< -- Taxonomy of research questions; growing vocabularies; shaping framework -- >

**[Jo]**

— > How can we co-create **common \*** future scenarios?

> How to move away from pre-choreographed environments and compose our own choreographies?

> In a time of networked mediation how can we interfere with the default condition of the human—computer—inter-action/ -facing?

#participatory futures

#theater of the Oppressed (Boal)

*Core concepts:*

— the notion of performativity of languages: scores and scripts for togetherness; for being-in-common; for co-writing new poetics and the basis for new politics.

— the notion of staging: new scenarios beyond usership — spectatorship: explore different 'action play roles' in collaborative network settings with interdependent forms of agency.

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**\*** Commoning, or the collective production of a common (a commonality, a common good), is the essential practice through which the social instantiates the political, be it on the macro or the micro level. How can we nurture various modes of commoning – of being with and for, social giving and taking, sharing and co-creating (Human <> Machine feedback loops/ shared learning environment).

**\*** How to set a common stage / staging the commons? What agents/ agencies produce and operate this commons? What are ‘commoning practices’? What is the relation between the production of subjectivity and the production of a comoning theatre of operations?

### **[Ré]**

Considering that (re:proposal):

1. The human is the training which allows us to observe performers in action, their interactions, their limitations, etc.

*> Physical theatre moderates that process.*

1. The machine is the interface that allows us to make sense of the signals by turning them into meaningful content.

*> AI-powered cognitive sciences moderate that process.*

1. The culture can come either before, as a situation for training—the risk being that it interferes with the human—or after, as a way to build speculative scenarios based on what the machine tells us about the human.

*> Speculative design moderates that process*

Considering that: metacognition is the awareness and understanding of one's own thought processes; let us refer to the awareness and understanding of one's own body-mind *embodied metacognition.*

Considering that: in the speculative field: In order to avoid regurgitating ready-made futures—even being critical or pushing them further—we need to avoid technology-centered approaches.

-> instead focus on context & culture

It results that:

Physical theatre is a unique framework allowing true human-centered speculation (the culture).

Originally an analytical tool to understand the human, the machine becomes actor in our speculation.

An interesting research question would be the mutual influence of human, machine, and culture.

**— Can physical theatre training improve human embodied metacognition?**

**— Can analytical technologies improve human embodied metacognition?**

**— Which rituals emerge from improved embodied metacognition?**

**Speculatively:**

**— What might society & culture look like if humans knew themselves better, accurately understood first-hand their own cognition—how it is embodied, how it develops?  
 Which new rituals emerge?  
 How is the environment shaped?  
 Which new policies are promoted?  
 Which cultures / subcultures are born?**

**— How might technology be developed by humans with improved embodied metacognition?**

**What new products/technologies might emerge?  
 Does ergonomy take an essential place in product development?  
 How are interfaces designed in relation to the body-mind?**

**— how might these technologies in turn influence these humans?   
 What would it allow them to see?   
 What is the next step up? Or down?  
 Can we identify potential feedback loop? Vicious / virtuous cycles?**

We mentioned before that our strength is in the ability to keep the research question fluid. Maybe that is a great opportunity to research the fluidity of interferences and feedback loops between humans and machines?

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### **[Diana]**

(to be added more informed research)

Taxonomy of research questions:

\_What is the essence of human?

\_what constitutes the cognitive patterns of an individual? how do they relate to the patterns of movement?

\_what is consciousness?

\_how to study mind? in motion?

\_do patterns of thoughts relate to patterns of movement?

\_do emotional patterns relate to physiology, physicality, ad thinking?

\_How to push limitations? how to foster growth and get people unstuck from damaging behavioural patterns? how to fulfil human potential?

\_What is the optimum state for growth?

\_What is animal energy and what does it communicates?

\_How to capture emotion?

emotion as a modulation of cognition. (Bach, 2009, 144) - How does emotion modulate cognition?

‘emotions “color” action and thought’ (145) – ‘in PSI, emotion relates to perception, planning, action etc., like colors and shapes relate to objects’ (Bach, 2009, 151)

‘emotions are explained as *configurations of cognition’* (Bach, 2009, 151)

Besides emotion, physicality has been proved to also play an important role in decision-making.

\_What is the role of physicality in decision making?

\_ What characterises a heightened state of experience?

\_What is catharsis? How do you measure intensity?

\_How do humans negotiate agency?

\_How much agency does an actor have in relation to another?

\_What are the recurrent patterns and limitations of various psycho-physiological makeups?

\_What exchange happens ?

\_collective consciousness

\_collective unconscious

\_individual unconscious

\_how to understand the process of dreaming

\_how do we construct memories (individuals vs collectives)

\_how do we build mythologies?

\_what are archetypes?

\_what is embodied intelligence?

\_how can our embodied intelligence inform the construction of artificial intelligence?

\_what does our body know?

\_what is the creativity of the body?

\_agency and empowerment

\_unlocking the mind

\_feedback loops + co-creation.

### **[We]**

**first**

What if machines are able of reading our emotions?

What if there is a machine / artificial intelligence that helps you to improve your relation to your body / becoming aware of your body / helps you to understand yourself “better” ?

- researching into meditation apps

- body enhancement through AI?

- artificial empathy

What if we could use technology / A.I. to get *radical closer* to each other?

> fractals / zeno’s paradox (infinite steps in a finite space/time)

What if we surrender our agency and our free will to the control of a machine / artificial intelligence for the promise of building a better relation to our body and to a radical closer relationship to others?

What if we get rid of the unknown and instead install an artificial intelligence that is guiding us through the unknown based on the gathering and analysis of test data by other people?

What is animalistic technology?

**second**

How does the behaviour of people changes, when they are aware of being observed by an A.I.?

How does the behaviour of people change if they overcome the first feelings of estrangement and become accustomed to it?

What do „users“ in a performative setting wish to gain from an A.I. that can read their emotions?

**third**

How can we find answers to those questions and bring them to the stage to create a scenario for an audience to experience a glimpse into this possible future?

**Kate**

What can machines offer to humans?

*Humans as human beings, in a global sense.*

What can it offer me professionally – can it enhance my understanding of my embodied experience? Can it give me tools to go deeper into what I do?

Technology and vulnerability

“But if there’s one dominant pattern of the last decade, it’s how we are using technology to protect ourselves against vulnerability. These glorious tools that allow us to communicate as never before have turned, in many cases, into shields that we use to fend people off and manage our love lives in self-protective ways. Vulnerability is terrifying but necessary, and the more we do to avoid it, the more emotionally damaged we make ourselves.”

*Daniel Jones, ‘Modern Love’ editor, New York Times*

Is it possible to use technology to bring about real human connection? To make us radically closer, to reveal more of our backstage code?

We create images of ourselves in technology, and technology in the image of ourselves. What does it mean for the technology to create us?

*Links with surrendering to the other, partner work, being guided by the other.*

Do we need scientific proof?

The primacy of experience – what weight do we give that, really, in academia?

If we see this work as a way of stripping away social habitus, socially circumscribed behaviours it might be a process of ‘animalisation’ or ‘de-anthropomorphisation’. What is possible for technology if it is also stripped of our influence? Of the interface? Of the voice of ‘Alexa’?

The other side is that this is a process of conditioning. Of **programming the body**.

Ditte’s work

Energetic qualities of the voice. Intentions.

The substantive nature of sound. Sound that impels, that touches.

The reality of this push/pull relationship.

In general – the search for uncodified communication. ‘The uncanny’.

Grotowski’s work, and the work that is supported by the Grotowski Institute today are examples of psychophysical approaches to acting.

*Terzopoulos method – body-mind eye; Phillip Zarrilli; Suzuki; (Meyerhold biomechanics?)*

As such they often draw on Asian traditions – yoga, Noh theatre etc. – that don’t apply the body/mind binary in the same way as in ‘the West’. They also make claims to break down that binary, sometimes explicitly, as part of the training.

· Is there a measurable physicality to these methods?

· Does the attempt to measure the psychophysical effects of these methods give or take away from them? Do we re-establish a dichotomy in the process?

· How to measure the psychophysical?

(Review of ‘Strange Things’ by Alva Noë: “Noë takes aim at competing evolutionary and neuroscientific approaches to art, documenting their explanatory failures. Such strategies tend to oscillate between improbable overreach and empty generalization.”)

[Dimitri]

What/how does a group of physically moving actors (both artists and social actors) think? (i.e. what kind of cognition is embedded in social and/or physical interaction? Can we extract it, and can we input into it (i.e. ask it questions)?)

### **[GROUP CONVERSATION]**

KATE & DIANA

HOW DOES THE HEIGHTENED STATE / CONDITIONING FROM PHYSICAL THEATRE TRAINING TRANSLATES FROM A COGNITIVE SCIENCE PERSPECTIVE

- HOW CAN WE MEASURE THE ANIMAL STATE

- HOW DOES THE TRAINING INFLUENCES / IMPROVES COGNITION

JOANA

HOW CONSTRUCTED BY SOCIETY ARE WE

- HOW CAN WE JUDGE BEHAVIOURS

- HOW MUCH CAN WE TALK OF PHYSICALITY WITHOUT A SOCIAL CONTEXT

- HOW DOES THIS RELATE TO THEATRE

- HOW MUCH CAN WE DETACH OURSELVES

WHAT DOES A BODY MEAN / WHAT IS NATURAL

THE CHOICE OF DATA + TECHNOLOGY TO USE IS NOT A NEUTRAL CHOICE

KATE

WE NEED MULTIPLE RESEARCH QUESTIONS

IT ISN'T POSSIBLE TO COMPREHEND THE EMPIRICAL, NON-RIGOROUS APPROACH OF GROTOWSKI TRAINING WITH A RIGID QUESTION

WENZEL

EITHER IT IS SCIENTIFIC OR IT ISN'T

DIANA

THERE ARE DIFFERENT KINDS OF SCIENCE

- PHYSICS ARE WIDELY EMPIRICAL

TRAINING HAS A QUALITY AND ACHIEVES WHAT IT CLAIMS TO DO

REGIS

THE FRAMEWORK HAS TO BE SCIENTIFIC, NOT THE TOPIC OF STUDY

(YOU COULD SCIENTIFICALLY ANALYSE REMBRANDT’S PAINTINGS ANd DIARY TO SEE IF A CERTAIN MOOD OR EVENT INFLUENCES HIS STYLE)

KATE

WE DONT HAVE TO CLAIM TO USE A FULLY SCIENTIFIC APPROACH

WE WILL WORK MATEJKA'S APPROACH, NOT GROTOWSKI

JOANA

WE CAN USE ITERATIONS

CHECK BIAS

DIANA

GROTOWSKI METHOD IS CLEAR AND STRONG

SOME PARTS CAN BE MODULAR

JOANA

PINA BAUSCH HAS A MULTICULTURAL TEAM TO EXPLORE GENERAL, BROAD HUMAN QUESTIONS

HOW DO YOU DRAW CERTAIN SCRIPTS TO MAP COMPLEX, HYBRID INTERACTIONS

WHAT ROLE DOES MACHINE LEARNING PLAY IN THIS AND WHAT LIMITS DOES IT HAVE

HAVE UMBRELLA AND TAXONOMY AROUND IT

DIANA

USING POINTS OF VIEW BASED ON DIFFERENT ONTOLOGIES

WHAT DO PEOPLE EXPERIENCE FROM THEIR OWN WORLD

USE IN SPECULATION

MANY FUTURES BASED ON MANY ONTOLOGIES

JOANA

ABOUT MACHINE LEARNING

SOURCING DATA FROM PERSONAL EXPERIENCES

HUGE GAPS IN ALGORITHMIC CULTURE / THE MACHINE OVERSEES LOTS OF DETAILS

WENZEL

THE ISSUE IS IN THE PROPOSAL WE WILL CREATE AN AI THAT CAN READ THE BODY

AS IT IS TRAINED THROUGH GROTOWSKI METHOD

JOANA

YOU CAN FEED A MACHINE WITH SO MANY SORTS OF DATA AND LABELS

THE INTEREST OF LOOKING INTO THE 5% OF THE POPULATION WHO CHALLENGE WHAT MOVEMENT IT

DIANA

STORYTELLING / FICTION BASED ON THIS

JOANA

IT IS A GROWING METHOD THAT IS MORPHING AS IT GOES

HUMAN-MACHINE LEARNING

HOW TO FOCUS FOR THE 2WEEKS WORKSHOP

WE ALREADY HAVE 4 DIFFERENT SENSORS

THEY ARE QUITE DIVERSE

REGIS

SPECULATION COMES FROM THE FACT OF DOING THE ANALYSIS OVER ITS RESULTS

DIANA

EXPERIMENTS - ACTORS TRAININGS WOULD MAKE BETTER ASTRONAUTS

APPLIED TRAINING

KATE

WHAT CAN A MACHINE OFFER ME TO UNDERSTAND MYSELF BETTER

CAN THIS PROJECT ALLOW ME TO GO DEEPER INTO MY PROFESSIONAL PRACTICE

JOANA

MET SOMEONE FROM JAPANESE SPACE AGENCY

THEY FOCUS ON PARALYMPICS

THE CHALLENGE OF MAKING SUPERMEN OFF PEOPLE WITH DISABILITIES

REGIS

ALBEDO LEBANON AS PARTNER FOR FULL GRANT

DIANA

STORY OF KASPAROV'S CENTAURS

HUMAN+MACHINE TEAMS

DIMITRI

THE AI SYSTEM WILL BE DESIGNED TO STUDY GROTOWSKI-LIKE STAGE

'USABLE FOR INTERACTION IN A PERFORMANCE CONTEXT' QUOTE FROM PROPOSAL

DIANA

THERE IS NO SUCH THING AS THE OBSERVING NOT INFLUENCING THE OBSERVED

DIMITRI

THE DATA WE COLLECT DEPENDS ON DECISION WE TAKE IN TERMS OF BUILDING METHODOLOGY AND INFRASTRUCTURE

REGIS

THREE TYPES OF DATA: BIOMETRICS, INTERACTIONS IN SPACE, AND QUALITATIVE

ALSO A PROGRESSION OF BEHAVIOURS, SELF CONFIDENCE, LANGUAGE, ETC

KATE

THERE IS A FORM OF CONDITIONING

REGIS

CONDITIONING IS INTERESTING TO STUDY

IT IS THE SOCIAL COMPUTING IN A CONTROLLED EXPERIMENT

...

DIANA

I AM NOT THINKING OF CREATING THE AI AT THIS STAGE

THROWING A ROCK IN THE LAKE

WENZEL

WE ARE RESEARCHING HOW THE GROTOWSKI METHOD WORKS

WE ARE EVALUATING

KATE

THE CHANGES BROUGHT ABOUT BY THE TRAINING FROM MATEJ AND DITTE IN TWO WEEKS

DIANA

WE ARE RESEARCHING HOW THE HUMANITIES ARE INFLUENCED BY THIS TRAINING

I DON'T LIKE THE IDEA OF CONDITIONING

KATE

AUTOMATED RESPONSE / CONTROL ARE RELATED TO CONDITIONING

DIANA

REPETITION WITHOUT INTENTION ISN'T INCREASING AWARENESS

REGIS

SOCIAL CONDITIONING IS VERY INTERESTING TO RESEARCH FROM A SPECULATIVE PERSPECTIVE

EVERY NORMATIVE ARTEFACT IS SOCIAL CONDITIONING

...

KATE

UNDERGOING TRAINING WHILE BEING MONITORED IS ALREADY BEYOND MY EXPERIENCE AND CAN BE ENOUGH

REGIS

WE CAN AND SHOULD GO BEYOND THE ORIGINAL PROPOSAL

DIANA

WRITE TAXONOMY OF RESEARCH QUESTIONS

### **[Me]**

Here is a stream of consciousness of questions:

* Does Grotowski's method improve focus?
* Does Grotowski's method improve creative ideation?
* Do participants become more comfortable with each other?
* Do participants become more comfortable with themselves?
* Do participants become less repressed?
* Do participants become more empathetic?
* Does the gait or posture of participants change over time?
* Do participants favor a space in the room, does this change over time?
* Does the presence of technology reduce the effectiveness of the training?
* Does the participants sense of personal space change over time?
* Do the movements of participants synchronize in any way?
* Do humans flock?
* Does the participants response to physical touch chance?
* Does the workshop effect other intimate relationships?
* How does the physical or mental arousal of the participants in response to touch or eye-contact change over time?
* How do the stress levels of the participants change?
* How do the stress levels of the participants change in the presence of an audience?
* Which types of exercise correspond the which physiological changes?
* Can we predict outcome for a participant based on their baseline measurements?
* What art can be made from this data?
* What patterns exist in the data over the course of a day, a week?
* Does anyone fall in love with anyone during the workshop, did we know before they did?
* How does one person's mood effect everyone else's?
* What does catharsis look like?
* Is proximity important for empathy?
* Are moods infectious?
* Can we observe body mirroring?
* Do the participants develop a physical language between themselves that can be characterized?
* Is there a synchronization of breathing?
* Is the moon involved and if so, how?
* How does the participants memory/ visualization of the space/ each other improve over time?
* How do the CO2 levels in the space effect participants arousal?

(And this is the book I recommended... very tanagentaly connected  
<http://openhumanitiespress.org/books/download/Connor_2017_Dream-Machines.pdf>)