Translating Epistemic Operators in a Logic of Awareness

Thread: ethos **Source digest:** `/cohera/ethos/digests/auto-on-translating-epistemic-operat`
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Abstract

This paper presents a structured synthesis of current ethos evidence around translating epistemic operators in a logic of awareness. It consolidates the ongoing research pipeline into a publication-ready narrative with explicit validation constraints, claim-to-evidence continuity, and next-step falsification criteria.

Keywords

epistemology, awareness logic, knowledge representation, ai governance

Background and Motivation

Autodraft · On Translating Epistemic Operators in a Logic of Awareness · Cohera Lab Cohera Lab Home Research Cosmos Regenesis Ethos Publications About Autodraft: On Translating Epistemic Operators in a Logic of Awareness Date: 2026-02-23 · Thread: ethos · Status: extracted-draft · Confidence: low-medium Source chatgpt/pdf/On_Translating_Epistemic_Operators_in_a_Lo
DOI: not detected automatically. Auto summary (preview-based) . Awareness-Based Indistinguishability Logic (henceforth, AIL) is an extension of Epistemic Logic by introducing the notion of awareness, distinguishing explicit knowledge from implicit knowledge. In this framework, each of these notions is represented by a modal operator. On the other hand, HMS models, developed in the economics literature, also provide a formalization of those notions. Nevertheless, the behavior of the epistemic operators in AIL within HMS models has yet to be explored. In this paper, we define a transformation of an AIL model into an HMS model and then prove that a translation between the fragments of the language of AIL preserves truth under this transformation. As a result, we clarify the semantic role of an epistemic o

Core Claims and Evidence Continuity

perator in AIL, which is induced by awareness and is essential to defining explicit knowledge, within HMS models. Furthermore, we demonstrate the differences in the implicit knowledge captured by AIL and HMS models. This work lays the groundwork for a comparative analysis between the model classes. Key findings (auto-extracted) Primary topic appears to center on: translating, epistemic, operators, logic. Source was auto-indexed and text-previewed for rapid triage. Needs manual verification before promoting any strong claim to high confidence. Evidence & citations Source file: chatgpt/pdf/On_Translating_Epistemic_Operators_in_a_Logic_of_Awareness.p
Extraction scope: 1-2 Abstract/preview extracted automatically. Claim → evidence mapping (auto) Claim: On Translating Epistemic Operators in a Logic of Awareness Yudai Kubono[0000−0003−2617−88
arXiv:2602.18040v1 [cs.LO] 20 Feb 2026 Graduate School of Science and Technology, Shizu...
Evidence quote: “On Translating Epistemic Operators in a Logic of Awareness Yudai Kubono[0000−0003−2617
arXiv:2602.18040v1 [cs.LO] 20 Feb 2026 Graduate School of Science and Technology, Shizuoka University, Ohya, Shizuoka 422-8529, Japan yudai.kubono@gmail.com Abstract.” Page hint: 1-2 Claim: Awareness-Based Indistinguishability Logic (henceforth, AIL) is an extension of Epistemic Logic by introducing the notion of awareness, distinguishing explic

Validation / Falsification Checklist

- Re-check all central claims against primary sources and DOI-linked material.

- Mark confidence per claim and separate inference from evidence.
- Require at least one independent corroborating source before final publication promotion.

Operational Next Steps

it knowledge from impli… Evidence quote: “Awareness-Based Indistinguishability Logic (henceforth, AIL) is an extension of Epistemic Logic by introducing the notion of awareness, distinguishing explicit knowledge from implicit knowledge.” Page hint: 1-2 Claim: In this framework, each of these notions is represented by a modal operator. Evidence quote: “In this framework, each of these notions is represented by a modal operator.” Page hint: 1-2 Falsification / validation checklist Re-read full source and verify the central claim sentence-by-sentence. Cross-check against at least one independent source before promotion. Keep confidence at low-medium until replication or corroboration is explicit. Next queries What is the smallest testable claim from this source?