

EuPhiLo 4th Annual Conference

3rd – 5th December 2025, Università degli Studi di Padova

AULA DIANO — Palazzo Liviano — Piazza Capitaniato 7

Wednesday 3rd December

9:30-10:20: Julien Murzi (U. Salzburg)

What is Carnap's Problem and how can we solve it?

10:30-11:20: Bogdan Dicher (U. Witwatersrand)

Some problems of normal form in logical meta-inferentialism

[20 mins break]

11:40-12:30: Gila Sher (UC San Diego)

Logical Realism meets Logical Conventionalism, Nihilism, Pluralism, and Pragmatism

12:30-14:30: Lunch

14:30-15:20: Sebastiano Moruzzi (U. Bologna)

From Adoption to Abandonment: The Rational Limits of Revising Logical Principles

15:30-16:20: Sophia Arbeiter (Bielefeld University)

Kripke, the logical traditionalist

[20 mins break]

16:40-17:30: Wessel Kroon (U. Utrecht)

On the distinction between one-component and two-component semantics

Thursday 4th December

9:30-10:20: Max Carrara, Andrea Stollo, Michele Pra Baldi & Diego Tajer
(U. Padova/Trieste)

Degrees of neutral logics

10:30-11:20: Andreas Fjellstad (U. Padova)

Supporting the conclusion with logic

[20 mins break]

11:40-12:30: Evelina Lissoni (IUSS Pavia)

Should logical pluralists be anti-exceptionalists?

12:30-14:30: Lunch

14:30-15:20: Ole Hjortland (U. Bergen)

The laws of logic as laws of nature

15:30-16:20: Sabina Dominguez Parrado (St. Andrews/ILLC)

What are logical pluralists pluralist about?

[20 mins break]

16:40-17:30: Daniele Garancini (U. Munich)

Two arguments about the foundations of inferential knowledge

Friday 5th December

9:30-10:20: Filippo Ferrari & Stefano Pagnaghi (U. Bologna / Bonn)
(Don't fear) the Collapse

10:30-11:20: Pietro Lampronti & Daniel Wimmer (LMU)
Metaphysical consequence with truthmakers

[20 mins break]

11:40-12:30: Mariela Rubin & Diego Tajer (U. Padova / Buenos Aires)
Logics as models and conditionals

12:30-14:30: *Lunch*

14:30-15:20: Erik Stei (U. Utrecht)
Reflections on the "Logic in natural language" thesis

15:30-16:20: Sebastian Speitel (U. Bonn)
The determinacy challenge for moderate mathematical realism

[20 mins break]

16:40-17:30: Gil Sagi (U. Haifa)
Formalization and linguistic freedom

Abstracts

Logic as Models and Conditionals

Mariela Rubin & Diego Tajer

Model Pluralism in philosophy of science interprets theories as models, and claims that some phenomena can be understood using different models. In philosophy of logic, some authors have endorsed the idea of 'Logic as a model', which sees logical theories as idealized models of logical concepts. Under this perspective, logical theories are idealized and incomplete abstractions aspiring to explain, predict or elucidate some aspect of the target phenomenon. In this paper, we use this approach to understand the logic of conditionals. The theories will be understood as a variety of models intending to represent conditionals with different theoretical purposes or focusing on different aspects. We will analyze some of these theories and determine which kind of idealizations and distortions

they make regarding the target phenomenon. This analysis will motivate a version of model-based logical pluralism regarding conditionals, where questions about validity of inferences only make sense in relation to a specific epistemic purpose.

What Is Carnap's Problem and How Can We Solve It?

Julien Murzi & Brett Topey

Abstract: On a plausible approach to logical metasemantics, our dispositions to treat a logical expression's I- and E-rules as valid determine its contribution to the truth conditions of sentences in which it appears. Carnap's so-called Categoricity Problem is that the rules in question don't seem to fix a unique interpretation of our logical vocabulary: there appear to be deviant interpretations of both the connectives and the quantifiers that are compatible with the validity of their rules. And although standard responses are available to Carnap's problem as it applies to propositional logic (by appeal, e.g., to bilateral rules or to a local notion of validity), the case of the quantifiers is more difficult. Here we develop a more precise account of how Carnap-style arguments work than has ever before been given, one that makes clear why certain such arguments succeed while others fail. In so doing, we demonstrate that despite recent criticisms, the account of the categoricity of the quantifiers we offered in previous work isn't threatened by any of the alleged deviant interpretations that have been discussed in the literature: each of these either is incompatible with the validity of the quantifier rules or else results in an illegitimate Carnap-style argument.

Two Arguments about the Foundation of Inferential Knowledge

Daniele Bruno Garancini

Exceptionalists in the epistemology of logic, including Hanna and Warren, tend to endorse some version of *the logical alien argument*: logical alien thought—reasoning at odds with whatever principles this argument seeks to justify—is impossible, the correct patterns of reasoning have no alternative; therefore, they must be truth-preserving or no pattern of reasoning is. I argue that this argument is self-defeating. This being done, I discuss an alternative exceptionalist argument, *the transcendental argument*: logical alien thought is possible, but we can justifiably assume that it is unsound because its unsoundness is a condition of possibility for human inferential knowledge. I propose that the transcendental argument is a better candidate than the logical alien argument to give a foundation of inferential knowledge.

Metaphysical Consequence with Truthmakers

Pietro Lampronti & Daniel Wimmer

Logical consequence is taken to be necessary truth preservation in virtue of form. Necessary truth preservation without form can be called metaphysical consequence—it is a matter only of whether it is metaphysically impossible that the premises of an argument be true while the conclusion is false.

We give a precise account of what the metaphysical necessity is that underwrites MC. We argue that a hyperintensional framework is best apt for that purpose because (i) it allows us to distinguish necessarily equivalent propositions and (ii) it is more informative as to the nature of the metaphysical necessity underlying MC.

In particular, by consulting the apparatus of exact truthmaker semantics, we work out that for every case of MC, a relation of 'metaphysical necessitation' between the relevant truthmaker

states holds. We explicate this relation by a pre-order on the truthmakers of premises and conclusion of metaphysically valid arguments.

Logical Realism meets Logical Conventionalism, Nihilism, Pluralism, and Pragmatism **Gila Sher**

The talk will consider the conventionalist, nihilist, pluralist, and pragmatist approaches to logic from the point of view of logical realism. It will try to make sense of these approaches and evaluate their philosophical considerations from a realistic standpoint, including their criticisms, if any, of logical realism.

From Adoption to Abandonment: The Rational Limits of Revising Logical Principles **Sebastiano Moruzzi**

I advance a converse to the Kripke–Padró Adoption Problem—the Abandonment Problem. If certain fundamental rules (e.g. Modus Ponens, Universal Instantiation) cannot be rationally adopted because any correct application already presupposes them, then, *mutatis mutandis*, they cannot be rationally abandoned either: any principled rejection would have to deploy what it disavows. I argue—conditionally—that wherever the Adoption Problem genuinely obtains, a structurally parallel Abandonment Problem does too (the Adoption–Abandonment Link). The case turns on three independent candidate constraints on rule change: an inferential model of guidance, a fundamentality requirement, and a freedom condition. Together, these generate for abandonment precisely the obstacle they generate for adoption. The upshot is a disjunction: either we enjoy full freedom over logical rules, or there are fixed points in our *logica utens*—inescapable inferential norms that are neither adoptable nor abandonable. This conditional result sharpens the commitments that views on philosophical logic that allow for the rational adoption and revision of logic such as anti-exceptionalism must undertake, at a minimum, the denial of one of the constraints on rule change.

Should logical pluralists be anti-exceptionalists? **Evelina Lissoni**

Even if logical pluralism and logical anti-exceptionalism are widely discussed topics in the philosophy of logic, their relation remains largely underexplored. It has been argued that anti-exceptionalism is best complemented by pluralism rather than monism. Here, I raise the reverse question: should logical pluralists be anti-exceptionalists? Among the proponents of the most influential versions of logical pluralism – Carnap, Beall and Restall, and Shapiro – Beall and Restall make a point of maintaining an orthodox stance on the properties that constitute what they call the *settled core* of logical consequence, thus committing to an exceptionalist view of logic. However, I argue that, if they want to address the collapse problem, pluralists of the same stripe as Beall and Restall have no choice but to embrace a form of anti-exceptionalism.

(Don't Fear) The Collapse **Filippo Ferrari & Stefano Pagnaghi**

Logical pluralism (LP) is the view that there is more than one correct logic. Beall and Restall (2006) characterize LP as the thesis that validity is indeterminate and admits multiple precisifications constrained metatheoretically by necessity, formality, and normativity, and semantically by the Generalised Tarski Thesis (GTT). According to GTT, validity involves truth-preservation across all "cases," whose variation yields distinct logics (e.g., classical, constructive, relevant). This paper critically assesses the so-called "collapse argument" first presented in (Priest 2006), as a significant objection to LP. The objection centres around those situations in

which two, or more, precisifications of logical consequence clearly differ in deductive strength. Consider a notion of validity L1 (e.g. classical validity) and a strictly weaker one L2 (e.g. relevant validity), such that a sentence B follows from $A_1 \dots A_n$ in L1 but not in L2. Should or should not a subject conclude C upon accepting $A_1 \dots A_n$? According to the collapse objection, the answer must be affirmative, as the strongest admissible logic is the one which provides normative guidance. Since classical logic is the deductively strongest logic, pluralism collapses into (classical) monism. We first argue that the collapse problem comprises two distinct arguments: one from truth-transmission and one from normativity. Although often treated as a single objection, they rely on different assumptions and warrant separate analysis. We then critically evaluate the strength of both arguments as objections to LP and argue that neither version effectively undermines LP.

Supporting the conclusion, with logic

Andreas Fjellstad

Formal logic has historically been seen as a tool for good deductive reasoning, but just when is a classically valid inference capturing good deductive reasoning? This paper develops a proposal for when the premises of a classically valid inference provide a sufficient reason for the conclusion. This is achieved through a discussion of the variable-sharing criterion from relevance logic, Craig's interpolation theorem, perfectible entailment, and the role of prime implicants as explanations in modelling of abductive reasoning in machine learning.

Degrees of logical neutrality

Max Carrara, Michele Pra Baldi, Andrea Strollo & Diego Tajer

Some logics (such as FDE or certain Kleene logics) lack logical truths. These systems, which validate only inferences, are often called *Purely Inferential Logics* (PILs). Our paper explores a new philosophical application of such logics, focusing on their connection to the widely discussed idea of logic's neutrality. Although the absence of logical truths is sometimes seen as a mere technical fact—or even as a defect—we argue that this feature carries important philosophical implications. In particular, it can be considered as a minimal requirement to model different notions and degrees of neutrality in logic. Building on this idea, we consider several types of PILs, distinguishing between logics without theorems, without anti-theorems, and with additional forms of neutrality concerning premises. For each group, we discuss representative examples and their role in the broader debate on neutrality, as well as their relative strength within this framework.

Some Problems of Normal Form in Logical Metainferentialism

Bogdan Dicher

In “Logical Metainferentialism” (Ergo, forthcoming), Dicher and Paoli develop a theory of harmony for metainferential calculi in the FDE family, including ST. They identify a certain normal form—called there structurally atomic–analytic synthetic (SAAS) normal form—as the mark of harmony. A proof is in SAAS normal form iff it is structurally atomic (the structural rules apply to/produce only atomic formulae) and analytic–synthetic (all applications of elimination rules precede all applications of introduction rules). In “Sequent Calculi for First-Order ST” (JPhiLog, 2024), Paoli and Prenosil introduce a sequent calculus for ST employing generalized elimination rules for the quantifiers. In this talk, I present a calculus for ST in which all elimination rules are in general form, and I discuss which normal forms can be identified for this calculus and their significance for metainferential harmony.

What are logical pluralists pluralist about?

Sabina Domínguez Parrado

This talk clarifies and reassesses the scope of logical pluralism. I first argue that philosophers of logic often overlook an important distinction between the *word* ‘valid’, the *concept* validity, and the

property validity. As a result, it is often unclear what the subject matter of logical theories *is*, and what exactly logical pluralists are pluralist *about*. With this distinction in mind, I argue that the pluralist proposal advanced by Beall and Restall is best understood as the conjunction of individually plausible but jointly incompatible claims about the concept validity and the word 'valid'. I then show that other extant forms of pluralism located at the levels of language and concept initially appear to avoid this tension but ultimately incur important difficulties. I conclude by considering the prospects for a coherent and substantial form of pluralism at the levels of language and concept.

Kripke the Logical Traditionalist

Sophia Arbeiter

What is the relationship between logic and thought? The logical *traditionalist* holds that logic is thought-dependent: logic is in some important sense internal to thought and to formulate the logical laws is to recognize what holds of thought. The logical *modernist* holds that logic is independent of thought: one may select a specific logical theory to govern thought, on pragmatic or epistemic grounds. I contend that this disagreement constitutes the context for Kripke's "The Question of Logic" (2024). I argue that Kripke is a traditionalist, with a focus on the core juncture of his paper (his "basic point", p. 20). Beyond an improved understanding of Kripke's philosophy of logic, my hope is to advocate for a re-appraisal of the traditionalist position by presenting and clarifying its core commitments.

One the distinction between one-component and two-component semantics

Wessel Kroons

Semantic systems that take into account both the truth conditions and the subject matter of sentences are becoming more widespread. One way to classify such systems is by distinguishing between one-component semantics and two-component semantics—a distinction introduced by Berto, Hornischer, and Hawke that has gained traction in recent years. A two-component semantics treats truth conditions and subject matters as irreducible to each other, whereas a one-component semantics derives one from the other. I challenge this distinction on two grounds. First, the neutrality required for the distinction to apply across a sufficiently broad range of semantic systems renders it ambiguous and ultimately undermines its utility. Second, the definition is prone to misinterpretation and fails to convey the meaning typically intended by those who employ it. I tentatively propose a novel, more transparent way of drawing the distinction between what we might call one-component and two-component semantics.

Ole Hjortland

The laws of logic as laws of nature

The methodology and acquisition of knowledge in logic differ from those of other sciences only in degree, not in kind. This is the anti-exceptionalist agenda for logic, developed in recent work in the philosophy of logic. Existing approaches tend to share a focus on logical theories and theory-choice as opposed to the justification of individual laws of logic. Nonetheless, logical theories are still taken to include such laws, arguably in a capacity not unlike the laws of other sciences. This paper examines the viability of anti-exceptionalist conceptions of logical laws. It introduces a metaphysical anti-exceptionalism that complements its epistemological counterpart: nomic anti-exceptionalism.

Erik Stei

Reflections on the "logic in natural language" thesis

According to the *logic in natural language thesis*, "a natural language, as a structure with a syntax and a semantics, thereby determines a logical consequence relation" (Glanzberg 2015, 75). While Glanzberg rejects the thesis, arguing that we will not get a logical consequence relation worth its name from natural language without substantial theoretical investment, others argue that appropriate formal systems do serve as models of a real phenomenon in natural language (Sagi 2020, 2024). In the talk, I will look at different ways to make the thesis precise and how (if at all) these readings are in tension with each other. I'll discuss some interesting upshots of the debate with a focus on methodological aspects concerning logical theory building.