Routine Creativity

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Motivation

- Computational design creativity is hard to study.

- The focus has been on extreme non-routine design cases.

i.e., start with the hardest!

blue sky research

“Theoretical” Creativity

- Formal theory.
- Conceptual space “transformed”.

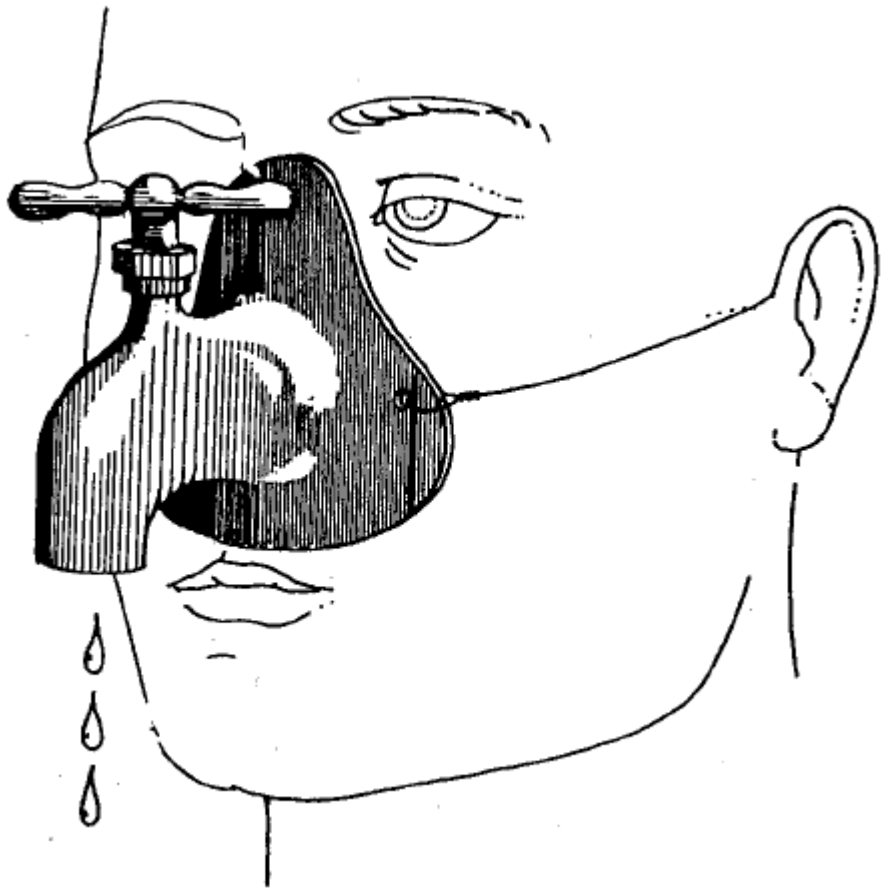
- Transformational creativity allows “radical newness”.
  - i.e., what wasn’t possible before.

“Perceived” Creativity

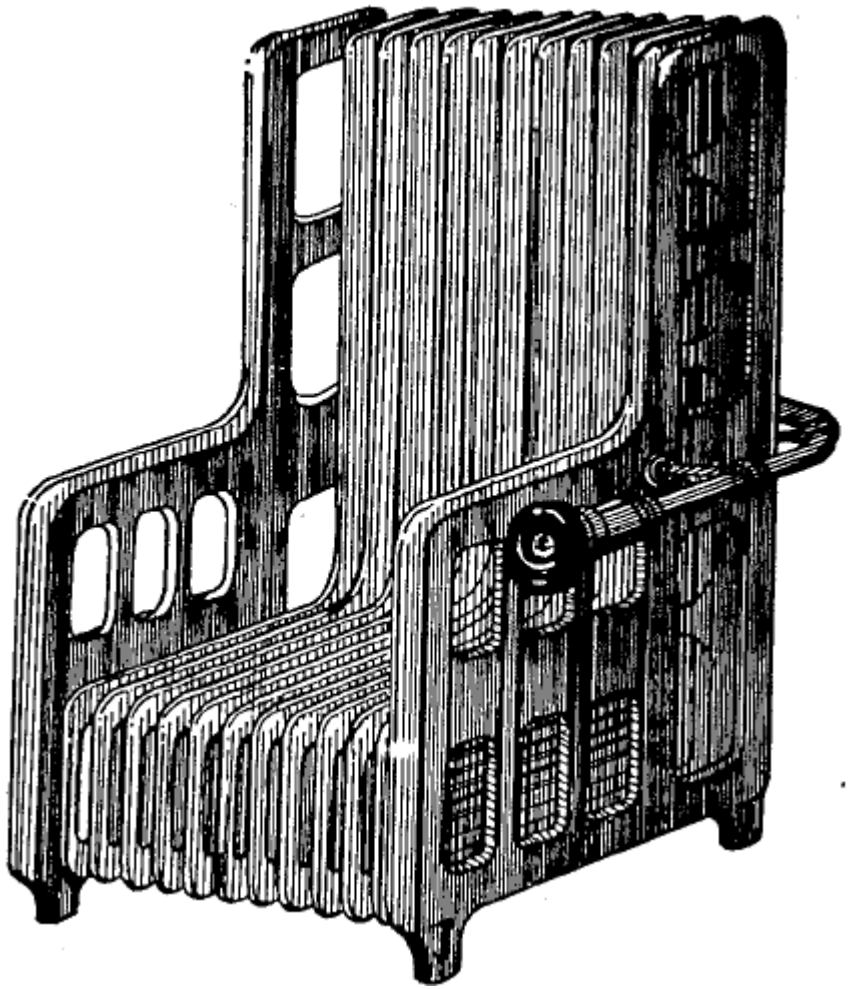
- People detect and evaluate creativity.
- Varies by who judges.
- Judgment includes many factors.

- People can judge *degrees of creativity.*
  …Exotic & extreme creativity.
  …Mundane creativity.

Exotic?



Exotic?



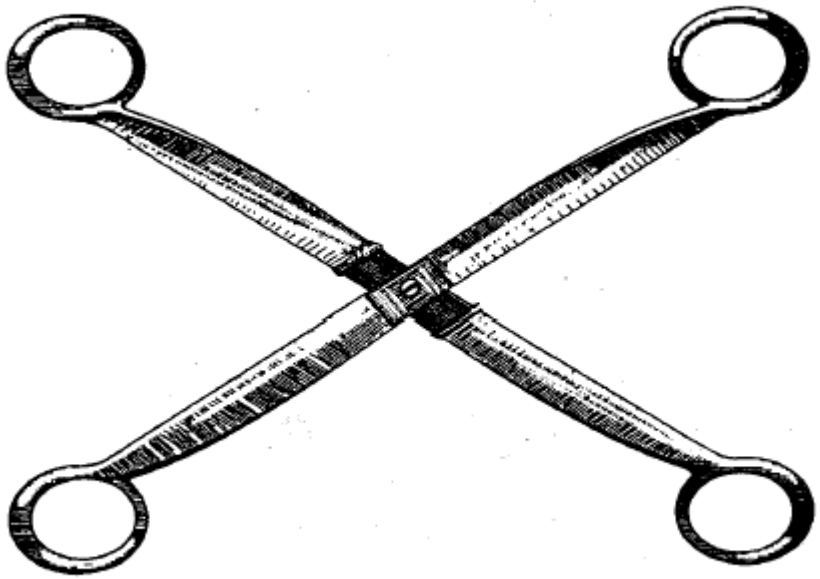
Given

Mundane?

Mundane?

Mundane?

Blue Sky!



Anti-blue sky

- Start with the easiest!
- Try to generate mundane creativity.

- Gently transform routine design methods.
- Investigate impact of changes on judgement of creativity.

Ingredients of Routine Designing

1. Basic Synthesis
2. Criticism
3. Decomposition
4. Evaluation
5. Execution
6. Ordering
7. Patching
8. Planning
9. Recomposition
10. Retraction
11. Selection
12. Situation Recognition
13. Suggestion Making

Creative Design

- Goal of transformational creativity is important.
- Fuelled by large scale reasoning methods.
  - e.g., analogy.

Routine Creativity

- *Creativity is supported and enhanced by smaller scale reasoning.*

- Use Routine Design basis.
- Focus on perceived creativity.

- Many more opportunities for interesting research into creative design systems.