

University of Groningen

Expressivity of Logics of Knowledge and Action

Kuijjer, Bouke

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

2014

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Kuijjer, B. (2014). *Expressivity of Logics of Knowledge and Action*. [Thesis fully internal (DIV), University of Groningen]. [S.n.].

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Stellingen behorende bij het proefschrift

Expressivity of Logics of Knowledge and Action

door Louwe B. Kuijer.

1. \mathcal{L}_{CP} is to \mathcal{L}_R as \mathcal{L}_{CU} is to \mathcal{L}_{U^*} , so it is surprising that \mathcal{L}_{CU} is equally expressive as \mathcal{L}_{U^*} while \mathcal{L}_{CP} is less expressive than \mathcal{L}_R .
2. The difference between \mathcal{L}_{CP} on the one hand and \mathcal{L}_R , \mathcal{L}_{CU} and \mathcal{L}_{U^*} on the other is that, in some sense, \mathcal{L}_R , \mathcal{L}_{CU} and \mathcal{L}_{U^*} can create memories but \mathcal{L}_{CP} cannot.
3. An “arbitrary public announcement” operator \diamond from the logic APAL should be considered truly arbitrary if and only if it quantifies over all APAL formulas.
4. A pointed model is only given meaning by the formulas that may or may not hold there.
5. A formula is only given meaning by the pointed models where it may or may not hold.
6. A modal logic should be considered equal to the combination of a set of formulas, a class of (pointed) models and a satisfaction relation between formulas and models.
7. Suppose several expert marksmen all independently and with several years in between take a shot at a blank wall, that the shots all hit a specific small section of the wall and that the marksmen seem to be very satisfied with their shots. Then it is reasonable to assume that the marksmen were trying to hit this section of the wall and that there is some salient feature that made them target it.