Interaction Design & Virtual Reality

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Assistant Prof.

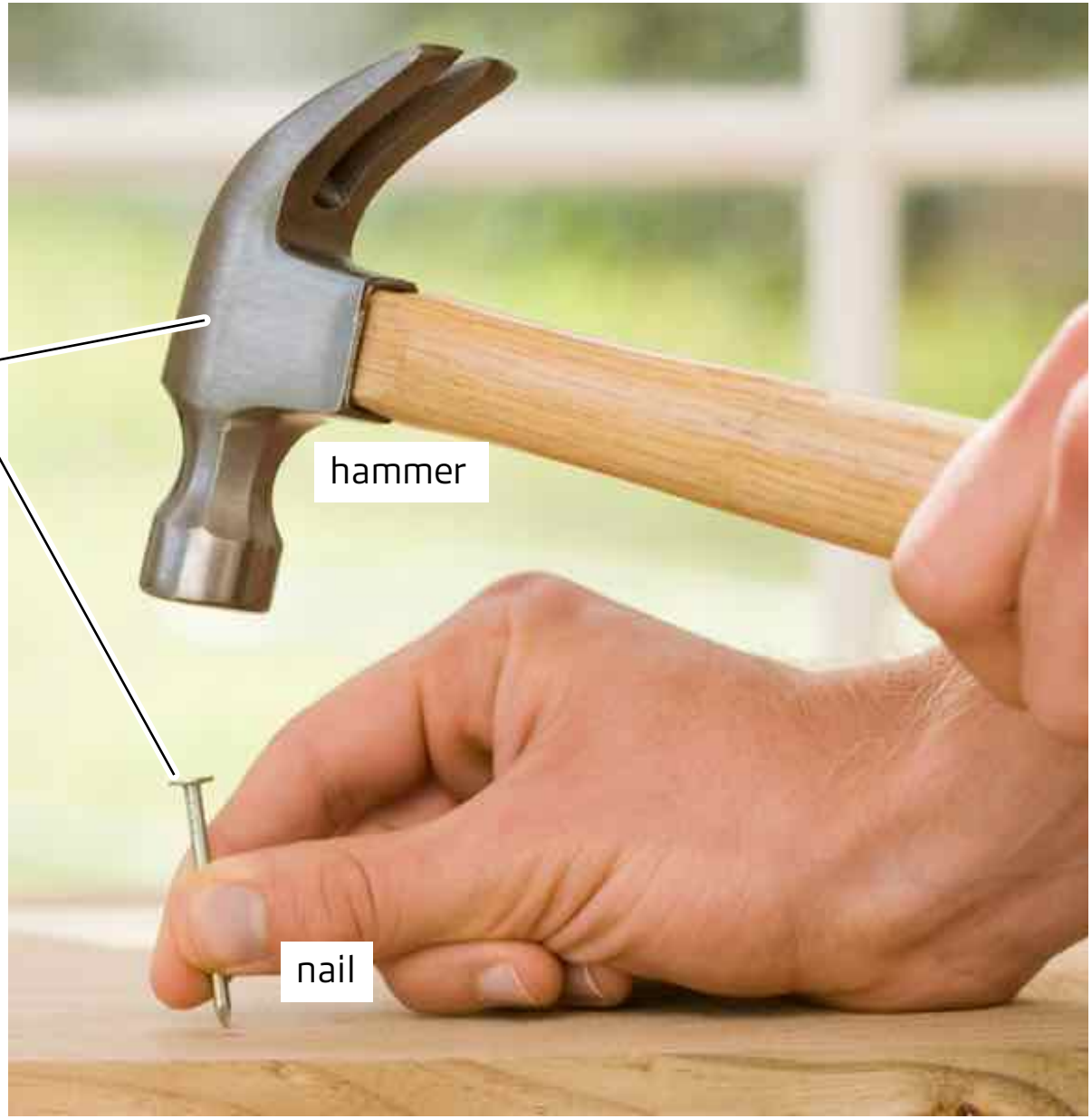
2016.10.04

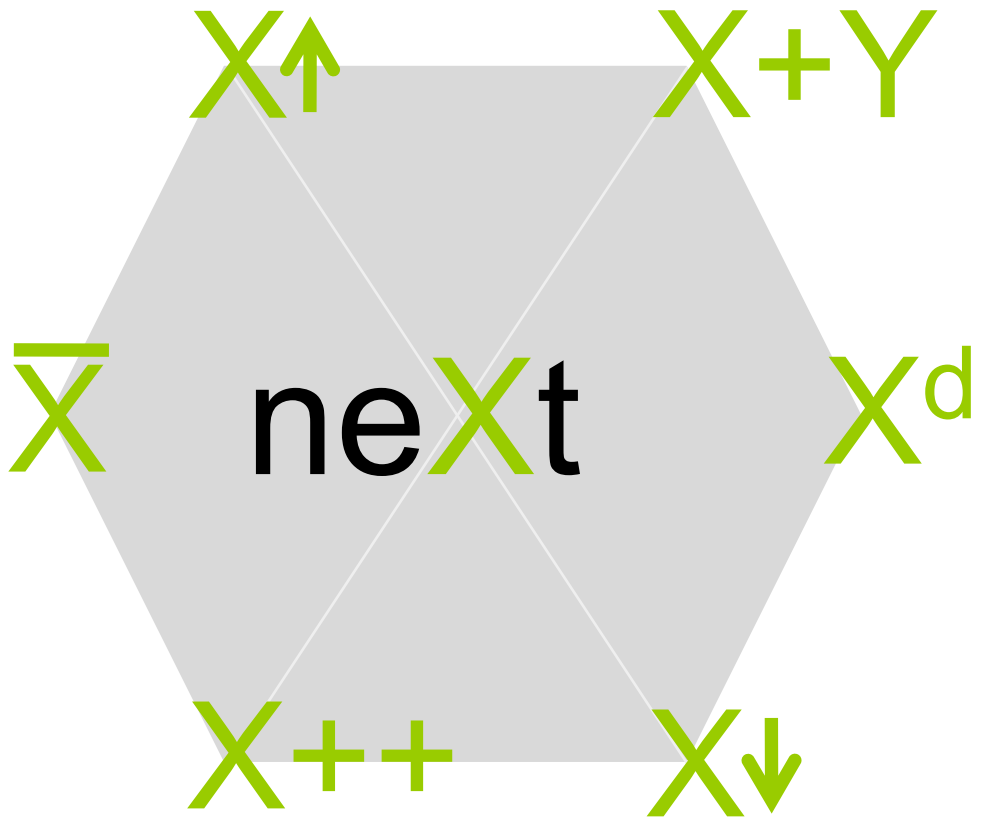
for better
penetration rate

1. Search and Join “NCTU-ID-2016”
2. Post group photo

problem

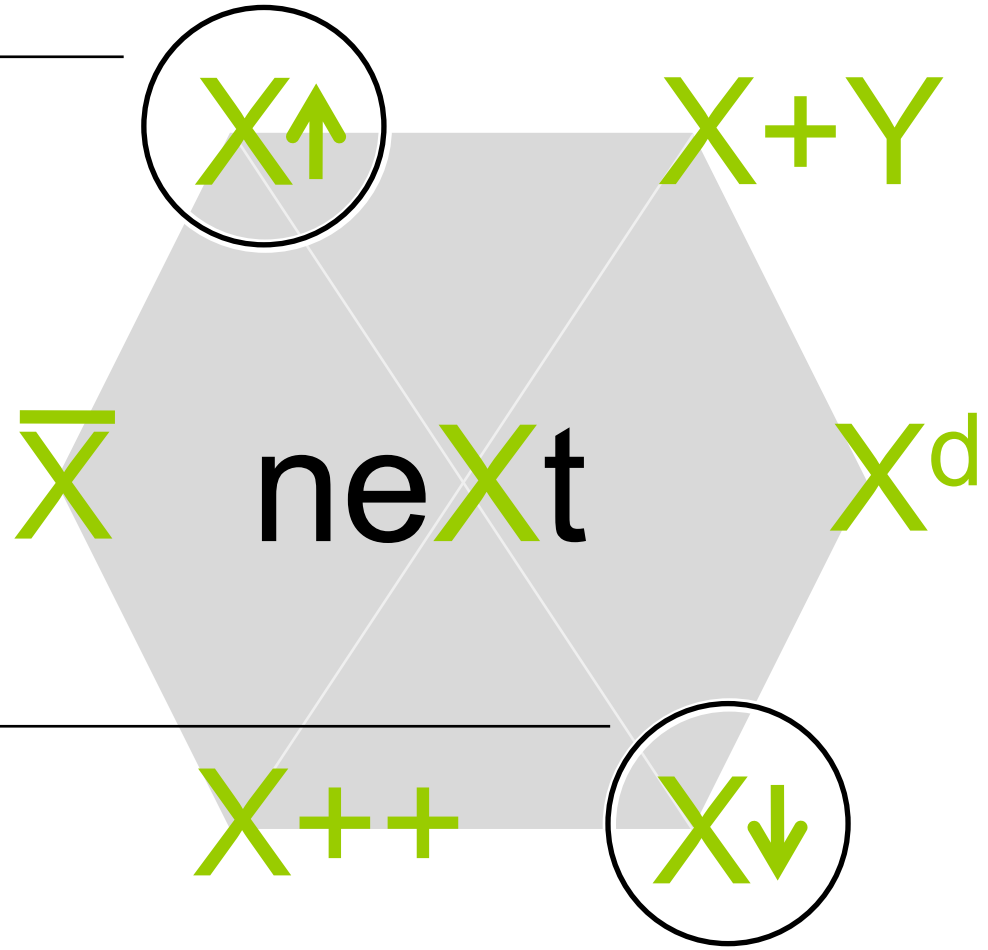
solution

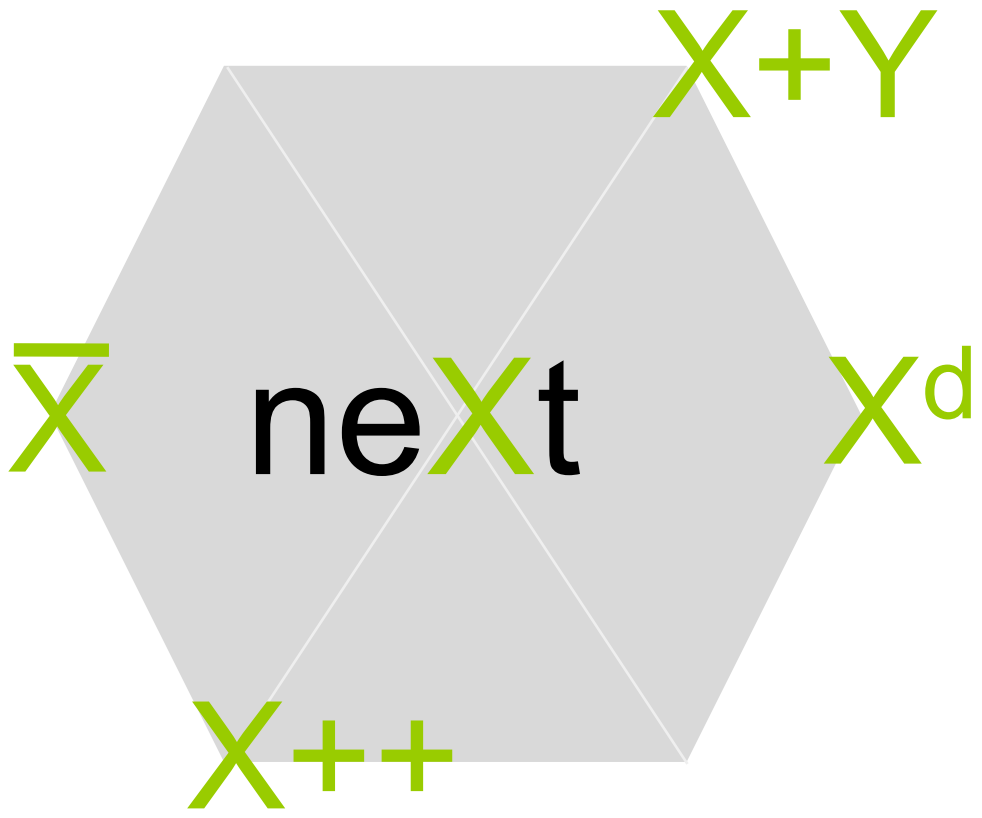



X↑
X+Y
X̄
neXt
Xd
X++
X↓

given a **solution** (hammer),
find all the **problems** (nails)

given a **problem** (nail),
find all the **solutions** (hammers)




X+Y
X̄
neXt
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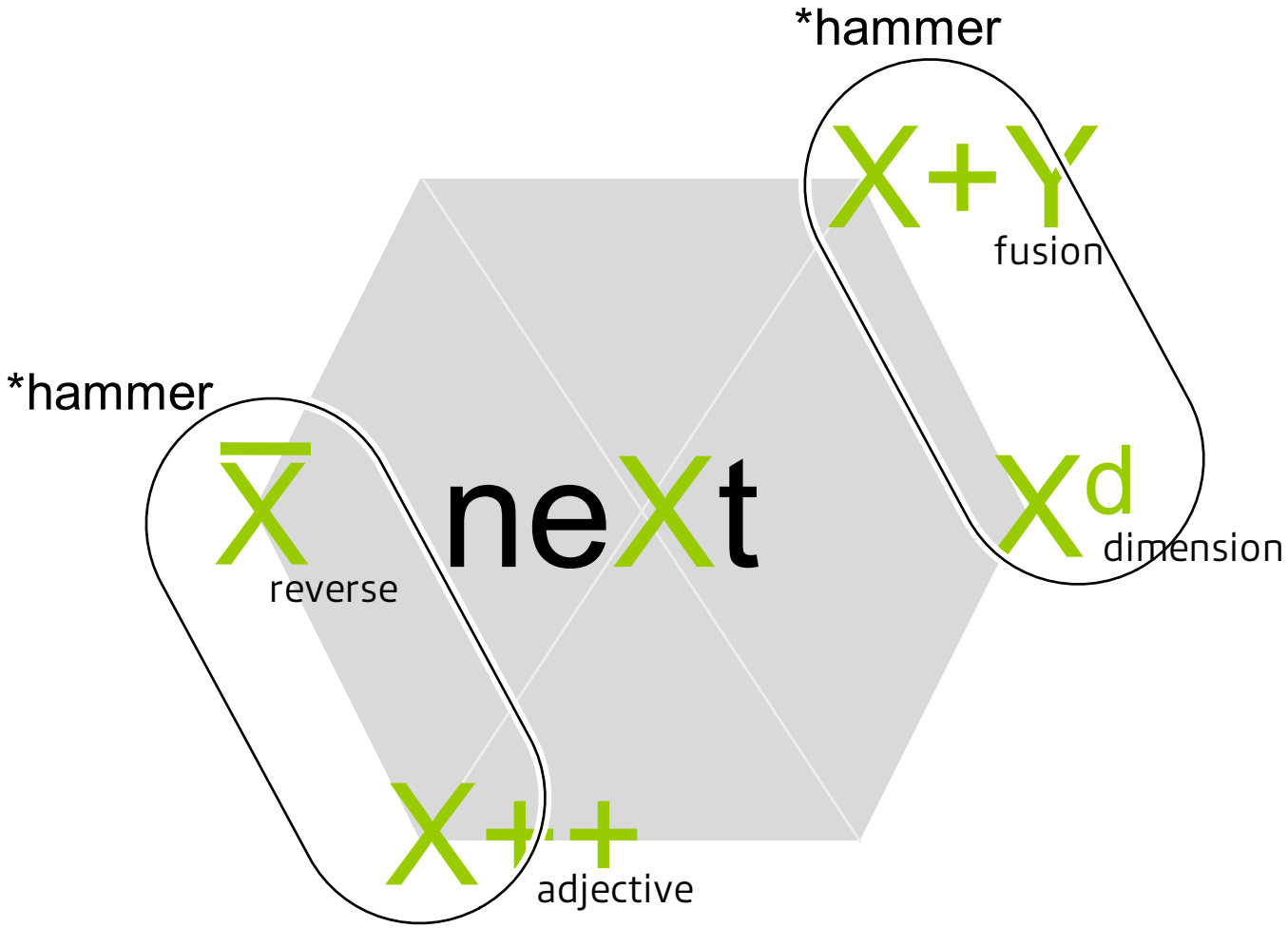
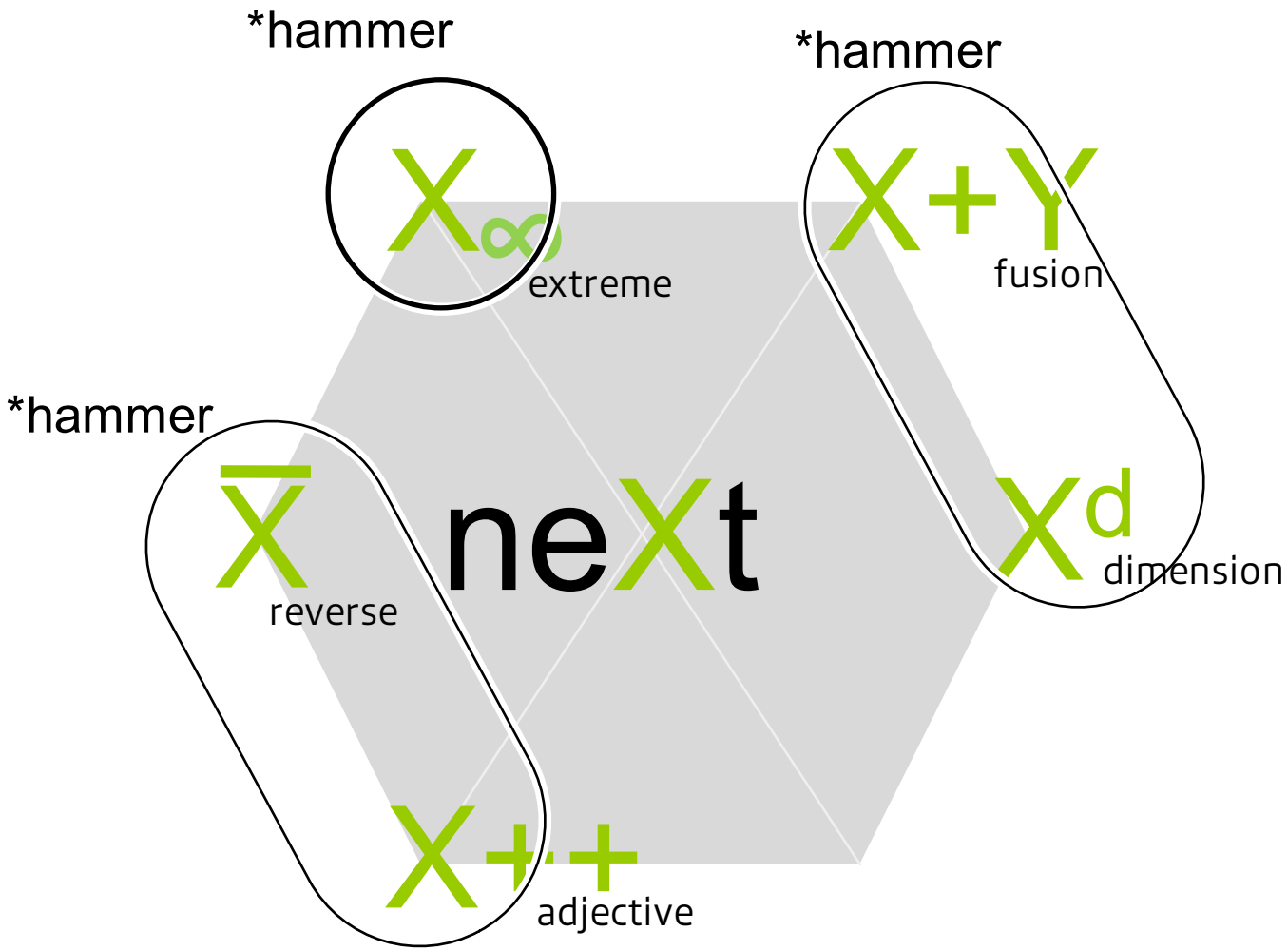
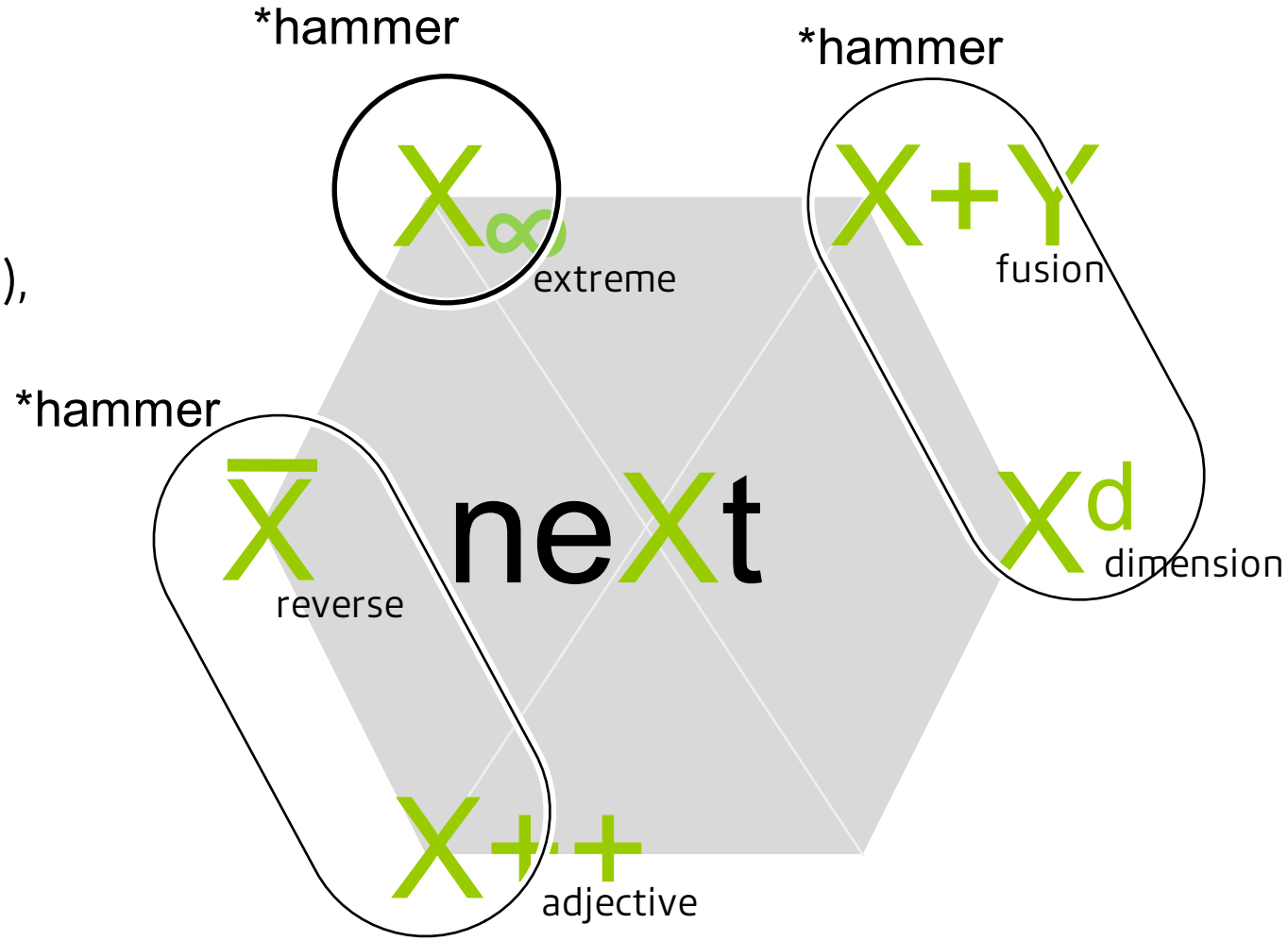

*hammer
X+Y
fusion
*hammer
X̄
reverse
neXt
Xd
dimension
X++
adjective


*hammer
X∞
extreme
*hammer
X+Y
fusion
*hammer
X̄
reverse
neXt
Xd
dimension
X++
adjective

here, **5 mental models** for finding next solutions

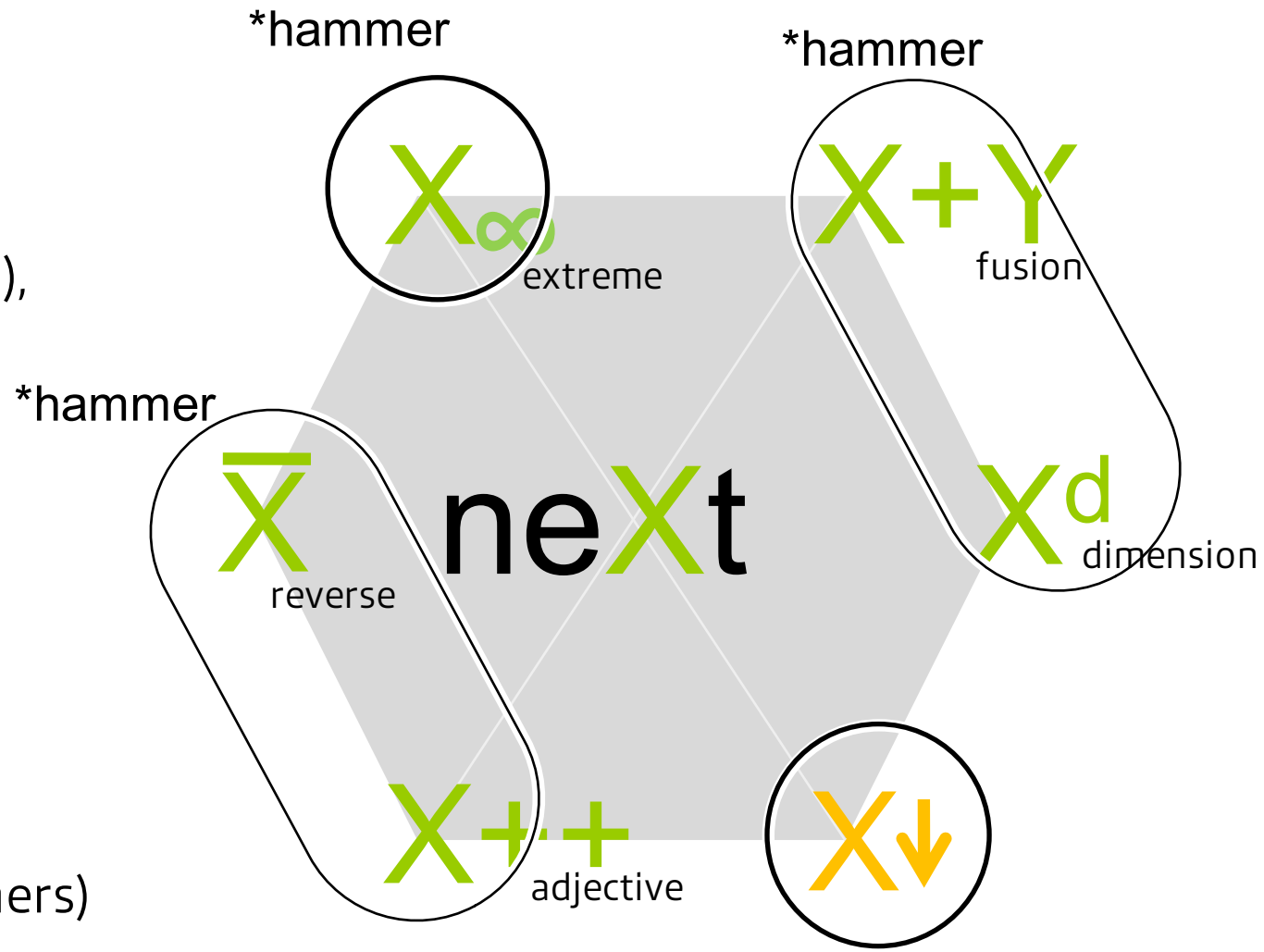
given a ***solution** (*hammer), find all the **problems** (nails)



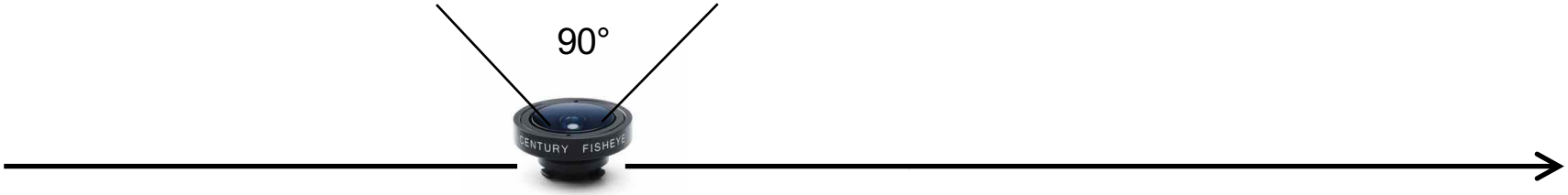
here, **5 mental models** for finding next solutions

given a ***solution** (*hammer), find all the **problems** (nails)

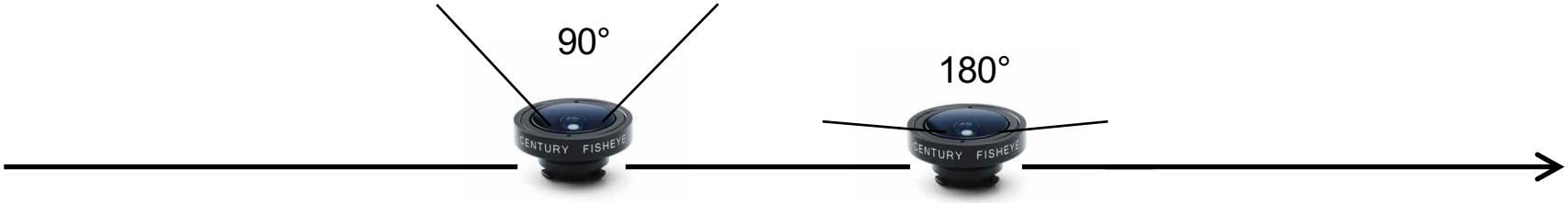
given a **problem** (nail), find all the **solutions** (hammers)

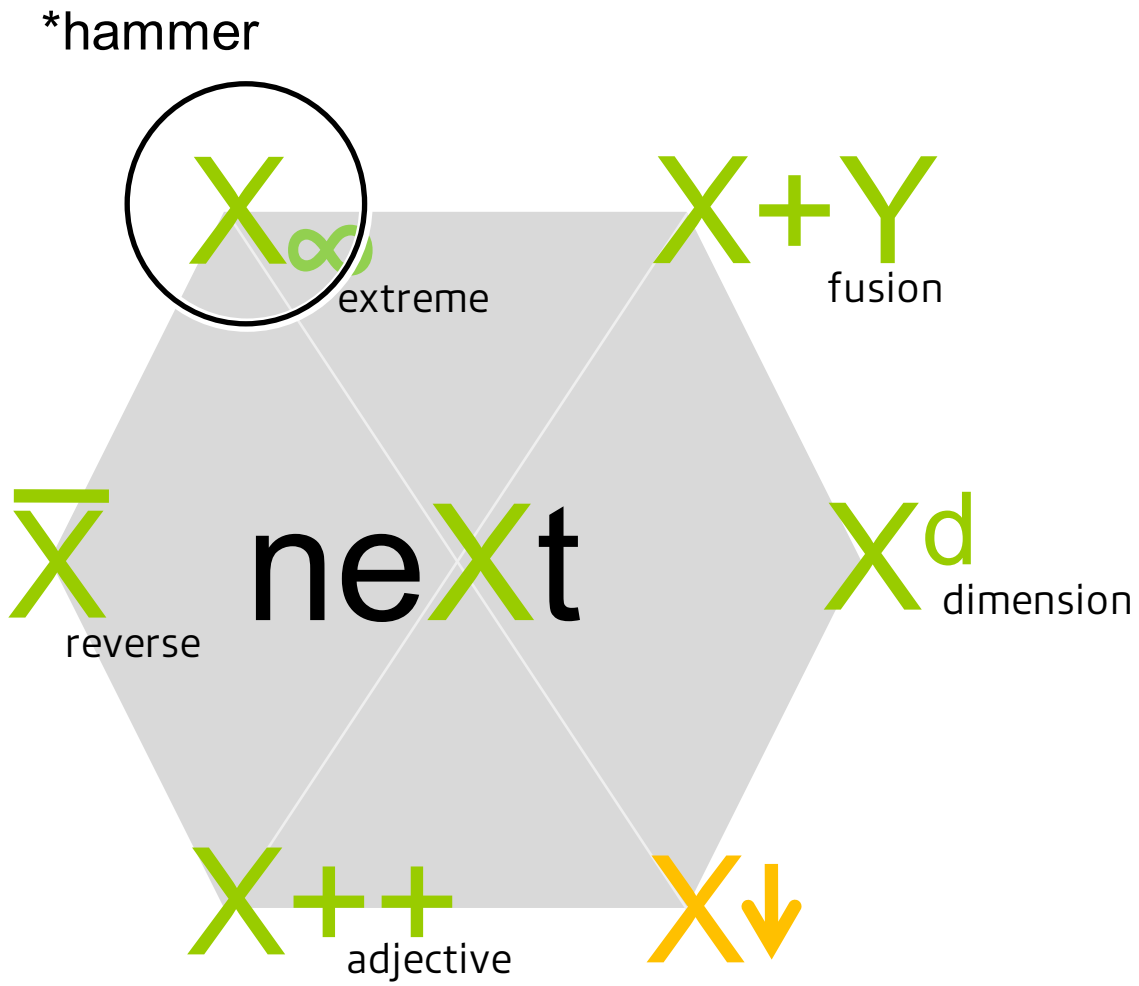


Vision-driven design
User-centered design
Solution-driven design


90°
CENTURY FISHEYE

SurroundSee




*hammer
X∞
extreme
X+Y
fusion
X̄
reverse
neXt
Xd
dimension
X++
adjective
X↓

Magic Finger

SurroundSee

Cyclops

theta s

?

-10°

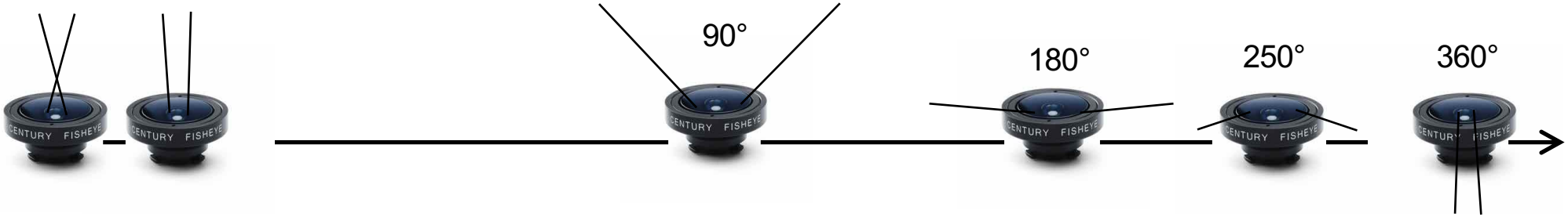
~0°

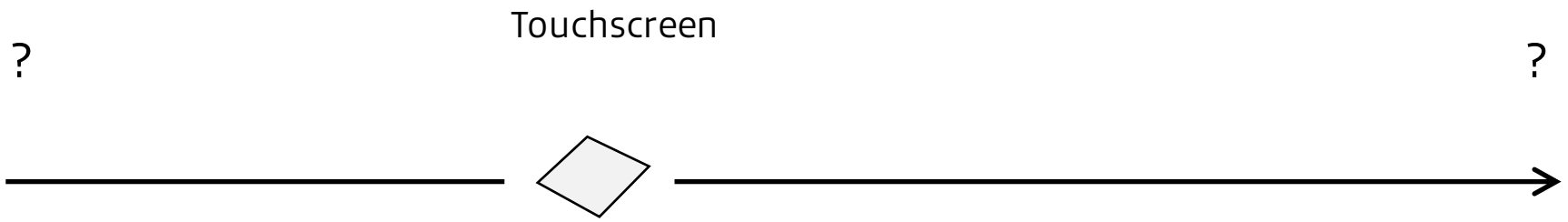
90°

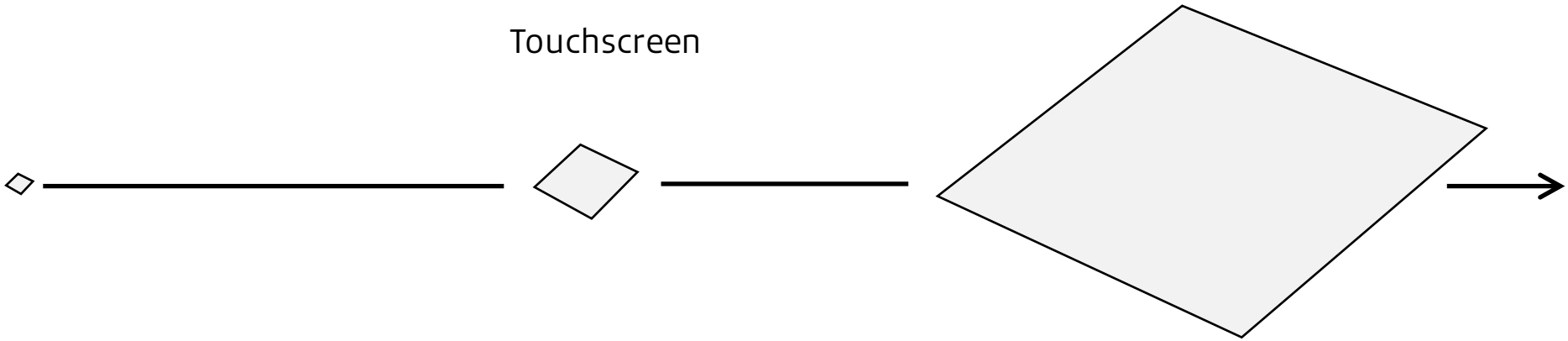
180°

250°

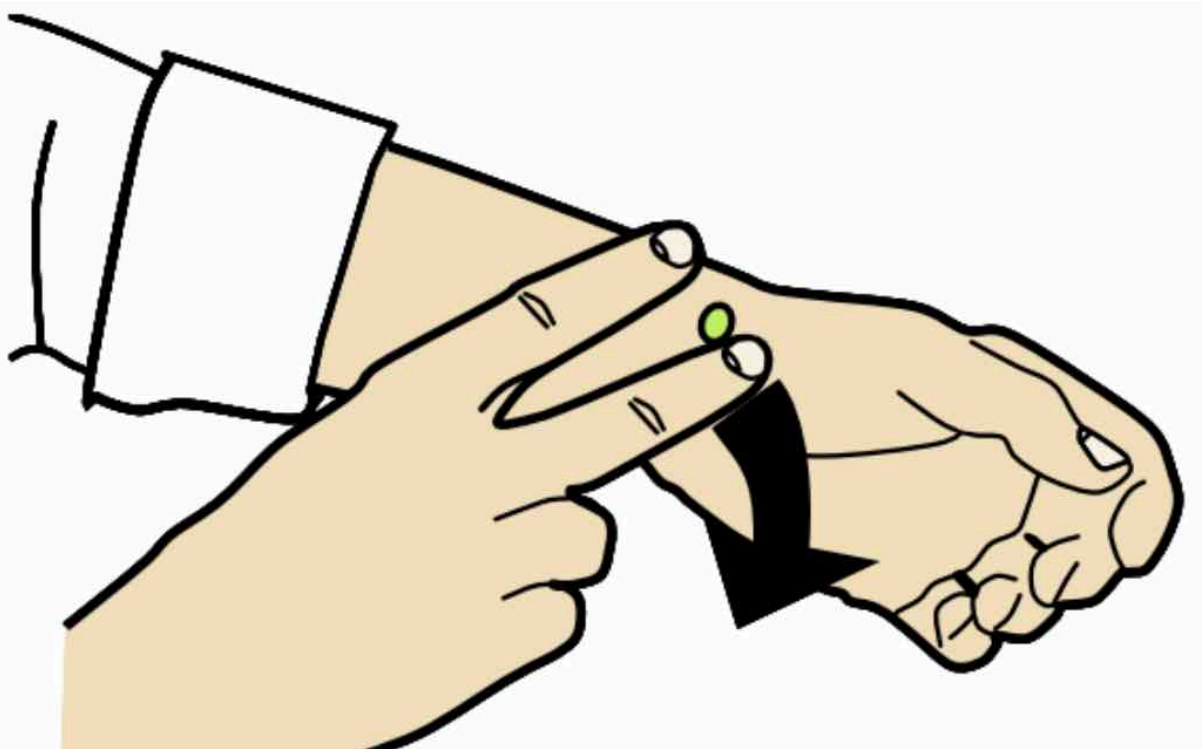
360°



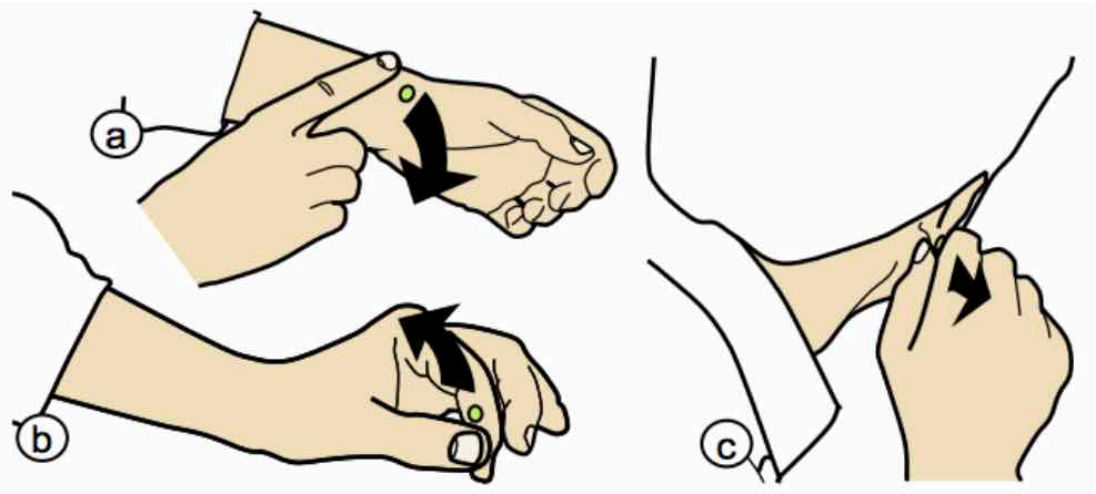

Touchscreen
?
?

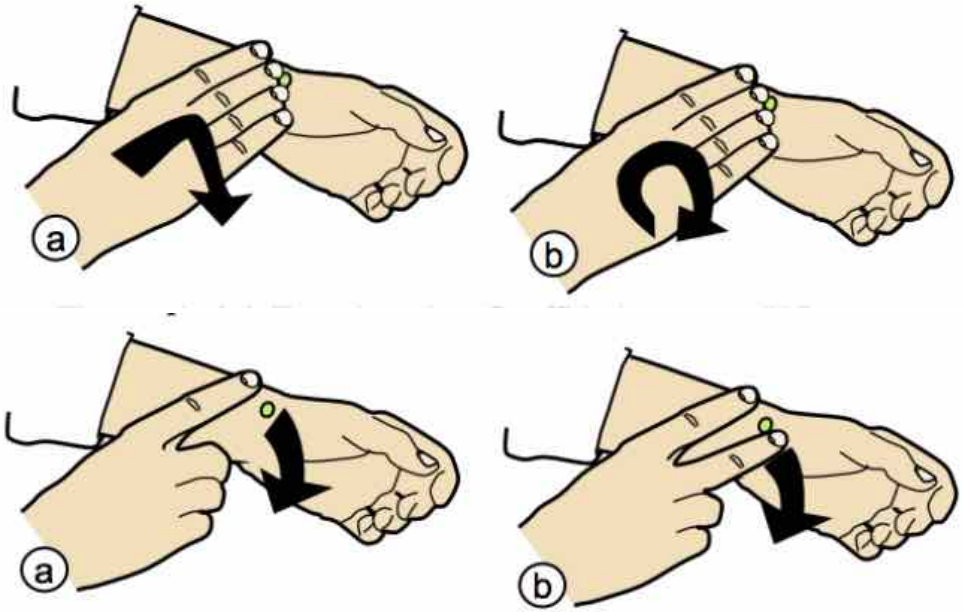

Touchscreen

Disappearing Devices,
UIST'09



Disappearing Devices, UIST'09

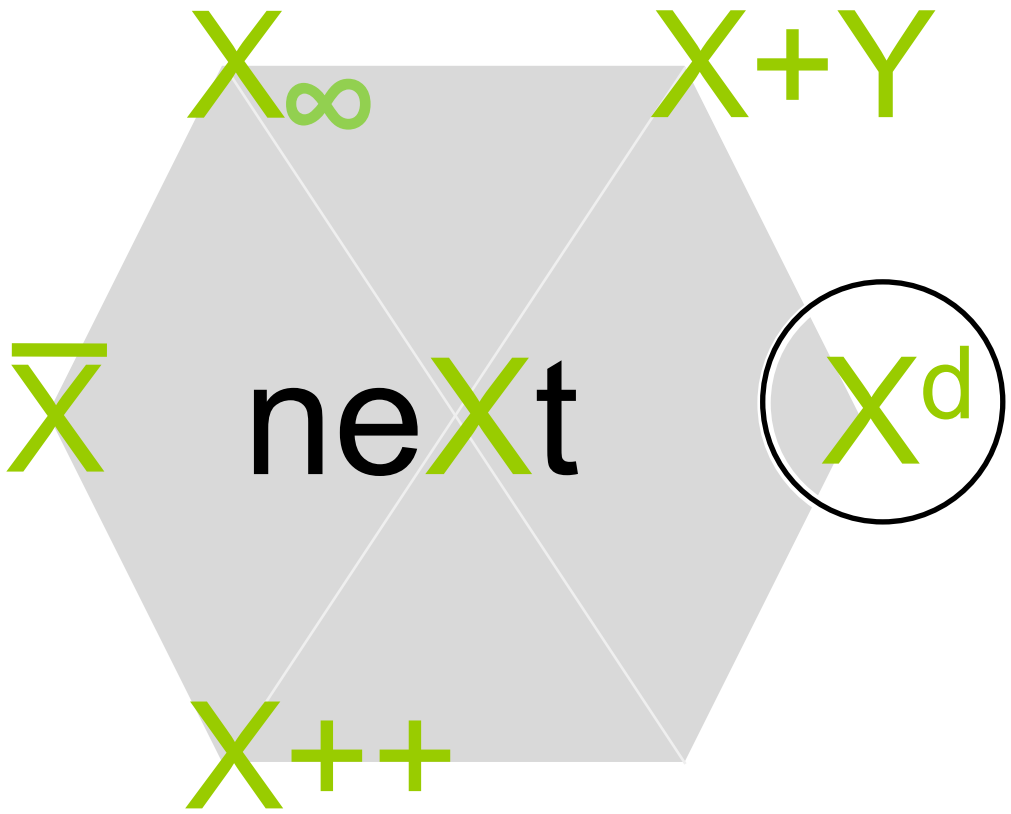




GravitySpace, CHI ‘13

generalize to another dimension

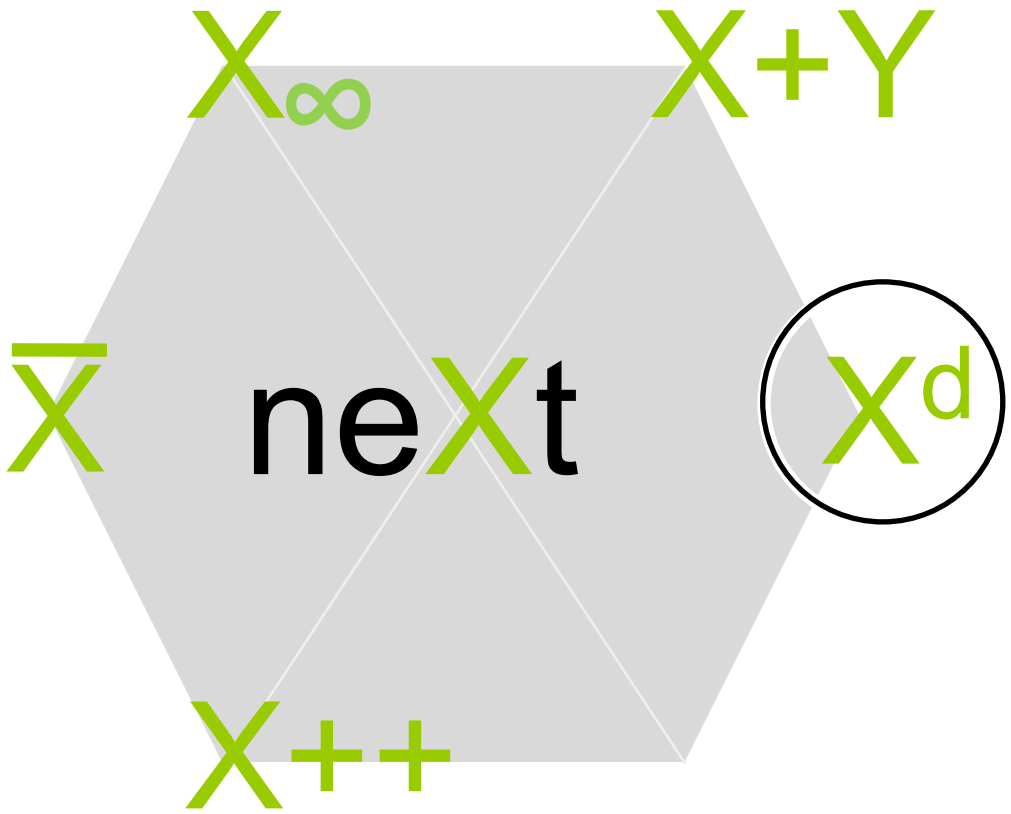
data →
text →
audio →
image →
video



generalize to another dimension

data →
text →
audio →
image →
video

Flickr → youtube



(command) cui →
(graphic) gui →
(tangible) tui →
(wearable) wui →
(gaze/brain) gaze/bui

time, spatial,
frequency,
vision / hear / haptic /
smell / taste

on-body camera

on-body display?

display on the nail

[NailDisplay, CHI]

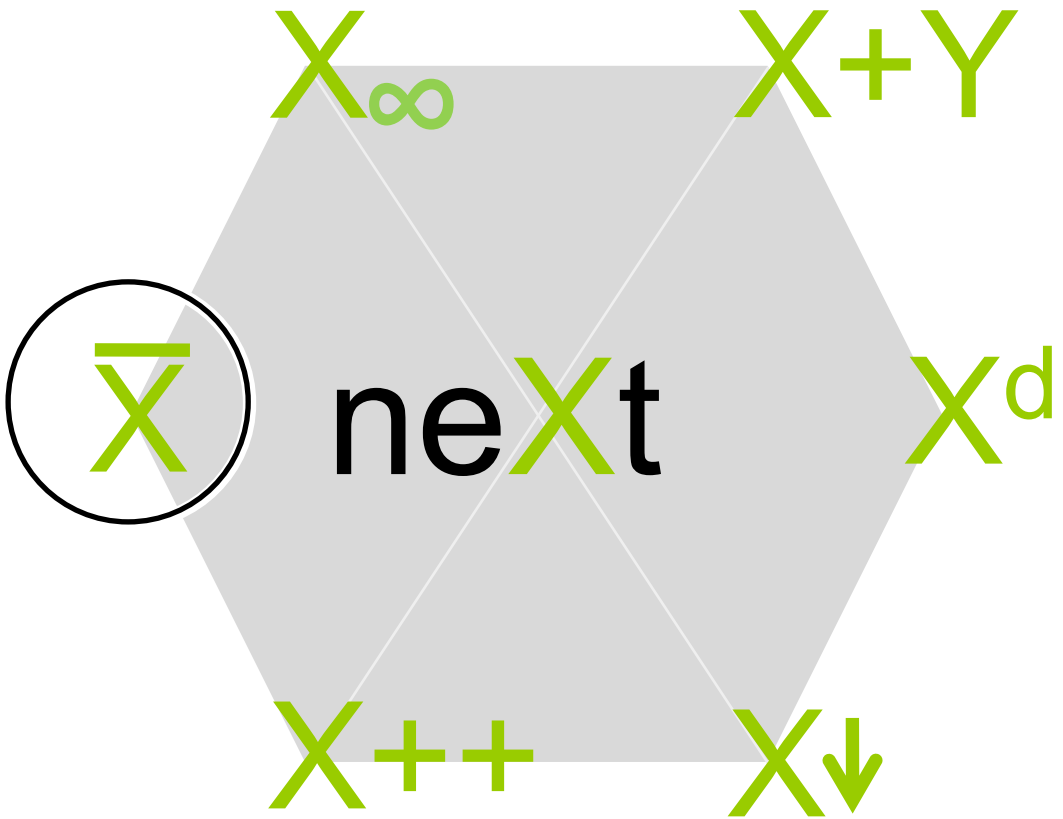
1:56

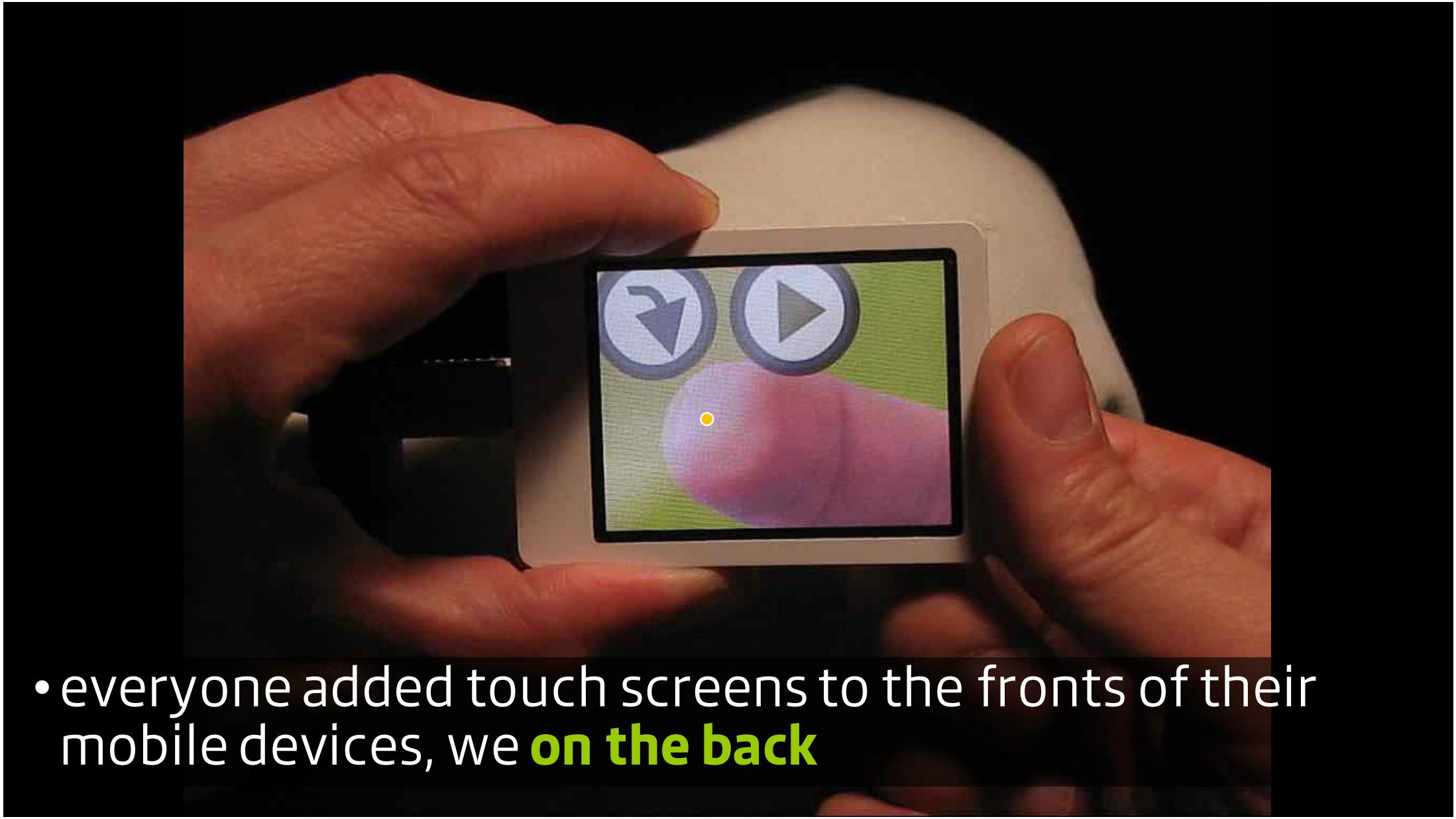
how about ...

display put on the back ?

allowing information for people (running) in behind

do exactly the opposite



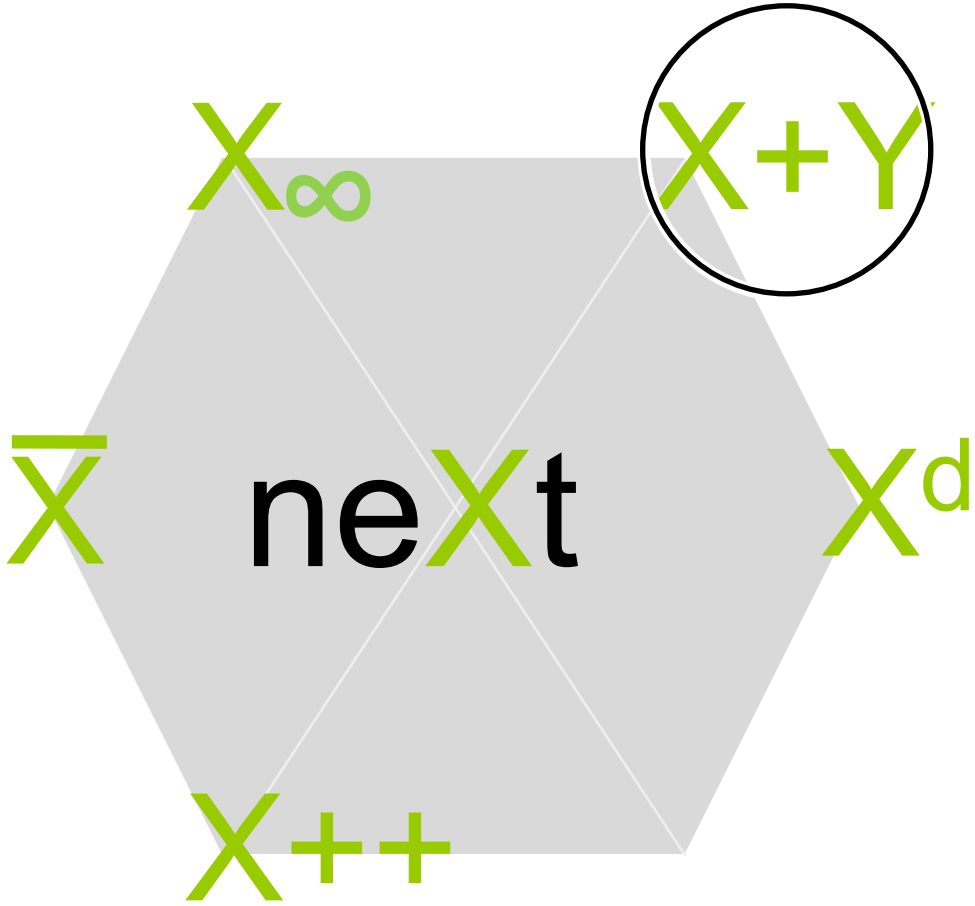


- everyone added touch screens to the fronts of their mobile devices, we **on the back**

fusion of the dissimilar

where to find Y
- your tool
- their tools

stay inspired

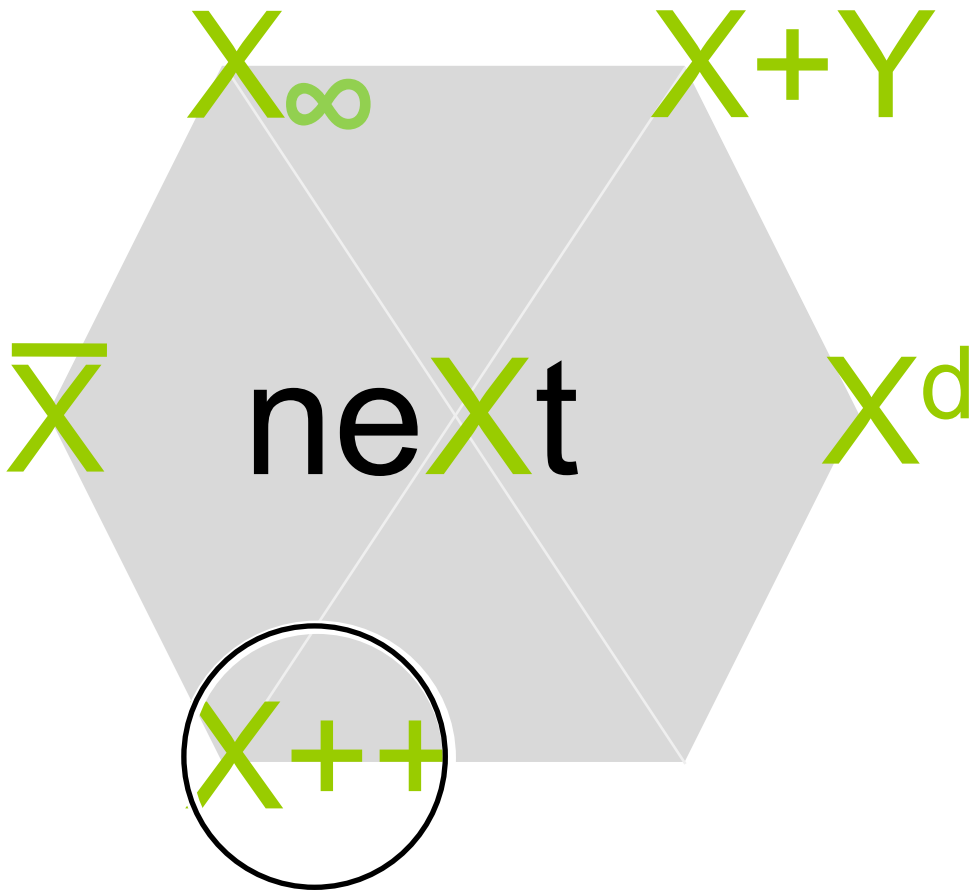


add your favorite adjective

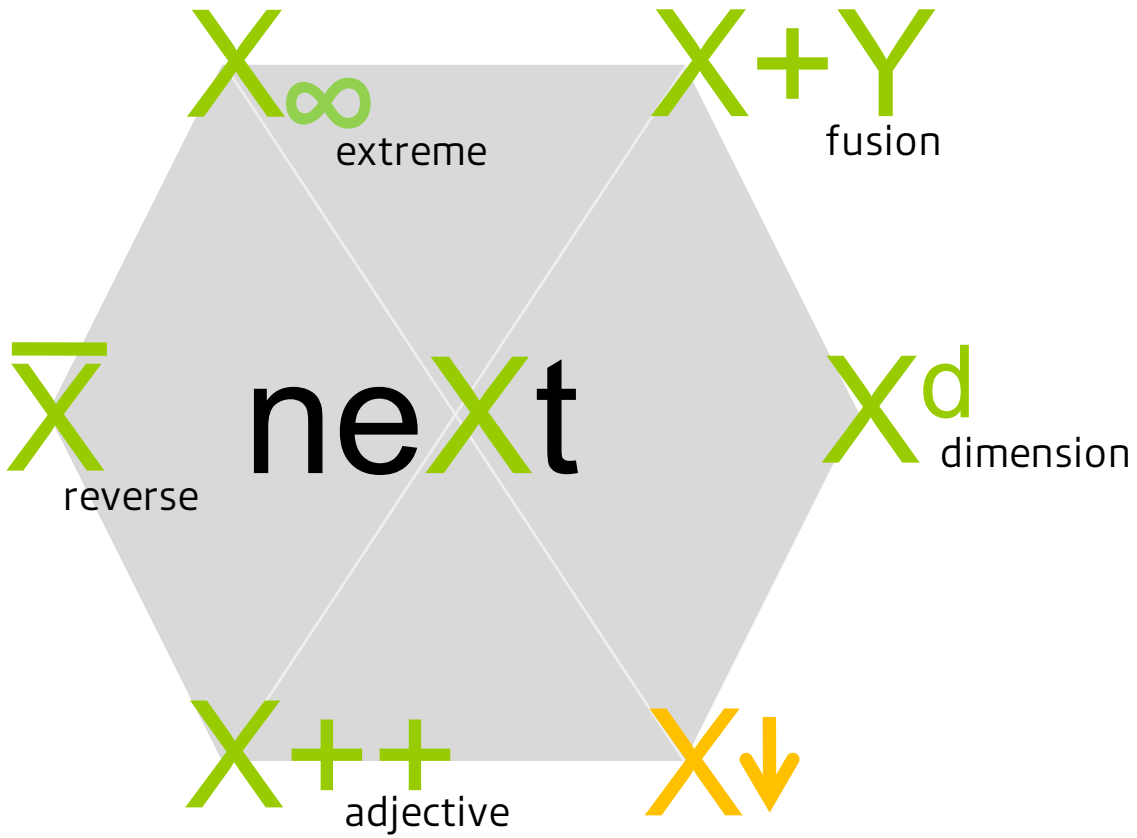
- adaptive
- distributed
- efficient
- democratized
- social
- personalized

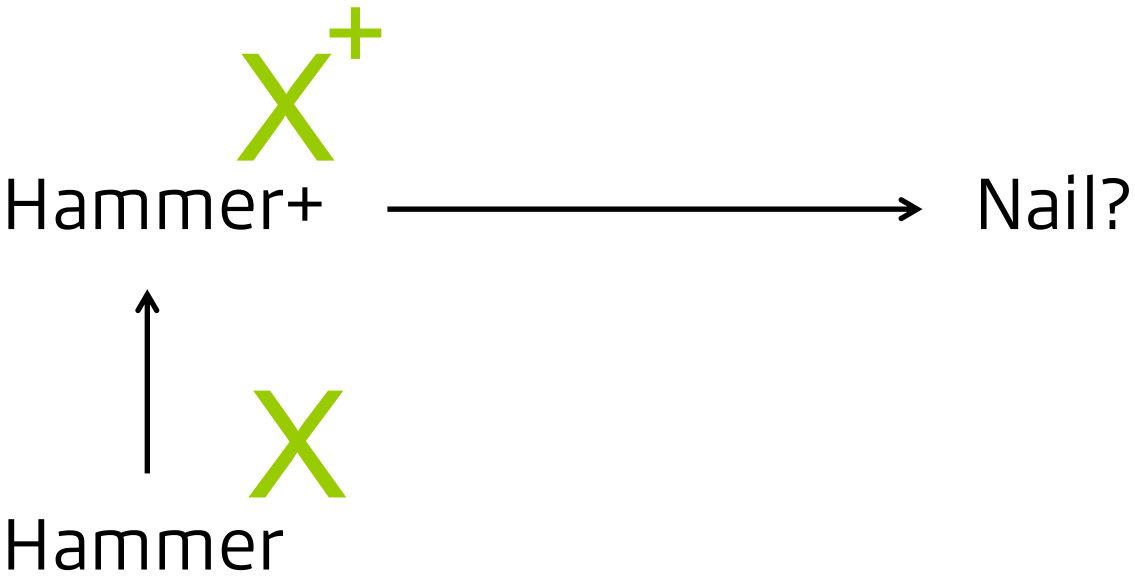
trick: unexpected adjectives

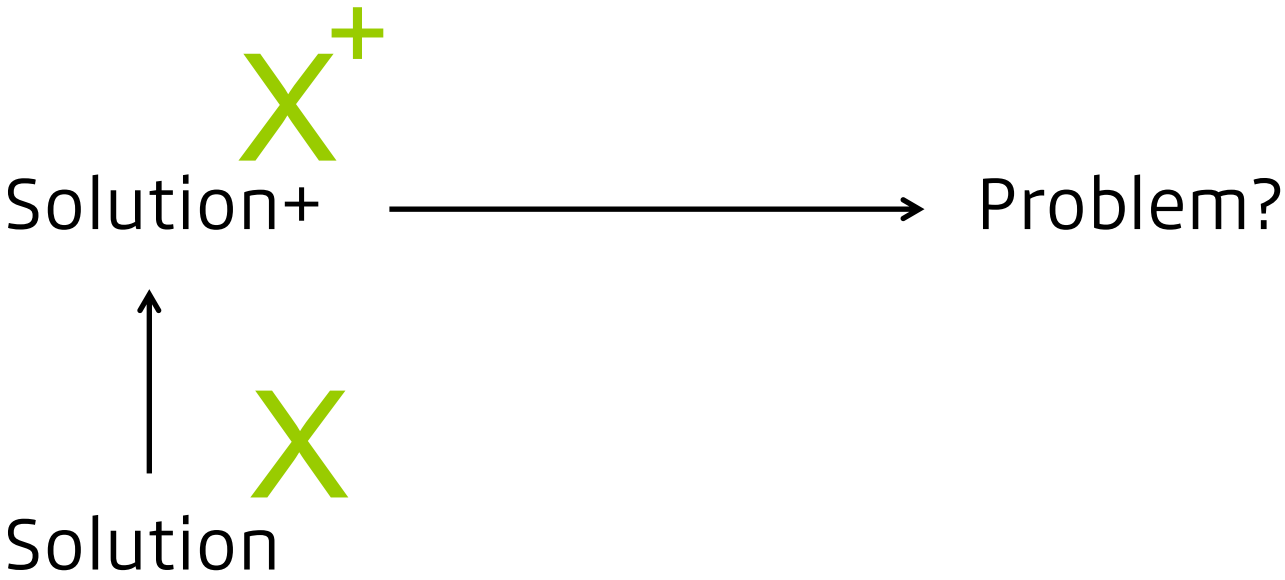
:: colliding of concepts



5 mental models for
finding next solutions




X+
Hammer+
Nail?
X
Hammer


X+
Solution+
Problem?
X
Solution