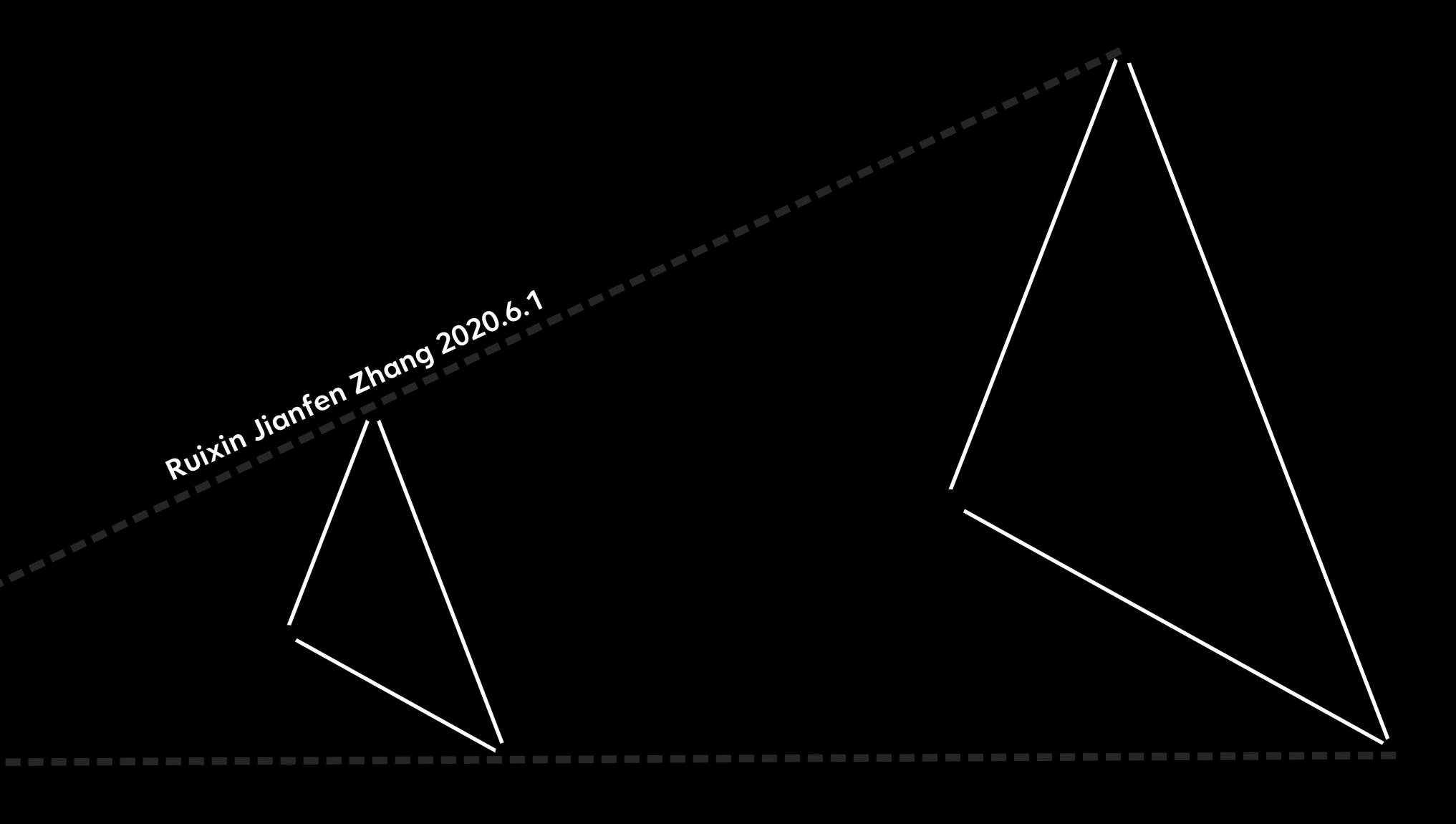
Future digital design





Ruixin J. Zhang

I am a digital product designer. I have been working in digital design for 8 years up to now. I worked in some of the big companies (Philips, Baidu, Microdoft), as well as some start-ups (Impraise, Hunch.ai, etc.). My works covers user interface design, experience design, and user research. I do design through the whole product design cycle.

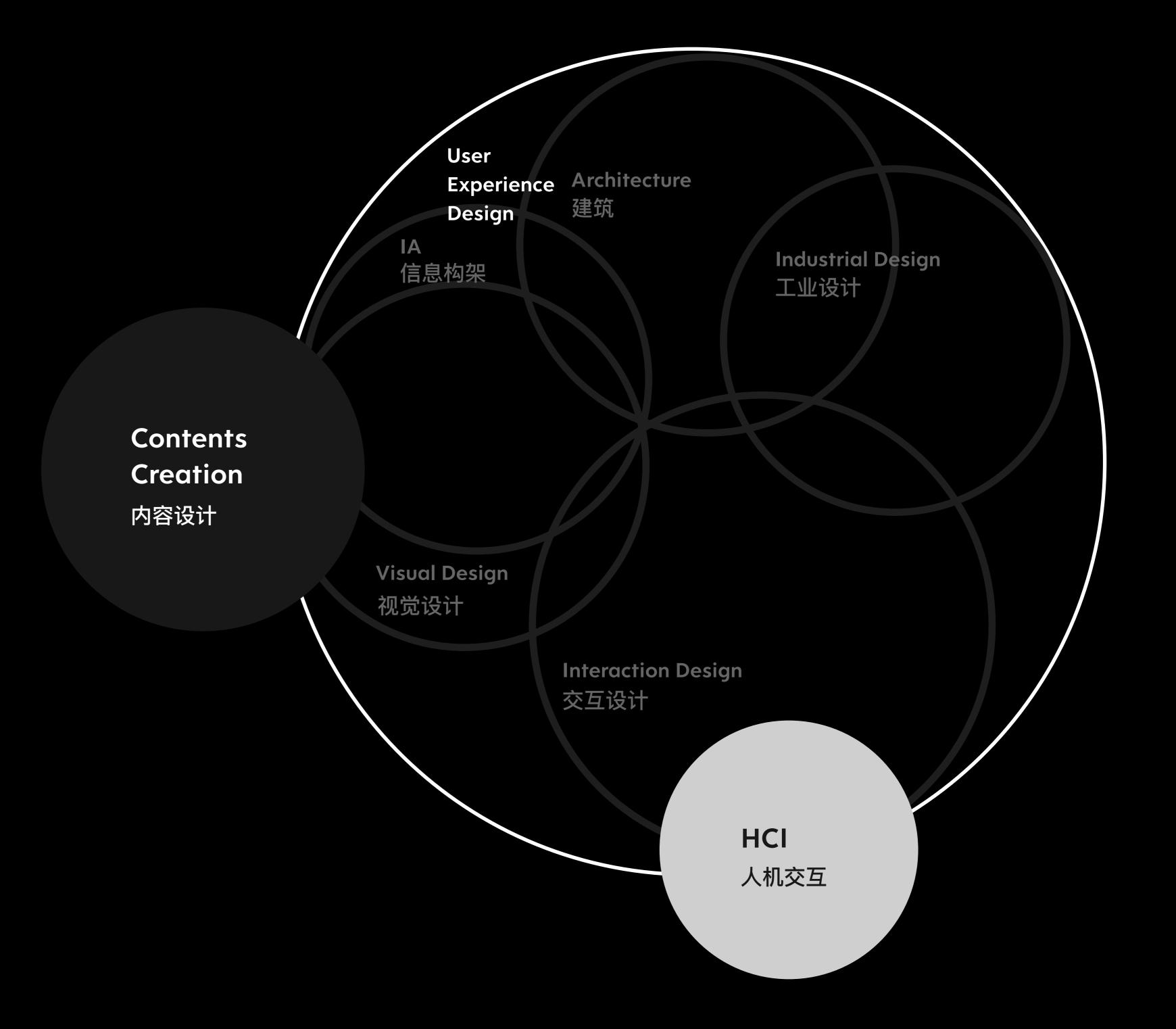




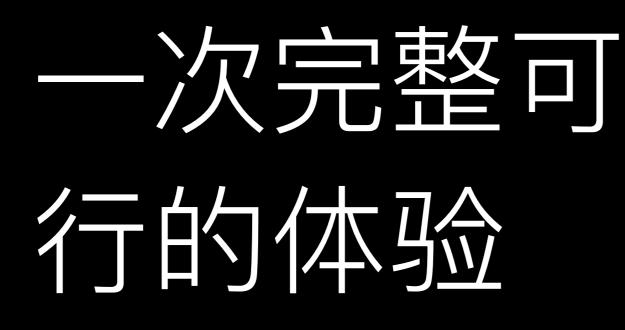
Brief History of UI Design Language System Beyond the Desktop



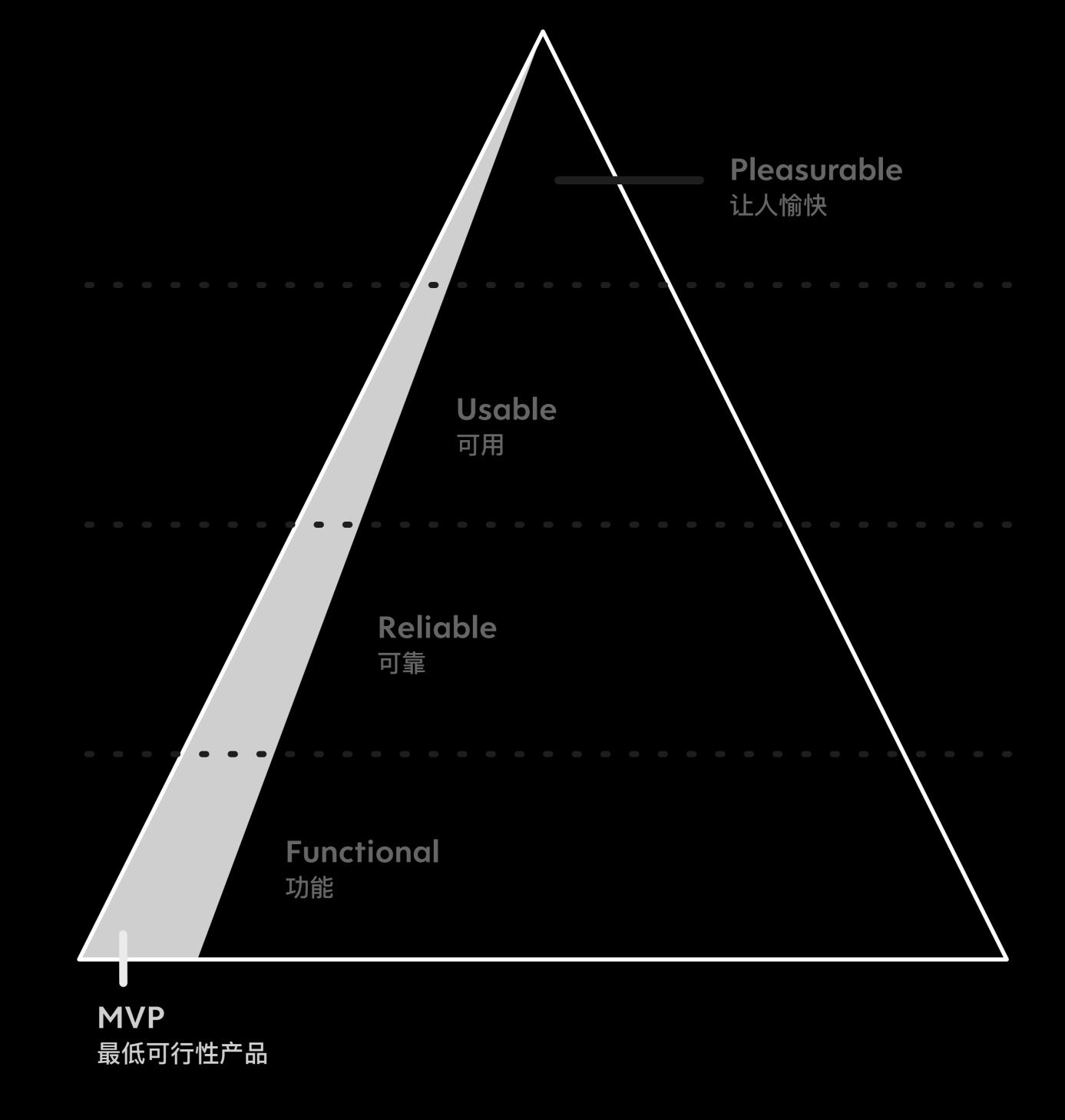
用户体验 设计







Reference: https://www.nngroup.com/articles/theory-user-delight/ #:~:text=Only%20when%20a%20product%20is,only%20if%20it%20is%20usable.





Brief History ofUl



1968 - 1970

Douglas **Engelbart's NLS**

Reference: https://en.wikipedia.org/wiki/User_interface https://en.wikipedia.org/wiki/Natural_user_interface

Macintosh Natrua U

1979 - 1984

Steve Jobs visit Xerox PARC

1990 - present

Steve Mann MS PixelSense, MS Kinect, **3D** immersive touch.



Brief History of UI

66

- Blake J. (2011)

A natural user interface is a user interface designed to use natural human behavior for interacting directly with content.

Future Digital Design Design Language System

Design Language System is a set of rules or guidelines that heightens the level of harmony in a digital ecosystem.



Design Language System

Material Google UI Foundation + Guidelines

Atlassian

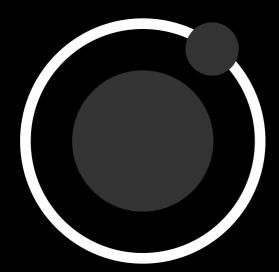
Atlassian Brand + Marketing + Product

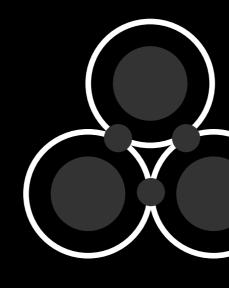
Carbon

IBM UI + Code library



Design Language System

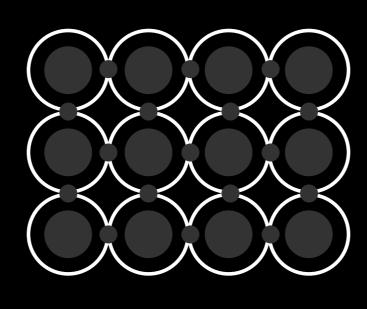


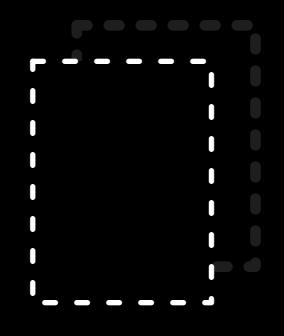


Atoms

Molecules

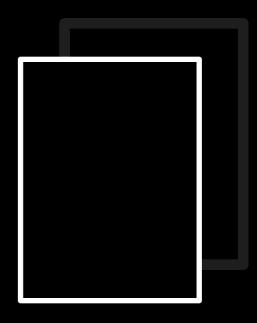
Orginal Graph: "Atomic Design" by Brad Frost - slightly adjusted here https://atomicdesign.bradfrost.com/chapter-2/





Organisms

Templates

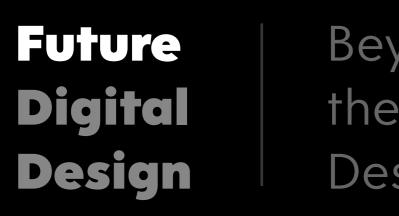


Pages



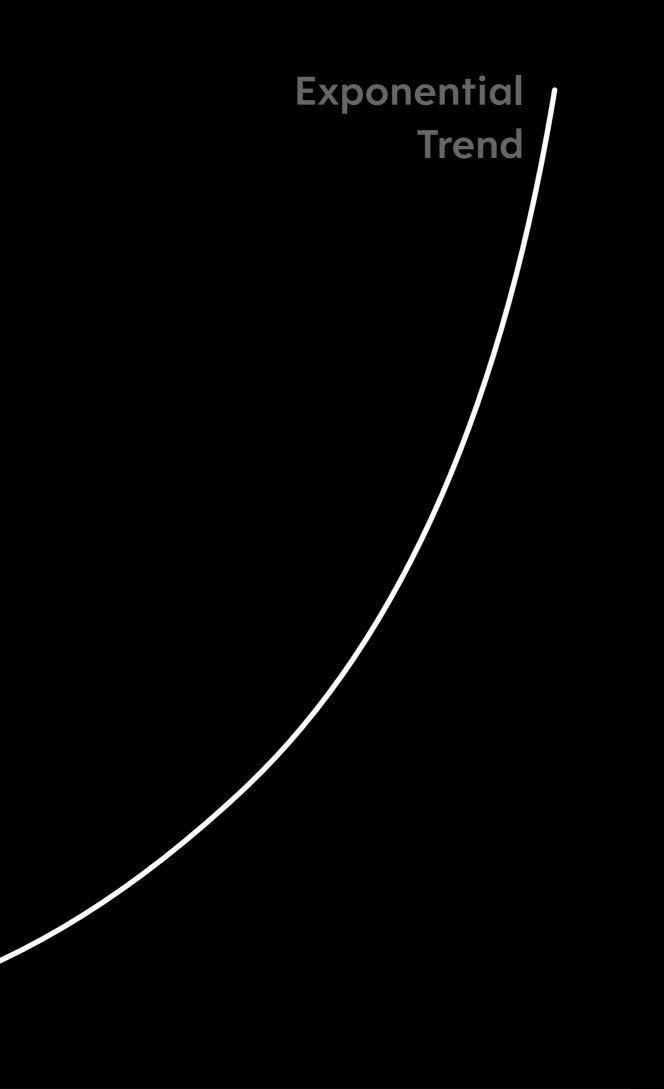
The most profound technologies are those that can disappear.

- Mark Weiser: Father of Ubiquitous Computing & Calm Technology



ΤΕϹΗΝΟΙΟGΥ CAPACITY

Graph: Exponential growth of information based technology. Ray Kurzweil - Chapter 1 from The Singularity Is Near





TIME

Technolgy fester then you think.



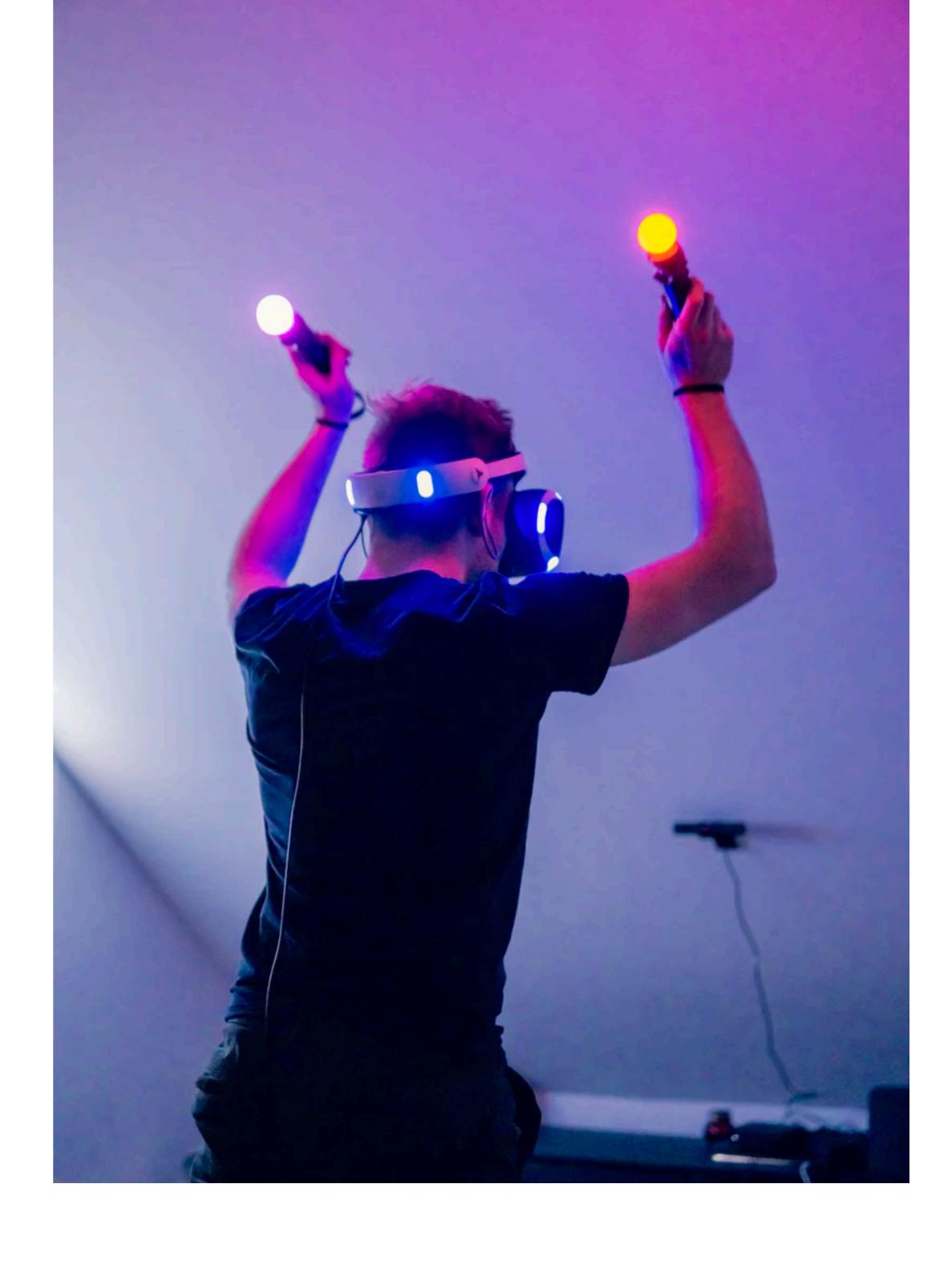
Brief History ofUl

• we live and work.

Employing and leveraging our natural, bodily interaction abilities and embeding computing within the social and physical contexts in which



Embodied Vitrual Reality Tangible Computing Affective Computing



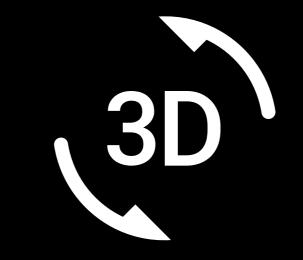


Embedded Ubiquitous Computing Augmented Reality Location Based System



Future	
Digital	
Design	

> Gesture Control

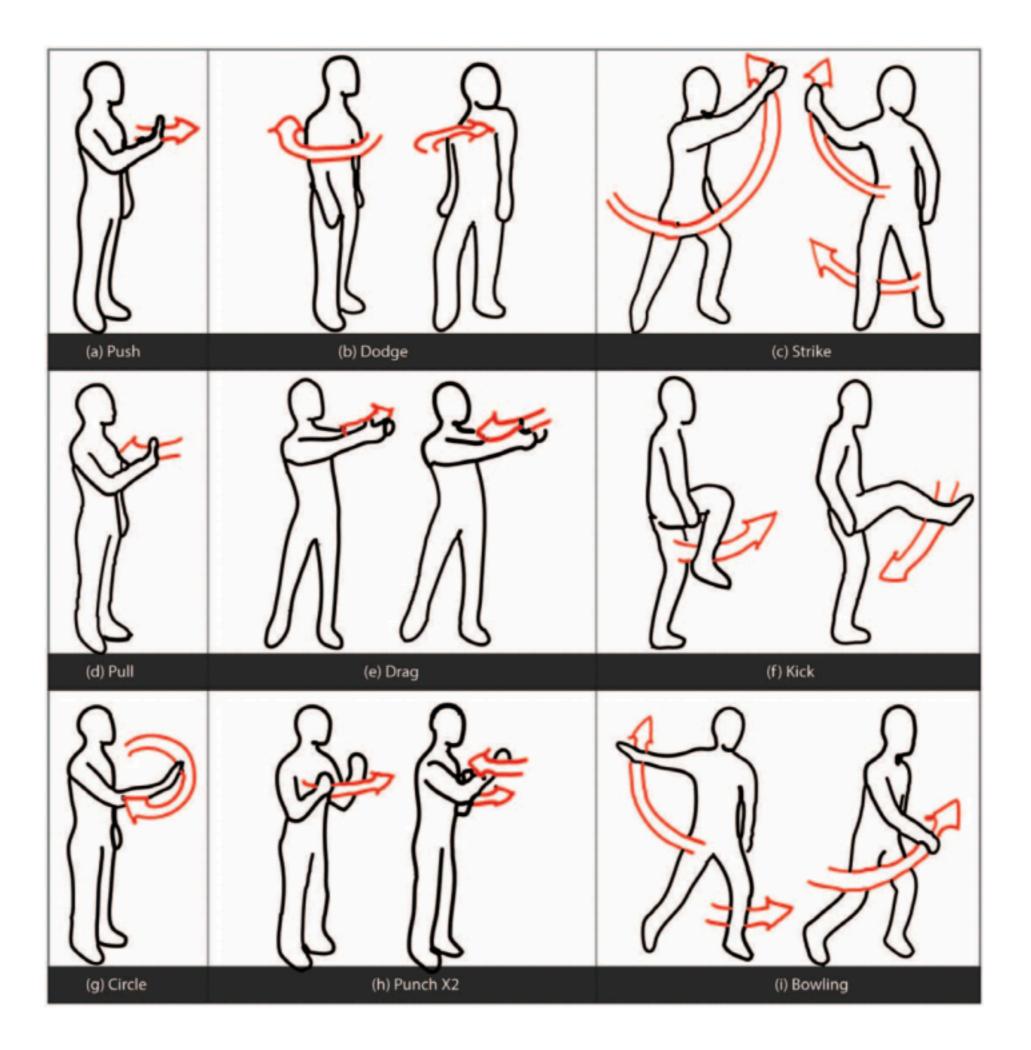


Spatial UI/UX



Gesture recognition via changing of wifi signals

Image: From the paper "Whole-home gesture recognition using wireless signals" by Q Pu, S Gupta, S Gollakota, S Patel 2013. Reference: https://dl.acm.org/doi/abs/10.1145/2500423.2500436



non-line-of-sight, and through-the-wall scenarios with an average accuracy of 94%.

FIGURE 1. Gesture sketches: WiSee can detect and classify these nine gestures in line-of-sight,



Hologram and AR enable us to go into the new Spatial UI world with new "reality".

Photo by the Dan Smalley Lab at Brigham Young University in January 2018 Hologram/projection: https://phys.org/news/2018-01-holograms-d-thin-air.html Smart glasses: Rokid, Magic Leap, Hololens 2/3, etc.





What is reality

MODEL

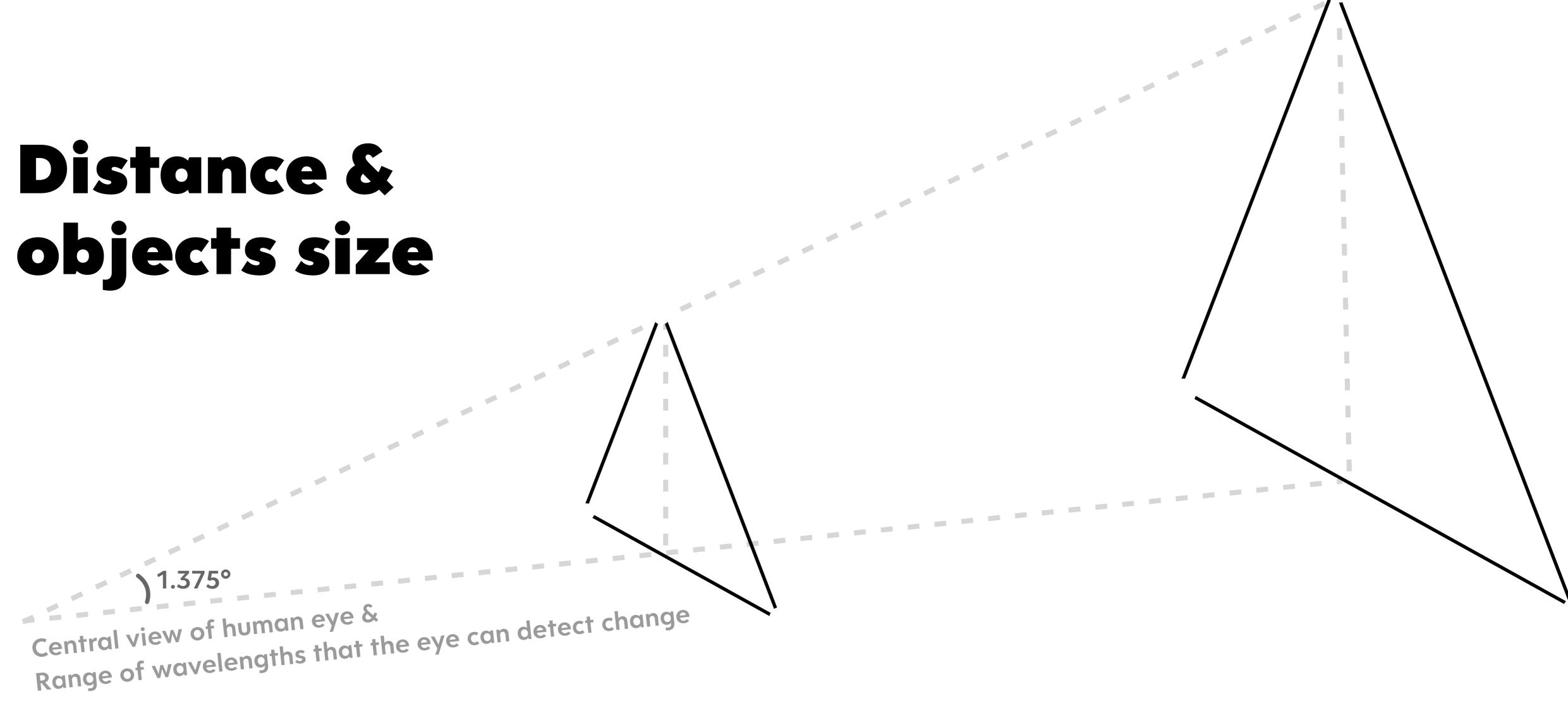




TEXTURE

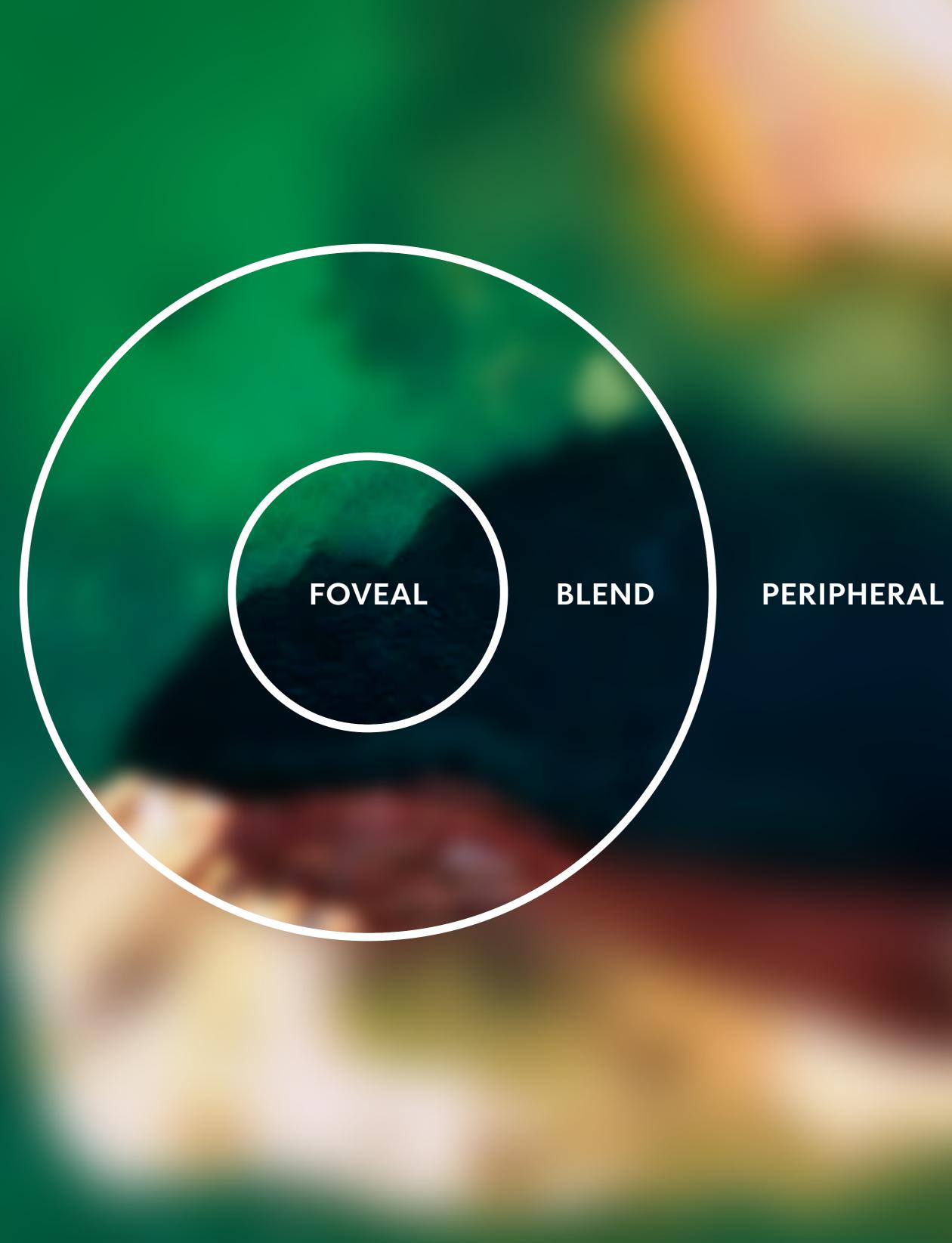


Distance &





Focus and out of focus





NEW DESIGN QUESTION

However, how to manipulate this new world?



Get Prepared as Designers

Sketch After Effects Cinema 4D Unity



Thanks! Questions?

Contact me if you have more questions or interested in some of my projects and work.

ruixinz@hotmail.com jenz_weixin

