



Newsletter Vereniging voor Logica

Spring Edition - May 2022

Message from the Board

The board of the VvL is happy to reintroduce the *VvL Newsletter*, which is planned to appear three times a year. The newsletter will keep you updated on upcoming and past events organized by the VvL that are relevant for a broad audience with an affinity for logic and philosophy of the exact sciences. Additionally, the newsletter aspires to let VvL members feel more connected to each other, which is why one of our members will introduce themselves in each edition. If you have always wondered what aspects of logic are being studied in the Netherlands, also make sure to read 'Questions in Logic', where a VvL member shares their research interests in the field. Don't forget to solve the puzzle at the end!

If you have any comments or suggestions, or if you would rather not receive this newsletter, please send an e-mail to bestuur@verenigingvoorlogica.nl.

About the VvL

The *Dutch Association for Logic and Philosophy of the Exact Sciences (VvL)* represents not only logicians and philosophers in academia, but considers itself to represent everyone with an interest in logic or philosophy of the exact sciences. It also commits itself to popularising these areas to a broader audience. The VvL regularly organises events and supports initiatives in the relevant fields. In addition, the VvL functions as a *de facto* alumni organisation for logic.

The VvL was founded in 1947, but has over the past year been undergoing a revival, accompanied by an increase in new members. Some facts about our current members:

- The VvL currently has 173 members.
 - In the past year, approximately 50 new members have joined. We hope to keep growing in the coming years, so please consider encouraging any interested colleagues to become a member!
 - We have members from many different institutions, based in Amsterdam, Utrecht, Groningen, Nijmegen, Tilburg, Eindhoven, Delft, Twente, Leiden and Rotterdam, and we even have some internationally based members.
 - Among the 30 most recent membership registrations, 13% are bachelor and master students, 30% are PhD students, 30% are other academic staff, and 27% fall under logic alumni working outside an academic setting and members from the general public.
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News

- **Introduction of VvL Master's Thesis Prize.** The VvL has introduced the first [Master's Thesis Prize](#) for logic-related theses in the Netherlands! Any master's thesis from the calendar year 2021 with a topic related to logic

or philosophy of the exact sciences written as part of a master's programme at a Dutch university was eligible to be nominated. The deadline for submission was April 15. The Master's Thesis Prize committee consists of Valeria de Paiva (Chair), Jan Broersen, Balder ten Cate, Davide Grossi, Leah Henderson and Sara Uckelman - they are currently deciding on this year's winner(s), who will be notified in the beginning of June.

- **Updates on the website.** The [VvL website](#) has received several updates over the past few months, such as new pages for activities that are being organized, but also a sponsors page and a page listing the current logic-related seminars across the Netherlands (if you think we are missing one, let us know!). Keep an eye out for more updates, and if you have any comments or suggestions, feel free to send an e-mail to bestuur@verenigingvoorlogica.nl.

Upcoming Events

- **May 31, 2022 (16:00-19:00) - Logic at Large Lecture 2022 (Joel David Hamkins).** The Logic at Large Lectures were introduced in 2021 by the VvL as annual, public lectures organised for a general audience. This year's lecture will be given by Joel David Hamkins (O'Hara Professor of Philosophy and Mathematics, University of Notre Dame), titled "Infinite Games, Frivolities of the Gods". The lecture will be given online, and will be followed by a social event on [gather.town](#). For registration, please visit [the website](#).
- **July 1, 2022 - Dutch Logic PhD Day 2022.** The first edition of the Dutch Logic PhD Day will take place at Utrecht University on Friday July 1! The goal of this event is to foster a community of PhD students in the Netherlands in all areas of logic. PhD students will be able to present their (ongoing) research, and we are happy to confirm dr. Revantha Remanayake (RUG) and dr. Maria Aloni (ILLC, UvA) as keynote speakers. There will also be sufficient opportunity to socialize! Master students may also register, as it is likely that there will be places available for them. PhD students in logic or a related area can send in abstracts for a talk until *June 1*. More information about registration and submission of abstracts can be found [here](#).

Past Events

- **April 22-23, 2022: Logic4Peace.** The VvL joined the co-organization of the online fundraising event [Logic4Peace](#). The conference took place on 22 and 23 April 2022 and hosted a very interesting and dense programme consisting of two parallel tracks with 80 contributed presentations and one invited lecture. The organizing team of Logic4Peace thanks all participants, PC-members, co-organizers and sponsors for their contributions which made Logic4Peace a great success! A full financial report about the amounts that have been collected will be made available on the conference website. Half of the collected amount goes to the Ukrainian Charity "Voices of Children", and the other half goes to our academic colleagues in Ukraine who have lost their homes, families or livelihoods due to the war. Please also note that the [conference donations page](#) remains open till the end of May to allow for any additional funding to come in. The organization team has in the meantime been in contact with all participants to collect their conference material and will make the received material as well as the booklet of abstracts available online within the coming weeks, this will include the texts from the opening and closing speeches given at the conference.
- **October 15, 2021: Workshop on the Compositional Nature of Tense, Mood and Aspect.** This [workshop](#) was organized by UiLOTS (Utrecht), ILLC (Amsterdam) and the VvL, and was dedicated to the launch of Henk

Verkuyl's book *The Compositional Nature of Tense, Mood and Aspect*. The workshop included distinguished speakers working in the domain of tense, aspect and mood who could connect their contribution to topics in the new book.

Geef De Pen Door

In this section, a VvL member introduces themselves, so that the association can get to know its diverse collection of members better. For the first edition, Nima Motamed will introduce himself.

"My name is Nima, and I'm currently a PhD student at Utrecht University, though I am based in Amsterdam (where I spend too much of my time in parks and forests). Before my PhD, I studied computer science, artificial intelligence and logic, all at the University of Amsterdam. Despite currently being a logician, my interests when starting CS were quite far removed from anything theoretical. But luckily for me, it took only some courses on logic, automata and computability to pull me in. I was shocked by the preciseness and great applicability of formal methods. And suffice to say, the current amount of interest I have in logic made joining the VvL last year a no-brainer.



My work now is on logic in multiagent systems, specifically focussing on belief and intention revision. But like many other former Master of Logic students, my interests in general are quite broad, ranging from cognition and social choice theory to coalgebra and category theory. Though these might sound like very different fields, they all address aspects of the relation between intelligence, reasoning and computation, which is a relation that I hope to always continue exploring."

Questions in Logic

In this section, a VvL member explains what drives their research in logic. They illustrate a question (with or without an answer) in logic in an accessible way: this can be a problem they are currently working on, the motivation behind a broader area of research, or an already known result that they simply find interesting. Apostolos Tzimoulis (VU) is the first member to address his research interests.



"An important concern of proof theory is the design of uniform techniques and methods for designing proof-calculi (i.e. formal tools for generating logical conclusions from axioms and rules) for wide families of logics. Calculi with good properties allow us to both automatize reasoning in these logics and also to study and understand the properties of these logics. The question that I am working on belongs to a line of research on the interface of algebra and logic: specifically, how properties of the algebraic semantics of wide classes of logics facilitate the design of good proof-calculi for these logics. During my PhD, my collaborators and I characterized the algebraic properties that guarantee certain classes of logics to have good proof-calculi, which are generated algorithmically using these algebraic properties.

However, many interesting and useful logics fall outside the scope of this characterization, and in particular logics with various applications in philosophy and social sciences such as dynamic epistemic logics, propositional dynamic logic, and linear logic. To address this problem, my collaborators and I developed a powerful technique, referred to as the multi-type approach, which has proved very successful in extending the scope of the characterization also to some

important logics falling out of the scope of the characterization such as the ones mentioned above. The application of the multi-type approach essentially consists in "breaking down" (logical) operations into compositions of simpler ones and transforming a single algebraic structure into a heterogeneous algebraic structure, consisting of several domains, each of which representing a different type of entities, and operations connecting these domains.

However, in all these cases, the equivalent representation of the algebras of the given logic as heterogeneous algebras was achieved on the basis of a semantic analysis specific to that particular case. Hence, so far, there is no general characterization of properties of a given class of algebras (which is the algebraic semantics of a given logic) that guarantee that the algebras of this class can be equivalently represented as heterogeneous algebras endowed with the properties that would guarantee the generation of good proof-calculi. The problem I am working on right now is identifying such a characterization and in particular identifying sufficient conditions on the algebraic semantics that will guarantee such an equivalent representation."

For further reading, take a look at [Fritella *et al.*, \(2016\)](#) and [Greco *et al.*, \(2017\)](#).

Logic Puzzle

Solve the puzzle!

The answer will be given in the Fall
Edition of the VvL Newsletter.

26.

According to this old problem, three of the inhabitants—A, B, and C—were standing together in a garden. A stranger passed by and asked A, "Are you a knight or a knave?" A answered, but rather indistinctly, so the stranger could not make out what he said. The stranger then asked B, "What did A say?" B replied, "A said that he is a knave." At this point the third man, C, said, "Don't believe B; he is lying!"
The question is, what are B and C?

Source puzzle: Raymond M. Smullyan, *What Is The Name Of This Book?* (2011)