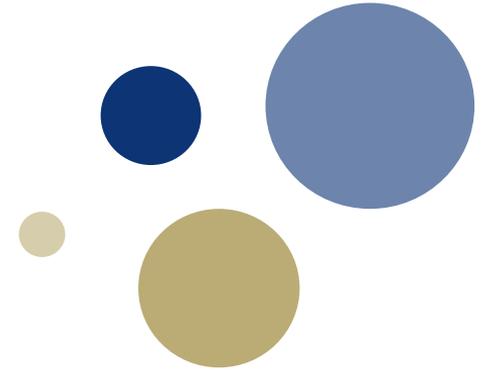




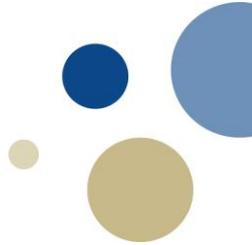
**NTNU – Trondheim**  
Norwegian University of  
Science and Technology



# **Quality assurance in converging quality cultures**

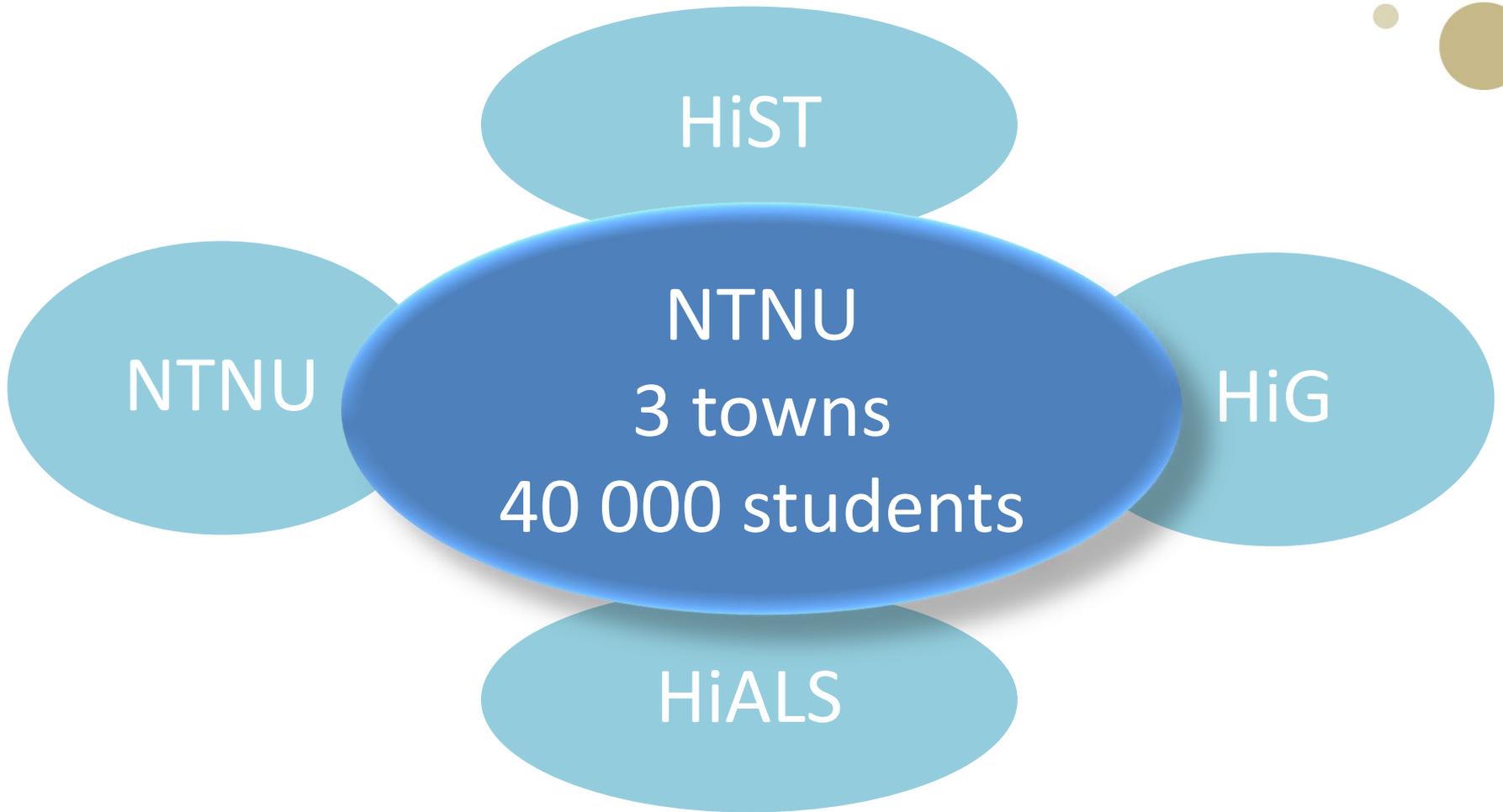
Olve I. Holaas  
Senior advisor  
NTNU

# Today's questions



1. How can a QA system be rigged to allow for mechanisms of change, change both on an operational level and on a systemic level
2. How can external stakeholders be used in QA to ensure that their involvement is not just figurative
3. How do we develop a QA system based on our institution's quality culture, when the frameworks for the quality culture is changing

## The merger



# NTNU (Norwegian University of Science and Technology)

*«We create knowledge for a better world, and solutions that can change everyday life»*

- Trondheim, Gjøvik and Ålesund
- Main profile is science and technology. Also the humanities, social sciences, economics, medicine, health sciences, educational science, architecture, art disciplines, and artistic activities.
- 8 Faculties + the museum
- 400 degree awarding programs
- 7 000 man-years (4 400 academic / 2 500 admin)
- 8 800 admissions in 2017 → 23 000 applicants
- 3 500 of our students are non-Norwegian citizens
- 4 strategic areas of research:  
**sustainability, energy, oceans and health**

# Engineering education



- 3 000 students
- 24 bachelor degree programs
- covering 8-10 engineering disciplines (marine, mechanical, civil, electronics, chemical, logistics, geomatics, oil&gas, materials engineering, ships design)
- 3 faculties
- offered in 3 towns 6-7 hours drive apart

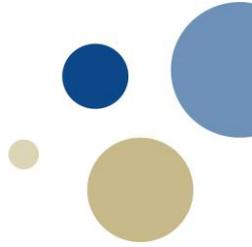
# Engineering education – quality?



- Should NTNU continue to offer civil engineering in all three towns?
- Should all four technical specialisations in electronics engineering have courses in all three towns
- Should NTNU employ more staff in chemical engineering expanding the degree program to all three towns?
- Would such expansions of study programs be conducive to enhanced quality in engineering education?
- Or should NTNU trim the sails, run a tighter ship, and excel in programs where it already scores well (with respect to applicants, enrolment, drop-outs, grading results, students finished on time, and cooperation with external partners)?

How would we enhance quality education in engineering education throughout the university?

# Solution: Executive committee for engineering education (bachelor's)

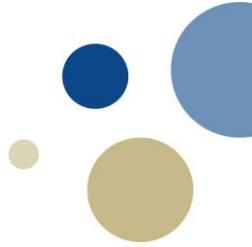


## Members

- 3 vice-deans from the 3 faculties of engineering
- 3 students, from each of the 3 towns
- 2 faculty members representing Gjøvik and Alesund
- The leader and the counter-part from the exec.comm for engineering education (master's)
- No external member

## Roles

Coordinating body, enhancing quality in engineering ed., advisory body for rector, deciding the structure and content of eng.ed. (equal quality), focus on intended learning outcomes



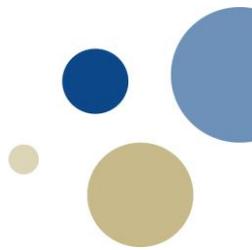
Those were the facts

Why complicate matters further?

Structure is not synonymous to culture:

*“man is an animal suspended in webs of significance he himself has spun. I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search for law but an interpretive one in search for meaning” (Geertz 1973:5)*

# Quality culture agents



Trade unions

The student

Media

The professor

Board of Governors

Ministry

Observer

Admin

Me?

Inside

Outside

Chamber of commerce

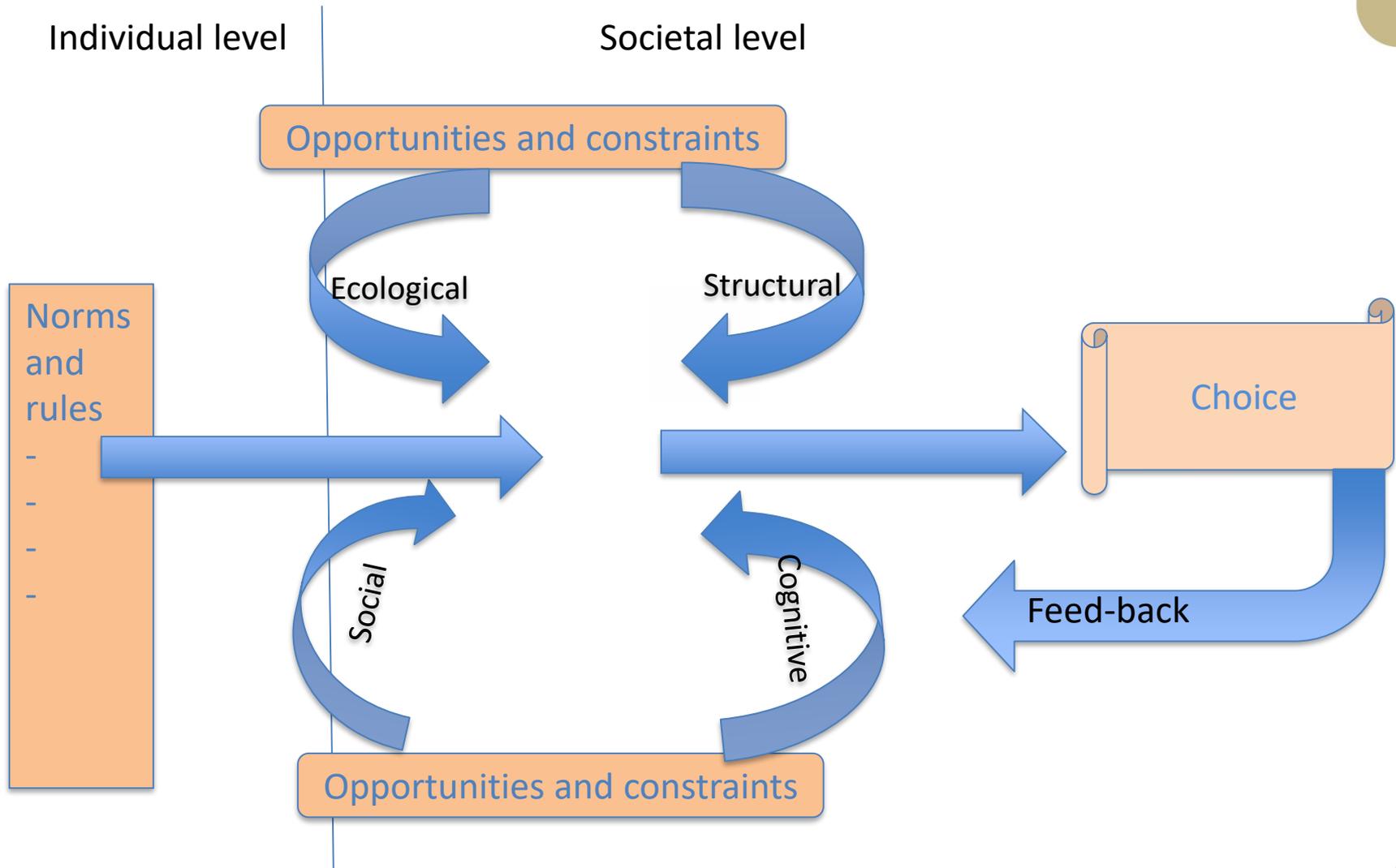
Participant

The municipality

Local & regional companies

Partner universities

# A simplistic model



Choice:



Lundberg (2001)

an organizational culture

- is a shared psychological frame of reference...
- of deeply embedded values and assumptions...
- which mould the social behaviour of its members;
- is taught by social interaction, and ...
- is invisible, because symbolic, **only observable through behaviour, language and objects**, yet...
- determining, since it stresses the unique character or identity of the organisation, and ...
- is sustainable in time, but alterable yet very difficult.

# Thus – how do we allow for choice

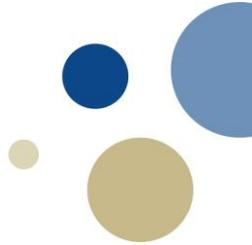


- Is change as a structural element indeed embedded in a HEIs QA system to enable it to develop as required by cultural changes?
- Is a QA a cultural tool for generating changes, or a tool imposed by management to record results?
- Should QA grow from how the HEIs work is changing, from whom we at all times have become, from operations we develop into, so that the QA ensures ownership from professors and students, from stakeholders both internal and external?

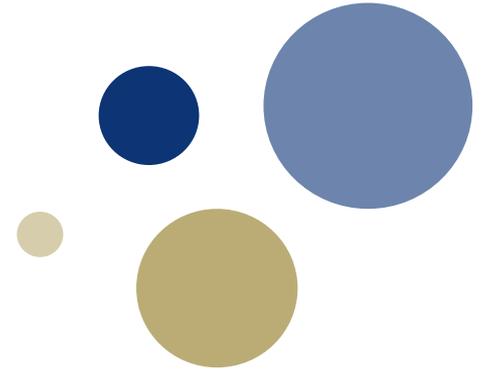
# How about that moonbeam?

- 5 (ways of defining quality in HE) x 156 (definitions of culture) x 9 (issues and relationships for quality culture) x 4 (merging institutions) = headache (28 080)
- Quality culture emerges, it is a process, it is established on symbolic values, values given to them by the collective 'we'
- Our deliverables (my favourite word) depend on all stakeholders participating – omitting external stakeholders affects the quality of our product negatively

# Did we come any closer?



1. How can a QA system be rigged to allow for mechanisms of change, change both on an operational level and on a systemic level
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