
Alternatives to Methodological Naturalism

Conference Packet

Online Meeting - April 16, 2016




The Blyth Institute



Introduction

Welcome to the Alternatives to Methodological Naturalism 2016 Online Conference! We have a fantastic lineup of presentations this year, and are looking forward to the information and discussion that we will be having. Please take a moment to look through this packet before the conference to make sure that you are ready when the conference begins.

About the Conference

While there has long been a discussion about the role and legitimacy of naturalism as a foundational assumption in academic thought, critics of naturalism have generally been just that - only critics. The goal of this conference is to not only look at the strengths and weaknesses of naturalistic methodologies, but actually begin to examine and establish potential alternative methodologies. Our goal is to not only understand the problems clearly, but also more clearly see the potential solutions. Not every speaker agrees with the organizers about the problematic nature of naturalism, but we all value the discussion around it.

About the Blyth Institute

The Blyth Institute is a research and education nonprofit organization which focuses on new avenues of exploration in biology, cognitive science, and engineering, with a focus on formal, semantic, and logical relationships in systems. The Blyth Institute is the organizing institution for this conference. More information about The Blyth Institute, their work, and their research can be found at <http://www.blythinstitute.org/>

About the Center for Evolutionary Informatics

The Center for Evolutionary Informatics (CEI) is a group of STEM researchers and professionals whose research focuses on the role of information in the modeling and analysis of evolutionary processes and related phenomena. The CEI focuses especially on informational requirements of evolution. This conference is funded in large part by a generous grant from the CEI. More information about the CEI, their work, and their research can be found at <http://www.evoinfo.org/>

Connecting to the Conference

This conference will primarily occur using the join.me conferencing tool. join.me allows you to connect in three different ways: through the join.me app, through the web browser, or by phone through a conference line. The join.me app is the recommended way to connect, but we have below the information for all three methods. You can download and install the join.me app from <http://bit.ly/jm-app> or from the join.me website.

	Virtual Room 1	Virtual Room 2
Using the join.me application	Open the application and enter the conference room code: <code>amnat.vroom1</code>	Open the application and enter the conference room code: <code>amnat.vroom2</code>
Using a Web Browser	Point your web browser to the following URL: http://join.me/amnat.vroom1	Point your web browser to the following URL: http://join.me/amnat.vroom2
Calling in with a Phone	Step 1: Dial in to join.me (international dial-in numbers below) +1.404.801.3225 or +1.734.746.0035 Step 2: After dialing in, enter the following as the conference number: 412-259-745	Step 1: Dial in to join.me (international dial-in numbers below) +1.404.801.3225 or +1.734.746.0035 Step 2: After dialing in, enter the following as the conference number: 812-639-717
International Call-in Numbers	A list of international call-in numbers is available at https://join.me/intphone/	A list of international call-in numbers is available at https://join.me/intphone/

In addition to our two virtual rooms, we will also have an ongoing chat session that you can connect to with your browser. You can join in the chat by going to:

<http://tlk.io/amnat-chat>

If you run into any problems during the conference, you can go to our help chat, which will be available by going to:

<http://tlk.io/amnat-help>

If you are having severe problems you can call the conference organization (Jonathan Bartlett) on his cell phone at +1.918.845.6126 or email info@blythinstitute.org.

Conference Schedule

Below is the schedule for the conference. Talks are intended to be thirty minutes followed by ten minutes of question and answer time. Participants will then have five minutes between talks to make sure they are in the right room for the next talk.

Room	Topic*	Speaker	Start Time
Virtual Room 1	Opening Statements	J. Bartlett	9:00 AM Central Time
Virtual Room 1	Keynote: Methodological Dualism in Austrian Economics	P. Bagus	9:15 AM Central Time
Virtual Room 1	Regularism	T. Gilson	10:30 AM Central Time
Virtual Room 2	Evolution of MN	J. Bartlett	10:30 AM Central Time
Virtual Room 1	Gambler's Epistemology	S. Cordova	11:15 AM Central Time
Virtual Room 2	Two Defenses of MN	R. Kojonen	11:15 AM Central Time
Lunch Break			12:00 PM Central Time
Virtual Room 1	Design Triangulation	P. Nelson	1:00 PM Central Time
Virtual Room 2	MN & Its Creation Story	A. Mignea	1:00 PM Central Time
Virtual Room 1	Describable but Unpredictable	J. Bartlett	1:45 PM Central Time
Virtual Room 2	Shortcomings in Alternatives to MN	E. Holloway	1:45 PM Central Time
Virtual Room 1	Methodological Informationalism	A. Mignea	2:30 PM Central Time
Virtual Room 2	Francis Bacon, Teleology, and Analogy	J. LeMaster	2:30 PM Central Time
Virtual Room 1	Design as a Demarcation Criteria	M. Lopez	3:15 PM Central Time
Virtual Room 2	Philosophy-Free Scientific Method	G. Gaulin	3:15 PM Central Time
Virtual Room 1	Applying Theological Method in Genomics	J. Johansen	4:00 PM Central Time
Virtual Room 2	————	————	4:00 PM Central Time
Dinner			4:45 PM Central Time
Virtual Room 1	Non-Naturalism and Machine Learning	E. Holloway	5:45 PM Central Time
Virtual Room 2	God of the Gaps and MN	R. Jorritsma	5:45 PM Central Time
Virtual Room 1	Group Discussion	Discussion	6:45 PM Central Time
Virtual Room 1	Closing Statements	J. Bartlett	7:45 PM Central Time

* Please note that the titles of the talk topics have been shortened in this schedule. Full topic titles are listed in the topic listing.

After the Conference

This conference is intended to be just a starting point for research dealing with ways to incorporate non-naturalistic methodologies into academic work. The organizers of the conference will be supporting the continued work of the attendees in a variety of ways.

Conference Videos

Each talk will be recorded. The conference videos are a way for conference attendees to revisit what they learned at the conference, as well as for others who were not at the conference to have the ability to learn these new ideas for themselves. Additionally, the videos allow conference attendees to see any talk that they missed during the conference if they wanted to watch two talks that were happening simultaneously.

Note that due to limitations of the software, only the screen sharing and audio will be recorded. The video feeds from webcams are not included in the final videos. Therefore, please be sure that all needed visuals are contained in your presentation.

Papers for the Conference Proceedings

Each presenter is invited to submit a paper relating to their talk after the conference for the conference proceedings. Papers are due one month after the end of the conference - May 16th. For this conference, the papers are due after the conference to allow for incorporation of additional ideas learned during the conference. The goal of the conference is to expand your ideas from interactions with others, and we expect authors to take advantage of the conference to improve upon their own ideas before submitting them for the proceedings.

Each paper will be reviewed by one or two reviewers to provide feedback for the authors. The authors are expected to respond to the feedback provided and/or update their manuscript to reflect issues discovered by the reviewers. If for some reason a paper is not suitable for inclusion in the proceedings, the editors will notify the author of this and what changes need to be made to make the paper suitable.

Future Conferences

We anticipate running similar conferences periodically. We will keep in contact with our conference attendees to be sure that everyone is aware of all future conferences.

Topic Listing (Alphabetical by Author)

Note that the topic descriptions are shortened from the submitted abstracts by the conference committee. Any fault in the descriptions of the talks are due to the conference committee, not the topic authors.

Methodological Naturalism in the Austrian School of Economics

Philipp Bagus
The Mises Institute; Universidad Rey Juan Carlos

Based on Ludwig von Mises' work, this talk will explain why there is a methodological dualism between the natural and the social science. Furthermore, it will explain what praxeology is and why the sciences of human action are separated into theory and history.

The Evolution of Methodological Naturalism

Jonathan Bartlett
The Blyth Institute

This talk will give a brief overview of the history of methodological naturalism, focusing on the fact that the idea of methodological naturalism has changed quite a bit. In fact, ideas taken for granted today as being methodologically naturalistic were opposed on their first introduction as introducing theological elements into science.

Describable but Unpredictable: The Shape of Non-Natural Formalisms in Modeling

Jonathan Bartlett
The Blyth Institute

This talk will discuss the ways in which lower-level mathematics learned in grade school and in undergraduates college education shapes our thinking about causation, and leads to expectations about the world which arise from habits of thought rather than logical analysis. This talk will discuss other types of mathematical models of causation which are more appropriate to non-mechanical causes, and how they can be integrated into empirical methodologies.

Gambler's Epistemology as an Alternative to Impractical Naturalism

Salvador Cordova
Millenium Analytics

Rather than adjudicating the philosophical merits of naturalism to other approaches, this talk will examine the possibility that reward-to-risk analyses (such as seen in the professional investment and gambling) serve as better practical guides in committing financial and human resources to scientific exploration than enforcement of unspoken creeds of impractical naturalism that may actually be detrimental to scientific discovery.

Philosophy-Free Scientific Method

Gary Gaulin
Gaulin Tracksite; Hitchcock Press Inc.

The “scientific method” is inherent to human behavior. Babies learn by forming hypotheses (an idea you can test) leading to theories (explanation for how something works or happened) that yield for them repeatable results. The same behavior is found in the hypothesis and theory driven science journal methodology of adults, where “peer review” is the “confidence” part of the cognitive related mechanism. This talk will focus on the scientific method as a methodology we use on a daily basis, which does not need Methodological Naturalism or any other philosophy to understand, just the very basics of cognitive science and common sense.

Regularism: A Better Alternative to Methodological Naturalism

Tom Gilson

Many virtues have been attributed to Methodological Naturalism – testability, reasonability, and effectiveness. However, these have been strongly associated with unscientific metaphysical assumptions which tend to dominate scientific thinking even if they do not follow necessarily from Methodological Naturalism's assumptions. This talk will introduce Regularism as an alternative that retains Methodological Naturalism's virtues while remaining metaphysically neutral.

Shortcomings in Alternatives to Methodological Naturalism

Eric Holloway
Baylor University

This talk will cover shortcomings in many current alternatives to Methodological Naturalism, as well as potential ways to overcome these shortcomings. It will focus both on theoretical and practical considerations in which alternatives to Methodological Naturalism has been found wanting, but will also show how science's own inductivist reasoning is actually non-Naturalistic.

Implications of non-Naturalism in Machine Learning and Beyond

Eric Holloway
Baylor University

Non-Naturalistic theories of nature, if true, have profound consequences that are not often considered. This talk will explore the impact of non-Naturalistic theories of nature primarily in machine learning, as well as physical causality and economics. Additionally, the talk will cover meta-benefits to science from non-Naturalistic theories such as improved integration of scientific disciplines and a more coherent picture of scientific induction.

Exploring the Application of Theological Method in Genomic Research

Jim Johansen
Liberty University

This talk explores the utility of theological method in science, specifically in genomic research. This talk will propose that the divine attributes have been shown to be mirrored in natural law, thus allowing us to use theological premises in weighing scientific hypotheses.

The 'God of the Gaps'-Argument for Methodological Naturalism

Ruben Jorritsma
Independent Scholar

One of the common arguments for Methodological Naturalism is the charge that supernaturalistic theories commit the 'god of the gaps'-fallacy. This argument has great rhetorical strength, because it draws on several different intuitively appealing ideas. This talk will examine those ideas and show that none provides sufficient grounds for categorically disqualifying supernaturalistic theories from science.

Two different defenses of methodological naturalism related to their critiques

Rope Kojonen
University of Helsinki

This talk will discuss the critiques of Methodological Naturalism, and suggest that the underlying cause for criticizing Methodological Naturalism is the advance of scientism – the belief that science is the only valid mode of explanation of the world. This talk will discuss alternative ways of understanding the relationship between science and knowledge which remove the need for replacing Methodological Naturalism in science.

Methodological Naturalism and Its Creation Story

Arminius Mignea
Independent Scholar

This talk discusses the way that Methodological Naturalism affects our views of the origins and history of life on earth. The talk will focus on the ways in which Methodological Naturalism requires adherence to ideas that simply transfer miraculous powers from the supernatural to ordinary matter.

Methodological Informationalism: an Alternative to Methodological Naturalism

Arminius Mignea
Independent Scholar

This talk proposes that for life sciences, Methodological Informationalism should be preferred to Methodological Naturalism. Methodological Informationalism posits that the guiding principles for biology should be examining the informational foundations and requirements of the biological machinery found in organisms. This is at odds with many assumptions of current biology, which views information as an after-effect of random mutations, rather than as a foundational cause in its own right.

The Relationship of Francis Bacon, Teleology, and Analogy to the Doctrine of Methodological Naturalism

Jim LeMaster
Southern Baptist Theological Seminary

Francis Bacon divided natural science into physics and metaphysics. Bacon objected to including teleology in physics because in his experience, teleological claims tended to discourage or suppress the search for efficient causes for natural phenomena. This talk will explore the notion that what Bacon concluded as a stifling effect of teleology was more a symptom of the constraints of long-entrenched Greek philosophical approaches rather than a weakness inherent to teleological thinking itself.

Design as a Criterion of Demarcation

by Mario A. Lopez
OIACDI

Many attempts have been made to demarcate science such that design falls on either the “non-science” side (i.e., Methodological Naturalism) or on the “science” side (i.e., Alternatives to Methodological Naturalism). This talk will propose, however, that design is itself the demarcation between what is science and what is not science. This fits well with the teleonomic structure of what is found in nature and matches the benefits of current scientific methodology, while providing a better foundation for both.

Design Triangulation

Paul Nelson
Biola University; Discovery Institute

The ability of biologists to predict biological structures based on functional necessity combined with the complexity and specialization of functionality in biological systems warrants the understanding of biological systems as being rationally and logically put together, even in the absence of specific observed parts. This talk focuses on formalizing this principle under the rubric of design triangulation, and will show its usefulness in the history of biology and its relationship with intelligent causation in biological explanation.

Preview Sessions

These two talks were given before the conference in two preview sessions. You can find the preview sessions on the am-nat.org website.

Methodological Dualism (MD) and Multi-Explanation Framework (MEF) in Psychology

Sam Rakover
University of Haifa

The conceptual divide between mental and mechanical explanations leads to the need for a multi-explanatory framework in sciences dealing with behavior and consciousness. This talk focuses on Methodological Dualism, which, rather than bridging the divide, recognizes it as real and matches explanations to appropriate causes on either side of the mechanical/mental divide.

Top-Down vs. Bottom-Up Linguistics and Grammatical Relations

Noel Rude
Independent Scholar

Human language can be studied bottom up (corpus linguistics, neurolinguistics) and top down via conscious data creation and introspection as to grammaticality. Creativity in language hinges on both law and liberty, on the freedom of the will and constraints thereof. This talk will focus on the role of agency in language, and how our ability to learn and understand language is based not primarily on shared mechanics but rather agency-oriented concepts that we cannot not know.

Final Notes

For any suggestions regarding this conference or future conferences, please send an email to info@blythinstitute.org. The Blyth Institute regularly organizes conferences for the academic community, and we appreciate all suggestions for making these conferences better for both the presenters and the attendees.

Thank you for coming together with us for this conference. We hope that you find it worth your time and participation!

Conference Organizers

Primary Organizers

- Jonathan Bartlett, The Blyth Institute
- Eric Holloway, Baylor University

Conference Advisory Panel

- Robert Marks III, Center for Evolutionary Informatics
- Douglas Axe, The Biologic Institute

Additional Credits

- Mario Lopez - Conference Website
- Conference Logo - AlaGidea
- Joey Lagata - Conference Assistant