



STST research update

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Activities March-April 2014

1. Background Research

- collection of projects on website + “air objects” and toys
- analysis of 10 toys
- books: what makes museum fun, Working Prototypes exploratorium

2. Field Research

- preparation: what? why? how?
- 1. visit Technorama: “air” exhibition workflow, interviews, lab visits
- 2. visit Technorama: observation 3 exhibits

3. Brainstorming/Experiments/Project

- Design Space, Exhibits List
- BA project: wind drawings

4. Transdisciplinary collaboration

- wind tunnel: simulation of natural phenomena (Scale Matters project)
- transdisciplinary collaboration methods

1. Background Research

- collection of projects on website + “air objects” and toys
 - low tech - <http://www.science-toys.net/?p=248>
 - high tech - <http://www.science-toys.net/?p=558>
 - old school - vacuum pump
- analysis of 10 toys - <https://docs.google.com/spreadsheets/d/1MP2CcppCzEYCDq9gh5lb5gD7K-khjxlnQt8cy16ZEJLo/edit#gid=0>



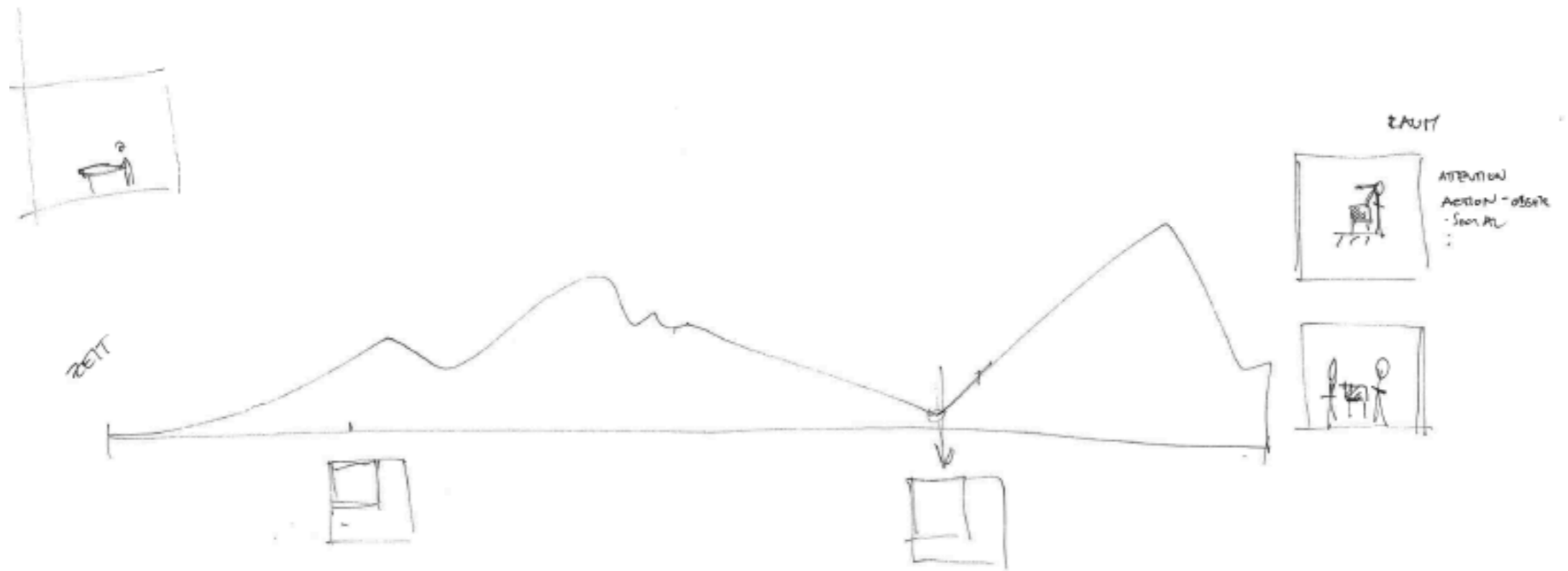
2. Field Research

- preparation: what? why? how?



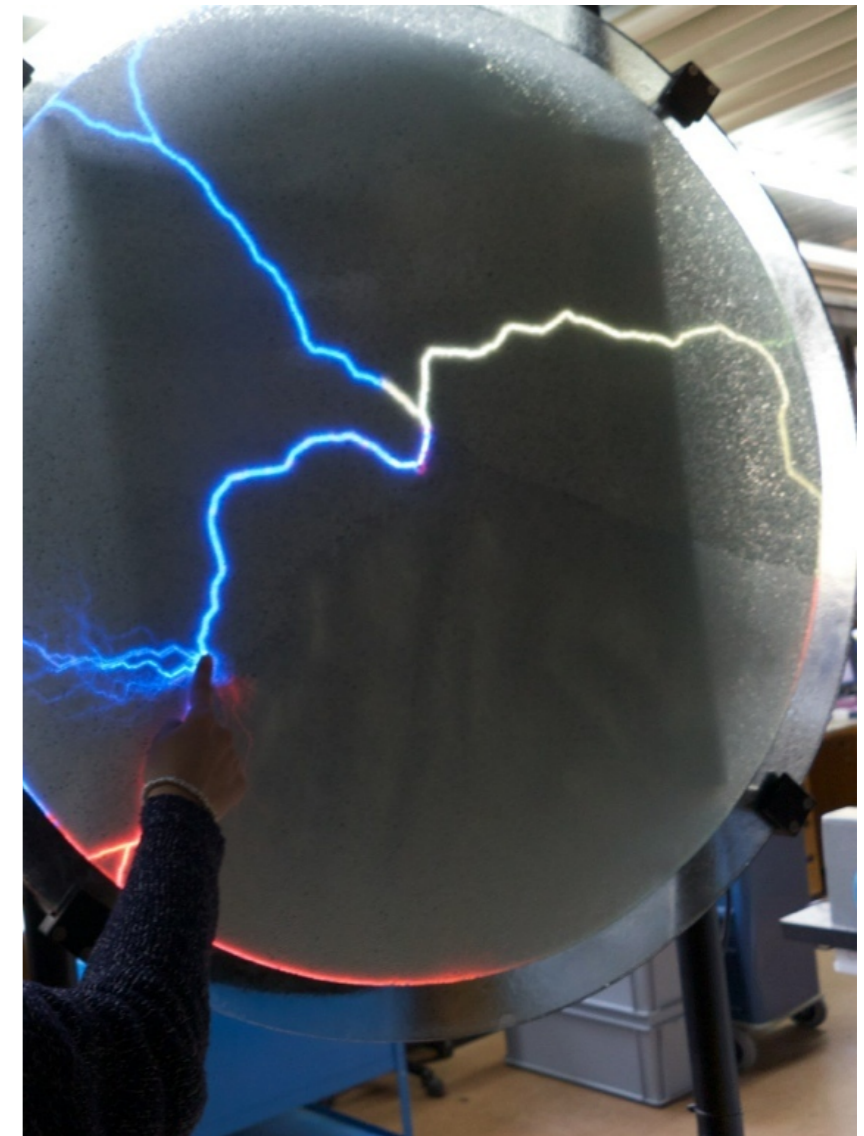
2. Field Research

- templates for documenting
- what can we document via direct and participatory observation: time, space, attention, interest... ?



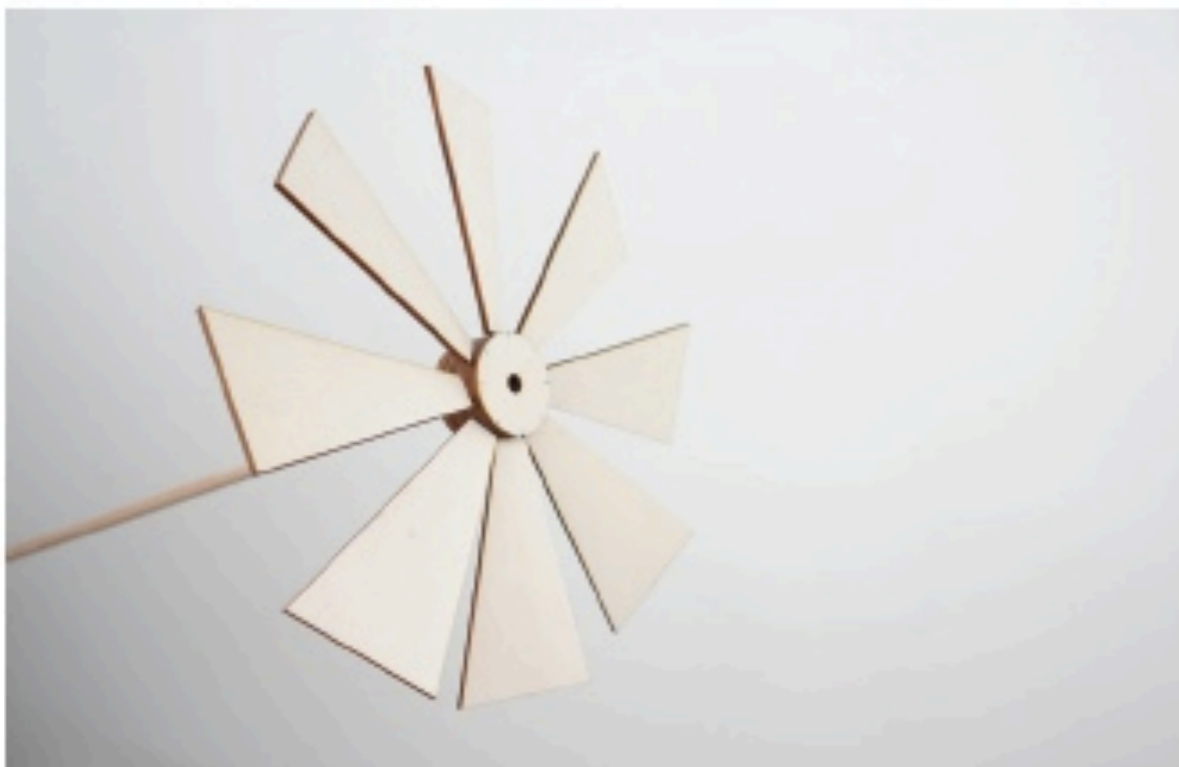
2. Field Research

- 1. visit Technorama: “air” exhibition workflow, interviews, lab visits
- interview with the head of the shop - possibility to test toys form the shop

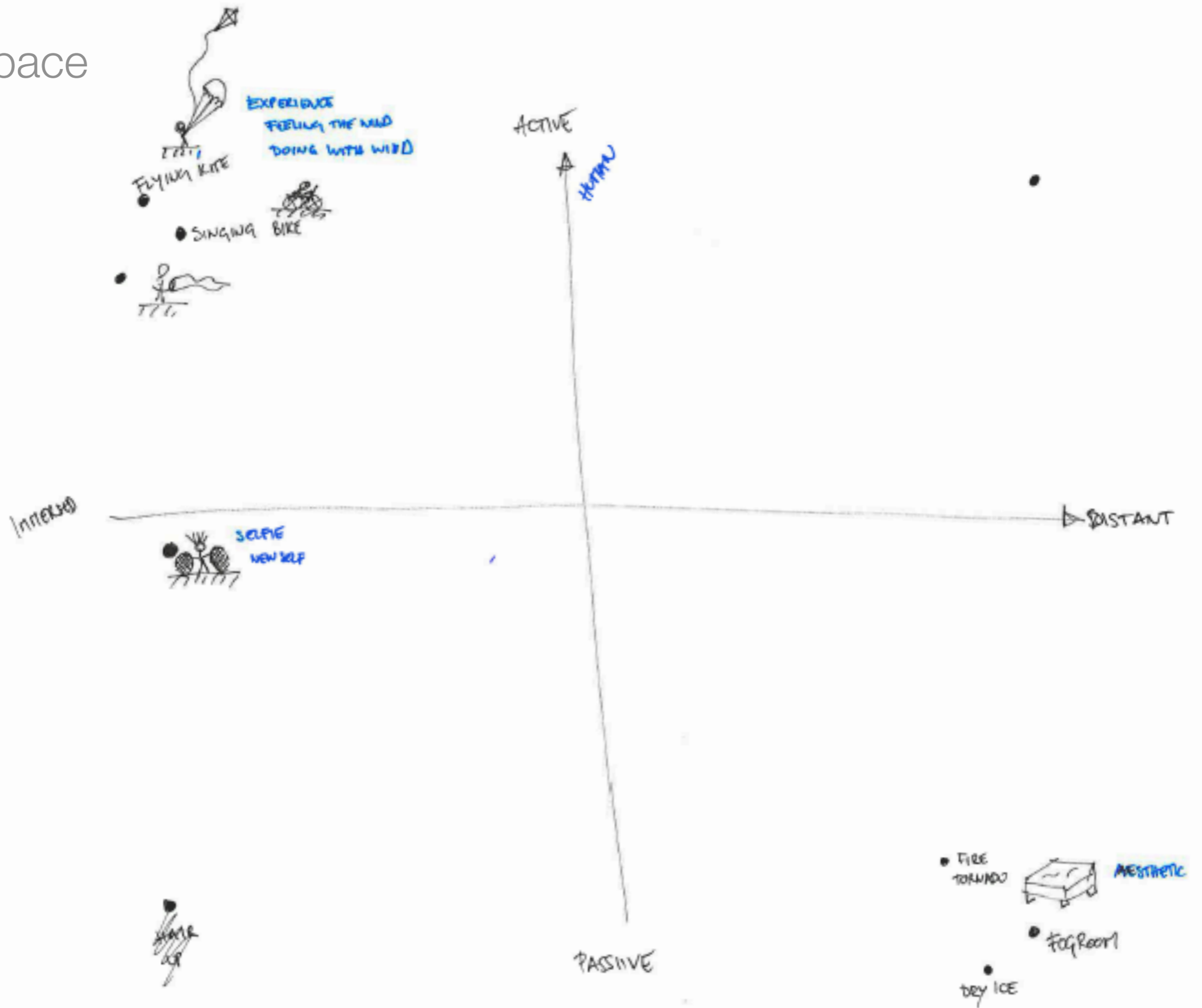


3. Brainstorming/Experiments/Project

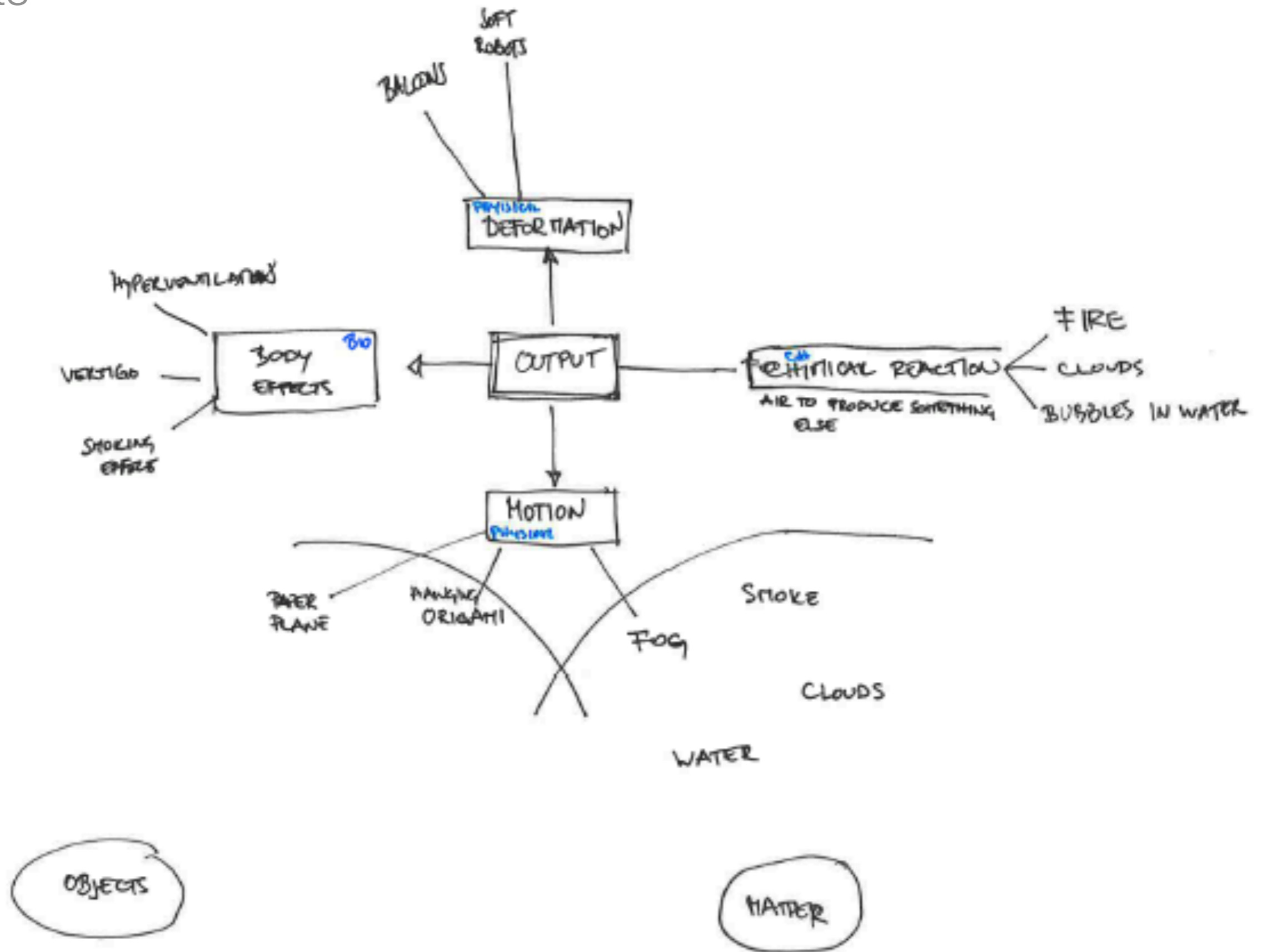
- Design Space, Exhibits List
- BA project: wind drawings



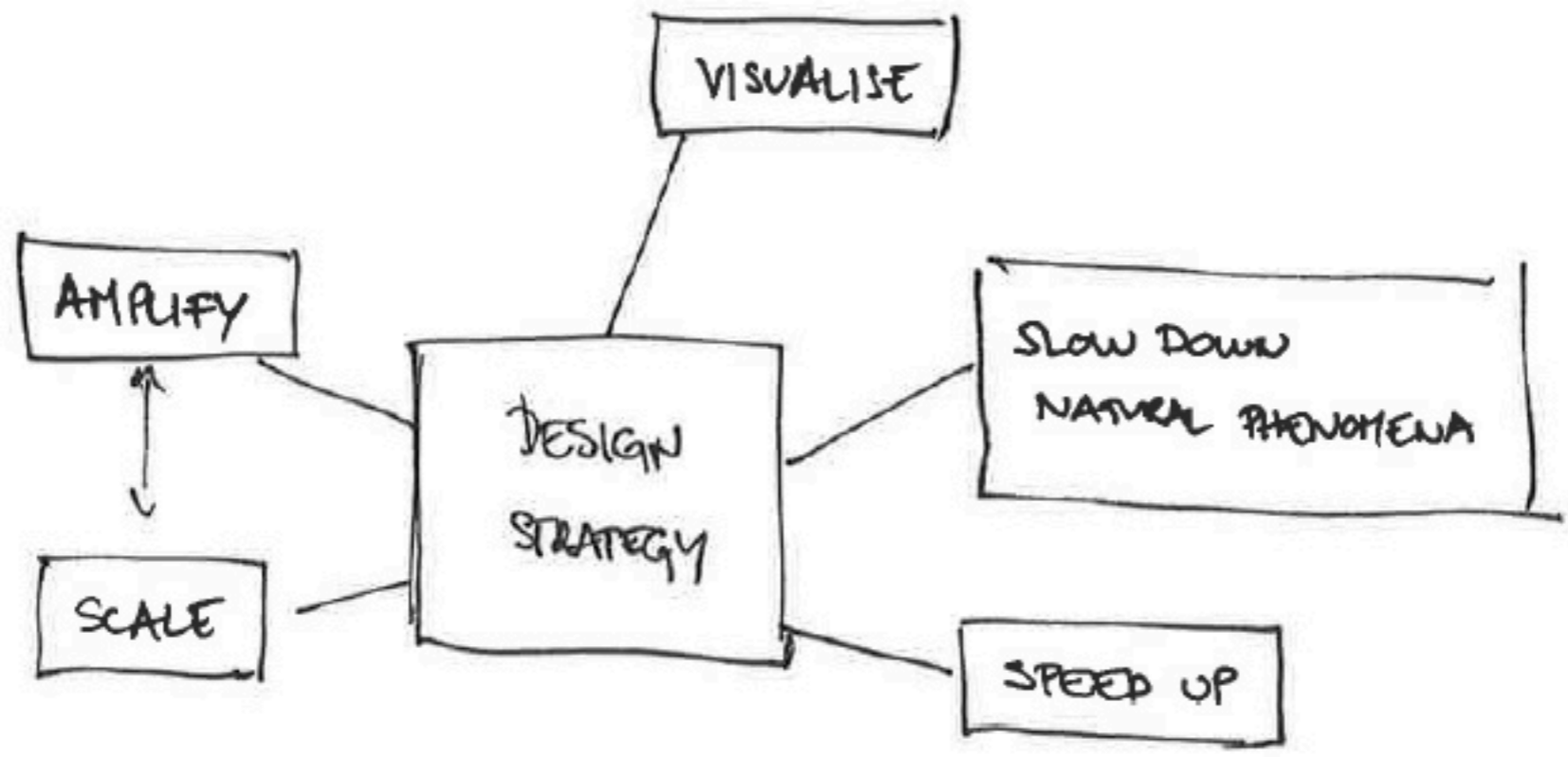
design space

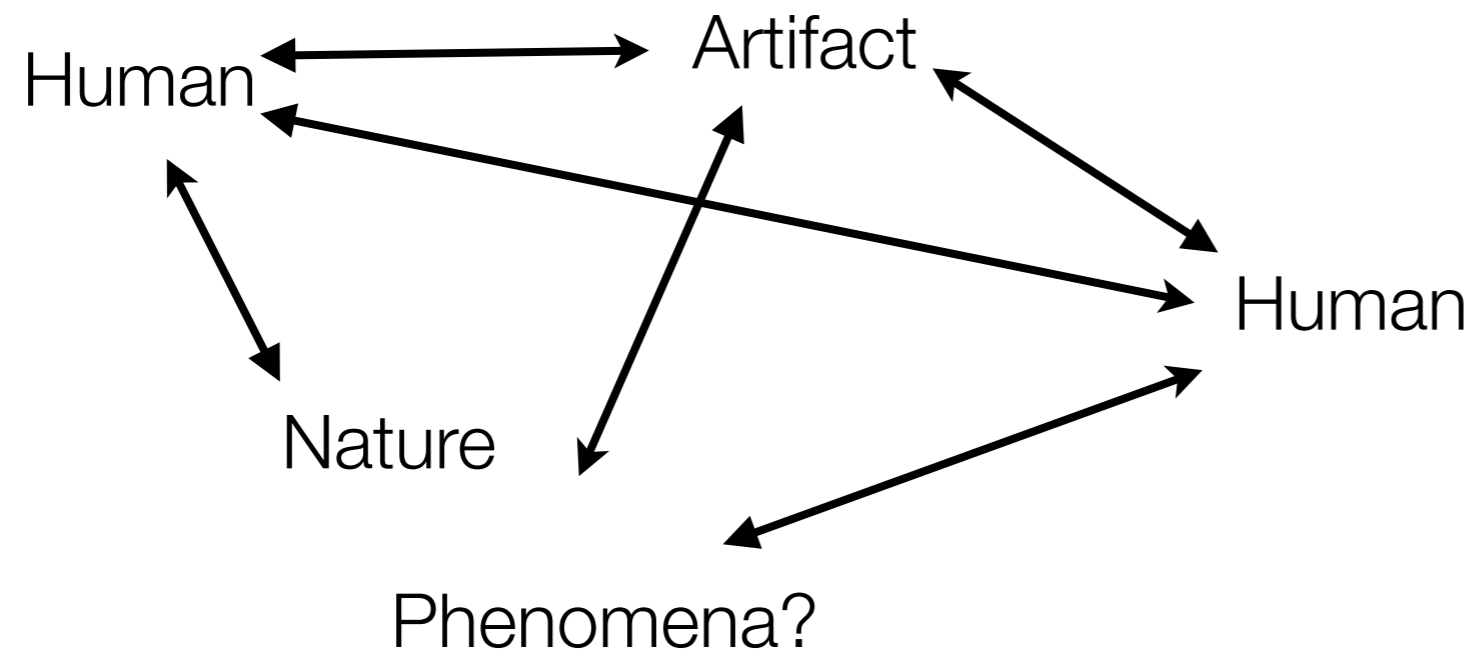


outputs



design strategies





Technorama exhibit list feedback

Positive Criteria

- strong engagement and interests
- aesthetic experience
- bodily experience
- social interaction

Negative Criteria

- only explanation of scientific phenomena
- on-off interaction



what do we mean by aesthetic experience?



phantasy

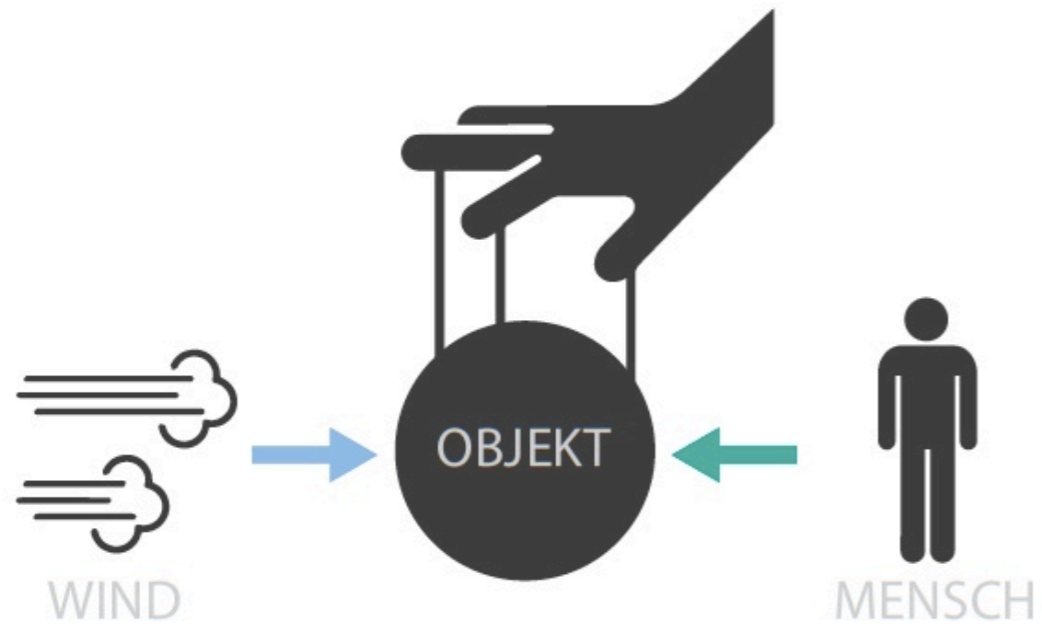
“I define phantasy-inducing environments as one that evokes mental images of things not present to the senses or within the actual experience of the person involved.” Malone

how to create new knowledge? apply old knowledge to new situation

3. Brainstorming/Experiments/Project

- BA project: wind-human drawings

Spannungsfeld: Wer kontrolliert momentan das Objekt?



4. Transdisciplinary collaboration

- Scale Matters project visit
 - wind tunnel: simulation of natural phenomena
 - transdisciplinary methods: everyone preparing the same thing (e.g. build a kite, critique of readings); uses competition strategy.
 - exchange with Scale Matters on monthly basis
- Technorama visit
 - terminology: eg participatory vs prototyping
 - similar work process

Next Steps

Background Research

- topic ordering system
- contributions from ZHAW
- readings

Field Research

- direct observation, followed up by interviews (participatory observation)
- design probes: participation of the visitors (cameras..)

Transdisciplinary Research

- workshops: ZHAW and ZHdK
- exchange/documentation of research activities on website
- everyone preparing the same thing

Overview Phase 1

Phase	Inhalt	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Phase 1	Analyse, Beobachtungen																					
ZHdK																						
	To Do's	<p>1. Literaturrecherche: Wissen & Lernen, Kreative Ansätze in der Vermittlung von naturwissenschaftlichen Themen, Methodik für die Beobachtung/Co-Creation im Museum und Draussen</p> <p>2. Produktrecherche: Vorhandene Science Toys, DIY-Baukästen und Sets</p> <p>3. Interviews: Pädagogen und Naturwissenschaftler (eventuell Vortragsreihe)</p> <p>4. Beobachtungen: Technorama und Draussen,</p> <p>5. Workshops: Co-Research, Probes</p>																				
	Deliverables	<p>1. Dokumentation/Zusammenfassung der Recherchenergebnisse</p> <p>2. Auswertung der Produktrecherche</p> <p>3. Guidelines für Phase 2</p>																				
ZHAW																						
	To Do's	<p>1. Literaturrecherche: Interessante Naturphänomene im Bereich Luft, Möglichkeiten der Vermittlung dieser Phänomene</p> <p>2. Produktrecherche: Mechanismen, Materialien und Produkte, welche Relevanz für das Projekt besitzen</p> <p>3. Patentrecherche: Artverwandte Produkte</p>																				
	Deliverables	<p>1. Dokumentation/Zusammenfassung der Recherchenergebnisse</p> <p>2. Auswertung der Produktrecherche</p> <p>3. Empfehlung für Phase 2</p>																				