





## **Philosophy in the Reformed Tradition 2021**

Celebrating the Heritage, Facing the Challenges, and Embracing the Future

Book of abstracts for Research Paper Sessions

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### Preface

We are delighted to present this book of abstracts, which is part of the five yearly conference on Philosophy in the Reformed Tradition, edition 2021. This conference is organized against the backdrop of tectonic shifts in world-wide Christianity. Churches and related institutions in the global South are thriving and seeing unprecedented growth while in the Western world numbers of active church members are in decline and Christian organizations see themselves confronted with the eroding effects of secularization. These shifts have impacted on strands of Christian thought that are known as reformational philosophy or philosophy in the reformed tradition, with Herman Dooyeweerd and Dirk H.Th. Vollenhoven as important initiators. Some of the traditional strongholds of this philosophical tradition have lost their position in academia. At the same time, new, sometimes private initiatives were taken in the past decades, for instance in the UK (Faraday Institute, Cambridge; Ian Ramsey Center for Science and Religion; SCIO – Scholarship and Christianity in Oxford), the Netherlands (Abraham Kuyper Center, VU; the Neo-Calvinism Research Institute, Kampen; Forum-C, Amersfoort) and the USA (Center for Public Justice, Washington DC; Center for Theology, Science, and Human Flourishing, University of Notre Dame), offering platforms for discussion and opportunities for funding, trainee- and scholarship. Many of these initiatives were successful in terms of academic standing and public outreach. In the meantime, even more students and young scholars in the global South are standing up and long for a fresh and deeper understanding of the reformed tradition and its meaning for philosophy and theology. This is the moment to answer the need of these students and young scholars by rethinking the mission of the Reformational philosophical tradition and by mapping the challenges and tasks that lie ahead.

The Association for Reformational Philosophy, the All of Life Redeemed (AoLR) platform, and the Abraham Kuyper Center organize, therefore, an international conference which has the aim to make the rich resources of the Reformational movement more widely available, especially for the new audiences in the global South. We also aim at creating a context for dialogue between Reformational philosophers and representatives of other streams of thought within the broader Christian tradition.

#### More specifically, we want to

- (1) exhibit what a century of philosophical thinking in the Reformed tradition has delivered, especially with respect to the challenges of our age (sustainability; ethics of technology; food production and consumption; professionalism and vocation; international relations, to mention a few)
- (2) identify and explore new ways to address the unresolved issues
- (3) encourage young students, scholars and professionals to engage with philosophical thinking in the Reformed tradition
- (4) offer a platform for students, young scholars and professionals (especially in the South) to present their initial steps in the field.

The event will celebrate the 16th anniversary of the All of Life Redeemed (AoLR) platform. It will also be the 10th in the series of 5-yearly international conferences of the Association for Reformational Philosophy.

As for so many scholars, the global COVID-19 pandemic has become an occasion to explore new ways of connecting, communicating, and learning. The conference will, therefore, be largely online. We anticipated several hybrid hubs in different countries, but due to the ongoing uncertainties related to meeting face to face, we have decided to only host a hub in Amsterdam.

The program involves a combination of state-of-the-art keynote lectures, panels on focused themes, and workshops in which junior scholars can present their work and be mentored by senior scholars in their field. We will also create ample digital space for informal gatherings.

The latest version of the program can be found here:

https://www.reformationalphilosophy.org/rpc2021-program/.

Registrations remain open until the last conference day, see here:

https://www.eventbrite.nl/e/philosophy-in-the-reformed-tradition-2021-international-conference-tickets-204332793887

We hope you will enjoy the conference, advance your knowledge and understanding of reformational philosophy, including its criticisms, and are able to make connections and enjoy old or emerging academic friendships.

Christine Boshuijzen-van Burken (chair) (Australia) Romel Regalado Bagares (Philippines) Lay Hendra Wijaya (Indonesia) Gerrit Glas (The Netherlands)

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#### Abstracts

The end of philosophy and the task of thinking: possible dialogues between Herman Dooyeweerd and a Hebrew approach to philosophy - Pedro Lucas Dulci

Discourses about "the end of philosophy" have become commonplace in the contemporary. For Marx, philosophy should come to an end by transforming it into praxis. Wittgenstein also argued for the end of philosophy through a great analysis of language. When this work was done correctly, its problems would be answered and it would be a chapter in history. However, what both did not realize is that, seeking the end of philosophy, they opened up new fields of philosophical inquiry—inaugurating distinct phases even in their own thoughts.

Another name for "end of philosophy" projects is that of Martin Heidegger. He announced the end of philosophy by understanding it as Metaphysics. The last "task of thinking" for him was to show how the history of philosophy is a long path of metaphysical emptying that reached its supreme possibilities in a scientific period that he called "the age of technology". However, despite the extreme situation we have reached, Heidegger is prodigal in showing that the history of philosophy is based on an immense "forgetfulness of being" that occurred through the metaphysical substitution of being for entity. Undoubtedly, in this project of deconstruction of metaphysics Heidegger was influenced by Nietzsche, who also saw the beginning of the decay of philosophy with Socrates and Plato — but still considered the pre-Socratics the true philosophers. Heidegger, however, admits that forgetfulness of being is as late as Parmenides, who identified being with thought, establishing an unavoidable path to rationalist and idealist reductionism. There is, therefore, only one epoch of "being", that of its suspension ( $\dot{\epsilon}\pi$ o $\chi$ \acute\eta). The task of thinking will be to go beyond all attempts to identify being in entity and to push thought back to being—in myth, poetry, or mystic.

Heidegger's philosophical project was met with much suspicion. On the one hand we have the charge of a thoughtless return to myth raised by Theodor Adorno; on the other hand, we had Rudolf Carnap's sharp accusation of the absence of meaning in certain formulations in Heidegger's texts. It is not our purpose to discuss the success of the Heideggerian project here, but to admit how it raises a fundamental problem for all those who are celebrating the heritage and thinking the challenges of philosophy in the Reformed Tradition. Is our philosophical heritage part of this long metaphysical tradition of forgetfulness of being? If not, how does it escape it? Did it also need a thoughtless return to myth or mystic as Heidegger was accused? Such questions are not artificial within reformational thought, since Herman Dooyeweerd himself was in close dialogue with Heidegger's work and, therefore, aware of his philosophical provocations.

This paper will focus on presenting how Dooyeweerd's philosophy manages to escape from Heidegger's "forgetfulness of being" through the non-metaphysical choices he makes. Furthermore, as the philosophy of the Cosmonomic Idea achieves the "task of thinking", it proves able to establish fruitful dialogues with recent interdisciplinary proposals — such as the Hebrew approach to biblical philosophy presented in Dru Johnson's terms.

# Natural Sciences and Philosophy in Pierre Bayle's Systema totius philosophiae - Miklos Vassanyi

Before Bayle left Sedan for Rotterdam in 1678, he had composed, around 1675–1677, a voluminous compendium of the entire system of philosophy in Latin, which he used as a manuscript basis for his lectures at the Protestant Academy (*Oeuvres diverses* IV, La Haye: 1731, 201–520; unpublished before this date). In this, he developed a quadripartite system with a new ordering of all the academic disciplines: 1. Logic; 2. Morality; 3. Physics (General & Particular); 4. Metaphysics. Within Particular Physics, the third section ("Des cieux") of the first treaty discusses astronomy, my main focus in this proposed paper.

On account of that section, I would like to examine Bayle's methodology of decision-making in the case of such questions as seem too entangled for natural reason to immediately decide. It may be anticipated that he uses a method of a philosopher who does not consider himself a fully fledged natural scientist who carries out experiments and puts the result in mathematical formulas but who is nevertheless ready to consider natural scientific matters seriously in the balances of human reason. Occupying a fundamentally anti-Peripatetic stance, he proposes his probabilistic solutions in the wake of Galilei (think especially of the *Sidereus nuncius, Istoria e dimostrazioni intorno alle macchie solari*, and *Dialogo* Day 4) and Descartes (*Principia philosohiae*, Part III) but does not endorse Cartesianism at all costs.

I will argue that on account of natural philosophical dilemmas we see, early on, the emergence of the dubitative, skeptical frame of mind that will characterize his metaphysical thought in the *Dictionaire*. On a final note, then, I would like, to shortly compare his grounds for the evaluation of Copernicanism with those of Jean Calvin (several Biblical commentaries and homilies) and Melanchthon (*Initia physicae*).

# Fear and trembling. Climate change and human responsibility - Jan van der Stoep

Climate change is high on the political agenda. Suddenly we discover that we, modern people, have a huge impact on living conditions on earth. So strong, in fact, that it takes on threatening proportions: rising sea levels, extreme weather conditions, loss of biodiversity. We have long been warned about this, but now we are really confronted with the ecological consequences of living in a high-industrial society.

The era in which we live is often referred to as the Anthropocene. For the first time in history human activity has impact on a geological scale. What does this mean for the role that humans should play. Must we, as Bruno Latour argues, rediscover that we inhabit a limited place on earth and that we are embedded in a complex fabric of life? Or must we take our responsibility and accept that humans are at the center of the world, as Clive Hamilton says?

In this paper I will explore what can be said from a Christian philosophical point of view about the place and responsibility of people in an era of climate change. First, I will emphasize that humans are situated beings who live in close interdependence with other creatures. Second, I will show that humans can transcend their own existence and view the world as a coherent whole. Finally, I will explore what it means to live in a God-created reality in which His love and holiness are manifested.

# Adoption of ontologies in engineering and construction: can Dooyeweerd help us? - Hans Voordijk

While standardization is believed to be a driver of the adoption and integration of digital practices, the differing digital modeling standards hinder uniform sector-wide digital modeling practices in construction and engineering (Timmermans and Epstein 2010). Following an interpretive approach, the objective of this study is to explore which obstacles hamper the creation of a sector-wide domain ontology in construction and engineering practice and how can these be overcome? First, Ihde's (1990) concept of technological mediation is used to interpret why fragmented standards restrict an adoption of a sector-wide domain ontology. Second, it is explored how these obstacles can be overcome by using the MAKE (Multi-Aspectual Knowledge Elicitation) method of Winfield (2000).

Inde, a seminal scholar in the philosophy of technological mediation, states that human perceptions and interpretations are always, to some degree, constituted and transformed by technologies (Rosenberger & Verbeek 2015). Through interpreting the mediating effects of digital modeling standards in construction and engineering, it is shown that hermeneutic and background human-technology relationships dominate. By providing concepts, and relationships between them, a digital modeling standard mediates, in a hermeneutic relationship, a specific view or model of reality by amplifying certain aspects of the world at the expense of other aspects. Local modeled realities are reduced to views that can be expressed using the dimensions and properties adopted by a certain discipline. This hampers a shared interpretation and model of reality and makes it difficult to develop a sector-wide domain ontology. In Ihde's terms, a sector-wide ontology typically plays a role in a background relationship. It helps to shape the modeling of different local realities and the context in which users perceive reality.

The MAKE method devised by Winfield (2000) and based on the work of Dooyeweerd is used to explore how a sector-wide domain ontology could be develop through a mix of a bottom-up and top-down approaches (Winfield & Basden, 2006). Through the top-down approach, the more generic and abstract aspects and concepts are defined and related to each other. A top-level knowledge map is built that covers all aspects and provides an overview and coverage of the broad context of a domain ontology. However, to ensure that the ontology does deliver the information required by the end-user, a bottom-up approach is also needed. This bottom-up approach can be related to the second level of MAKE which involves detailed knowledge elicitation. Concepts defined in each aspect are refined into more detail. By the continual discussion between the major stakeholders involved, applying MAKE may overcome the differences identified in the digital modelling standards. This process may lead to a shared domain ontology that aligns multiple digital standards.

A hermeneutical Dooyeweerdian evaluation of the creation of humananimal chimera - Henk Jochemsen

To increase the number of available donor organs, the possible cultivation of human organs in animals (chimeras) is investigated. Though the goal can be valued positively, several objections can be raised against this method. The health risks for patients, but possibly also for a wider population, remain uncertain. Butin addition to such safety concerns, research among the population often shows clear reservations and discomfort with respect to research in which 'unnatural' creatures are created. This argument of 'unnaturalness' is mostly rejected in philosophy with an appeal to 'natural fallacy', which states that you cannot directly derive a norm from a state of affairs. Using Dooyeweerdian philosophy it will be argued, however, that the 'unnaturalness' argument does have a certain moral validity. In addition to these argument, Dooyeweerdian anthropology, stressing the embodied character of human existence, combined with considerations from philosophy of technology, pointing out that technology is called to disclose meaning harboured in reality (cf. Heidegger), will be used to identify ethical objections to this line of research. The conclusion is that the research has better focus on ethically less objectionable alternatives, like organ cultivation in vitro.

## Dooyeweerdian Faith: Faith as All-Domain Allegiance - Joshua Mugg

Calvin defined faith as "a firm and certain knowledge of God..." While this looks like a purely intellectual definition, Kuyper and Dooyeweerd helpfully broaden the application of faith to all areas of life. Indeed, for these Reformed thinker, knowledge of God is necessary even for the knowledge of the self. However, recently some philosophers and analytic theologians have argued that one can have faith without belief. Perhaps trusting acceptance is enough (c.f. Alston). Or perhaps hopefully affirmation is enough (c.f. Pojman). Or perhaps even though propositional faith—faith that—might involve belief, the more important attitudinal faith—faith in—need not. Importantly, some of them have come from members of our own Reformed Tradition (e.g. Pojman 1986). What should those of us working in the Reformed Tradition make of these claims? I suggest that recent work on the nature, virtue, and value of faith can and should jumpstart important discussions on faith, doubt, and the Christian life. However, an appreciation of the nature of faith from within the Reformed Tradition will highlight some problems for divorcing faith from belief in the way some of these philosophers and theologians have suggested. In this paper, I put a Reformed perspective on the connection between faith, doubt, and the Christian life in dialogue with contemporary discussions on the nature, value, and virtue of faith.

I begin by setting out some of the recent work in analytic theology on the nature, value, and virtue of faith, beginning with Pojman's 1986 essay through the flurry of new essays, presentations, and books developed as a result of Howard-Snyder, Kvanvig, and McKaughan's Nature, Value, and Virtue of Faith Project, funded by the Templeton Foundation from 2014-2017. Here I note three insights from this recent literature. First, I note recent criticism of discussion on the rationality of faith in that it has been overly epistemic at the expense of the practical. Second, I note the need for faith to be compatible with some forms of doubt. Third, I outline how discussions on faith tie into discussion on the voluntariness of belief. I suggest that these observations give us various philosophical/theological puzzles to solve, or explanandum which an account of faith should explain. Next, I offer a Dooyeweerd inspired account of faith: faith as all-domain allegiance. On this account, faith in which one commits only in some areas of one's life is not true faith. However, while the commitment must be across domains, it need not always be felt fully in each domain—leaving open the possibility of doubt. This account has two important implications. First, this all-domain allegiance does include the intellectual life, including belief. As such, those of us operating in the Reformed Tradition should accept doxasticism (the view that propositional faith entails belief). Second, I suggest that faith as alldomain allegiance makes better sense of the important observations from recent work in analytic theology on faith. In this way, I offer an inference to the best explanation for my Dooyeweerdinspired account of faith.

## The Analogical Concepts of Economics and Theology: A Reformational-Philosophical Perspective - Joost Hengstmengel

Economics and theology share a long history of interaction and mutual influence. Due to the secularization in academia, in the nineteenth century their ways parted. The last few decades there is a new interest in the combination of both sciences. Their relationship can, and has been studied from various angles and perspectives. A promising new approach focuses on concepts that are central to both economics and theology. Examples include debt, trust, values, and love. By deepening the understanding of these concept and comparing their history and meaning in both disciplines, the disciplines in question may benefit from each other and reach a higher level of realism. According to the tradition of reformational philosophy, conceptual similarities across different academic disciplines are indeed to be expected. They point to the limits of the individual sciences, and hence to a deeper coherence and meaning of reality. This paper discusses what the reformational philosophy (of economics) of Herman Dooyeweerd, Bob Goudzwaard, and others has to say on the relationship between economics and theology. It shows that reformational philosophy offers a valuable framework to clarify their intersections and interdependences. Focusing on so-called economictheological analogies, anticipations, and retrocipations identified in this tradition, I argue that in engaging in an interdisciplinary dialogue, both sciences may contribute to a more realistic view of man and society necessary to face the economic challenges of our time.

The many faces of sustainable home cooking - Maarten Verkerk and Diana Salgado

Climate change and sustainability are among the most urgent and important topics of this century. Our contribution focuses on sustainable food preparation in households. We want to show that the Reformed thought tradition has valuable concepts and notions for thinking through the issues surrounding sustainability.

In this contribution we explore the practice of sustainable home cooking. We analyze this topic from two perspectives. The first perspective is the theory of modal aspects developed by the Dutch philosopher Herman Dooyeweerd. This approach offers insight in the many faces of sustainable home cooking. Especially, attention will be given to the normative aspects. The second perspective is the normative practice approach developed by Jochemsen, Hoogland, Glas and others. In our contribution, the so-called engineer's version of this approach will be used: the Triple I model. This approach highlights values involve in home cooking, the societal dynamics in which home cooking is embedded, and the influence of the spirit of the times.

Our contribution will be built up from the preparation of an everyday dish. For example, the well-known Dutch dish 'hutspot' (stew with skirt).

From Fragmentation to Diversity: The Ongoing Relevance of Dooyeweerd's Naive-Theoretical Distinction - Tricia Van Dyk and Benjamin Groenewold

This paper argues that Herman Dooyeweerd's distinction between theoretical thought and "naïve" pre-theoretical experience, which was targeted against a kind of scientism that may seem out-of-date in today's "post-truth" world, is actually just as relevant as ever. A key factor that has often been missed in discussions of this distinction is its ability to allow diverse interlocutors to find common ground, not in the "what" of their different experiences, but in "how" they engage the world. Similarly, an emphasis on naïve (integral) experience can act as a corrective to the way in which diversity—ideally recognized as a gift of God—can lead to confusion and fragmentation in our contemporary globalizing world.

Theoretical thought, as Willem Vanderberg has shown, tends to fragment; each theoretician reasons out of the limitations of his or her own discipline. As a result, theories tend to be plausible when evaluated on their own terms, and incomprehensible when the attempt is made to evaluate them on others' terms. What is needed is a "touchstone": some way of testing the worth of the theory against the full, interconnected complexity of existence. This touchstone cannot be theoretical, for all theoretical stances are partial, valid only in relation to the specific dimension of creation they attend to. It must arise out of some existential stance that relates our knowing to the whole. As René van Woudenberg has suggested, naïve (integral) experience can act as this kind of touchstone.

Therefore, contra Mathanja Berger and others, the distinction between theoretical and naïve pretheoretical thought cannot be conceived of as a continuum: the two attitudes are not different in terms of relative "quantity" of abstraction; rather, theoretical thought involves abstraction from integral experience. For this reason, it is important to consider how integral experience in Dooyeweerd's view is not rendered incoherent by the wide diversity of experiences, for it is not simply a source of data, but is a datum. The "touchstone" possibility for constructive interaction among diverse perspectives and experiences, then, does not lie in similarities of content (the what) between diverse perspectives, but rather in the way in which all theoretical philosophy must adequately respond to the holistic integral character (the how) of experience.

The value of the distinction between theoretical thought and integral experience is therefore the broad applicability of this insight not just to the fragmentation of theoretical knowledge, but also to discourse between diverse backgrounds. As professors at an international university, we teach students from all over the world. It is no accident that the saying, "Everyone has their own truth" is one we hear regularly. Rather than having to struggle for universal recognition of abstract values, we are challenged by the distinction between theoretical thought and naïve experience to teach students to test the fit between theories and their experience of life. Because our experiences are diverse, those accounts will be diverse, but the shared fact of integral experience can open space for the sort of authentic conversation that Dooyeweerd envisioned.

Towards non-reductionist AI: Reformational philosophy perspective on current machine learning implementation - Hendrik Santoso Sugiarto

Artificial Intelligence (AI) has been widely used in our day-to-day activities, from search engines to social media. AI has already surpassed the human level in various creative tasks (which may benefit humans in various repetitive and dangerous works). However, AI as a scientific field originated from several competing traditions and their fundamental presuppositions may not be neutral. In this particular point, reformational philosophy can provide substantial critiques on the current technological trend.

Contemporary AI generally employs massive amounts of data and expressive machine learning algorithms with a lot of parameters. This data-centric approach should be appreciated because it will guide the thinking process in AI aligning with the observed reality. However, we need to distinguish between the collection of data and the original reality. Data is recorded using certain devices, methods, and assumptions. Devices may not be perfect and assumptions are not neutral. Furthermore, different machine learning models generally employ hidden reductionist assumptions underlying their current modeling paradigms.

Some very widely used approaches such as SVM and embedding models reduce cognition into spatial aspects by the ability to project concepts into spatial representational dimension and assess the distance between different objects. These techniques are frequently used in many recommender systems whereas the users will be introduced to their preferred items (connections, contents, advertisements, products, etc.). To achieve this purpose, this algorithm usually recommends the items with closer distance and hides the items with far distance to them. Hence, it often creates polarization and division in society. Moreover, the algorithm is surprisingly sensitive enough to identify our hidden desires based on our usage pattern. It is designed to captivate the users to keep using the apps or even purchasing more products.

Recent advanced AI frameworks are also not free from reductionism. Deep Neural Networks derived from neuroscience tradition reduce intelligence into physical aspects by storing information into nonlinear activities and interactions of various parts of the neural network. This approach currently has been widely used in image recognition and natural language understanding. There are also various types of reductionism in other machine learning traditions (statistics, evolutionary biology, logic, etc.). Recently, researchers have also explored potential AI applications on judicial and ethical aspects, which their reductionist implementation can be very dangerous.

A solution to reduce the degree of reductionism in AI is by incorporating higher aspects of humanity. Ensemble models anticipate social aspects by incorporating interaction of different learned perspectives of several specialized models through voting or other social mechanisms. Similarly, contemporary models such as Reinforcement Learning anticipates formative aspects through goal achievement by updating the knowledge and decision according to its historical experience. Another potential solution is constructing an interdisciplinary environment for AI development to prevent absolutization of one aspect. In conclusion, reformational philosophy can be utilized to discern reductionism in AI and this reductionism has been technologizing our humanity. However, this philosophy is also not anti-AI but recognizing (non-reductionist) AI as a potential aspect of human flourishing that can bring shalom to society.

A General Theory of Objectivity - Gunton, R.M., Stafleu, M.D., Reiss, M.J.

Objectivity in the sciences is a much-touted yet problematic concept. It is sometimes held up as characterising scientific knowledge, yet operational definitions are diverse and call for such paradoxical genius as the ability to see without a perspective, to predict repeatability, to elicit nature's own self-revelation, or to discern the structure of reality with inerrancy.

Here we propose a positive and general definition of objectivity based on work in the Reformational philosophy tradition. Recognising a suite of relation-frames – the modal aspects proposed by Dooyeweerd and Vollenhoven – we show how objectivity can be understood as characteristic of representations that attempt to portray a subject in an earlier relation-frame than that in which it characteristically functions. This can be seen, in Dooyeweerdian terms, as finding retrocipations either from states of affairs or from theoretical models, back to earlier aspects, especially the numerical or spatial. In short, we argue, objectivity is projection. This definition can be applied both to data and to theories. It is exemplified from mathematics and the natural sciences, and some possible objections to it are considered, as well as its extension to the social sciences.

# Sustainability and Environmental Hermeneutic: A Reformational Approach - Dr. Victor Morales

The current environmental crisis is the result of the flaws of an instrumentalist and mechanistic interpretation of the world. Such a worldview has been fleshed out in secular metanarratives of progress and growth since the Industrial Revolution. Hence, these metanarratives have been unable to provide a *big picture*, as it were, fora fair and wholesome interrelationship between human beings, other creatures and their environment. On the contrary, the implied growing gap between culture and nature lies at the basis upon which human development has been predicated before it became unsustainable. If so, what should the concept of human development entail? I shall explore the role of faith and religion, as understood by the Reformational tradition, in searching for fitting ways of understanding our moral agency in relation to the world surrounding and sustaining us. I shall put forward that this is actually a hermeneutic task. Hence, I shall compare the so-called *Heilsgeschichte* (salvation-history) and the *Anthropocene* as two influential interpretations of the world in order to explore the way in which these accounts have come to shape the identity of moral agents and moral communities with an eye on the development of sustainable life-styles. I shall examine Dooyeweerd's philosophical and Bavinck's theological legacies in order to lay down the foundations of an environmental hermeneutic.

### The Covid-19 pandemic under late modern conditions – Jan Hoogland

The Covid-19 pandemic presented itself as the first pandemic under late modern conditions. The difference between early and late modernity is that the early modern pursuit of scientific-technical control over the world has led to such a high grade of complexity that it becomes increasingly difficult to control the world effectively. This has three important consequences for the way in which we try to control the Covid-19 pandemic:

- 1) It seems that our main problem with the Covid-19 pandemic is not so much the threat of the virus itself as the fact that we do not have control over the pandemic. We suffer mostly from our lack of control. All measures against the pandemic seem to be aimed at bringing the epidemic under scientific-technical control. Politicians seem to follow that lead almost blindly.
- 2) Because scientific-technical control of Covid-19 has been given top priority in this way, other dimensions of the problem have disappeared from public attention. This is especially true for the worldview or existential dimension of the measures and policies against Covid-19.
- 3) This neglect of other dimensions is expressed in the fact that in the public opinion around the Covid-19 pandemic there is an increasing polarization of two opposing 'frames'. The first frame is one typically stamped by (early) modernity, in which the scientific-technical control of the pandemic is central and which is presented as a frame which is rational and leads to rational choices and policies. The second frame, in which a much greater diversity of views and opinions emerges, mainly questions the one-sidedness of the first, technocratic frame and tries to present alternatives to it. These alternatives range from policy proposals also based on (alternative) scientific or supposedly scientific insights to outright conspiracy theories.

In my paper I want to show that the polarization between these two frames makes it clear that an 'early-modern' approach of scientific-technical control to a pandemic in the current , late-modern context, due to its one-sidedness, is severely inadequate and that an approach should be sought in which justice can be done to a greater diversity of dimensions, in particular also the worldview dimension of the problem.

## A Christian Approach in developing sustainable energy systems - Paulo Ribeiro, Maarten Verkerk

Energy systems have become one of the greatest needs of sustainable living on earth. And Christian engineers need to be fully engaged in developing such systems as they respond to the Cultural Mandate to take care of the earth.

The question to the Christian engineers is: How to witness Christ in developing sustainable energy systems? A traditional route is to open the Bible, to read relevant parts, to extract some guidelines, and to give an evangelistic testimony. This route is appealing because it is accessible (everyone has a Bible), it respects the voice of God, and inspires us to preach Christ. However, this path also has several shortcomings. May be, the most important one is that it is impossible to convince non-Christians to use this method.

In our presentation we will show that Reformational philosophy shows an alternative way, which is full of thorns and thistles because it requires a deep insight in the structure and normativity of reality. But the reward is an engineering approach that unfolds the complexity of engineering designs, highlights values and normativity, and addresses the idea and values of basic beliefs. This approach is based on two pillars. The first pillar is the so-called practice approach. Especially, the engineer's version that is called the Triple I model flexibly applied to energy systems. The second pillar is the distinction between aspects, wholes and enkaptic structures. It appears that these pillars are very fruitful in designing complex systems like sustainable energy systems.

Christian engineers will need alternative approaches and practices to be effective in developing sustainable energy systems. These approaches will require implicit or latent, and explicit ways which bring a Christian witness to the development of sustainable energy systems. Engineering Recommendations and Standards which brings the ethics and values of a Christian perspective, for example, is one way to implicitly bring normativity in engineering practice. Another way is the fostering of alternative energy projects, an explicit way to bring the witness into practice. Examples of implicit or latent and explicit ways will be given which may help Christian engineers incorporate Christian principles into the design and implementation of energy sustainable systems.

Recently, the IEEE Std 7000<sup>™</sup>-2021 IEEE Standard Model Process for Addressing Ethical Concerns during System Design brought some useful guidelines. "The goal of this standard is to enable organizations to design systems with explicit consideration of individual and societal ethical values, such as transparency, sustainability, privacy, fairness, and accountability, as well as values typically considered in system engineering, such as efficiency and effectiveness." Thus, Christian engineers could start from such a document, and with the help from an adjusted Triple I, and the distinction between aspects for more fruitful design of complex systems sustainable energy systems.

## The Quest for Presence: Social-Theological Aspects of Science & Faith in Brazil - Guilherme de Carvalho

Building bridges between Science and Christianity has its obvious gist in the conceptual mediation between these spheres, which should reveal inner harmony among the core ideas and promote their cross-fertilization. Yet a wider look to both realms should make it clear that besides being a multileveled enterprise, bridge building between Science and Faith has an important social dimension. This is so because Christianity and Science form different kinds of communities, which have similarities and differences. Therefore, some regulative ideas as to what a community is and specific models for understanding scientific and religious communities could be useful to think and act strategically along this process of bridge-building. Today, the Brazilian Association of Christians in Science (ABC²) has about 70 study groups spread across the country. From the beginning of the ABC² initiative, we followed a regulative model to coordinate our activities based on the view of Science and Christianity as being composed of learning communities centered in reality encountering, or logos communities, but focusing on different dimensions of reality and distinct human goods. Our approach also included an idea of political reality that called for diplomacy, having in mind the need for balancing frontiers, discourses, and authorities.

### Sphere Sovereignty Implies Free Markets – Adolfo Garcia de la Sienra

Capitalist monopolization tends to encroach in the state structure and convert its constitution in a manual of procedures of the Big Enterprise. What this means is that, indeed, unchecked capitalism leads to communism! Hence, we may assert that sphere sovereignty is not against "free market" but against anarchic, unchecked capitalism. Of course, it is also against any form of collectivist economies preventing free markets and decision making by agents not controlled by the state officials. In Garc 1a de la Sienra (2020) I propose a criterion to delimit the boundaries of the state in terms of the Prisoner's Dilemma: Rougly, what- ever conflict that cannot be solved by means of private contracts requires state intervention. This includes public goods and negative externalities. Therefore, whatever economic activity not requiring this intervention must be considered a matter of the free markets. What this means is that sphere soveriegnty leads, indeed, to economic freedom and free markets.

## Annex to Program of International Conference Reformational in the Reformed Tradition

**2021** Last updated 7 December 2021

Schedule: 9 De paper)	cember 2021, 15				
Stream 1	Stream 2	Stream 3	Stream 4	Stream 5	Stream 6
Sustainability (1) Chair: Victor Morales	COVID-19 pandemic Chair: Michael Wagenman	Technology (1) Chair: Maaike Harmsen	Reformed Faith Chair: Joost Hengstmengel	Economics Chair: Andrew Basden	Social Ethics in Science Chair: Arjan de Visser
Jan van der Stoep: Fear and trembling. Climate change and human responsibility	Jan Hoogland: The Covid-19 pandemic under late modern conditions	Verkerk and Ribeiro: Witnessing Christ in sustainable energy systems	Joshua Mugg: Reformed Faith	Adolfo García de la Sienra Guajardo: Sphere sovereignty implies free markets	Guiherme de Carvalho: The Quest for Presence: Social- theological aspects of Science and Faith in Brazil

Schedule: 10 De	Schedule: 10 December 2021, 13:15-14:15 UTC (30 min per paper)				
Stream 7	ream 7 Stream 8 Stream 9 Stream 10		Stream 10	Stream 11	
Sustainability (2) Chair: Maarten Verkerk	Systematic Philosophy Chair: TBA	Economics and Theology Chair: Renée van Riessen	Technology (2)  Chair: Fernando  Pasquini Santos	Science and Medicine Chair: TBA	
Victor Morales: Sustainability and Environmental Hermeneutic: A Reformational Approach	Miklos Vassanyi: Natural Sciences and Philosophy in Pierre Bayle's Systema totius philosophiae	tural Sciences end of philosophy and the task of thinking: possible stema totius dialogues between		Gunton, Richard., Stafleu, M.D., Reiss, M.J.: A General Theory of Objectivity	
Maarten Verkerk and Diana Salgado: The many faces of sustainable home cooking	Tricia Van Dyk and Benjamin Groenewold: From Fragmentation to Diversity: The Ongoing Relevance of Dooyeweerd's Naive-	Joost Hengstmengel: The Analogical Concepts of Economics and Theology: A Reformational- Philosophical Perspective	Hendrik Santoso Sugiarto: Towards non-reductionist Al: Reformational philosophy perspective on current machine learning implementation	Henk Jochemsen: A hermeneutical Dooyeweerdian evaluation of the creation of human-animal chimera	

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	Distinction		