

A Bibliography of Publications of Luc Steels

Luc Steels

Tel: ?n/a?
FAX: ?n/a?

E-mail: elisahus@vub.ac.be (Internet)

13 October 2017
Version 1.13

Abstract

This bibliography records publications of Luc Steels.

Title word cross-reference

1986 [dBHS87]. **1999** [PVC⁺99].

4 [Ste76a].

5th [FMN99].

6th [SDR⁺00].

8th [SSv94b, SSV94a].

'94 [SSv94b, SSV94a]. **97** [vW97]. **'99** [PVC⁺99]. **9th** [vW97].

Acquisition [BSV98, SSV94a, SBV98, SSv94b, Ste94f, Ste97d, Ste02f]. **Action** [Ste00e]. **adaptatifs** [SV97a]. **Adaptive** [C⁺94, MMM⁺96, MW90, MBF⁺00, PBMW98, Ste96c, Ste98d, Ste99c, Ste00d, SV97b]. **Advances** [FMN99, dBHS87]. **age**

[Ste97c]. **Agent** [Ste98b]. **Agents** [Ste94d, SB95, Ste95b, Ste95k, Ste95a, Ste97g, Ste00a, Ste90b, Ste90c, Ste94c, Ste94h, Ste95j, SSV96, SV97a, SV97b, Ste98c]. **AI** [Ste84c, Ste86a, Ste89a]. **AIBO** [SK01]. **AISB91** [SS91]. **algorithm** [dJS03]. **Algorithmic** [Ste85a]. **Amorçage** [SK99a]. **Analogical** [Ste90e, Ste90d]. **Analysis** [Ste94e, Ste94g, PVC⁺99]. **Ancrage** [SV97a]. **ancrés** [SK99a]. **animals** [C⁺94, MMM⁺96, MW90, MBF⁺00, PBMW98]. **animats** [C⁺94, MMM⁺96, MW90, MBF⁺00, PBMW98]. **Application** [Ste90g]. **applications** [Ste75a]. **applicative** [Ste83b]. **April** [vW97, SS91]. **Architecture** [KKS95]. **architectures** [ADS⁺87]. **Ars** [GW95]. **art** [NKR⁺85]. **Artefacte** [Ste00c]. **article** [Ste01d]. **Artificial** [IPSK04, SC85, Ste87a, Ste88a, Ste88b, SS91, Ste91b, Ste94a, SB95, ST95, Ste95h, Ste01d, FMN99, Ste95g, dBHS87, Ste95c]. **Artificial-Intelligence-Systemen** [Ste95c]. **Artificielle** [Ste01c]. **Aspects** [Ste77]. **automata** [SV76]. **autonomes** [SK99a]. **Autonomous** [Ste93d, Ste95b, Ste95k, Ste95a, SdB95, Ste00a, Ste01b, Ste94c, Ste94h, Ste95j, SSV96, Ste97d].

Barbara [Ste01d]. **based** [SS83]. **Basic** [SdB95]. **be** [Ste01a]. **Behavior** [C⁺94, KKS95, MMM⁺96, MW90, MBF⁺00, PBMW98, Ste94e, Ste94g, Ste95b, Ste94c, Ste97d]. **behavior-oriented** [Ste94c]. **Behavioral** [BKS00]. **Behaviour** [SS91]. **Behaviours** [SdB95]. **Belgium** [SSv94b]. **better** [Ste02d]. **between** [Ste90b, Ste90c]. **Beyond** [Ste94b]. **Biology** [Ste95k, Ste95a]. **Bootstrapping** [SK02]. **Bootstraps** [Ste99b]. **Brighton** [dBHS87]. **Building** [SB95, Ste95b, GSV93, Ste84c].

Cambridge [Ste90g]. **Can** [Ste01a, Ste94f]. **Case** [Ste76b, Ste94c, Ste02a]. **Castle** [IPSK04]. **Categories** [BSV98, SBV98, Ste98a, KS00]. **challenges** [Ste94h]. **Change** [SK98a]. **channels** [JS99]. **choice** [Ste91a]. **Churchill** [Ste90g]. **Co** [Ste98e]. **Co-Evolution** [Ste98e]. **Cognition** [Ste99b]. **Cognitive** [Ste98d, Ste99a]. **Collective** [Ste86b]. **Collective** [SK99b]. **College** [Ste90g]. **Comment** [KS00]. **Commentary** [SM94, Ste01d]. **Commet** [GSV93]. **Common** [Ste88d]. **Communicating** [Ste00a, Ste79b]. **Communication** [Ste98b, Ste01f, Ste97c, Ste02e, dJS03]. **Community** [Ste86c]. **Competitors** [Ste96b]. **Completion** [Ste75a, SV76]. **Complex** [Ste88a, Ste88b, Ste00d]. **Componential** [Ste93a]. **Components** [Ste90a]. **comprendre** [Ste02d]. **computational** [Ste76c]. **Computer** [Ste02a, van95]. **Computing** [ST95]. **Concepts** [Ste85a]. **Conference** [C⁺94, FMN99, MMM⁺96, MW90, MBF⁺00, PBMW98, SDR⁺00, vW97, Ste90g, SS91, dBHS87, Ste76c]. **Connectionism** [PSFSS89, PSFSS91]. **Connectionist** [Ste89a]. **conscious** [Ste01a]. **consciousness** [Ste95g]. **Constraints** [Ste82, Ste83a, Ste85b, SO00]. **Constructing** [Ste97a]. **Construction** [BSV98, SBV98]. **construisent** [KS00]. **Consultants** [Ste82, Ste85b]. **Contact** [Ste97b]. **context** [Ste75b]. **context-free** [Ste75b]. **Contributions** [SL92]. **Conventions** [Ste98b]. **convergence** [KS00]. **Conversations** [SM94]. **Cooperation** [Ste90b, Ste90c]. **Corporate** [Ste93b, Ste93c]. **Coupling** [Ste98d]. **Creation** [Ste96e]. **Creatures** [Ste91b]. **Crucial** [SKMV02]. **cultural** [SO00, Ste02e]. **cyber** [Ste95e]. **cyber-sapiens** [Ste95e]. **cyberspace** [Ste97c]. **Czech** [vW97].

d'agents [SK99a]. **Dagstuhl** [IPSK04]. **dans** [SV97a, SK99a]. **Deepening** [Ste88c, Ste89b]. **delivery** [Ste91a]. **description** [ADS⁺87]. **Descriptions** [Ste83a]. **Design** [Ste85c, Ste94c]. **development** [Ste91a, dJS03]. **developments** [van95]. **Diagnosis** [Ste89c]. **Discovering** [Ste96b]. **Discussion** [Ste91a]. **Distinctions** [Ste97a]. **Distributed** [SM99, Ste90b, Ste90c, dJS03]. **d'une** [SK99a]. **Dynamics** [Ste88a, Ste88b, Ste95f, SK99b].

ECAI [dBHS87]. **ECAI-86** [dBHS87]. **ECAL'99** [FMN99]. **ECML** [vW97]. **ECML-97** [vW97]. **editorial** [Ste95a]. **Efficient** [BKS00]. **eighth** [SS91]. **EKAW** [SSV94a, SSv94b]. **Electronica** [GW95]. **Embodied** [SB95, IPSK04]. **Embodiment** [Ste99a]. **Emergence** [Ste00a]. **Emergent** [Ste90f, Ste91b, Ste94d, Ste96c, Ste02c]. **Engeln** [Ste00b]. **Engineering** [SL92, SL93]. **Enhancing** [SL92]. **Equilibrium** [Ste94e]. **erfinden** [Ste00c]. **erwachen** [Ste95e]. **ESPRIT** [SL92, SL93]. **EuroEcTel** [PVC⁺99]. **Europal** [Ste90g]. **European** [FMN99, PVC⁺99, vW97, Ste90g, SSv94b, SSV94a, dBHS87]. **EvoIASP** [PVC⁺99]. **Evolution** [Ste94d, Ste98e, SO00, Ste00f, Ste02e, SK00]. **Evolutionary** [PVC⁺99, Ste02b].

- Evolutionnaire** [Ste01c]. **examples** [SS83]. **Expériences** [KS00, SK00]. **Experiment** [Ste99d, Ste01g]. **Expert** [Ste84a, Ste85d, Ste85e, Ste87d, Ste88c, Ste89b, SV89, SM94, Ste86c, Ste86d, SV86, Ste87c]. **Expertise** [Ste90a]. **experts** [Ste79b]. **expertsystemen** [NS86]. **Exploiting** [Ste90d, Ste90e].
- Factors** [SKMV02]. **Fault** [Ste89c]. **Fifth** [PBMW98]. **finding** [SBS91]. **First** [MW90, PVC⁺99, Ste90g, SK01]. **FORLI** [Ste76a]. **formal** [SV76]. **Formalism** [Ste76b]. **Formation** [Ste98e]. **FORTRAN** [Ste76a]. **Fourth** [MMM⁺96]. **Frame** [Ste78, Ste91b, SS83]. **frame-based** [SS83]. **Frames** [Ste81]. **Framework** [Ste93a, Ste93d]. **France** [SDR⁺00]. **free** [Ste75b]. **French** [Ste02d]. **Function** [Ste89c]. **Function-Fault** [Ste89c]. **Functionality** [Ste90f, Ste94d]. **further** [Ste94f]. **future** [NKR⁺85, SSv94b].
- Games** [Ste98d, SK98b, SM99, Ste01b, Ste02b, Ste02c, SV97b]. **Geheugens** [Ste86b]. **General** [Ste79a]. **Generation** [JS99, Ste85d, Ste85e, Ste87d, SV89, Ste86d, SV86, Ste87c]. **Germany** [IPSK04]. **Göteborg** [PVC⁺99]. **Grammar** [Ste00a, Ste02a]. **grammars** [Ste75a, SV76]. **Grounded** [Ste96e, Ste97g, SK99c, Ste01e, SK02, Ste98c]. **Grounding** [SV97b, Ste02b]. **Guest** [Ste95a].
- hardware** [Ste91a]. **Heads** [Ste99d, Ste01g]. **Hoegaarden** [SSv94b]. **hominidus** [Ste95e]. **hommes** [Ste02d]. **Homo** [Ste95e]. **human** [Ste02e]. **Humanoid** [Ste01f]. **Hybrid** [KKS95].
- ihre** [Ste00c]. **II** [dBHS87]. **image** [PVC⁺99]. **Information** [GW95, Ste76c]. **Innovation** [SK98b]. **integrated** [Ste91a]. **Intelligence** [IPSK04, SC85, Ste87a, Ste88a, Ste88b, SS91, Ste94a, SB95, Ste95f, Ste95h, Ste95c, Ste96d, Ste03, dBHS87]. **intelligens** [Ste95e]. **Intelligent** [NKR⁺85, Ste95k, Ste95a, Ste95j]. **Intelligenz** [Ste95c, Ste95d, Ste96a]. **International** [C⁺94, IPSK04, MMM⁺96, MW90, MBF⁺00, PBMW98, SDR⁺00]. **Internetfluegeln** [Ste00b]. **Introduction** [Ste84a, Ste86d]. **Invited** [Ste86a]. **Issues** [SSV96, Ste91a].
- jeux** [SV97a]. **July** [IPSK04, dBHS87].
- Kennissystemen** [Ste92]. **Knowledge** [GSV93, Ste85c, Ste87b, SL92, Ste93b, Ste93c, SL93, SM94, SSV94a, Ste84b, SSv94b, Ste94f]. **Kognitive** [Ste00c]. **KRS** [Ste84b, Ste85a]. **kunstcreatie** [Ste86f]. **künstlichem** [Ste95e].
- langage** [SV97a, SK00]. **Language** [Ste78, Ste97b, Ste97f, Ste98d, Ste98e, SK98b, Ste99b, Ste99c, Ste00d, Ste00e, Ste01b, Ste01e, Ste02b, Ste02c, Ste76c, Ste77, Ste79a, SV97b, Ste00f, SK01, Ste02f]. **Languages** [Ste86a, Ste75b]. **Lausanne** [FMN99]. **Learning** [SV86, SV89, SdB95, Ste97b, SK99b, Ste01e, Ste01f, vW97, SK01, Ste02e, Ste02f, dJS03]. **Leben** [Ste95e]. **Leeds** [SS91]. **leur** [KS00]. **Level** [SM94, Ste98e]. **lexicale** [SK99a]. **Lexicon** [SK98a]. **Lexicons** [Ste96c]. **Life** [Ste94a, SB95, ST95, FMN99]. **line** [Ste94d]. **Linguistic** [Ste98a]. **linguistics** [Ste76c]. **Linguistique** [Ste01c]. **Liquid** [KKS95]. **Lisp** [Ste90g, Ste86e, SCF⁺86]. **list** [Ste76a].
- Machine** [vW97]. **make** [Ste94f]. **Management** [Ste93b, Ste93c]. **manual** [Ste76a]. **Maschinen** [Ste95e]. **Massive** [Ste87a]. **Mathematical** [Ste93d, Ste94g]. **May** [PVC⁺99]. **Meaning** [Ste87b, Ste96e, Ste98e, SKMV02, SK01].

Mechanism [Ste78, Ste97d]. **Memories** [Ste98d, Ste86c]. **Message** [ADS⁺87]. **Methodology** [Ste01d]. **Mieux** [Ste02d]. **Mirror** [Ste00e]. **Model** [Ste89c]. **modeled** [Ste79b]. **Modeling** [KKS95, Ste97f]. **modular** [Ste77]. **monde** [KS00]. **Multi** [Ste98b]. **Multi-Agent** [Ste98b]. **Mythos** [GW95].

Naming [SM99]. **Natural** [Ste78, Ste76c, Ste79a]. **nature** [SDR⁺00]. **Neurons** [Ste00e]. **nonlinear** [SBS91].

Object [Ste83a, Ste84b, Ste83b, Ste84c]. **Object-Oriented** [Ste83a, Ste84b, Ste83b, Ste84c]. **Objects** [Ste94b]. **office** [NKR⁺85]. **OLB** [Ste76a]. **on-line** [Ste94d]. **Ontologies** [Ste98b]. **Ontwikkelingen** [NS86]. **ORBIT** [Ste83b, Ste84c]. **Organisation** [Ste98e]. **Organising** [Ste97e]. **Organization** [Ste87e, Ste99c, Ste90b, Ste90c]. **Organizing** [Ste95i]. **Oriented** [Ste83a, Ste83b, Ste84b, Ste84c, Ste94c]. **Origin** [Ste98a]. **Origine** [SK00]. **Origins** [Ste95h, Ste96d, Ste97g, Ste97f, Ste98b, Ste98e, Ste00e, SKMV02, Ste98c, Ste02a].

package [Ste76a]. **Paper** [Ste86a]. **papers** [SSV94a, IPSK04]. **Parallel** [SDR⁺00]. **Parallelism** [Ste87a]. **Paris** [SDR⁺00]. **Parsing** [Ste75b]. **passing** [ADS⁺87]. **Path** [SBS91]. **people** [Ste02d]. **Perceptual** [Ste97a]. **Perceptually** [Ste96e]. **perspective** [PSFSS89, PSFSS91, Ste89a]. **perspectives** [NKR⁺85]. **phonology** [SO00]. **physical** [SSV96]. **platforms** [Ste91a]. **population** [SK99a]. **posed** [Ste94h]. **Position** [SSV94a]. **possible** [Ste95g]. **PPSN** [SDR⁺00]. **Practical** [Ste90g]. **Prague** [vW97]. **problem** [SDR⁺00, Ste89a]. **Proceedings** [Ste76c, Ste90g, C⁺94, FMN99, MMM⁺96, MW90, MBF⁺00, PBMW98, PVC⁺99, SDR⁺00, vW97, SS91, SSv94b]. **Process** [SL92]. **Processes** [BKS00]. **processing** [PVC⁺99, Ste76a, Ste79a, SS83]. **Producing** [Ste76c]. **Programmeren** [Ste86e]. **Programming** [Ste86a, Ste83b]. **Progress** [SC85, Ste94f]. **properties** [SV76, Ste79a]. **puzzle** [Ste00f].

reagieren [Ste00c]. **Real** [ST95]. **realisation** [SSV96]. **Reasoning** [Ste79b]. **Recognition** [Ste91b]. **regular** [Ste75b]. **related** [SV76]. **Representation** [Ste83a, Ste85c, Ste87b, Ste84b, Ste03]. **Representations** [Ste90e, Ste95f, Ste01e, Ste90d]. **Republic** [vW97]. **Requirements** [Ste85c]. **research** [Ste94h]. **Reusability** [Ste93a]. **Revised** [IPSK04]. **Robo** [Ste95e]. **robot** [Ste01a]. **Roboter** [Ste00c]. **Robotic** [Ste94d, Ste97g, Ste00a, SSV96, SV97b, Ste98c]. **robotiques** [SV97a, SK00]. **Robots** [Ste93d, SdB95, Ste01b, Ste01f, KS00, Ste95j]. **Role** [Ste93a, Ste01e]. **Roots** [Ste94a]. **route** [SB95].

sapiens [Ste95e]. **Science** [Ste97c, van95]. **Second** [Ste85d, Ste85e, Ste87c, Ste87d, SV89, Ste86d, SV86]. **Selected** [IPSK04]. **Selection** [Ste87e, JS99]. **selectionist** [Ste97d]. **Self** [Ste87e, Ste95i, Ste97e, Ste98e, Ste99c, Ste90b, Ste90c]. **Self-Organisation** [Ste98e]. **Self-Organising** [Ste97e]. **Self-Organization** [Ste87e, Ste99c, Ste90b, Ste90c]. **Self-Organizing** [Ste95i]. **semantic** [Ste76c]. **Semantics** [SK99c, SK02, Ste02c]. **sémantique** [SK99a]. **Seminar** [IPSK04]. **Semiotic** [SK99b]. **Sense** [Ste88d]. **sensorielles** [KS00]. **sensory** [JS99]. **September** [FMN99, SDR⁺00, SSv94b]. **session** [Ste91a]. **seventh** [dBHS87]. **Sharing** [Ste97a]. **Shift** [Ste78]. **sich** [Ste00c]. **signal** [PVC⁺99]. **Simulation** [C⁺94, MMM⁺96, MW90, MBF⁺00,

PBMW98, SS91]. **simulations** [Ste02a]. **Situated** [SB95, Ste99a, SK99c]. **situés** [SK99a]. **Sixth** [MBF⁺00]. **Social** [Ste01f, Ste02e, Ste02f, SK01]. **Society** [SS91, Ste79b]. **solving** [SDR⁺00, Ste89a]. **Some** [SS83]. **Source** [SK98b]. **Spatial** [Ste95i]. **Spatially** [SM99]. **Spontaneous** [SK98a, Ste99c]. **Sprache** [Ste00c]. **standard** [SCF⁺86]. **state** [NKR⁺85]. **Steps** [Ste88d]. **Stochasticity** [SK98b]. **Structural** [Ste98d]. **Study** [SS91, Ste94c]. **style** [Ste84c]. **Subfield** [Ste84a]. **Sweden** [PVC⁺99]. **Switzerland** [FMN99]. **Symbols** [Ste02b]. **syntactic** [SS83, SO00]. **Syntax** [Ste97g, Ste98c]. **Synthesising** [Ste98e]. **Synthetic** [Ste97f]. **System** [Ste00d]. **Systemen** [Ste95c]. **Systems** [GSV93, Ste76b, Ste84a, Ste85c, Ste85d, Ste85e, Ste87d, Ste88c, Ste89b, SV89, Ste94e, SM94, Ste94g, Ste95b, Ste95h, Ste98b, ADS⁺87, Ste75b, Ste79a, Ste84c, Ste86c, Ste86d, SV86, Ste87c, Ste91a].

Talking [Ste99d, Ste01g]. **Technology** [Ste95k, Ste95a]. **telecommunications** [PVC⁺99]. **Teleportation** [Ste99a, Ste00c]. **their** [Ste75a, SV76]. **Theory** [Ste90f, Ste00e, Ste77]. **Third** [C⁺94]. **today** [van95]. **tool** [Ste84c]. **trends** [van95].

U.K [dBHS87]. **Umwelt** [Ste00c]. **understand** [Ste02d]. **University** [SS91]. **Ursprünge** [Ste95c]. **Use** [Ste91b]. **user** [Ste76a]. **Using** [Ste98e, Ste84b].

Verbal [Ste01f]. **VI** [SDR⁺00]. **Vie** [Ste01c]. **view** [Ste83b]. **Visual** [BSV98, SBV98]. **Visually** [Ste97g, Ste98c]. **Vocabularies** [Ste97e]. **Vocabulary** [Ste95i].

waves [SBS91]. **Webb** [Ste01d]. **Welcome** [GW95]. **Wired** [GW95]. **Word** [SK99c, SK02, SKMV02]. **Word-Meaning** [SKMV02]. **words** [SK01]. **Workshop**

[SSv94b, SSV94a]. **Workshops** [PVC⁺99]. **workstation** [NKR⁺85]. **World** [GW95, ST95].

Zoekprocessen [Ste86f]. **Zukunft** [Ste95d, Ste96a].

References

Attardi:1987:MPA

[ADS⁺87] G. Attardi, S. Diomedi, M. Simi, P. Maes, L. Steels, K. Van Marcke, C. Benoit, and C. Benoit. Message passing architectures and description systems. In Directorate General XIII, Telecommunications, Information Industries & Innovation, editor, *ES-PRIT '86: results and achievements*, pages 73–86. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1987. ISBN 0-444-70160-5. LCCN A75.5 .E84 1986.

Birk:2000:EBP

[BKS00] A. Birk, H. Kenn, and L. Steels. Efficient behavioral processes. In Meyer et al. [MBF⁺00], pages 391–398. ISBN 0-262-63200-4. ISSN 1089-4365. LCCN QL751.65.S55 I58 2000.

Belpaeme:1998:CAV

[BSV98] Tony Belpaeme, Luc Steels, and Joris Van Looveren. The construction and acquisition of visual categories. *Lecture Notes in Computer Science*, 1545:1–12, 1998. CODEN LNCSD9. ISSN 0302-9743 (print), 1611-3349 (electronic).

- URL <http://link.springer-ny.com/link/service/series/0558/bibs/1545/15450001.htm>;
<http://link.springer-ny.com/link/service/series/0558/papers/1545/15450001.pdf>.
- Cliff:1994:AAP**
- [C⁺94] Dave Cliff et al., editors. *From animals to animats 3: proceedings of the Third International Conference on Simulation of Adaptive Behavior*. MIT Press, MIT Press, 1994. ISBN 0-262-53122-4. LCCN QL751.65.S55 I58 1994.
- duBoulay:1987:AAI**
- [dBHS87] Ben du Boulay, David Hogg, and Luc Steels, editors. *Advances in artificial intelligence, II: seventh European Conference on Artificial Intelligence, ECAI-86, Brighton, U.K., July 20-25, 1986*, volume 2. North-Holland, Amsterdam, The Netherlands, 1987. ISBN 0-444-70279-2. LCCN Q334.E97 1986.
- deJong:2003:DLA**
- [dJS03] Edwin D. de Jong and Luc Steels. A distributed learning algorithm for communication development. *Complex Systems*, 14(4):315-334, 2003. ISSN 0891-2513.
- Floreano:1999:AAL**
- [FMN99] Dario Floreano, Francesco Mondada, and J. D. (Jean-Daniel) Nicoud, editors. *Advances in artificial life: 5th European Conference, ECAL'99, Lausanne, Switzerland, September, 1999; proceedings*, volume 1674 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1999. ISBN 3-540-66452-1. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QH324.2 .E87 1999.
- Geldof:1993:CBK**
- [GSV93] S. Geldof, L. Steels, and W. Van de Velde. Comment for building knowledge systems. *Communication and Cognition — Artificial Intelligence (CC-AI)*, 10(3):195-218, 1993. ISSN 0378-0880.
- Gerbel:1995:MIW**
- [GW95] Karl Gerbel and Peter Wiebel, editors. *Mythos Information: Welcome to the Wired World: Ars Electronica 95*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1995. ISBN 3-211-82709-9. LCCN QA76.9.C66 A77 1995.
- Iida:2004:EAI**
- [IPSK04] Fumiya Iida, Rolf Pfeifer, Luc Steels, and Yasuo Kuniyoshi, editors. *Embodied Artificial Intelligence: International Seminar, Dagstuhl Castle, Germany, July 7-11, 2003: Revised Selected Papers*, volume 3139 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2004. CODEN LNCS9. ISBN 3-540-22484-X. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN Q335 .E43 2004. URL <http://link.springer-ny.com/link/service/series/>

- 0558/tocs/t3139.htm; <http://www.springerlink.com/openurl.asp?genre=issue&issn=0302-9743&volume=3139>; <http://www.springerlink.com/openurl.asp?genre=volume&id=doi:10.1007/b99075>. [LSB76]
- Jong:1999:GSS**
- [JS99] E. D. De Jong and L. Steels. Generation and selection of sensory channels. In Poli et al. [PVC⁺99], pages 90–100. ISBN 3-540-65837-8 (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN TK5102.9 .E98 1999.
- Kuyper:1995:HAM**
- [KKS95] J. De Kuyper, D. Keymeulen, and L. Steels. A hybrid architecture for modeling liquid behavior. In B. Chandrasekaran, Janice Glasgow, and N. Hari Narayanan, editors, *Diagrammatic Reasoning: Cognitive and Computational Perspectives*, pages 731–751. AAAI Press, Menlo Park, CA, USA, 1995. ISBN 0-262-57112-9. LCCN QA76.9.A96 D53 1995.
- Kaplan:2000:CRC**
- [KS00] F. Kaplan and L. Steels. Comment les robots construisent leur monde: Expériences sur la convergence des catégories sensorielles. In J-L. Dessalles, editor, *Journée ARC Evolution et Cognition*, pages 13–18. ENST, Paris, France, 2000. URL <http://arti.vub.ac.be/steels/arc2000.ps>.
- Landsbergen:1976:ANL**
- S. P. J. Landsbergen, L. Steels, and H. Boley. In L. Steels, H. Boley, and S. P. J. Landsbergen, editors, *Advances in natural language processing: Preprints of a workshop held at the University of Antwerp, 27 Oct. 1976*, page 168. Universitaire Instelling Antwerpen, Wilrijk, Belgium, 1976.
- Meyer:2000:AAP**
- [MBF⁺00] Jean-Arcady Meyer, A. Berthoz, D. Floreano, H. L. Roitblat, and S. W. Wilson, editors. *From animals to animats 6: proceedings of the Sixth International Conference on Simulation of Adaptive Behavior*, Complex adaptive systems. MIT Press, MIT Press, 2000. ISBN 0-262-63200-4. ISSN 1089-4365. LCCN QL751.65.S55 I58 2000.
- Maes:1996:AAP**
- [MMM⁺96] Pattie Maes, M. J. Mataric, J.-A. Meyer, J. Pollack, and S. W. Wilson, editors. *From animals to animats 4: proceedings of the Fourth International Conference on Simulation of Adaptive Behavior*, Complex adaptive systems. MIT Press, MIT Press, 1996. ISBN 0-262-63178-4. ISSN 1089-4365. LCCN QL751.65.S55 I58 1996.
- Meyer:1990:AAP**
- [MW90] Jean-Arcady Meyer and Stewart W. Wilson, editors. *From animals to animats: proceedings*

of the First International Conference on Simulation of Adaptive Behavior. MIT Press, MIT Press, 1990. ISBN 0-262-63138-5. LCCN QL751.65.S55 I58 1990.

Naffah:1985:IWO

- [NKR⁺85] N. Naffah, G. Kempen, J. Rohmer, L. Steels, D. Tsichritzis, and G. White. Intelligent workstation in the office: state of the art and future perspectives. In J. Roukens and J. F. Renuart, editors, *ESPRIT '84: status report of ongoing work*, pages 365–378. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1985. ISBN 0-444-87740-1. LCCN QA75.5 .E84 1984.

Nijholt:1986:OE

- [NS86] A. Nijholt and L. Steels, editors. *Ontwikkelingen in expert-systemen*. Academic Service, Den Haag, The Netherlands, 1986. ISBN 90-6233-202-1. iv + ch1(44) + ch2(14) + ch3(19) + ch4(18) + ch5(24) + ch6(25) + ch7(20) + ch8(18) pp.

Pfeifer:1998:AAP

- [PBMW98] Rolf Pfeifer, B. Blumberg, J.-A. Meyer, and S. W. Wilson, editors. *From animals to animats 5: proceedings of the Fifth International Conference on Simulation of Adaptive Behavior*, Complex adaptive systems. MIT Press, MIT Press, 1998. ISBN 0-262-66144-6. ISSN 1089-4365. LCCN QL751.65.S55 I58 1998.

Pfeifer:1989:CP

- [PSFSS89] R. Pfeifer, Z. Schreter, F. Fogelman-Soulié, and L. Steels, editors. *Connectionism in perspective*. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1989. ISBN 0-444-88061-5. LCCN Q334 .C7 1989. Papers from an international conference held at the University of Zurich, Switzerland, 11–13 Oct. 1989.

Pfeifer:1991:CP

- [PSFSS91] R. Pfeifer, Z. Schreter, F. Fogelman-Soulié, and L. Steels. Connectionism in perspective. *Neurocomputing*, 2(3):135, 1991. CODEN NR-CGEO. ISSN 0925-2312 (print), 1872-8286 (electronic).

Poli:1999:EIA

- [PVC⁺99] Riccardo Poli, H.-M. Voigt, S. Cagnoni, D. Corne, G. Smith, and T. Fogarty, editors. *Evolutionary image analysis, signal processing, and telecommunications: First European Workshops, EvoIASP '99 and EuroEcTel '99, Göteborg, Sweden, May 26–27, 1999: proceedings*, volume 1596 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1999. ISBN 3-540-65837-8 (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN TK5102.9 .E98 1999.

Steels:1995:ALRa

- [SB95] Luc Steels and Rodney Brooks, editors. *The 'Artificial Life' route*

- to ‘Artificial Intelligence’. *Building Embodied, Situated Agents*. Lawrence Erlbaum Associates, New Haven, CT, USA, 1995. ISBN 0-8058-1519-8 (paperback), 0-8058-1518-X (hardcover). ix + 288 pp. LCCN Q335 .A789 1995.
- [SBS91] J. A. Sepulchre, A. Babloyantz, and L. Steels. Path finding with nonlinear waves. In Teuvo Kohonen et al., editors, *Artificial neural networks: proceedings of the 1991 International Conference on Artificial Neural Networks (ICANN-91), Espoo, Finland, 24–28 June 1991*, volume 2, pages 1265–1268. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1991. ISBN 0-444-89178-1. LCCN QA76.87.I56 1991. Two volumes.
- [SBV98] L. Steels, T. Belpaeme, and J. Van Looveren. The construction and acquisition of visual categories. In A. Birk and J. Demiris, editors, *Learning robots: 6th European Workshop, EWLR '96, Brighton, England, August 1996: proceedings*, volume 1545 of *Lecture Notes in Computer Science*, pages 1–12. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1998. ISBN 3-540-65480-1 (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.76.I58A97 1998. URL <http://arti.vub.ac.be/steels/ewlr97.ps>.
- [SC85] Luc Steels and J. A. Campbell, editors. *Progress in Artificial Intelligence*. Ellis Horwood, Chichester, UK, 1985. ISBN 0-85312-830-8, 0-470-20171-1 (Halsted Press). LCCN Q335 .P76 1985. A selection of papers and updates of papers from the 1982 European Conference on Artificial Intelligence in Orsay, France.
- [SCF+86] H. Stoyan, J. Chailoux, J. Fitch, T. Krumnack, E. Neidl, J. Padgett, G. Attardi, T. Christaller, J. Dalton, M. Devin, B. Lang, R. Lopez de Mantaras, E. Papon, S. Pope, C. Quiennec, and L. Steels. Towards a LISP standard. In du Boulay et al. [dBHS87], pages 46–52. ISBN 0-444-70279-2. LCCN Q334.E97 1986.
- [SdB95] L. Steels and B. de Boer. Learning basic behaviours on autonomous robots. In *Proceedings of the 5th Belgian-Dutch Conference on Machine Learning, BENELEARN-95*, page ?? ????, 1995.
- [SDR+00] Marc Schoenauer, K. Deb, G. Rudolph, X. Yao, E. Lutton, J. J. Merelo, and H.-P. Schwefel, editors. *Parallel problem solving from nature — PPSN VI; 6th International Conference, Paris, France, September 2000; proceedings*, volume

Steels:1985:PAI**Sepulchre:1991:PFN****Stoyan:1986:TLS****Steels:1998:CAV****Steels:1995:LBB****Schoenauer:2000:PPS**

1917 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2000. ISBN 3-540-41056-2 (soft-cover). LCCN QA267.A1 L43 no.1917.

Steels:1998:SLC

- [SK98a] L. Steels and F. Kaplan. Spontaneous lexicon change. In *COLING-ACL '98: 36th Annual Meeting of the Association for Computational Linguistics and 17th International Conference on Computational Linguistics, Aug. 10-14, 1998, Montreal, Quebec, Canada: proceedings of the conference*, volume 2, pages 1243-1250. Morgan Kaufmann Publishers, San Francisco, CA, USA, 1998. ISBN 1-55860-581-9. LCCN P98 .A887 1998. URL <http://arti.vub.ac.be/steels/acl98.ps>.

Steels:1998:SSI

- [SK98b] L. Steels and F. Kaplan. Stochasticity as a source of innovation in language games. In Christoph Adami, R. Belew, H. Kitano, and C. Taylor, editors, *Artificial life VI: proceedings of the Sixth International Conference on Artificial Life*, Complex adaptive systems, pages 368-376. MIT Press, MIT Press, 1998. ISBN 0-262-51099-5. ISSN 1089-4365. LCCN QH324.2 .I556 1998. URL <http://arti.vub.ac.be/steels/alife98.ps>. Conference held at UCLA, June 27-29, 1998.

Steels:1999:ASL

- [SK99a] L. Steels and F. Kaplan. Amorçage d'une sémantique lexicale dans une population d'agents autonomes, ancrés et situés. In P. Amsili, editor, *6e conférence annuelle sur le traitement automatique des langues naturelles, TALN'99*, pages 393-398. ????, ????, 1999. URL <http://arti.vub.ac.be/steels/taln99.ps>.

Steels:1999:CLS

- [SK99b] L. Steels and F. Kaplan. Collective learning and semiotic dynamics. In Floreano et al. [FMN99], pages 679-688. ISBN 3-540-66452-1. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QH324.2 .E87 1999. URL <http://arti.vub.ac.be/steels/collearn.ps>.

Steels:1999:SGW

- [SK99c] L. Steels and F. Kaplan. Situated grounded word semantics. In Thomas Dean, editor, *IJCAI-99: proceedings of the Sixteenth International Joint Conference on Artificial Intelligence, Stockholm, Sweden, July 31-August 6, 1999*, volume 2, pages 862-867. Morgan Kaufmann Publishers, San Francisco, CA, USA, 1999. ISBN 1-55860-613-0. LCCN Q334 .I7846 1999. URL <http://arti.vub.ac.be/steels/ijcai99.ps>. Two volumes.

Steels:2000:OED

- [SK00] L. Steels and F. Kaplan. Origine et évolution du langage:

expériences robotiques. *Revue du Palais de la Découverte*, 278:63–67, 2000.

Steels:2001:AFW

- [SK01] L. Steels and F. Kaplan. AIBO’s first words. the social learning of language and meaning. *Evolution of Communication*, 4(1):??, 2001. ISSN 1387-5337. URL <http://arti.vub.ac.be/steels/aibo.ps>. In press. [SL93]

Steels:2002:BGW

- [SK02] L. Steels and F. Kaplan. Bootstrapping grounded word semantics. In T. Briscoe, editor, *Linguistic evolution through language acquisition: Formal and Computational Models*, page ?? Cambridge University Press, Cambridge, UK, 2002. URL <http://arti.vub.ac.be/steels/ground.ps>. In press. [SM94]

Steels:2002:CFO

- [SKMV02] L. Steels, F. Kaplan, A. McIntyre, and J. Van Looveren. Crucial factors in the origins of word-meaning. In A. Wray, editor, *The Transition to Language*, pages 214–217. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2002. URL <http://arti.vub.ac.be/steels/crucialfac.ps>. [SM99]

Steels:1992:EKE

- [SL92] Luc Steels and Brice Lepape, editors. *Enhancing the Knowledge Engineering Process: Contributions from ESPRIT*. Elsevier Science Publishers, Amsterdam, The

Netherlands, 1992. ISBN 0-444-89893-X. vi + 273 pp. LCCN T58.5 .E54 1992.

Steels:1993:KEE

L. Steels and B. Lepape. Knowledge engineering in ESPRIT. *IEEE Intelligent Systems*, 8(4):4–10, 1993. ISSN 1094-7167.

Steels:1994:KLE

Luc Steels and John McDermott, editors. *The Knowledge Level in Expert Systems. Conversations and Commentary*, volume 10 of *Perspectives in artificial intelligence*. Academic Press, San Diego, CA, USA, 1994. ISBN 0-12-664145-5. x + 274 pp. LCCN QA76.76.E95 S84 1994.

Steels:1999:SDN

L. Steels and A. McIntyre. Spatially distributed naming games. *Advances in Complex Systems*, 1(4):301–323, 1999. ISSN 0219-5259. URL <http://arti.vub.ac.be/steels/spatial.ps>.

Steels:2000:CES

- [SO00] L. Steels and P.-Y. Oudeyer. The cultural evolution of syntactic constraints in phonology. In Mark A. Bedeau, J. S. McCaskill, N. H. Packard, and S. Rasmussen, editors, *Artificial life VII: proceedings of the seventh International Conference on Artificial Life*, pages 382–394. MIT Press, MIT Press, 2000. ISBN 0-262-52290-X. LCCN QH324.2 .I556 2000. URL <http://arti.vub.ac.be/steels/alife7.ps>.

- Steels:1983:SEF**
- [SS83] L. Steels and K. De Smedt. Some examples of frame-based syntactic processing. In Fr. Daems and L. Goossens, editors, *Een spyeghel voor G. Jo Steenbergen*, pages 293–305. Acco, Leuven, Belgium, 1983.
- Steels:1991:APE**
- [SS91] Luc Steels and Barbara Smith, editors. *AISB91: proceedings of the eighth Conference of the Society for the Study of Artificial Intelligence and Simulation of Behaviour, 16–19 April 1991, University of Leeds*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1991. ISBN 0-387-19671-4 (New York), 3-540-19671-4 (Berlin). LCCN Q334 .S6315 1991.
- Steels:1994:PPE**
- [SSV94a] L. Steels, G. Schreiber, and W. Van de Velde, editors. *Position papers of the 8th European Knowledge Acquisition Workshop EKAW '94*. Vrije Universiteit Brussel, Artificial Intelligence Laboratory, Technical Report 94-2, Brussels, Belgium, 1994. ISBN ??? LCCN ????
- Steels:1994:FKA**
- [SSv94b] Luc Steels, Guus Schreiber, and Walter van de Velde, editors. *A future for knowledge acquisition: 8th European Knowledge Acquisition Workshop, EKAW '94, Hoe gaarden, Belgium, September 26–29, 1994: proceedings*, volume 867 of *Lecture Notes in Artificial Intelligence and Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1994. CODEN LNCSD9. ISBN 0-387-58487-0. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.76.E95 E36 1994.
- Steels:1996:IPR**
- [SSV96] L. Steels, P. Stuer, and D. Vereertbrugghen. Issues in the physical realisation of autonomous robotic agents. Unpublished notes., 1996. URL <http://arti.vub.ac.be/steels/sab96.ps>.
- Steels:1995:ALRb**
- [ST95] L. Steels and M. Tokoro. Artificial life and real world computing. In *Computer science today: recent trends and developments* [van95], pages 15–28. CODEN LNCSD9. ISBN 3-540-60105-8 (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76. .C57326 1995.
- Steels:1975:CGT**
- [Ste75a] L. Steels. Completion grammars and their applications. Technical report, Universitaire Instelling Antwerpen, Wilrijk, Belgium, 1975. 63 pp.
- Steels:1975:PSR**
- [Ste75b] L. Steels. Parsing systems for regular and context-free languages. Technical report, Universitaire Instelling Antwerpen, Wilrijk, Belgium, 1975. 44 pp.

- Steels:1976:FOP**
- [Ste76a] L. Steels. The FORLI. OLB package for list processing in FORTRAN 4: a user's manual. Technical report, Universitaire Instelling Antwerpen, Wilrijk, Belgium, 1976. 35 pp.
- Steels:1976:FCS**
- [Ste76b] L. Steels. A formalism for case systems. In *Proceedings of the Summer Conference on Artificial Intelligence and Simulation of Behaviour, AISB (ECAI'76)*, pages 279–290. ????, ????, 1976.
- Steels:1976:PNL**
- [Ste76c] L. Steels. Producing natural language from semantic information: Proceedings of the computational linguistics conference. Technical report, Universitaire Instelling Antwerpen, Wilrijk, Belgium, 1976. 31 pp.
- Steels:1977:AMT**
- [Ste77] L. Steels. *Aspects of a modular theory of language*, volume 50 of *Proefschriften*. Universitaire Instelling Antwerpen, Wilrijk, Belgium, 1977. 189 + 167 + 233 pp. Ph.D. Thesis.
- Steels:1978:FSM**
- [Ste78] L. Steels. The frame shift mechanism in natural language. In D. H. Sleeman, editor, *Proceedings of the 4th European Conference on Artificial Intelligence, AISB/GI (ECAI'78)*, pages 325–329. Leeds University, Leeds, UK, 1978.
- Steels:1979:GPN**
- [Ste79a] L. Steels. General properties of natural language processing systems. In Robert Trappl et al., editors, *Progress in cybernetics and systems research*, volume V, pages 504–510. Hemisphere Pub. Corp., New York, NY, USA, 1979. ISBN 0-470-88475-4. LCCN Q300 .P75. 11 volumes of papers presented at a symposium organized by the Austrian Society for Cybernetic Studies.
- Steels:1979:RMS**
- [Ste79b] L. Steels. Reasoning modeled as a society of communicating experts. Technical Report AI-TR-542, MIT AI Lab, MIT Press, 1979. 154 pp.
- Steels:1981:F**
- [Ste81] L. Steels. Frames. In Burghard B. Rieger, editor, *Empirical Semantics: a collection of new approaches in the field*, volume 12–13 of *Quantitative Linguistics*, pages 192–235. Studienverlag Dr. N. Brockmeyer, Bochum, Germany, 1981. ISBN 3-88339-221-9 (vol. 1), 3-88339-222-7 (vol. 2). LCCN P325 .E42 1981.
- Steels:1982:CC**
- [Ste82] L. Steels. Constraints as consultants. In *Proceedings of the 5th European Conference on Artificial Intelligence, ECAI'82*, pages 75–78. ????, ????, 1982.
- Steels:1983:DCO**
- [Ste83a] L. Steels. Descriptions as constraints in object-oriented repre-

sentation. In A. Bundy, editor, *IJCAI-83 : proceedings of the Eighth International Joint Conference on Artificial Intelligence, 8-12 August 1983, Karlsruhe, West Germany*, pages 395-397. William Kaufmann, San Francisco, CA, 1983. ISBN 0-86576-064-0. LCCN Q334 .I57 1983.

Steels:1983:OAV

[Ste83b]

L. Steels. ORBIT: an applicative view of object-oriented programming. In Pierpaolo Degano and Erik Sandewall, editors, *Integrated interactive computing systems: proceedings of the European Conference on Integrated Interactive Computing Systems, ECICS 82 Stresa, Italy, 1-3 September 1982*, pages 193-205. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1983. ISBN 0-444-86595-0. LCCN QA76.9.I58 E96 1982.

Steels:1984:IES

[Ste84a]

L. Steels. Introduction to expert systems subfield. In Tim O'Shea, editor, *Advances in artificial intelligence: proceedings of the Sixth European Conference on Artificial Intelligence, ECAI-84, Pisa, Italy, September 5-7, 1984*, page 1. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1984. ISBN 0-444-87611-1. LCCN Q334.E97 1984.

Steels:1984:OOK

[Ste84b]

L Steels. Object-oriented knowledge representation using KRS. In Tim O'Shea, editor, *Advances*

in artificial intelligence: proceedings of the Sixth European Conference on Artificial Intelligence, ECAI-84, Pisa, Italy, September 5-7, 1984, pages 333-336. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1984. ISBN 0-444-87611-1. LCCN Q334.E97 1984.

Steels:1984:OTB

[Ste84c]

L. Steels. ORBIT: a tool for building AI systems in an object-oriented style. In Alick Elithorn and Ranan Banerji, editors, *Artificial and Human Intelligence: edited review papers presented at the International NATO Symposium on Artificial and Human Intelligence, Lyon, France, October 1981*, pages 131-140. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1984. ISBN 0-444-86545-4. LCCN Q334 .I575 1981.

Steels:1985:ACK

[Ste85a]

L. Steels. Algorithmic concepts in KRS. In *NGI-SION 1985. Informatica Symposium: Uitdaging aan de informatica*, pages 531-542. Nederlands Genootschap voor Informatica. Stichting Informatica Onderzoek Nederland, Amsterdam, The Netherlands, 1985. ISBN 90-70621-17-7.

Steels:1985:CC

[Ste85b]

L. Steels. Constraints as consultants. In Luc Steels and J. A. Campbell, editors, *Progress in Artificial Intelligence*, pages 146-165. Ellis Horwood, Chichester,

UK, 1985. ISBN 0-85312-830-8. LCCN Q335 .P76 1985. A selection of papers and updates of papers from the 1982 European Conference on Artificial Intelligence in Orsay, France.

Steels:1985:DRK

[Ste85c] L. Steels. Design requirements for knowledge representation systems. In Joachim Laubsch, editor, *GWAI-84: 8th German Workshop on Artificial Intelligence, Wingst/Stade, October 8-12, 1984*, volume 103 of *Informatik-Fachberichte: Subreihe Kunstliche Intelligenz*, pages 1-19. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1985. ISBN 0-387-15669-0 (New York), 3-540-15669-0 (Berlin). LCCN Q334 .G47 1984.

Steels:1985:SGEa

[Ste85d] L. Steels. Second generation expert systems. *Informatie*, 27 (11):966-971, 1985. CODEN IN-FTCR. ISSN 0019-9907.

Steels:1985:SGEb

[Ste85e] Luc Steels. Second generation expert systems. *Future Generation Computer Systems*, 1(4):213-221, June 1985. CODEN FGSEVI. ISSN 0167-739X (print), 1872-7115 (electronic).

Steels:1986:APL

[Ste86a] L. Steels. AI and programming languages (invited paper). In H.-J. Kugler, editor, *Information processing 86: proceedings*

of the IFIP 10th World Computer Congress, Dublin, Ireland, September 1-5, 1986, volume 10 of *IFIP congress series*, pages 105-110. North-Holland, Amsterdam, The Netherlands, 1986. ISBN 0-444-70077-3. LCCN QA75.5.I3785 1986.

Steels:1986:CG

[Ste86b] L. Steels. Collectieve geheugens. In A. Nijholt and L. Steels, editors, *Ontwikkelingen in expertsystemen*, pages 8.1-8.19. Academic Service, Den Haag, The Netherlands, 1986.

Steels:1986:ESC

[Ste86c] L. Steels. From expert systems to Community Memories. In Thomas Bernold, editor, *Expert systems and knowledge engineering: essential elements of advanced information technology: proceedings of the Technology Assessment and Management Conference of the Gottlieb Duttweiler Institute, Ruschlikon, Zurich, Switzerland, 25-26, April 1985*, pages 17-29. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1986. ISBN 0-444-70057-9. LCCN QA76.76.E95 T43 1985.

Steels:1986:ISG

[Ste86d] L. Steels. Introduction to second generation expert systems. In L. C. Aiello, editor, *Nuove frontiere dell'informatica: i sistemi esperti*, pages 131-144. Accademia Nazionale dei Lincei, Rome, Italy, 1986.

Steels:1986:PL

- [Ste86e] L. Steels. *Programmeren in LISP*. Academic Service, Den Haag, The Netherlands, 1986. ISBN 90-6233-096-7 (1983), 90-6233-229-3 (1986). iii + ch1(22) + ch2(44) + ch3(34) + ch4(24) + ch5(33) + ch6(13) + ch7(6) + bib(5) pp.

Steels:1986:ZK

- [Ste86f] L. Steels. Zoekprocessen in kunstcreatie. In R. Hagoort and P. Maessen, editors, *Geest, computer, kunst*, pages 286–296. Stichting Grafiet, Utrecht, The Netherlands, 1986. ISBN 90-70559-07-2.

Steels:1987:MPA

- [Ste87a] L. Steels. Massive parallelism for artificial intelligence. *Microprocessing and Microprogramming*, 21(1–5):17–19, 1987. CODEN MMICDT. ISSN 0165-6074 (print), 1878-7061 (electronic).

Steels:1987:ERM

- [Ste87b] L. Steels. Meaning in knowledge representation. In Pattie Maes and Daniele Nardi, editors, *Meta-Level Architectures and Reflection*, pages 51–59. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1987. ISBN 0-444-70343-8. LCCN QA76.7 .M48 1988. Selection of the papers presented at the Workshop Meta-level Architectures and Reflection, held in Alghero, Italy, during October 27–30, 1986 and sponsored by the Cost-13 Project No. 21.

Steels:1987:SGEa

- [Ste87c] L. Steels. Second generation expert systems. In *Proceedings of the SEAS Spring Meeting 1987: Systems Architecture. 2 volumes*, pages 101–109. SHARE European Association, Nijmegen, The Netherlands, 1987.

Steels:1987:SGEb

- [Ste87d] L. Steels. Second generation expert systems. In M. A. Bramer, editor, *Research and development in expert systems III: proceedings of the Sixth Technical Conference of the British Computer Society Specialist Group on Expert Systems, Metropole Hotel, Brighton, 16–18 December 1986*, pages 175–183. Cambridge University Press, Cambridge, UK, 1987. ISBN 0-521-34154-X. LCCN QA76.76.E95 B76 1986.

Steels:1987:SOT

- [Ste87e] L. Steels. Self-organization through selection. In M. Caudill and C. Butler, editors, *IEEE First International Conference on Neural Networks, Sheraton Harbor Island East, San Diego, California, June 21–24, 1987*, volume 2, pages 55–62. SOS Printing, Piscataway, NJ, USA, 1987. LCCN QA76.87 .I3437 1987; QP363.3 .I58 1987; QT 34 I22 1987i. Four volumes. IEEE catalog number 87 THO191-7.

Steels:1988:AICa

- [Ste88a] L. Steels. Artificial intelligence and complex dynamics. In

Third International Symposium on Knowledge Engineering, pages 164–168. Rank Xerox, Madrid, Spain, 1988.

Steels:1988:AICb

- [Ste88b] L. Steels. Artificial intelligence and complex dynamics. In Mario Tokoro, Yuichiro Anzai, and Akinori Yonezawa, editors, *Concepts and characteristics of knowledge-based systems: selected and reviewed papers from the IFIP TC 10/WG 10.1 workshop, Mount Fuji, Japan, 9–12 November, 1987*, pages 369–404. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1988. ISBN 0-444-88328-2. LCCN QA76.76.E95 C664 1989.

Steels:1988:DES

- [Ste88c] L. Steels. The deepening of expert systems. *AI Communications*, 1(1):9–17, 1988. CODEN ACM-MEE. ISSN 0921-7126.

Steels:1988:STC

- [Ste88d] L. Steels. Steps towards common sense. In Yves Kodratoff, editor, *ECAI 88: proceedings of the 8th European Conference on Artificial Intelligence: August 1–5, 1988*, pages 49–54. Pitman Publishing, London, UK, 1988. ISBN 0-273-08798-3. LCCN Q334 .E97 1988.

Steels:1989:CPS

- [Ste89a] L Steels. Connectionist problem solving: an AI perspective. In Pfeifer et al. [PSFSS89], pages 215–228. ISBN 0-444-88061-5. LCCN Q334 .C7 1989. Papers

from an international conference held at the University of Zurich, Switzerland, 11–13 Oct. 1989.

Steels:1989:DES

- [Ste89b] L. Steels. The deepening of expert systems. In R. Huber et al., editors, *Artificial Intelligence in Scientific Computation: Towards second generation systems, IMACS'89*, pages 189–196. J.C. Baltzer AG, Scientific Publishing Co., Basel, Switzerland, 1989.

Steels:1989:DFP

- [Ste89c] L. Steels. Diagnosis with a function-fault model. *Applied Artificial Intelligence*, 3(2-3):213–237, 1989.

Steels:1990:CE

- [Ste90a] L. Steels. Components of expertise. *The AI Magazine*, 11(2): 28–49, 1990. CODEN AIMAEK. ISSN 0738-4602.

Steels:1990:CBDa

- [Ste90b] L. Steels. Cooperation between distributed agents through self-organization. In Y. Demazeau and J.-P. Müller, editors, *IROS '90: towards a new frontier of applications: proceedings / IEEE International Workshop on Intelligent Robots and Systems '90, July 3–6, 1990, Mechanical Engineering Research Laboratory, Hitachi Ltd., Tsuchiura, Ibaraki, Japan*, pages 8–14 suppl. IEEE, New York, NY, USA, 1990. ISBN ??? LCCN TJ210.3 .I443 1990. Two volumes. IEEE catalog number: 90TH0332-7.

Steels:1990:CBDb

- [Ste90c] L. Steels. Cooperation between distributed agents through self-organization. In Yves Demazeau and Jean-Pierre Müller, editors, *Decentralized A.I.: proceedings of the First European Workshop on Modelling Autonomous Agents in a Multi-Agent World, Cambridge, England, August 16–18, 1989*, pages 175–196. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1990. ISBN 0-444-88705-9. LCCN Q334.E99 1989.

Steels:1990:EARa

- [Ste90d] L. Steels. Exploiting analogical representations. *Robotics and Autonomous Systems*, 6(1–2):71–88, 1990. CODEN RASOEJ. ISSN 0921-8890. URL <http://www.sciencedirect.com/science/journal/09218890>.

Steels:1990:EARb

- [Ste90e] L. Steels. Exploiting analogical representations. In Pattie Maes, editor, *Designing Autonomous Agents: Theory and Practice from Biology to Engineering and Back*, pages 71–88. MIT Press, MIT Press, 1990. ISBN 0-262-63135-0. LCCN Q325 .D47 1991.

Steels:1990:TTE

- [Ste90f] L. Steels. Towards a theory of emergent functionality. In Meyer and Wilson [MW90], pages 451–461. ISBN 0-262-63138-5. LCCN QL751.65.S55 I58 1990.

Steels:1990:EEC

- [Ste90g] Luc Steels, editor. *Europal 90: Proceedings of the First European Conference on the Practical Application of Lisp, Churchill College, Cambridge, UK, 1990*. ISBN ????? LCCN ?????

Steels:1991:DSH

- [Ste91a] L. Steels. Discussion session on hardware issues. the choice of development and delivery platforms for integrated systems. In *Expert systems integration: proceedings of the BANKAI Workshop, Brussels, Belgium, 12–14 September 1990*, pages 51–56. Elsevier Science Publishers (North-Holland), Amsterdam, The Netherlands, 1991. ISBN 0-444-88649-4. LCCN QA76.76.E95 B26 1990.

Steels:1991:EFR

- [Ste91b] L. Steels. Emergent frame recognition and its use in artificial creatures. In John Mylopoulos and Ray Reiter, editors, *IJCAI-91: proceedings of the Twelfth International Conference on Artificial Intelligence, Darling Harbour, Sydney, Australia, 24–30 August 1991*, volume 2, pages 1219–1224. Morgan Kaufmann Publishers, San Francisco, CA, USA, 1991. ISBN 1-55860-160-0. LCCN Q334 .I57 1991. Two volumes.

Steels:1992:K

- [Ste92] L. Steels. *Kennissystemen*. Addison-Wesley, Reading, MA, USA,

1992. ISBN 90-6789-327-7. xviii + 554 pp.

Steels:1993:CFR

- [Ste93a] L. Steels. The componential framework and its role in reusability. In Jean-Marc David, Jean-Paul Krivine, and Reid Simmons, editors, *Second Generation Expert Systems*, pages 273–298. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1993. ISBN 0-387-56192-7 (New York), 3-540-56192-7 (Berlin). LCCN QA76.76.E95 S43 1993.

Steels:1993:CKMa

- [Ste93b] L. Steels. Corporate knowledge management. In Jose Cuena, editor, *Knowledge oriented software design: extended papers from the IFIP TC 12 Workshop on Artificial Intelligence from the Information Processing Perspective, AIFIPP '92, Madrid, Spain, 14–15 September, 1992*, volume A-27 of *IFIP Transactions: A. Computer science and technology*, pages 91–116. North-Holland, Amsterdam, The Netherlands, 1993. ISBN 0-444-81541-4. ISSN 0926-5473. LCCN QA76.76.D47 I35 1992.

Steels:1993:CKMb

- [Ste93c] L. Steels. Corporate knowledge management. In J.-P. Barthès, editor, *Proceedings of the 1st International Symposium on the Management of Industrial and Corporate Knowledge, IS-*

MICK'93, pages 9–30. ????, ????, 1993.

Steels:1993:MFA

- [Ste93d] L. Steels. A mathematical framework for autonomous robots. In Patrick Brezillon and Vadim Stefanuk, editors, *Proceedings of the East-West Conference on Artificial Intelligence: EWAIC '93, September 7–9, 1993, Moscow, Russia*, pages 333–334. ????, ????, 1993. ISBN ????. LCCN Q334 .E18 1993.

Steels:1994:ALR

- [Ste94a] L. Steels. The artificial life roots of artificial intelligence. *Artificial Life*, 1(1–2):89–125, 1994. CODEN ARLIEY. ISSN 1064-5462, 1530-9185. URL <http://artivub.ac.be/steels/alife.ps>.

Steels:1994:BO

- [Ste94b] L. Steels. Beyond objects. In Mario Tokoro and Remo Pareschi, editors, *Object-oriented programming: 8th European Conference, ECOOP '94, Bologna, Italy, July 4–8, 1994: proceedings*, volume 821 of *Lecture Notes in Computer Science*, pages 1–11. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1994. CODEN LNCSD9. ISBN 0-387-58202-9 (New York), 3-540-58202-9 (Berlin). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QA76.64 .E95 1994. URL <http://link.springer-ny.com/link/service/series/0558/bibs/0821/08210001.htm>;

<http://link.springer-ny.com/link/service/series/0558/papers/0821/08210001.pdf>.

Steels:1994:CSB

- [Ste94c] L. Steels. A case study in the behavior-oriented design of autonomous agents. In Dave Cliff, Ph. Husbands, J.-A. Meyer, and S. W. Wilson, editors, *From Animals to Animats 3. Proceedings of the Third International Conference on Simulation of Adaptive Behavior, SAB'94*, Complex Adaptive Systems, pages 445–452. MIT Press, MIT Press, 1994. ISBN 0-262-53122-4. LCCN QL751.65.S55 I58 1994. URL <http://arti.vub.ac.be/steels/sab94.ps>.

Steels:1994:EFR

- [Ste94d] L. Steels. Emergent functionality in robotic agents through on-line evolution. In Rodney Brooks and Pattie Maes, editors, *Artificial life IV: proceedings of the Fourth International Workshop on the Synthesis and Simulation of Living Systems*, pages 8–14. MIT Press, MIT Press, 1994. ISBN 0-262-52190-3. LCCN QH324.2 .A75 1994. URL <http://arti.vub.ac.be/steels/alife4.ps>.

Steels:1994:EAB

- [Ste94e] L. Steels. Equilibrium analysis of behavior systems. In A. G. Cohn, editor, *ECAI 94, 11th European Conference on Artificial Intelligence, August 8–12, 1994, Amsterdam, the Netherlands: proceedings*, pages 714–718. John Wiley

and Sons, Ltd., Chichester, UK, 1994. ISBN 0-471-95069-6. LCCN Q334.E97 1994.

Steels:1994:HCW

- [Ste94f] L. Steels. How can we make further progress in knowledge acquisition? In *Proceedings of the Japanese Knowledge Acquisition Workshop*, pages 65–71. ????, ????, 1994.

Steels:1994:MAB

- [Ste94g] L. Steels. Mathematical analysis of behavior systems. In P. Gaussier and J.-D. Nicoud, editors, *Proceedings: From Perception to Action Conference, September 7–9, 1994, Lausanne, Switzerland*, pages 88–95. IEEE, New York, NY, USA, 1994. ISBN 0-8186-6482-7 (case), 0-8186-6481-9 (microfiche). LCCN TJ210.3 .F76 1994. URL <http://arti.vub.ac.be/steels/perarc.ps>.

Steels:1994:NCP

- [Ste94h] L. Steels. New challenges posed by autonomous agents research. In T. Lengauer, editor, *Computer Science: State of the Art and Future Directions*, page ?? Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1994.

Steels:1995:BTib

- [Ste95a] L. Steels. The biology and technology of intelligent autonomous agents (guest editorial). *Robotics and Autonomous Systems*, 15(1–

2):1–2, 1995. CODEN RASO EJ.
ISSN 0921-8890.

Steels:1995:BAA

- [Ste95b] L. Steels. Building agents with autonomous behavior systems. In Steels and Brooks [SB95], pages 83–119. ISBN 0-8058-1519-8 (paperback), 0-8058-1518-X (hardcover). LCCN Q335 .A789 1995. URL <http://arti.vub.ac.be/steels/corsendonck.ps>.

Steels:1995:UIA

- [Ste95c] L. Steels. Die Ursprünge von Intelligenz bei Artificial-Intelligence-Systemen. In Gerbel and Wiebel [GW95], pages 308–312. ISBN 3-211-82709-9. LCCN QA76.9.C66 A77 1995.

Steels:1995:ZI

- [Ste95d] L. Steels. Die Zukunft der Intelligenz. In S. Bollmann, editor, *Kursbuch Neue Medien: Trends in Wirtschaft und Politik, Wissenschaft und Kultur*, pages 321–333. Bollmann Verlag, Mannheim, Germany, 1995.

Steels:1995:HCS

- [Ste95e] L. Steels. Homo cyber-sapiens oder Robo hominidus intelligens: Maschinen erwachen zu künstlichem Leben. In Ch. Maar, E. Pöppel, and T. Christaller, editors, *Die Technik auf dem Weg zur Seele: Proceedings of the Burda Symposium on Brain-Computer Interfaces*, pages 327–344. Rowohlt Taschenbuch Verlag, Hamburg, Germany, 1995. URL <http://arti.vub.ac.be/>

[steels/burda.ps](http://arti.vub.ac.be/steels/burda.ps). German version of The Homo Cyber Sapiens, the Robot Homonidus Intelligens, and the ‘artificial life’ approach to artificial intelligence.

Steels:1995:IDR

- [Ste95f] L. Steels. Intelligence — dynamics and representations. In Steels [Ste95k], pages 72–89. ISBN 3-540-59052-8. LCCN TJ217.5 .B56 1995. URL <http://arti.vub.ac.be/steels/trento.ps>. Proceedings of the NATO Advanced Study Institute on the Biology and Technology of Intelligent Autonomous Agents, held in Castel Ivano, Trento, Italy, March 1–12, 1993.

Steels:1995:ACP

- [Ste95g] L. Steels. Is artificial consciousness possible? In G. Trautteur, editor, *Consciousness: Distinction and Reflection*. Bibliopolis, Naples, Italy, 1995.

Steels:1995:OIA

- [Ste95h] L. Steels. The origins of intelligence in artificial systems. In Gerbel and Wiebel [GW95], pages 308–312. ISBN 3-211-82709-9. LCCN QA76.9.C66 A77 1995.

Steels:1995:SOS

- [Ste95i] L. Steels. A self-organizing spatial vocabulary. *Artificial Life*, 2 (3):319–332, 1995. CODEN AR-LIEY. ISSN 1064-5462, 1530-9185. URL <http://arti.vub.ac.be/steels/space.ps>.

Steels:1995:WRI

- [Ste95j] L. Steels. When are robots intelligent autonomous agents? *Robotics and Autonomous Systems*, 15(1–2):3–9, 1995. CODEN RASOEJ. ISSN 0921-8890. URL <http://arti.vub.ac.be/steels/autsys.ps>.

Steels:1995:BTIa

- [Ste95k] Luc Steels, editor. *The Biology and Technology of Intelligent Autonomous Agents*, volume 144 of *NATO ASI Series: Series F, Computer and Systems Sciences*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1995. ISBN 3-540-59052-8. LCCN TJ217.5 .B56 1995. Proceedings of the NATO Advanced Study Institute on the Biology and Technology of Intelligent Autonomous Agents, held in Castel Ivano, Trento, Italy, March 1–12, 1993.

Steels:1996:ZI

- [Ste96a] L. Steels. Die Zukunft der Intelligenz. *Kunstforum International*, 133:84–89, 1996. ISSN 0177-3674.

Steels:1996:DC

- [Ste96b] L. Steels. Discovering the competitors. *Adaptive Behavior*, 4(2):173–199, 1996. CODEN ADBEEA. ISSN 1059-7123. URL <http://arti.vub.ac.be/steels/para.ps>.

Steels:1996:EAL

- [Ste96c] L. Steels. Emergent adaptive lexicons. In Maes et al.

[MMM⁺96], pages 562–567. ISBN 0-262-63178-4. ISSN 1089-4365. LCCN QL751.65.S55 I58 1996. URL <http://arti.vub.ac.be/steels/adaptlex.ps>.

Steels:1996:OI

- [Ste96d] L. Steels. The origins of intelligence. In *The Future of Science Has Begun: Approaches to Artificial Life and Artificial Intelligence. Proceedings of the Fourth International Conference*, pages 75–88. Fondazione Carlo Erba, Milano, Italy, 1996. URL <http://arti.vub.ac.be/steels/origin.ps>.

Steels:1996:PGM

- [Ste96e] L. Steels. Perceptually grounded meaning creation. In M. Tokoro, editor, *Proceedings of the Second International Conference on Multi-Agent Systems, ICMAS-96*, pages 338–344. AAAI Press, Menlo Park, CA, USA, 1996. URL <http://arti.vub.ac.be/steels/meaning.ps>.

Steels:1997:CSP

- [Ste97a] L. Steels. Constructing and sharing perceptual distinctions. In van Someren and Widmer [vW97], pages 4–13. CODEN LNCSD9. ISBN 3-540-62858-4 (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN Q325.5 .E85 1997. URL <http://arti.vub.ac.be/steels/ecml.ps>.

Steels:1997:LLL

- [Ste97b] L. Steels. Language learning and language contact. In W. Daelemans, A. Van den Bosch, and A. Weijters, editors, *Workshop Notes of the ECML/MLnet Workshop on Empirical Learning of Natural Language Processing Tasks, ECML-97*, pages 11–24. Prague, Czech Republic, 1997. URL <http://arti.vub.ac.be/steels/contact.ps>.

Steels:1997:SCA

- [Ste97c] L. Steels. Science communication in the age of cyberspace. In *The Future of Science has begun: The communication of science to the public. Science and the media. Proceedings of the Fifth International Conference*, pages 173–180. Fondazione Carlo Erba, Milano, Italy, 1997.

Steels:1997:SMA

- [Ste97d] L. Steels. A selectionist mechanism for autonomous behavior acquisition. *Robotics and Autonomous Systems*, 20(2-):117–131, 1997. CODEN RASO EJ. ISSN 0921-8890.

Steels:1997:SOV

- [Ste97e] L. Steels. Self-organising vocabularies. In Christopher G. Langton and Katsunori Shimohara, editors, *Proceedings of the 5th International Workshop on Artificial Life: Synthesis and Simulation of Living Systems, ALIFE-96*, pages 179–184. MIT Press, MIT Press, 1997. ISBN 262621118. LCCN QH324.2

.I56 1996. URL <http://arti.vub.ac.be/steels/alife96.ps>. Workshop held at the Nara-Ken New Public Hall, Nara, Japan, May 16th to May 18th, 1996.

Steels:1997:SML

- [Ste97f] L. Steels. The synthetic modeling of language origins. *Evolution of Communication*, 1(1): 1–34, 1997. ISSN 1387-5337. URL <http://arti.vub.ac.be/steels/coe.ps>.

Steels:1997:OSV

- [Ste97g] Luc Steels. The origins of syntax in visually grounded robotic agents. In Martha E. Pollack, editor, *IJCAI-97: proceedings of the Fifteenth International Joint Conference on Artificial Intelligence, Nagoya, Japan, August 23–29, 1997*, volume 2, pages 1632–1641. Morgan Kaufmann Publishers, San Francisco, CA, USA, 1997. ISBN 1-55860-480-4. LCCN Q334 .I57 1997. URL <http://arti.vub.ac.be/steels/orig-syn.ps>. Two volumes.

Steels:1998:OLC

- [Ste98a] L. Steels. The origin of linguistic categories. In *The Evolution of Language Conference: Selected papers from 2nd International Conference on the Evolution of Language*, page ?? ???, ????, 1998. URL <http://arti.vub.ac.be/steels/orig-cat.ps>.

Steels:1998:OOC

- [Ste98b] L. Steels. The origins of ontologies and communication con-

- ventions in multi-agent systems. *Autonomous Agents and Multi-Agent Systems*, 1(2):169–194, 1998. ISSN 1387-2532. URL <http://arti.vub.ac.be/steels/orig-ont.ps>. **Steels:1999:CTS**
- [Ste99a] L. Steels. Cognitive teleportation and situated embodiment. In Floreano et al. [FMN99], pages 7–8. ISBN 3-540-66452-1. ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN QH324.2 .E87 1999.
- Steels:1998:OSV**
- [Ste98c] L. Steels. The origins of syntax in visually grounded robotic agents. *Artificial Intelligence*, 103(1-2):133–156, 1998. CODEN AINTBB. ISSN 0004-3702 (print), 1872-7921 (electronic). URL <http://arti.vub.ac.be/steels/orig-syn.ps>. **Steels:1999:HLB**
- [Ste99b] L. Steels. How language bootstraps cognition. In I. Wachsmutt and B. Jung, editors, *KogWis99. Proceedings der 4. Fachtagung der Gesellschaft für Kognitionswissenschaft*, pages 1–3. Infix, Braunschweig, Germany, 1999.
- Steels:1998:SCC**
- [Ste98d] L. Steels. Structural coupling of cognitive memories through adaptive language games. In Pfeifer et al. [PBMW98], pages 263–269. ISBN 0-262-66144-6. ISSN 1089-4365. LCCN QL751.65.S55 I58 1998. **Steels:1999:SSO**
- [Ste99c] L. Steels. The spontaneous self-organization of an adaptive language. In K. Furukawa, D. Michie, and S. Muggleton, editors, *Intelligent agents*, volume 15 of *Machine Intelligence*, pages 205–224. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1999. ISBN 0-19-853867-7 (hardcover). LCCN QA76.9.M35 I53 1992. URL <http://arti.vub.ac.be/steels/mi15.ps>.
- Steels:1998:SOL**
- [Ste98e] L. Steels. Synthesising the origins of language and meaning using co-evolution, self-organisation and level formation. In James R. Hurford, Michael Studdert-Kennedy, and Chris Knight, editors, *Approaches to the Evolution of Language: social and cognitive bases*, pages 384–404. Cambridge University Press, Cambridge, UK, 1998. ISBN 0-521-63049-5, 0-521-63964-6 (paperback). LCCN P116 .A68 1998. URL <http://arti.vub.ac.be/steels/edin.ps>. **Steels:1999:THE**
- [Ste99d] L. Steels. *The Talking Heads Experiment*. Laboratorium, Antwerpen, Belgium, 1999. 238 pp. Limited Pre-edition.
- Steels:2000:EGC**
- [Ste00a] L. Steels. The emergence of grammar in communicating autonomous robotic agents. In

- Werner Horn, editor, *ECAI 2000: 14th European Conference on Artificial Intelligence, August 20–25, 2000, Berlin, Germany: including Prestigious Applications of Intelligent Systems (PAIS-2000): proceedings*, volume 54 of *Frontiers in artificial intelligence and applications*, pages 764–769. IOS Press, Amsterdam, The Netherlands, 2000. ISBN 1-58603-013-2 (IOS Press), 4-274-90388-5 (Ohmsha). ISSN 0922-6389. URL <http://arti.vub.ac.be/steels/ecai2000.ps>.
- [Ste00b] L. Steels. Engeln mit Internetfluegeln. In Hans-Joachim Schellnhuber et al., editors, *Die Gegenwart der Zukunft: die Serie der Süddeutschen Zeitung über unsere Welt im neuen Jahrhundert*, volume 367 of *Wagenbach Taschenbuch*, pages 90–98. Verlag Klaus Wagenbach, Berlin, Germany, 2000. ISBN 3-8031-2367-4. URL <http://www.benecke.com/gegenwart.html>. German version of *Digital Angels*.
- [Ste00c] L. Steels. Kognitive Roboter und Teleportation — Artefacte reagieren auf ihre Umwelt und erfinden sich eine Sprache. In Ch Maar, H. U. Obrist, and E. Pöppel, editors, *Weltwissen Wissenswelt: Das globale Netz von Text und Bild*, pages 175–184. DuMont Verlag, Cologne, Germany, 2000.
- [Ste00d] L. Steels. Language as a complex adaptive system. In Schoenauer et al. [SDR⁺00], pages 17–26. ISBN 3-540-41056-2 (softcover). LCCN QA267.A1 L43 no.1917. URL <http://arti.vub.ac.be/steels/ppsn2000.ps>.
- [Ste00e] L. Steels. Mirror neurons and the action theory of language origins. Unpublished notes., 2000. URL <http://arti.vub.ac.be/steels/neurons.ps>.
- [Ste00f] L. Steels. The puzzle of language evolution. *Kognitionswissenschaft*, 8(4):143–150, 2000. CODEN KOGNEB. ISSN 0938-7986. URL <http://arti.vub.ac.be/steels/puzzle.ps>.
- [Ste01a] L. Steels. Can a robot be conscious? In press., 2001.
- [Ste01b] L. Steels. Language games for autonomous robots. *IEEE Intelligent Systems*, 16(5):16–22, 2001. ISSN 1094-7167. URL <http://arti.vub.ac.be/steels/games.ps>.
- [Ste01c] L. Steels. Linguistique evolutionnaire et vie artificielle. *Vie Artificielle*, 1(1):??, 2001.

Steels:2000:LCA**Steels:2000:MNA****Steels:2000:PLE****Steels:2001:CRC****Steels:2001:LGA****Steels:2001:LEV**

Steels:2001:MAC

- [Ste01d] L. Steels. The methodology of the artificial. commentary on Barbara Webb's article. *Behavioral and brain sciences*, 24(6): ??, 2001. CODEN BBSCDH. ISSN 0140-525X (print), 1469-1825 (electronic). In press.

Steels:2001:RLL

- [Ste01e] L. Steels. The role of language in learning grounded representations. In P. R. Cohen and T. Oates, editors, *Learning Grounded Representations: Papers from 2001 AAAI Spring Symposium*, number SS-01-05 in AAAI Spring Symposium Series Technical Reports, pages 80–88. AAAI Press, Menlo Park, CA, USA, 2001.

Steels:2001:SLV

- [Ste01f] L. Steels. Social learning and verbal communication with humanoid robots. In *Proceedings of the IEEE-RAS International Conference on Humanoid Robots*, pages 335–342. IEEE, New York, NY, USA, 2001.

Steels:2001:THE

- [Ste01g] L. Steels. The talking heads experiment. In H. U. Obrist and B. Vanderlinden, editors, *Laboratorium*, pages 413–419. DuMont Verlag, Cologne, Germany, 2001.

Steels:2002:CSO

- [Ste02a] L. Steels. Computer simulations of the origins of case grammar. In press. To be presented at

evolang2002 in Harvard, in preparation., 2002.

Steels:2002:GST

- [Ste02b] L. Steels. Grounding symbols through evolutionary language games. In Angelo Cangelosi and Domenico Parisi, editors, *Simulating the Evolution of Language*, pages 211–226. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2002. ISBN 1-85233-428-2. LCCN P116 .C36 2001.

Steels:2002:LGE

- [Ste02c] L. Steels. Language games for emergent semantics. *IEEE Intelligent Systems*, 17(1):83–85, 2002. ISSN 1094-7167.

Steels:2002:MCH

- [Ste02d] L. Steels. Mieux comprendre les hommes... (French) [To better understand people...]. *La Recherche: Les nouveaux robots (special issue)*, 350:72–76, 2002.

Steels:2002:SCL

- [Ste02e] L. Steels. Social and cultural learning in the evolution of human communication. In D. K. Oller, U. Griebel, and K. Plunkett, editors, *Evolution of Communication Systems: A Comparative Approach*, page ?? MIT Press, MIT Press, 2002. In press.

Steels:2002:SLL

- [Ste02f] L. Steels. Social learning and language acquisition. In D. McFarland, O. Holland, and C. Melhuish, editors, *Social Robots*,

page ?? Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2002. In press.

Steels:2003:IR

- [Ste03] Luc Steels. Intelligence with representation. *Philosophical Transactions of the Royal Society A: Mathematical, Physical, and Engineering Sciences*, 361(1811): 2381–2395, 2003. CODEN PTR-MAD, PTMSFB. ISSN 1364-503X (print), 1471-2962 (electronic). Biologically inspired robotics (Bristol, 2002).

Steels:1976:FPC

- [SV76] L. Steels and D. Vermeir. On the formal properties of completion grammars and their related automata. Technical report, Universitaire Instelling Antwerpen, Wilrijk, Belgium, 1976. 41 pp.

Steels:1986:LSG

- [SV86] L. Steels and W. Van de Velde. Learning in second generation expert systems. In Janusz S. Kowalik, editor, *Knowledge-based problem solving*, pages 270–295. Prentice-Hall, Upper Saddle River, NJ 07458, USA, 1986. ISBN 0-13-516576-8. LCCN QA76.76.E95 K561 1986.

Steels:1989:LSG

- [SV89] L. Steels and W. Van de Velde. Learning in second generation expert systems. In Yves Kodratoff and Alan Hutchinson, editors, *Machine and Human Learning. Advances in European Research*, Michael Horwood series

on artificial intelligence, pages 53–75. Kogan Page, London, UK, 1989. ISBN 1-85091-497-4. LCCN Q325.M317 1989b.

Steels:1997:AJL

- [SV97a] L. Steels and P. Vogt. Ancrage de jeux de langage adaptatifs dans des agents robotiques. In A. Ali Cherif and J. Signorini, editors, *Intelligence Artificielle et Complexité*, pages 27–39. Université Paris 8, 1997. ISBN 2-9511847-0-0.

Steels:1997:GAL

- [SV97b] L. Steels and P. Vogt. Grounding adaptive language games in robotic agents. In Phil Husband and Inman Harvey, editors, *Proceedings of the Fourth European Conference on Artificial Life, ECAL'97*, Complex Adaptive Systems, pages 474–482. MIT Press, MIT Press, 1997. ISBN 0-262-58157-4. LCCN QH324.2 .E87 1997. URL <http://arti.vub.ac.be/steels/grounding.ps>. Conference held July 28-31, 1997 in Brighton, UK.

vanLeeuwen:1995:CST

- [van95] J. van Leeuwen. *Computer science today: recent trends and developments*, volume 1000 of *Lecture Notes in Computer Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1995. CODEN LNCS9. ISBN 3-540-60105-8 (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). xiii + 641 pp. LCCN QA76. .C57326 1995.

Someren:1997:MLE

- [vW97] Maarten W. van Someren and Gerhard Widmer, editors. *Machine learning: ECML-97: 9th European Conference on Machine Learning, Prague, Czech Republic, April 23-25, 1997: proceedings*, volume 1224 of *Lecture Notes in Computer Science and Lecture Notes in Artificial Intelligence*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 1997. CODEN LNCSD9. ISBN 3-540-62858-4 (softcover). ISSN 0302-9743 (print), 1611-3349 (electronic). LCCN Q325.5 .E85 1997.