

Curriculum Vitae

Prof.dr. Henderik A. Proper

Version of: January 2, 2023

Contents

1	Details	3
2	Career overview	3
3	Research drive and research interests	4
4	Academic education	5
5	Command of languages	5
6	Awards and distinctions	5
7	Employment	6
8	Research funding	7
9	Academic leadership	9
10	Supervision of students	10
11	Reviewing	11
11.1	General	11
11.2	Conferences and workshops	11
11.3	Journals	14
12	Organising committee and editorships	14
12.1	Co-chairing of conferences and workshops	14
12.2	Steering & advisory committees	16
12.3	Editorships	16
13	Membership of professional organisations	17

14 Keynotes	17
15 Taught courses & lectures	18
16 Invited lectures	23
17 Leadership in teaching	24
18 Industrial leadership	25
19 Publications	26
19.1 Books	26
19.2 Edited Books	27
19.3 Chapters in Books	31
19.4 Journal Publications	33
19.5 Conference Publications	37
19.6 Technical Reports	60

1 Details

Titles: Prof. Dr.
Initials: H. A.
First name: Henderik
Surname: Proper
Short name: Erik
Date of birth: 22 May, 1967
Nationality: Dutch

E-Mail: henderik.proper@tuwien.ac.at
Website: www.erikproper.eu
ORCID: 0000-0002-7318-2496
Mobile: +352-621762041

Office: TU Wien
Favoritenstraße 9-11
A-1040 Vienna
Austria

Home: 52, Cité im Thaelchen
L-6145 Junglinster
Luxembourg



2 Career overview

Prof.dr. Henderik A. Proper, Erik for friends, is a Full Professor in Enterprise and Process Engineering in the Business Informatics Group at the TU Wien.

He is the co-author of a wide range of conference publications, chapters in books, journal papers, and books. During his career so-far, he supervised 15 as primary supervisor (promotor), and 4 as co-supervisor (fellow/co-promotor). Over the past ten years, he has regularly provided guest lectures within different MSc programmes offered by the University of Luxembourg (LU), the University of Lorraine (FR), TU Wien (AT), the University of Namur (BE), Antwerp University (BE), and TIAS (NL).

Erik has a mixed background, covering a variety of roles in both academia and industry. His core research drive is the development of *theories that work*. In other words, Erik focuses on research that leads to results that have both theoretical *rigour* and practical *relevance*. His general research interest concerns the foundations and applications of domain modelling. Over the past 20 years, he has applied this research drive and general research interest towards the further development of the field of enterprise engineering, and enterprise modelling in particular. His long experience in teaching and coaching a wide variety of people enables him to involve and engage others in this development.

Erik received his Master's degree from the University of Nijmegen, The Netherlands in May 1990, and received his PhD (with distinction) from the same University in April 1994. For his Doctoral thesis he developed a theory for conceptual modelling of evolving application domains, yielding a formal specification of evolving information systems.

After receiving his PhD, Erik became a senior research fellow at the Computer Science Department of the University of Queensland, Brisbane, Australia. During that period he also conducted research in the Asymetrix Research Lab at that University for Asymetrix Corp, Seattle, Washington. In 1995 he became a lecturer at the School of Information Systems from the Queensland

University of Technology, Brisbane, Australia. During this period he was also seconded as a senior researcher to the Distributed Systems Technology Centre (DSTC), a Cooperative Research Centre funded by the Australian government.

From 1997 to 2001, Erik worked in industry. First as a consultant at Origin, Amsterdam, The Netherlands, and later as a research consultant and principal scientist at the Ordina Institute for Research and Innovation, Gouda, The Netherlands.

In June 2001, Erik returned to academia, where he became an adjunct Professor at the Radboud University Nijmegen. In September 2002, Erik became a Professor at the Radboud University Nijmegen.

In January of 2008, he went back to combining industry and academia, by combining his Professorship with consulting and innovation at Capgemini, with the aim of more tightly combining his theoretical and practical work. Finally, in May 2010 Erik was awarded an FNR PEARL laureate, resulting in his move to the Luxembourg Institute of Science and Technology in Luxembourg. Until summer 2017, he continued his chair at the Radboud University Nijmegen in the Netherlands, in terms of an Adjunct Professorship. In June 2017, the latter was also transitioned to Luxembourg in terms of an Adjunct Professorship in in Data & Knowledge Engineering at the University of Luxembourg. In September 2018, Erik also became a (regular) Guest Professor at the Vienna University of Technology (TU Wien) in Austria.

As of January 2022, Erik is vice-chair of the IFIP 8.1 working group, while also being the representative for the Netherlands in IFIP's TC8 technical committee. He is also the Stellvertretender Sprecher (vice chair) of the EMISA working group of the German Computer Science Society (Gesellschaft für Informatik), as well as a member of the management team of the Enterprise Engineering Network.

Finally, in January 2023, Erik moved to the Vienna University of Technology (TU Wien) to take up a Full Professorship in Enterprise & Process Engineering within the Business Informatics Group.

3 Research drive and research interests

Erik's core research drive is the development of *theories that work*. In other words, Erik focuses on research that leads to results that have both theoretical *rigour* and practical *relevance*. His general research interest concerns the foundations and applications of domain modelling, including:

1. philosophical and linguistic foundations of modelling,
2. conceptualisation processes,
3. value of modelling, and the return on modelling effort (RoME),
4. domain, and purpose, specific modelling languages,
5. computer assisted modelling and modelling tools,
6. model mining and automatic model (in)validation,
7. model-based systems (models as “runtime” artefacts),
8. learning & teaching modelling.

In the past he applied this general interest towards the model-based aspects of *information systems engineering*, including:

1. data & information modelling,

2. information discovery and information markets,
3. cognitive match-making,
4. workflow modelling and business process modelling.

Around the turn of the century, he shifted the focus of his work to the model-based aspects of *enterprise engineering and architecting*, including:

1. enterprise (architecture) modelling in general, as well as modelling of specific aspects/concerns, including:
 - (a) business process modelling,
 - (b) business rules,
 - (c) architecture principles,
 - (d) role-based access control,
 - (e) value exchange and value co-creation,
 - (f) design rationale,
2. collaborative decision making and collaborative modelling,
3. enterprise (design) coherence.

4 Academic education

- **Degree:** PhD Computer science (Cum Laude = with distinction)
Institute: Radboud University, Nijmegen, the Netherlands
Year: 1994
- **Degree:** MSc Computer Science
Institute: Radboud University, Nijmegen, the Netherlands
Year: 1990

5 Command of languages

Language	Reading	Speaking	Writing
Dutch	Fluent	Fluent	Fluent
English	Fluent	Fluent	Fluent
German	Fluent	Fluent	Good

6 Awards and distinctions

- 2020, nominated “*Academic data leader*” by CDO Magazine, led by the MIT Sloan School of Management, on my work on conceptual modelling and enterprise modelling.
- 2014, awarded the “*NAF penning*”, by the Netherlands Digital Architecture Forum, recognising my work on Enterprise Architecture.
- 2012, awarded the “*IFIP Outstanding Service Award*”, recognising many years of service to IFIP Working Group 8.1, its associated events, and the wider IFIP community.

- 2010, awarded an FNR PEARL grant of 3.3 M€
- 1999, awarded the “*Best Lecturer Business-Informatics 1998/1999 award*” for a lecture series on Software Engineering at the University of Tilburg, the Netherlands.
- 1994, PhD received the “SNS Bank” award.
- 1994, PhD received the predicate Cum Laude (= with distinction) from the Radboud University, Nijmegen, the Netherlands.

7 Employment

- **Employer:** TU Wien
Function: Full Professor
Period: January 2023 – Present
- **Employer:** TU Wien
Function: Guest Professor
Period: September 2018 – December 2022
- **Employer:** University of Luxembourg
Function: Adjunct Professor
Period: June 2017 – December 2022
- **Employer:** Luxembourg Institute of Science and Technology, Luxembourg
Function: Senior Research Manager
Period: May 2010 – December 2022
- **Employer:** Radboud University, Nijmegen, the Netherlands
Function: Adjunct Professor
Period: January 2008 – January 2018
- **Employer:** Capgemini, Utrecht, the Netherlands
Function: Principal Consultant
Period: January 2008 – April 2010
- **Employer:** Radboud University, Nijmegen, the Netherlands
Function: Full-time Professor
Period: June 2001 – December 2007
- **Employer:** Ordina Institute, Gouda, the Netherlands
Function: Partner & Principal Scientist
Period: June 1998 – August 2001
- **Employer:** Origin, Amsterdam, the Netherlands
Function: Architect/Consultant
Period: June 1997 – June 1998
- **Employer:** Distributed Systems Technology Centre (DSTC), Brisbane, Australia
Function: Researcher, seconded from
Queensland University of Technology, Brisbane, Australia
Period: October 1995 – June 1997
- **Employer:** Queensland University of Technology, Brisbane, Australia
Function: Lecturer
Period: October 1995 – June 1997

- **Employer:** Asymetrix, Bellevue, Washington, USA
Function: Research consultant
Period: June 1994 – February 1995
- **Employer:** University of Queensland, Brisbane, Australia
Function: Senior research fellow
Period: May 1994 – October 1995
- **Employer:** Radboud University, Nijmegen, the Netherlands
Function: Junior researcher (AIO)
Period: May 1990 – May 1994
- **Employer:** HAN University, Arnhem, the Netherlands
Function: Part-time lecturer
Period: September 1992 – December 1993
- **Employer:** Radboud University, Nijmegen, the Netherlands
Function: Several tutorships
Period: September 1991 – June 1994

8 Research funding

- **Name:** CoBALab – Collaborative Business Analytics Laboratory
Source: FNR, Luxembourg
Size: Awarded funding: 400 K€. This project involves a collaboration between the National University of Singapore and Luxembourg Institute of Science and Technology, Luxembourg. The project, funded by the FNR, involved 3 fully funded PostDoc positions for two years, as well as an additional mobility grant.
Role: Main applicant
Year: 2016
- **Name:** An Integrative Design Framework for Business Innovation
Source: FNR, Luxembourg
Size: Awarded funding: 56 K€. A Mobility grant to support multiple (long-stay) research visits by Prof. Dr. Eng Chew from the University of Technology Sydney.
Role: Co-applicant
Year: 2014
- **Name:** ValCoLa – Value Co-creation Language
Source: FNR, Luxembourg
Size: Awarded funding: 1248 K€. This project involves a collaboration between the University of St. Gallen in Switzerland and Luxembourg Institute of Science and Technology, Luxembourg. The Luxembourg side of the project, funded by the FNR, involves 2 PostDocs and 1 Research Engineer for four years.
Role: Main applicant
Year: 2014
- **Name:** RationalArchitecture
Source: FNR, Luxembourg
Size: Awarded funding: 750 K€. This project involves a collaboration between the University of Luxembourg and Luxembourg Institute of Science and Technology, Luxembourg. The project, funded by the FNR, involved 2 PhD students and 1 PostDoc.
Role: Main applicant
Year: 2012

- Name:** ACET – Architectural Coordination of Enterprise Transformations

Source: FNR, Luxembourg

Size: Awarded funding: 934 K€ This project involves a collaboration between the University of St. Gallen in Switzerland and Luxembourg Institute of Science and Technology, Luxembourg. The Luxembourg side of the project, funded by the FNR, involved 2 PhD students, 2 PostDocs and 1 Research Engineer for three years.

Role: Main applicant

Year: 2011
- Name:** ASD – Agile Service Development

Source: Ministry of Economic Affairs, the Netherlands

Size: Awarded funding: 100 K€. This project was a follow up of the original ArchiMate project, and included next to LIST, Luxembourg, the following partners from the Netherlands: Be Informed, BiZZdesign, Everest, HU University of Applied Sciences Utrecht, IBM, Novay, O&i, PGGM, RuleManagement Group, Radboud University Nijmegen, TNO, Twente University, Utrecht University, and Voogd & Voogd. Funding was provided by the Dutch Government, and involved 1 PostDoc position at the LIST side for a year.

Role: Co-applicant

Year: 2010
- Name:** ASINE – Architecture-based Service Innovation in Networked Enterprises

Source: FNR Luxembourg

Size: Awarded funding: 3300 K€ This is a PEARL project, involving 4 PhD students, 2 PostDocs, 2 Research Engineers, and 1 Research Manager for a five year period.

Role: Main applicant

Year: 2010
- Name:** Strengthening ICT Training and Research Capacity in the Public Universities in Uganda

Source: Nuffic

Size: This project involves 30 PhD students, of which 15 were planned to obtain PhD's at Universities in the Netherlands.

Role: Co-applicant

Year: 2007
- Name:** Building a Sustainable ICT Training Capacity in the Public Universities in Uganda

Source: Nuffic

Size: This project involved 6 PhD students and 28 MSc students, where all students did do their respective degrees in the Netherlands

Role: Co-applicant

Year: 2005
- Name:** ArchiMate

Source: Dutch Ministry of Economic Affairs

Size: Consortium involving ABN-AMRO, ABP, CWI, Dutch Tax Office, Ordina, Leiden University, Radboud University and the Telematics Institute. The project ran for two years, and had an overall budget of 4500 K€.

Role: Initiator and co-applicant

Year: 2002

- Name:** PRONIR – Profile based retrieval of networked information resources
Source: Netherlands Organisation for Scientific Research
Size: This project involved two PhD Students and a Scientific Programmer, and was a collaboration between the University of Tilburg and the Radboud University
Role: Main applicant
Year: 2001
- Name:** Seeding Grant – Indexing Mechanisms for Information Discovery
Source: Queensland University of Technology
Size: AU\$ 7,000
Role: Main applicant
Year: 1996

9 Academic leadership

- 2021, chair of the assessment committee of a PhD defence, involving a cotutelle Université Paris-Saclay and the University of Luxembourg.
- 2016 – 2018, Head of Academic Affairs, Luxembourg Institute of Science and Technology, Luxembourg.
- 2017, member of the assessment committee for a position as Associate professor, Norwegian University of Science and Technology (NTNU), Norway.
- 2014, member of the assessment committee for a promotion to Associate Professor at the KTH (Royal Institute of Technology), Stockholm, Sweden.
- 2013, member of the assessment committee of Research & Collaboration, University of Skövde, Skövde, Sweden.
- 2011, member of the assessment committee for a promotion to Associate Professor at the KTH (Royal Institute of Technology), Stockholm, Sweden.
- 2010, member of the assessment committee for a promotion to Senior Lecturer, at the Faculty of Engineering Sciences Ben-Gurion University of the Negev, Israel.
- 2009, member of the assessment committee for a promotion to Full Professor at the KTH (Royal Institute of Technology), Stockholm, Sweden.
- 2007, member of the advisory board for the appointment of a Lecturer position within the Security of Systems group, Radboud University, Nijmegen, the Netherlands.
- 2004, member of the advisory board for the appointment of a Lecturer position within the Security of Systems group, Radboud University, Nijmegen, the Netherlands.
- 2004, member of the advisory board for the appointment of a Lecturer position within the Information Retrieval and Information Systems group, Radboud University, Nijmegen, the Netherlands.
- 2002, member of the advisory board for the appointment of an Associate Professor within the Information Retrieval and Information Systems group, Radboud University, Nijmegen, the Netherlands.
- 2002, member of the advisory board for the appointment of an Associate Professor within the Software Technology group, Radboud University, Nijmegen, the Netherlands.

10 Supervision of students

- More than forty Master Thesis projects as principal supervisor.
- More than five Bachelor Thesis as a principal supervisor.
- Primary supervisor for PhD Thesis:
 1. M. Mulder, *Enabling the automatic verification and exchange of DEMO models*, 2021, Radboud University, Nijmegen, the Netherlands.
 2. Y. Bobbert, *Improving the Maturity of Business Information Security*, 2018, Radboud University, Nijmegen, the Netherlands.
 3. M. Bjeković, *Pragmatics of Enterprise Modelling Languages: A Framework for Understanding and Explaining*, 2018, Radboud University, Nijmegen, the Netherlands.
 4. G. Plataniotis, *EA Anamnesis - A Conceptual Framework for Enterprise Architecture Rationalization*, 2017, Radboud University, Nijmegen, the Netherlands.
 5. R. Ettema, *Using triangulation in Lean Six Sigma to explain quality problems – An enterprise engineering perspective*, 2016, Radboud University, Nijmegen, the Netherlands.
 6. H. Faller, *Organisational Subcultures and Enterprise Architecture Effectiveness: an Explanatory Theory*, 2016, Radboud University, Nijmegen, the Netherlands.
 7. D. van der Linden, *Personal semantics of meta-concepts in conceptual modelling languages*, 2015, Radboud University, Nijmegen, the Netherlands.
 8. F. Tulinayo, *Combining System Dynamics with a Domain Modelling Method*, 2014, Radboud University, Nijmegen, the Netherlands.
 9. R. Wagter, Ordina, *Enterprise Coherence*, 2013, Radboud University, Nijmegen, the Netherlands.
 10. D. Ssebugwawo, *Analysis and Evaluation of Modelling Processes*, 2012, Radboud University, Nijmegen, the Netherlands.
 11. A. Nakakawa, *A Collaborative Process for Enterprise Architecture Creation*, 2012, Radboud University, Nijmegen, the Netherlands.
 12. S. Overbeek, E-Office, *Bridging Supply and Demand for Knowledge Intensive Tasks*, 2009, Radboud University, Nijmegen, the Netherlands.
 13. J. Nabukenya, *Improving the Quality of Organisational Policy Making using Collaboration Engineering*, 2009, Radboud University, Nijmegen, the Netherlands.
 14. B. van Gils, *Aptness on the Web*, 2006, Radboud University, Nijmegen, the Netherlands.
 15. S. J. B. A. Hoppenbrouwers, *Freezing Language – Conceptualisation Processes across ICT-Supported Organisations*, 2004, Radboud University, Nijmegen, the Netherlands.
- Co-supervisor for PhD Thesis:
 1. M. Borgers, *Are Architecture Principles Effective*, 2021, University of Maastricht, Maastricht, the Netherlands.
 2. I. Wilmont, *Cognitive Aspects of Conceptual Modelling*, 2020, Radboud University, Nijmegen, the Netherlands.
 3. M. Blaschke *Analysis and Design of Digital Value Co-creation Networks: Insights from Digital Platforms*, 2020, University of St. Gallen, St. Gallen, Switzerland.
 4. K. Leune, *Access Control and Service-Oriented Architectures*, 2007, Tilburg University, Tilburg, the Netherlands.
- Associate-supervisor for PhD Thesis:

1. A. P. Barros, *Conceptual Workflow Modelling*, University of Queensland, Brisbane, Australia, 1998.
2. L. J. Bird-Campbell, *Data reverse engineering: From a relational database system to a three-dimensional conceptual schema*, University of Queensland, Brisbane, Australia, 1997.

11 Reviewing

11.1 General

- > 40 MSc. and Bsc. Thesis.
- > 15 PhD Thesis.
- Two Habilitation Thesis:
 - 2018, Dr. Robert Pergl, Technical University Prague, Czech Republic.
 - 2014, Dr. Stephan Aier, University of St. Gallen, Switzerland.
- Reviewer of project proposals to e.g. the Dutch Research Council, the Belgian Research Foundation, and the Natural Sciences and Engineering Research Council of Canada.

11.2 Conferences and workshops

Regular PC memberships of:

- 2019 – present, *VENMO – Value and Quality of Enterprise Modelling*
- 2018 – present, *Modellierung 2018*
- 2012 – present, *ECIS – European Conference on Information Systems* (ECIS)
- 2012 – present, *iWI – International Conference on Wirtschaftsinformatik*
- 2012 – present, *VMBO – Value Modelling and Business Ontology*
- 2012 – present, *EI2N – Enterprise Integration, Interoperability and Networking*
- 2011 – present, *BITA – Workshop on Business and IT Alignment*
- 2011 – present, *CBI – IEEE Conference on Business Informatics*
- 2011 – present, *EDOC – IEEE Enterprise Computing Conference*
- 2011 – present, *RCIS – International Conference on Research Challenges in Information Science*
- 2011 – present, *SoEA4EE – Workshop on Service oriented Enterprise Architecture for Enterprise Engineering*
- 2010 – present, *ER – International Conference on Conceptual Modelling*
- 2008 – present, *EEWC – Enterprise Engineering Working Conference (formerly CIAO! workshop)*
- 2008 – present, *EEWC-DC – EEWC Doctoral Consortium (formerly CIAO! Doctoral Consortium)*

- 2007 – present, *CAiSE – International Conference on Advanced Information Systems Engineering*
- 2007 – present, *EMISA – Enterprise Modelling and Information Systems Architectures* workshop
- 2006 – present, *EMMSAD – Exploring Modelling Methods in Systems Analysis and Design* workshop
- 2005 – present, *FBM – Fact-Based Modelling (formerly ORM workshop on Object-Role Modelling)* workshop
- 2008 – present, *PoEM – Practise of Enterprise Modelling* working conference
- 2006 – 2020, *TEAR – Workshop on Trends in Enterprise Architecture Research*
- 2012 – 2016, *BPMS2 – Workshop on Social and Human Aspects of Business Process Management*
- 2010 – 2014, *DESRIST – DDesign Science Research in Information Systems and Technology* conference
- 2009 – 2013, *PRET – Practice-driven Research on Enterprise Transformation* working conference
- 2000 – 2004, *The National Architecture Congres (Landelijk Architectuurcongres)*
- 1999 – 2011, *ECDM – The Bi-Annual International Workshop on Evolution and Change in Data Management*

Further PC memberships include:

- 2021, *SISFAI*
- 2021, *ODCM-DT*
- 2021, *VORTE*
- 2021, *BITA*
- 2019, *ICIST*
- 2019, *IDEA*
- 2019, *BPM – Business Process Management Conference*
- 2019, *S-BPM ONE*
- 2018, *BIR*
- 2016, *ES*
- 2015, *CoBI*
- 2015, *ES*
- 2015, *ICIST*
- 2015, *S-BPM ONE*
- 2014, *CoBI*

- 2014, *MKWI*
- 2014, *MCIS*
- 2014, *QMMQ*
- 2014, *WEETM*
- 2013, *AMINO workshop*
- 2013, *CAiSE conference, Doctoral Consortium*
- 2013, *CAIW*
- 2013, *MeDMoT*
- 2013, *YAWL*
- 2012, *EIS*
- 2012, *MCIS*
- 2012, *MeDMoT*
- 2012, *MGC*
- 2011, *EIS*
- 2011, *IEEE CloudCom*
- 2011, *ME*
- 2011, *SOCA*
- 2010, *CRIWG*
- 2010, *HICCS*
- 2010, *PEAM*
- 2009, *CAiSE conference, Doctoral Consortium*
- 2009, *LAP – Language Action Perspective working conference*
- 2008, *ECMD*
- 2008, *ISREP*
- 2008, *ReMoD*
- 2008, *SIGSAND-EUROPE*
- 2007, *PhiCoMo*
- 2007, *SME – IFIP WG8.1 Working Conference on Situational Method Engineering: Fundamentals and Experiences*
- 2006, *ACDM workshop*
- 2006, *ACDM*
- 2006, *IFIP International Conference on The past and future of Information Systems: 1976-2006*
- 2000, *ADL – International conference on Advances in Digital Libraries*

11.3 Journals

Numerous papers submitted to journals, such as:

- Business Information Systems Engineering (Wirtschaftsinformatik)
- Computer Journal
- Enterprise Information Systems
- Enterprise Modelling and Information Systems Architectures
- Data & Knowledge Engineering
- IEEE Transactions on Data & Knowledge Engineering
- Innovations in Systems and Software Engineering
- Information Systems (Pergamon)
- Information Systems and e-Business Management
- International Journal of Cooperative Information Systems
- International Journal of Information System Modelling and Design
- International Journal on Concurrent Engineering Research and Applications.
- Journal of Interaction Science
- Journal of Strategic Information Systems
- Software and Systems Journal

12 Organising committee and editorships

12.1 Co-chairing of conferences and workshops

- 2022, industry co-chair of the *ER – International Conference on Conceptual Modeling*.
- 2021, co-chair of the: *EEWC – Enterprise Engineering Working Conference*.
- 2021, co-chair of the: *TEAR – Trends in Enterprise Architecture Research* workshop.
- 2021, general co-chair of the: *IEEE CBI – Conference on Business Informatics*.
- 2020, workshops co-chair of the: *CAiSE – Conference on advanced Information Systems Engineering*.
- 2020, General co-chair of the: *IEEE CBI – Conference on Business Informatics*.
- 2020, co-chair of the: *EEWC – Enterprise Engineering Working Conference*.
- 2019, workshops co-chair of the: *CAiSE – Conference on advanced Information Systems Engineering*.
- 2019, general chair of the: *PoEM - Practice of Enterprise Modelling* working conference.
- 2018, co-chair of a track at the *ECIS – European Conference on Information Systems*.

- 2018, programme committee co-chair of the: *CoopIS – Cooperative Information Systems* conference.
- 2018, programme committee co-chair of the: *IEEE CBI - Conference on Business Informatics*.
- 2018, co-chair of the: *EEWC – Enterprise Engineering Working Conference*.
- 2017, co-chair of the: *EEWC – Enterprise Engineering Working Conference*.
- 2015, co-chair of a track on enterprise transformation at the *ECIS – European Conference on Information Systems*.
- 2014, chair of the *EMMSAD – Exploring Modelling Methods for Systems Analysis and Design* working conference.
- 2014, programme committee co-chair of the: *IEEE CBI - Conference on Business Informatics*.
- 2013, chair of the *EMMSAD – Exploring Modelling Methods for Systems Analysis and Design* working conference.
- 2013, co-chair of a track on enterprise transformation at the *ECIS – European Conference on Information Systems*.
- 2013, co-chair of the *PRET – Working conference on Practice-driven Research on Enterprise Transformations*.
- 2012, chair of the *EMMSAD – Exploring Modelling Methods for Systems Analysis and Design* working conference.
- 2012, co-chair of a track on enterprise transformation at the *ECIS – European Conference on Information Systems*.
- 2012, co-chair of the *TEAR – Trends in Enterprise Architecture Research* workshop.
- 2011, chair of the *EMMSAD – Exploring Modelling Methods for Systems Analysis and Design* working conference.
- 2011, co-chair of the *PRET – Working conference on Practice-driven Research on Enterprise Transformations*.
- 2011, programme committee co-chair of the *CEC – Conference on Commerce and Enterprise Computing*.
- 2010, co-chair of the *CAiSE-Forum – Forum of the Conference on advanced Information Systems Engineering*.
- 2010, chair of the *EMMSAD – Exploring Modelling Methods for Systems Analysis and Design* working conference.
- 2010, general chair of the Enterprise Engineering Week, a week bringing together three events related to enterprise engineering: the PoEM working conference, PRET working conference and TEAR workshop.
- 2010, co-chair of a track on enterprise transformation at the *ECIS – European Conference on Information Systems*.
- 2010, co-chair of the *PRET – Working conference on Practice-driven Research on Enterprise Transformations*.

- 2010, chair of the *EMMSAD – Exploring Modelling Methods for Systems Analysis and Design* working conference.
- 2010, co-chair of the *TEAR – Trends in Enterprise Architecture Research* workshop.
- 2009, chair of the *EMMSAD – Exploring Modelling Methods for Systems Analysis and Design* working conference.
- 2009, co-chair of the *PRET – Working conference on Practice-driven Research on Enterprise Transformations*.
- 2008, chair of the *EMMSAD – Exploring Modelling Methods for Systems Analysis and Design* working conference.
- 2007, chair of the *EMMSAD – Exploring Modelling Methods for Systems Analysis and Design* working conference.
- 2006, chair of the *EMMSAD – Exploring Modelling Methods for Systems Analysis and Design* working conference.
- 2001, chairman of the: *The Ordina Round Table Conference on Knowledge Management for Flexible Project Teams*, Echteld, the Netherlands.
- 2001, organising committee member of the: *First Component Based Software Day*, CWI, Amsterdam, the Netherlands.
- 2000, chairman of the: *The Ordina Round Table Conference on Business-ICT alignment*, Echteld, the Netherlands.

12.2 Steering & advisory committees

- 2015 – present, advisory committee member of the *EMMSAD – Exploring Modelling Methods for Systems Analysis and Design* working conference.
- 2011 – present, steering committee member of the *IEEE CBI – Conference on Business Informatics*.
- 2010 – present, steering committee member of the *TEAR – Trends in Enterprise Architecture Research* workshop.
- 2015 – present, advisory board member of the *EEWC – Enterprise Engineering Working Conference*.

12.3 Editorships

Associate Editor of:

- 2013 – present, International Journal on Multidisciplinary Approaches to Innovation (IJ-MAI).
- 2012 – present, Business Information Systems Engineering (Wirtschaftsinformatik) Journal.
- 2009 – present, International Journal of Information System Modelling and Design.
- 2006 – present, Enterprise Modelling and Information Systems Architectures (EMISA) Journal.
- 2001 – present, International Journal of Cooperative Information Systems, World Scientific.

- 2002 – 2013, Data & Knowledge Engineering, North-Holland/Elsevier-Science.
- 2006 – 2010, Via Nova Architectura, on-line journal, <http://www.via-nova-architectura.org>.

Editor of:

- 2008 – present, series (founding) co-editor in chief of Springer's *Enterprise Engineering* series.
- 2016 – 2019, Journal of Organisational Design & Enterprise Engineering (OD&EE).
- 2008, a special issue of Enterprise Modelling and Information Systems Architectures focussing on Enterprise Architecture.

13 Membership of professional organisations

- Association for Computing Machinery (ACM)
- Gesellschaft für Informatik (GI)
- Deutscher Hochschulverband (DHV)
- International Federation of Information Processing (IFIP) 8.1 working group.

14 Keynotes

- 2021, *Enterprises as model-driven systems*, delivered at the *International Information Management Association (IIMA) Conference 2021*, Utrecht, the Netherlands.
- 2020, *Enterprise Systems Architectures – Essentials*, delivered at the *International Joint Conference on e-Business and Telecommunications (ICETE)*, Lieusaint, Paris, France.
- 2019, *Enterprise modelling in the digital age: Challenges and opportunities*, delivered at the *SoEA4EE workshop at the IEEE EDOC conference*, Paris, France.
- 2017, *Subject-oriented Modelling for Smart Systems*, delivered at the *S-BPM ONE*, Darmstadt, Germany.
- 2017, *Organisational Design & Enterprise Engineering: Two sides of the same coin?*, delivered at the *Innovations in Software Engineering Conference (ISEC)*, Jaipur, India.
- 2017, *Integrated Modelling Landscapes: What is realistic?*, delivered at the *Modelling Symposium (ModSym)*, Jaipur, India.
- 2015, *Model-enabled design in organisations*, delivered at the *INFORSID*, Biarritz, France.
- 2015, *Enterprise Engineering – Informed steering of enterprises in motion*, delivered at the *Annual Conference of the Associação Portuguesa de Sistemas de Informação (CAPSI)*, Lisbon, Portugal.
- 2014, *Understanding EE modelling-landscapes*, delivered at the *Business Modelling and Software Design (BMSD)*, Kirchberg, Luxembourg.
- 2014, *Enterprise Architecture and Process Improvement; How one may learn from the other*, delivered at the *EuroSPI*, Kirchberg, Luxembourg.

- 2013, *Enterprise Service Innovation*, delivered at the *International Conference on Enterprise Information Systems (ICEIS)*, Angers, France.
- 2012, *Enterprise Service Innovation*, delivered at the *IBM Big Data Analytics Day*, Frankfurt, Germany.
- 2012, *Enterprise Architecture – A guided tour between theory and practice*, delivered at the *Enterprise Architecture Symposium*, Stockholm, Sweden.
- 2012, *Engineering & Emergence in Enterprises – A story of 4 Es*, delivered at the *Enterprise Engineering Working Conference (EEWC)*, Kirchberg, Luxembourg.
- 2011, *Principles in an Enterprise Architecture Context*, delivered at the *The Open Group Conference*, Amsterdam, the Netherlands.
- 2010, *Architectures for Service Innovation*, delivered at the *The Open Group Conference*, Rome, Italy.
- 2009, *DEMO en Archimate*, delivered at the *EAM Congres*, Zeist, the Netherlands.
- 2009, *Clouds in an architecture perspective*, delivered at the *CIO Network*, Utrecht, the Netherlands.
- 2009, *Business Rules & Enterprise Modelling*, delivered at the *Business Rules Conferemce*, Utrecht, the Netherlands.
- 2008, *Quality in Model-driven*, delivered at the *VVSS*, Eindhoven, the Netherlands.
- 2006, *What is SoA?*, delivered at the *EuroForum 2006*, Utrecht, the Netherlands.
- 2004, *Informatiekunde; Exacte Vaagheid*, delivered at the *SIGCHI Dutch Chapter*, Utrecht, the Netherlands.
- 2003, *Sturen door Inzicht*, delivered at the *ICT Kenniscongres*, Den Haag, the Netherlands.
- 2002, *Should we stop acting like control freaks?*, delivered at the *Dutch Component Based Development workshop*, Den Haag, the Netherlands.
- 2001, *ActorWeb – Towards a deeper understanding of system architectures*, delivered at the *ICT Kenniscongres*, Den Haag, the Netherlands.

15 Taught courses & lectures

- **Title:** Enterprise Architecture
Period: 2018 – Present
Format: A 3ec course in a Master of Business Informatics
Organisation: TU Wien, Austria
- **Title:** Architecture and Business Strategy
Period: 2011 – Present
Format: A 3ec course in a Master in Information System Security Management
Organisation: University of Luxembourg, Luxembourg
- **Title:** Strategic Alignment and Business Modelling
Period: 2011 – Present
Format: A 3ec course in a Master in Informatics Methods Applied to Business Management
Organisation: University of Lorraine, France

- **Title:** Methods and Models for the Strategic Alignment of Business and IT
Period: 2018 – Present
Format: A 5ec course in a Master of Computer Science
Organisation: University of Namur, Belgium
- **Title:** Enterprise Architecture with ArchiMate & Friends
Period: 2019 – Present
Format: A two-day lecture in an Executive Master in Enterprise IT Architecture
Organisation: University of Antwerp, Belgium
- **Title:** Introduction to Enterprise Architecture
Period: 2011 – Present
Format: A one day lecture block in a Master on Information Management
Organisation: TiasNimbas Business School, the Netherlands
- **Title:** Enterprise Architecture Frameworks
Period: 2011 – 2019
Format: A one-day lecture in an Executive Master in Enterprise IT Architecture
Organisation: University of Antwerp, Belgium
- **Title:** Enterprise Architecture
Period: 2011 – 2014
Format: A two day lecture block in a Master on IT Governance
Organisation: Luxembourg Institute of Science and Technology, Luxembourg, Luxembourg
- **Title:** Business Service Innovation
Period: 2014 – 2016
Format: A quarter course in a Master of Business Informatics
Organisation: Radboud University, Nijmegen, the Netherlands, Luxembourg
- **Title:** Digital Enterprise Engineering
Period: 2014
Format: A two day PhD Course on Digital Enterprise Engineering
Organisation: University of Jyväskylä, Helsinki, Finland
- **Title:** Enterprise Architecture and Service Innovation
Period: 2012 – 2014
Format: A two day lecture block in a Master on IT and Innovation
Organisation: TU Wien, Austria
- **Title:** Architecture Principles and IT Governance
Period: Spring 2013
Format: A one day lecture block in an Executive Master on Enterprise Architecture
Organisation: TiasNimbas Business School, The Netherlands
- **Title:** Overview of TOGAF
Period: Spring 2010
Format: Two day workshop
Organisation: Capgemini, Utrecht, the Netherlands
- **Title:** TOGAF 9
Period: Fall 2009, Spring 2010
Format: Four course
Organisation: Capgemini, Utrecht, the Netherlands

- **Title:** ArchiMate
Period: Summer 2009, Fall 2009, Spring 2010
Format: Two day course
Organisation: Capgemini, Utrecht, the Netherlands
- **Title:** TOGAF 8
Period: Fall 2008, Summer 2009
Format: Four course
Organisation: Capgemini, Utrecht, the Netherlands
- **Title:** Information Architecture
Period: Fall 2009
Format: Series of eight lectures
Organisation: Radboud University, Nijmegen, the Netherlands
- **Title:** Business Rules
Period: 2007 – 2009
Format: Series of sixteen lectures
Organisation: Radboud University, Nijmegen, the Netherlands
- **Title:** Business Architecture
Period: Spring 2008, Spring 2009
Format: Three half-a day lecture blocks in an Executive Master on Enterprise Architecture: “*Master of Architecture in the Digital World*”
Organisation: A collaboration between:
 1. ABK, Radboud University, Nijmegen, the Netherlands
 2. ICIS, Radboud University, Nijmegen, the Netherlands
 3. Capgemini, Utrecht, the Netherlands
- **Title:** Introduction to Enterprise Architecture
Period: Spring 2005, Spring 2006, Fall 2007, Fall 2008
Format: Four half-a-day lecture blocks in an Executive Master on Enterprise Architecture “*Master of Architecture in the Digital World*”
Organisation: A collaboration between:
 1. ABK, Radboud University, Nijmegen, the Netherlands
 2. ICIS, Radboud University, Nijmegen, the Netherlands
 3. Capgemini, Utrecht, the Netherlands
- **Title:** Introduction to Enterprise Architecture
Period: Fall 2006, Fall 2007, Fall 2008
Format: Series of sixteen lectures
Organisation: Radboud University, Nijmegen, the Netherlands
- **Title:** Enterprise Modelling
Period: Spring 2004, 2005, 2006, 2007, 2008
Format: Series of sixteen lectures as part of a Bachelor of Information Systems
Organisation: Radboud University, Nijmegen, the Netherlands
- **Title:** System Theory – Structure & Coordination
Period: Spring 2004, 2005
Format: Series of eight lectures
Organisation: Radboud University, Nijmegen, the Netherlands

- **Title:** System Theory – Definition & Design
Period: Spring 2005
Format: Series of eight lectures
Organisation: Radboud University, Nijmegen, the Netherlands
- **Title:** Data & Information Modelling
Period: September 2002, 2003
Format: Two week course, of eight full-days
Organisation: Uganda Martyrs University, Nkozi, Uganda
- **Title:** Domain Modelling
Period: 2002
Format: Two day course
Organisation: Akzo Nobel, Arnhem, The Netherlands
- **Title:** Architecture of Information Systems 1
Period: Fall 2002
Format: Series of 12 lectures
Organisation: Radboud University, Nijmegen, the Netherlands
- **Title:** Architecture & Alignment
Period: Spring 2002, 2003
Format: Series of 12 lectures
Organisation: Radboud University, Nijmegen, the Netherlands
- **Title:** Software Engineering – 4
Period: Fall 2001
Format: Series of 12 lectures
Organisation: Radboud University, Nijmegen, the Netherlands
- **Title:** Masterclass KM
Period: Fall 2001, Spring 2002, Fall 2002, Spring 2003, Fall 2003
Format: Two full day modules
Organisation: Pro-Education, University of Professional Education, Amsterdam, The Netherlands
- **Title:** Introduction to Component-based Development and Application Architectures
Period: Summer 2000
Format: Two hours lecture
Organisation: Ordina Telecom, Bilthoven, The Netherlands
- **Title:** An architectural perspective on knowledge management
Period: Spring 2000
Format: One day course. Part of a Master of Knowledge Management curriculum.
Organisation: TIAS, University of Tilburg, Tilburg, The Netherlands
- **Title:** Project Start-Architecture - Technical annex for system development contracts
Period: Spring 2000
Format: Four course
Organisation: Dutch Taxation Office, The Netherlands
- **Title:** Component based development & Application architecture
Period: Spring 1999
Format: Series of 6 lectures
Organisation: University of Tilburg, Tilburg, The Netherlands

- **Title:** Introduction to knowledge discovery
Period: Fall 1998 and Spring 1999
Format: Half-a-day course
Organisation: Ordina Public, Zoetermeer, The Netherlands
- **Title:** An architectural perspective on knowledge management
Period: Fall 1998, Spring 1999, Fall 1999, Spring 2000
Format: Half-a-day course. Part of a two day course on knowledge management
Organisation: PAO-Informatica, The Netherlands
- **Title:** Application development under architecture
Period: Fall 1997 and Spring 1998
Format: Two day course
Organisation: ISES International, The Netherlands
- **Title:** Information & knowledge representation
Period: February 1997 to May 1997
Format: Series of 12 lectures
Organisation: Queensland University of Technology, Brisbane, Australia
- **Title:** Database design
Period: February 1996 to June 1996
Format: Series of 12 lectures
Organisation: Queensland University of Technology, Brisbane, Australia
- **Title:** File structures
Period: August 1995 to December 1995 and August 1996 to December 1996
Format: Series of 12 lectures
Organisation: Queensland University of Technology, Brisbane, Australia
- **Title:** Database design & Conceptual modelling 2
Period: August 1995 to December 1995
Format: Series of 12 lectures
Organisation: University of Queensland, Brisbane, Australia
- **Title:** Database design & Conceptual modelling 1
Period: February 1995 to May 1995
Format: Series of 12 lectures
Organisation: University of Queensland, Brisbane, Australia
- **Title:** Evolving information systems
Period: Spring 1993 and 1994
Format: Guest lecture
Organisation: Radboud University, Nijmegen, the Netherlands
- **Title:** System development methods
Period: Fall 1992 and 1993
Format: Series of 6 lectures
Organisation: HAN University, Arnhem, the Netherlands
- **Title:** CASE Tools
Period: Fall 1992 and 1993
Format: Series of 6 lectures
Organisation: HAN University, Arnhem, the Netherlands

16 Invited lectures

- 2021, *Informed Governance of Enterprise Transformations*, guest lecture at the *EA Debt Student Workshop*, Frankfurt University of Applied Sciences, Frankfurt, Germany.
- 2020, *Domain Modelling – Understanding the things we talk about*, guest lecture at the *CSE Distinguished Seminar Series*, TU Lisbon, Portugal.
- 2020, *Domain Modelling – Understanding the things we talk about*, guest lecture at the *LISTen up! webinar*, Luxembourg Institute of Science and Technology, Belval, Luxembourg.
- 2020, *Enterprise Systems Architectures – Essentials*, guest lecture at the *LISTen up! webinar*, Luxembourg Institute of Science and Technology, Belval, Luxembourg.
- 2019, *Grounded Enterprise Modelling*, guest lecture at the *NEMO Summer School*, Vienna University, Austria.
- 2019, *Fundamental challenges in systems modelling*, guest lecture at the *University of St. Gallen*, Switzerland.
- 2018, *Towards grounded enterprise modelling*, guest lecture at the *University of Bozen/Bolzano*, Italy.
- 2018, *Grounded Enterprise Modelling*, guest lecture at the *NEMO Summer School*, Vienna University, Austria.
- 2017, *Grounded Enterprise Modelling*, guest lecture at the *NEMO Summer School*, Vienna University, Austria.
- 2017, *Enterprise Engineering – Scope & Challenges*, guest lecture at the *Higer School of Economics*, Nizhny Novgorod, Russia.
- 2017, *EA in 60 minutes*, guest lecture at the *Allianz*, München, Germany.
- 2015, *SmartChange for Organisations in Motion*, guest lecture at the *Utrecht University*, Utrecht, the Netherlands.
- 2015, *Model-enabled design in organisations*, guest lecture at the *National University of Singapore*, Singapore.
- 2014, *Informed steering of enterprises in motion*, guest lecture at the *CNAM*, Paris, France.
- 2014, *Enterprise Architecture – Informed steering of enterprises in motion*, guest lecture at the *University of Jyväskylä*, Helsinki, Finland.
- 2012, *Architecture-based Service Innovation*, guest lecture at the *Queensland University of Technology*, Brisbane, Australia.
- 2011, *Enterprise Architecture: A means for Informed Governance of Enterprise Transformations*, guest lecture at the *BGL*, Kirchberg, Luxembourg.
- 2011, *Architecture Principles – The Cornerstone of Enterprise Architecture*, guest lecture at the *Capgemini*, Utrecht, the Netherlands.
- 2011, *Architecture Modelling: Why, What, How*, guest lecture at the *SAP Netherlands*, Den Bosch, the Netherlands.
- 2011, *Architecture Modelling: Why, What, How*, guest lecture at the *Club Urba*, Paris, France.

- 2010, *Enterprise Architecture – Creating value by informed governance*, guest lecture at the IDC, Lisbon, Portugal.
- 2010, *Architecture-based Service Innovation in Networked Enterprises*, guest lecture at the Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany.
- 2009, *Information Architecture*, guest lecture at the HAN University of Applied Sciences, Arnhem, the Netherlands.
- 2009, *Enterprise Architecture – A guided tour between theory and practice*, guest lecture at the Ahold, Amsterdam, the Netherlands.
- 2009, *Architectuur in de Digitale Wereld*, guest lecture at the HU University of Applied Sciences, Utrecht, the Netherlands.
- 2009, *Architecture as a means for Informed Governance*, guest lecture at the NAF Insights, Zeist, the Netherlands.
- 2008, *Business rules & architecture principles: Common roots; yet differing roles*, guest lecture at the Radboud University, Nijmegen, the Netherlands, Caput College.
- 2005, *The act of modeling: Context and understanding*, guest lecture at the University of Duisburg-Essen, Duisburg, Germany.
- 2004, *Domain Modelling – Anchoring semantics in information systems engineering*, guest lecture at the SIKS Doctoral School, Vught, the Netherlands.
- 2003, *Architecture-driven System Development – A system theory perspective*, guest lecture at the SIKS Doctoral School, Vught, the Netherlands.

17 Leadership in teaching

- 2008 – present, Member of the Advisory Board of the Master of Informatics, HU University of Applied Science, Utrecht, the Netherlands.
- 2011, Chair of an accreditation committee of the Dutch/Flemish Accreditation Organisation (NVAO), Pertaining to an Executive Master on Information Management, TiasNimbas Management School.
- 2011, Chair of an accreditation committee of the Dutch/Flemish Accreditation Organisation (NVAO), pertaining to a Master program on Public Information Management of the Erasmus Universiteit, the Netherlands.
- 2010, Chair of an accreditation committee of the Dutch/Flemish Accreditation Organisation (NVAO), Pertaining to a BSc program on Information Technology, of the Open University, the Netherlands.
- 2010, Chair of an accreditation committee of the Dutch/Flemish Accreditation Organisation (NVAO), Pertaining to an MSc program on IT Governance of the Open University, the Netherlands.
- 2009, Member of an accreditation committee of the Dutch/Flemish Accreditation Organisation (NVAO), Pertaining to an MSc program on Enterprise IT Architecture from Inno.com in Belgium.
- 2004 – 2008, Program coordinator, Master of Architecture in the Digital World (part time program), Consortium of Radboud University, Nijmegen, the Netherlands and Capgemini, Utrecht, the Netherlands.

- 2002 – 2007, Theme leader of the Architecture-driven System Development research focus of the post-graduate school: *Research School for Information and Knowledge Systems (SIKS)*.
- 2004 – 2007, Member of Teaching Committee (Onderwijscommissie) of the NIII, Radboud University, Nijmegen, the Netherlands.
- 2007, Leader of the PR revitalisation committee, aimed at the revitalisation of PR activities towards high schools in order to attract more students, NIII, Radboud University, Nijmegen, the Netherlands.
- 2002 – 2003, Leader of the curriculum development team for the Business Informatics MSc. and BSc. Program (Curriculum 2003) at Radboud University, Nijmegen, the Netherlands.
In its first accreditation (2007), this program was evaluated as the best among three public Universities in the Netherlands offering such programmes.
- 2002 – 2004, Program coordinator, Information Science Program, Radboud University, Nijmegen, the Netherlands.
- 2002, Member of the Information Technology curriculum advisory board for the Hogeschool van Amsterdam/Brabant, Amsterdam, the Netherlands.

18 Industrial leadership

- 2021 – present, Member of the Academic Advisory Board of the Business Architecture Guild.
- 2008 – 2012, Vice-chair of the ArchiMate forum of the The Open Group.
- 2009 – 2012, Member of the Business Architecture Certification working group, The Open Group.
- 2007 – 2012, Member of the advisory committee of Ordina's GEA (Generic Enterprise Architecting) Innovation Platform.
- 2008 – 2012, Vice-chair of the ArchiMate forum of The Open Group.
- 2002 – 2003, 2007 – 2010, Co-founder and board member of Netherlands Architecture Forum (NAF).
- 2010 – 2010, Label-leader for the Architecture Domain, Capgemini Academy, Utrecht, the Netherlands.
- 2008 – 2010, Leader of the Architecture Service-Line, Capgemini, Utrecht, the Netherlands.
- 2002 – 2003, 2007 – 2010, Co-founder and board member of the Netherlands Architecture Forum (NAF).
- 2009 – 2010, Leader of the Architecture Expert Group within Financial Services, Capgemini, Utrecht, the Netherlands.
- 2007 – 2008, Co-founder, board member and treasurer of the ArchiMate foundation.

19 Publications

19.1 Books

1. H. A. Proper, R. Winter, S. Aier, and S. de Kinderen, editors. *Architectural Coordination of Enterprise Transformation*. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 2018. ISBN: 978-3-319-69583-9
doi:10.1007/978-3-319-69584-6
2. M.-E. Iacob, H. Jonkers, M. M. Lankhorst, H. A. Proper, and D. A. C. Quartel. *ArchiMate 2.1 Specification*. The Open Group, 2013. ISBN: 9789401800037
3. M.-E. Iacob, H. Jonkers, M. M. Lankhorst, H. A. Proper, and D. A. C. Quartel. *ArchiMate 2.0 Specification*. The Open Group, 2012. ISBN: 1-937-21800-3
4. M. M. Lankhorst, W. P. M. Janssen, H. A. Proper, M. W. A. Steen, M. M. Zoet, W. A. Molnar, M.-E. Iacob, H. Jonkers, W. Engelsman, J. Versendaal, L. G. J. Debije, K. Gaaloul, A. Schrier, A. W. Heerink, S. J. B. A. Hoppenbrouwers, W. van Stokkum, I. Wilmont, and D. J. T. van der Linden. *Agile Service Development: Combining Adaptive Methods and Flexible Solutions*. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 2012. ISBN: 978-3-642-28187-7
5. M.M Lankhorst, S. J. B. A. Hoppenbrouwers, H. Jonkers, H. A. Proper, L. van der Torre, F. Arbab, F. S. de Boer, M. Bonsangue, M.-E. Iacob, A. W. Stam, L. Groenewegen, R. van Buuren, R. J. Slagter, J. Campschroer, M. W. A. Steen, S. F. Bekius, H. Bosma, M. J. Cuvelier, H. W. L. ter Doest, P. A. T. van Eck, P. Fennema, J. Jacob, W.P.M. Janssen, Jonkers, H., D. Krukkert, D. van Leeuwen, P.G.M. Penders, G.E. Veldhuijzen van Zanten, and R. J. Wieringa. *Enterprise Architecture at Work – Modelling, Communication and Analysis*. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 3rd edition, 2012. ISBN: 978-3-642-29650-5
6. D. Greefhorst and H. A. Proper. *Architecture Principles – The Cornerstones of Enterprise Architecture*. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 2011. ISBN: 978-3-642-20278-0
doi:10.1007/978-3-642-20279-7
7. M.-E. Iacob, H. Jonkers, M. M. Lankhorst, and H. A. Proper. *ArchiMate 1.0 Specification*. The Open Group, 2009. ISBN: 978-9-087-53502-5
8. R. J. Wieringa, P. van Eck, C. Steghuis, and H. A. Proper. *Competences of IT Architects*. Academic Service – SDU, The Hague, Netherlands, 2008. ISBN: 978-9-012-58087-8
9. M. Op ’t Land, H. A. Proper, M. Waage, J. Cloo, and C. Steghuis. *Enterprise Architecture – Creating Value by Informed Governance*. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 2008. ISBN: 978-3-540-85231-5
doi:10.1007/978-3-540-85232-2
10. M. M. Lankhorst, S. J. B. A. Hoppenbrouwers, H. Jonkers, H. A. Proper, L. van der Torre, F. Arbab, F. S. de Boer, M. M. Bonsangue, M.-E. Iacob, A. W. Stam, L. Groenewegen, R. van Buuren, R. J. Slagter, J. Campschroer, M. W. A. Steen, S. F. Bekius, H. Bosma, M. J. Cuvelier, H. W. L. ter Doest, P. A. T. van Eck, P. Fennema, J. Jacob, W. P. M. Janssen, Jonkers, H., D. Krukkert, D. van Leeuwen, P. G. M. Penders, G.E. Veldhuijzen van Zanten, and R. J. Wieringa. *Enterprise Architecture at Work – Modelling, Communication and Analysis*. Springer, Heidelberg, Germany, 2005. ISBN: 3-540-24371-2

11. H. A. Proper. *Informatiekunde; Exacte vaagheid*. Nijmegen Institute for Information and Computing Sciences, University of Nijmegen, Nijmegen, the Netherlands, November 2003. In Dutch. ISBN: 9-090-17286-6
<https://repository.ubn.ru.nl/handle/2066/30154>
12. H. A. Proper. *ISP for Large-scale Migrations*. Information Services Procurement Library. Ten Hagen & Stam, Den Haag, the Netherlands, 2001. ISBN: 9-076-30488-2
13. H. A. Proper. *A Theory for Conceptual Modelling of Evolving Application Domains*. PhD thesis, University of Nijmegen, Nijmegen, the Netherlands, 1994. ISBN: 9-090-06849-X
<https://repository.ubn.ru.nl/handle/2066/83258>

19.2 Edited Books

1. J. P. A. Almeida, D. Bork, G. Guizzardi, M. Montali, H. A. Proper, and T. Prince Sales, editors. *23rd Conference on Business Informatics, CBI 2021, Bolzano, Italy, September 1-3, 2021. Volume 2*. IEEE, 2021. ISBN: 978-1-6654-2069-3
[doi:10.1109/CBI52690.2021](https://doi.org/10.1109/CBI52690.2021)
2. J. P. A. Almeida, D. Bork, G. Guizzardi, M. Montali, H. A. Proper, and T. Prince Sales, editors. *23rd IEEE Conference on Business Informatics, CBI 2021, Bolzano, Italy, September 1-3, 2021. Volume 1*. IEEE, 2021. ISBN: 978-1-6654-2069-3
[doi:10.1109/CBI52690.2021](https://doi.org/10.1109/CBI52690.2021)
3. S. Dupuy-Chessa and H. A. Proper, editors. *Advanced Information Systems Engineering Workshops - CAiSE 2020 International Workshops, Grenoble, France, June 8-12, 2020, Proceedings*, volume 382 of *Lecture Notes in Business Information Processing*. Springer, Heidelberg, Germany, 2020. ISBN: 978-3-030-49164-2
[doi:10.1007/978-3-030-49165-9](https://doi.org/10.1007/978-3-030-49165-9)
<https://doi.org/10.1007/978-3-030-49165-9>
4. D. Aveiro, G. Guizzardi, R. Pergl, and H. A. Proper, editors. *Advances in Enterprise Engineering XIV – 10th Enterprise Engineering Working Conference, EEWK 2020, Bozen-Bolzano, Italy, September 28, October 19, and November 9-10, 2020, Revised Selected Papers*, volume 411 of *Lecture Notes in Business Information Processing*. Springer, Heidelberg, Germany, 2021. ISBN: 978-3-030-74195-2
[doi:10.1007/978-3-030-74196-9](https://doi.org/10.1007/978-3-030-74196-9)
5. H. A. Proper and J. Stirna, editors. *Advanced Information Systems Engineering Workshops – CAiSE 2019 International Workshops, Rome, Italy, June 3-7, 2019, Proceedings*, volume 349 of *Lecture Notes in Business Information Processing*. Springer, Heidelberg, Germany, 2019. ISBN: 978-3-030-20947-6
[doi:10.1007/978-3-030-20948-3](https://doi.org/10.1007/978-3-030-20948-3)
6. J. Gordijn, W. Guédria, and H. A. Proper, editors. *The Practice of Enterprise Modeling - 12th IFIP Working Conference, PoEM 2019, Luxembourg, Luxembourg, November 27-29, 2019, Proceedings*, volume 369 of *Lecture Notes in Business Information Processing*. Springer, 2019. ISBN: 978-3-030-35150-2
[doi:10.1007/978-3-030-35151-9](https://doi.org/10.1007/978-3-030-35151-9)
7. C. Feltus, P. Johannesson, and H. A. Proper, editors. *Proceedings of the Practice of Enterprise Modelling 2019 Conference Forum (short papers), Luxembourg, November 27-29, 2019*, volume 2586 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2020.
<http://ceur-ws.org/Vol-2586>

8. H. A. Proper, S. Strecker, C. Huemer, C. Feltus, W. Guédria, I. S. Razo-Zapata, M. Brichni, D. Rozier, M. M. Komarov, S. V. Maltseva, and S. Guerreiro, editors. *20th IEEE Conference on Business Informatics, CBI 2018, Vienna, Austria, July 11-14, 2018, Volume 2 – Research-in-Progress Papers and Workshops*. IEEE Computer Society, 2018.
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=8451902>
9. H. A. Proper, S. Strecker, and C. Huemer, editors. *20th IEEE Conference on Business Informatics, CBI 2018, Vienna, Austria, July 11-14, 2018, Volume 1 – Research Papers*. IEEE Computer Society, 2018. ISBN: 978-1-5386-7016-3
10. H. Panetto, C. Debruyne, H. A. Proper, C. Agostino Ardagna, D. Roman, and R. Meersman, editors. *On the Move to Meaningful Internet Systems. OTM 2018 Conferences – Confederated International Conferences: CoopIS, C C&TC,TC, and ODBASE 2018, Valletta, Malta, October 22-26, 2018, Proceedings, Part II*, volume 11230 of *Lecture Notes in Computer Science*. Springer, Heidelberg, Germany, 2018. ISBN: 978-3-030-02670-7
[doi:10.1007/978-3-030-02671-4](https://doi.org/10.1007/978-3-030-02671-4)
11. H. Panetto, C. Debruyne, H. A. Proper, C. Agostino Ardagna, D. Roman, and R. Meersman, editors. *On the Move to Meaningful Internet Systems. OTM 2018 Conferences – Confederated International Conferences: CoopIS, C C&TC,TC, and ODBASE 2018, Valletta, Malta, October 22-26, 2018, Proceedings, Part I*, volume 11229 of *Lecture Notes in Computer Science*. Springer, Heidelberg, Germany, 2018. ISBN: 978-3-030-02609-7
[doi:10.1007/978-3-030-02610-3](https://doi.org/10.1007/978-3-030-02610-3)
12. J. Gordijn and H. A. Proper, editors. *Proceedings of the 12th International Workshop on Value Modeling and Business Ontologies, VMBO 2018, Amsterdam, The Netherlands, February 26th – 27th, 2018*, volume 2239 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2018.
<http://ceur-ws.org/Vol-2239>
13. H. A. Proper and J. Ralyté, editors. *IEEE 16th Conference on Business Informatics, CBI 2014, Geneva, Switzerland, July 14-17, 2014 – Volume 1*. IEEE Computer Society Press, Los Alamitos, California, 2014. ISBN: 978-1-4799-5778-1
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6902665>
14. W. A. Molnar, H. A. Proper, J. Zdravkovic, P. Loucopoulos, O. Pastor, and S. Kinderen de, editors. *Proceedings of the 8th Transformation & Engineering of Enterprises workshop (TEE 2014), held in conjunction with the 16th IEEE Conference on Business Informatics (CBI 2014), Geneva, Switzerland*. CEUR-WS.org, 2014.
<http://ceur-ws.org/Vol-1182/>
15. I. Bider, K. Gaaloul, J. Krogstie, S. Nurcan, H. A. Proper, R. Schmidt, and P. Soffer, editors. *Enterprise, Business-Process and Information Systems Modeling – 15th International Conference, BPMDS 2014, 19th International Conference, EMMSAD 2014, Held at CAiSE 2014, Thessaloniki, Greece, June 16-17, 2014. Proceedings*, *Lecture Notes in Business Information Processing*. Springer, Heidelberg, Germany, 2014. ISBN: 978-3-662-43744-5
[doi:10.1007/978-3-662-43745-2](https://doi.org/10.1007/978-3-662-43745-2)
16. D. Aveiro, M. Bjeković, A. Caetano, A. Fleischmann, L. Heuser, S. de Kinderen, M. M. Komarov, Y. Koucheryavy, S. V. Maltseva, W. Molnar, A. Oberweis, H. A. Proper, M. Rappa, W. Schmidt, F. Schönthaler, J. Sottet, C. Stary, and G. Vossen, editors. *Proceedings of the 16th IEEE Conference on Business Informatics (CBI 2014), Geneva, Switzerland, Volume 2*. IEEE Computer Society Press, Los Alamitos, California, 2014. ISBN: 978-1-4799-5779-8
17. H. A. Proper, D. Aveiro, and K. Gaaloul, editors. *Advances in Enterprise Engineering VII – Third Enterprise Engineering Working Conference, EEWC 2013, Luxembourg, May 13-14, 2013. Proceedings*, volume 146 of *Lecture Notes in Business Information Processing*. Springer, Heidelberg, Germany, May 2013. ISBN: 978-3-642-38116-4
[doi:10.1007/978-3-642-38117-1](https://doi.org/10.1007/978-3-642-38117-1)

18. S. Nurcan, H. A. Proper, P. Soffer, J. Krogstie, R. Schmidt, T. A. Halpin, and I. Bider, editors. *Enterprise, Business-Process and Information Systems Modeling – 14th International Conference, BPMDS 2013, 18th International Conference, EMMSAD 2013, Held at CAiSE 2013, Valencia, Spain, June 17-18, 2013. Proceedings*, volume 147 of *Lecture Notes in Business Information Processing*. Springer, Heidelberg, Germany, June 2013. ISBN: 978-3-642-38483-7
doi:10.1007/978-3-642-38484-4
19. A. F. Harmsen and H. A. Proper, editors. *Practice-Driven Research on Enterprise Transformation – 6th Working Conference, PRET 2013, Utrecht, The Netherlands, June 6, 2013. Proceedings*, volume 151 of *Lecture Notes in Business Information Processing*, Utrecht, the Netherlands, June 2013. Springer, Heidelberg, Germany. ISBN: 978-3-642-38773-9
doi:10.1007/978-3-642-38774-6
20. R. Deneckère and H. A. Proper, editors. *Proceedings of the CAiSE’13 Forum at the 25th International Conference on Advanced Information Systems Engineering (CAiSE), Valencia, Spain, June 20th, 2013*, volume 998 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2013.
<http://ceur-ws.org/Vol-998>
21. H. A. Proper, A. F. Harmsen, K. Gaaloul, and S. Wrycza, editors. *Practice-Driven Research on Enterprise Transformation – 4th Working Conference, PRET 2012, Gdańsk, Poland, June 27, 2012. Proceedings*, volume 120 of *Lecture Notes in Business Information Processing*, Gdansk, Poland, June 2012. Springer, Heidelberg, Germany. ISBN: 978-3-642-31133-8
doi:10.1007/978-3-642-31134-5
22. I. Bider, T. A. Halpin, J. Krogstie, S. Nurcan, H. A. Proper, R. Schmidt, P. Soffer, and S. Wrycza, editors. *Enterprise, Business-Process and Information Systems Modeling – 13th International Conference, BPMDS 2012, 17th International Conference, EMMSAD 2012, and 5th EuroSymposium, held at CAiSE 2012, Gdańsk, Poland, June 25-26, 2012. Proceedings*, volume 113 of *Lecture Notes in Business Information Processing*. Springer, Heidelberg, Germany, June 2012. ISBN: 978-3-642-31071-3
doi:10.1007/978-3-642-31072-0
23. S. Aier, M. Ekstedt, F. Matthes, H. A. Proper, and J. Sanz, editors. *Trends in Enterprise Architecture Research and Practice-Driven Research on Enterprise Transformation – 7th Workshop, TEAR 2012, and 5th Working Conference, PRET 2012, Held at The Open Group Conference 2012, Barcelona, Spain, October 23-24, 2012. Proceedings*, volume 131 of *Lecture Notes in Business Information Processing*. Springer, Heidelberg, Germany, October 2012. ISBN: 978-3-642-34162-5
doi:10.1007/978-3-642-34163-2
24. B. Hofreiter, E. Dubois, K.-J. Lin, T. Setzer, C. Godart, H. A. Proper, and L. Bodestaff, editors. *13th IEEE Conference on Commerce and Enterprise Computing, CEC 2011, Luxembourg-Kirchberg, Luxembourg, September 5-7, 2011*. IEEE Computer Society Press, Los Alamitos, California, September 2011. ISBN: 978-1-4577-1542-6
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6046209>
25. A. F. Harmsen, K. Grahlmann, and H. A. Proper, editors. *Practice-Driven Research on Enterprise Transformation – Third Working Conference, PRET 2011, Luxembourg-Kirchberg, Luxembourg, September 6, 2011. Proceedings*, volume 89 of *Lecture Notes in Business Information Processing*, Delft, the Netherlands, September 2011. Springer, Heidelberg, Germany. ISBN: 978-3-642-23387-6
doi:10.1007/978-3-642-23388-3
26. I. Bider, T. A. Halpin, J. Krogstie, S. Nurcan, H. A. Proper, R. Schmidt, and R. Ukör, editors. *Enterprise, Business-Process and Information Systems Modeling – 12th International Conference, BPMDS 2011, and 16th International Conference, EMMSAD 2011, held*

- at CAiSE 2011, London, UK, June 20-21, 2011. *Proceedings*, volume 81 of *Lecture Notes in Business Information Processing*, Hammamet, Tunisia, June 2011. Springer, Heidelberg, Germany. ISBN: 978-3-642-21758-6
doi:10.1007/978-3-642-21759-3
27. P. Soffer and H. A. Proper, editors. *Information Systems Evolution – CAiSE Forum 2010, Hammamet, Tunisia, June 7-9, 2010, Selected Extended Papers*, volume 72 of *Lecture Notes in Business Information Processing*. Springer, Heidelberg, Germany, 2010. ISBN: 978-3-642-17721-7
doi:10.1007/978-3-642-17722-4
 28. P. Soffer and H. A. Proper, editors. *Proceedings of the CAiSE Forum 2010, Hammamet, Tunisia, June 9-11, 2010*, volume 592 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2010.
<http://ceur-ws.org/Vol-592>
 29. H. A. Proper, M. M. Lankhorst, M. Schönherr, J. Barjis, and S. J. Overbeek, editors. *Trends in Enterprise Architecture Research – 5th International Workshop, TEAR 2010, Delft, The Netherlands, November 12, 2010. Proceedings*, volume 70 of *Lecture Notes in Business Information Processing*, Delft, the Netherlands, November 2010. Springer, Heidelberg, Germany. ISBN: 978-3-642-16818-5
doi:10.1007/978-3-642-16819-2
 30. A. F. Harmsen, H. A. Proper, F. Schalkwijk, J. Barjis, and S. J. Overbeek, editors. *Practice-Driven Research on Enterprise Transformation – Second Working Conference, PRET 2010, Delft, The Netherlands, November 11, 2010. Proceedings*, volume 69 of *Lecture Notes in Business Information Processing*, Delft, the Netherlands, November 2010. Springer, Heidelberg, Germany. ISBN: 978-3-642-16769-0
doi:10.1007/978-3-642-16770-6
 31. I. Bider, T. A. Halpin, J. Krogstie, S. Nurcan, H. A. Proper, R. Schmidt, and R. Ukor, editors. *Enterprise, Business-Process and Information Systems Modeling – 11th International Workshop, BPMDS 2010, and 15th International Conference, EMMSAD 2010, held at CAiSE 2010, Hammamet, Tunisia, June 7-8, 2010. Proceedings*, volume 50 of *Lecture Notes in Business Information Processing*, Tunis, Tunisia, June 2010. Springer, Heidelberg, Germany. ISBN: 978-3-642-13050-2
doi:10.1007/978-3-642-13051-9
 32. H. A. Proper, A. F. Harmsen, and J. L. G. Dietz, editors. *Advances in Enterprise Engineering II – First NAF Academy Working Conference on Practice-Driven Research on Enterprise Transformation, PRET 2009, held at CAiSE 2009, Amsterdam, The Netherlands, June 11, 2009. Proceedings*, volume 28 of *Lecture Notes in Business Information Processing*, Amsterdam, the Netherlands, June 2009. Springer, Heidelberg, Germany. ISBN: 978-3-642-01858-9
doi:10.1007/978-3-642-01859-6
 33. T. A. Halpin, J. Krogstie, S. Nurcan, H. A. Proper, R. Schmidt, P. Soffer, and R. Ukor, editors. *Enterprise, Business-Process and Information Systems Modeling, 10th International Workshop, BPMDS 2009, and 14th International Conference, EMMSAD 2009, held at CAiSE 2009, Amsterdam, The Netherlands, June 8-9, 2009. Proceedings*, volume 29 of *Lecture Notes in Business Information Processing*, Amsterdam, the Netherlands, June 2009. Springer, Heidelberg, Germany. ISBN: 978-3-642-01861-9
doi:10.1007/978-3-642-01862-6
 34. T. A. Halpin, J. Krogstie, and H. A. Proper, editors. *Innovations in Information Systems Modeling - Methods and Best Practices*. IGI Publishing, Hershey, Pennsylvania, 2009. ISBN:

978-1-60566-278-7
doi:10.4018/978-1-60566-278-7

35. T. A. Halpin, J. Krogstie, and H. A. Proper, editors. *Proceedings of the 13th Workshop on Exploring Modeling Methods for Systems Analysis and Design (EMMSAD 2008), held in conjunction with the 20th Conference on Advanced Information Systems Engineering (CAiSE 2008), Montpellier, France*, volume 337. CEUR-WS.org, June 2008.
<http://ceur-ws.org/Vol-337>
36. H. A. Proper, T. A. Halpin, and J. Krogstie, editors. *Proceedings of the 12th Workshop on Exploring Modeling Methods for Systems Analysis and Design (EMMSAD 2007), held in conjunction with the 19th Conference on Advanced Information Systems (CAiSE 2007), Trondheim, Norway*. CEUR-WS.org, 2007. ISSN: 1613-0073
<http://ceur-ws.org/Vol-365>
37. J. Krogstie, T. A. Halpin, and H. A. Proper, editors. *Proceedings of the 11th Workshop on Exploring Modeling Methods for Systems Analysis and Design (EMMSAD 2006), held in conjunction with the 18th Conference on Advanced Information Systems (CAiSE 2006)*. CEUR-WS.org, 2006.
<http://ceur-ws.org/Vol-364>

19.3 Chapters in Books

1. H. A. Proper. *On Model-Based Coordination of Change in Organizations*, pages 79–98. Springer, Heidelberg, Germany, 2021. ISBN: 978-3-030-84655-8
doi:10.1007/978-3-030-84655-8_6
2. H. A. Proper, W. Guédria, and J.-S. Sottet. Enterprise Modelling in the Digital Age. In V. Kulkarni, S. Reddy, T. Clark, and B. S. Barn, editors, *Advanced Digital Architectures for Model-Driven Adaptive Enterprises*, chapter 3, pages 46–67. IGI Global, Hershey, Pennsylvania, 2020. ISBN: 9781799801085
doi:10.4018/978-1-7998-0108-5.ch003
3. R. Wagter and H. A. Proper. Coherence Management Dashboard for ACET. In H. A. Proper, R. Winter, S. Aier, and S. de Kinderen, editors, *Architectural Coordination of Enterprise Transformation*, The Enterprise Engineering Series, chapter 18, pages 183–191. Springer, Heidelberg, Germany, 2018. ISBN: 978-3-319-69583-9
doi:10.1007/978-3-319-69584-6
4. R. Wagter and H. A. Proper. Involving the right stakeholders – Enterprise coherence governance. In H. A. Proper, R. Winter, S. Aier, and S. de Kinderen, editors, *Architectural Coordination of Enterprise Transformation*, The Enterprise Engineering Series, chapter 10, pages 99–110. Springer, Heidelberg, Germany, 2018. ISBN: 978-3-319-69583-9
doi:10.1007/978-3-319-69584-6
5. H. A. Proper, R. Winter, and S. Aier. Introduction. In H. A. Proper, R. Winter, S. Aier, and S. de Kinderen, editors, *Architectural Coordination of Enterprise Transformation*, The Enterprise Engineering Series, chapter 1, pages 1–10. Springer, Heidelberg, Germany, 2018. ISBN: 978-3-319-69583-9
doi:10.1007/978-3-319-69584-6
6. H. A. Proper, R. Winter, and S. Aier. Conclusion and reflections. In H. A. Proper, R. Winter, S. Aier, and S. de Kinderen, editors, *Architectural Coordination of Enterprise Transformation*, The Enterprise Engineering Series, chapter 26, pages 293–304. Springer, Heidelberg, Germany, 2018. ISBN: 978-3-319-69583-9
doi:10.1007/978-3-319-69584-6

7. M. M. Lankhorst, L. van der Torre, H. A. Proper, F. Arbab, and M. W. A. Steen. Viewpoints and visualisation. In *Enterprise Architecture at Work – Modelling, Communication and Analysis*, The Enterprise Engineering Series, pages 171–214. Springer, Heidelberg, Germany, 4th edition, 2017. ISBN: 978-3-662-53932-3
doi:10.1007/978-3-662-53933-0_8
8. R. Wagter, H. A. Proper, and D. Witte. A Theory for Enterprise Coherence Governance. In P. Saha, editor, *A Systematic Perspective to Managing Complexity with EA*. IGI Publishing, Hershey, Pennsylvania, 2013.
9. M. W. A. Steen, M. E. Iacob, M.M Lankhorst, H. Jonkers, M. Zoet, W. Engelsman, J. Versendaal, H. A. Proper, L. Debije, and K. Gaaloul. Service Modelling. In M. M. Lankhorst, editor, *Agile Service Development: Combining Adaptive Methods and Flexible Solutions*, The Enterprise Engineering Series, chapter 3, pages 59–94. Springer, Heidelberg, Germany, 2012. ISBN: 978-3-642-28187-7
10. M.M Lankhorst, W. P. M. Janssen, H. A. Proper, and M. W. A. Steen. Introducing Agile Service Development. In M. M. Lankhorst, editor, *Agile Service Development: Combining Adaptive Methods and Flexible Solutions*, The Enterprise Engineering Series, chapter 1, pages 1–15. Springer, Heidelberg, Germany, 2012. ISBN: 978-3-642-28187-7
11. M. M. Lankhorst and H. A. Proper. Agile Architecture. In M. M. Lankhorst, editor, *Agile Service Development: Combining Adaptive Methods and Flexible Solutions*, The Enterprise Engineering Series, chapter 3, pages 41–57. Springer, Heidelberg, Germany, 2012. ISBN: 978-3-642-28187-7
12. P. van Bommel, S. J. B. A. Hoppenbrouwers, H. A. Proper, and J. Roelofs. Concepts and Strategies for Quality of Modeling. In T. A. Halpin, J. Krogstie, and H. A. Proper, editors, *Innovations in Information Systems Modeling*, chapter 9. IGI Publishing, Hershey, Pennsylvania, 2009. ISBN: 978-1-60566-278-7
doi:10.4018/978-1-60566-278-7
13. S. J. Overbeek, P. van Bommel, H. A. Proper, and D. B. B. Rijsenbrij. Foundations and Applications of Intelligent Knowledge Exchange. In P. Zemliansky and K. St-Amant, editors, *The Handbook of Research on Virtual Workplaces and the New Nature of Business Practices*. IGI Publishing, Hershey, Pennsylvania, 2008. ISBN: 978-1-599-04893-2
14. P. van Bommel, S. J. B. A. Hoppenbrouwers, H. A. Proper, and Th. P. van der Weide. On the Use of Object-Role Modeling For Modeling Active Domains. In K. Siau, editor, *Research Issues in System Analysis and Design, Databases and Software Development*, pages 123–145. IGI Publishing, Hershey, Pennsylvania, 2007. ISBN: 978-1-599-04927-4
15. M. Op ’t Land, H. A. Proper, M. Waage, J. Cloo, and C. Steghuis. *The Need for a New Instrument*, chapter 2. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 2008. ISBN: 978-3-540-85231-5
doi:10.1007/978-3-540-85232-2
16. M. Op ’t Land, H. A. Proper, M. Waage, J. Cloo, and C. Steghuis. *The Enterprise Architect*, chapter 6. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 2008. ISBN: 978-3-540-85231-5
doi:10.1007/978-3-540-85232-2
17. M. Op ’t Land, H. A. Proper, M. Waage, J. Cloo, and C. Steghuis. *The Results of Enterprise Architecting*, chapter 4. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 2008. ISBN: 978-3-540-85231-5
doi:10.1007/978-3-540-85232-2

18. M. Op 't Land, H. A. Proper, M. Waage, J. Cloo, and C. Steghuis. *The Process of Enterprise Architecting*, chapter 5. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 2008. ISBN: 978-3-540-85231-5
doi:10.1007/978-3-540-85232-2
19. M. Op 't Land, H. A. Proper, M. Waage, J. Cloo, and C. Steghuis. *Positioning Enterprise Architecture*, chapter 3. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 2008. ISBN: 978-3-540-85231-5
doi:10.1007/978-3-540-85232-2
20. M. Op 't Land, H. A. Proper, M. Waage, J. Cloo, and C. Steghuis. *Introduction*, chapter 1. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 2008. ISBN: 978-3-540-85231-5
doi:10.1007/978-3-540-85232-2
21. M. Op 't Land, H. A. Proper, M. Waage, J. Cloo, and C. Steghuis. *Conclusion*, chapter 7. The Enterprise Engineering Series. Springer, Heidelberg, Germany, 2008. ISBN: 978-3-540-85231-5
doi:10.1007/978-3-540-85232-2
22. H. A. Proper, S. J. B. A. Hoppenbrouwers, and G. E. Veldhuijzen van Zanten. Communication of enterprise architectures. In *Enterprise Architecture at Work – Modelling, Communication and Analysis*, The Enterprise Engineering Series, pages 59–72. Springer, Heidelberg, Germany, 4th edition, 2017. ISBN: 978-3-662-53932-3
doi:10.1007/978-3-662-53933-0_4
23. M. M. Lankhorst, L. van der Torre, H. A. Proper, F. Arbab, F. S. de Boer, and M. Bonsangue. Foundations. In *Enterprise Architecture at Work – Modelling, Communication and Analysis*, The Enterprise Engineering Series, pages 41–58. Springer, Heidelberg, Germany, 4th edition, 2017. ISBN: 978-3-662-53932-3
doi:10.1007/978-3-662-53933-0_3
24. E. D. Falkenberg, J. L. H. Oei, and H. A. Proper. A conceptual framework for evolving information systems. In H. G. Sol and R. L. Crosslin, editors, *Dynamic Modelling of Information Systems II, The Second International Working Conference on Dynamic Modelling of Information Systems, Washington, DC, USA, July 18-19, 1991*, pages 353–375. North-Holland, Amsterdam, the Netherlands, 1992. ISBN: 0-444-89405-5

19.4 Journal Publications

1. H. A. Proper, R. Wagter, and J. Bekel. On enterprise coherence governance with gea: a 15-year co-evolution of practice and theory. *Software and Systems Modeling*, 2022. ISBN: 1619-1374
doi:10.1007/s10270-022-01059-0
2. M. A. T. Mulder and H. A. Proper. On Enterprise-Grade Tool Support for DEMO. *Software and Systems Modeling*, 21(4):1341–1361, 2021.
doi:10.1007/s10270-021-00911-z
3. H. A. Proper and M. Bjeković. Fundamental challenges in systems modelling. *EMISA Forum*, 39(1):13–28, 2019.
4. A. Nakakawa, P. van Bommel, H. A. Proper, and J. B. F. Mulder. A situational method for creating shared understanding on requirements for an enterprise architecture. *International Journal of Cooperative Information Systems*, 27(4):1850010, 2018.
doi:10.1142/S0218843018500107

5. R. Magalhães and H. A. Proper. Model-enabled Design and Engineering of Organisations. *Organisational Design and Enterprise Engineering*, 1(1):1–12, 2017.
doi:10.1007/s41251-016-0005-9
6. Z. Zarwin, M. Bjeković, J.-M. Favre, J.-S. Sottet, and H. A. Proper. Natural modelling. *Journal Of Object Technology*, 13(3):4: 1–36, July 2014.
doi:10.5381/jot.2014.13.3.a4
7. D. J. T. van der Linden, S. J. B. A. Hoppenbrouwers, and H. A. Proper. On the identification of modeler communities. *International Journal of Information Systems Modeling and Design*, pages 22–40, 2014.
doi:10.4018/ijismd.2014040102
8. G. Plataniotis, S. de Kinderen, and H. A. Proper. EA anamnesis: An approach for decision making analysis in enterprise architecture. *International Journal of Information System Modeling and Design*, 5(3):75–95, 2014. ISSN: 1947-8186
doi:10.4018/ijismd.2014070104
9. S. de Kinderen, K. Gaaloul, and H. A. Proper. Bridging value modelling to ArchiMate via transaction modelling. *Software & Systems Modeling*, 13(3):1043–1057, 2014. ISSN: 1619-1366
doi:10.1007/s10270-012-0299-z
10. F. P. Tulinayo, P. van Bommel, and H. A. Proper. Enhancing the system dynamics modeling process with a domain modeling method. *International Journal of Cooperative Information Systems*, 22(2), 2013.
doi:10.1142/S0218843013500111
11. H. A. Proper and M. M. Lankhorst. Enterprise Architecture – Towards essential sensemaking. *Enterprise Modelling and Information Systems Architectures*, 9(1):5–21, June 2014.
doi:10.18417/emisa.9.1.1
12. D. Greefhorst, H. A. Proper, and G. Plataniotis. The Dutch State of the Practice of Architecture Principles. *Journal of Enterprise Architecture*, 9(4):20–25, November 2013.
13. J. L. G. Dietz, J. A. P. Hoogervorst, A. Albani, D. Aveiro, E. Babkin, J. Barjis, A. Caetano, P. Huysmans, J. Iijima, S. J. H. van Kervel, H. Mulder, M. Op ’t Land, H. A. Proper, J. Sanz, L. Terlouw, J. M. Tribolet, J. Verelst, and R. Winter. The discipline of enterprise engineering. *International Journal Organisational Design and Engineering*, 3(1):86–114, 2013.
14. F. P. Tulinayo, P. van Bommel, and H. A. Proper. From a system dynamics causal loop diagram to an object-role model: A stepwise approach. *Journal of Digital Information Management*, 10(3):174–186, 2012.
<http://dline.info/fpaper/jdim/v10i3/3.pdf>
15. D. Ssebuggwawo, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Applying AHP for collaborative modeling evaluation: Experiences from a modeling experiment. *International Journal of Information Systems Modeling and Design*, 4(1):1–24, 2013.
doi:10.4018/jismd.2013010101
16. A. Nakakawa, P. van Bommel, and H. A. Proper. Supplementing enterprise architecture approaches with support for executing collaborative tasks – a case of TOGAF ADM. *International Journal of Cooperative Information Systems*, 22(2):1350007, June 2013.
doi:10.1142/S021884301350007X
17. H. A. Proper and D. Greefhorst. Principles in an Enterprise Architecture Context. *Journal of Enterprise Architecture*, pages 8–16, February 2011.

18. A. Nakakawa, P. van Bommel, and H. A. Proper. Definition and validation of requirements for collaborative decision-making in enterprise architecture creation. *International Journal of Cooperative Information Systems*, 20(1):83–136, 2011.
doi:10.1142/S021884301100216X
19. D. Ssebuggwawo, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Collaborative Modeling: Towards a Meta-model for Analysis and Evaluation. *Sprouts: Working Papers on Information Systems*, 10(36), 2010. ISSN: 1535-6078
https://aisel.aisnet.org/sprouts_all/356
20. S. J. Overbeek, P. van Bommel, and H. A. Proper. Statics and dynamics of cognitive and qualitative matchmaking in task fulfillment. *Information Sciences*, 181(1):129–149, January 2011. ISSN: 0020-0255
doi:10.1016/j.ins.2010.09.002
21. K. Gaaloul, H. A. Proper, E. Zahoor, F. Charoy, and C. Godart. A logical framework for reasoning about delegation policies in workflow management systems. *International Journal of Information and Computer Security*, 4(4):365–388, 2011.
doi:10.1504/IJICS.2011.044825
22. M. M. Lankhorst, H. A. Proper, and H. Jonkers. The anatomy of the ArchiMate language. *International Journal of Information System Modeling and Design*, 1(1):1–32, 2010.
doi:10.4018/jismd.2010092301
23. S. J. Overbeek, P. van Bommel, and H. A. Proper. Bridging Supply and Demand for Knowledge Intensive Tasks. *Information Sciences*, 181(1):129–149, January 2011.
doi:10.1016/j.ins.2010.09.002
24. S. J. Overbeek, P. van Bommel, and H. A. Proper. Embedding knowledge exchange and cognitive matchmaking in a dichotomy of markets. *Expert Systems with Applications*, (36):12236–12255, 2009.
doi:10.1016/j.eswa.2009.04.071
25. S. J. Overbeek, P. van Bommel, and H. A. Proper. Matching cognitive characteristics of actors and tasks in information systems engineering. *Knowledge-Based Systems*, 21(8):764–785, December 2008.
doi:10.1016/j.knosys.2008.03.032
26. J. Nabukenya, P. van Bommel, H. A. Proper, and G. J. de Vreede. An Evaluation Instrument for Collaborative Processes: Application to Organizational Policy-Making. *Group Decision and Negotiation*, 20(4):465–488, 2011.
doi:10.1007/s10726-009-9177-7
27. F. Arbab, F. S. de Boer, M. Bonsangue, M. M. Lankhorst, H. A. Proper, and L. van der Torre. Integrating architectural models – symbolic, semantic and subjective models in enterprise architecture. *Enterprise Modelling and Information Systems Architectures*, 2(1):40–57, 2007.
doi:10.18417/emisa.2.1.4
28. P. van Bommel, B. van Gils, H. A. Proper, M. van Vliet, and Th. P. van der Weide. Value and the information market. *Data & Knowledge Engineering*, 61(1):153–175, 2007.
doi:10.1016/j.datak.2006.05.002
29. B. van Gils, H. A. Proper, P. van Bommel, and Th. P. van der Weide. Typing and transformational effects in complex information supply. *International Journal of Cooperative Information Systems*, 16(2):229–269, June 2007.
doi:10.1142/S0218843007001639

30. P. van Bommel, H. A. Proper, and Th. P. van der Weide. Information coverage in advisory brokers. *International journal of intelligent systems*, 22(11):1155–1188, November 2007.
doi:10.1002/int.20240
31. S. J. B. A. Hoppenbrouwers, H. A. Proper, and V. E. van Reijswoud. Navigating the Methodology Jungle – The communicative role of modelling techniques in information system development. *Computing Letters*, 1(3), 2005.
32. G. E. Veldhuijzen van Zanten, S. J. B. A. Hoppenbrouwers, and H. A. Proper. System Development as a Rational Communicative Process. *Journal of Systemics, Cybernetics and Informatics*, 2(4):47–51, 2004.
33. H. A. Proper. Editor’s introduction. *International Journal of Cooperative Information Systems*, 13(3):211–212, 2004.
doi:10.1142/S0218843004000948
34. S. J. B. A. Hoppenbrouwers, A. I. Bleeker, and H. A. Proper. Facing the Conceptual Complexities in Business Domain Modeling. *Computing Letters*, 1(2):59–68, 2005.
35. B. van Gils, H. A. Proper, and P. van Bommel. A conceptual model of information supply. *Data & Knowledge Engineering*, 51:189–222, 2004.
doi:10.1016/j.datak.2004.03.009
36. M. P. Papazoglou, H. A. Proper, and J. Yang. Landscaping the information space of large multi-database networks. *Data & Knowledge Engineering*, 36(3):251–281, 2001.
doi:10.1016/S0169-023X(00)00050-1
37. H. A. Proper and P. D. Bruza. What is information discovery about? *Journal of the American Society for Information Science*, 50(9):737–750, July 1999.
doi:10.1002/(SICI)1097-4571(1999)50:9%3C737::AID-ASI2%3E3.0.CO;2-C
38. A. H. M. ter Hofstede and H. A. Proper. How to formalize it?: Formalization principles for information system development methods. *Information and Software Technology*, 40(10):519–540, October 1998.
doi:10.1016/S0950-5849(98)00078-0
39. A. H. M. ter Hofstede, H. A. Proper, and Th. P. van der Weide. Exploiting fact verbalisation in conceptual information modelling. *Information Systems*, 22(6/7):349–385, September 1997.
doi:10.1016/S0306-4379(97)00022-7
40. H. A. Proper. Data schema design as a schema evolution process. *Data & Knowledge Engineering*, 22(2):159–189, 1997.
doi:10.1016/S0169-023X(96)00045-6
41. A. H. M. ter Hofstede, H. A. Proper, and Th. P. van der Weide. Query formulation as an information retrieval problem. *The Computer Journal*, 39(4):255–274, September 1996.
doi:10.1093/comjnl/39.4.255
42. P. N. Creasy and H. A. Proper. A generic model for 3-dimensional conceptual modelling. *Data & Knowledge Engineering*, 20(2):119–161, 1996.
doi:10.1016/0169-023X(95)00043-R
43. H. A. Proper and Th. P. van der Weide. A general theory for evolving application models. *IEEE Transactions on Knowledge and Data Engineering*, 7(6):984–996, December 1995.
doi:10.1109/69.476503

44. H. A. Proper and Th. P. van der Weide. Information disclosure in evolving information systems: Taking as shot at a moving target. *Data & Knowledge Engineering*, 15:135–168, 1995.
doi:10.1016/0169-023X(94)00035-D
45. T. A. Halpin and H. A. Proper. Subtyping and polymorphism in object-role modelling. *Data & Knowledge Engineering*, 15:251–281, 1995.
doi:10.1016/0169-023X(95)00005-D
46. L. J. Campbell, T. A. Halpin, and H. A. Proper. Conceptual schemas with abstractions: Making flat conceptual schemas more comprehensible. *Data & Knowledge Engineering*, 20(1):39–85, 1996.
doi:10.1016/0169-023X(96)00005-5
47. G. H. W. M. Bronts, S. J. Brouwer, C. L. J. Martens, and H. A. Proper. A unifying object role modelling theory. *Information Systems*, 20(3):213–235, 1995.
doi:10.1016/0306-4379(95)00010-2
48. H. A. Proper and Th. P. van der Weide. EVORM: A conceptual modelling technique for evolving application domains. *Data & Knowledge Engineering*, 12:313–359, 1994.
doi:10.1016/0169-023X(94)90031-0
49. J. L. H. Oei, H. A. Proper, and E. D. Falkenberg. Evolving information systems: Meeting the ever-changing environment. *Information Systems Journal*, 4(3):213–233, 1994.
doi:10.1111/j.1365-2575.1994.tb00052.x
50. A. H. M. ter Hofstede, H. A. Proper, and Th. P. van der Weide. Formal definition of a conceptual language for the description and manipulation of information models. *Information Systems*, 18(7):489–523, October 1993.
doi:10.1016/0306-4379(93)90004-K

19.5 Conference Publications

1. G. Poels, H. A. Proper, and D. Bork. DT4GITM - A vision for a framework for digital twin enabled IT governance. In *55th Hawaii International Conference on System Sciences, HICSS 2022, Virtual Event / Maui, Hawaii, USA, January 4-7, 2022*, pages 1–10. ScholarSpace, 2022.
<http://hdl.handle.net/10125/80143>
2. V. Pálffy, C. Feltus, and H. A. Proper. Assessment and Validation of EXCOGITEA , an Architecture Discipline and Model for Enterprise’s Optimization and Decision Making. In *International Conference on Advanced Enterprise Information System (AEIS 2022), December 2-4, London, UK, 2022*.
3. M. R. Krouwel, M. Op ’t Land, and H. A. Proper. Generating low-code applications from enterprise ontology. In B. S. Barn and S. Sandkuhl, editors, *The Practice of Enterprise Modeling - 15th IFIP WG 8.1 Working Conference, PoEM 2022, London, UK, November 23-25, 2022, Proceedings*, volume 456 of *Lecture Notes in Business Information Processing*, pages 18–32. Springer, 2022.
doi:10.1007/978-3-031-21488-2_2
4. M. J. Anwar, A. Q. Gill, and H. A. Proper. A conceptual model to assess the maturity of information security audit process. In D. Bork, S. Barat, P. M. Asprion, A. Marcelletti, A. Morichetta, B. Schneider, V. Vinay Kulkarni, R. Breu, and P. Zech, editors, *Proceedings of the PoEM 2022 Workshops and Models at Work co-located with Practice of Enterprise Modelling 2022, London, United Kingdom, November 23-25, 2022*, volume 3298 of *CEUR*

Workshop Proceedings. CEUR-WS.org, 2022.
http://ceur-ws.org/Vol-3298/paper_MaW_01.pdf

5. H. A. Proper, R. Wagter, and J. Bekel. Enterprise coherence with GEA - A 15 year co-evolution of practice and theory. In E. Serral, J. Stirna, J. Ralyté, and J. Grabis, editors, *The Practice of Enterprise Modeling - 14th IFIP WG 8.1 Working Conference, PoEM 2021, Riga, Latvia, November 24-26, 2021, Proceedings*, volume 432 of *Lecture Notes in Business Information Processing*, pages 3–18. Springer, 2021.
 doi:10.1007/978-3-030-91279-6_1
6. H. A. Proper and G. Bork, D. and Poels. Towards an ontology-driven approach for digital twin enabled governed IT management. In I. Tiddi, M. Maleshkova, T. Pellegrini, and V. de Boer, editors, *Joint Proceedings of the Semantics co-located events: Poster&Demo track and Workshop on Ontology-Driven Conceptual Modelling of Digital Twins co-located with Semantics 2021, Amsterdam and Online, September 6-9, 2021*, volume 2941 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2021.
<http://ceur-ws.org/Vol-2941/paper18.pdf>
7. A. Nakakawa, H. A. Proper, F. P. Tulinayo, F. Namagembe, and S. J. Overbeek. Assessing Readiness for e-Government Enterprise Architecture in a Developing Economy - Towards an Integrated Maturity Model. In *25th International Enterprise Distributed Object Computing Workshop, EDOC Workshop 2021, Gold Coast, Australia, October 25-29, 2021*, pages 279–288. IEEE Computer Society Press, Los Alamitos, California, 2021.
 doi:10.1109/EDOCW52865.2021.00059
8. M. A. T. Mulder and H. A. Proper. On the Development of Enterprise-Grade Tool Support for the DEMO Method. In R. La Rosa, S. W. Sadiq, and E. Tenient, editors, *Advanced Information Systems Engineering - 33rd International Conference, CAiSE 2021, Melbourne, VIC, Australia, June 28 - July 2, 2021, Proceedings*, volume 12751 of *Lecture Notes in Computer Science*, pages 499–515. Springer, Heidelberg, Germany, 2021.
 doi:10.1007/978-3-030-79382-1_30
9. G. Guizzardi and H. A. Proper. On Understanding the Value of Domain Modeling. In G. Guizzardi, T. P. Sales, C. Griffo, and M. Furnagalli, editors, *Proceedings of 15th International Workshop on Value Modelling and Business Ontologies (VMBO 2021), Bolzano, Italy, 2021*, volume 2835 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2021.
<http://ceur-ws.org/Vol-2835/paper6.pdf>
10. C. Feltus, Q. Ma, H. A. Proper, and P. Kelsen. Towards AI Assisted Domain Modeling. In I. Reinhartz-Berger and S. W. Sadiq, editors, *Advances in Conceptual Modeling ER 2021 Workshops CoMoNoS, EmpER, CMLS, St. John's, NL, Canada, October 18-21, 2021, Proceedings*, volume 13012 of *Lecture Notes in Computer Science*. Springer, Heidelberg, Germany, 2021. ISBN: 978-3-030-88357-7
11. H. A. Proper and G. Guizzardi. On Domain Modelling and Requisite Variety – Current state of an ongoing journey. In J. Grabis and D. Bork, editors, *The Practice of Enterprise Modeling. PoEM 2020*, volume 400 of *Lecture Notes in Business Information Processing*, pages 186–196, Riga, Latvia, November 2020. Springer, Heidelberg, Germany. ISBN: 978-3-030-63479-7
 doi:10.1007/978-3-030-63479-7_13
12. H. A. Proper. Digital Enterprise Modelling – Opportunities and Challenges. In B. Roelens, W. Laurier, G. Poels, and H. Weigand, editors, *Proceedings of 14th International Workshop on Value Modelling and Business Ontologies, Brussels, Belgium, January 16-17, 2020*, volume 2574 of *CEUR Workshop Proceedings*, pages 33–40. CEUR-WS.org, 2020.
<http://ceur-ws.org/Vol-2574/short3.pdf>

13. H. A. Proper. Data ecosystems – fuelling the digital age (invited paper). In B. Roelens, W. Laurier, G. Poels, and H. Weigand, editors, *Proceedings of 14th International Workshop on Value Modelling and Business Ontologies, Brussels, Belgium, January 16-17, 2020*, volume 2574 of *CEUR Workshop Proceedings*, pages 1–4. CEUR-WS.org, 2020.
<http://ceur-ws.org/Vol-2574/invited1.pdf>
14. H. A. Proper and G. Guizzardi. On Domain Conceptualization. In D. Aveiro, G. Guizzardi, R. Pergl, and H. A. Proper, editors, *Advances in Enterprise Engineering XIV – 10th Enterprise Engineering Working Conference, EEWC 2020, Bozen-Bolzano, Italy, September 28, October 19, and November 9-10, 2020, Revised Selected Papers*, volume 411 of *Lecture Notes in Business Information Processing*, pages 49–69. Springer, Heidelberg, Germany, 2021. ISBN: 978-3-030-74195-2
[doi:10.1007/978-3-030-74196-9_4](https://doi.org/10.1007/978-3-030-74196-9_4)
15. M. A. T. Mulder and H. A. Proper. Towards enterprise-grade tool support for DEMO. In J. Grabis and D. Bork, editors, *The Practice of Enterprise Modeling. PoEM 2020*, volume 400 of *Lecture Notes in Business Information Processing*, pages 90–105, Riga, Latvia, November 2020. Springer, Heidelberg, Germany. ISBN: 978-3-030-63479-7
[doi:10.1007/978-3-030-63479-7_7](https://doi.org/10.1007/978-3-030-63479-7_7)
16. M. A. T. Mulder and H. A. Proper. Evolving the DEMO Specification Language. In D. Aveiro, G. Guizzardi, R. Pergl, and H. A. Proper, editors, *Advances in Enterprise Engineering XIV – 10th Enterprise Engineering Working Conference, EEWC 2020, Bozen-Bolzano, Italy, September 28, October 19, and November 9-10, 2020, Revised Selected Papers*, volume 411 of *Lecture Notes in Business Information Processing*, pages 153–172. Springer, Heidelberg, Germany, 2021. ISBN: 978-3-030-74195-2
[doi:10.1007/978-3-030-74196-9_9](https://doi.org/10.1007/978-3-030-74196-9_9)
17. Ö. Uludağ, H. A. Proper, and F. Matthes. Investigating the establishment of architecture principles for supporting large-scale agile transformations. In *2019 IEEE 23rd International Enterprise Distributed Object Computing Conference (EDOC)*, pages 41–50, Los Alamitos, California, October 2019. IEEE Computer Society.
[doi:10.1109/EDOC.2019.00015](https://doi.org/10.1109/EDOC.2019.00015)
18. M. Snoeck, J. Stirna, H. Weigand, and H. A. Proper. Panel discussion: Artificial intelligence meets enterprise modelling (summary of panel discussion). volume 2586 of *CEUR Workshop Proceedings*, pages 88–97. CEUR-WS.org, 2019.
<http://ceur-ws.org/Vol-2586/paper8.pdf>
19. K. Sandkuhl and H. A. Proper. Towards an early warning mechanism for adaptation needs of digital services. In J. Jörg Becker and D. A. Novikov, editors, *21st IEEE Conference on Business Informatics, CBI 2019, Moscow, Russia, July 15-17, 2019, Volume 1 - Research Papers*, pages 504–511. IEEE Press, 7 2019.
[doi:10.1109/CBI.2019.00065](https://doi.org/10.1109/CBI.2019.00065)
20. H. A. Proper and M. Bjeković. Fundamental challenges in systems modelling. In H. C. Mayr, S. Rinderle-Ma, and S. Strecker, editors, *40 Years EMISA 2019, May 15-17, 2019, Evangelische Akademie Tutzing, Germany*, volume P-304 of *Lecture Notes in Informatics*, pages 13–28. Gesellschaft für Informatik e.V., 2019.
<https://dl.gi.de/20.500.12116/33130>
21. B. van Gils and H. A. Proper. Enterprise modelling in the age of digital transformation. In R. A. Buchmann, D. Karagiannis, and M. Kirikova, editors, *The Practice of Enterprise Modeling – 11th IFIP WG 8.1. Working Conference, PoEM 2018, Vienna, Austria, October 31 – November 2, 2018, Proceedings*, volume 335 of *Lecture Notes in Business Information Processing*, pages 257–273. Springer, Heidelberg, Germany, 2018. ISBN: 978-3-030-02301-0
[doi:10.1007/978-3-030-02302-7_16](https://doi.org/10.1007/978-3-030-02302-7_16)

22. I. S. Razo-Zapata, E. K. Chew, Q. Ma, L. Gammaitoni, and H. A. Proper. Enabling value co-creation in customer journeys with VIVA. In *Joint International Conference on Service Science and Innovation (ICSSI 2018) and on Serviceology (ICServ2018)*, 2018.
23. H. A. Proper, M. Bjeković, B. van Gils, and S. J. B. A. Hoppenbrouwers. Towards a Multi-Stage Strategy to Teach Enterprise Modelling. In D. Aveiro, G. Guizzardi, S. Guerreiro, and W. Guédria, editors, *Advances in Enterprise Engineering XII – 8th Enterprise Engineering Working Conference, EEWc 2018, Luxembourg, May 28 – June 1, 2018, Proceedings*, volume 334 of *Lecture Notes in Business Information Processing*, pages 181–202. Springer, Heidelberg, Germany, 2018. ISBN: 978-3-030-06097-8
doi:10.1007/978-3-030-06097-8
24. H. A. Proper and K. Sandkuhl. The context of collaborative digital service development. In D. Bork, J. Grabis, and B. Lantow, editors, *Proceedings of the 2nd International Workshop on Practicing Open Enterprise Modelling within OMiLAB (PrOse) co-located with 11th IFIP WG 8.1 Working Conference on the Practice of Enterprise Modelling (PoEM 2018), Vienna, Austria, October 31, 2018.*, volume 2238 of *CEUR Workshop Proceedings*, pages 73–87. CEUR-WS.org, 2018.
<http://ceur-ws.org/Vol-2238/paper7.pdf>
25. H. A. Proper, M. Bjeković, B. van Gils, and S. de Kinderen. Enterprise architecture modelling – purpose, requirements and language. In *Proceedings of the 13th Workshop on Trends in Enterprise Architecture (TEAR 2018). IEEE, Stockholm, Sweden 2018.*, 2018.
26. A. Nakakawa, F. Namagembe, and H. A. Proper. Dimensions for scoping e-government enterprise architecture development efforts. In H. Panetto, C. Debruyne, H. A. Proper, C. Agostino Ardagna, D. Roman, and R. Meersman, editors, *On the Move to Meaningful Internet Systems. OTM 2018 Conferences – Confederated International Conferences: CoopIS, C&TC, and ODBASE 2018, Valletta, Malta, October 22-26, 2018, Proceedings, Part I*, volume 11229 of *Lecture Notes in Computer Science*, pages 661–679. Springer, Heidelberg, Germany, 2018. ISBN: 978-3-030-02609-7
doi:10.1007/978-3-030-02610-3_37
27. C. Huemer, G. Kappel, M. Wimmer, H. A. Proper, S. Reich, W. Behrendt, S. Thalmann, G. Weichhart, and A. Zoitl. Interoperability and integration in future production systems. In H. A. Proper, S. Strecker, C. Huemer, C. Feltus, W. Guédria, I. S. Razo-Zapata, M. Brichni, D. Rozier, M. M. Komarov, S. V. Maltseva, and S. Guerreiro, editors, *20th IEEE Conference on Business Informatics, CBI 2018, Vienna, Austria, July 11-14, 2018, Volume 2 – Research-in-Progress Papers and Workshops*, pages 175–177. IEEE Computer Society, 2018.
doi:10.1109/CBI.2018.10067
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=8451902>
28. S. J. B. A. Hoppenbrouwers, H. A. Proper, and M. Nijssen. Towards key principles of fact based thinking. In Christophe Debruyne, Hervé Panetto, Wided Guédria, Peter Bollen, Ioana Ciuciu, and Robert Meersman, editors, *On the Move to Meaningful Internet Systems: OTM 2018 Workshops – Confederated International Workshops: EI2N, FBM, ICSP, and Meta4eS 2018, Valletta, Malta, October 22-26, 2018, Revised Selected Papers*, volume 11231 of *Lecture Notes in Computer Science*, pages 77–86. Springer, 2019. ISBN: 978-3-030-11682-8
doi:10.1007/978-3-030-11683-5%5C_8
29. C. Feltus, H. A. Proper, A. Metzger, J. C. Garcia Lopez, and R. Gonzalez Castineira. Value cocreation (VCC) language design in the frame of a smart airport network case study. In L. Barolli, M. Takizawa, T. Enokido, M. R. Ogiela, L. Ogiela, and N. Javaid, editors, *32nd IEEE International Conference on Advanced Information Networking and Applications, AINA 2018, Krakow, Poland, May 16-18, 2018*, pages 858–865. IEEE Computer Society,

2018. ISBN: 978-1-5386-2195-0
doi:10.1109/AINA.2018.00127
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=8424835>

30. C. Feltus, L. Lessard, F. B. Vernadat, D. Amyot, and H. A. Proper. Conceptualization of a value cocreation language for knowledge-intensive business services. In E. Ziemba, editor, *Information Technology for Management. Ongoing Research and Development – 15th Conference, AITM 2017, and 12th Conference, ISM 2017, Held as Part of FedCSIS, Prague, Czech Republic, September 3-6, 2017, Extended Selected Papers*, volume 311 of *Lecture Notes in Business Information Processing*, pages 3–23. Springer, Heidelberg, Germany, 2018. ISBN: 978-3-319-77720-7
doi:10.1007/978-3-319-77721-4_1
31. C. Feltus, H. A. Proper, and K. Haki. Towards a language to support value cocreation: An extension to the ArchiMate modeling framework. In M. Ganzha, L. A. Maciaszek, and M. Paprzycki, editors, *Proceedings of the 2018 Federated Conference on Computer Science and Information Systems, FedCSIS 2018, Poznań, Poland, September 9-12, 2018*, pages 751–760, 2018. ISBN: 978-83-949419-5-6
doi:10.15439/2018F27
32. I. S. Razo-Zapata, A. Shrestha, and H. A. Proper. On valuation of smart grid architectures: An enterprise engineering perspective. In I. Reinhartz-Berger, J. Gulden, S. Nurcan, W. Guédria, and P. Bera, editors, *Enterprise, Business-Process and Information Systems Modeling – 18th International Conference, BPMDS 2017, 22nd International Conference, EMMSAD 2017, Held at CAiSE 2017, Essen, Germany, June 12-13, 2017, Proceedings*, volume 287 of *Lecture Notes in Business Information Processing*, pages 346–353. Springer, Heidelberg, Germany, 2017. ISBN: 978-3-319-59465-1
doi:10.1007/978-3-319-59466-8_22
33. H. A. Proper. Organisational design & enterprise engineering – two sides of the same coin? In R. P. Gorthi, S. Sarkar, N. Medvidovic, V. Kulkarni, A. Kumar, P. Joshi, P. Inverardi, A. Sureka, and R. Sharma, editors, *Proceedings of the 10th Innovations in Software Engineering Conference, ISEC 2017, Jaipur, India, February 5-7, 2017*, pages 2–3, New York, New York, 2017. ACM. ISBN: 978-1-4503-4856-0
doi:10.1145/3021460.3021487
34. G. S. S. Leal, W. Guédria, H. Panetto, and H. A. Proper. Towards a semi-automated tool for interoperability assessment: An ontology-based approach. In A. Mas, A. L. Mesquida, R. V. O'Connor, T. Rout, and A. Dorling, editors, *Software Process Improvement and Capability Determination – 17th International Conference, SPICE 2017, Palma de Mallorca, Spain, October 4-5, 2017, Proceedings*, volume 770 of *Communications in Computer and Information Science*, pages 241–254. Springer, Heidelberg, Germany, 2017. ISBN: 978-3-319-67382-0
doi:10.1007/978-3-319-67383-7_18
35. G. S. S. Leal, W. Guédria, H. Panetto, and H. A. Proper. Towards a semi-automated tool for interoperability assessment: An ontology-based approach. In *International Conference on Software Process Improvement and Capability Determination*, pages 241–254. Springer, Heidelberg, Germany, 2017.
doi:10.1007/978-3-319-67383-7_18
36. C. Feltus and H. A. Proper. Conceptualization of an abstract language to support value co-creation. In M. Ganzha, L. A. Maciaszek, and M. Paprzycki, editors, *Proceedings of the 2017 Federated Conference on Computer Science and Information Systems, FedCSIS 2017, Prague, Czech Republic, September 3-6, 2017*, pages 971–980, 2017. ISBN: 978-83-946253-7-5
doi:10.15439/2017F9

37. C. Feltus and H. A. Proper. Towards a security and privacy co-creation method. In D. Fischer, editor, *12th International Conference for Internet Technology and Secured Transactions, ICITST 2017, Cambridge, United Kingdom, December 11-14, 2017*, pages 75–80. IEEE Computer Society, Los Alamitos, California, 2017. ISBN: 978-1-908320-93-3
doi:10.23919/ICITST.2017.8356351
38. I. S. Razo-Zapata, M. Mihaylov, and H. A. Proper. Exploring the application of multilayer networks in enterprise architecture: A case study in the smart grid. In E. Kornysheva, G. Poels, and C. Huemer, editors, *18th IEEE Conference on Business Informatics, CBI 2016, 29th August – 1st September 2016, Paris, France, Volume 2 – Short and Workshop Papers*, pages 300–307. IEEE Computer Society, Los Alamitos, California, 2016.
doi:10.1109/CBI.2016.41
<http://ieeexplore.ieee.org/xpl/tocresult.jsp?isnumber=7780284>
39. G. S. S. Leal, W. Guédria, H. Panetto, and H. A. Proper. Towards a meta-model for networked enterprise. In Schmidt. R., W. Guédria, I. Bider, and S. Guerreiro, editors, *Enterprise, Business-Process and Information Systems Modeling – 17th International Conference, BPMDS 2016, 21st International Conference, EMMSAD 2016, Held at CAiSE 2016, Ljubljana, Slovenia, June 13-14, 2016, Proceedings*, volume 248 of *Lecture Notes in Business Information Processing*, pages 417–431. Springer, Heidelberg, Germany, 2016. ISBN: 978-3-319-39428-2
doi:10.1007/978-3-319-39429-9_26
40. G. S. S. Leal, W. Guédria, H. Panetto, H. A. Proper, and Mario Lezoche. Using formal measures to improve maturity model assessment for conceptual interoperability. In I. Ciuciu, C. Debruyne, H. Panetto, G. Weichhart, P. Bollen, A. Fensel, and M.-E. Vidal, editors, *On the Move to Meaningful Internet Systems: OTM 2016 Workshops – Confederated International Workshops: EI2N, FBM, ICSP, Meta4eS, and OTMA 2016, Rhodes, Greece, October 24-28, 2016, Revised Selected Papers*, volume 10034 of *Lecture Notes in Computer Science*, pages 47–56. Springer, Heidelberg, Germany, 2016. ISBN: 978-3-319-55960-5
doi:10.1007/978-3-319-55961-2_5
41. G. Plataniotis, Q. Ma, H. A. Proper, and S. de Kinderen. Traceability and modeling of requirements in enterprise architecture from a design rationale perspective. In C. Rolland, D. Anagnostopoulos, P. Loucopoulos, and C. Gonzalez-Perez, editors, *9th IEEE International Conference on Research Challenges in Information Science, RCIS 2015, Athens, Greece, May 13-15, 2015*, pages 518–519. IEEE Computer Society, Los Alamitos, California, May 2015. ISBN: 978-1-4673-6630-4
doi:10.1109/RCIS.2015.7128916
42. G. Plataniotis, S. de Kinderen, Q. Ma, and H. A. Proper. A conceptual model for compliance checking support of enterprise architecture decisions. In D. Aveiro, U. Frank, K.-J. Lin, and J. M. Tribolet, editors, *17th IEEE Conference on Business Informatics, CBI 2015, Lisbon, Portugal, July 13-16, 2015 – Volume 1*, pages 191–198. IEEE Computer Society, Los Alamitos, California, July 2015. ISBN: 978-1-4673-7340-1
doi:10.1109/CBI.2015.46
43. D. J. T. van der Linden, H. A. Proper, and S. J. B. A. Hoppenbrouwers. Conceptual understanding of conceptual modeling concepts: A longitudinal study among students learning to model. In L. S. Iliadis, M. P. Papazoglou, and K. Pohl, editors, *Advanced Information Systems Engineering Workshops – CAiSE 2014 International Workshops, Thessaloniki, Greece, June 16-20, 2014. Proceedings*, volume 178 of *Lecture Notes in Business Information Processing*, pages 213–218. Springer, Heidelberg, Germany, 2014. ISBN: 978-3-319-07868-7
doi:10.1007/978-3-319-07869-4_19
44. D. J. T. van der Linden and H. A. Proper. Category structure of language types common to conceptual modeling languages. In I. Bider, K. Gaaloul, J. Krogstie, S. Nurcan, H. A. Proper,

- R. Schmidt, and P. Soffer, editors, *Enterprise, Business-Process and Information Systems Modeling – 15th International Conference, BPMDS 2014, 19th International Conference, EMMSAD 2014, Held at CAiSE 2014, Thessaloniki, Greece, June 16-17, 2014. Proceedings*, Lecture Notes in Business Information Processing, pages 317–331. Springer, Heidelberg, Germany, 2014. ISBN: 978-3-662-43744-5
doi:10.1007/978-3-662-43745-2_22
45. D. J. T. van der Linden and H. A. Proper. On the accommodation of conceptual distinctions in conceptual modeling languages. In H.-G. Fill, D. Karagiannis, and U. Reimer, editors, *Modellierung 2014, 19.-21. März 2014, Wien, Österreich*, volume 225 of *Lecture Notes in Informatics*, pages 17–32. GI, 2014. ISBN: 978-3-88579-619-0
<https://dl.gi.de/20.500.12116/17063>
46. H. A. Proper. Enterprise architecture: Informed steering of enterprises in motion. In S. Ham-moudi, J. Cordeiro, L. A. Maciaszek, and J. Filipe, editors, *Enterprise Information Systems – 15th International Conference, ICEIS 2013, Angers, France, July 4-7, 2013, Revised Se-lected Papers*, volume 190 of *Lecture Notes in Business Information Processing*, pages 16–34. Springer, Heidelberg, Germany, 2014. ISBN: 978-3-319-09491-5
doi:10.1007/978-3-319-09492-2_2
47. S. Plataniotis, S. de Kinderen, and H. A. Proper. Implementing a software prototype for en-terprise architecture rationalization: Lessons learned. In G. Grossmann, S. Hallé, D. Karas-toyanova, M. Reichert, and S. Rinderle-Ma, editors, *18th IEEE International Enterprise Distributed Object Computing Conference Workshops and Demonstrations, EDOC Work-shops 2014, Ulm, Germany, September 1-2, 2014*, pages 41–46. IEEE Computer Society, Los Alamitos, California, 2014.
doi:10.1109/EDOCW.2014.15
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6971861>
48. G. Plataniotis, S. de Kinderen, and H. A. Proper. Capturing design rationales in enterprise architecture: A case study. In U. Frank, P. Loucopoulos, O. Pastor, and I. Petrounias, editors, *Proceedings of the 7th IFIP WG 8.1 working conference on the Practice of Enterprise Modeling (PoEM 2014)*, volume 197 of *Lecture Notes in Business Information Processing*, pages 133–147. Springer, Heidelberg, Germany, 2014. ISBN: 978-3-662-45500-5
doi:10.1007/978-3-662-45501-2_10
49. G. Plataniotis, S. de Kinderen, and H. A. Proper. A computational approach for design rationalization in enterprise architecture. In M. Bajec, M. Collard, and R. Deneckère, editors, *IEEE 8th International Conference on Research Challenges in Information Science, RCIS 2014, Marrakech, Morocco, May 28-30, 2014*, pages 1–2. IEEE Computer Society, Los Alamitos, California, 2014. ISBN: 978-1-4799-2393-9
doi:10.1109/RCIS.2014.6861090
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6848887>
50. W. Guédria and H. A. Proper. The need for second order interoperation – A view beyond traditional concepts. In R. Meersman, H. Panetto, A. Mishra, R. Valencia-García, A. Lucas Soares, I. Ciuciu, F. Fernando, G. Weichhart, T. Moser, M. Bezzi, and H. Chan, editors, *On the Move to Meaningful Internet Systems: OTM 2014 Workshops – Confederated Inter-national Workshops: OTM Academy, OTM Industry Case Studies Program, C&TC, EI2N, INBAST, ISDE, META4eS, MSC and OnToContent 2014, Amantea, Italy, October 27-31, 2014. Proceedings*, volume 8842 of *Lecture Notes in Computer Science*, pages 255–264. Springer, Heidelberg, Germany, 2014. ISBN: 978-3-662-45549-4
doi:10.1007/978-3-662-45550-0_26
51. K. Gaaloul, S. Guerreiro, and H. A. Proper. Modeling access control transactions in en-terprise architecture. In H. A. Proper and J. Ralyté, editors, *IEEE 16th Conference on*

- Business Informatics, CBI 2014, Geneva, Switzerland, July 14-17, 2014 – Volume 1*, pages 127–134. IEEE Computer Society Press, Los Alamitos, California, 2014. ISBN: 978-1-4799-5778-1
doi:10.1109/CBI.2014.26
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6902665>
52. K. Gaaloul, S. Yangui, S. Tata, and H. A. Proper. Architecting Access Control for Business Processes in the Cloud. In *International Workshop on Advanced Information Systems for Enterprises (IWAISE), Tunis, Tunisia*. IEEE Computer Society, Los Alamitos, California, 2014.
doi:10.1109/IWAISE.2014.9
 53. K. Gaaloul and H. A. Proper. A modeling approach supporting access control delegation in a disaster management context. In S. Reddy, editor, *2014 IEEE 23rd International WETICE Conference, WETICE 2014, Parma, Italy, 23-25 June, 2014*, pages 263–268. IEEE Computer Society, 2014. ISBN: 978-1-4799-4249-7
doi:10.1109/WETICE.2014.37
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6909389>
 54. S. de Kinderen, Q. Ma, and H. A. Proper. Model bundling: Towards a value-based compositional approach for language engineering. In *Proceedings of the 8th international workshop on Value Modelling and Business Ontology (VMBO 2014), Berlin, Germany*, 2014.
 55. C. Décosse, W. A. Molnar, and H. A. Proper. What does DEMO do? A qualitative analysis about DEMO in practice: Founders, modellers and beneficiaries. In D. Aveiro, J. M. Tribolet, and D. Gouveia, editors, *Proceedings of the 4th Enterprise Engineering Working Conference (EEWC 2014), Funchal, Madeira*, volume 174 of *Lecture Notes in Business Information Processing*, pages 16–30. Springer, Heidelberg, Germany, 2014. ISBN: 978-3-319-06504-5
doi:10.1007/978-3-319-06505-2_2
 56. M. Bjeković, H. A. Proper, and J.-S. Sottet. Embracing pragmatics. In E. S. K. Yu, G. Dobbie, M. Jarke, and S. Purao, editors, *Conceptual Modeling – 33rd International Conference, ER 2014, Atlanta, GA, USA, October 27-29, 2014. Proceedings*, volume 8824 of *Lecture Notes in Computer Science*, pages 431–444. Springer, Heidelberg, Germany, 2014. ISBN: 978-3-319-12205-2
doi:10.1007/978-3-319-12206-9_37
 57. R. Wagter, H. A. Proper, and D. Witte. Developing the GEA method – design science and case-study research in action. In X. Franch and P. Soffer, editors, *Advanced Information Systems Engineering Workshops – CAiSE 2013 International Workshops, Valencia, Spain, June 17-21, 2013. Proceedings*, volume 148 of *Lecture Notes in Business Information Processing*, pages 43–57, Valencia, Spain, June 2013. Springer, Heidelberg, Germany. ISBN: 978-3-642-38489-9
doi:10.1007/978-3-642-38490-5_4
 58. D. J. T. van der Linden and H. A. Proper. Do conceptual modeling languages accommodate enough explicit conceptual distinctions? In J. Grabis, M. Kirikova, J. Zdravkovic, and J. Stirna, editors, *Short Paper Proceedings of the 6th IFIP WG 8.1 Working Conference on the Practice of Enterprise Modeling (PoEM 2013), Riga, Latvia, November 6-7, 2013*, volume 1023 of *CEUR Workshop Proceedings*, pages 126–135. CEUR-WS.org, 2013.
<http://ceur-ws.org/Vol-1023/paper12.pdf>
 59. D. J. T. van der Linden and H. A. Proper. On the cognitive understanding of types in modeling languages. In R. Jung and M. Reichert, editors, *Proceedings of the 5th International Workshop on Enterprise Modelling and Information Systems Architectures, EMISA 2013, St. Gallen, Switzerland, September 5-6, 2013*, volume 222 of *Lecture Notes in Informatics*,

pages 149–162. Gesellschaft für Informatik, Bonn, Germany, 2013. ISBN: 978-3-88579-616-9
<https://dl.gi.de/20.500.12116/17240>

60. H. A. Proper. Business informatics for enterprise transformations. In *Proceedings of the 6th IEEE International Conference on Service-Oriented Computing and Applications (SOCA 2013)*, Koloa, Hawaii, page 251. IEEE Computer Society, Los Alamitos, California, 2013. ISBN: 978-1-4799-2701-2
 doi:10.1109/SOCA.2013.31
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6717185>
61. H. A. Proper. Architecture-based services innovation. In S. Hammoudi, L. A. Maciaszek, J. Cordeiro, and J. L. G. Dietz, editors, *ICEIS 2013 – Proceedings of the 15th International Conference on Enterprise Information Systems, Volume 1, Angers, France, 4-7 July, 2013*, pages IS–11. SciTePress, 2013. ISBN: 978-989-8565-59-4
62. G. Plataniotis, S. Kinderen, and H. A. Proper. Capturing decision making strategies in enterprise architecture – A viewpoint. In S. Nurcan, H. A. Proper, P. Soffer, J. Krogstie, R. Schmidt, T. A. Halpin, and I. Bider, editors, *Enterprise, Business-Process and Information Systems Modeling – 14th International Conference, BPMDS 2013, 18th International Conference, EMMSAD 2013, Held at CAiSE 2013, Valencia, Spain, June 17-18, 2013. Proceedings*, volume 147 of *Lecture Notes in Business Information Processing*, pages 339–353. Springer, Heidelberg, Germany, June 2013. ISBN: 978-3-642-38483-7
 doi:10.1007/978-3-642-38484-4_24
63. G. Plataniotis, S. de Kinderen, D. J. T. van der Linden, D. Greefhorst, and H. A. Proper. An empirical evaluation of design decision concepts in enterprise architecture. In J. Grabis, M. Kirikova, J. Zdravkovic, and J. Stirna, editors, *The Practice of Enterprise Modeling – 6th IFIP WG 8.1 Working Conference, PoEM 2013, Riga, Latvia, November 6-7, 2013, Proceedings*, volume 165 of *Lecture Notes in Business Information Processing*, pages 24–38. Springer, Heidelberg, Germany, 2013. ISBN: 978-3-642-41640-8
 doi:10.1007/978-3-642-41641-5_3
64. G. Plataniotis, S. de Kinderen, and H. A. Proper. Relating decisions in enterprise architecture using decision design graphs. In D. Gasevic, M. Hatala, H. R. Motahari Nezhad, and M. Reichert, editors, *17th IEEE International Enterprise Distributed Object Computing Conference, EDOC 2013, Vancouver, BC, Canada, September 9-13, 2013*, pages 139–146. IEEE Explore, Los Alamitos, California, 2013. ISBN: 978-0-7695-5081-7
 doi:10.1109/EDOC.2013.23
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6657190>
65. N. J. Pluijmer, W. A. Molnar, and H. A. Proper. Research approach in enterprise engineering: A matter of engineering. In X. Franch and P. Soffer, editors, *Approaches for Enterprise Engineering Research*, volume 148 of *Lecture Notes in Business Information Processing*, pages 73–86, Valencia, Spain, June 2013. Springer, Heidelberg, Germany. ISBN: 978-3-642-38489-9
 doi:10.1007/978-3-642-38490-5_6
66. W. A. Molnar and H. A. Proper. A case study of a financial services provider: Progressing towards applying advanced enterprise engineering. In J. P. Shim, Y. Hwang, and S. Petter, editors, *19th Americas Conference on Information Systems, AMCIS 2013, Chicago, Illinois, USA, August 15-17, 2013*, pages 1–8. Association for Information Systems, 2013.
<http://aisel.aisnet.org/amcis2013/EndUserIS/GeneralPresentations/18>
67. W. A. Molnar and H. A. Proper. Engineering an enterprise: Practical issues of two case studies from the luxembourgish beverage and tobacco industry. In A. F. Harmsen and H. A. Proper, editors, *Practice-Driven Research on Enterprise Transformation – 6th Working Conference, PRET 2013, Utrecht, The Netherlands, June 6, 2013. Proceedings*, volume 151

- of *Lecture Notes in Business Information Processing*, pages 76–91, Utrecht, the Netherlands, June 2013. Springer, Heidelberg, Germany. ISBN: 978-3-642-38773-9
doi:10.1007/978-3-642-38774-6_6
68. W. Guédria, K. Gaaloul, H. A. Proper, and Y. Naudet. Research methodology for enterprise interoperability architecture approach. In X. Franch and P. Soffer, editors, *Advanced Information Systems Engineering Workshops – CAiSE 2013 International Workshops, Valencia, Spain, June 17-21, 2013. Proceedings*, volume 148 of *Lecture Notes in Business Information Processing*, pages 16–29, Valencia, Spain, June 2013. Springer, Heidelberg, Germany. ISBN: 978-3-642-38489-9
doi:10.1007/978-3-642-38490-5_2
 69. W. Guédria, K. Gaaloul, Y. Naudet, and H. A. Proper. A modelling approach to support enterprise architecture interoperability. In Y. T. Demey and H. Panetto, editors, *On the Move to Meaningful Internet Systems: OTM 2013 Workshops – Confederated International Workshops: OTM Academy, OTM Industry Case Studies Program, ACM, EI2N, ISDE, Meta4eS, ORM, SeDeS, SINCOM, SMS, and SOMOCO 2013, Graz, Austria, September 9 – 13, 2013, Proceedings*, volume 8186 of *Lecture Notes in Computer Science*, pages 189–198. Springer, Heidelberg, Germany, 2013. ISBN: 978-3-642-41032-1
doi:10.1007/978-3-642-41033-8_27
 70. K. Gaaloul, M. El Kharbili, and H. A. Proper. Secure Governance in Enterprise Architecture – Access Control Perspective. In California IEEE Explore, Los Alamitos, editor, *The 3rd International Symposium ISKO-Maghreb, Marrakesh, Morocco, November 8–9, 2013*.
doi:10.1109/ISK0-Maghreb.2013.6728170
 71. K. Gaaloul and H. A. Proper. An access control model for organisational management in enterprise architecture. In *Ninth International Conference on Semantics, Knowledge and Grids, SKG 2013, Beijing, China, October 3-4, 2013*, pages 37–43. IEEE Computer Society, Los Alamitos, California, 2013. ISBN: 978-1-4799-3012-8
doi:10.1109/SKG.2013.12
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6816526>
 72. S. de Kinderen and H. A. Proper. e3-RoME: a value-based approach for method bundling. In S. Y. Shin and J. Carlos Maldonado, editors, *Proceedings of the 28th Annual ACM Symposium on Applied Computing, SAC '13, Coimbra, Portugal, March 18-22, 2013*, pages 1469–1471. ACM, 2013. ISBN: 978-1-4503-1656-9
doi:10.1145/2480362.2480635
<http://dl.acm.org/citation.cfm?id=2480362>
 73. C. Décosse, W. A. Molnar, and H. A. Proper. A qualitative research approach to obtain insight in business process modelling methods in practice. In J. Grabis, M. Kirikova, J. Zdravkovic, and J. Stirna, editors, *The Practice of Enterprise Modeling – 6th IFIP WG 8.1 Working Conference, PoEM 2013, Riga, Latvia, November 6-7, 2013, Proceedings*, volume 165 of *Lecture Notes in Business Information Processing*, pages 161–175. Springer, Heidelberg, Germany, 2013. ISBN: 978-3-642-41640-8
doi:10.1007/978-3-642-41641-5_12
 74. M. Bjeković, H. A. Proper, and J.-S. Sottet. Enterprise modelling languages – just enough standardisation? In B. Shishkov, editor, *Business Modeling and Software Design – Third International Symposium, BMSD 2013, Noordwijkerhout, The Netherlands, July 8-10, 2013, Revised Selected Papers*, volume 173 of *Lecture Notes in Business Information Processing*, pages 1–23. Springer, Heidelberg, Germany, 2014. ISBN: 978-3-319-06670-7
doi:10.1007/978-3-319-06671-4_1
 75. M. Bjeković, J.-S. Sottet, J.-M. Favre, and H. A. Proper. A framework for natural enterprise modelling. In *IEEE 15th Conference on Business Informatics, CBI 2013, Vienna, Austria,*

- July 15-18, 2013, pages 79–84. IEEE Computer Society Press, Los Alamitos, California, 2013. ISBN: 978-0-7695-5072-5
doi:10.1109/CBI.2013.20
76. M. Bjeković and H. A. Proper. Challenges Of Modelling Landscapes: Pragmatics Swept Under the Carpet? In *Third International Symposium, BMSD*, pages 11–22, 2013.
<http://www.is-bmsd.org/Documents/ProceedingsOfThirdBMSD.pdf>
 77. R. Wagter, H. A. Proper, and D. Witte. A practice-based framework for enterprise coherence. In H. A. Proper, A. F. Harmsen, K. Gaaloul, and S. Wrycza, editors, *Practice-Driven Research on Enterprise Transformation – 4th Working Conference, PRET 2012, Gdańsk, Poland, June 27, 2012. Proceedings*, volume 120 of *Lecture Notes in Business Information Processing*, pages 77–95, Gdansk, Poland, June 2012. Springer, Heidelberg, Germany. ISBN: 978-3-642-31133-8
doi:10.1007/978-3-642-31134-5_4
 78. R. Wagter, H. A. Proper, and D. Witte. The extended enterprise coherence-governance assessment. In S. Aier, M. Ekstedt, F. Matthes, H. A. Proper, and J. Sanz, editors, *Trends in Enterprise Architecture Research and Practice-Driven Research on Enterprise Transformation – 7th Workshop, TEAR 2012, and 5th Working Conference, PRET 2012, Held at The Open Group Conference 2012, Barcelona, Spain, October 23-24, 2012. Proceedings*, volume 131 of *Lecture Notes in Business Information Processing*, pages 218–235. Springer, Heidelberg, Germany, October 2012. ISBN: 978-3-642-34162-5
doi:10.1007/978-3-642-34163-2_13
 79. R. Wagter, H. A. Proper, and D. Witte. Enterprise architecture: A strategic specialism. In S. Rinderle-Ma, J. Sanz, and X.-Y. Bai, editors, *Proceedings of the 14th IEEE Conference on Commerce and Enterprise Computing (CEC2012)*, pages 1–8, Hangzhou, China, September 2012. IEEE Computer Society Press, Los Alamitos, California. ISBN: 978-0-769-54857-9
doi:10.1109/CEC.2012.11
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6470764>
 80. R. Wagter, H. A. Proper, and D. Witte. Enterprise coherence in the dutch ministry of social affairs and employment. In M. Bajec and J. Eder, editors, *Advanced Information Systems Engineering Workshops – CAiSE 2012 International Workshops, Gdańsk, Poland, June 25-26, 2012. Proceedings*, volume 112 of *Lecture Notes in Business Information Processing*, pages 600–607. Springer, Heidelberg, Germany, 2012. ISBN: 978-3-642-31068-3
doi:10.1007/978-3-642-31069-0_50
 81. R. Wagter, H. A. Proper, and D. Witte. On the use of GEA at the dutch ministry of social affairs and employment. In S. Rinderle-Ma, J. L. Sanz, and X.-Y. Bai, editors, *14th IEEE International Conference on Commerce and Enterprise Computing, CEC 2012, Hangzhou, China, September 9-11, 2012*, pages 115–119. IEEE Computer Society Press, Los Alamitos, California, September 2012. ISBN: 978-0-769-54857-9
doi:10.1109/CEC.2012.26
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6470764>
 82. R. Wagter, H. A. Proper, and D. Witte. Enterprise coherence governance in the public sector – custodial institutions agency of the dutch ministry of security and justice. In *IEEE 15th Conference on Business Informatics, CBI 2013, Vienna, Austria, July 15-18, 2013*, pages 117–124. IEEE Computer Society Press, Los Alamitos, California, 2013. ISBN: 978-0-7695-5072-5
doi:10.1109/CBI.2013.25
 83. G. Plataniotis, S. Kinderen de, and H. A. Proper. EA Anamnesis: Towards an approach for Enterprise Architecture rationalization. In J.-P. Tolvanen, J. Sprinkle, M. Rossi, and J. Gray, editors, *Proceedings of the 12th Workshop on Domain-specific Modeling, DSM 2012, Tucson,*

- Arizona, October 21–25, 2012, New York, New York, 2012. ACM. ISBN: 978-1-4503-1634-7
doi:10.1145/2420918.2420927
84. D. Marosin, H. A. Proper, and L. van der Torre. Changing agreements: Intention reconsideration based on assumptions and reasons. In S. Ossowski, F. Toni, and G. A. Vouros, editors, *Proceedings of the First International Conference on Agreement Technologies, AT 2012, Dubrovnik, Croatia, October 15-16, 2012*, volume 918 of *CEUR Workshop Proceedings*, pages 262–263. CEUR-WS.org, 2012.
<http://ceur-ws.org/Vol-918/111110262.pdf>
 85. K. Gaaloul, H. A. Proper, and F. Charoy. An extended RBAC model for task delegation in workflow systems. In L. Niedrite, R. Strazdina, and B. Wangler, editors, *Workshops on Business Informatics Research – BIR 2011 International Workshops and Doctoral Consortium, Riga, Latvia, October 6, 2011 Revised Selected Papers*, volume 106 of *Lecture Notes in Business Information Processing*, pages 51–63. Springer, Heidelberg, Germany, 2012. ISBN: 978-3-642-29230-9
doi:10.1007/978-3-642-29231-6_5
 86. C. Feltus, E. Dubois, H. A. Proper, I. Band, and M. Petit. Enhancing the ArchiMate standard with a responsibility modeling language for access rights management. In M. Singh Gaur, A. Elçi, O. B. Makarevich, M. A. Orgun, and V. Singh, editors, *5th International Conference of Security of Information and Networks, SIN '12, Jaipur, India, October 22 – 26, 2012*, pages 12–19. ACM Press, New York, New York, 2012. ISBN: 978-1-4503-1668-2
doi:10.1145/2388576.2388577
<http://dl.acm.org/citation.cfm?id=2388576>
 87. S. de Kinderen, K. Gaaloul, and H. A. Proper. Integrating value modelling into ArchiMate. In M. Snene, editor, *Exploring Services Science – Third International Conference, IESS 2012, Geneva, Switzerland, February 15-17, 2012. Proceedings*, volume 103 of *Lecture Notes in Business Information Processing*, pages 125–139. Springer, Heidelberg, Germany, 2012. ISBN: 978-3-642-28226-3
doi:10.1007/978-3-642-28227-0_10
 88. S. de Kinderen, K. Gaaloul, and H. A. Proper. Transforming transaction models into ArchiMate. In Kirikova M. and J. Stirna, editors, *Proceedings of the CAiSE'12 Forum at the 24th International Conference on Advanced Information Systems Engineering (CAiSE), Gdansk, Poland, June 28, 2012*, volume 855 of *CEUR Workshop Proceedings*, pages 114–121. CEUR-WS.org, 2012.
<http://ceur-ws.org/Vol-855/paper14.pdf>
 89. S. de Kinderen, K. Gaaloul, and H. A. Proper. On transforming DEMO models to ArchiMate. In I. Bider, T. A. Halpin, J. Krogstie, S. Nurcan, H. A. Proper, R. Schmidt, P. Soffer, and S. Wrycza, editors, *Enterprise, Business-Process and Information Systems Modeling – 13th International Conference, BPMDS 2012, 17th International Conference, EMMSAD 2012, and 5th EuroSymposium, held at CAiSE 2012, Gdańsk, Poland, June 25-26, 2012. Proceedings*, volume 113 of *Lecture Notes in Business Information Processing*, pages 270–284. Springer, Heidelberg, Germany, June 2012. ISBN: 978-3-642-31071-3
doi:10.1007/978-3-642-31072-0_19
 90. M. Bjeković, H. A. Proper, and J.-S. Sottet. Towards a coherent enterprise modelling landscape. In K. Sandkuhl, U. Seigerroth, and J. Stirna, editors, *Short Paper Proceedings of the 5th IFIP WG 8.1 Working Conference on the Practice of Enterprise Modeling, Rostock, Germany, November 7-8, 2012*, volume 933 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2012.
<http://ceur-ws.org/Vol-933/pap3.pdf>

91. R. Wagter, H. A. Proper, and D. Witte. Enterprise coherence assessment. In A. F. Harm-
sen, K. Grahlmann, and H. A. Proper, editors, *Practice-Driven Research on Enterprise
Transformation – Third Working Conference, PRET 2011, Luxembourg-Kirchberg, Luxem-
bourg, September 6, 2011. Proceedings*, volume 89 of *Lecture Notes in Business Information
Processing*, pages 28–52, Delft, the Netherlands, September 2011. Springer, Heidelberg, Ger-
many. ISBN: 978-3-642-23387-6
doi:10.1007/978-3-642-23388-3_2
92. D. J. T. van der Linden, S. J. B. A. Hoppenbrouwers, A. Lartseva, and H. A. Proper. Towards
an Investigation of the Conceptual Landscape of Enterprise Architecture. In V. Dignum,
J. Hidders, and S. Overbeek, editors, *Proceedings of the 6th SIKS Conference on Enterprise
Information Systems (EIS 2011)*, 2011.
93. D. J. T. van der Linden, S. J. B. A. Hoppenbrouwers, A. Lartseva, and H. A. Proper. To-
wards an investigation of the conceptual landscape of enterprise architecture. In I. Bider,
T. A. Halpin, J. Krogstie, S. Nurcan, H. A. Proper, R. Schmidt, and R. Ukor, editors, *Enter-
prise, Business-Process and Information Systems Modeling – 12th International Conference,
BPMDs 2011, and 16th International Conference, EMMSAD 2011, held at CAiSE 2011,
London, UK, June 20-21, 2011. Proceedings*, volume 81 of *Lecture Notes in Business Infor-
mation Processing*, pages 526–535, Hammamet, Tunisia, June 2011. Springer, Heidelberg,
Germany. ISBN: 978-3-642-21758-6
doi:10.1007/978-3-642-21759-3_38
94. F. P. Tulinayo, P. van Bommel, and H. A. Proper. Grounded system dynamics: A procedure
for underpinning system dynamics with a domain modeling method. In P. Johannesson,
J. Krogstie, and A. L. Opdahl, editors, *The Practice of Enterprise Modeling – 4th IFIP
WG 8.1 Working Conference, PoEM 2011 Oslo, Norway, November 2-3, 2011 Proceedings*,
volume 92 of *Lecture Notes in Business Information Processing*, pages 112–125. Springer,
Heidelberg, Germany, 2011. ISBN: 978-3-642-24848-1
doi:10.1007/978-3-642-24849-8_9
95. D. Ssebuggwawo, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Assessing collaborative
modeling quality based on modeling artifacts. In V. Dignum, J. Hidders, and S. Overbeek,
editors, *Proceedings of the 6th SIKS Conference on Enterprise Information Systems, EIS
2011, Delft, The Netherlands, October 31, 2011*, volume 800 of *CEUR Workshop Proceedings*,
pages 65–66. CEUR-WS.org, 2011.
<http://ceur-ws.org/Vol-800/paper-4-1.pdf>
96. A. Nakakawa, P. van Bommel, and H. A. Proper. Applying soft systems methodology in
enterprise architecture creation workshops. In M. Nüttgens, O. Thomas, and B. Weber,
editors, *Enterprise Modelling and Information Systems Architectures: Proceedings of the 4th
International Workshop on Enterprise Modelling and Information Systems Architectures,
EMISA 2011, Hamburg, Germany, September 22-23, 2011*, number 190 in *Lecture Notes
in Informatics*, pages 37–50. Gesellschaft für Informatik, Bonn, Germany, September 2011.
ISBN: 978-3-88579-284-0
<https://d.gi.de/20.500.12116/18523>
97. A. Nakakawa, P. van Bommel, and H. A. Proper. Applying soft systems methodology in
enterprise architecture creation workshops. In V. Dignum, J. Hidders, and S. Overbeek,
editors, *Proceedings of the 6th SIKS Conference on Enterprise Information Systems, EIS
2011, Delft, The Netherlands, October 31, 2011*, volume 800 of *CEUR Workshop Proceedings*,
pages 69–70. CEUR-WS.org, 2011.
<http://ceur-ws.org/Vol-800/paper-4-3.pdf>
98. H. Jonkers, M. M. Lankhorst, D. A. C. Quartel, H. A. Proper, and M.-E. Iacob. Archi-
Mate for integrated modelling throughout the architecture development and implementa-
tion cycle. In B. Hofreiter, E. Dubois, K.-J. Lin, T. Setzer, C. Godart, H. A. Proper,

and L. Bodestaff, editors, *13th IEEE Conference on Commerce and Enterprise Computing, CEC 2011, Luxembourg-Kirchberg, Luxembourg, September 5-7, 2011*, pages 294–301, Luxembourg-Kirchberg, Luxembourg, September 2011. IEEE Computer Society Press, Los Alamitos, California. ISBN: 978-0-769-54535-6

doi:10.1109/CEC.2011.52

<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6046209>

99. D. Greefhorst and H. A. Proper. A practical approach to the formulation and use of architecture principles. In *Proceedings of the 6th Trends in Enterprise Architecture Research workshop (TEAR 2011), held in conjunction with the 15th IEEE International Enterprise Distributed Object Computing Conference (EDOC 2011), Helsinki, Finland*, pages 330–339, Helsinki, Finland, September 2011. IEEE Computer Society Press, Los Alamitos, California. ISBN: 978-0-769-54426-7
doi:10.1109/EDOCW.2011.18
100. K. Gaaloul, H. A. Proper, and F. Charoy. Injecting Task Delegation Constraints into a Formal Security Model. In *Workshop on Alignment of Business Process and Security Modelling (ABPSM'11) in conjunction with the 10th International Conference on Perspectives in Business Informatics Research (BIR 2011), Riga, Latvia*, pages 219–224. Springer, Heidelberg, Germany, September 2011.
101. K. Gaaloul, H. A. Proper, and F. Charoy. Delegation protocols in human-centric workflows. In B. Hofreiter, E. Dubois, K.-J. Lin, T. Setzer, C. Godart, H. A. Proper, and L. Bodestaff, editors, *13th IEEE Conference on Commerce and Enterprise Computing, CEC 2011, Luxembourg-Kirchberg, Luxembourg, September 5-7, 2011*, pages 219–224. IEEE Computer Society Press, Los Alamitos, California, September 2011. ISBN: 978-1-4577-1542-6
doi:10.1109/CEC.2011.38
<http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=6046209>
102. D. Ssebuggwawo, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Assessing collaborative modeling quality based on modeling artifacts. In P. van Bommel, S. J. B. A. Hoppenbrouwers, S. J. Overbeek, and J. Barjis, editors, *The Practice of Enterprise Modeling – Third IFIP WG 8.1 Working Conference, PoEM 2010, Delft, The Netherlands, November 9-10, 2010. Proceedings*, volume 68 of *Lecture Notes in Business Information Processing*, pages 76–90. Springer, Heidelberg, Germany, 2010. ISBN: 978-3-642-16781-2
doi:10.1007/978-3-642-16782-9_6
103. D. Ssebuggwawo, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Collaborative modeling: Towards a meta-model for analysis and evaluation. In B. F. van Dongen and H. A. Reijers, editors, *Proceedings of the 5th SIKS/BENAIIS Conference on Enterprise Information Systems, EIS 2010, Eindhoven, The Netherlands, November 16, 2010*, volume 662 of *CEUR Workshop Proceedings*, pages 56–70. CEUR-WS.org, 2010.
http://ceur-ws.org/Vol-662/paper_6.pdf
104. H. A. Proper and M. Op 't Land. Lines in the Water – The Line of Reasoning in an Enterprise Engineering Case Study from the Public Sector. In A. F. Harmsen, H. A. Proper, F. Schalkwijk, J. Barjis, and S. J. Overbeek, editors, *Practice-Driven Research on Enterprise Transformation – Second Working Conference, PRET 2010, Delft, The Netherlands, November 11, 2010. Proceedings*, volume 69 of *Lecture Notes in Business Information Processing*, pages 193–216, Delft, the Netherlands, November 2010. Springer, Heidelberg, Germany. ISBN: 978-3-642-16769-0
doi:10.1007/978-3-642-16770-6
105. A. Nakakawa, P. van Bommel, and H. A. Proper. Challenges of involving stakeholders when creating enterprise architecture. In B. F. van Dongen and H. A. Reijers, editors, *Proceedings of the 5th SIKS/BENAIIS Conference on Enterprise Information Systems, EIS*

- 2010, Eindhoven, The Netherlands, November 16, 2010, volume 662 of *CEUR Workshop Proceedings*, pages 43–55. CEUR-WS.org, 2010.
http://ceur-ws.org/Vol-662/paper_5.pdf
106. A. Nakakawa, P. van Bommel, and H. A. Proper. On Supporting Collaborative Problem Solving in Enterprise Architecture Creation. In A. F. Harmsen, H. A. Proper, F. Schalkwijk, J. Barjis, and S. J. Overbeek, editors, *Practice-Driven Research on Enterprise Transformation – Second Working Conference, PRET 2010, Delft, The Netherlands, November 11, 2010. Proceedings*, volume 69 of *Lecture Notes in Business Information Processing*, pages 156–181, Delft, the Netherlands, November 2010. Springer, Heidelberg, Germany. ISBN: 978-3-642-16769-0
doi:10.1007/978-3-642-16770-6
 107. A. Nakakawa, P. van Bommel, and H. A. Proper. Towards a theory on collaborative decision making in enterprise architecture. In R. Winter, J. L. Zhao, and S. Aier, editors, *Global Perspectives on Design Science Research, 5th International Conference, DESRIST 2010, St. Gallen, Switzerland, June 4-5, 2010. Proceedings*, volume 6105 of *Lecture Notes in Computer Science*, pages 538–541. Springer, Heidelberg, Germany, 2010. ISBN: 978-3-642-13334-3
doi:10.1007/978-3-642-13335-0_40
 108. J. Groenewegen, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Playing ArchiMate models. In I. Bider, T. A. Halpin, J. Krogstie, S. Nurcan, H. A. Proper, R. Schmidt, and R. Ukör, editors, *Enterprise, Business-Process and Information Systems Modeling – 11th International Workshop, BPMDS 2010, and 15th International Conference, EMMSAD 2010, held at CAiSE 2010, Hammamet, Tunisia, June 7-8, 2010. Proceedings*, volume 50 of *Lecture Notes in Business Information Processing*, pages 182–194, Tunis, Tunesia, June 2010. Springer, Heidelberg, Germany. ISBN: 978-3-642-13050-2
doi:10.1007/978-3-642-13051-9_16
 109. P. Tulinayo, S. J. B. A. Hoppenbrouwers, P. van Bommel, and H. A. Proper. Integrating system dynamics with object-role modeling and petri nets. In J. Mendling, S. Rinderle-Ma, and W. Esswein, editors, *Enterprise Modelling and Information Systems Architectures: Proceedings of the 3rd International Workshop on Enterprise Modelling and Information Systems Architectures; Ulm, Germany, September 10-11, 2009*, volume 152 of *Lecture Notes in Informatics*, pages 41–54. GI, 2009. ISBN: 978-3-88579-246-8
<http://subs.emis.de/LNI/Proceedings/Proceedings152/article2509.html>
 110. D. Ssebuggwawo, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Evaluating modeling sessions using the analytic hierarchy process. In A. Persson and J. Stirna, editors, *The Practice of Enterprise Modeling, Second IFIP WG 8.1 Working Conference, PoEM 2009, Stockholm, Sweden, November 18-19, 2009. Proceedings*, volume 39 of *Lecture Notes in Business Information Processing*, pages 69–83. Springer, Heidelberg, Germany, 2009. ISBN: 978-3-642-05351-1
doi:10.1007/978-3-642-05352-8_7
 111. D. Ssebuggwawo, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Analyzing a collaborative modeling game. In E. S. K. Yu, J. Eder, and C. Rolland, editors, *Proceedings of the Forum at the CAiSE 2009 Conference, Amsterdam, The Netherlands, 8-12 June 2009*, volume 453 of *CEUR Workshop Proceedings*, pages 73–78. CEUR-WS.org, 2009.
<http://ceur-ws.org/Vol-453/paper13.pdf>
 112. D. Ssebuggwawo, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Group Decision Making in Collaborative Modeling: Aggregating Individual Preferences with AHP. In *Digital Proceedings of the 4th SIKS conference in Enterprise Information Systems (EIS 2009), Ravenstein, the Netherlands, 2009*.

113. D. Ssebuggwawo, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Interactions, goals and rules in a collaborative modelling session. In A. Persson and J. Stirna, editors, *The Practice of Enterprise Modeling, Second IFIP WG 8.1 Working Conference, PoEM 2009, Stockholm, Sweden, November 18-19, 2009. Proceedings*, volume 39 of *Lecture Notes in Business Information Processing*, pages 54–68. Springer, Heidelberg, Germany, 2009. ISBN: 978-3-642-05351-1
doi:10.1007/978-3-642-05352-8_6
114. H. A. Proper and D. Greefhorst. The roles of principles in enterprise architecture. In H. A. Proper, M. M. Lankhorst, M. Schönherr, J. Barjis, and S. J. Overbeek, editors, *Trends in Enterprise Architecture Research – 5th International Workshop, TEAR 2010, Delft, The Netherlands, November 12, 2010. Proceedings*, volume 70 of *Lecture Notes in Business Information Processing*, pages 57–70, Delft, the Netherlands, November 2010. Springer, Heidelberg, Germany. ISBN: 978-3-642-16818-5
doi:10.1007/978-3-642-16819-2_5
115. H. A. Proper and M. Op ’t Land. Evolving the Enterprise Engineering Framework. In G. Poels and H. Weigand, editors, *Proceedings of the 4th International Workshop on Value Modeling and Business Ontologies, VMBO 2009, Amsterdam, The Netherlands, December, 2009.*, 2009.
<http://vmbo2009.blogs.dsv.su.se/files/2009/12/VMBOProper.pdf>
116. A. Nakakawa, P. van Bommel, and H. A. Proper. Requirements for Collaborative Decision Making in Enterprise Architecture. In *4th SIKS/BENAIIS Conference on Enterprise Information Systems (EIS2009), Nijmegen, the Netherlands, 2009.*
117. A. Nakakawa, P. van Bommel, and H. A. Proper. Quality enhancement in creating enterprise architecture: Relevance of academic models in practice. In H. A. Proper, A. F. Harmsen, and J. L. G. Dietz, editors, *Advances in Enterprise Engineering II – First NAF Academy Working Conference on Practice-Driven Research on Enterprise Transformation, PRET 2009, held at CAiSE 2009, Amsterdam, The Netherlands, June 11, 2009. Proceedings*, volume 28 of *Lecture Notes in Business Information Processing*, pages 109–133, Amsterdam, the Netherlands, June 2009. Springer, Heidelberg, Germany. ISBN: 978-3-642-01858-9
doi:10.1007/978-3-642-01859-6_7
118. A. F. Harmsen, H. A. Proper, and N. Kok. Informed governance of enterprise transformations. In H. A. Proper, A. F. Harmsen, and J. L. G. Dietz, editors, *Advances in Enterprise Engineering II – First NAF Academy Working Conference on Practice-Driven Research on Enterprise Transformation, PRET 2009, held at CAiSE 2009, Amsterdam, The Netherlands, June 11, 2009. Proceedings*, volume 28 of *Lecture Notes in Business Information Processing*, pages 155–180, Amsterdam, the Netherlands, June 2009. Springer, Heidelberg, Germany. ISBN: 978-3-642-01858-9
doi:10.1007/978-3-642-01859-6_9
119. F. Tulinayo, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Integrating system dynamics with object-role modeling. In J. Stirna and A. Persson, editors, *The Practice of Enterprise Modeling, First IFIP WG 8.1 Working Conference, PoEM 2008, Stockholm, Sweden, November 12-13, 2008. Proceedings*, volume 15 of *Lecture Notes in Business Information Processing*, pages 77–85. Springer, Heidelberg, Germany, 2009. ISBN: 978-3-540-89217-5
doi:10.1007/978-3-540-89218-2_6
120. C. Steghuis and H. A. Proper. Competencies and responsibilities of enterprise architects. In J. L. G. Dietz, A. Albani, and J. Barjis, editors, *Advances in Enterprise Engineering I, 4th International Workshop CIAO! and 4th International Workshop EOMAS, held at CAiSE 2008, Montpellier, France, June 16-17, 2008. Proceedings*, number 10 in *Lecture Notes in Business Information Processing*, pages 93–107. Springer, Heidelberg, Germany, 2008.

ISBN: 978-3-540-68643-9

doi:10.1007/978-3-540-68644-6_7

121. J. Nabukenya, P. van Bommel, and H. A. Proper. A theory-driven design approach to collaborative policy making processes. In *42st Hawaii International International Conference on Systems Science (HICSS-42 2009), Proceedings (CD-ROM and online), 5-8 January 2009, Waikoloa, Big Island, HI, USA*, pages 1–10. IEEE Computer Society, Los Alamitos, California, 2009. ISBN: 978-0-7695-3450-3
doi:10.1109/HICSS.2009.44
122. M. M. Lankhorst, H. A. Proper, and H. Jonkers. The architecture of the ArchiMate language. In T. A. Halpin, J. Krogstie, S. Nurcan, H. A. Proper, R. Schmidt, P. Soffer, and R. Ukor, editors, *Enterprise, Business-Process and Information Systems Modeling, 10th International Workshop, BPMDS 2009, and 14th International Conference, EMMSAD 2009, held at CAiSE 2009, Amsterdam, The Netherlands, June 8-9, 2009. Proceedings*, volume 29 of *Lecture Notes in Business Information Processing*, pages 367–380, Amsterdam, the Netherlands, June 2009. Springer, Heidelberg, Germany. ISBN: 978-3-642-01861-9
doi:10.1007/978-3-642-01862-6_30
123. J. Nabukenya, P. van Bommel, and H. A. Proper. Towards a Method for Collaborative Policy Making. In J. Ralyté, S. Brinkkemper, and B. Henderson-Sellers, editors, *Poster proceedings of the IFIP WG8.1 Working Conference on Situational Method Engineering (ME 2007), Geneva, Switzerland*, number Technical Report UU-CS-2007-026, pages 4–12, Department of Information and Computing Sciences, Utrecht University, September 2007. ISSN: 0924-3275
124. P. van Bommel, P. G. Buitenhuis, S. J. B. A. Hoppenbrouwers, and H. A. Proper. Architecture principles – A regulative perspective on enterprise architecture. In M. Reichert, S. Strecker, and K. Turowski, editors, *Enterprise Modelling and Information Systems Architectures – Concepts and Applications , Proceedings of the 2nd International Workshop on Enterprise Modelling and Information Systems Architectures (EMISA’07), St. Goar, Germany, October 8-9, 2007*, number 119 in *Lecture Notes in Informatics*, pages 47–60. Gesellschaft für Informatik, Bonn, Germany, 2007. ISBN: 978-3-88579-213-0
<https://tinyurl.com/y4ddva3r>
125. P. van Bommel, S. J. B. A. Hoppenbrouwers, H. A. Proper, and Th. P. van der Weide. QoMo: A Modelling Process Quality Framework based on SEQUAL. In H. A. Proper, T. A. Halpin, and J. Krogstie, editors, *Proceedings of the 12th Workshop on Exploring Modeling Methods for Systems Analysis and Design (EMMSAD 2007), held in conjunction with the 19th Conference on Advanced Information Systems (CAiSE 2007), Trondheim, Norway*, pages 118–127. CEUR-WS.org, 2007. ISSN: 1613-0073
<http://ceur-ws.org/Vol-365>
126. S. J. Overbeek, P. van Bommel, H. A. Proper, and D. B. B. Rijsenbrij. Matching cognitive characteristics of actors and tasks. In R. Meersman, editor, *On the Move to Meaningful Internet Systems 2007: CoopIS, DOA, ODBASE, GADA, and IS, OTM Confederated International Conferences CoopIS, DOA, ODBASE, GADA, and IS 2007, Vilamoura, Portugal, November 25-30, 2007, Proceedings, Part I*, volume 4803 of *Lecture Notes in Computer Science*, pages 371–380. Springer, Heidelberg, Germany, November 2007. ISBN: 978-3-540-76846-3
doi:10.1007/978-3-540-76848-7_24
127. S. J. Overbeek, P. van Bommel, H. A. Proper, and D. B. B. Rijsenbrij. Characterizing knowledge intensive tasks indicating cognitive requirements; scenarios in methods for specific tasks. In J. Ralyté, S. Brinkkemper, and B. Henderson-Sellers, editors, *Situational Method Engineering: Fundamentals and Experiences, Proceedings of the IFIP WG 8.1 Working*

- Conference, 12-14 September 2007, Geneva, Switzerland*, volume 244 of *IFIP*, pages 100–114. Springer, Heidelberg, Germany, September 2007. ISBN: 978-0-387-73946-5
doi:10.1007/978-0-387-73947-2_10
128. S. J. Overbeek, P. van Bommel, H. A. Proper, and D. B. B. Rijsenbrij. Visualizing formalisms with ORM models. In *On the Move to Meaningful Internet Systems 2007: OTM 2007 Workshops, OTM Confederated International Workshops and Posters, AWeSOMe, CAMS, OTM Academy Doctoral Consortium, MONET, OnToContent, ORM, PerSys, PPN, RDDS, SSWS, and SWWS 2007, Vilamoura, Portugal, November 25-30, 2007, Proceedings, Part I*, volume 4805 of *Lecture Notes in Computer Science*, pages 709–718. Springer, Heidelberg, Germany, November 2007. ISBN: 978-3-540-76887-6
doi:10.1007/978-3-540-76888-3_93
 129. S. J. Overbeek, P. van Bommel, and H. A. Proper. Information systems engineering supported by cognitive matchmaking. In Z. Bellahsene and M. Léonard, editors, *Advanced Information Systems Engineering, 20th International Conference, CAiSE 2008, Montpellier, France, June 16-20, 2008, Proceedings*, volume 5074 of *Lecture Notes in Computer Science*, pages 495–509. Springer, Heidelberg, Germany, June 2008. ISBN: 978-3-540-69533-2
doi:10.1007/978-3-540-69534-9_37
 130. M. Op ’t Land and H. A. Proper. Impact of principles on enterprise engineering. In H. Österle, J. Schelp, and R. Winter, editors, *Proceedings of the Fifteenth European Conference on Information Systems, ECIS 2007, St. Gallen, Switzerland, 2007*, pages 1965–1976. University of St. Gallen, 2007.
<http://aisel.aisnet.org/ecis2007/113>
 131. J. Nabukenya, P. van Bommel, and H. A. Proper. Repeatable collaboration processes for mature organizational policy making. In R. O. Briggs, O. Antunes, G.-J. de Vreede, and A. Read, editors, *Groupware: Design, Implementation, and Use, 14th International Workshop, CRIWG 2008, Omaha, NE, USA, September 14-18, 2008, Revised Selected Papers*, volume 5411 of *Lecture Notes in Computer Science*, pages 217–232. Springer, Heidelberg, Germany, 2008. ISBN: 978-3-540-92830-0
doi:10.1007/978-3-540-92831-7_19
 132. P. van Bommel, S. J. B. A. Hoppenbrouwers, H. A. Proper, and Th. P. van der Weide. Giving meaning to enterprise architectures: Architecture principles with ORM and ORC. In R. Meersman, Z. Tari, and P. Herrero, editors, *On the Move to Meaningful Internet Systems 2006: OTM Workshops – OTM Confederated International Workshops and Posters, AWeSOMe, CAMS, GADA, MIOS+INTEROP, ORM, PhDS, SeBGIS, SWWS, and WOSE 2006*, *Lecture Notes in Computer Science*, pages 1138–1147, Montpellier, France, October/November 2006. Springer, Heidelberg, Germany.
doi:10.1007/11915072_17
 133. P. van Bommel, S. J. B. A. Hoppenbrouwers, H. A. Proper, and Th. P. van der Weide. On the use of Object-Role Modelling to Model Active Domains. In T. A. Halpin, J. Krogstie, and H. A. Proper, editors, *Proceedings of the 13th Workshop on Exploring Modeling Methods for Systems Analysis and Design (EMMSAD 2008), held in conjunction with the 20th Conference on Advanced Information Systems Engineering (CAiSE 2008), Montpellier, France*, volume 337, pages 473–484. CEUR-WS.org, June 2008.
<http://ceur-ws.org/Vol-337>
 134. B. Pepels, R. Plasmeijer, and H. A. Proper. Fact-oriented modeling from a programming language designer’s perspective. In R. Meersman, Z. Tari, and P. Herrero, editors, *On the Move to Meaningful Internet Systems 2006: OTM 2006 Workshops, OTM Confederated International Workshops and Posters, AWeSOMe, CAMS, COMINF, IS, KSinBIT, MIOS-CIAO, MONET, OnToContent, ORM, PerSys, OTM Academy Doctoral Consortium*,

RDDS, SWWS, and SeBGIS 2006, Montpellier, France, October 29 – November 3, 2006. Proceedings, Part II, volume 4278 of *Lecture Notes in Computer Science*, pages 1170–1180. Springer, Heidelberg, Germany, October/November 2006. ISBN: 3-540-48273-3
doi:10.1007/11915072_20

135. S. J. Overbeek, P. van Bommel, H. A. Proper, and D. B. B. Rijsenbrij. Knowledge discovery and exchange – towards a web-based application for discovery and exchange of revealed knowledge. In J. Filipe, J. A. Moinhos Cordeiro, B. Encarnacao, and V. Pedrosa, editors, *WEBIST 2007 – Proceedings of the Third International Conference on Web Information Systems and Technologies, Volume WIA, Barcelona, Spain, March 3-6, 2007*, volume WIA, pages 26–34. INSTICC Press, Setubal, Portugal, March 2007. ISBN: 978-972-8865-78-8
136. J. Nabukenya, P. van Bommel, and H. A. Proper. Collaborative IT Policy-making as a means of achieving Business-IT Alignment. In B. Pernici and J. A. Gulla, editors, *Proceedings of the Workshop on Business/IT Alignment and Interoperability (BUSITAL 2007), held in conjunction with the 19th Conference on Advanced Information Systems (CAiSE 2007), Trondheim, Norway*, pages 461–468. Tapir Academic Press, Trondheim, Norway, 2007. ISBN: 978-8-251-92245-6
137. S. J. B. A. Hoppenbrouwers, L. Lindeman, and H. A. Proper. Capturing modeling processes – towards the modal modeling laboratory. In R. Meersman, Z. Tari, and P. Herrero, editors, *On the Move to Meaningful Internet Systems 2006: OTM 2006 Workshops, OTM Confederated International Workshops and Posters, AWeSOMe, CAMS, COMINF, IS, KSiNBIT, MIOS-CIAO, MONET, OnToContent, ORM, PerSys, OTM Academy Doctoral Consortium, RDDS, SWWS, and SeBGIS 2006, Montpellier, France, October 29 – November 3, 2006. Proceedings, Part II*, volume 4278 of *Lecture Notes in Computer Science*, pages 1242–1252. Springer, Heidelberg, Germany, October/November 2006. ISBN: 3-540-48273-3
doi:10.1007/11915072_27
138. H. A. Proper, P. van Bommel, S. J. B. A. Hoppenbrouwers, and Th. P. van der Weide. A Fundamental View on the Act of Modeling. In J. Kizza, J. Aisbett, A. Vince, and T. Wanyama, editors, *Advances in Systems Modelling and ICT Applications*, volume 2 of *Special topics in computing and ICT research*, Kampala, Uganda, August 2006. Fountain Publishers, Kampala, Uganda.
139. B. van Gils, H. A. Proper, P. van Bommel, and Th. P. van der Weide. Quality makes the information market. In R. Meersman and Z. Tari, editors, *On the Move to Meaningful Internet Systems 2006: CoopIS, DOA, GADA, and ODBASE, OTM Confederated International Conferences, CoopIS, DOA, GADA, and ODBASE 2006, Montpellier, France, October 29 – November 3, 2006. Proceedings, Part I*, volume 4275 of *Lecture Notes in Computer Science*, pages 345–359. Springer, Heidelberg, Germany, October/November 2006. ISBN: 3-540-48287-3
doi:10.1007/11914853_21
140. P. van Bommel, S. J. B. A. Hoppenbrouwers, H. A. Proper, and Th. P. van der Weide. Exploring modelling strategies in a meta-modelling context. In R. Meersman, Z. Tari, and P. Herrero, editors, *On the Move to Meaningful Internet Systems 2006: OTM 2006 Workshops, OTM Confederated International Workshops and Posters, AWeSOMe, CAMS, COMINF, IS, KSiNBIT, MIOS-CIAO, MONET, OnToContent, ORM, PerSys, OTM Academy Doctoral Consortium, RDDS, SWWS, and SeBGIS 2006, Montpellier, France, October 29 – November 3, 2006. Proceedings, Part II*, volume 4278 of *Lecture Notes in Computer Science*, pages 1128–1137. Springer, Heidelberg, Germany, October/November 2006. ISBN: 3-540-48273-3
doi:10.1007/11915072_16
141. P. van Bommel, B. van Gils, H. A. Proper, E. D. Schabell, M. van Vliet, and Th. P. van der Weide. Towards an information market paradigm. In O. Belo, J. Eder, O. Pastor, and

- J. Falcão e Cunha, editors, *The 17th Conference on Advanced Information Systems Engineering (CAiSE '05), Porto, Portugal, 13-17 June, 2005, CAiSE Forum, Short Paper Proceedings*, volume 161 of *CEUR Workshop Proceedings*, pages 27–32. CEUR-WS.org, 2005. http://ceur-ws.org/Vol-161/FORUM_05.pdf
142. H. A. Proper and Th. P. van der Weide. Schema equivalence as a counting problem. In R. Meersman, Z. Tari, and P. Herrero, editors, *On the Move to Meaningful Internet Systems 2005: OTM 2005 Workshops, OTM Confederated International Workshops and Posters, AWeSOMe, CAMS, GADA, MIOS+INTEROP, ORM, PhDS, SeBGIS, SWWS, and WOSE 2005, Agia Napa, Cyprus, October 31 – November 4, 2005, Proceedings*, volume 3762 of *Lecture Notes in Computer Science*, pages 730–739. Springer, Heidelberg, Germany, October/November 2005. ISBN: 3-540-29739-1
doi:10.1007/11575863_92
 143. H. A. Proper and Th. P. van der Weide. Modelling as selection of interpretation. In H. C. Mayr and H. Breu, editors, *Modellierung 2006, 22.-24. März 2006, Innsbruck, Tirol, Austria, Proceedings*, volume P82 of *Lecture Notes in Informatics*, pages 223–232, Bonn, Germany, March 2006. Gesellschaft für Informatik. ISBN: 3-88579-176-5
<https://tinyurl.com/y3h4uas9>
 144. H. A. Proper, S. J. B. A. Hoppenbrouwers, and Th. P. van der Weide. A fact-oriented approach to activity modeling. In R. Meersman, Z. Tari, and P. Herrero, editors, *On the Move to Meaningful Internet Systems 2005: OTM 2005 Workshops, OTM Confederated International Workshops and Posters, AWeSOMe, CAMS, GADA, MIOS+INTEROP, ORM, PhDS, SeBGIS, SWWS, and WOSE 2005, Agia Napa, Cyprus, October 31 – November 4, 2005, Proceedings*, volume 3762 of *Lecture Notes in Computer Science*, pages 666–675. Springer, Heidelberg, Germany, October/November 2005. ISBN: 3-540-29739-1
doi:10.1007/11575863_86
 145. S. J. B. A. Hoppenbrouwers, H. A. Proper, and Th. P. van der Weide. Towards explicit strategies for modeling. In T. A. Halpin, K. Siau, and J. Krogstie, editors, *Proceedings of the 10th Workshop on Evaluating Modeling Methods for Systems Analysis and Design (EMMSAD'05), held in conjunction with the 17th Conference on Advanced Information Systems Engineering (CAiSE'05), Porto, Portugal*, pages 485–492. CEUR-WS.org, 2005. ISBN: 9-727-52077-4
<http://ceur-ws.org/Vol-363/paper9.pdf>
 146. S. J. B. A. Hoppenbrouwers, H. A. Proper, and Th. P. van der Weide. Formal Modelling as a Grounded Conversation. In G. Goldkuhl, M. Lind, and S. Haraldson, editors, *Proceedings of the 10th International Working Conference on the Language Action Perspective on Communication Modelling (LAP'05)*, pages 139–155, Kiruna, Sweden, June 2005. Linköpings Universitet and Hogskolan I Boras, Linköping, Sweden.
 147. S. J. B. A. Hoppenbrouwers, H. A. Proper, and Th. P. van der Weide. Fact calculus: Using ORM and Lisa-D to reason about domains. In R. Meersman, Z. Tari, and P. Herrero, editors, *On the Move to Meaningful Internet Systems 2005: OTM Workshops – OTM Confederated International Workshops and Posters, AWeSOMe, CAMS, GADA, MIOS+INTEROP, ORM, PhDS, SeBGIS, SWWS, and WOSE 2005*, volume 3762 of *Lecture Notes in Computer Science*, pages 720–729, Agia Napa, Cyprus, October/November 2005. Springer, Heidelberg, Germany. ISBN: 3-540-29739-1
doi:10.1007/11575863_91
 148. B. van Gils, H. A. Proper, P. van Bommel, and Th. P. van der Weide. Transformations in information supply. In J. Grundspenkis and M. Kirikova, editors, *CAiSE'04 Workshops in connection with The 16th Conference on Advanced Information Systems Engineering, Riga, Latvia, 7-11 June, 2004, Knowledge and Model Driven Information Systems Engineering for*

Networked Organisations, Proceedings, Vol. 1, volume 3, pages 60–78, Riga, Latvia, June 2004. Faculty of Computer Science and Information Technology. ISBN: 9984-9767-1-8

149. B. van Gils, H. A. Proper, P. van Bommel, and P. de Vrieze. Transformation selection for aptness-based web retrieval. In H. E. Williams and G. Dobbie, editors, *Database Technologies 2005, Proceedings of the Sixteenth Australasian Database Conference, ADC 2005, Newcastle, Australia, January 31st – February 3rd 2005*, volume 39 of *Conferences in Research and Practice in Information Technology Series*, pages 115–124, Sydney, New South Wales, Australia, January 2005. Australian Computer Society. ISBN: 1-920682-21-X
<http://crpit.scem.westernsydney.edu.au/abstracts/CRPITV39vanGils.html>
150. P. van Bommel, B. van Gils, H. A. Proper, M. van Vliet, and Th. P. van der Weide. The information market: Its basic concepts and its challenges. In A. H. H. Ngu, M. Kitsuregawa, E. J. Neuhold, J.-Y. Chung, and Q. Z. Sheng, editors, *Web Information Systems Engineering – WISE 2005, 6th International Conference on Web Information Systems Engineering, New York, NY, USA, November 20-22, 2005, Proceedings*, volume 3806 of *Lecture Notes in Computer Science*, pages 577–583. Springer, Heidelberg, Germany, November 2005. ISBN: 3-540-30017-1
[doi:10.1007/11581062_50](https://doi.org/10.1007/11581062_50)
151. H. A. Proper, A. A. Verrijn–Stuart, and S. J. B. A. Hoppenbrouwers. On utility-based selection of architecture-modelling concepts. In S. Hartmann and M. Stumptner, editors, *Conceptual Modelling 2005, Second Asia-Pacific Conference on Conceptual Modelling (APCCM2005), Newcastle, NSW, Australia, January/February 2005*, volume 43 of *Conferences in Research and Practice in Information Technology Series*, pages 25–34, Sydney, New South Wales, Australia, 2005. Australian Computer Society. ISBN: 1-920682-25-2
<http://crpit.scem.westernsydney.edu.au/abstracts/CRPITV43Proper.html>
152. H. A. Proper, A. I. Bleeker, and S. J. B. A. Hoppenbrouwers. Object-role modeling as a domain modeling approach. In J. Grundspenkis and M. Kirikova, editors, *CAiSE’04 Workshops in connection with The 16th Conference on Advanced Information Systems Engineering, Riga, Latvia, 7-11 June, 2004, Knowledge and Model Driven Information Systems Engineering for Networked Organisations, Proceedings, Vol. 1*, volume 3, pages 317–328, Riga, Latvia, June 2004. Faculty of Computer Science and Information Technology. ISBN: 9984-9767-1-8
153. H. A. Proper and S. J. B. A. Hoppenbrouwers. Concept Evolution in Information System Evolution. In J. Gravis, A. Persson, and J. Stirna, editors, *Forum proceedings of the 16th Conference on Advanced Information Systems 2004 (CAiSE 2004), Riga, Latvia, Riga, Latvia*, pages 63–72, Riga, Latvia, June 2004. Faculty of Computer Science and Information Technology. ISBN: 9-984-97670-X
154. S. J. B. A. Hoppenbrouwers and H. A. Proper. A Communicative Perspective on Second Order Information Systems. In G. E. Lasker, editor, *Proceedings of the 16th International Conference on System Research, Informatics and Cybernetics, Baden–Baden, Germany. IIAS, 2004*.
155. S. J. B. A. Hoppenbrouwers, H. A. Proper, and Th. P. van der Weide. Understanding the requirements on modelling techniques. In O. Pastor and J. Falcao e Cunha, editors, *Advanced Information Systems Engineering, 17th International Conference, CAiSE 2005, Porto, Portugal, June 13-17, 2005, Proceedings*, volume 3520 of *Lecture Notes in Computer Science*, pages 262–276. Springer, Heidelberg, Germany, June 2005. ISBN: 3-540-26095-1
[doi:10.1007/11431855_19](https://doi.org/10.1007/11431855_19)
156. S. J. B. A. Hoppenbrouwers, H. A. Proper, and Th. P. van der Weide. A fundamental view on the process of conceptual modeling. In L. Delcambre, C. Kop, H. C. Mayr, J. Mylopoulos, and O. Pastor, editors, *Conceptual Modeling – ER 2005, 24th International Conference on*

Conceptual Modeling, Klagenfurt, Austria, October 24-28, 2005, Proceedings, volume 3716 of *Lecture Notes in Computer Science*, pages 128–143. Springer, Heidelberg, Germany, June 2005. ISBN: 3-540-29389-2
doi:10.1007/11568322_9

157. A. I. Bleeker, H. A. Proper, and S. J. B. A. Hoppenbrouwers. The Role of Concept Management in System Development – A practical and a theoretical perspective. In J. Grabis, A. Persson, and J. Stirna, editors, *Forum proceedings of the 16th Conference on Advanced Information Systems 2004 (CAiSE 2004), Riga, Latvia*, pages 73–82, Riga, Latvia, June 2004. Faculty of Computer Science and Information Technology. ISBN: 9-984-97670-X
158. G. E. Veldhuijzen van Zanten, S. J. B. A. Hoppenbrouwers, and H. A. Proper. System Development as a Rational Communicative Process. In N. Callaos, D. Farsi, M. Eshagian-Wilner, T. Hanratty, and N. Rish, editors, *Proceedings of the 7th World Multiconference on Systemics, Cybernetics and Informatics*, volume XVI, pages 126–130, July 2003. ISBN: 9-806-56001-9
159. B. van Gils, H. A. Proper, and P. van Bommel. Towards a General Theory for Information Supply. In C. Stephanidis, editor, *Proceedings of the 10th International Conference on Human-Computer Interaction*, pages 720–724, 2003. ISBN: 0-805-84930-0
160. B. van Gils, H. A. Proper, P. van Bommel, and E. D. Schabell. Profile-based retrieval on the World Wide Web. In P. M. E. de Bra, editor, *Proceedings of the Conferentie Informatiewetenschap (INFWET2003)*, pages 91–98, 2003.
161. H. A. Proper. Architecture-driven Information System Development – Toward a framework for understanding. In N. Callaos, D. Farsi, M. Eshagian-Wilner, T. Hanratty, and N. Rish, editors, *Proceedings of the 7th World Multiconference on Systemics, Cybernetics and Informatics*, volume XVI, pages 144–149, July 2003. ISBN: 9-806-56001-9
162. H. Jonkers, G. E. Veldhuijzen van Zanten, R. van Buuren, F. Arbab, F. S. de Boer, M. Bonsangue, H. Bosma, H. ter Doest, L. Groenewegen, J. Guillen Scholten, S. J. B. A. Hoppenbrouwers, M.-E. Iacob, W. Janssen, M. M. Lankhorst, D. van Leeuwen, H. A. Proper, A. Stam, and L. van der Torre. Towards a language for coherent enterprise architecture descriptions. In M. Steen and B. R. Bryant, editors, *7th International Enterprise Distributed Object Computing Conference (EDOC 2003), 16-19 September 2003, Brisbane, Australia, Proceedings*, pages 28–39. IEEE Computer Society, Los Alamitos, California, 2003. ISBN: 0-769-51994-6
doi:10.1109/EDOC.2003.1233835
163. H. A. Proper and Th. P. van der Weide. Information coverage – incrementally satisfying a searcher’s information need. In C. Stephanidis, editor, *Universal Acces in HCI: Towards an Information Society for All*, pages 719–723, Hillsdale, New Jersey, August 2001. Lawrence Erlbaum. ISBN: 0-805-83609-8
164. A. Stam and H. A. Proper. Improving Architectures by Simulation and Animation. In D. B. B. Rijsenbrij, editor, *Proceedings of the Second National Architecture Congres*, November 2000.
165. H. A. Proper, H. Bosma, S. J. B. A. Hoppenbrouwers, and R. D. T. Janssen. Towards an Information Systems Engineering Body of Knowledge. In D. B. B. Rijsenbrij, editor, *Proceedings of the Second National Architecture Congres*, November 2000.
166. H. A. Proper, H. Bosma, S. J. B. A. Hoppenbrouwers, and R. D. T. Janssen. An Alignment Perspective on Architecture-driven Information Systems Engineering. In D. B. B. Rijsenbrij, editor, *Proceedings of the Second National Architecture Congres*, November 2000.

167. A. P. Barros, A. H. M. ter Hofstede, and H. A. Proper. Essential principles for workflow modelling effectiveness. In G. G. Gable and R. A. G. Webber, editors, *The Third Pacific Asia Conference on Information Systems, PACIS 1997, Brisbane, Australia, April, 1-5, 1997*, page 15. AISEL, April 1997.
<http://aisel.aisnet.org/pacis1997/15>
168. A. P. Barros, A. H. M. ter Hofstede, and H. A. Proper. Towards real-scale business transaction workflow modelling. In A. Olivé and J. A. Pastor, editors, *Advanced Information Systems Engineering, 9th International Conference CAiSE'97, Barcelona, Catalonia, Spain, June 16-20, 1997, Proceedings*, volume 1250 of *Lecture Notes in Computer Science*, pages 437–450. Springer, Heidelberg, Germany, June 1997. ISBN: 3-540-63107-0
doi:10.1007/3-540-63107-0_31
169. A. H. M. ter Hofstede, H. A. Proper, and Th. P. van der Weide. Exploring Fact Verbalisations for Conceptual Query Formulation. In R. P. van der Riet, J. F. M. Burg, and A. J. van der Vos, editors, *Proceedings of the Second International Workshop on Applications of Natural Language to Databases (NLDB'96), Amsterdam, the Netherlands*, pages 40–51, Amsterdam, the Netherlands, June 1996. IOS Press. ISBN: 9-051-99273-4
170. A. H. M. ter Hofstede, H. A. Proper, and Th. P. van der Weide. Computer supported query formulation in an evolving context. In R. Sacks-Davis and J. Zobel, editors, *Proceedings of the Sixth Australasian Database Conference, Glenelg/Adelaide, South Australia, 1995*, volume 17 of *Australian Computer Science Communications*, pages 188–202. University of Melbourne, Melbourne, Australia, January 1995.
171. T. A. Halpin and H. A. Proper. Database schema transformation and optimization. In M. P. Papazoglou, editor, *OOER'95: Object-Oriented and Entity-Relationship Modelling, 14th International Conference, Gold Coast, Australia, December 12-15, 1995, Proceedings*, volume 1021 of *Lecture Notes in Computer Science*, pages 191–203. Springer, Heidelberg, Germany, December 1995. ISBN: 3-540-60672-6
doi:10.1007/BFb0020532
172. A. H. M. ter Hofstede, H. A. Proper, and Th. P. van der Weide. A Conceptual Language for the Description and Manipulation of Complex Information Models. In G. Gupta, editor, *Seventeenth Annual Computer Science Conference*, volume 16 of *Australian Computer Science Communications*, pages 157–167, Christchurch, New Zealand, January 1994. University of Canterbury. ISBN: 0-473-02313-X
173. A. H. M. ter Hofstede, H. A. Proper, and Th. P. van der Weide. Supporting information disclosure in an evolving environment. In D. Karagiannis, editor, *Database and Expert Systems Applications, 5th International Conference, DEXA '94, Athens, Greece, September 7 – 9, 1994, Proceedings*, volume 856 of *Lecture Notes in Computer Science*, pages 433–444. Springer, Heidelberg, Germany, 1994. ISBN: 3-540-58435-8
doi:10.1007/3-540-58435-8_208
174. C. A. J. Burgers, H. A. Proper, and Th. P. van der Weide. An Information System organized as Stratified Hypermedia. In N. Prakash, editor, *CISM0D94, International Conference on Information Systems and Management of Data*, pages 159–183, October 1994.
175. S. J. Brouwer, C. L. J. Martens, G. H. W. M. Bronts, and H. A. Proper. Towards a unifying object role modelling theory. In T. A. Halpin and R. Meersman, editors, *Proceedings of the First International Conference on Object-Role Modelling, ORM-1, Magnetic Island, Australia, 4-6 July 1994*, pages 259–273, Magnetic Island, Queensland, Australia, July 1994. Key Centre for Software Technology, University of Queensland, Brisbane, Australia.
176. H. A. Proper and Th. P. van der Weide. Towards a general theory for the evolution of application domains. In M. E. Orlowska and M. P. Papazoglou, editors, *Advances in Database*

Research – Proceedings of the 4th Australian Database Conference, ADC '93, Griffith University, Brisbane, Queensland, Australia, February 1-2, 1993, pages 346–362. World Scientific, 1993. ISBN: 981-02-1331-X

177. H. A. Proper. Towards an Integration of Evolving Information Systems and CASE-Tools. In S. Brinkkemper and A. F. Harmsen, editors, *Proceedings of the Fourth Workshop on the Next Generation of CASE Tools*, pages 23–33, June 1993.
178. C. A. J. Burgers, H. A. Proper, and Th. P. van der Weide. Organising an Information System as Stratified Hypermedia. In H. A. Wijshoff, editor, *Proceedings of the Computing Science in the Netherlands Conference*, pages 109–120, November 1993.
179. A. H. M. ter Hofstede, H. A. Proper, and Th. P. van der Weide. Data modelling in complex application domains. In P. Loucopoulos, editor, *Advanced Information Systems Engineering, CAiSE'92, Manchester, UK, May 12-15, 1992, Proceedings*, volume 593 of *Lecture Notes in Computer Science*, pages 364–377. Springer, Heidelberg, Germany, May 1992. ISBN: 3-540-55481-5
doi:10.1007/BFb0035142
180. E. D. Falkenberg, J. L. H. Oei, and H. A. Proper. Evolving information systems: Beyond temporal information systems. In A. M. Tjoa and I. Ramos, editors, *Proceedings of the International Conference on Database and Expert Systems Applications, Valencia, Spain, 1992*, pages 282–287. Springer-Verlag, Wien, September 1992. ISBN: 3-211-82400-6

19.6 Technical Reports

1. H. A. Proper. *Grounded Enterprise Modelling*. DaVinci Series. Nijmegen Institute for Information and Computing Sciences, Radboud University, Nijmegen, the Netherlands, 2008.
2. J. Nabukenya, G.-J. de Vreede, and H. A. Proper. Research Methods for Collaboration Engineering: An Assessment of Applicability Using Collaborative Policy-Making Example. Technical Report ICIS-R07010, Radboud University, May 2007.
<https://hdl.handle.net/2066/36409>
3. B. van Gils and H. A. Proper. Fundamentals of Quality on the Web. Technical Report ICIS-R06029, Radboud University, Nijmegen, the Netherlands, June 2006.
<https://hdl.handle.net/2066/35797>
4. B. van Gils, H. A. Proper, P. van Bommel, and Th. P. van der Weide. Aptness based search on the Web. Technical Report ICIS-R06005, Radboud University, Nijmegen, the Netherlands, November 2005.
<https://hdl.handle.net/2066/36106>
5. P. van Bommel, H. A. Proper, and Th. P. van der Weide. Structured Modeling with Uncertainty. Technical Report ICIS-R07022, Radboud University, Nijmegen, the Netherlands, 2007.
<https://hdl.handle.net/2066/36515>
6. E. D. Schabell, H. A. Proper, and Th. P. van der Weide. IRIS Publication Management System – the first steps towards realization. Technical Report ICIS-R06008, Radboud University, Nijmegen, the Netherlands, December 2005.
<https://hdl.handle.net/2066/32610>
7. H. A. Proper. Work Systems Modeling Library. Technical Report arXiv:2105.07419, Radboud University, Nijmegen, the Netherlands, 2005.
<https://arxiv.org/abs/2105.07419>

8. H. A. Proper and Th. P. van der Weide. *The DaVinci Series*. DaVinci Series. Nijmegen Institute for Information and Computing Sciences, University of Nijmegen, Nijmegen, the Netherlands, 2005.
9. S. J. Overbeek, D. B. B. Rijsenbrij, and H. A. Proper. Sophia: Towards a Personal Digital Workspace for Knowledge Workers. Technical Report ICIS-R06007, Radboud University, Nijmegen, the Netherlands, January 2005.
<https://hdl.handle.net/2066/32999>
10. S. J. B. A. Hoppenbrouwers, Th. P. van der Weide, and H. A. Proper. Dealing with Uncertainty in Information Modelling. Technical Report ICIS-R05013, Institute for Information and Computing Sciences, Radboud University, Nijmegen, the Netherlands, 2005.
<https://hdl.handle.net/2066/32389>
11. S. J. B. A. Hoppenbrouwers, H. A. Proper, and Th. P. van der Weide. Fundamental Understanding of the Act of Modelling. Technical Report ICIS-R05006, Radboud University, Nijmegen, the Netherlands, January 2005.
<https://hdl.handle.net/2066/60457>
12. H. A. Proper. *Architecture-driven Information Systems Engineering*. DaVinci Series. Nijmegen Institute for Information and Computing Sciences, University of Nijmegen, Nijmegen, the Netherlands, 2004.
13. H. A. Proper and S. J. B. A. Hoppenbrouwers. Information System Evolution as Language Evolution. Technical Report NIII-R0205, Nijmegen Institute for Information and Computing Sciences, University of Nijmegen, Nijmegen, the Netherlands, 2003.
<https://hdl.handle.net/2066/111110>
14. R. D. T. Janssen and H. A. Proper. A functionality taxonomy for document search engines. Technical Report arXiv:2105.12989, Ordina Institute, Gouda, the Netherlands, June 2001.
<http://arxiv.org/abs/2105.12989>
15. R. D. T. Janssen, H. A. Proper, H. Bosma, D. Verhoef, and S. J. B. A. Hoppenbrouwers. Developing an Architecture Method Library. Technical Report arXiv:2105.07396, Ordina Institute, Gouda, the Netherlands, January 2001.
<https://arxiv.org/abs/2105.07396>
16. H. A. Proper. Da Vinci – Architecture-Driven Business Solutions. Technical Report arXiv:2105.09255, Origin, Utrecht, the Netherlands, Summer 1998.
<https://arxiv.org/abs/2105.09255>
17. T. A. Barrett and H. A. Proper. Component Based Solutions Under Architecture. Technical Report arXiv:2105.08702, Origin, Utrecht, the Netherlands, Spring 1998.
<https://arxiv.org/abs/2105.08702>
18. P. D. Bruza and H. A. Proper. Discovering the Information that is lost in our Databases – Why bother storing data if you can’t find the information? arxiv:2105.08716, Distributed Systems Technology Centre, Brisbane, Queensland, Australia, 1996.
<https://arxiv.org/abs/2105.08716>
19. A. P. Barros, A. H. M. ter Hofstede, H. A. Proper, and P. N. Creasy. Business Suitability Principles for Workflow Modelling. Technical Report arXiv:2105.12654, Department of Computer Science, University of Queensland, Brisbane, Queensland, Australia, August 1996.
<https://arxiv.org/abs/2105.12654>
20. A. P. Barros, A. H. M. ter Hofstede, and H. A. Proper. Towards an Integrated Conceptual Modelling Kernel for Business Transaction Workflows. Technical Report arXiv:2105.15139,

Department of Computer Science, University of Queensland, Brisbane, Queensland, Australia, November 1996.

<http://arxiv.org/abs/2105.15139>

21. H. A. Proper and T. A. Halpin. Conceptual Schema Optimisation – Database Optimisation before sliding down the Waterfall. Technical Report arXiv:2105.12647, Department of Computer Science, University of Queensland, Brisbane, Queensland, Australia, July 1995.
<https://arxiv.org/abs/2105.12647>
22. H. A. Proper. Interactive Query Formulation using Spider Queries. Technical Report arXiv:2105.10349, Asymetrix Research Laboratory, University of Queensland, Brisbane, Queensland, Australia, 1994.
<https://arxiv.org/abs/2105.10349>
23. H. A. Proper. Interactive Query Formulation using Query By Navigation. Technical Report arXiv:2105.09562, Asymetrix Research Laboratory, University of Queensland, Brisbane, Queensland, Australia, 1994.
<https://arxiv.org/abs/2105.09562>
24. H. A. Proper. Interactive Query Formulation using Point to Point Queries. Technical Report arXiv:2102.01411, Asymetrix Research Report 94-1, Asymetrix Research Laboratory, University of Queensland, Brisbane, Queensland, Australia, 1994.
<https://arxiv.org/abs/2102.01411>
25. H. A. Proper and Th. P. van der Weide. A General Theory for the Evolution of Application Models – Full version. Technical Report arXiv:2105.11308, Department of Computer Science, University of Queensland, Brisbane, Australia, 1994.
<https://arxiv.org/abs/2105.11308>
26. H. A. Proper. Introduction to Formal Notations. Technical report, Asymetrix Research Laboratory, University of Queensland, Brisbane, Queensland, Australia, 1994.
<https://downloads.erikproper.eu/publications/proper1994formal.pdf>
27. H. A. Proper. Generating Significant Examples for Conceptual Schema Validation. Technical Report arXiv:2105.09561, Asymetrix Research Laboratory, University of Queensland, Brisbane, Queensland, Australia, 1994.
<https://arxiv.org/abs/2105.09561>
28. H. A. Proper. An Overview of Computer Supported Query Formulation. Technical Report arXiv:2105.09009, Asymetrix Research Laboratory, University of Queensland, Brisbane, Queensland, Australia, 1994.
<https://arxiv.org/abs/2105.09009>
29. H. A. Proper. ConQuer-92 – The revised report on the conceptual query language LISA-D. Technical Report arXiv:2105.11926, Asymetrix Research Laboratory, University of Queensland, Brisbane, Queensland, Australia, 1994.
<https://arxiv.org/abs/2105.11926>
30. A. H. M. ter Hofstede, H. A. Proper, and Th. P. van der Weide. A Note on Schema Equivalence. Technical Report 92-30, Department of Information Systems, University of Nijmegen, Nijmegen, the Netherlands, 1992.
<https://hdl.handle.net/2066/229974>
31. E. D. Falkenberg, J. L. H. Oei, and H. A. Proper. A Meta Model for Update in Information Systems. Technical Report 92-05, Department of Information Systems, University of Nijmegen, Nijmegen, the Netherlands, 1992.
<https://hdl.handle.net/2066/229960>

32. J. L. H. Oei, H. A. Proper, and E. D. Falkenberg. Modelling the Evolution of Information Systems. Technical Report 92-36, Department of Information Systems, University of Nijmegen, Nijmegen, the Netherlands, 1992.
<https://hdl.handle.net/2066/229961>