

speculative design **/ design fiction**

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self-introduction

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- **born in Tokyo**
- **left Tokyo to study fashion design in London**
- **studied architecture, fashion design and marketing**
- **studied fashion design in womenswear at RCA, MA/PhD**
- **returned to Japan to work as freelance**
- **moved to Kamakura to work at Keio University X-design**
- **temporarily worked for Kyoto University design school**
- **continue working as freelance on multiple projects**

self-introduction



MOBILITIES
● **DESIGNEAST 07**

dot architects



**what is
(what is not)
speculative design?**

日本学術会議：21世紀における人工物設計・生産のためのデザインビジョン提言

【提言1】ポスト工業化社会では、デザイン概念の質的転換を図るべきである。そこでは、いかにつくるかということと共に、何をつくるかが問われる

【提言2】優れた人工物は、つくること（設計・生産）と使うこと（生活）が密接に関連づけられた持続的なプロセスから生み出される。21世紀のデザインプロセスは、つくることから育てることへと大きく拡張していく必要がある

【提言3】21世紀のデザインは、個々の人工物にとどまらず、人工物や自然物の集合を含む環境・社会システムを生成し、生活の質を向上させていく役割を果たすべきである。そこでは、デザインの対象はハードな事物からソフトなサービスを含む環境・社会システムへと大きく拡大していく

【提言4】今日のデザイン問題は、非常に複雑で、曖昧かつ不安定なものである。問題解決に向けて、多種多様な主体のコラボレーションによるデザインを積極的に推進していく必要がある

【提言5】21世紀のデザインビジョンを実践するためには、明示化されていない要求を含む複雑な条件を扱うことができる高度なデザイン支援システムを積極的に開発し、活用していく必要がある

【提言6】最終的にデザインの質を評価するのはユーザーであり、今後のデザインは、設計者・生産者だけでなく、ユーザーも含めて考える必要がある。そのためには、デザイン教育やデザイン倫理の普及、適切なデザイン情報の発信などを積極的に推進する必要がある

【提言7】デザイン行為の本質を探究する設計工学は、21世紀の科学が求める総合化の方法を解明する学術研究のフロンティアであり、その研究体制の整備を積極的に推進すべきである。

Design as Wicked Problem

Horst Rittel and Melvin Webber (1973), Policy Sciences 4, 155-169
<http://www.ask-force.org/web/Discourse/Rittel-Dilemmas-General-Theory-Planning-1973.pdf>

- 1. There is no definitive formulation of a wicked problem**
- 2. Wicked problems have no stopping rule**
- 3. Solutions to wicked problems are not true-or-false, but good-or-bad**
- 4. There is no immediate and no ultimate test of a solution to a wicked problem**
- 5. Every solution to a wicked problem is a 'one-shot operation'; because there is no opportunity to learn by trial-and-error, every attempt counts significantly**
- 6. Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan**
- 7. Every wicked problem is essentially unique**
- 8. Every wicked problem can be considered to be a symptom of another problem**
- 9. The existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem's resolution**
- 10. The planner has no right to be wrong**

Design as Wicked Problem

**Rittel was morally objectionable to
turn wicked problems into “tame”
ones:**

**instead, he called a need for a
participatory and argumentative
design process.**

Christopher Frayling: Research in Art and Design

In RCA research paper Vol.1, No.1 (1993), pp.1-5

Read) with which I began, to make some practical suggestions as to the kinds of research which might suit, indeed grew out of, what we actually do;

- Research into art and design
- Research through art and design
- Research for art and design

Research into art and design is the most straightforward, and, according to the Alison index of research in art and design - as well as CNAAs lists of the 1980s and early 1990s plus my own experience at the Royal College of Art - by far the most common:

- Historical Research
- Aesthetic or Perceptual Research
- Research into a variety of theoretical perspectives on art and design - social, economic, political, ethical, cultural, iconographic, technical, material, structural, ... whatever.

That is research into art and design. At the College, it involves PhD theses or MPhil dissertations. And it is straightforward, because there are countless models - and archives - from which to derive its rules and procedures.

Research through art and design which accounts for the next largest category (though a small one) in the Alison index, the CNAAs documents, and my own experience of degrees by studio project at the College, is less straightforward, but still identifiable and visible.

- materials research - such as the titanium spatter-painting or colorization of metals project successfully completed in the metalwork and jewellery departments at the College and Camdenwell, in association with Imperial College of Science & Technology (partnerships are very useful, in this area of research);
- development work - for example, customising a piece of technology to do something no-one had considered before, and communicating the results. A recent example: the Canon colour photocopier at the Royal College of Art, successfully used by some postgraduate illustration students, who have both exhibited and written up the results;
- action research - where a research diary tells, in a step-by-step way, of a practical experiment in the studio, and the resulting report aims to contextualise it. Both the diary and the report are there to communicate the results, which is what separates research

from the gathering of reference materials. Kenneth Agnew has recently and wisely written that research through the design of products has been:

frustrated by the lack of any fundamental documentation of the design process which produced them. Too often, at best, the only evidence is the object itself, and even that evidence is surprisingly ephemeral. Where a good sample of the original product can utilize found, it often proves to be enigmatic.¹

These types of research resemble Herbert Read's 'teaching through art' - so long as we're clear about what is being achieved and communicated through the activities of art, craft or design. At the Royal College of Art, this kind of research, sometimes known as the degree by project - with a specific project declared in advance of registration - involves for the MPhil studio work and a research report, and for the PhD studio work plus a more extensive and substantial research report.

The thorny one is Research for art and design, research with a small 'r' in the dictionary - what Picasso considered was the gathering of reference materials rather than research proper. Research where the end product is an artefact - where the thinking is, so to speak, embodied in the artefact, where the goal is not primarily communicable knowledge in the sense of verbal communication, but in the sense of visual or iconic or imagistic communication. I've mentioned the expressive tradition in fine art

and that seems to me to be a tradition out of which much future research could grow: a tradition which stands outside the artefact at the same time as standing within it. Where the expressive tradition is concerned, one interesting question is why people went to call it research with a big 'R' at all. What's the motivation? True, research has become a political or resource issue, as much as an academic one. And, as a slight digression, it always amuses me to see the word 'academic' used as a pejorative - by people who themselves earn their livings within the academy. Research has become a status issue, as much as a conceptual or even practical one.

And that - I must confess - worries me. There may well be opportunities for research within the expressive tradition, but they need dispassionate research rather than heated discussion about status, class and reverse snobbery.

Research into Design Research through Design Research for Design

Koskinen: Four Cultures of Analysis in Design Research

https://books.google.co.jp/books?id=_oTZBAAQBAJ&lpg=PT275&ots=9tdWd45ZR_&dq=four%20cultures%20of%20analysis%20koskinen&hl=ja&pg=PT275#v=onepage&q=four%20cultures%20of%20analysis%20koskinen&f=false

- **Designers as Statisticians**
- **Design and Qualitative Social Science**
- **Design Researchers as Scholars in Humanities**
- **Art&Design as Analysis: Learning from Contemporary Art**

William Gaver: What should we expect from RtD?

In CHI 2012 proceeding, pp.937-946

ABSTRACT

In this essay, I explore several facets of research through design in order to contribute to discussions about how the approach should develop. The essay has three parts. In the first, I review two influential theories from the Philosophy of Science to help reflect on the nature of design theory, concluding that research through design is likely to produce theories that are provisional, contingent, and aspirational. In the second part, I discuss three possible interpretations for the diversity of approaches to research through design, and suggest that this variation need not be seen as a sign of inadequate standards or a lack of cumulative progress in the field, but may be natural for a generative endeavour. In the final section, I suggest that, rather than aiming to develop increasingly comprehensive theories of design, practice based research might better view theory as annotation of realised design examples, and particularly portfolios of related pieces. Overall, I suggest that the design research community should be wary of impulses towards convergence and standardisation, and instead take pride in its aptitude for exploring and speculating, particularising and diversifying, and - especially - its ability to manifest the results in the form of new, conceptually rich artefacts.

Author Keywords

research through design; theory; annotation; portfolios; philosophy of science

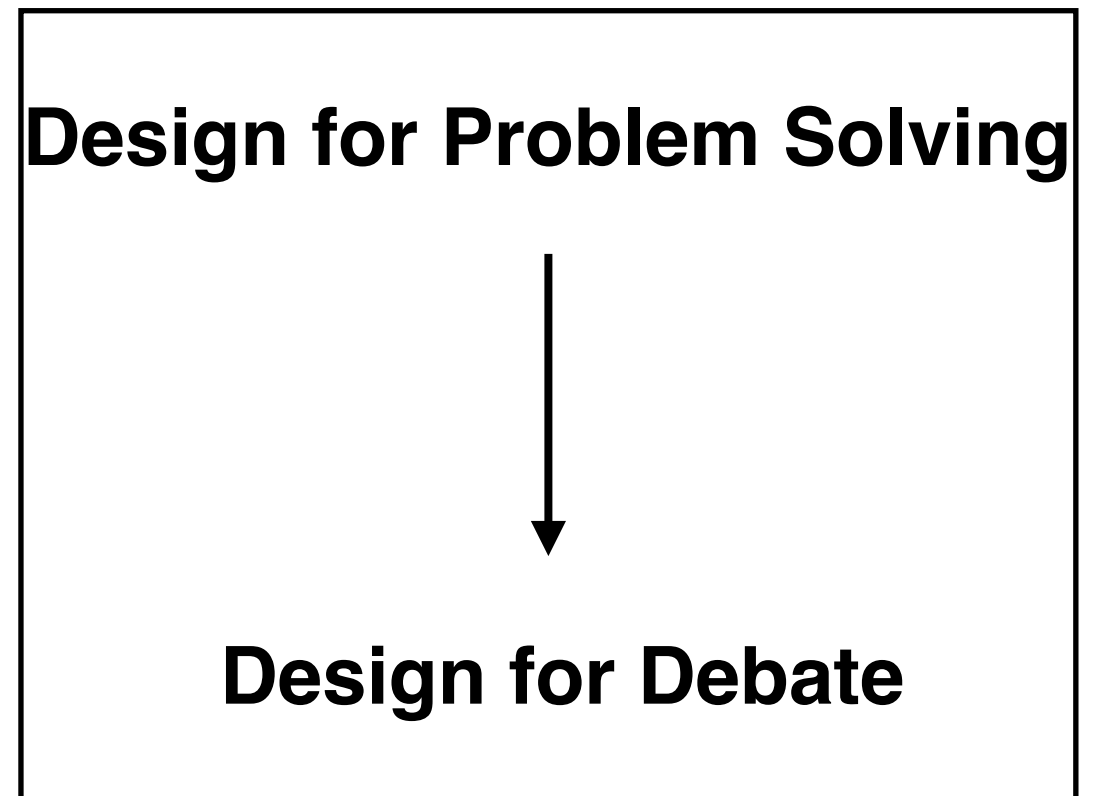
What is Speculative Design?

Anthony Dunne and Fiona Raby, Speculative Everything

When people think of design, most believe it is about **Problem Solving**: however, there are other possibilities for design: **one is to use design as a means of speculating how things could be - speculative design.**

It opens up all sorts of possibilities that can be discussed, debated, and **used to collectively define a preferable future**

for a given group of people: from companies, to cities, to societies.



Affirmative Design / Critical (Speculative) Design

Anthony Dunne and Fiona Raby, Speculative Everything

(a)

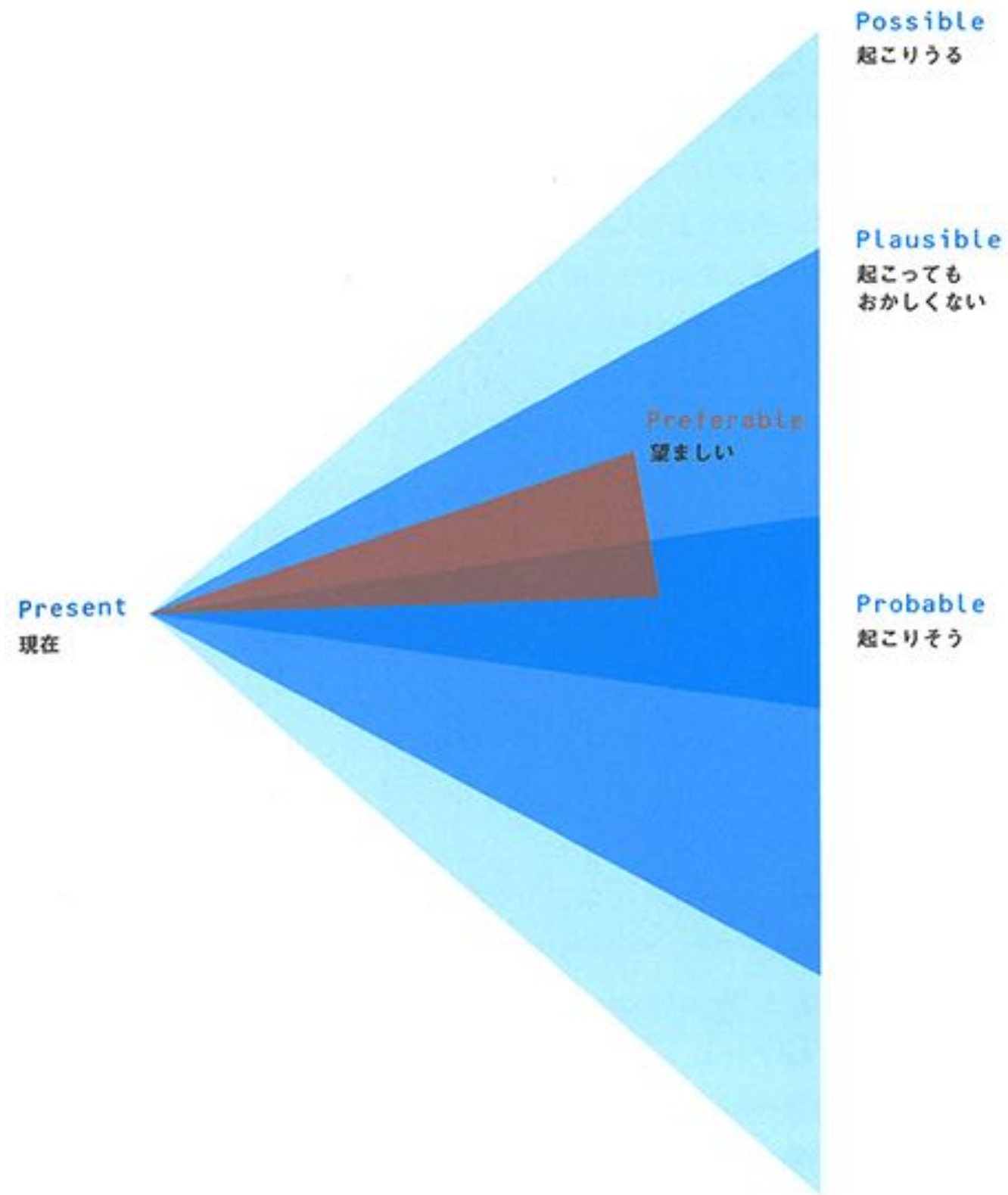
affirmative
problem solving
design as process
provides answers
in the service of industry
for how the world is
science fiction
futures
fictional functions
change the world to suit us
narratives of production
anti-art
research for design
applications
design for production
fun
concept design
consumer
user
training
makes us buy
innovation
ergonomics

[b]

critical
problem finding
design as medium
asks questions
in the service of society
for how the world could be
social fiction
parallel worlds
functional fictions
change us to suit the world
narratives of consumption
applied art
research through design
implications
design for debate
satire
conceptual design
citizen
person
education
makes us think
provocation
rhetoric

PPPP

Anthony Dunne and Fiona Raby, Speculative Everything



Dunne and Raby: Design and Science

Anthony Dunne and Fiona Raby, Speculative Everything

Design for Science :

科学研究をわかりやすく説明するためのデザイン

Design with Science :

デザイナーと科学者のコラボレーション

Design through Science :

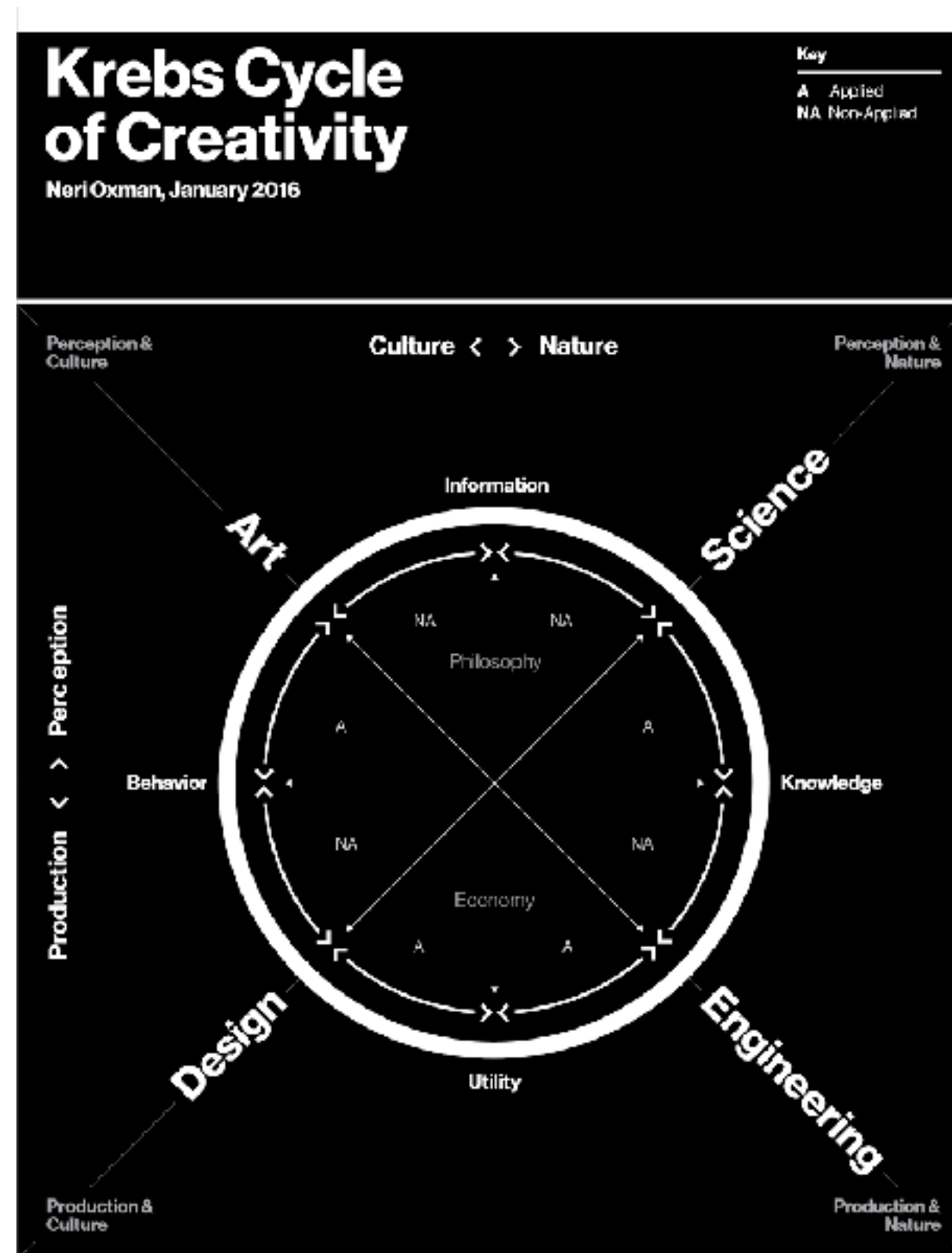
デザイナーが多少たりとも科学を実践する

Design about Science :

科学が及ぼす影響をデザインを通じて考察する

Krebs Cycle of Creativity

Neri Oxman, MIT media lab : <http://jods.mitpress.mit.edu/pub/AgeOfEntanglement>



some further references

Journals/Conference Proceedings

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Articles/Papers on Design Fiction and Speculative Design

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Joseph Lindley, Design Fiction

<http://www.lancaster.ac.uk/lica/about-us/people/joseph-lindley>

<http://dl.acm.org/citation.cfm?id=2783592>

Simon Grand and Martin Wiedmer, Design Fiction

<https://pdfs.semanticscholar.org/3b0e/1c0d308ecc8abbac5f2d4035297e7fc4b39c.pdf>

James Auger, Speculative Design

<http://www.tandfonline.com/doi/abs/10.1080/14626268.2013.767276>

https://en.wikipedia.org/wiki/Design_fiction

https://en.wikipedia.org/wiki/Critical_design

Thank You

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