

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

STRUGGLES

rondom onderzoek

Derek Kuipers Msc. & Gijs Terlouw Msc.

Masterconferentie Vereniging Hogescholen 26 maart 2019

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

aangenaam

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

aangenaam

NHL Stegden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn



24000
STUDENTS

CA 15%
INTERNATIONAL
STUDENTS



MULTI
CAMPUS
UNIVERSITY

90+
STUDENT
NATIONALITIES

2000
ACADEMIC
STAFF



DESIGN
BASED
EDUCATION



14
ACADEMIES

37
RESEARCH
GROUPS



12
ASSOCIATE'S
DEGREES

73
BACHELOR'S
DEGREES

51
MINORS

17
MASTER'S
DEGREES

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

CONTEXT

Van de Master Digitale Innovatie in Zorg & Welzijn

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn



CHANGE AGENTS

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn



(DIGITALE) INNOVATIE?

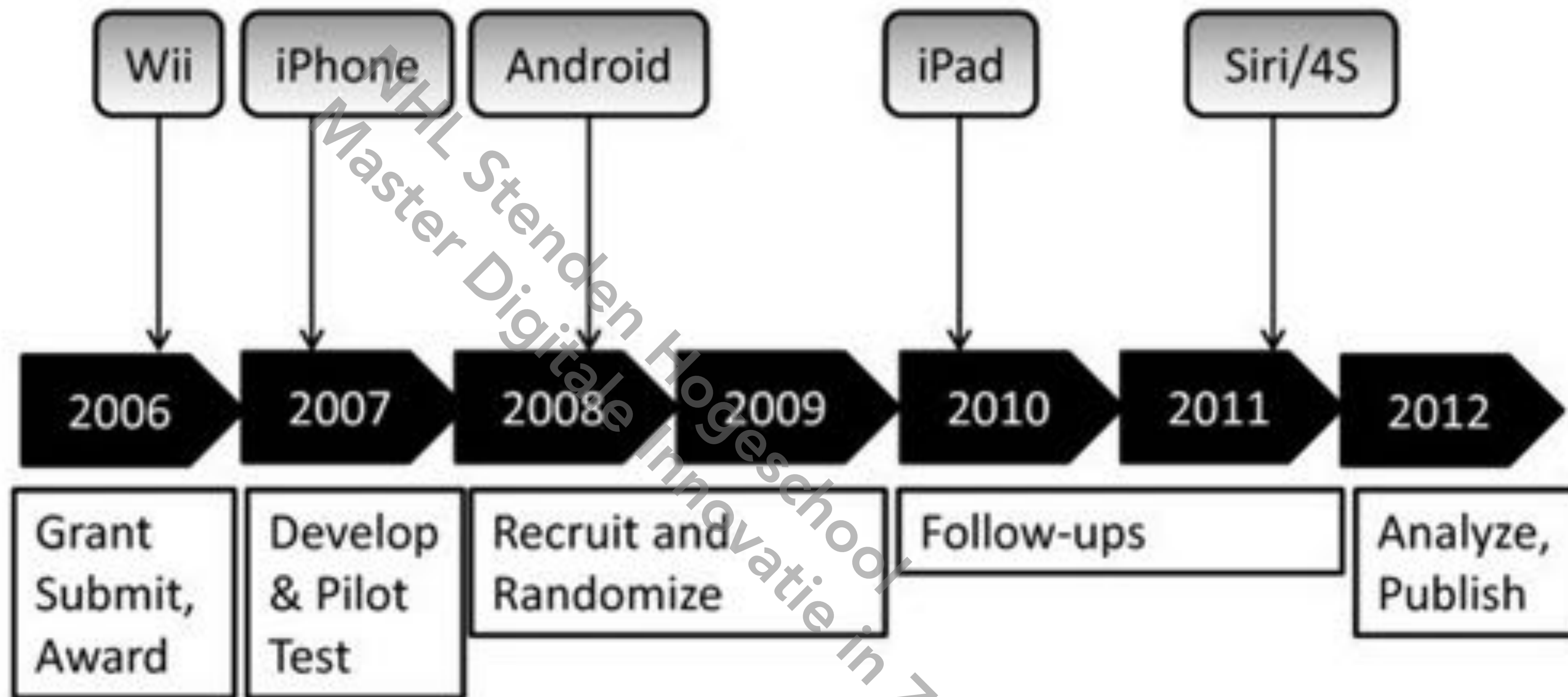
NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

← RESEARCH & INNOVATION →

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

STRUGGLE 1

Analytical Science vs. Design Science



“OUR CURRENT HEALTH RESEARCH ENTERPRISE IS PAINSTAKINGLY SLOW AND CUMBERSOME, AND ITS RESULTS SELDOM TRANSLATE INTO PRACTICE.”

-Riley W.T, Glasgow R.E, Etheredge L, Abernethy A.P.

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

**'THE ACT OF DESIGNING ITSELF IS
NOT AND WILL NOT EVER BE A
SCIENTIFIC ACTIVITY'**

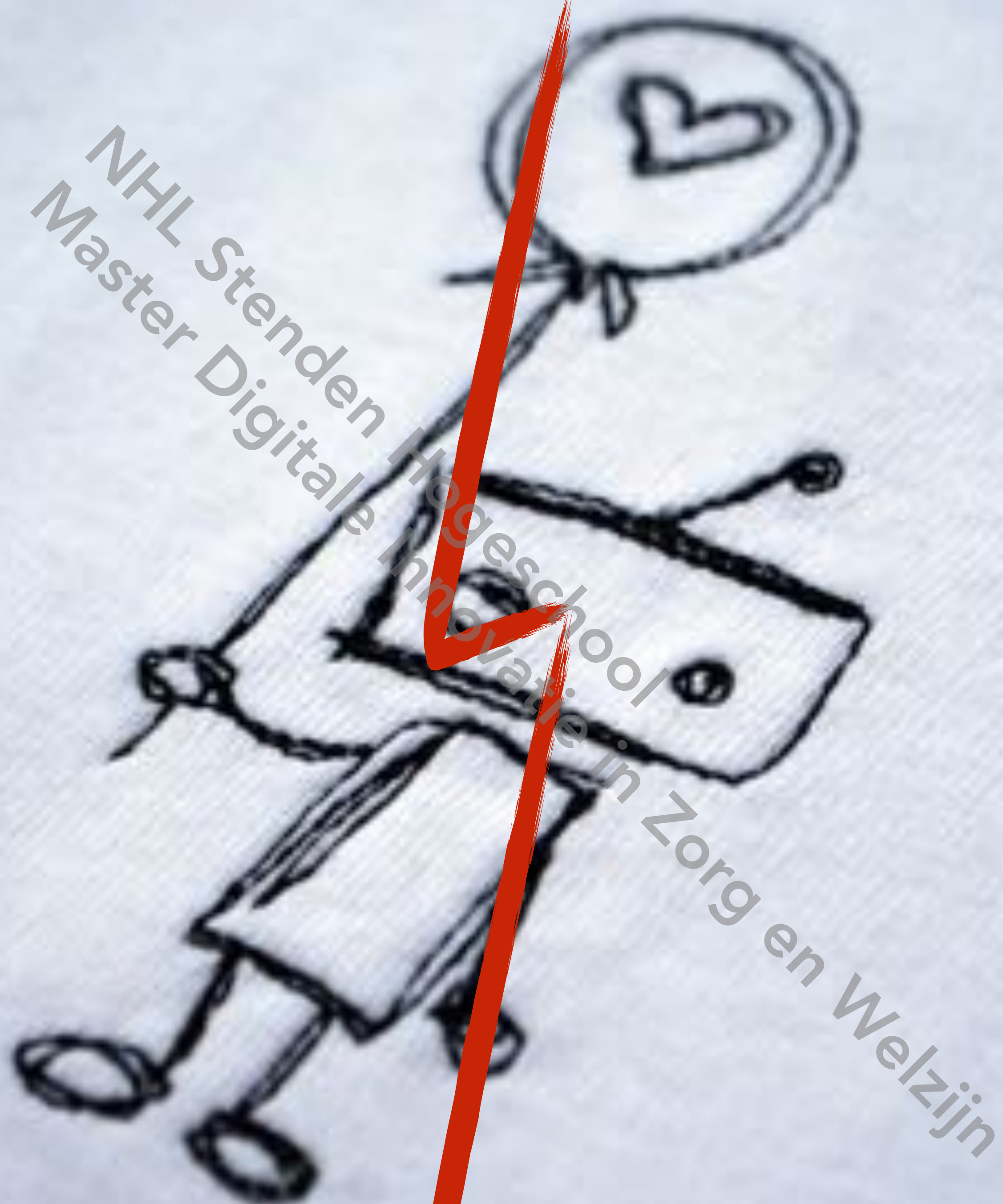
– D.P. Grant, Design Methodology and Design Methods. Design Methods and Theories 13, 46-47 (1979).

**'IT IS SIMPLY TOO MUCH TO DO BOTH
GOOD DESIGN, WITH A HAPPY CLIENT,
AND GOOD SCIENCE, WITH HAPPY PEERS'**

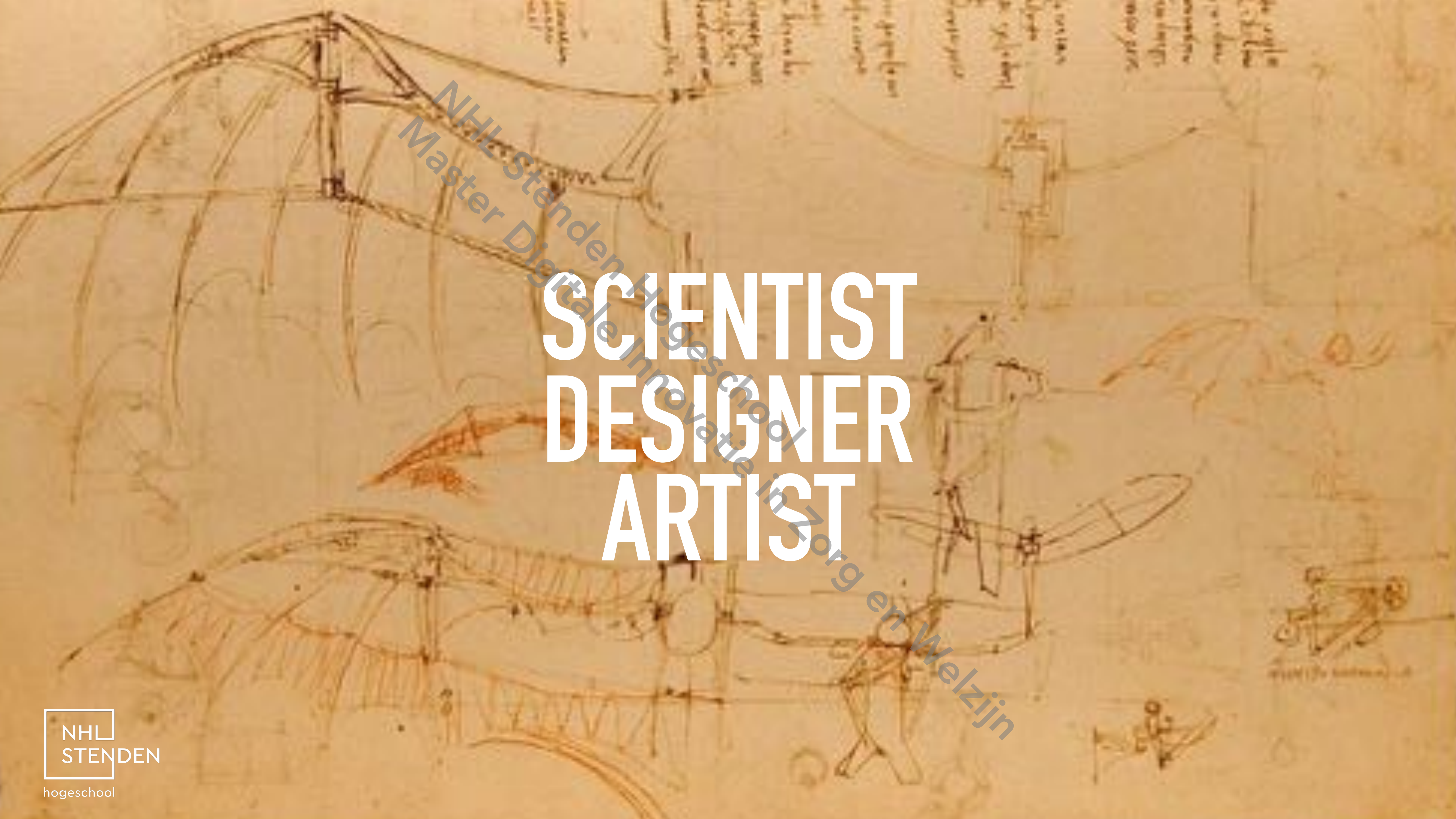
– D. Fallman, Why Research-Oriented Design Isn't Design-Oriented Research: On the Tensions Between Design and Research in an Implicit Design Discipline. Know Techn Pol 20,193–200 (2007).

INITIAL SEARCH: 19,565
DUPLICATES: 5226
TITEL & ABSTRACT: 26
STUDIES INCLUDED: 15

($n = .78$, 95% CI, 0.655 to 0.883)

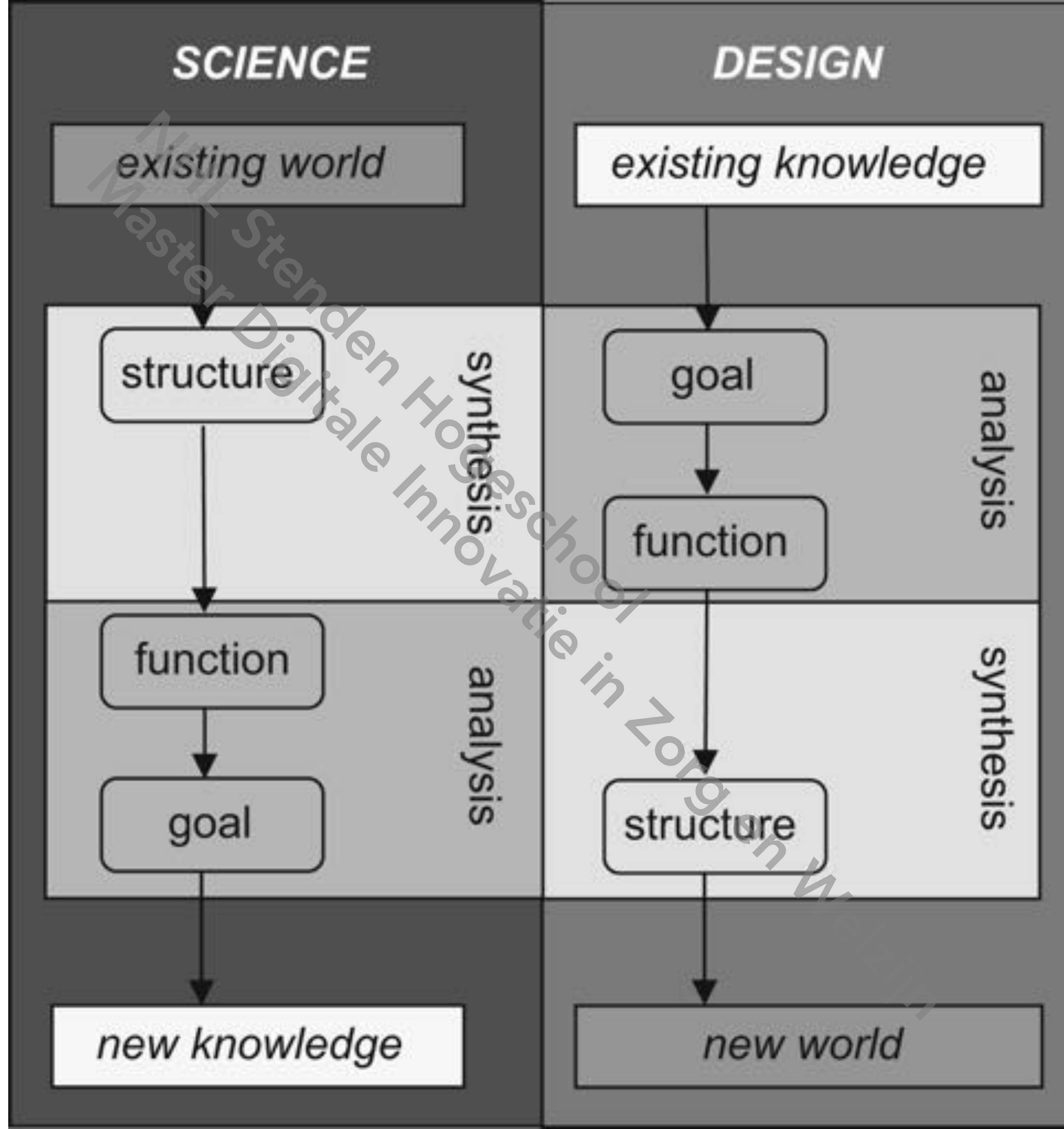


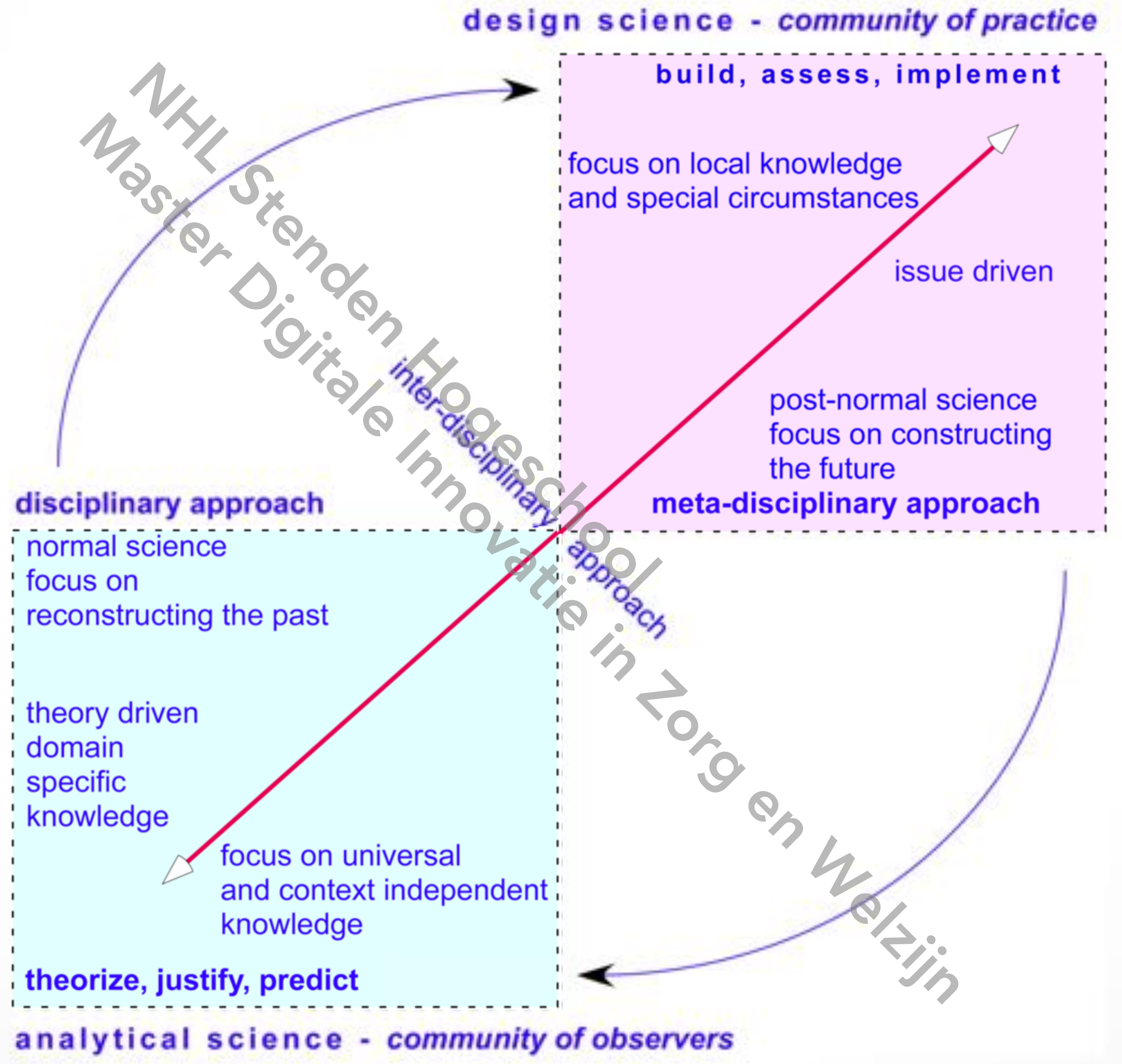
NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn



NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

SCIENTIST DESIGNER ARTIST





NHL Stenden Hogeschool
Master Digital Innovation
DESIGNER'S PARADOX

**WE CANNOT THINK ABOUT SOLUTIONS UNTIL
WE UNDERSTAND THE PROBLEM**

**WE CANNOT UNDERSTAND A PROBLEM UNTIL
WE THINK ABOUT SOLUTIONS**

DESIGN IS A WICKED PROBLEM

- Unstable Requirements and Constraints
- Complex Interactions among Subcomponents of Problem and resulting Subcomponents of Solution
- Inherent Flexibility to Change Artefacts and Processes
- Dependence on Human Cognitive Abilities - Creativity
- Dependence on Human Social Abilities - Teamwork

Hevner, Chatterjee (2010)

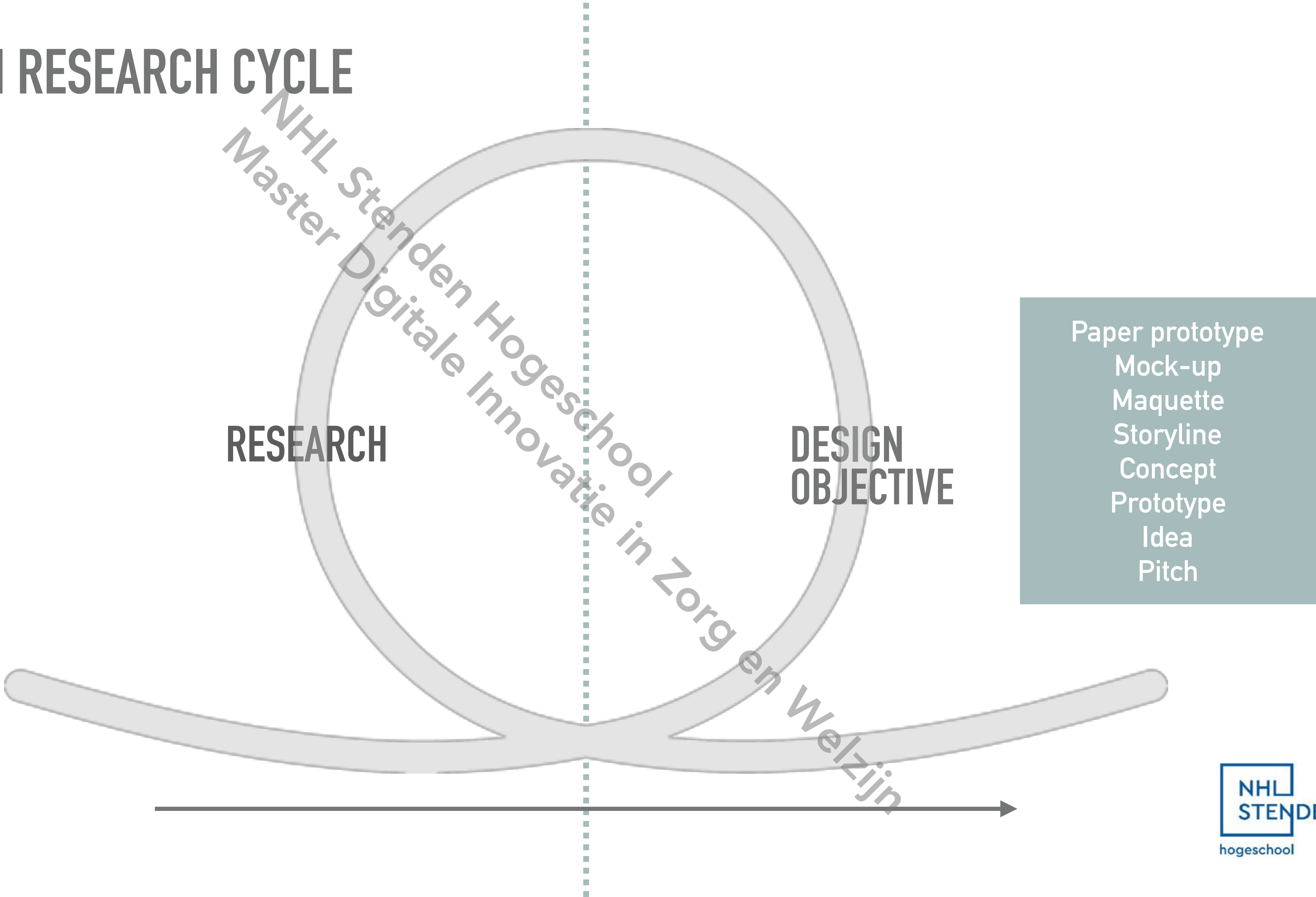
NHL Stenden Hogeschool
Master Digitale Innovatie en Welzijn

**'DESIGN IS CONCEIVING AND
GIVING FORM TO ARTEFACTS THAT
SOLVE PROBLEMS'**

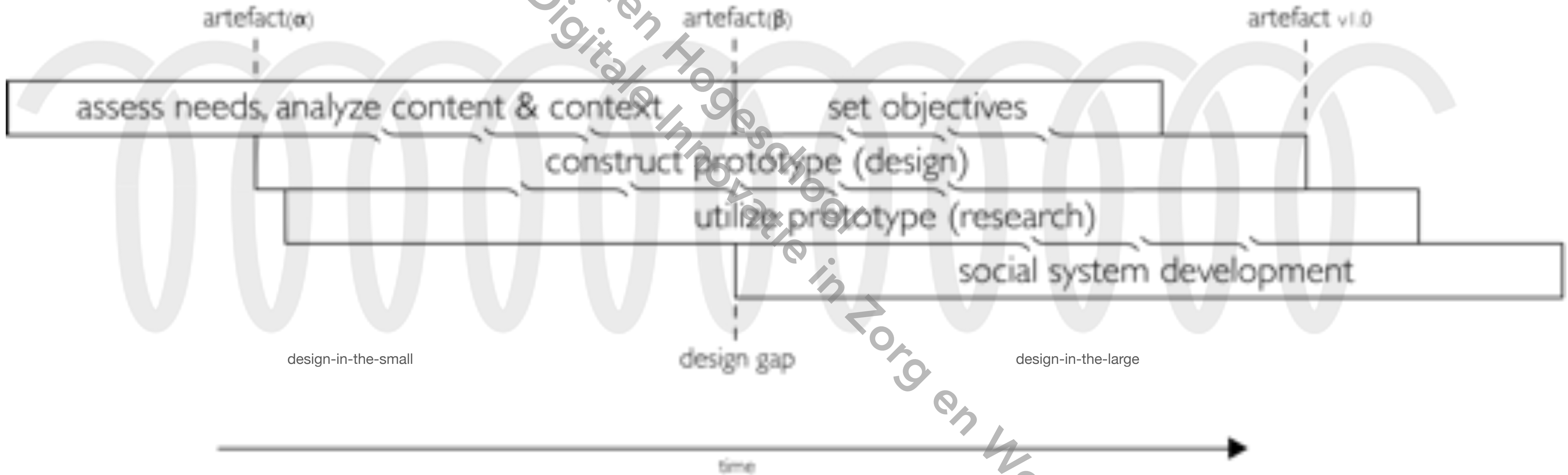
-Karl Ulrich

‘EEN ARTEFACT: DOOR MENSELIJK HANDELEN VOORTGEBRACHT DOELGERICHT EN BEWUST GECREËERD PRODUCT IN DE BREEDSTE ZIN VAN HET WOORD. EEN ARTEFACT KAN EEN FYSIEK PRODUCT, DIENST, SOFTWARE, VORMGEVING, GEBOUW, LANDSCHAP, ORGANISATIE OF PROCES ZIJN.’

DESIGN RESEARCH CYCLE

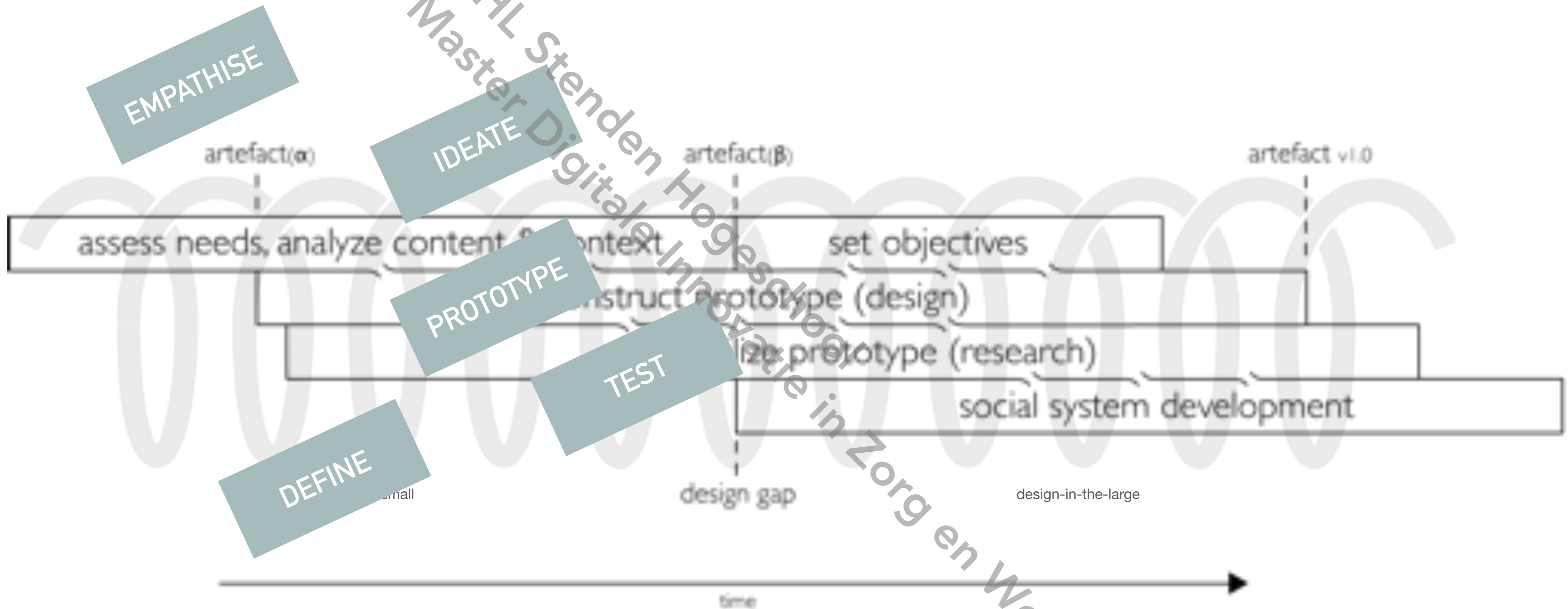


DESIGN RESEARCH FRAMEWORK



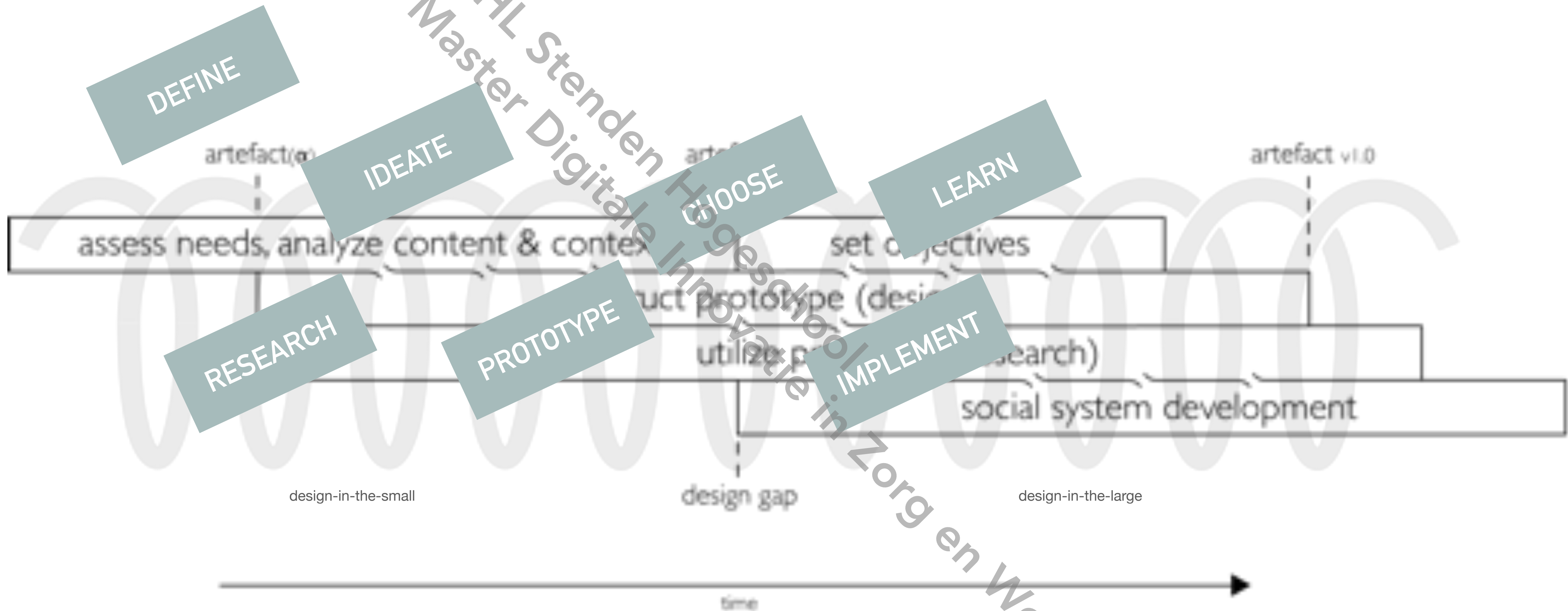
Kuipers, Terlouw, Wartena & Van Dongelen (2018)

Hasso-Plattner Institute of Design at (Stanford)



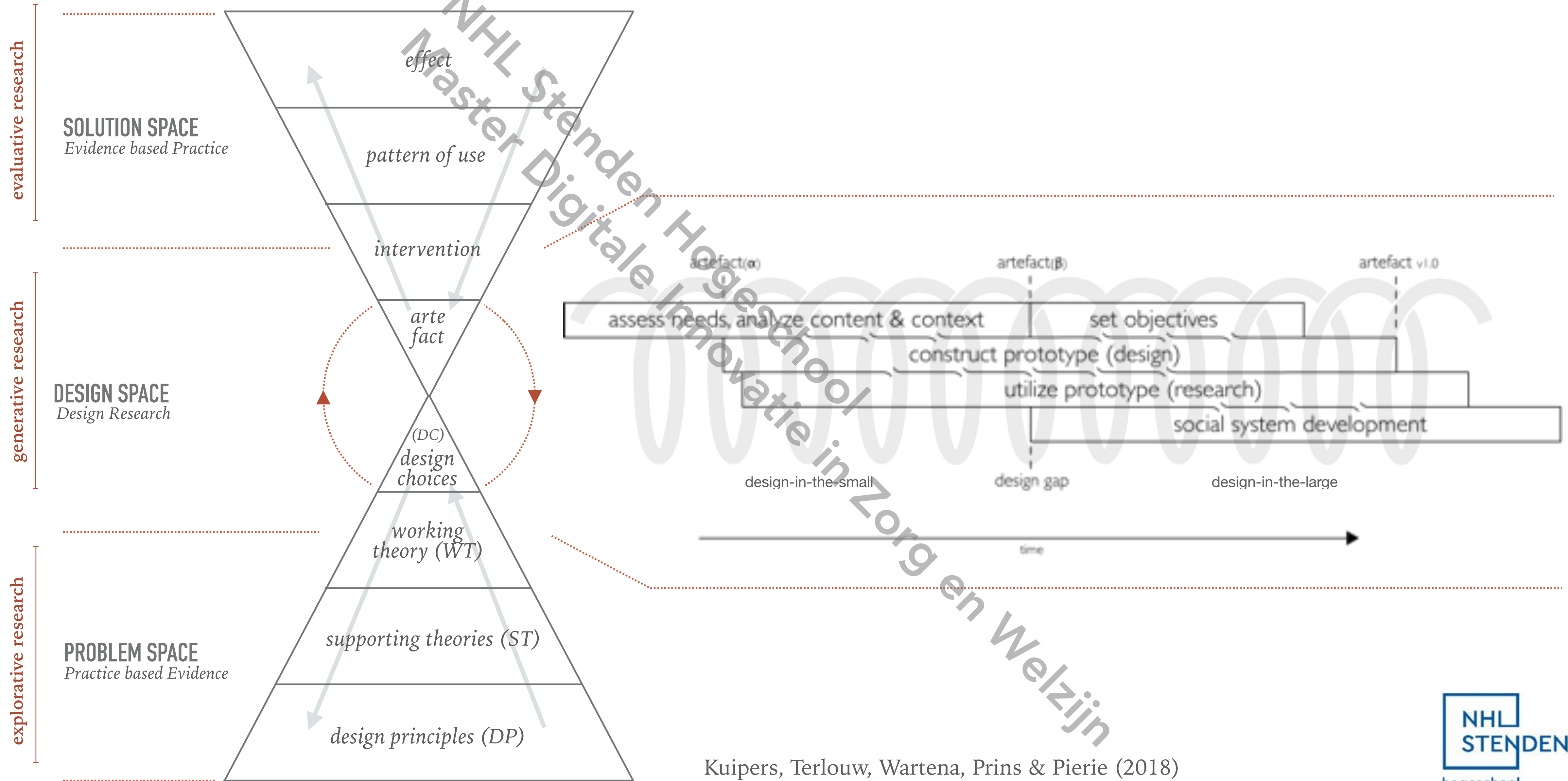
Kuipers, Terlouw, Wartena & Van Dongelen (2018)

The Sciences of the Artificial, Simon (1969)



Kuipers, Terlouw, Wartena & Van Dongelen (2018)

LAYERS IN SERIOUS MEDIA DESIGN & DESIGN RESEARCH FRAMEWORK



Kuipers, Terlouw, Wartena, Prins & Pierie (2018)

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

STRUGGLE 2

Commitment in Consistency binnen Team

topic

OPPORTUNISTIC

ITERATIVE, FOCUSES ON PURPOSE

END USERS AS EXPERTS

FOCUSES ON DEVELOPING

ADAPTED FROM MANY DISCIPLINES

INDIVIDUALS' RIGHTS

DIFFICULT TO PUBLISH OTHER THAN BASIC

DESIGN

ESTABLISHING THE STATE OF THE ART

LIFECYCLES

REQUIREMENTS AND DESIGN METHODS

IMPLEMENTATION

EVALUATION METHODOLOGIES

ETHICS

PUBLICATIONS

SYSTEMATIC

ITERATIVE, FOCUSES ON IMPACT

PROFESSIONALS AS EXPERTS

FOCUSES ON ROLL-OUT

RCT DOMINATES

HIGHLY REGULATED

VARIETY OF PAPER TYPES

HEALTH

NHL Stenden Hogeschool
Master Digitale Innovatie

TEAMSAMENSTELLING EEN DINGETJE

Wicked Circles | Meta-Disciplinary

in zorg en Welzijn

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

STRUGGLE 3

kalibreren

Zorg en Welzijn

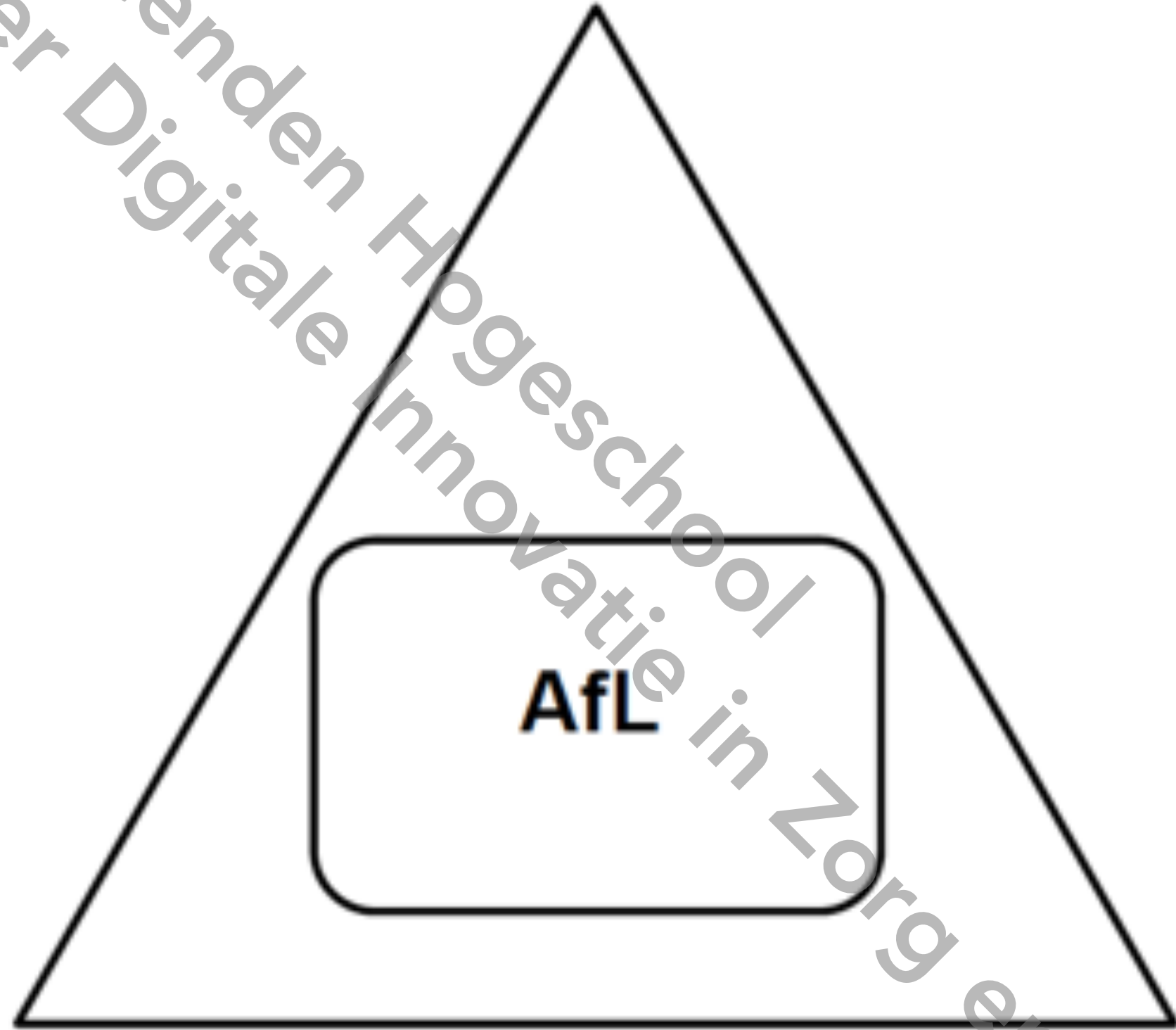
NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

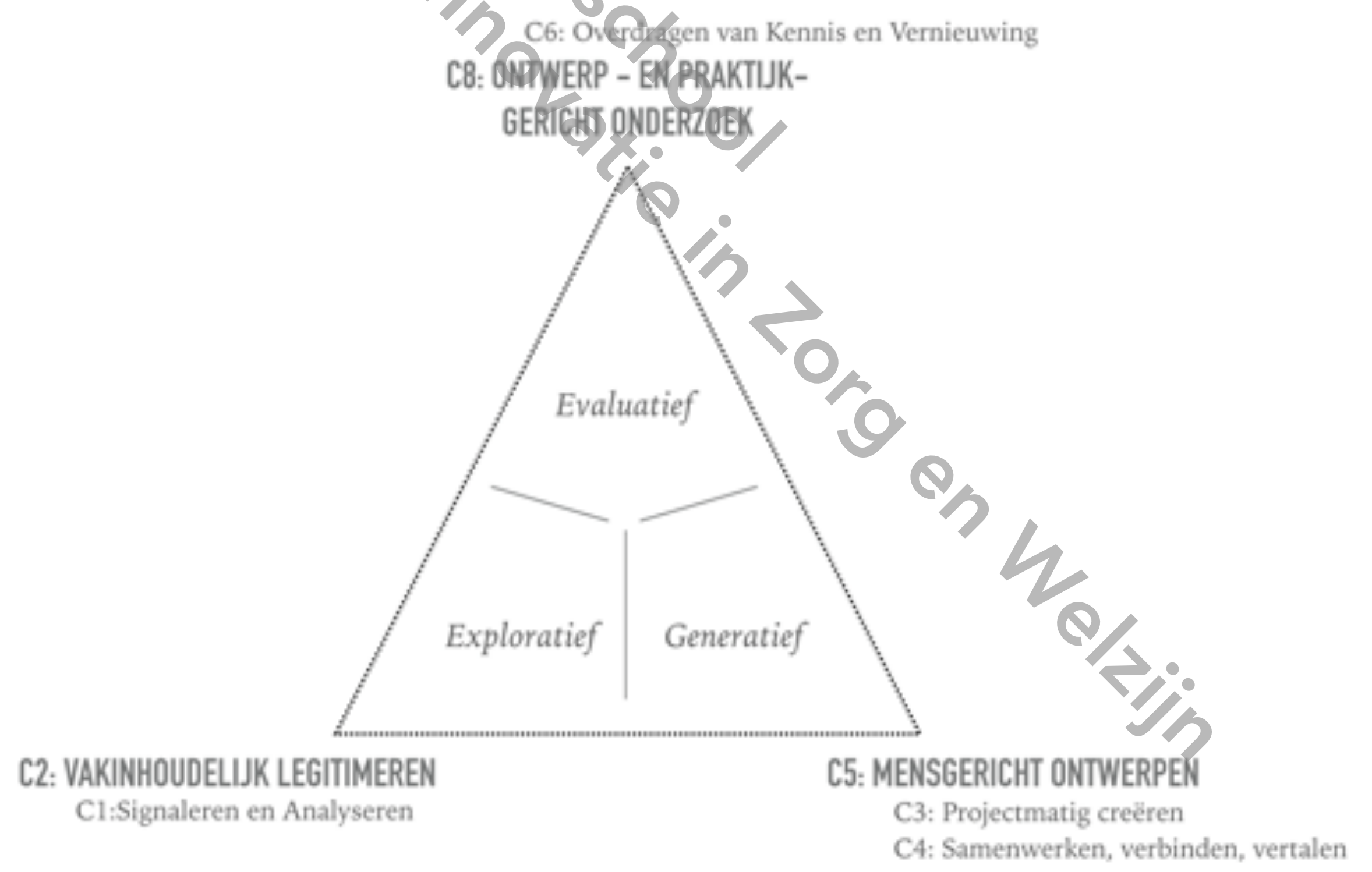
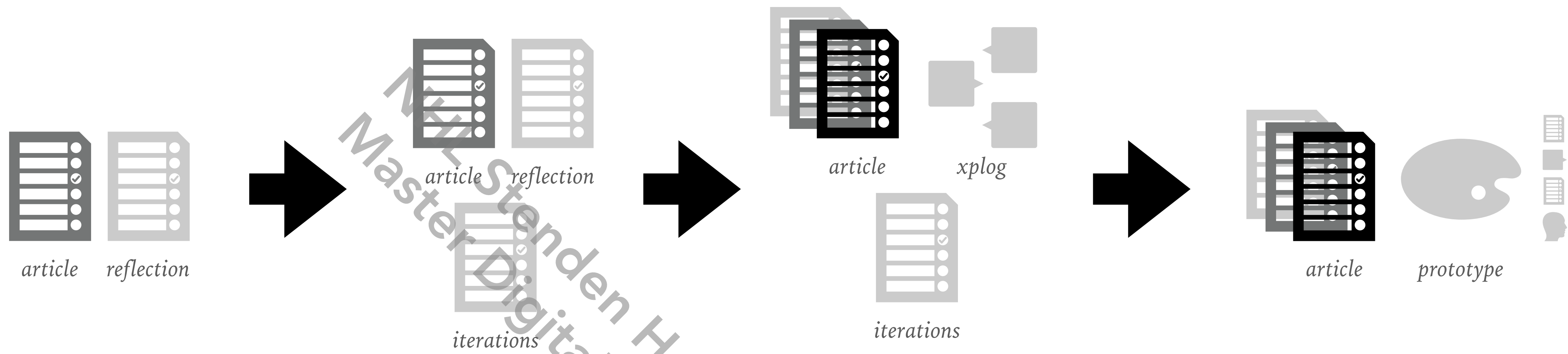
Proces=
XPLOG

AfL

Product=
DEELARTEFACTEN

Competentie groei=
NOTA



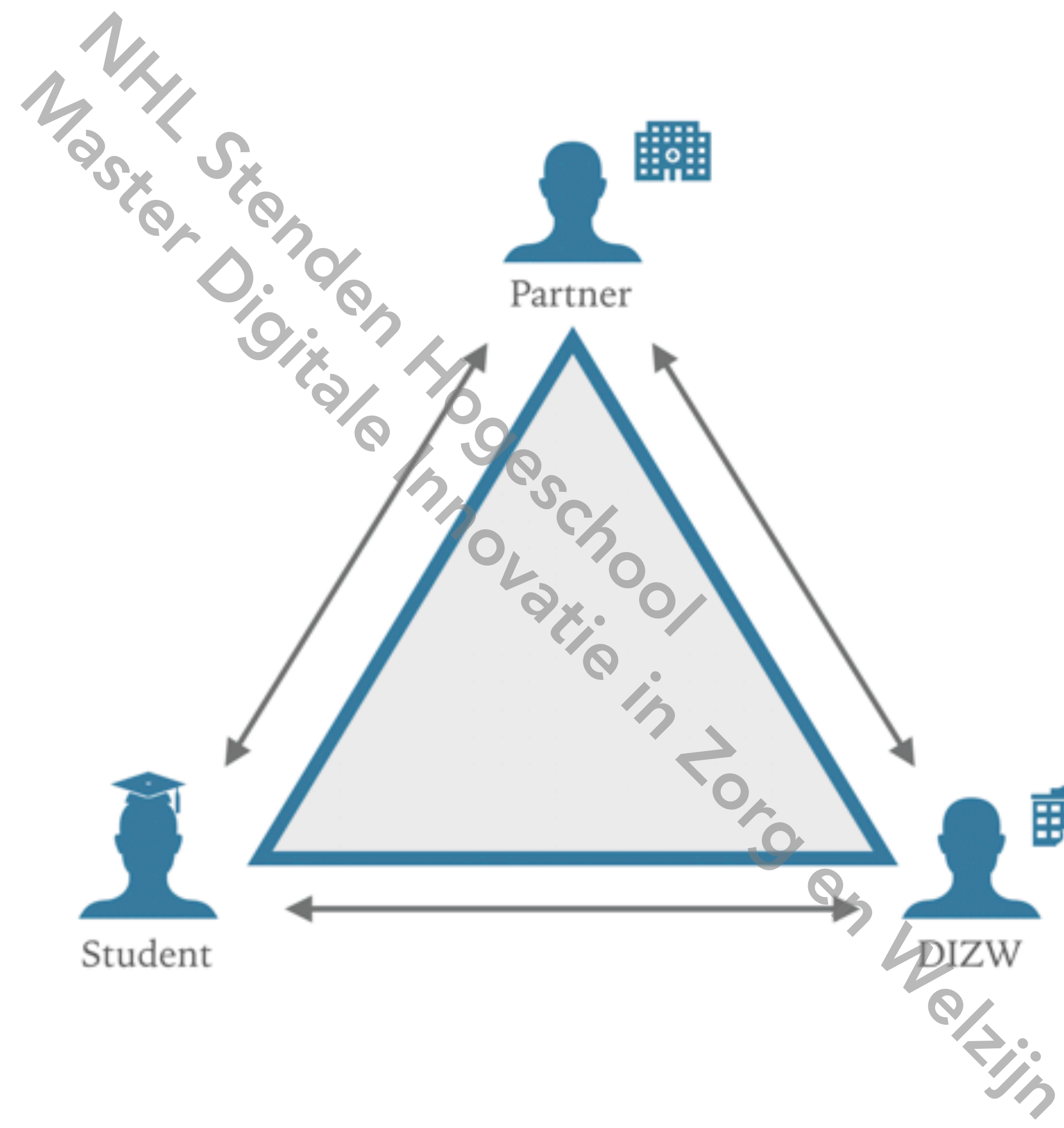


NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

STRUGGLE 4

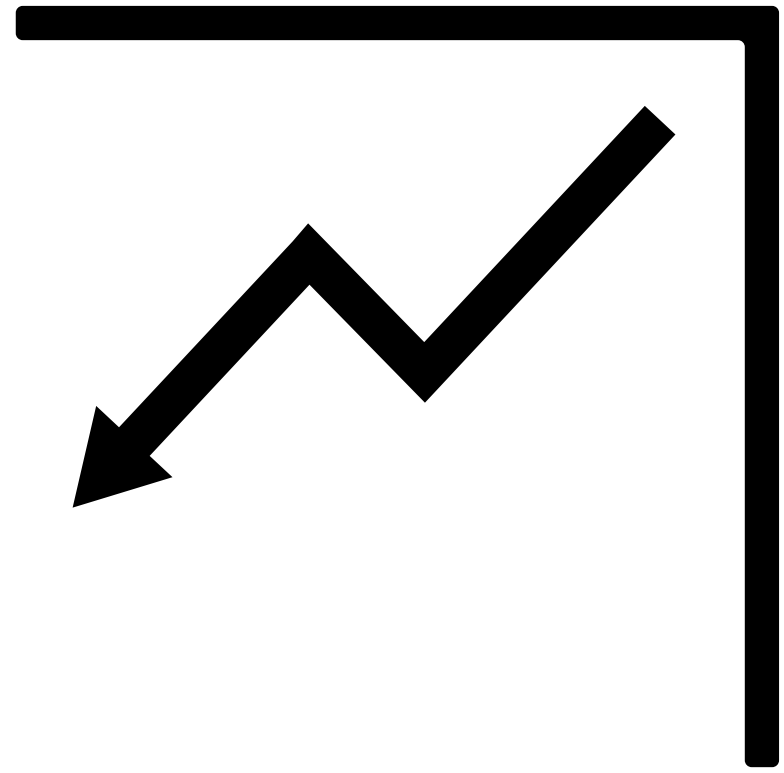
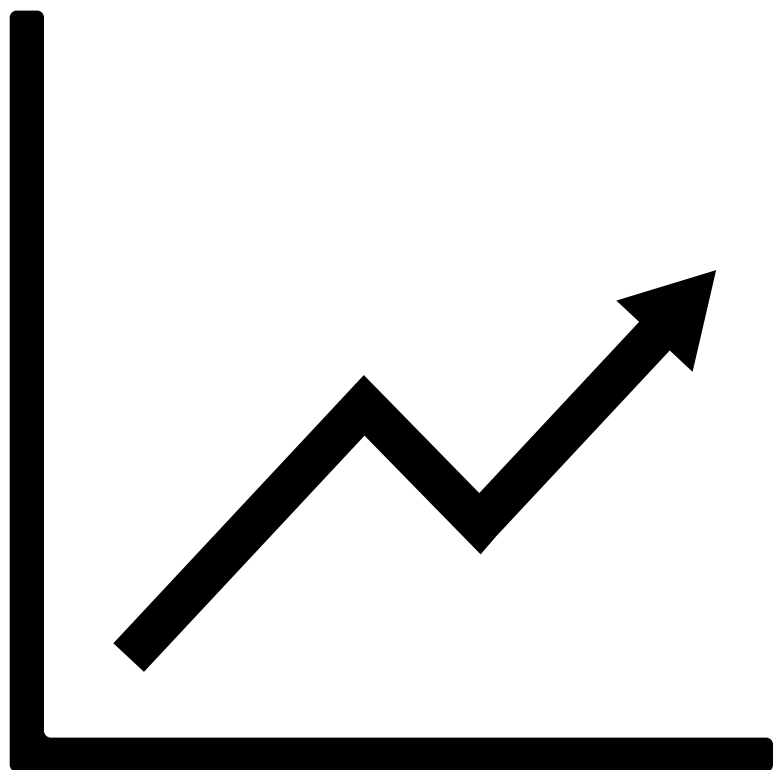
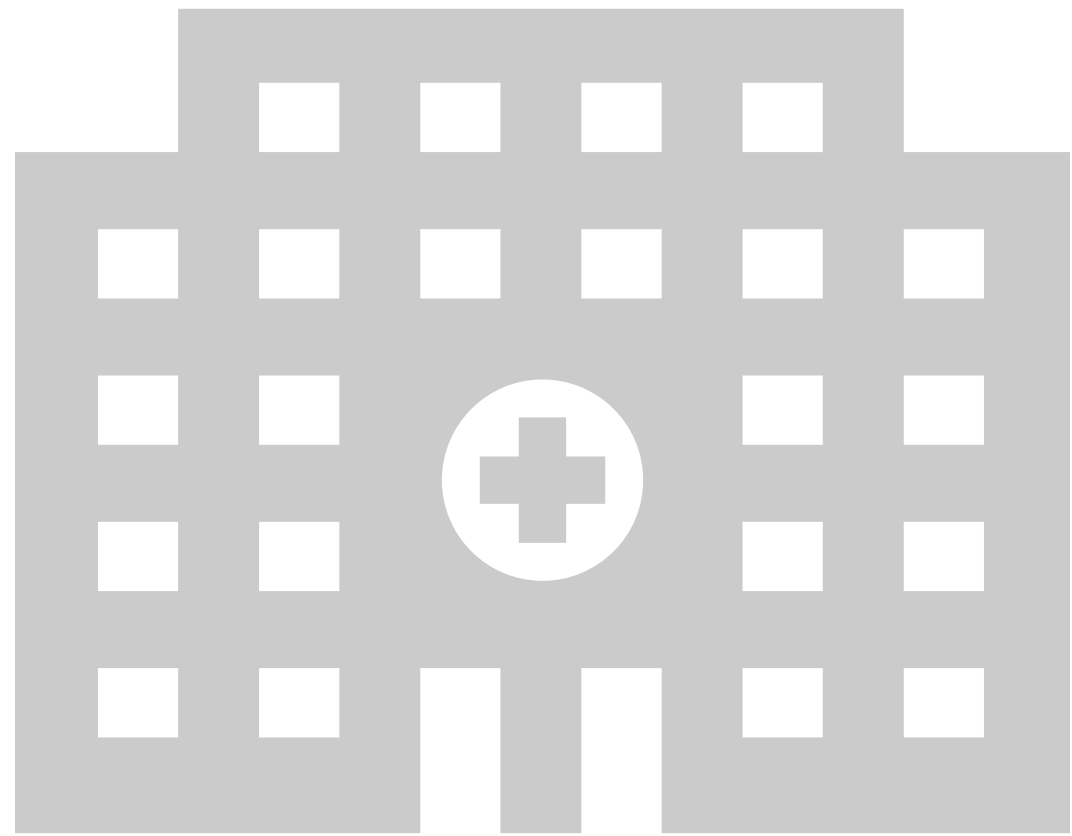
praktijk is weerbarstig

Zorg en Welzijn





NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn



NHL Stenden Hogeschool
Master Digitale Innovatie

ONBEGRIP

als in 'niet begrijpen'

in Zorg en Welzijn

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

BONUS STRUGGLE

domme vragen bestaan niet

“

Hoe zit het dan met betrouwbaarheid en validiteit?

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

“

Maar het masterniveau zit hem toch in
onderzoeksmethodologie?

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

“

Hoe waarborg je dan de objectiviteit van de onderzoeker?

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

“

Hoe zit het met generaliseerbaarheid van de onderzoeksresultaten?

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn

“

We hadden gehoopt geen thesis-achtig ding meer te zien, jullie zijn toch zo praktijkgericht?

NHL Stenden Hogeschool
Master Digitale Innovatie in Zorg en Welzijn