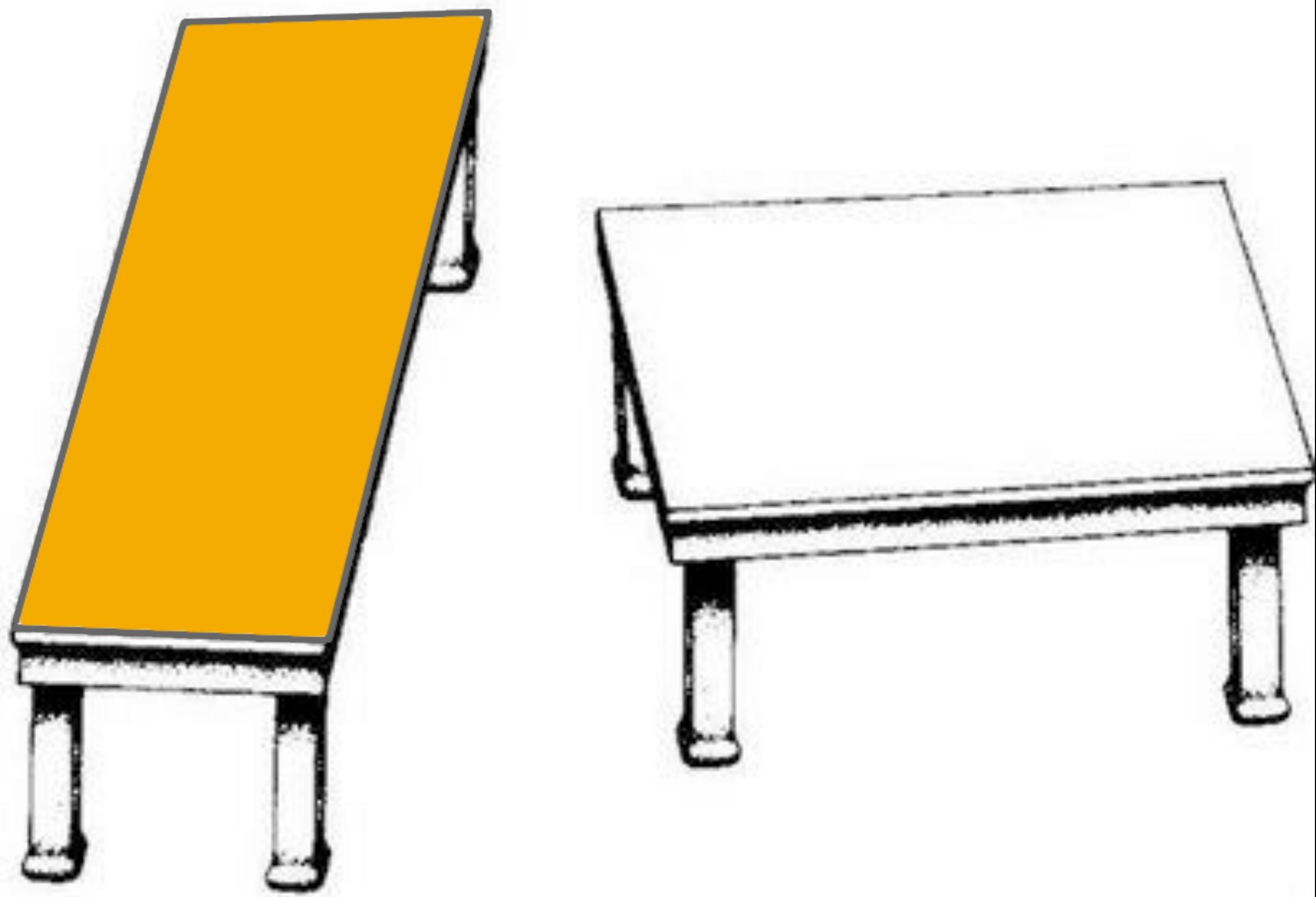


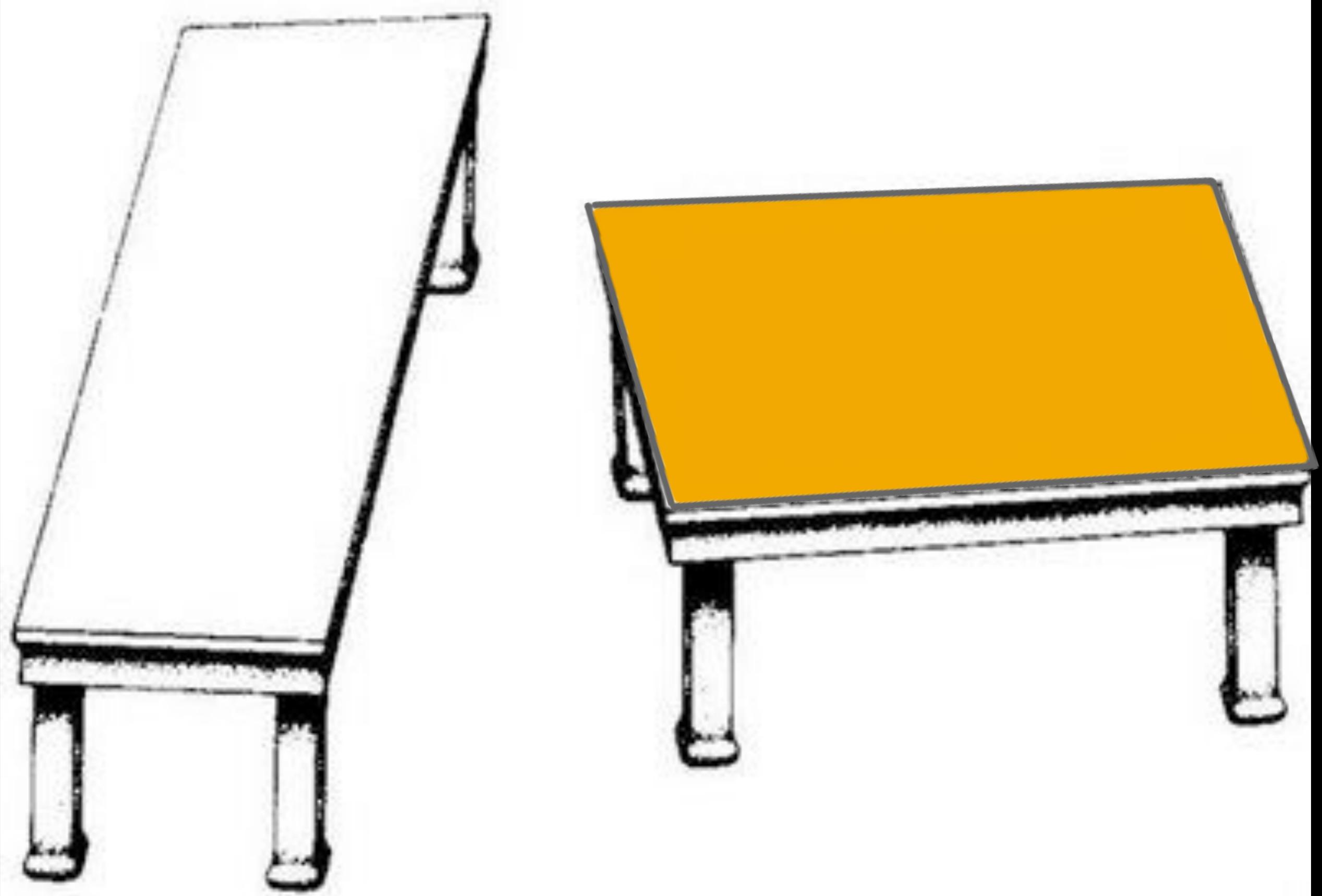


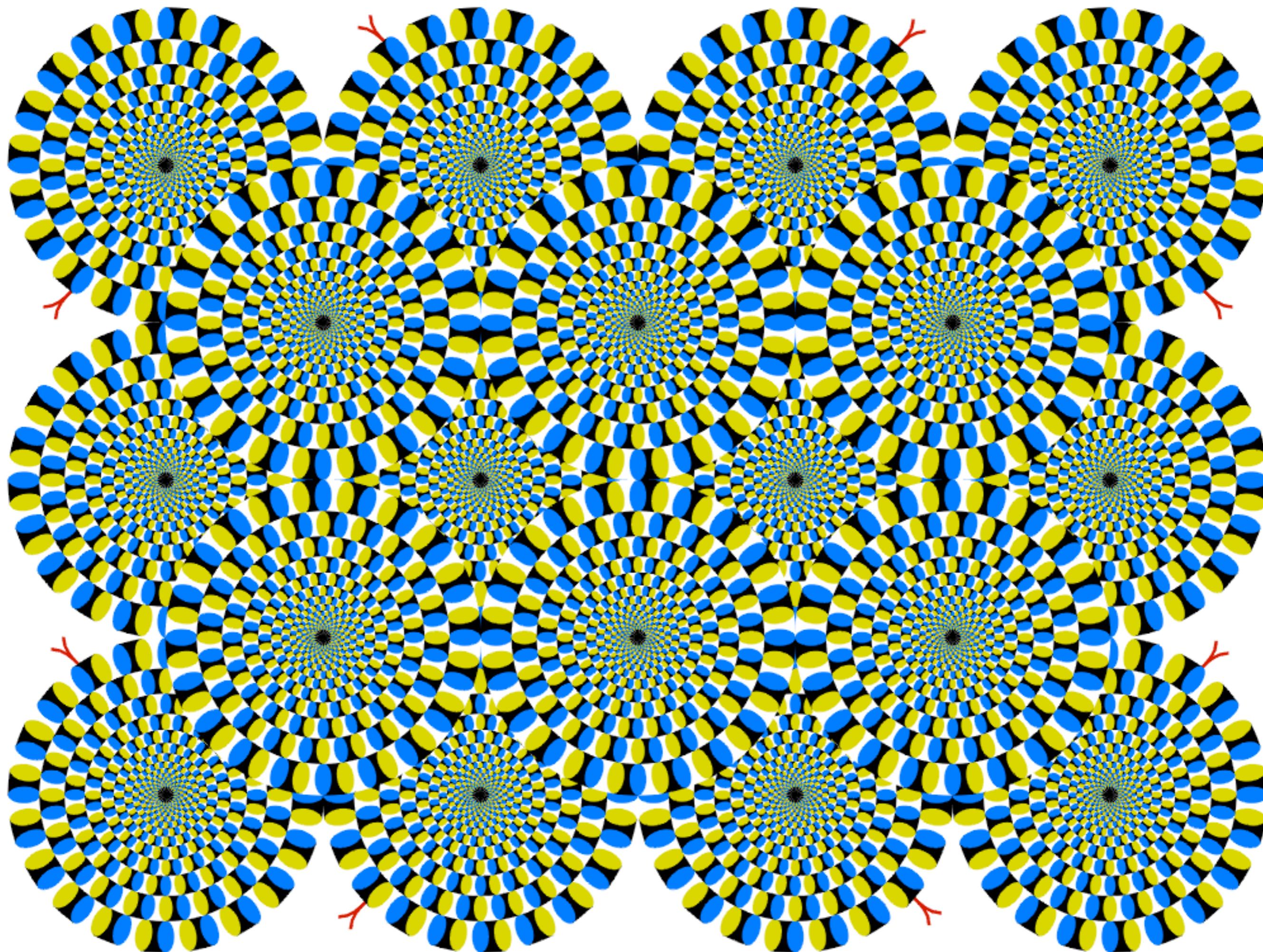








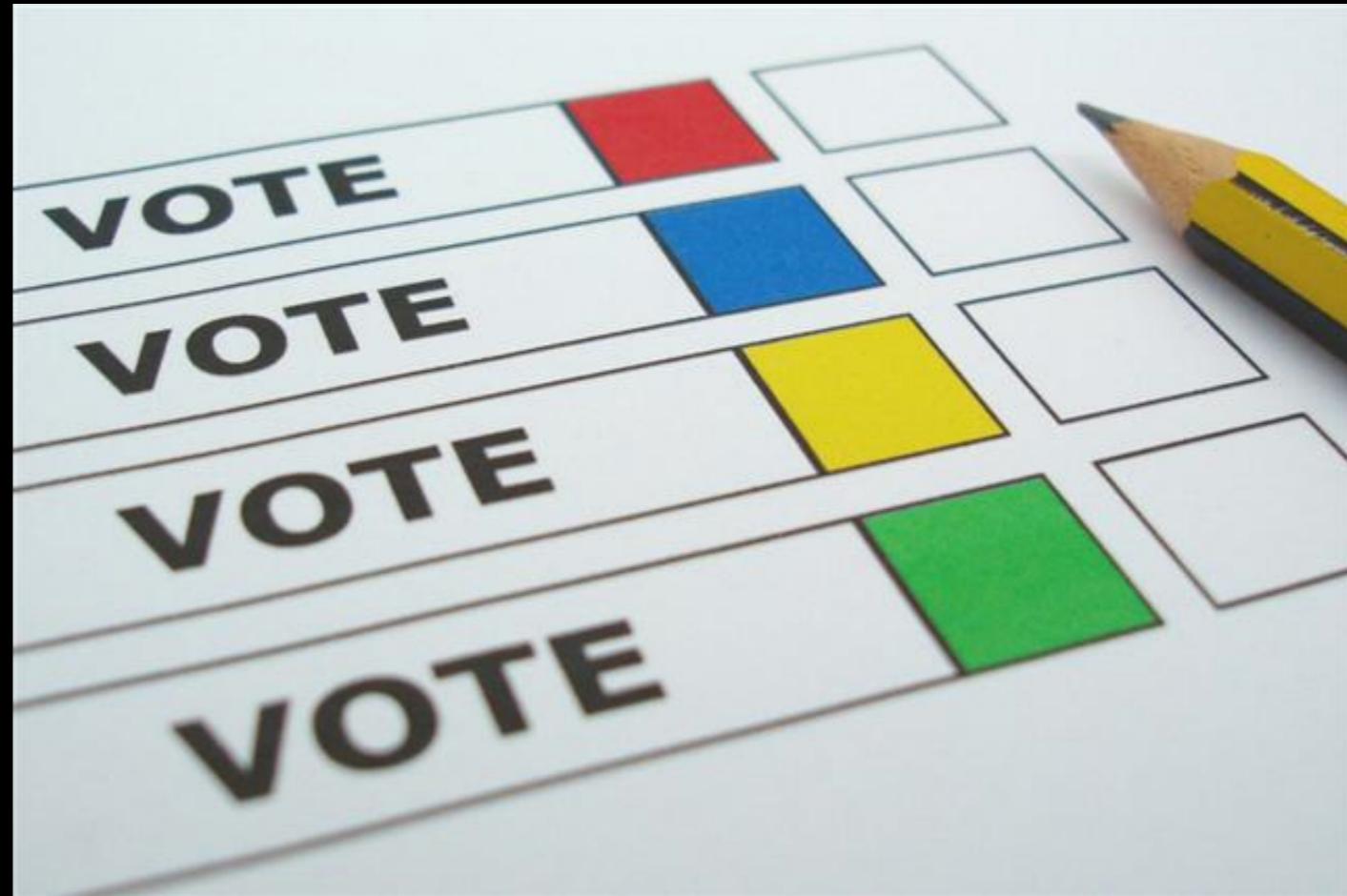


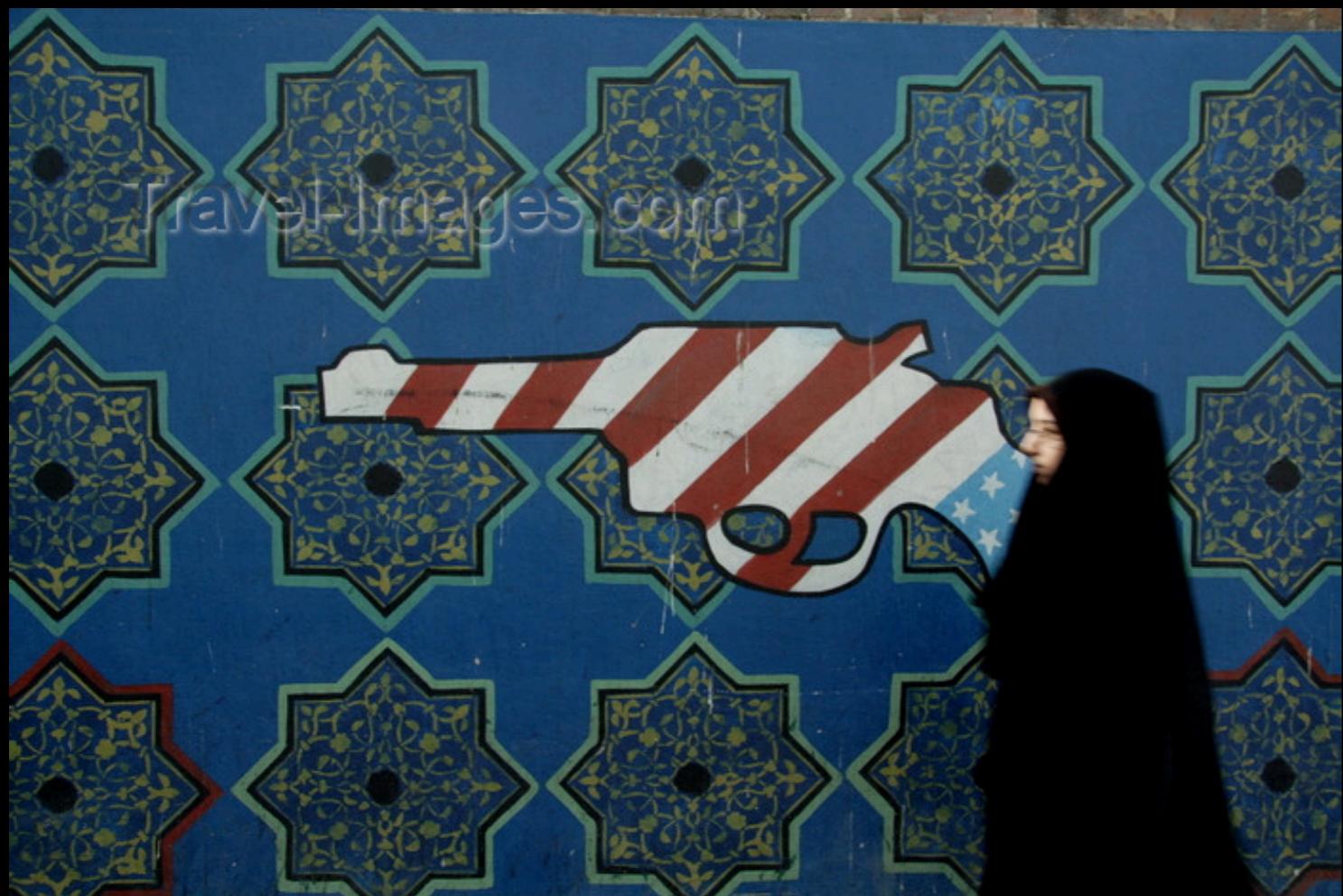


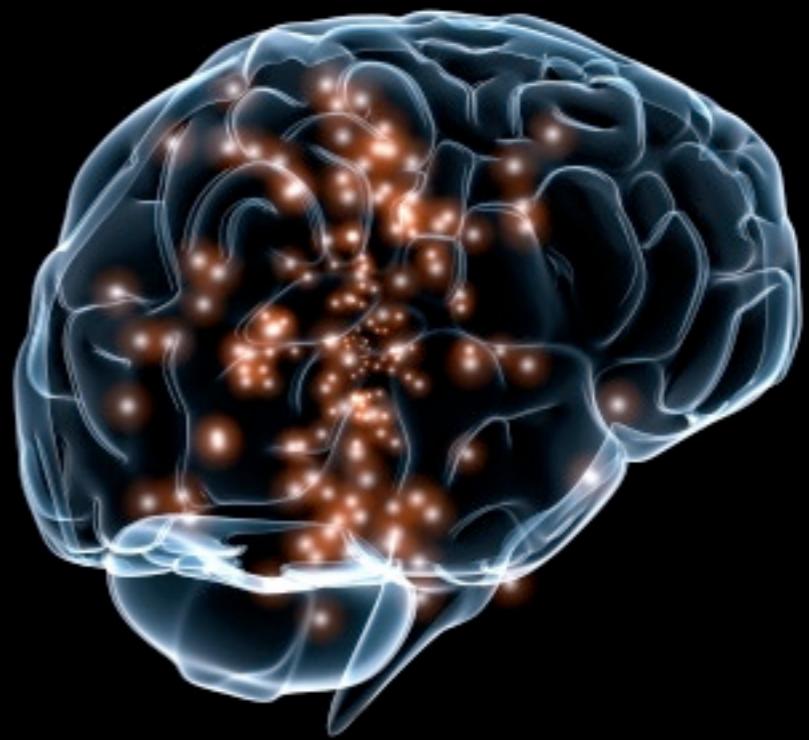
Fake it until you make it

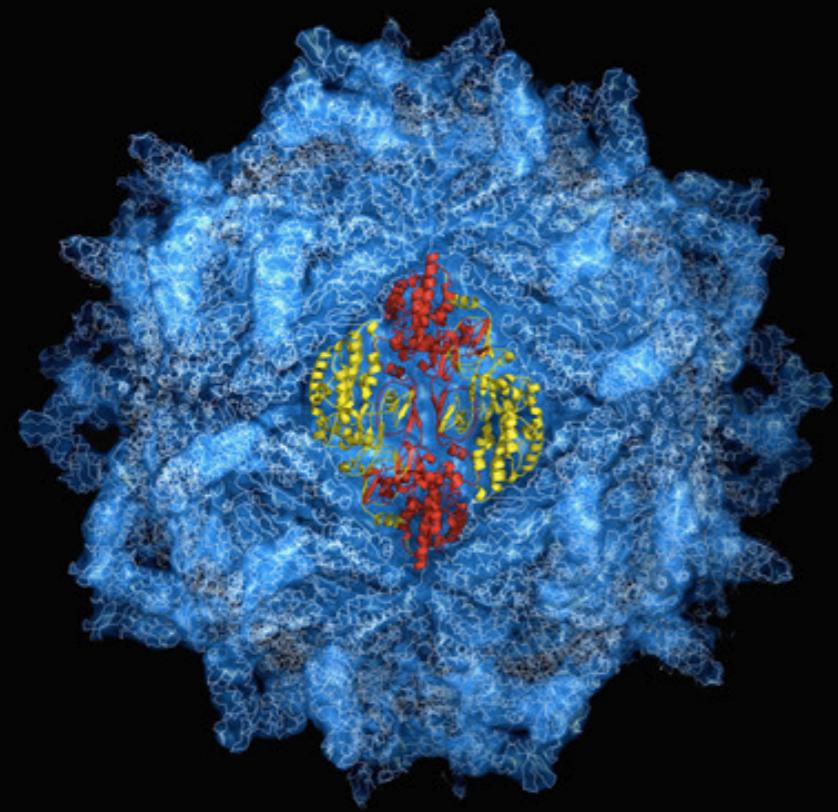




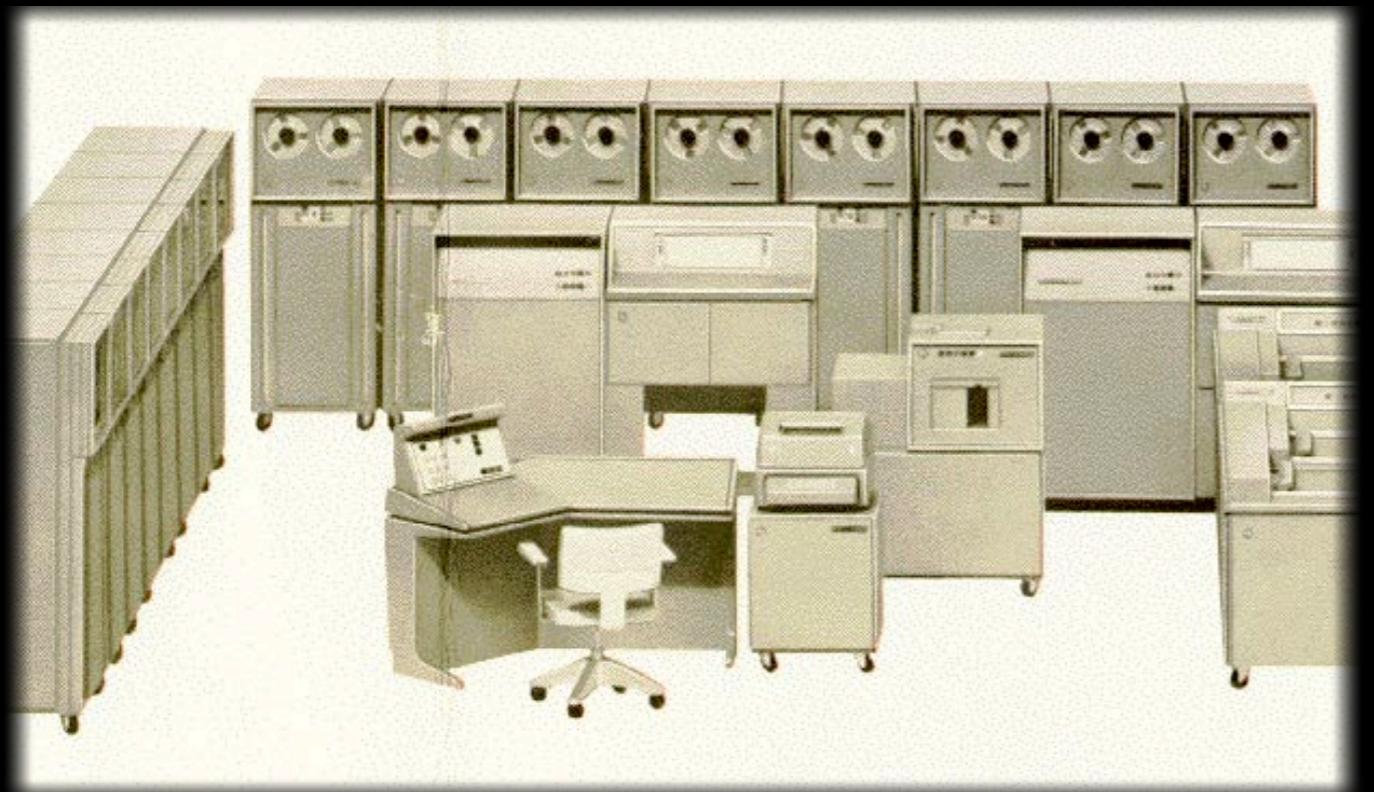


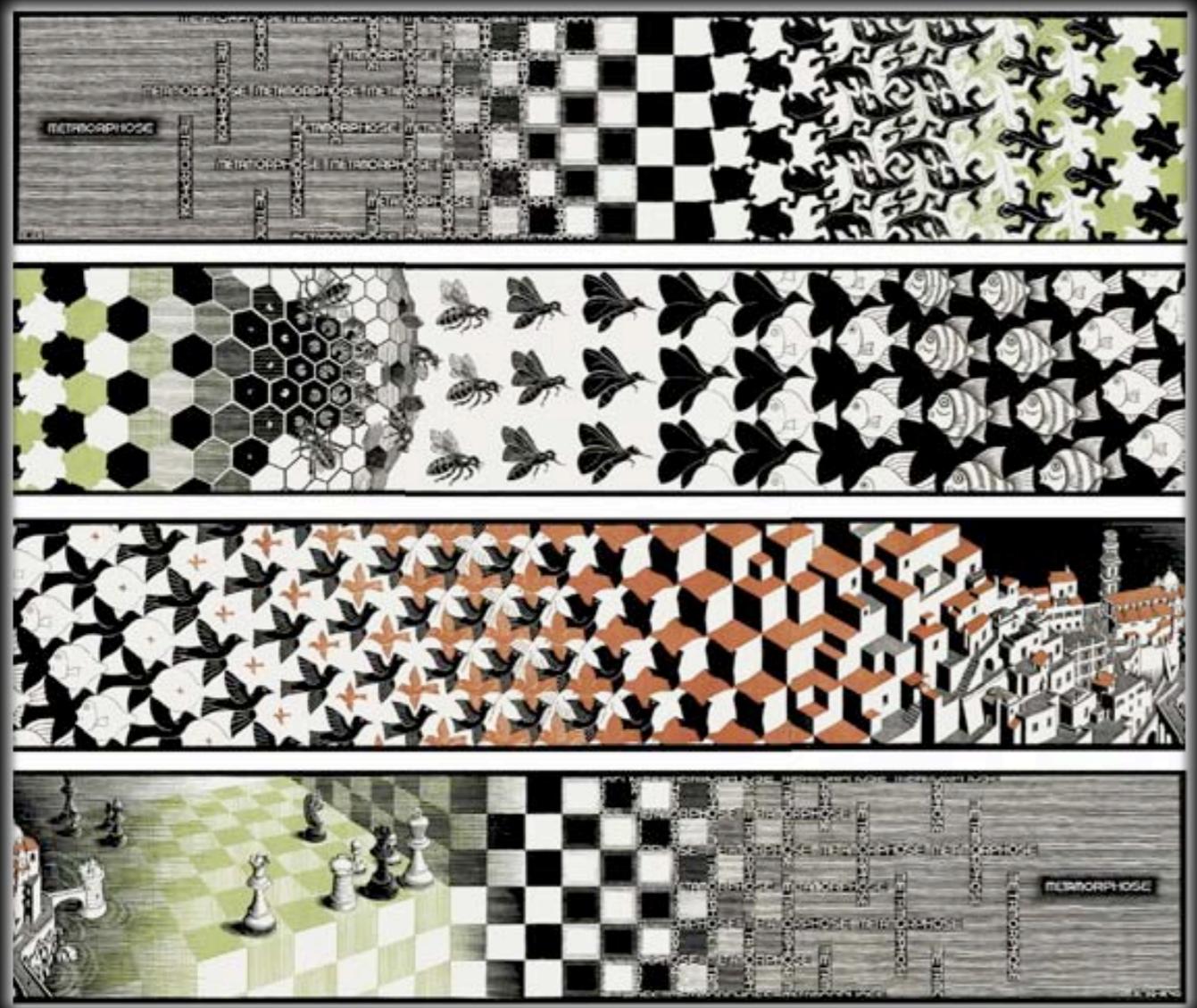


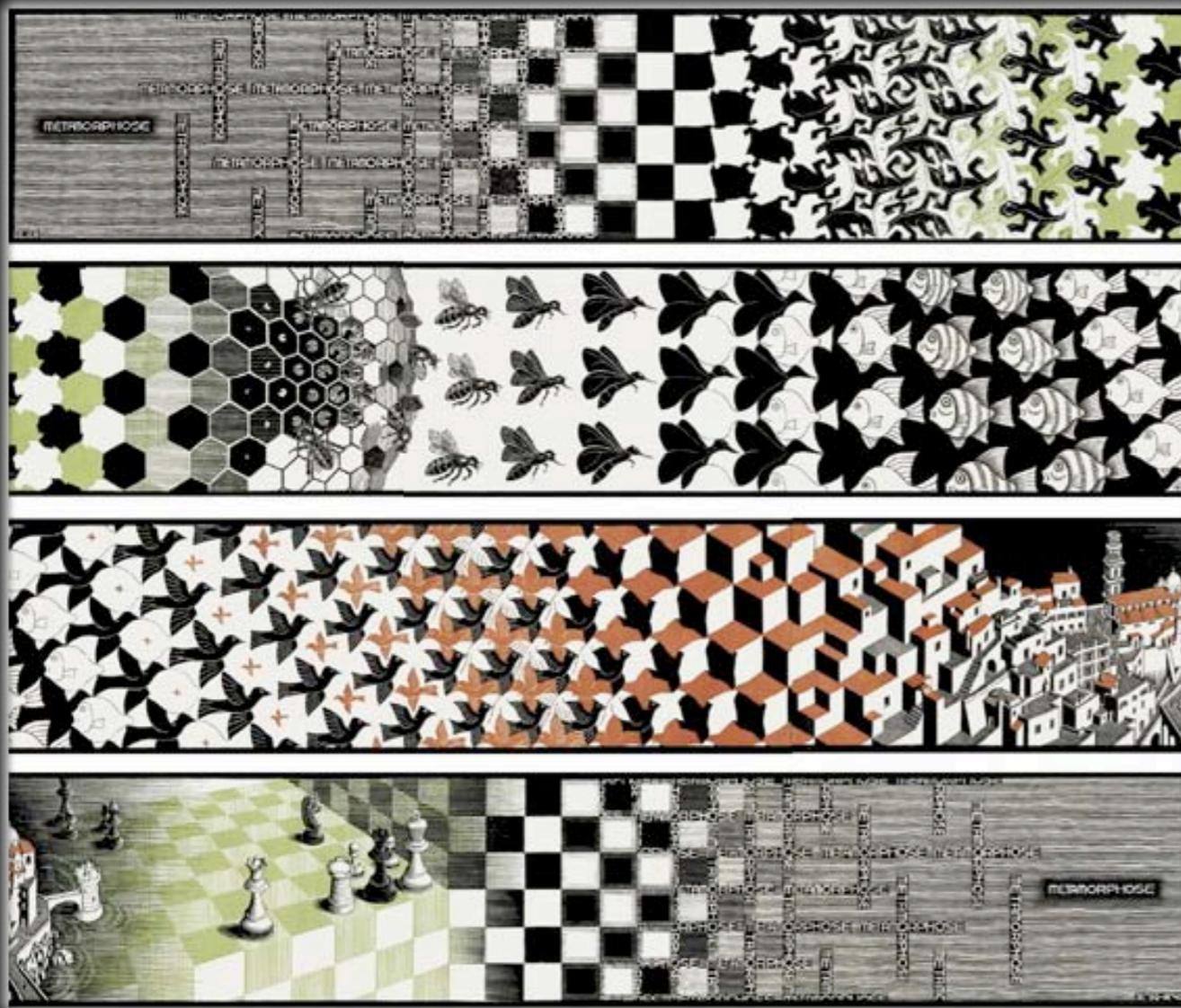
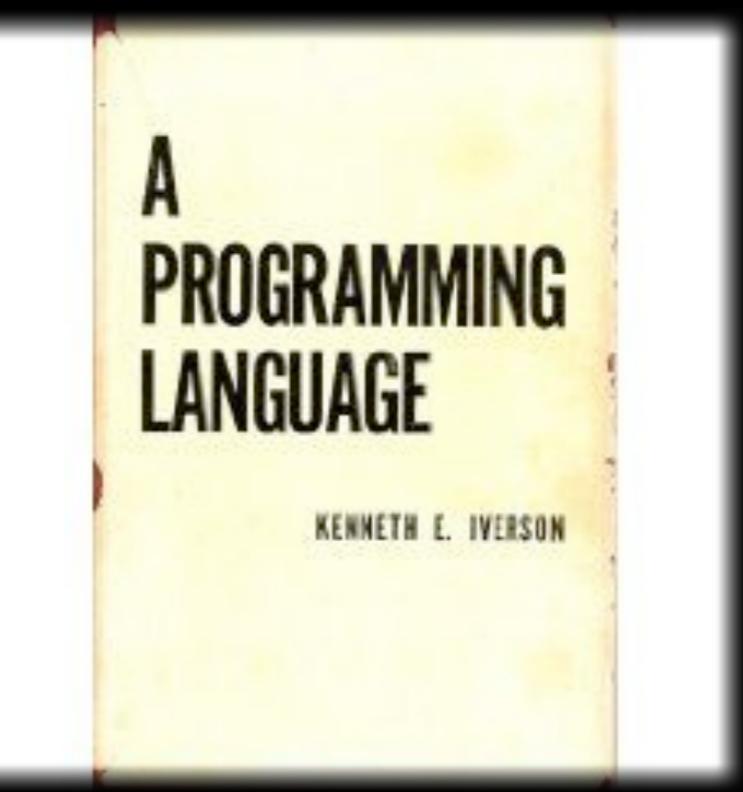
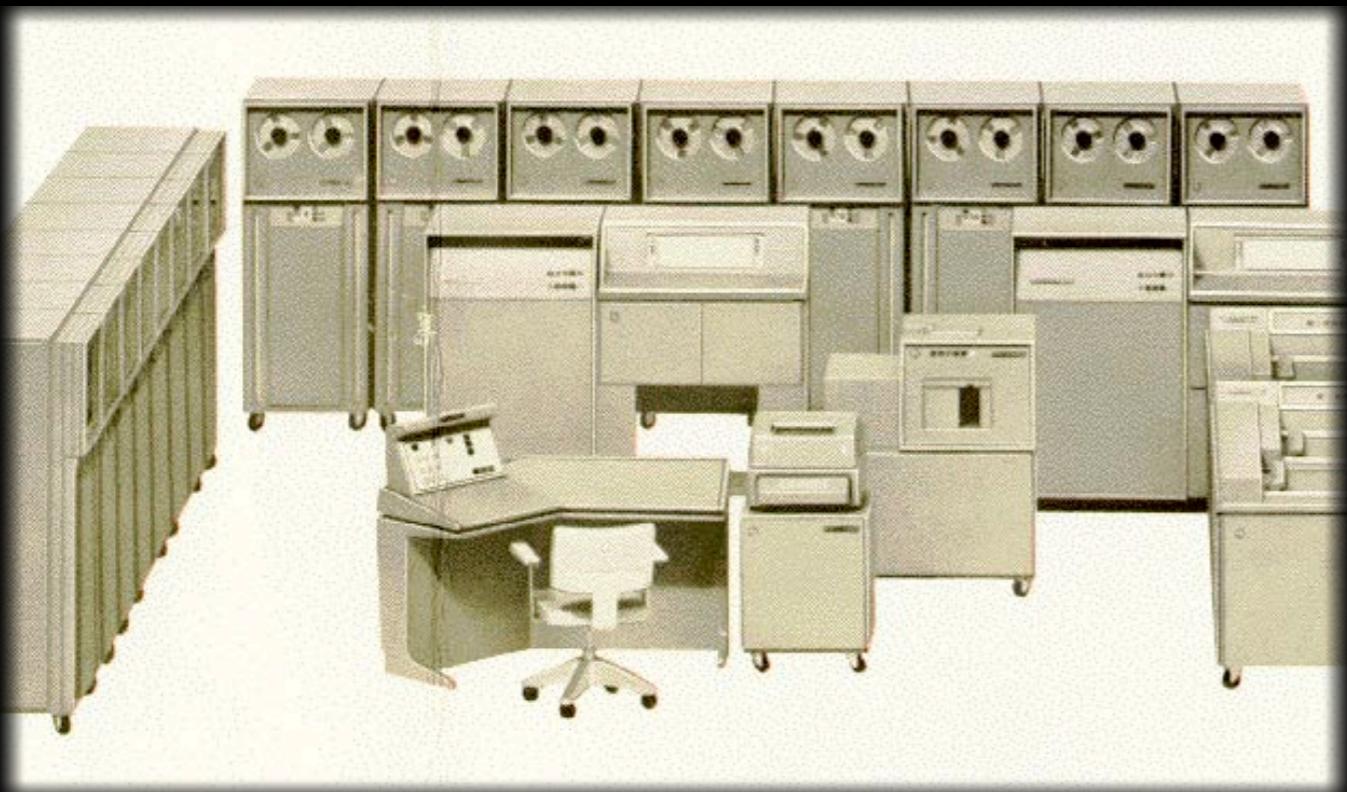


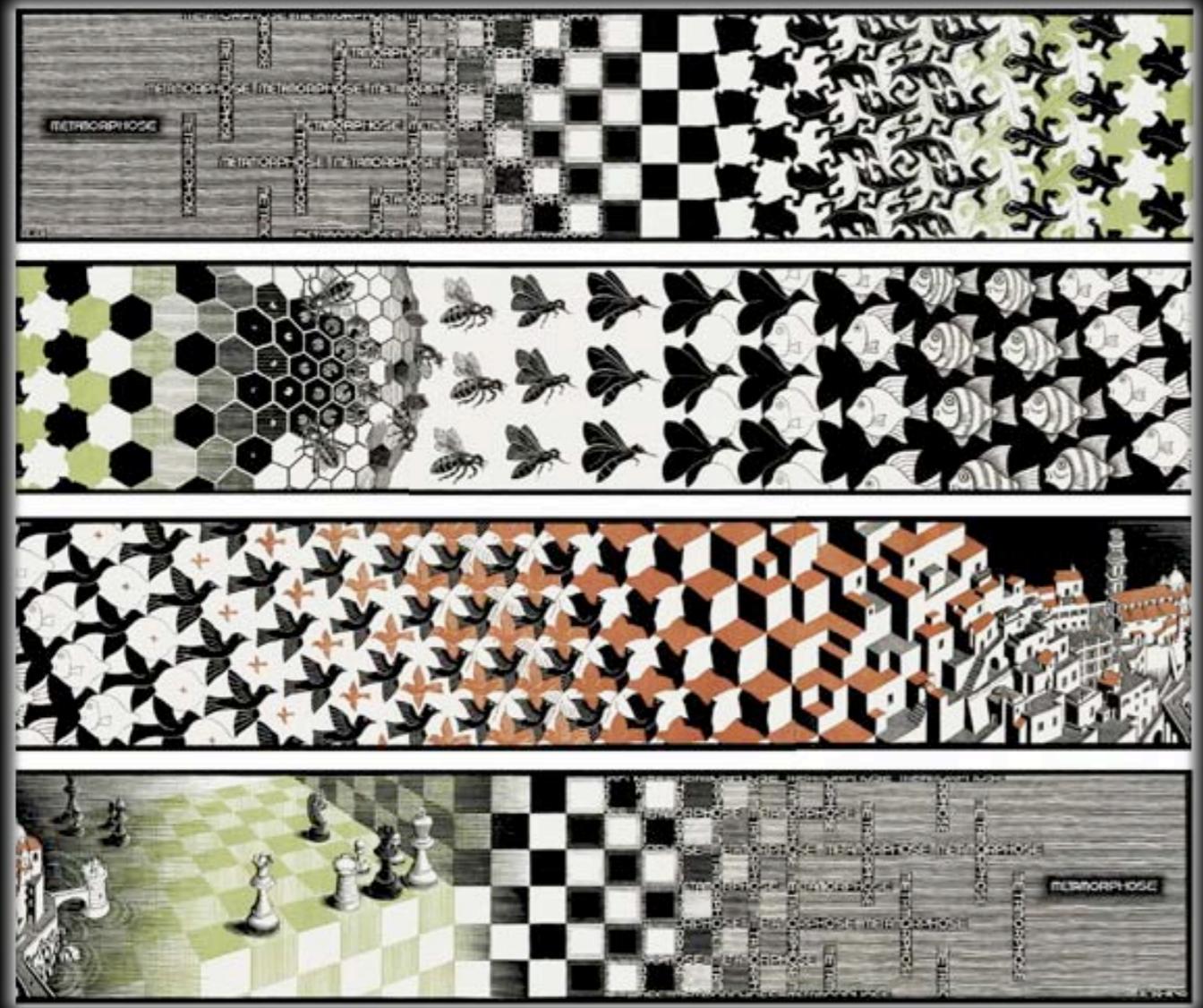
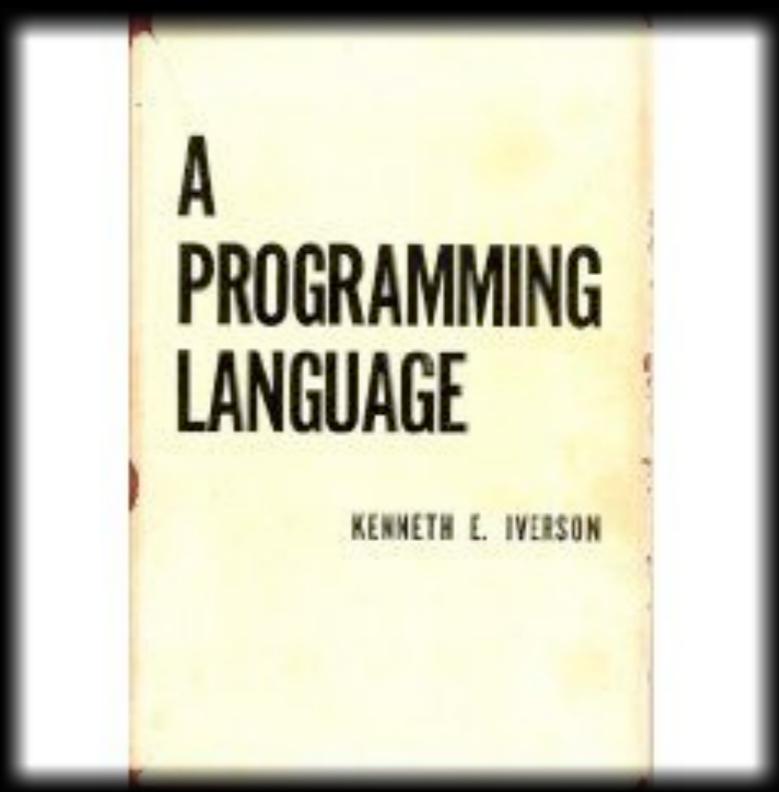


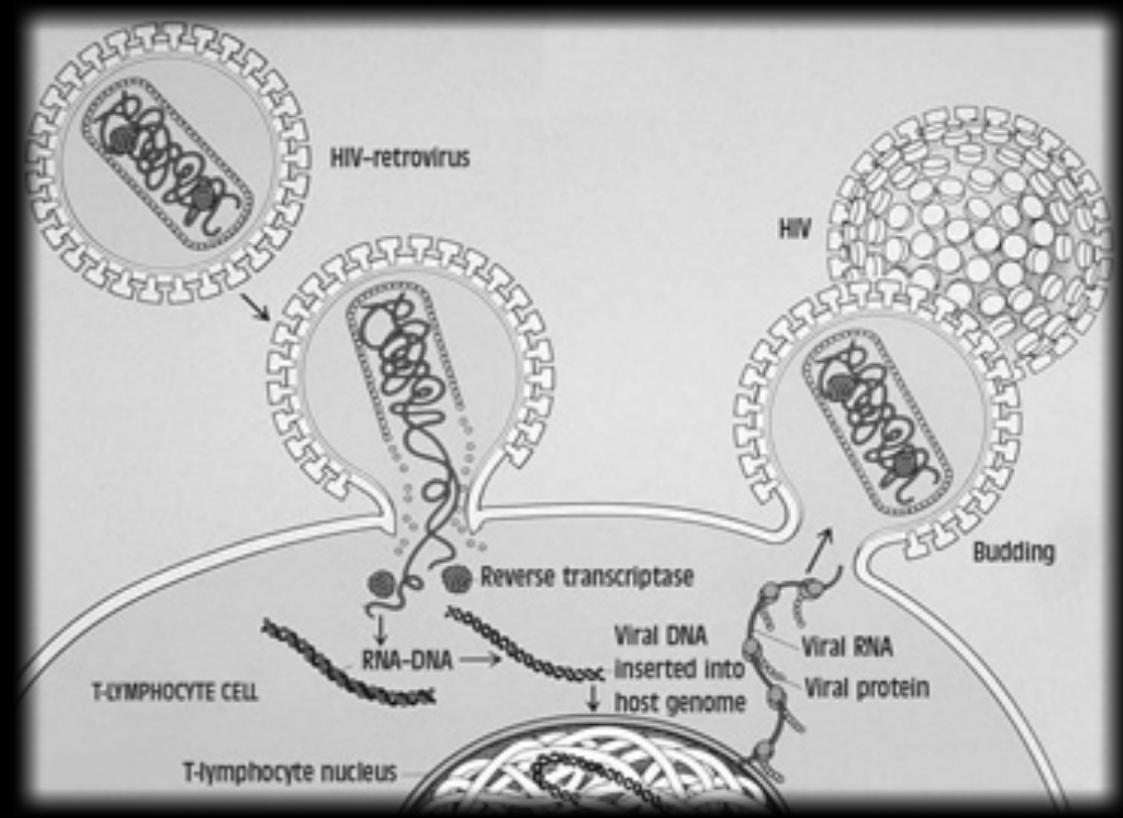
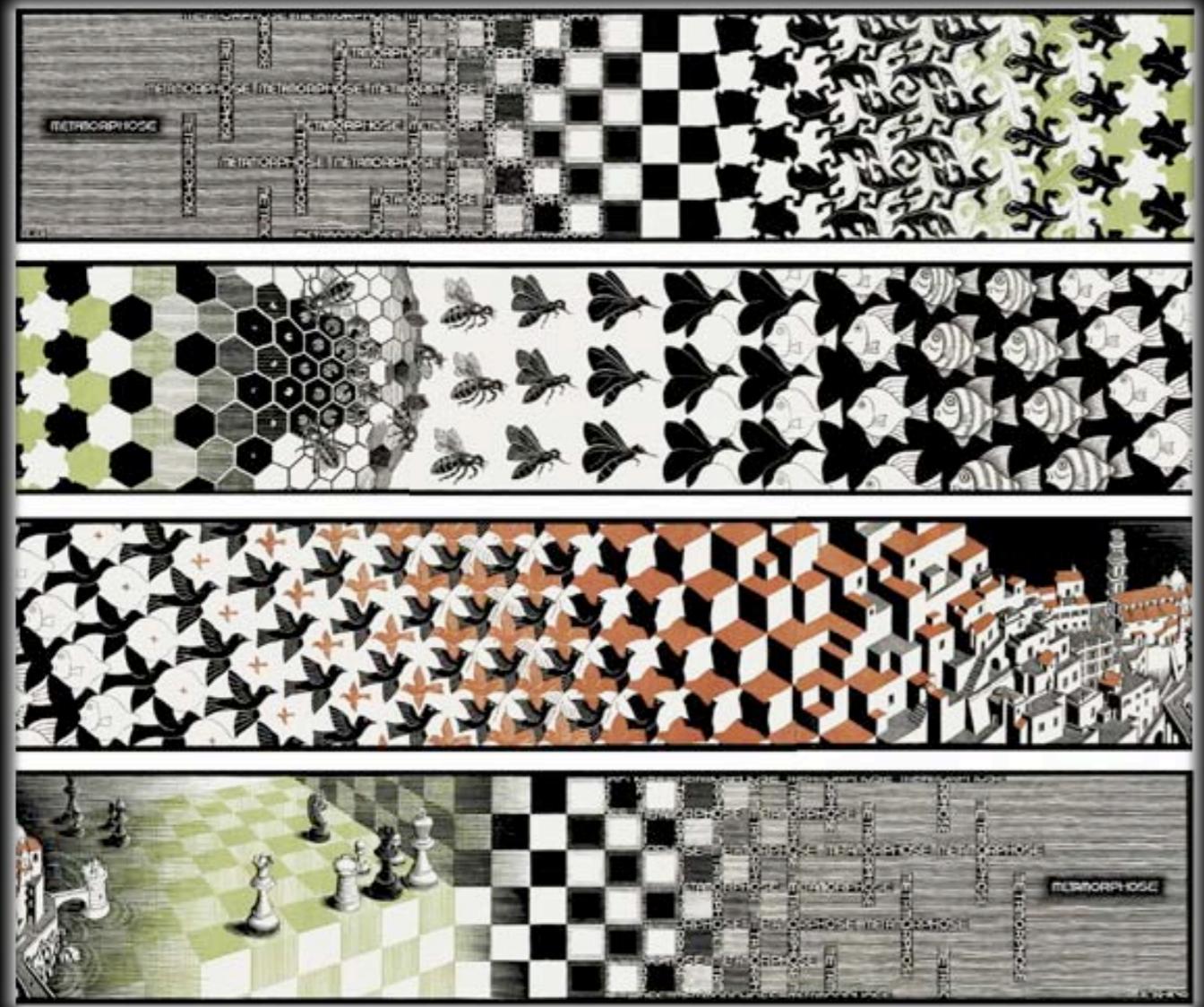
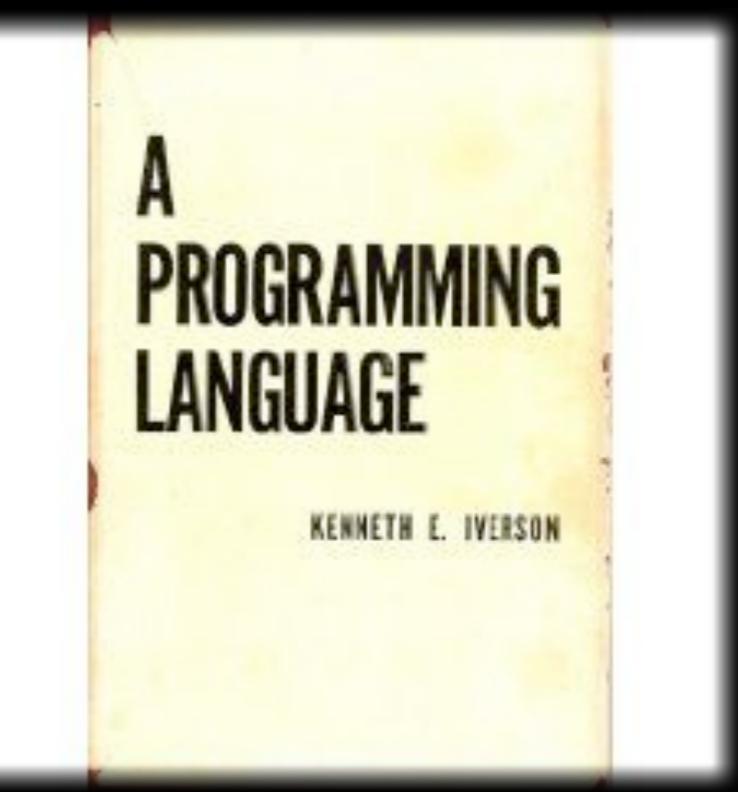
computing

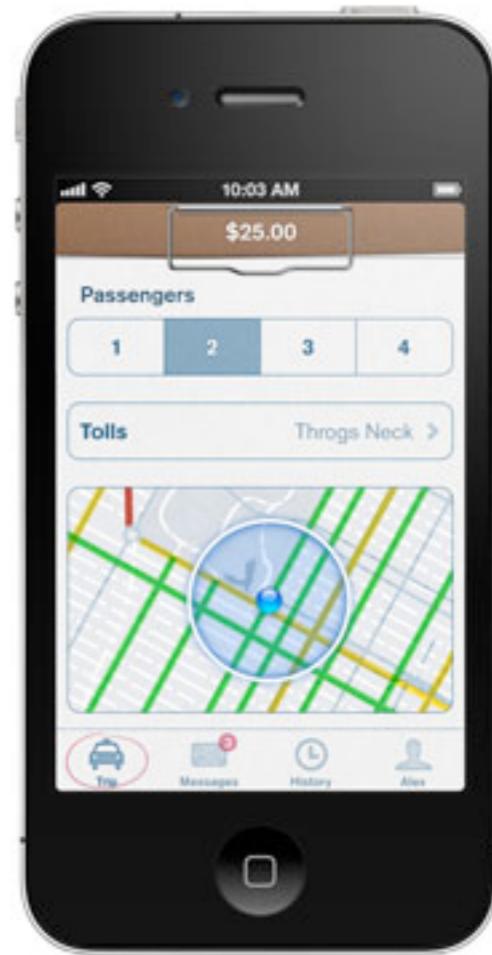






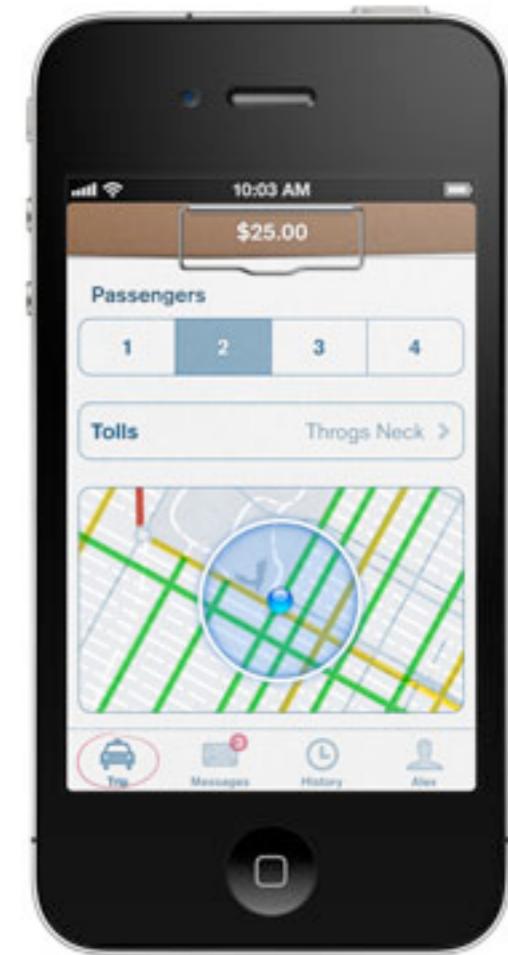








Passenger App



Driver App

Service

Message

RPC

Actors

SOA

iPad 13:43 97%

MobileMe Inbox Edit

Search Inbox

MobileMe 13/05/2010
It's your turn. Start using the Mobi...
It's your turn. Start using the MobileMe Mail beta now. Dear Jonathan, Congratulations,...

Apple 01/05/2010
iPad with Wi-Fi + 3G. Available to...
Shop Online | Find a Store | 1-800-MY-APPLE Learn more about iPad iPad order...

Apple 25/04/2010
Say Happy Mother's Day with an...
Shop Online | Find a Store | 1-800-MY-APPLE A touching gift for Mom. With iPod...

MobileMe Notifications 19/04/2010
Your message to Jonathan Isaacs...
Dear MobileMe member, The message sent at 12:05 PM on April 19, 2010 has been di...

Apple 14/04/2010
More speed. More power. The ne...
Shop Online | Find a Store | 1-800-MY-APPLE New Core i5 and Core i7 process...

Apple 03/04/2010
iPad. Wi-Fi model available today.
Shop Online | Find a Store | 1-800-MY-APPLE Learn more about iPad Wi-Fi + 3G...

Terri Glynn 21/03/2010
Out of Office AutoReply: Event de...
Hello, I will be away from my desk with limited access to email on Thursday 18th...

Apple 12/03/2010
iPad is coming. April 3. Pre-order...
Shop Online | Find a Store | 1-800-MY-APPLE Get free shipping on iPad from the...

Updated 06/06/2010 13:42

From: Apple Hide

To: Isaacs Jonathan

iPad with Wi-Fi + 3G. Available today.

1 May 2010 02:56 Mark as Unread

Shop Online | Find a Store | 1-800-MY-APPLE

iPad with Wi-Fi + 3G is here.

Available online or at your favorite [Apple Retail Store](#).

[Buy iPad](#)



[Learn more about iPad](#)

iPad order limit: two per customer. While supplies last.

Some features and applications are not available in all areas. Application availability and pricing are subject to change.

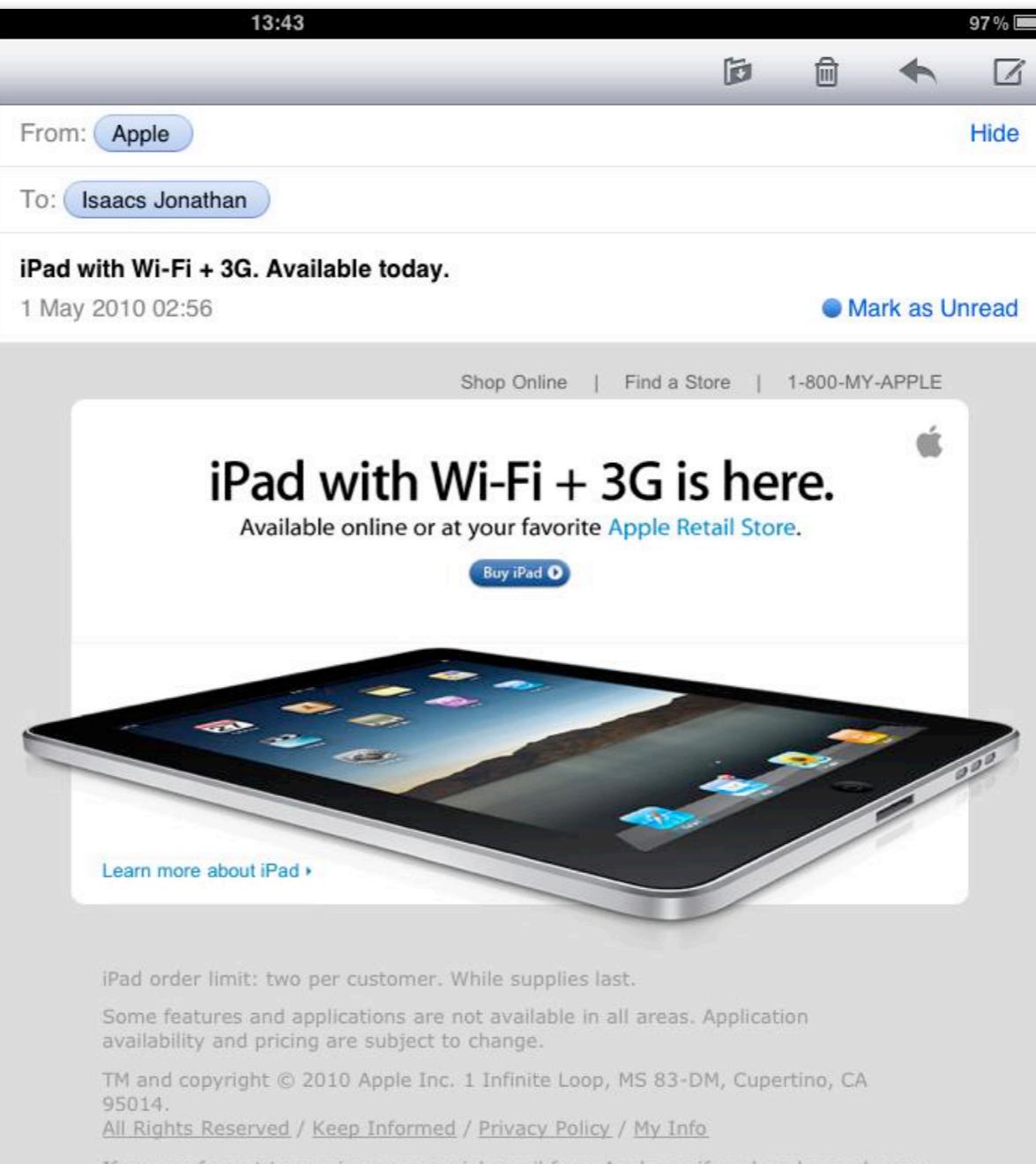
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List View

Detail View

List
Controller

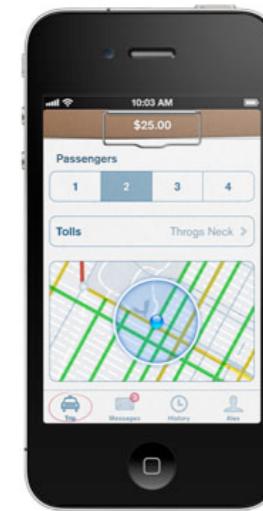


Detail
Controller

Model

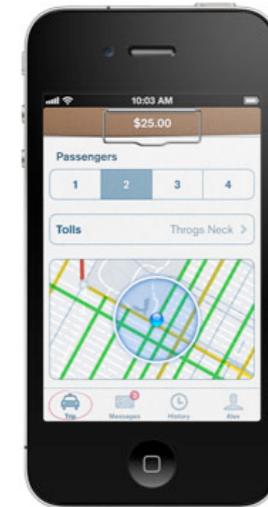


Passenger app



Driver app

Taxi App

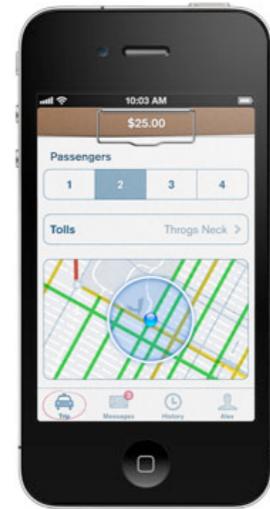


Passenger “view”

Driver “view”



Taxi App



Driver “view”



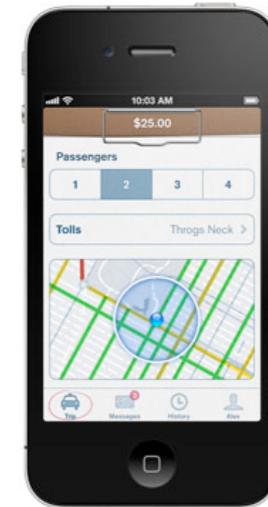
Taxi App



Passenger “view”



Taxi App



Passenger “view”

Driver “view”



Taxi App

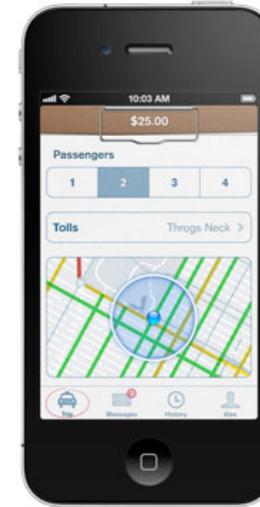


Broadcast (send)

Listen (receive)

IP + ZeroConf + TCP

Taxi App



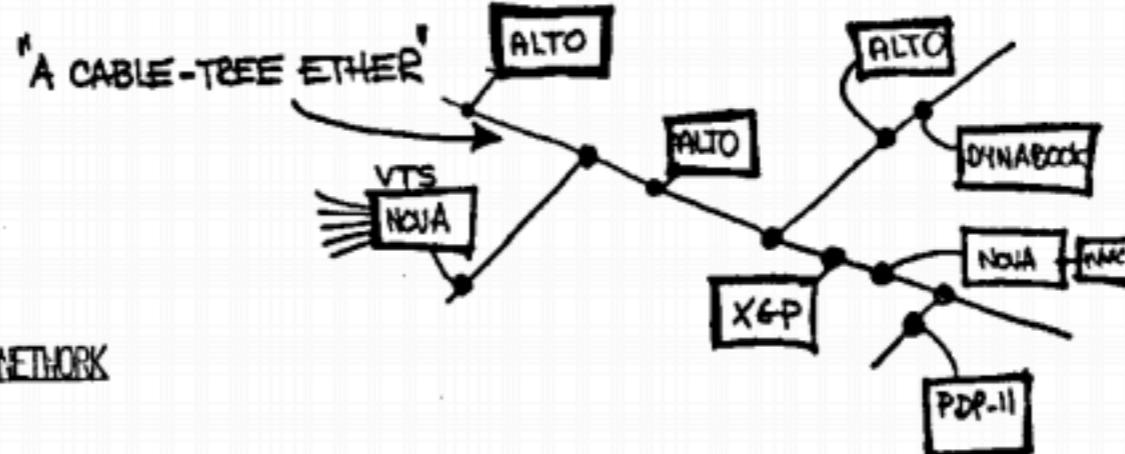
?

Broadcast (send)

Listen (receive)

IP + ZeroConf + TCP

XEROX



WE PLAN TO BUILD A SO-CALLED BROADCAST COMPUTER COMMUNICATION
NETWORK, NOT UNLIKE THE ALOHA SYSTEM'S RADIO NETWORK, BUT
SPECIFICALLY FOR IN-BUILDING MINICOMPUTER COMMUNICATION.
WE THINK IN TERMS OF NOVA'S AND ALTO'S JOINED BY COAXIAL CABLES.

WHILE WE MAY END UP USING COAXIAL CABLE TREES TO CARRY OUR
BROADCAST TRANSMISSIONS, IT SEEMS WISE TO TALK IN TERMS OF
AN ETHER, RATHER THAN 'THE CABLE', FOR AS LONG AS POSSIBLE.
THIS WILL KEEP THINGS GENERAL AND WHO KNOWS WHAT OTHER MEDIA
WILL PROVE BETTER THAN CABLE FOR A BROADCAST NETWORK; MAYBE
RADIO OR TELEPHONE CIRCUITS, OR POWER WIRING OR FREQUENCY-MULTI-PLEXED
CATV, OR MICROWAVE ENVIRONMENTS, OR EVEN COMBINATIONS THEREOF.

THE ESSENTIAL FEATURE OF OUR MEDIUM -- THE ETHER -- IS THAT IT
CARRIES TRANSMISSIONS, PROPAGATES BITS TO ALL STATIONS.

AND NOW, FOUR AXIOMS:

AXIOMS?

- (1) THE ETHER AXIOM: THE ETHER CARRIES TRANSMISSIONS TO ALL STATIONS.
- (2) THE PROXIMITY AXIOM: PROPAGATION TIMES ARE SOMEWHAT SMALL.
- (3) THE DETECTION AXIOM: STATIONS CAN DETECT, AT ALL TIMES, TRANSMISSIONS OF OTHER STATIONS; AS THEY PASS, IN ABOUT ONE BIT TIME.
- (4) THE DEFERENCE AXIOM: WHILE DETECTING A PASSING TRANSMISSION, NO STATION WILL BEGIN OR CONTINUE ITS OWN TRANSMISSION.

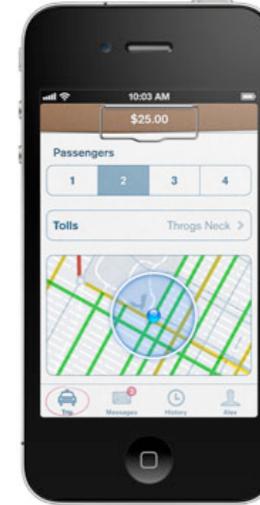
THE ETHER AXIOM FREES US FROM CONSIDERING NETWORK ROUTING.

THE PROXIMITY AXIOM ALLOWS US TO CONSIDER SOLUTIONS WHICH WOULD BE TOTALLY IMPRACTICAL OTHERWISE — SAY AS IN ALOHA RADIO.

THE DETECTION AXIOM DOES NOT IMPLY THAT CONFLICTS CAN BE AVOIDED; SEPARATED TRANSCEIVERS CAN BEGIN TRANSMISSION ON FREE ETHER ONLY TO DISCOVER LATER THAT THEIR TRANSMISSIONS HAVE COLLIDED ELSEWHERE. THE DEFERENCE AXIOM FOLLOWS FROM NOTHING MORE THAN OUR BASIC INTUITION — MAYBE IT SHOULD BE DISCARDED SOMETIME..

NOT THE
LOCAL
NETWORK!

Taxi App



Ether

Broadcast (send)

Listen (receive)

IP + ZeroConf + TCP

```
class Ether:

    @classmethod
    def createEtherWithNamed(etherName):

        /*
         * Bind `object` to a logical `name` in this ether namespace.
         *
         * The local instance will be published to the ether no
         * more than once per run loop iteration.
        */

    def bindLocalObjectToEntityName(object, entityName):
```

```
class Ether:

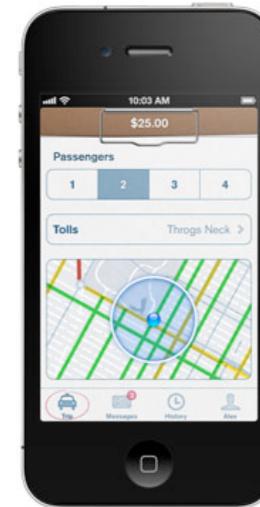
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        */

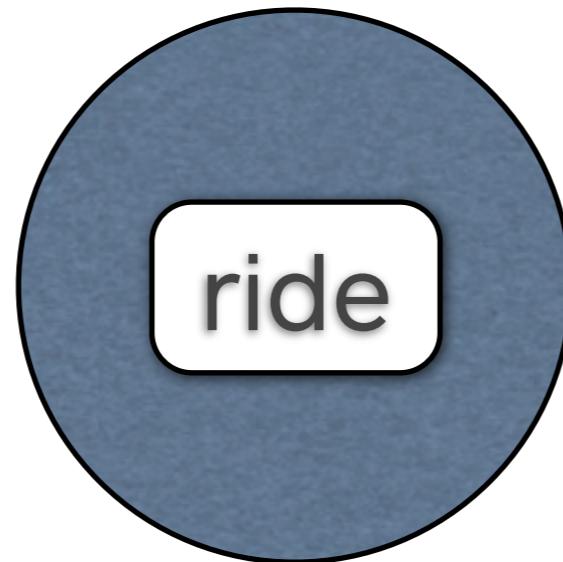
    def bindLocalObjectToEntityName(object, entityName):

taxiEther = Ether.createEtherWithNamed("sq-taxi")
taxiEther.bindLocalObjectToEntityName(self.ride, "ride")
```

Taxi App



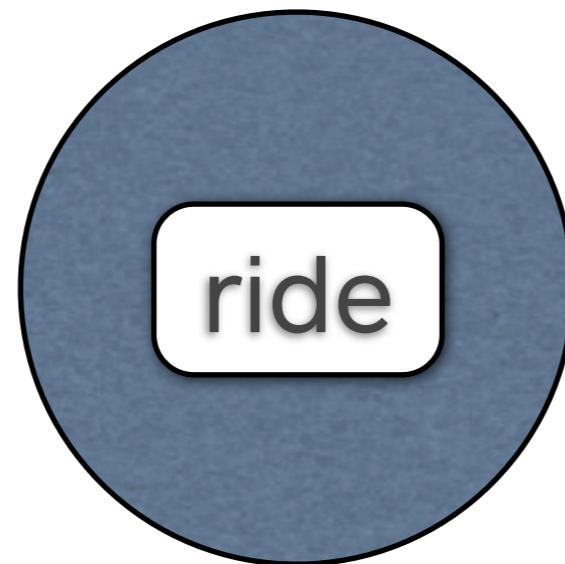
sq-taxi



Taxi App



sq-taxi



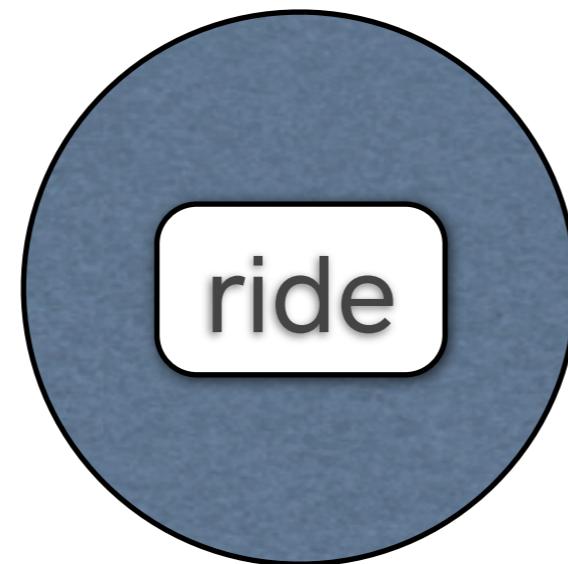
distance: 1.2 miles



Taxi App



sq-taxi



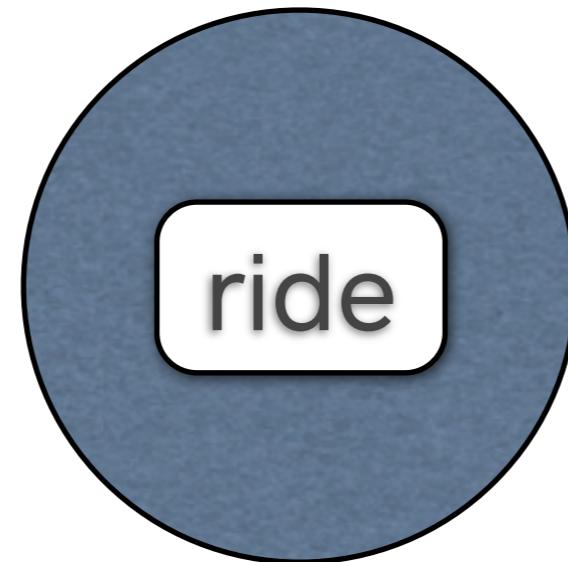
distance: 1.2 miles



Taxi App



sq-taxi



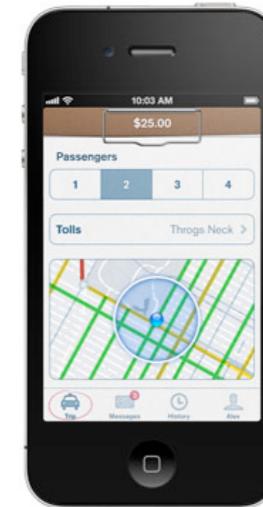
distance: 1.2 miles



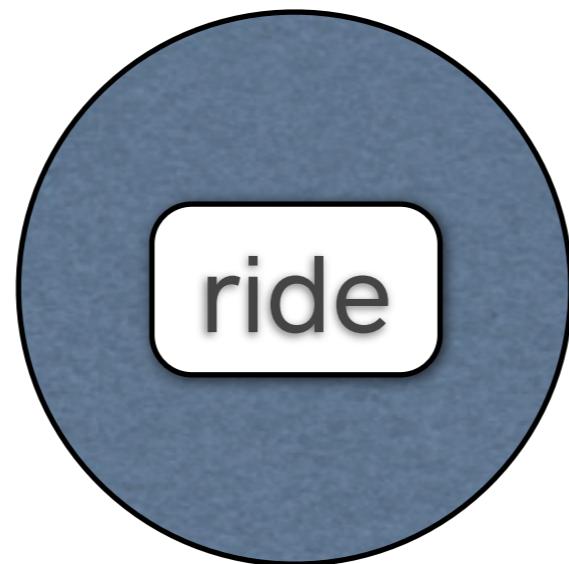
distance: 1.2 miles



Taxi App



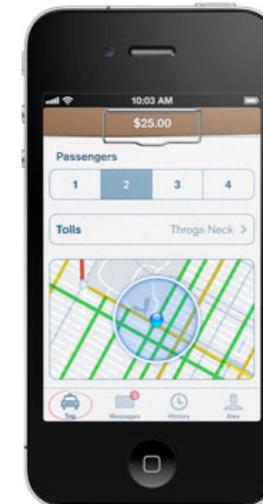
sq-taxi



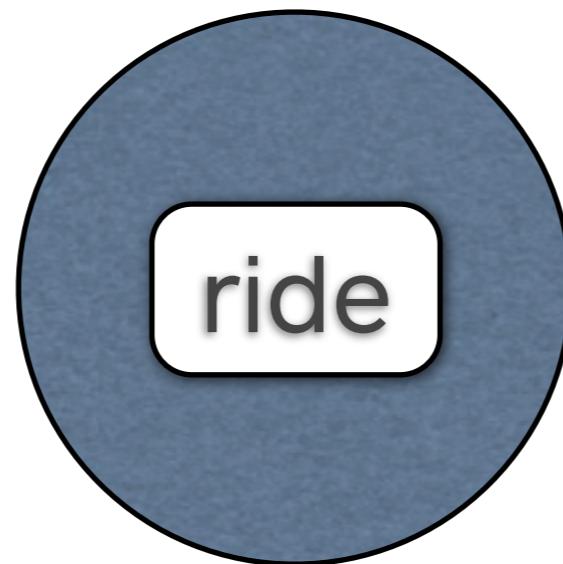
card swipe



Taxi App



sq-taxi



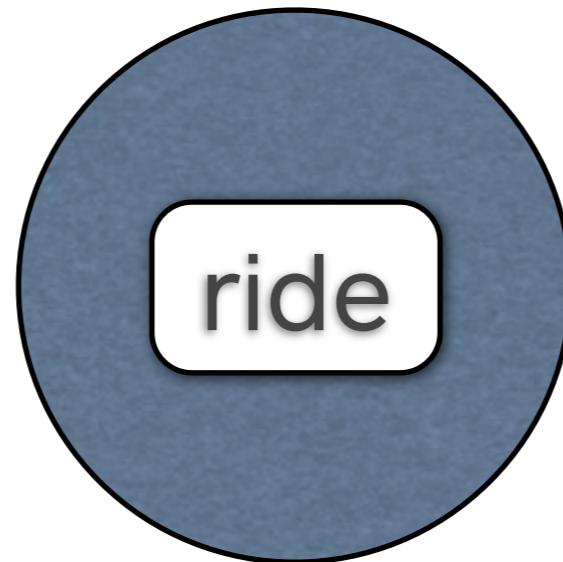
card swipe



Taxi App



sq-taxi



card swipe



card swipe





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