石川 将也
Masaya Ishikawa

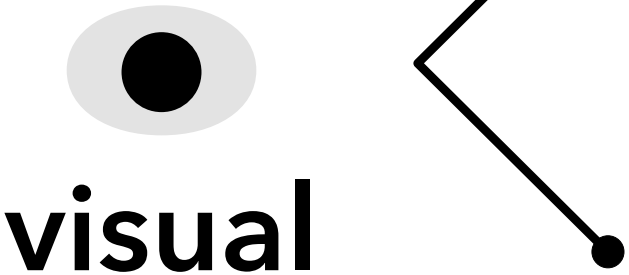
＋

田谷 修一郎
Shuichiro Taya

design and cognition

02 apparent motion

size color shape

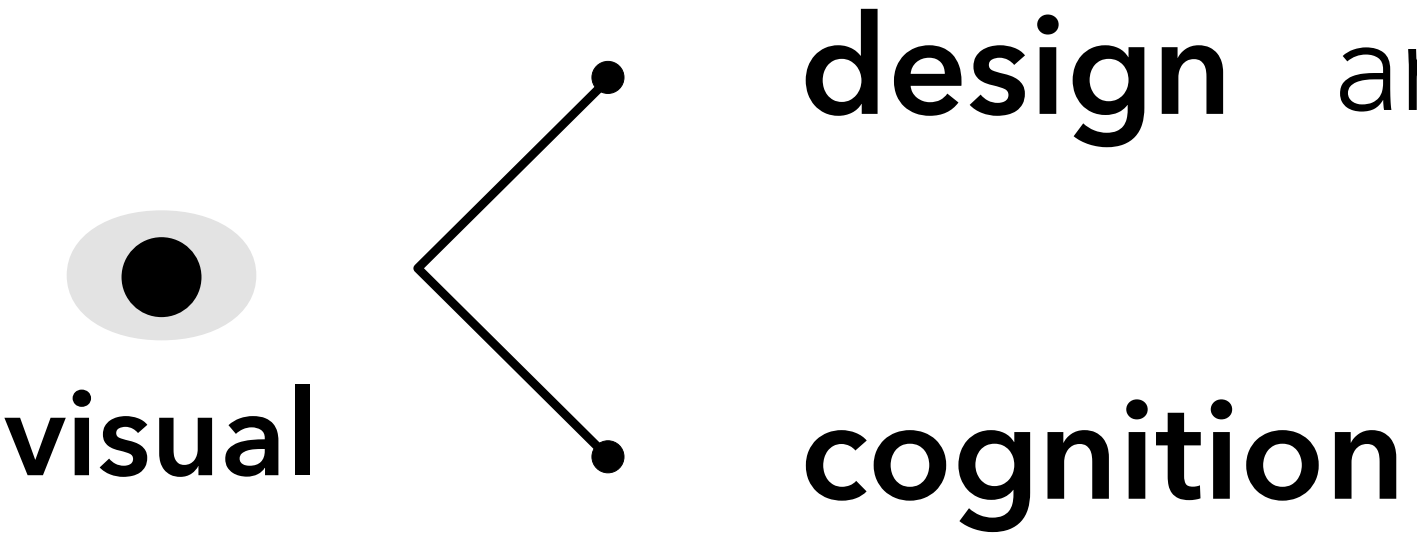


visual

design and

cognition

size **color** **shape** **motion**



from this week :

We will focus on cognition behind **motion and video** by creating **stop motion animation**.

motion

design and

cognition

motion design and cognition

image &
motion are
built inside
your mind.

motion **design** and **cognition**

image &
motion are
built inside
your mind.

motion design and **cognition**

cognition of video image is an **optical illusion**

Video image and the real world **is very different.**

motion design and **cognition**

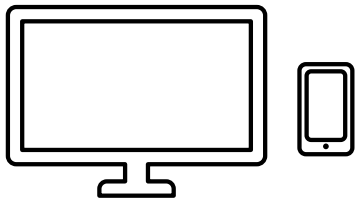
cognition of video image is an **optical illusion**

Video image and the real world **is very different.**

	Real	**Video**
1.		
2.		

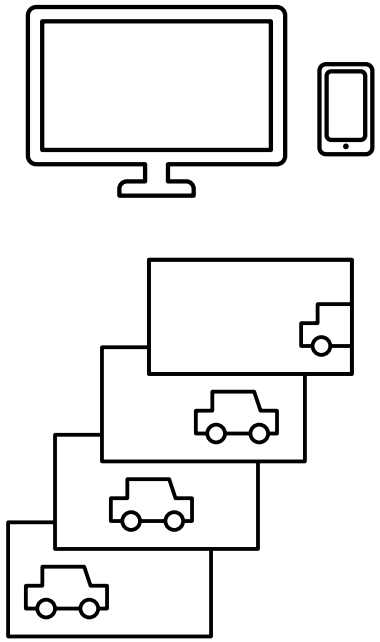
Video image and the real world **is very different.**

	Real	**Video**
1.	3D	**2D**
2.		



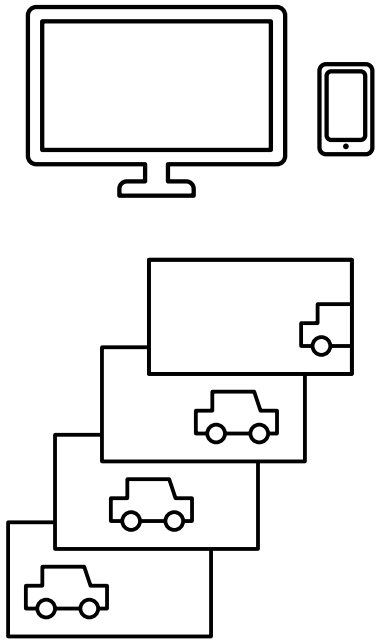
Video image and the real world **is very different.**

	Real	**Video**
1.	3D	**2D**
2.	continuous	**non-continuous**



Video image and the real world **is very different.**

	Real	**Video**
1.	3D	**2D**
2.	continuous	**non-continuous**

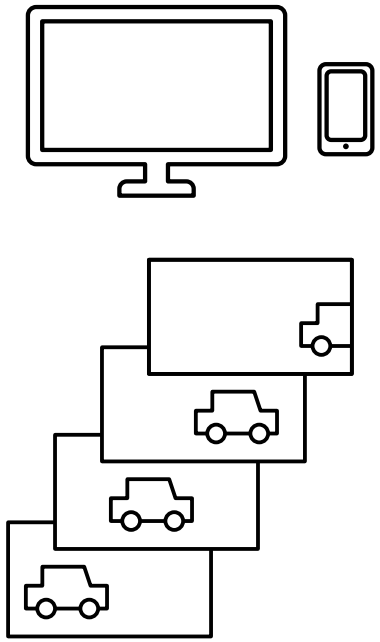


Video are just **still frames**.

How can we perceive motion?

Video image and the real world **is very different.**

	Real	**Video**
1.	3D	**2D**
2.	continuous	**non-continuous**



Video are just **still frames**.

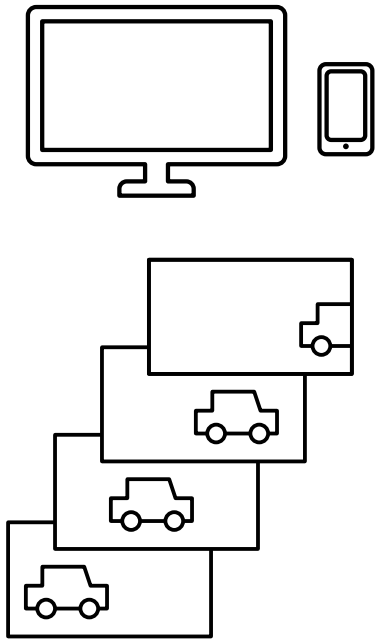
How can we perceive motion?

「**こんなことできません**」Humans can't do this!

from Pitagora Switch, 2014

Video image and the real world **is very different.**

	Real	**Video**
1.	3D	**2D**
2.	continuous	**non-continuous**



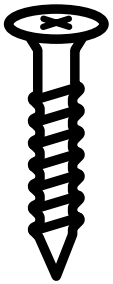
Video are just **still frames.**

How can we perceive motion?

We have the
ability to create motion from still frames.

exercise 1

Animate the nails.



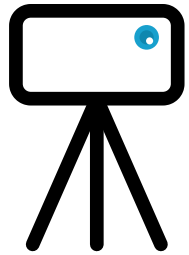
creative method : **stop motion animation**

tools : screw nail

stop motion studio app

blu tack

tripod



point

exercise 1

Animate the nails.

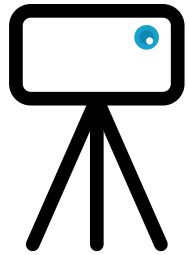
creative method : **stop motion animation**

tools : screw nail

stop motion studio app

blu tack

tripod



point

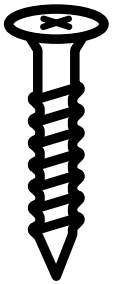
Fix tripod using tack glue.

Use **manual exposure**.

Use **onion skin** feature.

exercise 1

Animate the nails.



anima

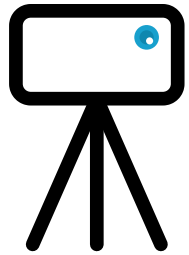
creative method : **stop motion animation**

tools : screw nail

stop motion studio app

blu tack

tripod



point

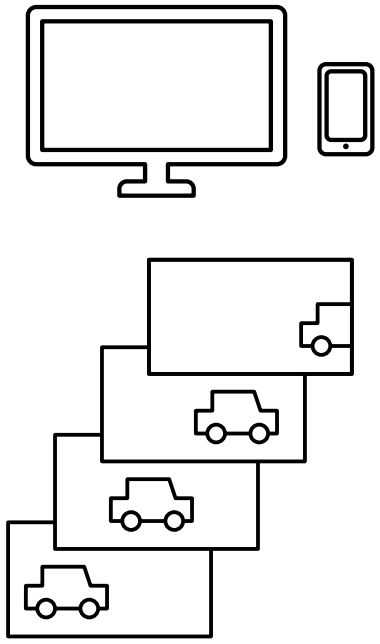
Fix tripod using tack glue.

Use **manual exposure**.

Use **onion skin** feature.

Video image and the real world **is very different.**

	Real	**Video**
1.	3D	**2D**
2.	continuous	**non-continuous**



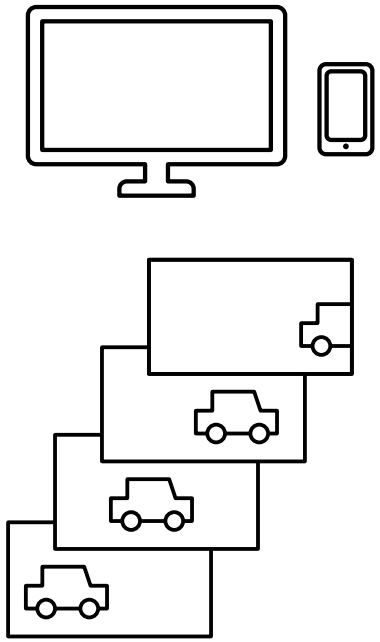
Video are just **still frames.**

How can we perceive motion?

We humans have the
ability to create motion from still frames.

Video image and the real world **is very different.**

	Real	**Video**
1.	3D	**2D**
2.	continuous	**non-continuous**



apparent motion

We humans have the
ability to create motion from still frames.

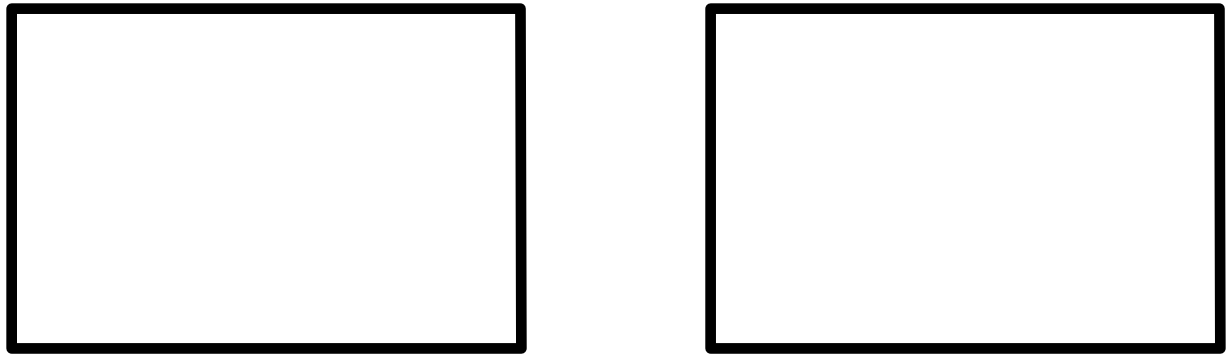
apparent motion

apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.

apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.



apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.

apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.

apparent motion

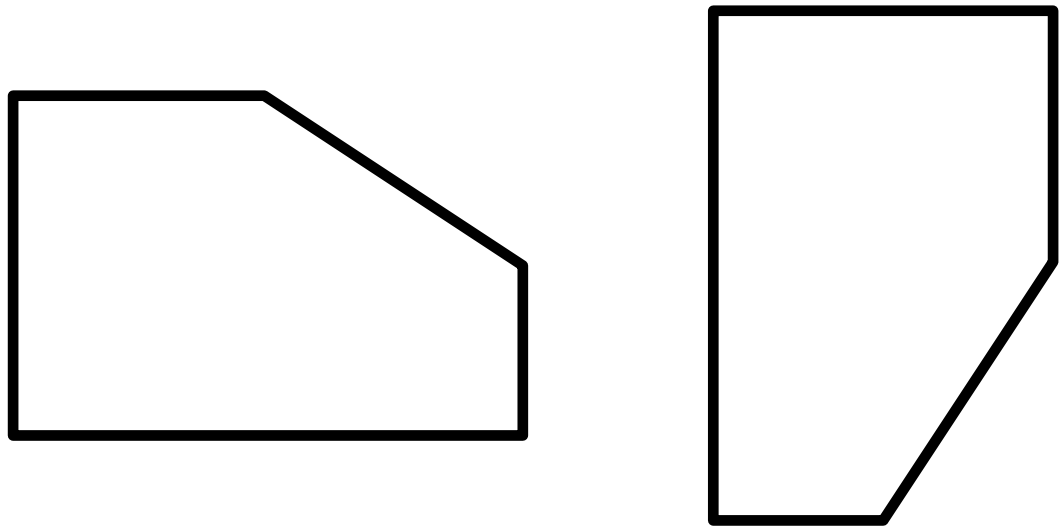
When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.

apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.

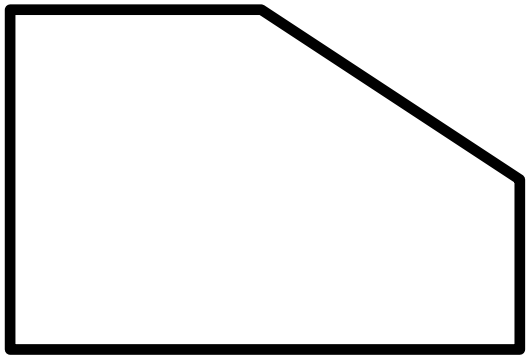
apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.



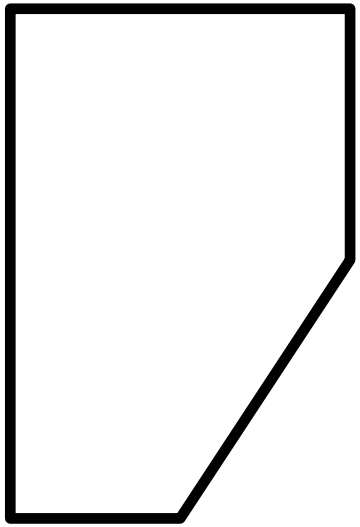
apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.



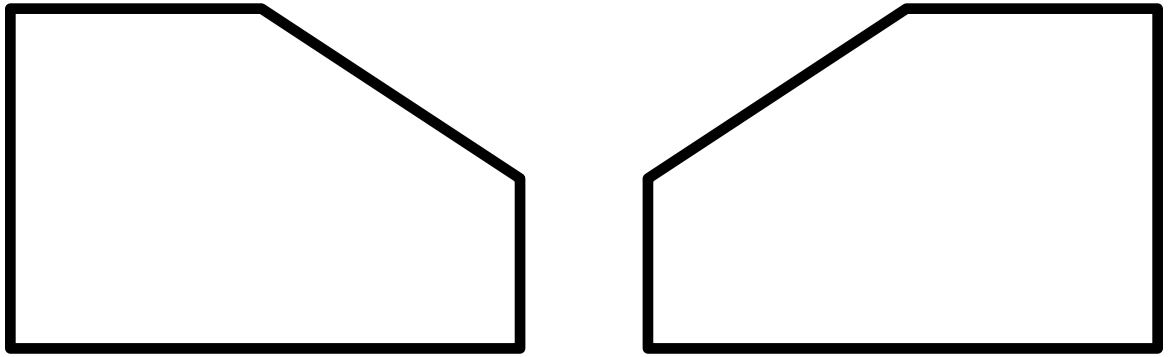
apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.



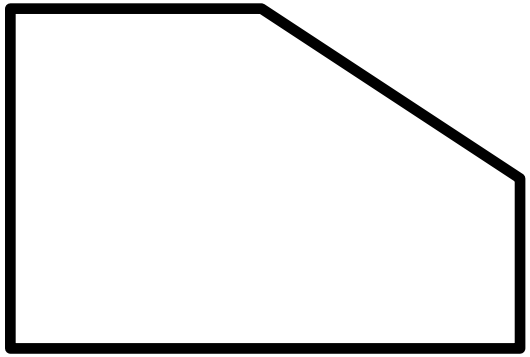
apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.



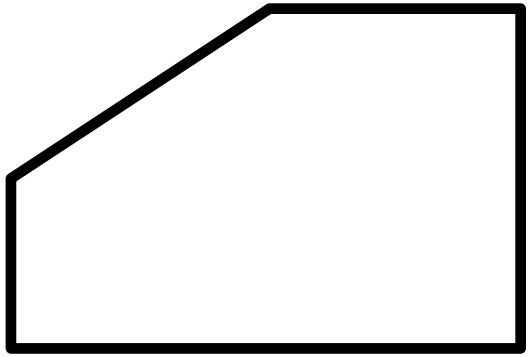
apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.



apparent motion

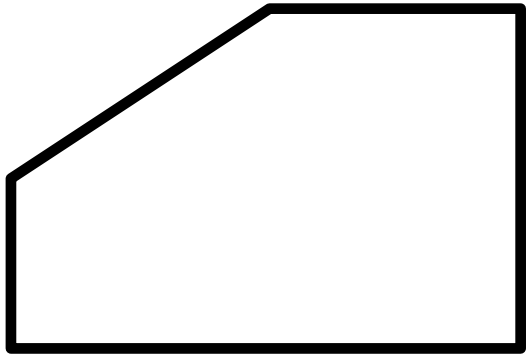
When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.



apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.

Our brain immediately gives us the conclusion.

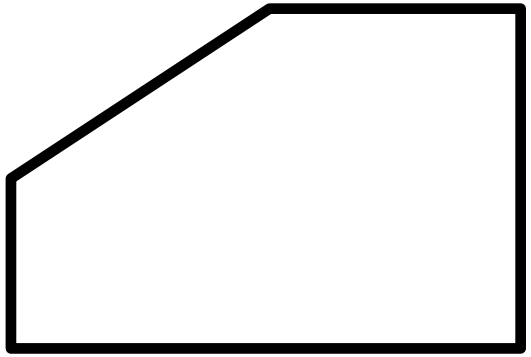


apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.

Our brain immediately gives us the conclusion.
Even it is **impossible in the real world.**

ex.「みなさんの
こんなことできません」



apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.

How can we percieve motion from non-continuous information ?

apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.

How can we percieve motion from non-continuous information ?

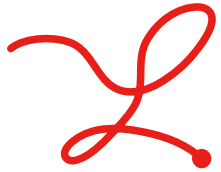
When a **laser point is moved very fast ...**

apparent motion

When **two pieces of visual information** on different location **are presented with** not so fast not so slow **intervals**, we percieve movement.

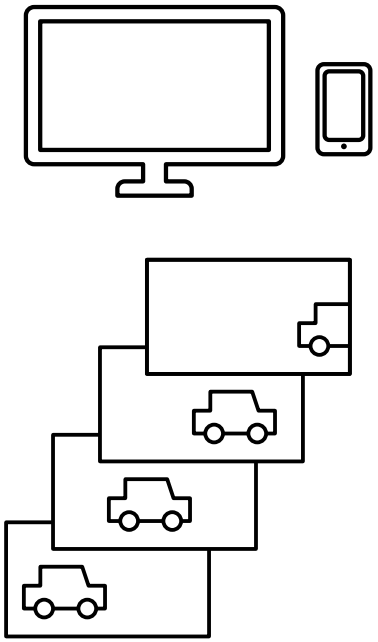
How can we percieve motion from non-continuous information ?

When a **laser point is moved very fast ... we see a line** (but it is realy a point)**.**



Video image and the real world **is very different.**

	Real	**Video**
1.	3D	**2D**
2.	continuous	**non-continuous**

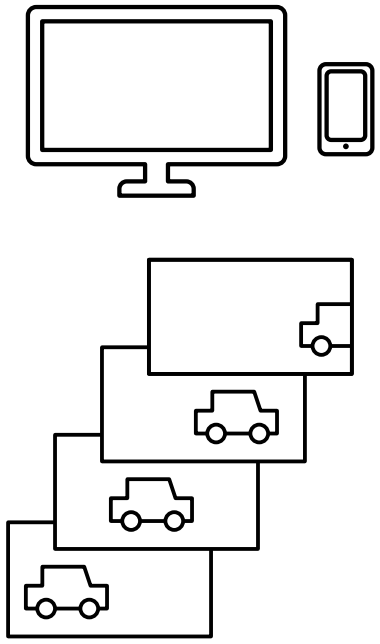


apparent motion

We humans have the **ability to create motion** from still frames.

Video image and the real world **is very different.**

	Real	**Video**
1.	3D	**2D**
2.	continuous	**non-continuous**



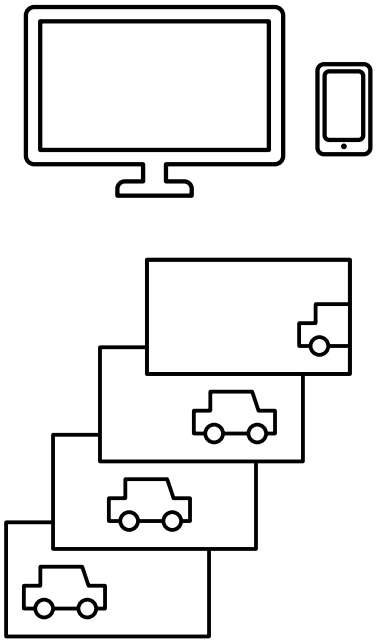
When we percept real world, we use non continous information **and the brain completes it**.

because

We humans have the **ability to create motion** from still frames.

Video image and the real world **is very different.**

	Real	**Video**
1.	3D	**2D**
2.	continuous	**non-continuous**



When we percept real world, we use non continous information **and the brain completes it**.

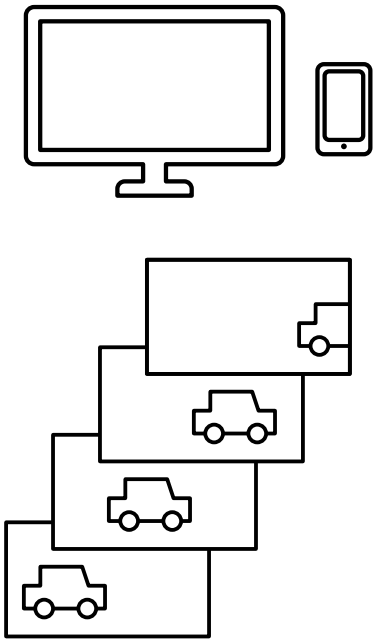
We humans also have the ability to **complete 3D from 2D information**.

「2355ID 3D 看板」

but

Video image and the real world **is very different.**

	Real	**Video**
1.	3D	**2D**
2.	continuous	**non-continuous**



When we percept real world, we use non continous information **and the brain completes it**.

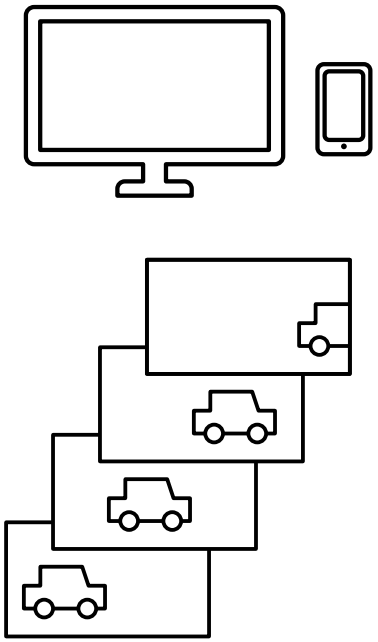
We humans also have the ability to **complete 3D from 2D information**.

our retina is 2D

Video image and the real world **is very different.**

but

	Real	**Video**
1.	3D	**2D**
2.	continuous	**non-continuous**



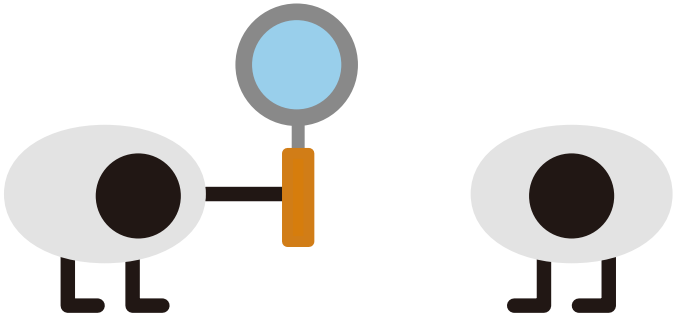
The same mechanism for real world perception
is used for visual, motion, image **cognition.**

Our mechanism for perception sometimes reveals in **unusual circumstances** (2D, non-continuous).

Our mechanism for perception sometimes reveals in **unusual circumstances** (2D, non-continuous).

II

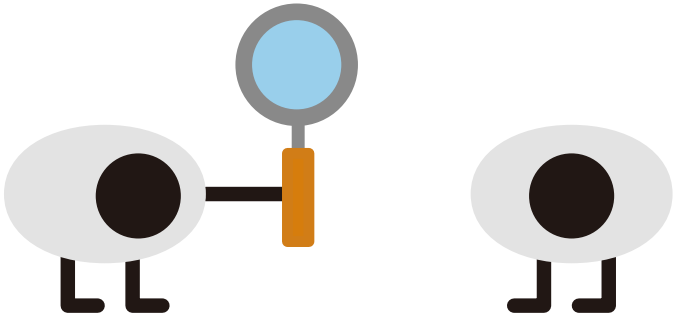
Optical Illusion



Our mechanism for perception sometimes reveals
in **unusual circumstances** (2D, non-continuous).

II

Optical Illusion

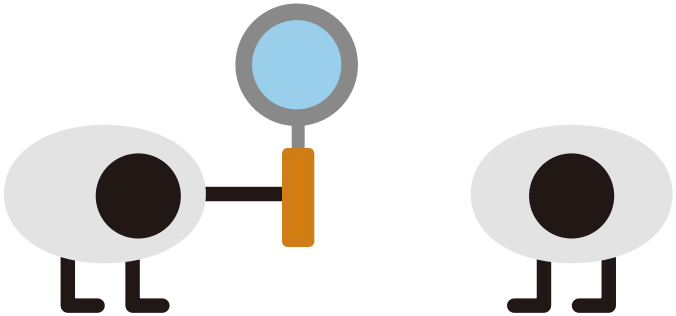


錯視(さくし)の謎(なぞ)めき

Our mechanism for perception sometimes reveals
in **unusual circumstances** (2D, non-continuous).

II

Optical Illusion

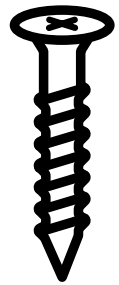


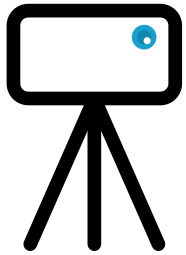
Perception is reality.
Reality is not reality.

Paul Rand

assignment 1

make your own screw nail animation





point

Make use of **different sizes.**

Give them a **animacy**.

Focus on **motion**.　not stories.

ex ： **push, fold, union, etc ...**

「新しい生物」アルミホイルプス

Deadline　:　4/30 mon 12:00 PM(noon)

- provide movie file via discord.
- todays exercise too.

石川 将也
Masaya Ishikawa

＋

田谷 修一郎
Shuichiro Taya

design and cognition

02 apparent motion