



Design School in Okinawa 2017 Facilitation Course
デザインスクール in 沖縄2017 ファシリテーション講習
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ファシリテーション講習: デザインとは? Facilitation Course: What is Design?

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A Formal Definition of “Design”

To create a specification of an object, manifested by an agent, intended to accomplish **goals**, in a particular **environment**, using a set of **primitive components**, satisfying a set of **requirements**, subject to **constraints**.

与えられた**環境**で**目的**を達成するために、様々な**制約**下で利用可能な**要素**を組み合わせ、**要求**を満足する人工物を生み出すこと。

Paul Ralph and Yair Wand: A Proposal for a Formal Definition of the Design Concept, 2009

- 広義のデザインは意匠だけに限らない。
In the broad sense, “design” does not only mean “product design.”
- 「解くべき問題は何か」を発見・定義し、適切な解決策を創出すること。
To discover and define the problem(s) to be solved, and to create proper solution(s).

A workshop is a method for learning, creation, problem solving, and training. Typically, in an environment where **the participants can actively work and talk**, a facilitator manages the place so that **all the participants are involved** in the activity.

ワークショップは、学びや創造、問題解決やトレーニングの手法である。**参加者が自発的に作業や発言をおこなえる環境が整った場において、ファシリテーターと呼ばれる司会進行役を中心に、参加者全員が体験するものとして運営される形態**がポピュラーとなっている。

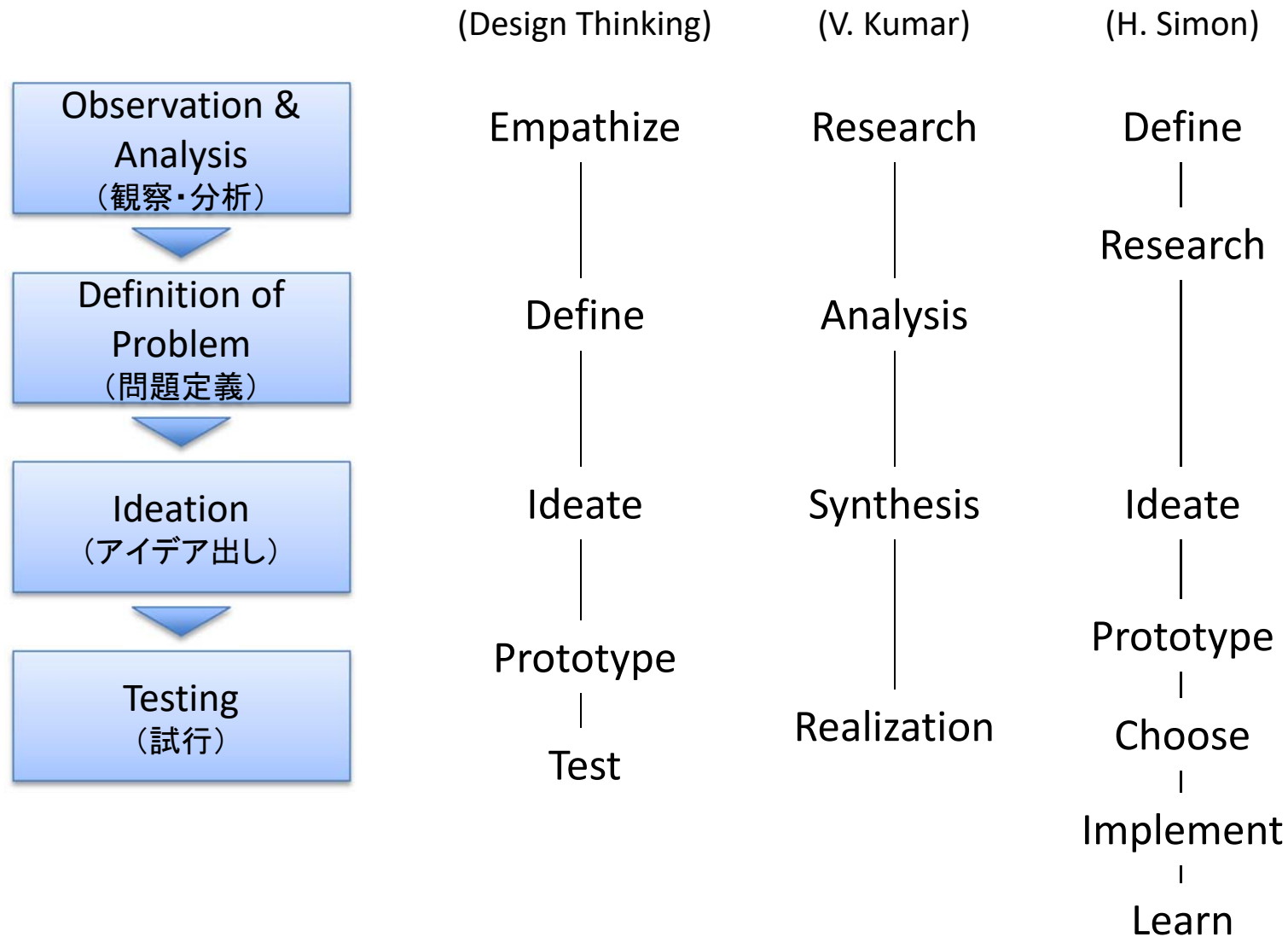
(Wikipedia)

- Three types of workshops
 - Problem solving: meetings, product development, solving issues in work and life, ...
問題解決型: 会議、商品開発、仕事・生活上の問題解決、...
 - Consensus building: making a vision of an organization, machizukuri (まちづくり; ≈ community development), ...
合意形成型: 組織のビジョン策定、まちづくり、...
 - Learning: career development, training, school education, ...
教育学習型: キャリア開発、研修、学校教育、...

(「ワークショップ・デザイン」、堀公俊・加藤彰 著)

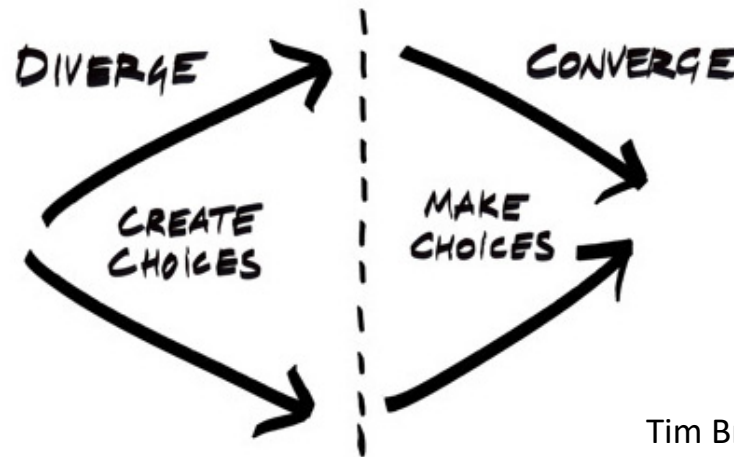
- A workshop for design (activity)
 - Problem finding: identifying true problems to be solved
 - Problem solving: creating ideas for achieving goals
 - Doing these activities in a workshop style.

Typical Design Process



Aspects of Design Activities

- Divergence (発散) & Convergence (収束)
 - Create many ideas first, then choose the good ones.

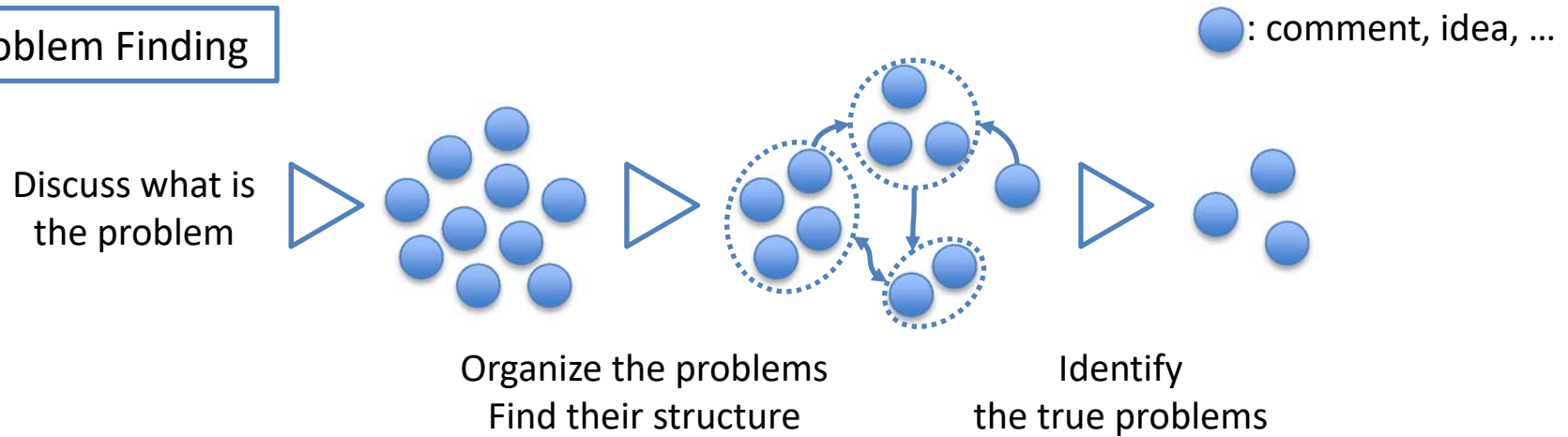


Tim Brown, "Change By Design", 2009

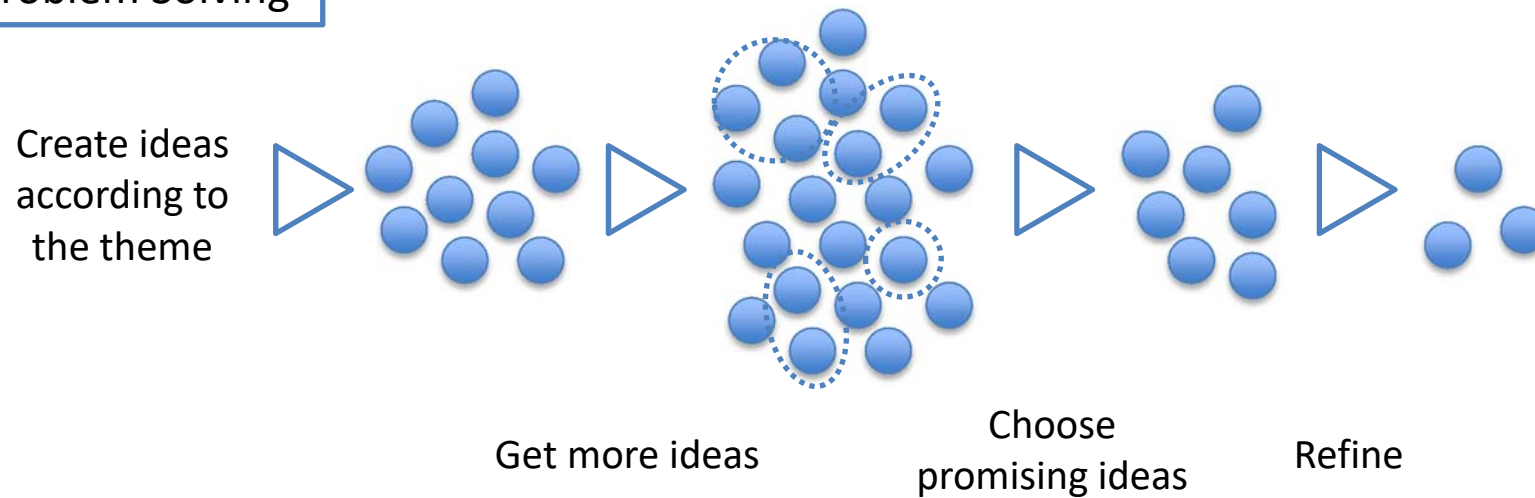
- Analysis (分析) & Synthesis (総合)
 - Analysis: understanding the design object by breaking them down.
 - Synthesis: finding a valuable combination of the elements you have found so far.

Examples

Problem Finding



Problem Solving

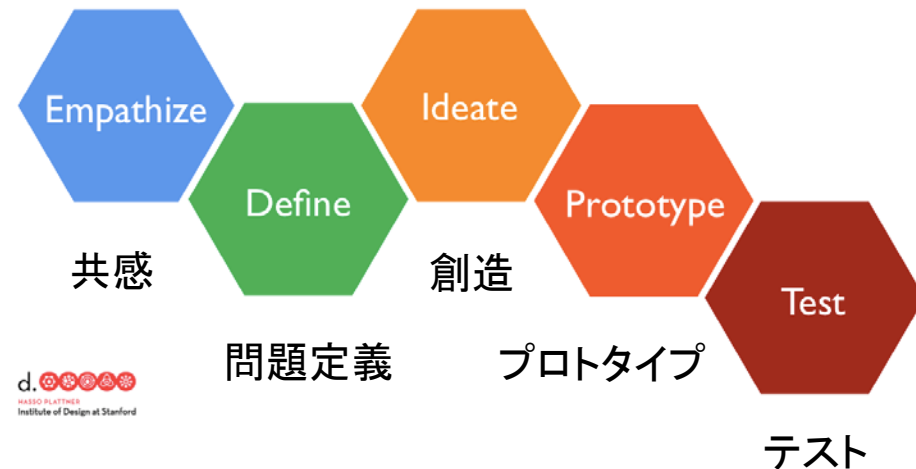


Example: Design Thinking



- Feature
 - Solution-based (-focused) thinking

- Key concepts
 - Human-centered
 - Inspiration-driven
 - Rapid prototyping
 - Iterative process

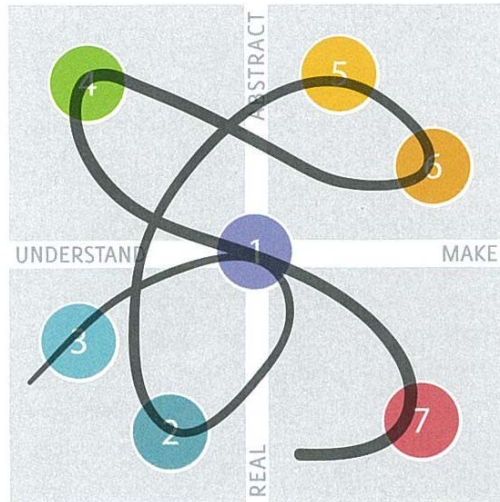


d.School @ Stanford University / IDEO

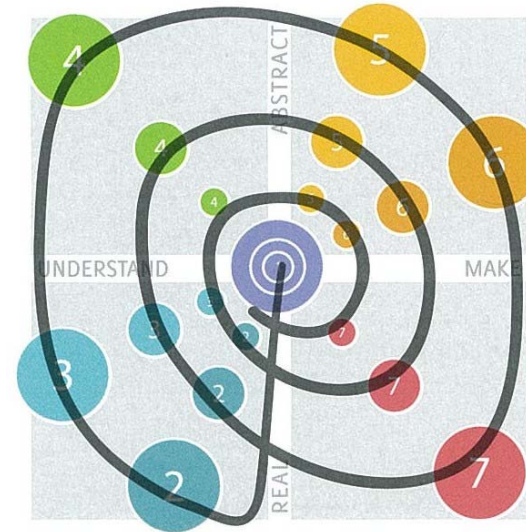
⇔ Typical engineer's way of thinking: technology-driven, logical, analytical, ...

The reality is ...

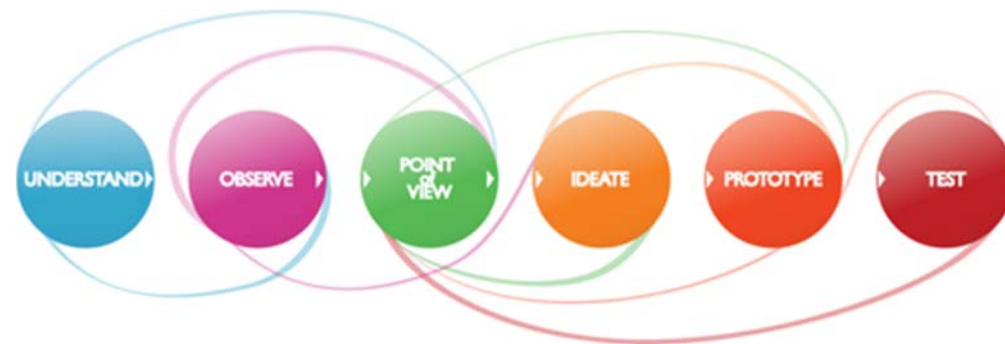
Nonlinear



Iterative

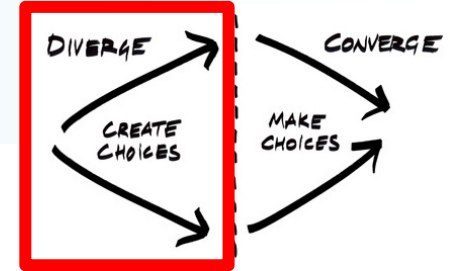


(Vijay Kumar: 101 Design Methods)



<https://dschool.stanford.edu/>

Brainstorming [Divergence]



- Create as many ideas as possible
 - Typically used in “ideation” phase, with around three to six people.
- Procedure
 1. Write down your ideas on sticky notes.
 - Use one sticky note for one idea.
 2. Share it with team members.
- Important rules
 - Focus on quantity, rather than quality. (質より量)
 - Withhold criticism. (批判しない)
 - Welcome unusual ideas. (ばかげたアイデア歓迎)
 - Combine and improve ideas. (他人のアイデアに乗っかる)

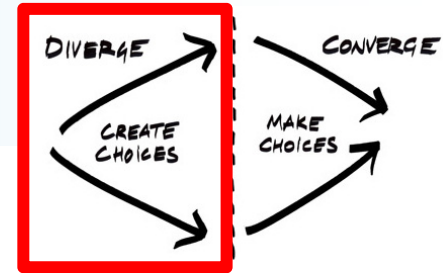
Workshop 1: Brainstorming

Goal: Create new souvenirs of Kyoto Univ.

1. Form teams of 3-4 people.
2. Write down as many ideas as possible. (3 min)
 - Individual work
 - Use one sticky note for one idea
 - At least 20 ideas
3. Share your ideas with team members. (10 min)
 - If you come up with a new idea while you are listening to other member's ideas, add it to them.

Further Ideation (1) [Divergence]

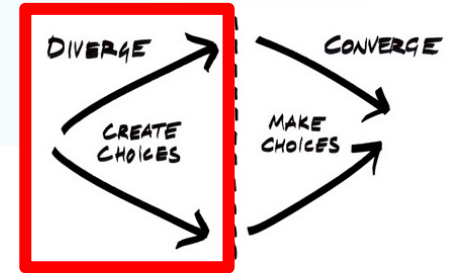
(a.k.a. forced ideation)



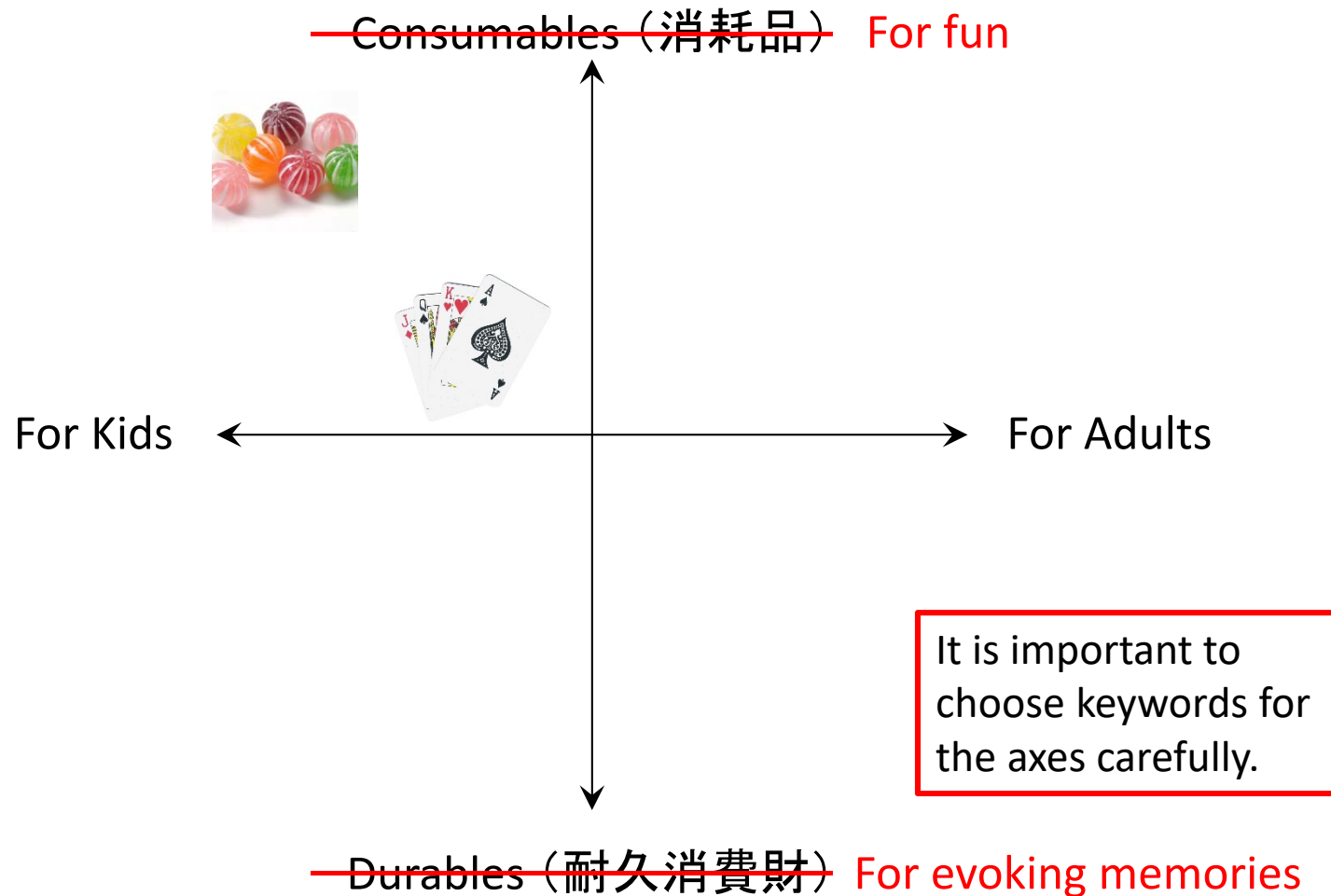
- Add some constraints during a brainstorming
 - A technique for getting further ideas.
- Example
 - Cost: “What if it had to cost more than a million dollars to implement?” “What about under 25 cents?”
 - Size: “What if it was physically larger than this room?” “Smaller than a deck of cards?”
 - Time: “Took more than four hours to complete the experience?” “Less than 30 seconds?”
 - (Constraints related to when, where, who, what, ...)

(Cf. d.school bootcamp bootleg p.18 “Powers of Ten”)
- Tips
 - Brainstorming can also be used for acquiring keywords for reframing. (→ further ideation (2))

Further Ideation (2) [Divergence]



- Reframing using a “2x2 matrix”

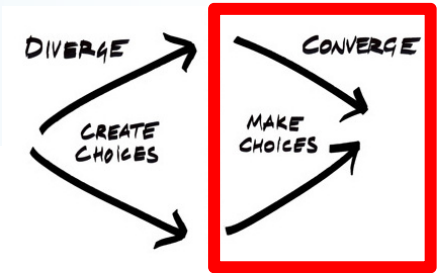


Workshop 2: Further Ideation

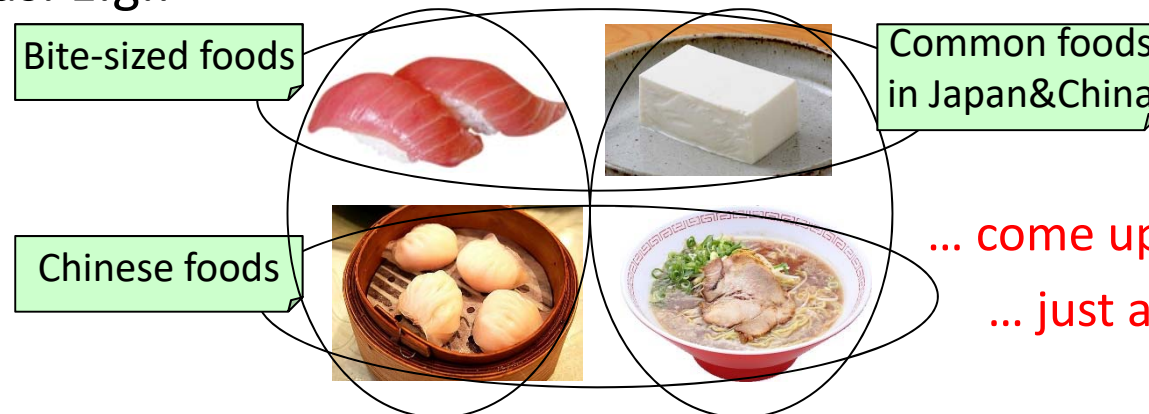
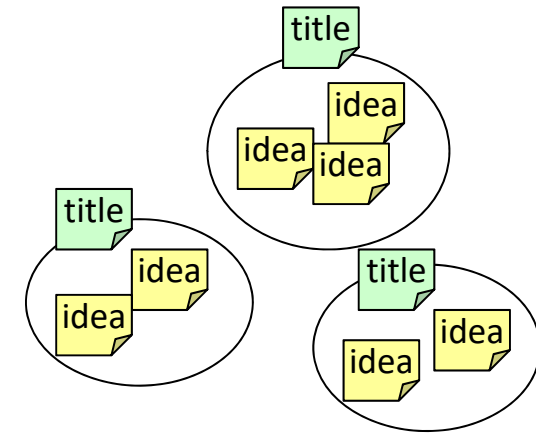
Goal: Create new souvenirs of Kyoto Univ. (same)

1. Get further ideas by adding constraints on the ideas you already have. (5 min)

Affinity Diagram [Convergence]

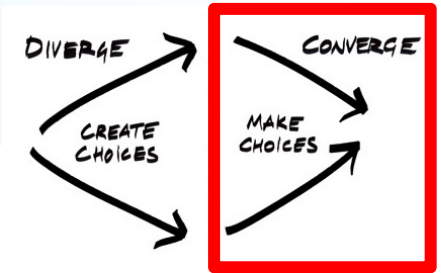


- Categorize ideas into groups.
 - Sometimes called “KJ method.”
(Cf. d.school bootcamp bootleg p.14 “Saturate and Group”)
- Procedure
 1. Choose one of the ideas
 2. Find similar idea(s) to it
 3. Iterate the above steps for all ideas
 4. Give a title for every group of ideas
- Tips
 - Find a good title that stimulates your creativity for getting more ideas. E.g.:



... come up with more ideas
... just a classification

Vote [Convergence]



- Vote for and choose good ideas
- Tips
 - Clarify the criteria before voting.
 - New, feasible, want, ...

