Simple, complex and hyper-complex understanding - enhanced sensitivity in observation of information

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Publication date:
2007

Document Version
Publisher's PDF, also known as Version of record

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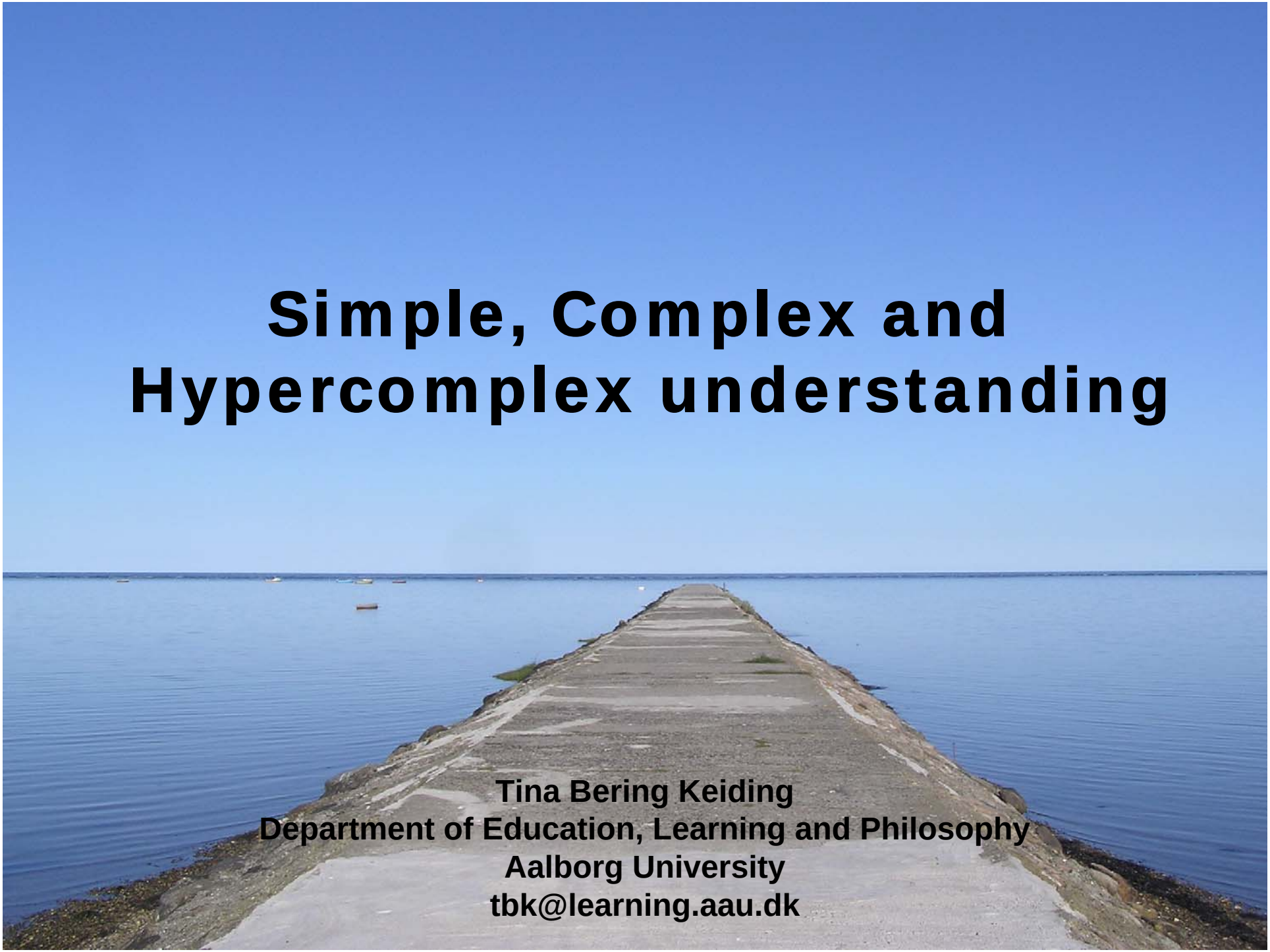

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Starting problem and aim

???

- Reading empirical studies I often wondered:
  - "*Why* is this utterance interpreted *this way* and not another?
  - "Why *this understanding*"

Aim

- To sketch out a suggestion to how selection of understanding can be systematized in order to
  - produce enhanced transparency in selection of understanding
  - enhanced sensitivity and definition in dept

Where to go and point of departure

Relevance of enhanced sensitivity and transparency in understanding

- Didaktik as reflection theory for education
  - Why is one utterance understood as learning, and another as ‘not-learning’
- Research
  - Makes the research process more observable

Premises

- Suggestions are based on interplay between
  - Understanding of Luhmanns concept of understanding
  - Empirical studies of observations of supervision
- A work in progress
- Invitation to discussion, rather than a conclusion

Understanding and Knowledge

- Accomplish each single unit of communication
  - Determines temporarily – shorter or longer – the horizon of meaning
  - Understands communication not 'the other'
  - I call this *simple understanding (*Verstehen in stark vereinfachter Form)
    (Systeme verstehen Systeme 1986:96)

- Knowledge can be produced from first-order observations; that is from ongoing-understanding

- Scientific knowledge requires observation of *how* knowledge is produced
  - Production of empirical material
  - Selection of understanding

He questions them closely;
he writes down what they remember.
And if the geographer thinks
that one of them remembers interesting things,
he obtains information about their moral constitutio
"Why", asks The Little Prince.
" Because drunk people will see twice the number,
and then the geographer would write down
two mountains, where there are only one"
Saint-Exupery:1987:71

Understanding information, not the informant

”Kommunikation nimmt mithin Verstehen laufend in Anspruch, aber nur in stark vereinfachter Form. Sie beobachten im Hinblick auf Selbstreferenz nur, um die Differenz von Information und Mitteilung ansetzen zu können. Man kann eine Kommunikation verstehen (einschlieβlich der Absicht der Mitteilung) ohne auch nur im geringsten die Person zu verstehen, die als Mitteilender beteiligt ist. Ja, die ständige Bemühung um das Verstehen der laufenden Kommunikation macht es sogar unwahrscheinlich, daβ man zugleich noch mehr als dies, nämlich den Partner versteht“ (Systeme vrstehen Systeme; Luhmann 1986:96).

Simple ⎤ Complex
Form of understanding

Complex understanding #1

- “Operations are asymmetric (or symmetry-breaking) operations. They use distinctions as forms and take forms as boundaries, separating the inner side (the *Gestalt*) and an outer side. The inner side is the indicated side, the marked side. From here one has to start the next operation. The inner side has a connective value” (Theories of Distinction; 2002:101).

- Complex understanding
  - Observes how – that is by which distinction – asymmetry has come about
  - Can be described as “... Handhabung fremder Selbstreferenz” (Systeme verstehen Systeme; Luhmann 1986:96)
  - Observes the observer; that is communication.
  - May attribute differences to the informant
    - It is nevertheless the differences of an addressee, that is an selection in communication

Complex understanding #2

- Conditions for construction of differences are different in oral and written/fixed communication

- Oral communication
  - Uttered information is highly evanescent
  - Remembering in psychic system is all was is left for construction of differences
  - In f-2-f interaction (fx teaching) complex understanding seems to be an exception, rather than the rule; new selections must be made in order to sustain interaction

- Written communication
  - Uttered information is fixed
  - Understanding and constructed differences can be tested against text
  - More comfortable conditions for complex understanding

Observing
Observations of Supervision

Observations from a report on quality development in supervision

- 45% of the informants agree with the utterance *"Primary Supervisor has helped us to structure the project"*
- 55% of the informants agree with the utterance *"Secondary Supervisor has discussed the structure of the project with us"* (Algreen-Ussing & Hansen 2001 question 10 and 24)

Immediate understanding: Supervision in project competencies is ensured by the secondary supervisors rather than the main supervisors. This corresponds to conclusions in previous evaluation reports (Algreen-Ussing & Dahms (1995); KUG 1997-1999; 1999-2000)

Construction of the difference used order to desribe supervision in the utterances suggests:

Utterance	Difference for form of supervision
Primary Supervisor has helped us to structure the project	**Help** ⌉-
Secondary Supervisor has discussed the structure of the project …	**Discuss** ⌉-

Complex understanding

- Makes it clear that the actual observations of the supervisors efforts are no more comparable than oranges and bananas
- Indicates that it will be easier for SS to emerge as 'supervising in project method' – easier to be observed as dutiful it the expectation is 'to discuss' rather than 'to help'

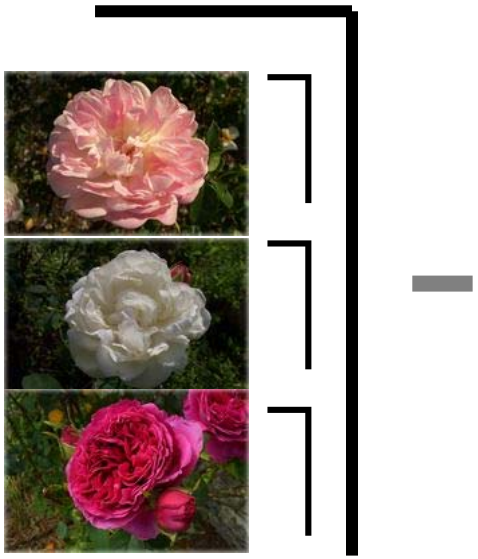
Hypercomplex understanding

Conditioning delimits possible relations within the system (Luhmann 1995:133)

- Sketches out conditions for indication
  - Time perspective: Prospective
    - Makes forms operational (decision): When is a rose a rose
  - Time perspective: Retrospective
    - Suggests possible framing difference for observed observations/indications

Actualized$_1$ ⌉ Possible
Actualized$_2$ ⌉ Possible
Actualized$_n$ ⌉ Possible

Hypercomplex understanding



Botanical Family

Hypercomplex understanding:
Construction of
active teachers and passive students

Utterance (Algreen-Ussing & Hansen 2001:28 &31)	**Difference event/action**	**Attribution of event**	**Proposal to conditioning difference**
I have several times *discussed* the significance of a problem oriented approach… I have *helped* to structure the project I have *asked* for the time sheet for the project I have *discussed* methods for group work	Discuss ⌉- Help ⌉- Ask ⌉- Discuss ⌉-	Event attributed to observing system: **Supervisor**	**action** ⌉ experience
PS have *discussed* the significance… PS have *helped* us to structure… PS have *asked* for the time sheet… PS have *discussed* methods …	Discuss ⌉- Help ⌉- Ask ⌉- Discuss ⌉-	Event attributed to a system in the environment (supervisor) of the observing systems (student)	**experience** ⌉ action

Satisfied with the supervisor – but why

Questionaire to all students

- How satisfied are you with the supervisor regarding…

Few interviews

- Why were you satisfied with/what was good about your supervisor:
  1. "We were satisfied with our supervisor, because he was good at answering our questions and to help us when we needed it"
  2. "We were satisfied with our supervisor, because he challenged us by giving us the responsibility for decisions and progression". (KUG 1997-1999:10-11)

Hypercomplex understanding

1. satisfied⌉ - *framed by* help⌉ -
2. satisfied⌉ - *framed by* challenge⌉ -

Assumptions generated:

- Conditioning differences produce information about *expectations* to good supervising
- The actual form of the difference satisfied/unsatisfied depends not on teacher, but on students expectations
- Satisfied/unsatisfied without conditioning as in the questionaire produces not information about quality of supervision but about fulfilled or dissapointed expectations to supervision

Hypercomplex understanding:
Construction of criteria for inclusion / exclusion in computer mediated teaching

Observations > 300 contributions

- Strong reactions on absence without previous notice: - ⎤ + unexpected absence
  - I'M SICK AND TIRED OF….

- Encouraging responses on subject matter contributions, *disregarding* quality and quantity (even if it is: "Heeeeelp") + ⎤ - contributions
  - Well done, I think…

- Surprisingly high number of contributions regarding absence and feedback that accepts explanation + ⎤ - expected absence and 'good' reasons
  - I wont be on mail until…
  - I'll work on this and send my contribution at…
  - Sorry, I have been ill…
  - I have had computer problems…

Proposal:

- *One* fundamental conditioning difference for inclusion: **Observable participation** ⎤ -
  - Only one contribution deals explicitly with this: "Please call me …. Absence caused several problems in my former group"

- Quality of contributions is – regarding this communication – not criteria for inclusion/exclusion function