



DISF - Centre for Interdisciplinary Documentation in Science & Faith

Report 2019-2020

ADSIR – Advanced School for Interdisciplinary Research



FOREWORD

In the Academic Year 2019-2020, we have lived through unusual months due to the Covid-19 global outbreak. The DISF Research Center continued to offer its services on the web, with the aim to reach all those who, for various reasons, were forced to reduce their outdoor or on-site activity. During this time, we have seen a significant increase in the number of visits to our portals, which we consider as a sign of appreciation by our visitors. The activities of the ADSIR also continued regularly, resorting, where necessary, to online working methods.

Our considerations about the current emergency are summarized in the Special Issue Science and Faith in the Coronavirus Epoch.

May our encouragement reach everyone!





GENERAL PRESENTATION

The Centre for Interdisciplinary Documentation in Science and Faith (DISF) is a research and training centre at the Pontifical University of the Holy Cross, in Rome. Set up in 2001, it was inspired by its founders' experience during the preparation and publication of the Dizionario Interdisciplinare di Scienza e Fede ("Interdisciplinary Dictionary of Science and Faith", G. Tanzella-Nitti and A. Strumia, eds., 2 vols., Urbanian University Press - Città Nuova, Roma 2002 – ISBN: 8831192655).



The DISF Centre has its own **Board of Directors and Scientific Committee**. During the Academic Year 2019-2020, the core staff was composed of: Rev. Prof. Giuseppe Tanzella-Nitti (Director), Dr. Ivan Colagè (Assistant Director and Researcher), Dr. Giulia Andronico (Executive Secretary and Web Editor), Dr. Elena Pautasso (Researcher), Dr. Stefano Oliva (Researcher) and Dr. Costanza Murgia (Collaborator).

The Centre aims at promoting a synthesis between faith, reason and science for all those engaged in intellectual and research activity, also offering advice and consulting to people working or studying abroad. The Centre pursues two main priorities: training young scholars (through the Advanced School for Interdisciplinary Research, ADSIR – Italian acronym SISRI), and informing the large audience (through the web portals inters.org and disf.org). The Centre's programs address scholars from a variety of disciplines with different philosophical and religious backgrounds.



The Centre is currently supported by a **Templeton World Charity Foundation** (TWCF) donation. The Italian websites and the educational initiatives have also been sponsored by the **RUI Foundation** and the **Italian Conference of Bishops** (Conferenza Episcopale Italiana, CEI).









ADSIR for Young Scholars

PERMANENT SEMINAR 2019/2020



The Permanent Seminar of the Academic Year 2019/20 focused on the question Where does the truth dwell today? Reflections on truth and falsehood in the contemporary age. Nowadays, reference to truth is often discouraged, or weakened by other priorities, like private opinion, personal feeling, social consensus, mere correlations, etc. The notion of truth is often considered inaccessible, anachronistic or sometimes even dangerous. The quick pace of scientific progress and today's cultural relativism seem to suggest that convictions and decisions are always contextual and provisional, avoiding any steady reference point. However, there is a number of contexts in which distinguishing between true and false seem still to be unavoidable and constitutes, eventually, the outcome. Scientific knowledge. historical research or the reconstruction of facts for a court judgment are cases in point.

The need for truth criteria, moreover, is increasingly felt in the face of the overwhelming amount of easy-available data and information (the "Big Data") in which it is more difficult to orient oneself. The aim of the 2019/2020 ADSIR Permanent Seminar was to explore whether, and to what extent, the notion of truth is still meaningful today.

The seminars adopt a participatory methodology addressed to young, under-35 graduates. Each seminar begins with a lecture by an invited speaker, followed by a

group work (problem solving). After lunch, each group (generally 3-4 gathering 8-10 participants) presents its results in a plenary session, followed by floor discussion and closing remarks by the invited speaker. The meetings were held in Rome on 4 Saturdays (in October, November, February, and March), from 10:00 am to 4:30 pm, and gathered a total of more than **100 participants**.







The four meetings of the 2019-2020 Permanent Seminar

October 26th, 2019 - *Knowing reality: What is scientific truth?* **Dominique Lambert**, University of Namur, Belgium

Scientific knowledge is nowadays one of the few contexts where a key role for the search for truth cannot be easily denied. Natural reality, indeed, progressively challenges scientists to approach its true constitution and continuously trials hypothesis so that the false ones are soon or later dismantled. Among scientists and philosophers of science there is, of course, debate about what scientific truth is, or must be, and opinions sometimes diverge considerably. However,



both the method and the history of scientific research seem to be hardly understandable without a steady reference to the ideal of truth and to a realistic attitude towards human knowledge.



Read Professor Lambert speech on the ADSIR website: http://sisri.it/doc/191026_Traccia_Lambert.pdf



Watch Professor Lambert Seminar on the DISF YouTube channel: https://www.youtube.com/watch?v=hcoDJGyB0oc

November 30th, 2019 – Ascertaining facts: happenings, evidence and documents Marco Paolino, Tuscia University, Viterbo, Italy

Reconstructing the past and keeping memory of it is a key human attitude, first pursued in mythological ways and then aimed at the greater possible objectivity. Thus, it is now essential to ground historical reconstruction upon events about which evidence and documentation is available. This implies that at the core of historical research – similarly to what happens in ascertaining responsibilities in the court – there is the aspiration to find out the truth, understood as correspondence to the facts. Reaching this would also ultimately allow to infer the causes and rationales of the course of events.





February 8th, 2020 – Big Data: Orienting oneself among information, correlations and opinions

Michele Crudele, Hall of residence "Poggiolevante", Bari, Italy

We are in the information age. The volume of data that humanity unceasingly stores is astonishing – scientific data, medical data, data about the market and the opinions, etc. However, these data – even when they are in huge amounts – do not speak by themselves. They must be organized, managed and compared; the correlations they hide must be unveiled. Good and properly analysed data allow for

reliable predictions, especially statistical ones. However, under which conditions do those data allow for discovering laws and acquiring truths? Traditionally, real knowledge is causal knowledge (verum scire est scire per causas); a current challenge, therefore, is that of understanding how Big Data can lead us to true causes.



March 21st, 2020 – Embracing the Being: the gift of Truth and the truth of Gift Giuseppe Tanzella-NITTI, Pontifical University of the Holy Cross, Rome.

Throughout history, more or less sceptical positions have been represented: this means that the possibility of achieving true knowledge about reality is not an unproblematic idea. However, as far as the discourse about truth is concerned, what does it change if one thinks that reality and truth are gifts in themselves? In other words, what does it change if one hypothesizes that reality follows from a creative intention and is the work of a Logos that guards "the truth of things"? In claiming the convergence of the truth of creation and the existence of a Creator-Logos, Judeo-Christian Revelation has historically promoted a philosophical framework able to overcome the potential conflicts between truth and pluralism, truth and free will, truth and history.

During the Academic Year 2019-2020 the activities of the SISRI school attracted the attention of some international sponsors. One Foundation has especially appreciated our educational work and, as a result, in agreement with the Foundation itself, it was decided to name the meetings of the ADSIR Seminar, starting from the next A.A., as

Albertus Magnus Interdisciplinary Study Program

Saint Albert the Great is recognized by the Catholic Church as the patron saint of scientists and is one of the inspiring figures of ADSIR school and the DISF Center.





LOCAL SEMINARS

Bari, where Local Seminars have been organized. The meetings involve people beyond those reached by the Permanent Seminar and aim at promoting the interdisciplinary approach, at informing about the developments in different fields of knowledge, and at creating synergies among scholars at the regional level.

BARI

ADSIR Bari, coordinated by Dr. Michele Crudele, promotes workshops on interdisciplinary topics related to the Science & Faith dialogue, which gather interested students and scholars. This year, the meetings focused on Some Believing Scientists: The personal religious dimension in scientific research.



Due to the Covid-19 emergency, the group held only one meeting during the year 2019-2020:

October 29th, 2019: **Gregor Johann Mendel** (coordinated by Fabio Sallustio and Michele Crudele)

BOLOGNA

ADSIR Bologna, coordinated by Rev. Prof. Alberto Strumia and Dr. Luca Arcangeli, gathers scholars coming from the Northern and Central Italy and is based at the *Veritatis Splendor Institute* in Bologna. Since many of the involved scholars are currently abroad for their academic activity, the meetings may also be attended in videoconference. Four meetings have been organized during the past Academic Year:



February 22nd, 2020: **What can we know? Knowledge and context** (Giorgio Volpe)

April 4th, 2020: On Mereology (Stefano Donati)

May 23rd, 2020: **Self-reference and self-consciousness** (Alberto Strumia)

June 19th, 2020: Christian theology and scientific revolution (Luca Arcangeli)





ROME

In the Academic Year 2019/20 a series of ADSIR seminars was held at the ELIS Center, (via Sandro Sandri 45-81, Rome), for young researchers and consultants (engineers and economists) of ELIS Consulting & Labs.

November 4th, 2019: Interdisciplinarity and the unity of knowledge: the experience of the ADSIR school (Giuseppe Tanzella-Nitti)

January 13th, 2020: **Why science needs philosophy** (Ivan Colagè)

February 17th, 2020: **Sharpening intelligence: the humanistic dimension of reason** (Antonio Petagine)



During the Academic Year 2019/2020, members of the Rome headquarters were invited, as speakers and lecturers, in various Public or Academic events:

November 2nd, 2019: Prof. Tanzella-Nitti gave a lecture titled **From the element to the foundation: philosophical and humanistic premises of science**, at the **Science Festival of Genoa**.

January 6-13, 2020: Prof. Tanzella-Nitti was invited to the Universidad de Los Andes, in Santiago del Cile, as a consultant for the launch of the Group Ciencia y Fe (Science and Faith) UANDES, where he also held a public conference titled The origin of the human being: between biological evolution and theology of creation, as well as a Prolusion to the Professors on the theme of Theology and science: reasons for a fruitful dialogue.



January 14-15, 2020: Dr. Ivan Colagè was involved in the organization, at the **Pontifical University Antonianum**, of the international conference **Nature and Environment in the Educational Covenant: beauty makes mankind good**, promoted by the **Congregation for Catholic Education**.

February 18th, 2020: Prof. Tanzella-Nitti was invited as a speaker at the Plenary Assembly of the Congregation for Catholic Education, to comment on the Foreword of the Apostolic Constitution Veritatis gaudium (2018) of Pope Francis.

July 3rd, 2020: Prof. Tanzella-Nitti gave a lecture titled **Life in the cosmos: a theological perspective**, at the **Festival of Space** 2020, Busalla-Genova.





WORKSHOP

On July 24 and 25, 2020, the 12th ADSIR Workshop, titled Truth and research between discovery and communication, took place. The Workshop of the Academic Year 2019-20 saw novelties compared to previous editions. Firstly, it was postponed from spring to summer, due to the Covid-19 emergency. Secondly, the venue of the event this year was the Domus Paolo VI, in Via della Scrofa, 70, Rome. Third, the

format, which was based on contributions by invited speakers. Finally, the organization was supported by a Scientific Committee that chose the theme, developed the format, selected the invited speakers and established the final program.

The members of the Scientific Committee were: Giovanni Amendola, Luca Arcangeli, Saverio Bersani, Ivan Colagè, Maria Covino, Mirko Di Bernardo, Marco Nicolella, Stefano Oliva.



Truth is a relevant theme in every area of culture. Today truth is often questioned or looked at with suspicion. The Workshop represented a further investigation of the same themes covered in the meetings of the Permanent Seminar, while focusing on the meaning of the cognitive enterprise. How important is to have access to the truth in scientific, humanistic, philosophical or theological research? How relevant is it for individual researchers in their daily activities? In what sense could we speak of "discovery" without any reference to the truth? How much does "communicating science" have to do with the truth? Is it possible to teach and to transmit knowledge without a commitment to truth? Scientific dissemination implies a certain simplification, but can this be to the detriment of communicating truth? The 2020 Workshop addressed these questions in a structured way, especially with regard to the role of truth in the construction of our vision of the world, of life and of the human being, and how this vision can be communicated.



The event included 8 main lectures, spread over 3 sessions that explored the theme of the workshop from different viewpoints: physical and cosmological sciences, biology and anthropology, scientific communication and popularization. Each presentation was followed by discussion with the participants. It was also possible to follow the event online, for those who could not reach Rome; the online participants were also able to interact with the invited speakers and ask questions.





The DISF Centre for the Large Audience

Soon after the establishment of the DISF Centre, it appeared that pursuing the Centre's mission would have required a presence on the Internet. Thus, the Italian web portal <u>disf.org</u> was created in 2003. It is the first Italian website dedicated to the relationship between scientific culture, philosophy and theology. The site's contents, organized into several thumb indexes and three main sections (<u>General Documentation</u>, <u>Interdisciplinary Dictionary</u> and <u>Bibliographical Services</u>), seek to provide the larger audience with study material and documentation for deepening various interdisciplinary topics.

DISF EDUCATIONAL



In 2020, the DISF Center has launched a project addressed to the world of education: Guiding the relationship between scientific thought and Christian faith in schools and

catechesis. Its main purpose will be to provide teaching aids on topics concerning the relationship between scientific thought and religious faith in contemporary culture. The aim is to encourage the awareness of harmony between "science and

faith" in young people. Scientific culture has a great influence on contemporary society, and especially on the new generation. Sensitive relationships such as those between science and society, science and ethics, science and religious faith, are today at the center of many disciplines taught in schools. Thus, there is an urgent need for tools that can help schoolteachers to



develop interdisciplinary learning itineraries using reliable sources and balanced syntheses, thus avoiding misleading simplifications.

The Project is carried out in collaboration with the *Italian Conference of Bishops*, which has ensured 50% of the necessary funds. The Project will last three years and foresees the following outcomes, both on the DISF website and, later, in a published volume:

- **Thematic Itineraries**: 30 didactic itineraries that will guide teachers in preparing the lessons, also thanks to additional materials and bibliographical suggestions;
- Frequently Asked Questions (FAQs): 30 answered questions targeted to those students who want to learn more about currently debated issues;
- **Videos:** more than 20 videos on major topics concerning the relationship between scientific culture and religion;
- **Believing Today:** this section will be aimed primarily at Catholic religion teachers and those involved in catechesis;
- A published volume: it will build upon the online material, to provide a didactical tool in constant dialogue with the online platform.





INTERS web portal – Documentation, information and consulting

In 2006, the English counterpart of the Italian portal was inaugurated. The English portal <u>inters.org</u> hosts the <u>Interdisciplinary Encyclopedia of Religion and Science</u> (INTERS – ISSN 2037-2329). The DISF Centre is currently developing and promoting the English portal, with the aim of offering an extensive database and a constantly updated Encyclopedia for the international audience.



The <u>Interdisciplinary Encyclopedia</u>, also supported by a *Templeton World Charity Foundation*'s donation, provides new, scholarly articles in the rapidly growing international field of Religion and Science. Besides the five entries added during the previous Academic Year, the

Interdisciplinary Encyclopedia of Religion and Science has been enriched, during this Academic Year, with two new entries:

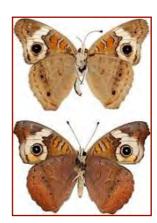
- **Death** (2019), by Giampaolo Ghilardi
- **Deism** (2020), by Mario Micheletti

The following entries are in preparation and will be published soon:

- Intelligence Design, by Santiago Collado
- Neuroscience, by Filippo Tempia
- Cultural Evolution, by Ivan Colagè
- **Psychiatry**, by Saverio Bersani

The <u>Special Issues</u> section is now accessible directly from the home page, and has been enriched with two relevant issues:

One concerning the **Theories of Evolution**: we proposed excerpts from the works by C. R. Darwin, J.-B- Lamarck, N. Steensen, E. Jablonka and M. J. Lamb, X. Le Pichon to show how evolutionary biology is possibly on the threshold of a paradigmatic revolution. Specifically, the proposed special issue focused on the changes in evolutionary biology after Darwin, which are currently underway. Key text is an excerpt from the last chapter of Alfred R Wallace's work, *Contributions to the Theory of Natural Selection*. Wallace was the "coproponent", together with Darwin, of natural selection as a basic evolutionary mechanism.









The other one, on the theme of **The Metaphor of the Book of Nature**, gathers eloquent texts of key authors like Augustine and Bonaventure, Galilei and Campanella. We also proposed insights from the teachings of Benedict XVI who on several occasions referred to the idea of nature as a book in a context of a renewed theology of creation.

The <u>Anthology and Documents</u> section was enriched with numerous excerpts from significant works of important authors, among which we would like to point the following out:

- Alfred R. Wallace, The Limits of Natural Selection as Applied to Man1870
- Union of Concerned Scientists, World Scientists' Warning to Humanity1992
- Oskari Juurikkala, <u>The Book of Nature in Patristic and Medieval Theology</u> 2020
- Excerpts from Documents of the Catholic Church about Specific Issues On Scientific Progress and Human Development
- Charles R. Darwin, Natural Selection, 1859
- Bonaventure of Bagnoregio, <u>Selected texts on the Metaphor of the Nature's Book</u>, 1257-1259
- Robert Boyle, Nature as a Book in Robert Boyle's Works, 1691
- Plato, <u>The Importance of Mathematics in the Education of the Philosopher</u>, 390-360 b.C.
- Plato, <u>The Cause of the Origin of the World is the Goodness and the Demiurge's Goodness</u>, 360 b.C.
- Bonaventure of Bagnoregio, The Creation of a Becoming World, 1257

Moreover, the Anthology and Documents section was improved with a new category dedicated to "Technology, Progress and Ethics".

Additionally, the category "Documents from the Catholic Church" – in which a number of texts by Pope Benedict XVI have been added – now collects also the declarations from **COMECE** - The Catholic Church in the European Union:

- Towards a Strategic Vision of Life Sciences and Biotechnology
- Opinion of the Reflection Group on Bioethics on Synthetic Biology
- Robotisation of Life: Ethics in View of New Challenges

The section containing the **Statements from the Pontifical Academy of Sciences** has also been updated with the last declarations.

Finally, the sections <u>"Articles of Historical Interest"</u> and <u>"Websites on Science & Religion"</u> have been continuously updated throughout the year.





THE PORTAL IN FIGURES

The service we offer through the portal *inters.org* is reaching more and more users all around the world, with a higher score in English-speaking Countries. About 65% of users are aged between 18 and 35. In the last Academic Year (October 2019 – November 2020), more than 290,000 pages have been visited by almost 200,000 single users.

INTERS users

The following table reports, on a monthly basis, the number of visited pages and of single users of inters.org, as extracted from *Google Analytics*.

Month	Visited pages	Single Users
October 2019	28.084	19.490
November 2019	23.860	16.289
December 2019	19.917	12.938
January 2020	20.812	13.897
February 2020	19.699	13.246
March 2020	19.556	12.884
April 2020	18.365	11.691
May 2020	19.031	12.275
June 2020	15.795	10.019
July 2020	14.633	9.810
August 2020	16.974	11.895
September 2020	26.261	18.560
October 2020	27.981	19.848
November 2020	22,803	15,153
Total	293.771	197.995

INTERS in the world

This graph shows how the users of inters.org distributed across the world's Countries from October 2019 to November 2020. It is interesting to note that also non-Western Countries are well represented, as well as Countries where Christianity is not the most widespread religion.

