“None of us could do this alone”

Evert Bisschop Boele, 27-1-2017
Content

• Necessarily ‘un-true’ perspectives on an interesting meeting between three institutes

• A meeting between
  • 1. ‘Research Universities’ and ‘Universities of Applied Sciences’?
  • 2. Academia and the Arts?
  • 3. Theory and Practice?
  • 4. Or...?
1. Content

• A meeting between
  • 1. ‘Research Universities’ and ‘Universities of Applied Sciences’?
  • 2. Academia and the Arts?
  • 3. Theory and Practice?
  • 4. Or…?
1. A meeting between ‘Research Universities’ and ‘Universities of Applied Sciences’

- A ‘binary’ system of higher education
## 1. Meeting RU – UAS

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<tr>
<th>RU</th>
<th>UAS</th>
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<tbody>
<tr>
<td>‘Academic’</td>
<td>‘Professional’</td>
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<tr>
<td>‘Research-oriented’</td>
<td>‘Research-informed’</td>
</tr>
<tr>
<td>‘Scientific’</td>
<td>‘Practice oriented’</td>
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1. Meeting RU – UAS

RU research

• fundamental; ‘curiosity-driven’ – questions articulated on the basis of earlier research

• ‘academic research’

• Professor (‘hoogleraar’) and his department, research group, research school…

• BA/BSc, MA/MSc, PhD

UAS research

• Applied; ‘practice-oriented’/‘problem-oriented’ – questions articulated in/by professional practice (private/public sectors)

• ‘action research’; ‘design research’ – application in professional practice/valorisation of fundamental knowledge

• Professor of applied sciences (‘lector’) and his research group (‘kenniskring’) with teacher-researchers

• e.g. BMus, MMus (and maybe ‘professional doctorates’ – e.g.. Dmus?)
1. Meeting RU – UAS

- ‘technological readiness levels’

```
NASA/DOD Technology Readiness Level

TRL 1
TRL 2
TRL 3
TRL 4
TRL 5
TRL 6
TRL 7
TRL 8
TRL 9

System Test, Launch & Operations
System/Subsystem Development
Technology Demonstration
Technology Development
Research to Prove Feasibility
Basic Technology Research

TRL 9
Actual system “flight proven” through successful mission operations

TRL 8
Actual system completed and “flight qualified” through test and demonstration (Ground or Flight)

TRL 7
System prototype demonstration in a space environment

TRL 6
System/subsystem model or prototype demonstration in a relevant environment (Ground or Space)

TRL 5
Component and/or breadboard validation in relevant environment

TRL 4
Component and/or breadboard validation in laboratory environment

TRL 3
Analytical and experimental critical function and/or characteristic proof-of-concept

TRL 2
Technology concept and/or application formulated

TRL 1
Basic principles observed and reported
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1. Meeting RU – UAS

<table>
<thead>
<tr>
<th>Manufacturing Readiness Level (MRL)</th>
<th>Phase</th>
<th>MRL</th>
<th>State of Development</th>
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<tbody>
<tr>
<td>Phase 3: Production Implementation</td>
<td>3</td>
<td>9</td>
<td>Full production process qualified for full range of parts and full metrics achieved</td>
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<tr>
<td></td>
<td></td>
<td>8</td>
<td>Full production process qualified for full range of parts</td>
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<td></td>
<td></td>
<td>7</td>
<td>Capability and rate confirmed</td>
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<tr>
<td>Phase 2: Pre production</td>
<td>2</td>
<td>6</td>
<td>Process optimised for production rate on production equipment</td>
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<td></td>
<td></td>
<td>5</td>
<td>Basic capability demonstrated</td>
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<tr>
<td>Phase 1: Technology assessment and proving</td>
<td>1</td>
<td>4</td>
<td>Production validated in lab environment</td>
</tr>
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<td></td>
<td></td>
<td>3</td>
<td>Experimental proof of concept completed</td>
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<td></td>
<td>2</td>
<td>Application and validity of concept validated or demonstrated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Concept proposed with scientific validation</td>
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* Manufacturing readiness levels
* System readiness levels
* Integration readiness levels
* Investment readiness levels
* Business readiness levels
* Incubation readiness levels
* Et cetera....
1. Meeting RU – UAS

- ‘Readiness levels’, institutionalized research, and the ‘valley of death’

Diagram:

- **Technology Push**
  - Universities don’t have the experience
  - Industry doesn’t have the time
  - Consequence: Research fails to reach Market

- **Market Need**
  - **Product Challenges**
    - Better products
    - Innovative effects
    - Higher Yields
  - **Business Challenges**
    - Lower material, operating and fixed costs
    - Faster production rates
    - More sustainable products

**The Innovation Phase**

- 1. Basic idea
- 2. Concept Developed
- 3. Proof of Concept
- 4. Process Validation in Lab
- 5. Process Validation Production Scale
- 6. Process Capability Validated
- 7. Capability Validated Economic Run
- 8. Capability Validated Range Of Parts
1. Meeting RU – UAS

- The pitfall of linear thinking and polarization – and an alternative for TRL: ‘Practice readiness levels’: nine goals of research

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(Van Beest/Andriessen, 2016 – internal publication, Hanzehogeschool)
1. Meeting RU – UAS

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- research university
- university of applied sciences
1. Meeting RU – UAS

- Summarizing:

- RASL as a meeting within a binary higher education system
- Linear thinking: first the ‘fundamental’, then the ‘applied’ research
- Polarization: paradigms?
- Or: research as a chain, moving from conceptual explanations to consolidated changes in practice
- Different actors may have different roles in this chain

- RASL as a form of supply chain management?
2. Content

• A meeting between
  • 1. ‘Research Universities’ and ‘Universities of Applied Sciences’?
  • 2. Academia and Arts?
  • 3. Theory and Practice?
  • 4. Or…?
2. A meeting between Academia and the Arts?

• Not a ‘binary’ but a ‘tripartite’ system of higher education

- Research universities (w.o.)
- Universities of Applied Sciences (hbo)
- Universities of the Arts (kuo)
2. Meeting Academia - Arts

- ‘The distinct character of the arts’
- The creative process as a research process with a distinct character
- The creative ‘product’ as the result of a research process with a distinct character

- ‘artistic research’
- ‘arts based research’
- ‘research in, through, on, about, as arts’
- ‘the artistic doctorate’ (PhD? Or e.g. DMus?)
2. Meeting Academia - Arts

The Conflict of the Faculties
Perspectives on Artistic Research and Academia

THE ARTISTIC TURN
A MANIFESTO
KATHLEEN COEKSSENS
DARIA CRISPIN
ANNE DOUGLAS

Society for Artistic Research

JOURNAL FOR ARTISTIC RESEARCH

ARTISTIC RESEARCH (Arts and Culture)
2. Meeting Academia - Arts

- The pitfall of exclusivity

- Academia: “This is not real research.”
- The Arts: “We are what really matters.”

- Unproductivity from both sides
2. Meeting Academia - Arts

- No consecutive order:

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- research university
- university of applied sciences
2. Meeting Academia - Arts

- But the possibilities of the meeting grounds

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- research university
- university of applied sciences
2. Meeting Academia - Arts

• Summarizing:

• RASL as a meeting of Arts and Science
• The pitfall of the exclusivity of either Arts or Science

• The possibilities of the meeting ground: RASL as the place where different research paradigms meet
  • A place for conversation
  • A place to grow
  • A place for combination of perspectives
3. Content

- A meeting between
  - 1. ‘Research Universities’ and ‘Universities of Applied Sciences’?
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  - 4. Or…?
3. Meeting theory – practice

Fokke & Sukke know what research is all about:

“Very impressive, colleague...

but does it also work in theory?”

- Where theory and practice meet...

- Research university: “You are doing it; we are researching it (and know what is really going on).”

- Arts institutes: “Your work place is only the writing desk; ours is the real world (so we know what is really going on).”

- The pitfall of specialization
3. A meeting between theory and practice

• The possibility to connect theory and practice

• Research university: educate researchers
  • Arts institutes: educate professionals – visual artists, designers, musicians, composers, dancers, choreographers, actors, directors, art teachers

• Teachers at arts institutes are often top rank practitioners
• Students may become tomorrow’s top rank practitioners
3. Meeting theory – practice

- The strong interdependence between the (institutionalized) art world(s) and higher arts institutions – advocacy
- A certain emphasis on the professionalized position of the arts in our society
- A certain neglect of non-professional culture participation – a tendency of arts professionals to ‘help’ non-arts-professionals
- An opportunity for research fostering an open-minded meeting between professional and non-professional arts/cultural practices
- [and the flip side of the coin…]
3. Meeting Theory - Practice

• An unproductive example: the Road Map for the Arts in the Dutch National Research Agenda

• “The Arts: Research and Innovation in the 21st Century”

(Statements presented as) questions:
• 1. The arts as motor for innovation and reflection in a high-tech society
• 2. The arts as an alternative form of knowledge production
• 3. The arts as a source of inspiration for education and life long learning

• Where has reflexivity and self-criticism gone?
### 3. Meeting Theory - Practice

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- **research university**
- **university of applied sciences**
3. Meeting Theory - Practice

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- Red arrow: research university
- Green arrow: university of applied sciences
## 3. Meeting Theory - Practice

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**PRACTICE**
3. Meeting Theory - Practice

• Summarizing:

• A meeting between theory and practice
• A direct connection to arts practice

• What about ‘non-Arts’ cultural practices?
4. Content

- A meeting between
  - 1. ‘Research Universities’ and ‘Universities of Applied Sciences’?
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4. A meeting between idiosyncratic researchers

KUO = WdKA and Codarts

Codarts = Music, Dance, Circus...

Music = jazz, pop, classical, world...

Classical = performers, conductors, composers...

Performers = strings, wind, percussion...

Strings = violins, violas, cellos, double basses

Violins = ...
4. A meeting between idiosyncratic researchers

- Eventually: a meeting of individuals
  - from different contexts (including institutional contexts)
  - with different backgrounds and different biographies
  - with different concerns and different agendas

- Personal, professional, institutional
Some final reflections

• Don’t let paradigmatic or institutional standpoints determine the discussion – it is above all a meeting place of interesting people

• Chances for EUR:
  • Application of their more fundamental research
  • (Further) diversification of research strategies: (action research, design research,) arts based research, artistic research
  • Direct connection with professional arts practices

• Chances for Codarts and Willem de Kooning Academy:
  • Direct connection with more fundamental academic research – including a (further) reorientation away from the arts professional
  • (Further) diversification of research strategies…
  • Chances to put artistic practice in the centre of attention
So what is RASL research?

- Academically and practically meaningful
- “None of us could do this alone”