FOCUS OF THE CONFERENCE

2018 ATLAS Transdisciplinary-Transnational-Transcultural (T3) International Conference program will consist of invited and selected papers emphasizing transdisciplinary, transnational and transcultural global problems. The general theme of this conference is “Being Transdisciplinary”. Plenary sessions and keynote panels will be presented by prominent speakers. Round table discussions on specific TD topics will also be organized.

Co-Organizers

- Babeș-Bolyai University of Cluj-Napoca, Romania
- The Academy of Transdisciplinary Learning & Advanced Studies (ATLAS)
- Mechanical Engineering Department, Texas Tech University
- International Center for Transdisciplinary Research & Studies (CIRET), France

Partners

- Cluj-Napoca City Hall
- Permanent Delegation of Romania at UNESCO
- National Commission of Romania for UNESCO (CNR-UNESCO)
- Romanian Academy
- Romanian Cultural Institute (ICR)
- Faculty of European Studies (FSE)
- Foundation for the Study of Nanoneurosciences and Neuregeneration (FSNN)
- RoNeuro Institute
- Institute of European Research, Cluj-Napoca, Romania
- Technical University of Cluj-Napoca (TUCN), Romania
- The Institute for Transdisciplinary Studies in Science, Spirituality, Society (IT4S), Bucharest, Romania

FOR MORE INFORMATION CONTACT:
Dr. Atila Ertas
Texas Tech University, Mechanical Engineering Department
Lubbock, Texas 79409-1021
Phone: (806) 834-5788; email: (aertas@coe.ttu.edu)
Prof. Dr. Raymond T. Yeh, Honorary Board Member

Raymond Yeh taught at several universities for more than 20 years and helped two Computer Science departments to top ten national rankings as chairman of department. He was also the CDC distinguished chair Professor at the University of Minnesota. He holds honorary professorship at five universities. Dr. Yeh is the founding editor-in-chief of IEEE Transactions on Software Engineering and was on the editorial board of various journals. He also founded the Technical Committee on Software Engineering and International Conference on Software Engineering (ICSE) within the IEEE Computer Society.

Dr. Yeh co-founded two successful software companies and two professional societies. He has been a consultant to many nations including United Nations, United States, China, Japan, Singapore, Sweden, Taiwan, and works with executives of many leading edge global companies as well as with founders of start-up companies. He has published 10 technical books and co-authored two business books. Dr. Yeh is an IEEE Centennial Medal laureate, and a recipient of the Pioneer in Information Technology Award from the government of Taiwan, among others. He is a fellow of Institute of Electrical and Electronic Engineers (IEEE), the Society for Design and Process Science (SDPS), and a senior research fellow at IC2 Institute at the University of Texas at Austin. Dr. Yeh had been a long term volunteer at the City of Ten Thousand Buddhas, a Buddhist monastery located in northern California since 2003.

Prof. Dr. Ioan-Aurel Pop

Ioan-Aurel POP, historian and professor at the Faculty of History and Philosophy of Babeș-Bolyai University in Cluj-Napoca, Department of Medieval and Early Modern History, Art History, and he is member of the Romanian Academy (in 2001, he was elected correspondent member, and he became full member in 2010). He was elected President of the Romanian Academy in April 2018.

After high school studies at “Andrei Șaguna” National College in Brașov (as head of the class, 1973), he entered the Faculties of History and Philosophy of Cluj-Napoca, in history (as head of the class, 1979), he became a secondary school teacher, then assistant lecturer, associate professor and professor at the same department at the University of Cluj-Napoca. In 1989, he obtained his Ph.D. with a thesis dedicated to the history of Romanian institutions in Transylvania during the XIV-XVI centuries, for which he won, after publication, the “George Barițiu” award of the Romanian Academy (1991).

Ioan-Aurel Pop has been granted many national and international awards, the title Doctor Honoris Causa of the universities in Alba Iulia, Timișoara, Oradea, Cahul, Galați, Sibiu, Târgu Mureș, State University of Chișinău,”Ion Creangă” Pedagogical University of Chișinău. He has been elected, in March 2012 (reelected in 2016), rector of Babeș-Bolyai University of Cluj-Napoca and in March 2013 member of the European Academy of Sciences and Arts in Salzburg (Austria). Since 1999, he is correspondent member of the European Academy of Sciences, Arts and Letters in Paris (France) and, since 2015, member of Virgilian National Academy of Mantova (Italy), but he is also member of various historical organizations with national and international prestige. Ioan-Aurel Pop served as director of the Romanian Cultural Institute in New York (USA) and of the Romanian Institute for Culture and Humanistic Research in Venice (Italy). Moreover, since 1993, he is director of the Centre for Transylvanian Studies of the Romanian Academy. Ioan-Aurel POP is also author and co-author of over fifty (50) books, treatises and manuals, and over three hundred (300) studies and articles. Among his most recent publications we mention Istoria, adevărul și miturile, second edition, Editura Enciclopedică, 2014; Cultural Diffusion and Religious Reformation in Sixteenth-Century Transylvania. How the Jesuits Dealt with the Orthodox and Catholic Ideas, The Edwin Mellen Press, 2014, „De manibus Vallacorum scismaticorum…” Romanians and Power in the Mediaeval Kingdom of Hungary (The Thirteenth and Fourteenth Centuries), Editura Peter Lang, 2013, as well as the volume Biserică, societate și cultură în Transilvania secolului al XVI-lea. Între acceptare și excludere, Editura Academiei Române, 2012.
Dr. Basarab Nicolescu

Member of the
Romanian Academy,
President, International
Center for Transdisciplinary
Research and Studies (CIRET)
France

Being Transdisciplinary, as Keystone of
Facing the Challenges of the
21st Century

Dr. Dumitru Grigore (Romania), Reinventing Education Counselling by Using Psychometric Technologies

Dr. Dumitru Grigore
Psychometric Systems SA
Cluj-Napoca Romania

Prof. Dr. Vistrian Maties
Head of the Coordinating Center of the National Mechatronic Platform
Technical University of Cluj–Napoca Romania

12:15 - 13:15, Monday, June 4

Session: Being Transdisciplinary in Economy, Engineering and Management (RT4)

Moderators:
Prof. Dr. Derrick Tate (China) and Prof. Dr. Vistrian Maties (Technical University of Cluj-Napoca and CIRET, Paris)

Dr. Derrick Tate
Founding Head of
Industrial Design Department
Xi’an Jiaotong
Liverpool University
Suzhou, China

Dr. Derrick Tate is Founding Head of the Department of Industrial Design at Xi’an Jiaotong-Liverpool University. He aims to impact society through bringing design thinking to areas of strategic importance: assessing the innovative potential of design ideas, developing sustainable approaches for building systems, transportation, and manufacturing; and broadening participation in innovation. Dr. Tate has carried out his research activities at the two ends of the research spectrum where they will have the greatest impact: fundamental research that provides a science base for the future of entrepreneurial engineering design as well as the application of design theories and tools to technology innovation. His recent projects include working with West Texas entrepreneurs on the development of innovative and sustainable designs and a US-Tanzania Workshop: Advancing the Structural Use of Earth-based Bricks, funded by NSF. He received a B.S. in Mechanical Engineering degree from Rice University. His S.M and Ph.D. degrees in Mechanical Engineering are from MIT in the areas of manufacturing and design, respectively.

Dr. Vistrian Maties is full professor at Technical University of Cluj–Napoca, since 1995, Former Head of the Department of Mechatronics and Machine Dynamics, Head of the Research Center on Mechatronics and Head of the Coordinating Center of the National Mechatronic Platform. He is an active promoter of mechatronic philosophy in education and research activities in Romania. He published more than 250 scientific papers in journals and conferences and published 20 books in the field of mechatronics. Based on the transdisciplinary identity of mechatronics, the concept of “mechatronics-environment for transdisciplinarity learning and integral education” was developed. For his contributions to Mechatronics development at National and International level he received the title of Doctor Honoris Causa of Technical University “Gheorghe Asachi” Iasi and of “Transilvania” University of Brasov (Romania). He is member of: IFToMM (International Federation for Promotion the Science of Machines and Mechanisms); International Center of Transdisciplinary Research and Studies (CIRET), Paris, France; ARoTMM (Romanian Association for Promotion the Science of Machines and Mechanisms); SRoMECA (Romanian Association for Mechatronics), founding member; ARR (Romanian Association for Robotics) and AGIR (Romanian Association of Engineering).

Contributors

1. V. Maties (Romania), Transdisciplinarity, mechatronics and organizational learning

2. Diana Vlašin (Romania), The transcultural perspective and the SMART education

Prof. Dr. Robert Peterson
Associate Dean for Research,
John T. Stuart III Centennial Chair in Business Administration,
University of Texas at Austin, Texas, USA

Prof. Dr. Patrick Brockett
Gus S. Wortham Chair in Risk Management and Insurance Director
University of Texas at Austin, Texas, USA

Bob Block
Founder and Managing Partner of LiTricity, CA, USA

LUNCH
Monday, 13:15 - 14:30

DINNER
19:30 - 21:30
Monday, June 4, 2018
CONFERENCE
KEYNOTE ADDRESS
Prof. Dr. Raymond T. Yeh
14:30 - 14:55, Monday, June 4

Dr. Raymond T. Yeh
ATLAS
Honorary Board member

Being Transdisciplinary - The Art of
Making Meaningful Connections

14:55 - 15:25, Tuesday, June 5
Session: Being Transdisciplinary in
Mass Media Popularization of Exact Sciences
(RT6)
Moderator:
Dr. Magda Stavinschi

Dr. Magda Stavinschi
Institute for Transdisciplinary Studies in Science, Spirituality, Society (IT4S), Bucharest and CIRET, Paris


More than 300 scientific articles, of which more than half in peer-reviewed journals, hundreds of articles and scientific papers for the public. Co-editor of the series „Ştiinţă şi Religie / Science and Religion”, „Ştiinţă, Spiritualitate, Societate / Science Spirituality, Society”, „Curtea Veche” Publishing. Editor or co-editor of several volumes, such as: Theoretical and Observational Problems Related to Solar Eclipses (1997), Advances in Solar Research at Eclipses from Ground and from Space (2000), Leçons d’astronomie (2003), Astrometry for Astrophysics (2013), 14 Steps to the Universe (2015).


Contributors

1. Raphaël Juan-Bouysset (France), The Transdisciplinary Library

Raphaël Juan-Bouysset
Bibliothèques d’Amiens Métropole
Amiens, France

2. Mihaela Caba-Madarasi (Italy), Transdisciplinarity and health communication: ‘Dr. Google’

Dnd. Mihaela Caba-Madarasi
Pontifical Salesian University
Rome, Italy

15:25 - 16:15, Monday, June 4
Session: Being Transdisciplinary in
Pre-tertiary Education (RT2)

Moderator:
Prof. Mirela Mureşan (Romania)

Prof. Mirela Mureşan
High-School Teacher in the
Romanian Language Department of “Moise Nicoara”
National College, Arad, Romania

Professor Mirela Mureşan is a high-school teacher in the Romanian Language Department of “Moise Nicoara” National College, Arad, Romania. As a member of the National Committee for Romanian Literature Curriculum Design, she is one of the designers of the new curriculum performed today in all schools in Romania, according to the reform of education, which took place in the country starting from 1997. She is a member in the Board of the National Association of Teachers of Romanian Literature (ANPRO), coordinator of The Transdisciplinary Center of Educational Applications from “Moise Nicoara” National College, Arad.

Contributors

1. Adrian Mirel Petrariu (Romania), The Role of Observation in Being Transdisciplinary

Dr. Adrian Mirel Petrariu
Magisteria, Bucharest, Romania
2. Ana Maria Fomin (Romania), Renewal in the school garden. A transdisciplinary educational experience

Dr. Ana Maria Fomin
Petru Rares National College
Suceava, Romania

3. Corina-Nicoleta Dindelean (Romania), Project “Ballet. Education. Transdisciplinarity”

Dr. Corina-Nicoleta Dindelean
Fundatia Culturala “Simona Noja”
Cluj-Napoca Romania

INVITED SPEAKER - 2
Dr. Sacha Kagan
16:15 - 16:40, Monday, June 4

Dr. Sacha Kagan
Research Associate
Institute of Sociology and Cultural Organization (ISKO),
Germany

Artful Sustainability in Transdisciplinary Spaces of Possibility

Dr. Sacha Kagan is a research associate at the Leuphana University Lüneburg (Germany), ISCO (Institute of Sociology and Cultural Organization). He is the Chair of Research Network 2 (Sociology of the Arts) at the European Sociological Association, a founding coordinator at the international level of Cultura21 (cultural fieldworks for sustainability), and a member in the ecoartnetwork and in the walking artists network a.o. His main research and action areas are the transdisciplinary field of “arts and (un-)sustainability” and the cultural dimension of sustainable (urban) development. His current research project, “The City as Space of Possibility” explores the city of Hanover, Germany (www.leuphana.de/sam).

INVITED SPEAKER - 3
Prof. Dr. Domingo Adame
17:00 - 17:25, Monday, June 4

Prof. Dr. Domingo Adame
Director of the
Magazine Theatrical Research of the
Veracruzana University,
Mexico

Transdisciplinary Theater for the Re-enchantment of Being and the World

Dr. Domingo Adame received bachelor in Dramatic Literature and Theater by Autonomous National University of Mexico UNAM (1983), Master in Literary Studies by Autonomous University of State of Mexico (1993) and PhD by Iberoamerican University (2001), has followed a course of specialization in performance and theatrical direction in Theater School of Krakow, Poland (1985-86). He has worked as actor, director, professor and theatrical researcher in several institutions of higher education of the country. From 2001 until now is professor-researcher in Veracruzana University in Xalapa, Mexico. Has been Director of the National Centre of Theatrical Research Rodolfo Usigli of The National Institute of Fine Arts (1989-1993), Founder President of Mexican Association of Theater Research (1993), Director of the Theater Faculty of The Veracruzana University (2005-2009), and is Director of the Magazine Theatrical Research of The Veracruzana University and Mexican Association of Theater Research.

INVITED SPEAKER - 4
Prof. Dr. Søren Brier
17:25 - 17:50, Monday, June 4

Prof. Dr. Søren Brier
Semiotics of Information, Cognition and Communication, Copenhagen Business School, Danmark

Cybersemiotics and the Search for a Non-reductionist Transdisciplinary Theory of Science Including Phenomenology, Hermeneutics and Spirituality

Søren Brier is Professor in the Semiotics of Information, Cognition and Communication Sciences at the Department of International Business Communication at Copenhagen Business School. He is MSc in biology focusing on ethology from U. of Copenhagen, Ph.D. in Philosophy of Information Science at U. of Roskilde and Doctor (Habil) of transdisciplinary Philosophy of science at CBS with the book Cybersemiotics: Why information is not enough, Toronto University of Press (now a Google book and on Kindle, Cybersemiotics.com). Founder and editor in Chief of the interdisciplinary quarterly journal Cybernetics & Human Knowing, a fellow of the American Society for Cybernetics receiving The Warren McCulloch Award; one of the founders of Int. Ass. For Biosemiotic Studies and on the editorial board of its Journal Biosemiotics as well as the scientific board of The Science of Information Institute and the Foundation of Information Science and of several scientific journals. His been practicing Transcendental meditation and has an interest in Perennial philosophy and its relation to the scientific worldview as well as the pragmatist and semiotic philosophy of C. S. Peirce and the system science of N. Luhmann. www.cbs.dk/en/staff/sbiberi, https://cbs.academia.edu/S%C3%B8renBrier. He is a member of the International Center for Transdisciplinary Research & Studies (CIRET, France).

ATLAS SPECIAL EVENT
RECEPTION
Tuesday
June 5, 2018

Dr. Ana Maria Fomin
Renewal in the school garden. A transdisciplinary educational experience
Urban Alchemy, Transforming Devastation to Hope and Revitalization through Art and Creativity

Lily Yeh is an internationally celebrated artist whose work has taken her to communities throughout the world. As founder and executive director of the Village of Arts and Humanities in North Philadelphia from 1968 to 2004, she helped create a national model in creative place-making and community building through the arts. In 2002, Yeh pursued her work internationally, founding Barefoot Artists, Inc., to bring the transformative power of art to impoverished communities around the globe through participatory, multifaceted projects that foster community empowerment, improve the physical environment, promote economic development and preserve indigenous art and culture. In addition to the United States, she has carried out projects in multiple countries including Kenya, Ivory Coast, Ghana, Rwanda, China, Taiwan, Ecuador, Syria, Republic of Georgia, Haiti, and Palestine. (www.barefootartists.org)

In 2004 she launched a decade long Rwanda Healing Project which aimed to address the lingering grief of the 1994 genocide. As part of this project, she transformed a rough mass grave into a beautiful memorial park in Rugerero. It became the official genocide memorial for the region. In addition, she launched multiple programs in healing, education, and job opportunities to transform the survivors and the Twa villages in Rugerero from destitution and grief into vibrant and joyful self-sustaining communities. Using art as a medium for social change, Yeh has positively influenced many impoverished communities worldwide.

Conflict of Civilizations: Transdisciplinary Aspects

Emil Hurezeanu was born in 1955 in Sibiu. He studied Law at the Cluj University and has a Master of Arts in International Relations and Strategic Studies at the Boston University. Poet, author, a very well-known Radio and TV producer, Emil Hurezeanu has won two national prizes for literature in Romania and received several distinctions for his TV shows, followed by millions of spectators.

Emil Hurezeanu was editor and later director of the Romanian department of Radio Free Europe in Munich (1983-1995) and Deutsche Welle in Cologne (1995-2002), chief editor of the newspaper Romania Libera and President of the editorial council of the Realitatea-Catavencu group. His TV shows Cap si pajura, with C.T. Popescu and Jurnalul de seara with Cosmin Prelipceanu have become quality standards for the Romanian political TV shows.
Emil Hurezeanu is a much appreciated lecturer and very often invited at Universities in Romania and abroad. He has received the honoris causa doctorate from several Universities. His most recent book of political essays from 2015 Pe trecea timpului was a best seller and has been appreciated as one of the most interesting and credible political chronicle of the past 20 years. In June 2015 Emil Hurezeanu has been appointed Ambassador of Romania in the Federal Republic of Germany.

INVITED SPEAKER - 8
Prof. Dr. Dafin Muresanu
9:25 - 9:50, Tuesday, June 5

The Quantic Brain or How Transdisciplinarity Can Open a New Neurosciences Era

Dafin Muresan, MD, PhD, MBA, is Professor of Neurology, Chairman of the Neurosciences Department, Vice Dean of the Faculty of Medicine, University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca, member of the Academy of Medical Sciences, Romania. He also acts as President of the Society for the Study of Neuroprotection and Neuroplasticity. In these roles, he is involved as coordinator in international educational programs of European Master (i.e. European Master in Stroke Medicine, University of Krems), organizer and co-organizer of European and international schools and courses (International Summer School for Young Neurologists, European Stroke Organisation Summer School, Danubian Neurological Society Teaching Courses). His activity includes involvement in many clinical studies and research projects, memberships in the executive board of many national and international societies, participations as invited speaker in national and international congresses, a significant portfolio of scientific articles as well as contributions in monographs and books published by prestigious international publishing houses. Prof. Dr. Muresanu has been honoured with the Faculty of Medicine, University of Medicine and Pharmacy “Iuliu Hatieganu” Cluj-Napoca “Octavian Fodor Award” for the best scientific activity of the year 2010 and the 2009 Romanian Academy of Medical Sciences “Gheorghe Marinescu Award” for advanced contributions in Neuroprotection and Neuroplasticity.

9:50 - 10:30, Tuesday, June 5
Session: Being Transdisciplinary in Exact Sciences (RT5)

Moderator:
Dr. Esin O. Isik

Dr. Esin O. Isik
Bogazici University
Istanbul, Turkey

1. Esin O. Işik (Turkey), Transdisciplinary Research for Magnetic Resonance Imaging of Neurodegenerative Disorders

Contributors

2. Dumitru Constantin-Dulcan (Romania), The Problem of Consciousness in the 21st Century

Prof. Dr. Dumitru Constantin Dulcan
“Titu Maiorescu” University
Bucuresti, Romania

3. Sarah Gehlert (USA),

Dr. Sarah Gehlert
Dean & Educational Foundation Distinguished Professor
College of Social Work
The University of South Carolina (USA)

10:50 - 12:30, Tuesday, June 5
Session: Being Transdisciplinary in Human Sciences (RT7)

Moderator:
Prof. Dr. Peter J. Whitehouse

Prof. Dr. Peter J. Whitehouse
Prof. of Medicine University of Toronto, and President of Intergenerational Schools International

Peter J. Whitehouse, MD, PhD is Professor of Neurology and former or current professor of Psychiatry, Psychology, Cognitive Science, Neuroscience, Bioethics, History, Nursing and Organizational Behavior at Case Western Reserve University, Professor of Medicine at the University of Toronto, and President of Intergenerational Schools International. He is also currently a strategic advisor in innovation at Baycrest Health Center. He received his undergraduate degree from Brown University and MD-PhD (Psychology) from The Johns Hopkins University (with field work at Harvard and Boston

Dr. Esin Öztürk Işık completed her Bachelor's studies in the Computer Engineering department, Middle East Technical University in 1999. She received her MS degree in Biomedical Engineering at the University of Alabama at Birmingham in 2002 and received her Ph.D. degree from the joint Bioengineering program between the University of California at Berkeley and the University of California at San Francisco in 2007 and continued her research as a postdoctoral fellow in the Radiology and Biomedical Imaging department at University of California at San Francisco. Dr. Öztürk Işık has been working as an assistant professor at the Biomedical Engineering Institute of the Bogazici University since Fall 2014. The main aim of her research projects has been developing novel molecular magnetic resonance imaging techniques to allow for a better understanding of underlying biochemistry of diseases in order to improve patient health.
Gustavo Avilés (Mexico) studied Architecture at the Iberoamericana University. Since 1984 he has been focused on Light in Architecture. His dedication to architectural lighting culture has conducted him to take on a transdisciplinary academic approach to articulate his practice through different standpoints on light and lighting. With this unique view he founded Lighteam in 1986. He has an extensive teaching experience and is sought after to speak at conferences worldwide. His work achieves a wide variety of applications and scales.

Gustavo Avilés represents one of the most enthusiastic professional and academic development line positions on an international context. He is member of AIA, IALD, IES, IIDA and founder of DIM with other Mexican colleagues. Gustavo was named part of the Board of Directors of IALD and holds the FONCA (Fondo Nacional para la Cultura y las Artes) National Scholarship for Creators. As a continuous academic effort to promote architectural lighting culture, Gustavo has recently founded the Architectural Lighting Design Specialization at the UNAM.

Social Experience of Light and Lighting in the Collective Imagination

Gustavo Avilés (Mexico) studied Architecture at the Iberoamericana University. Since 1984 he has been focused on Light in Architecture. His dedication to architectural lighting culture has conducted him to take on a transdisciplinary academic approach to articulate his practice through different standpoints on light and lighting. With this unique view he founded Lighteam in 1986. He has an extensive teaching experience and is sought after to speak at conferences worldwide. His work achieves a wide variety of applications and scales.

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14:25 - 15:05, Tuesday, June 5
Session: Being Transdisciplinary in Sustainability Studies and Actions (RT8)
Moderator:
Dr. Sacha Kagan

Dr. Sacha Kagan
Research Associate
Institute of Sociology and Cultural Organization (IKSO), Germany

Contributors
1. Cristian Ungureanu (Romania), The Geometric Composition for Visual Arts and its Transdisciplinary Valences

Dr. Cristian Ungureanu
George Enescu National University of Art, Romania

2. Verena van Zyl-Bulitta (Germany), Caveats for Innovation in Sustainable Societal Transition Processes: the (Dis)Enabling Roles of Technology for Social Solidarity

Verena van Zyl-Bulitta
Universität Leipzig
Germany

3. Samuel Pinheiro (Brazil), Transdisciplinarity and Environmental Education: a dialogue between Eastern and Western philosophies to think about the relation of human being and nature

Samuel Pinheiro
Federal University of Rio Grande do Norte
Brazil

15:05 - 15:45, Tuesday, June 5
Session: Being Transdisciplinary in Humanitarian Actions (RT9)
Moderator:
Prof. Dr. Raymond T. Yeh

Prof. Dr. Raymond T. Yeh
TLAS, Honorary Board member

Contributors
1. Ciocănescu, Cristian (Romania), The Geometric Composition for Visual Arts and its Transdisciplinary Valences

2. Verena van Zyl-Bulitta (Germany), Caveats for Innovation in Sustainable Societal Transition Processes: the (Dis)Enabling Roles of Technology for Social Solidarity

3. Samuel Pinheiro (Brazil), Transdisciplinarity and Environmental Education: a dialogue between Eastern and Western philosophies to think about the relation of human being and nature

16:10 - 17:35, Tuesday, June 5
Session: Being Transdisciplinary in Religious and Spiritual Approaches (RT10)
Moderator:
Prof. Dr. Fr. Ioan Chirilă

Prof. Dr. Fr. Ioan ChIRILĂ
President of the Senate of Babes-Bolyai University in Cluj-Napoca
Faculty of Orthodox Theology
Cluj-Napoca, Romania


Contributors
1. Ignacio Ramon Beltran (Mexico), Transdisciplinarity and Life: New Roads of Knowledge

Dr. Ignacio Ramos Beltran
National University Autonomous of Mexico (UNAM), Mexico

2. Pamela Heckel (USA), Examining Homelessness Through “Building Dwelling Thinking”

Dr. Pamela Heckel
American Red Cross
Cincinnati, USA

3. Ioan G. Pop (Romania), The authority spheres model. A semiophysical approach

Prof. Dr. Ioan G. Pop
Emanuel University Oradea, Faculty of Management, Romania
1. Arthur Versluis (USA), *Transdisciplinarity and Consciousness: An Integrated Model*

   Dr. Arthur Versluis  
   Michigan State University  
   East Lansing, USA

2. Vasile Chira (Romania), *The Fear and the Sacred. The Theology and the Phenomenology of the Theophobia*

   Dr. Vasile Chira  
   "Lucian Blaga" University  
   Sibiu, Romania

3. Cristian Andrei Tataru (Romania), *The Excluded-included Third and the Hidden-apparent Third in Theory and Practice, in Science and Psychoanalysis*

   Cristian Andrei Tataru  
   Lacanian International Association, Paris; France; Romanian Philanalysis Society, Cluj-Napoca, Romania

4. Diana Del Mastro (Poland), *Forms of the Reality and Knowledge in Pavel A. Florenskij Transdisciplinary Approach*

   Dr. Diana Del Mastro  
   University of Szczecin  
   Poland

5. Toderita Rusu (Romania), *Virtue Ethics as Reflected in Romanian Church Mural Painting*

   Fr. Toderita Rusu  
   University of Bucharest  
   Romania

6. Zizhuo Shi (Taiwan), *The Role of Spirituality Contributes to the Success of Being Transdisciplinary: in the Case of Mindfulness-Based Stress Reduction Program and Social Engagement*

   Dr. Zizhuo Shi  
   Luminary Research Institute  
   Taipei, Taiwan

**Session: Being Transdisciplinary in Higher Education (RT1)**

**Moderator:**  
Prof. Dr. Daniel Neira (Chili)

**17:35 - 19:10, Tuesday, June 5**

1. Viktor Dörfler (United Kingdom) and Baracska Zoltán (Hungary), *Educating for Misbehaviour in a Well-behaved World: Reflective Dialogue on Two Years - Experience of the Transdisciplinary Doctoral School*

   Dr. Viktor Dörfler  
   University of Strathclyde Business School, UK

2. Florent Pasquier (France), *To Be or Not to Be Transdisciplinary, is that the New Question?*

   Dr. Florent Pasquier  
   Espé, Université Paris-Sorbonne France

3. Sanjaya Senadheera (USA), *Being Transdisciplinary – An Essential Approach to Create Sustainable Physical Infrastructure for Humanity*

   Dr. Sanjaya Senadheera  
   Texas Tech University  
   Lubbock, USA

4. Alfredo Vega Cardenas (France), *Restorology, the Being Transdisciplinary of Cultural Transmission*

   Dr. Vega Cardenas Alfredo  
   University Paris  
   1 Panthéon-Sorbonne France

5. Claudia Cabrera (Mexico), *Art and Transdisciplinarity in Latin America*

   Dr. Claudia Cabrera Sánchez  
   National Autonomous University of Mexico, Mexico
Honoring and Celebrating Bob Block’s 90th Birthday

ATLAS SPECIAL EVENT RECEPTION

The Many Ways of Thinking: Transdisciplinary Skills

Bob Block is a Founder and a Managing Partner of LiTricity, a shareholder and Board member of USCL and the Co-Chair of the Advanced Technology Policy Committee of the National Energy Marketers Association. Mr. Block has extensive experience in the computer software, communication, energy and entertainment industries including pioneering roles in commercial and pay television and cellular telephone operating companies. He has also contributed significantly to the creation and development of entertainment and communication technologies used worldwide. Block is widely known for his pioneering work in communications, information and management technologies. He is the inventor and patent owner of more than 150 issued US and International patents, including patents relating to: Enterprise Management Systems, Information Labeling, Signal Control, Terrestrial and Satellite Distribution Systems, Real-Time Subscriber Billing Systems, Pay-Per-View, Parental Control and English Language Education. Block has multiple patent applications pending, including patents relating to interoperability of non-compatible radios, power metering and solar energy systems. Block’s inventions are licensed to most of the major consumer electronics manufacturers and have influenced entertainment, sports, and information and education services worldwide.

Dr. Bianca Vienni Baptista
Leuphana university of Lüneburg
Germany

6. Bianca Vienni Baptista (Germany), Challenges of transdisciplinary knowledge production at universities: a three level analysis

Dr. Jolan Velencei
Obuda University, Budapest
Hungary

7. Jolan Velencei (Hungary), Transdisciplinary approach in validation of relevant knowledge

Transylvania, the Heart of Romania

ATLAS CONFERENCE TOUR

Wednesday
June 6, 2018

The Transdisciplinary Journal of Engineering & Science is dedicated to honor Professor John Warfield by recognizing responsibilities for a culture of peace and transdisciplinary knowledge.

www.atlas-journal.org

Transdisciplinary Journal of Engineering & Science

The Transdisciplinary Journal of Engineering & Science is dedicated to honor Professor John Warfield by recognizing responsibilities for a culture of peace and transdisciplinary knowledge.

Bob Block
Founder and the First Chairman of the United States Sports Academy and Founder and Managing Partner of LiTricity (USA)

19:30 - 22:30, Tuesday, June 5

ATLAS RECEPTION
GUEST SPEAKER
Prof. Dr. Ioan-Aurel Pop
19:30 - 22:30, Tuesday, June 5

Prof. Dr. Ioan-Aurel Pop
President of the Romanian Academy and President of the University Babeș-Bolyai

Transylvania, the Heart of Romania

Professor Warfield (1925-2009)

Professor Warfield (1925-2009) received the Bachelor of Arts in 1948, Bachelor of Science in Electrical Engineering in 1948, and Master of Science in Electrical Engineering in 1949 from the University of Missouri, Columbia, Missouri. He received the Doctor of Philosophy degree from Purdue University, West Lafayette, Indiana in 1952. John Warfield is widely recognized as the father of systems science. He has been an educator, a research scientist in complex systems and organizational dynamics, and a leader in integrating an
JOURNAL AIMS & SCOPE

Transdisciplinary Journal of Engineering & Science (TJES) is a transdisciplinary international journal which bridges the gap between science, engineering, art, culture, spirituality and society. It is a peer-reviewed annually published online open access journal covering research on transcultural, transreligious, transpolitic, and transnational global unstructured problems such as health, disasters, poverty, water and food crises, environmental crises, violence, terrorism, humanitarian assistance and needs, well-being, transportation, security, international development, global economy (knowledge economy), sustainable development, energy issues, social policy and globalization, green engineering and science, art and design, complexity, research on contemporary issues, demographic changes, theology, and international ethics.

Researchers are also encouraged to submit manuscripts related to:

• Development of integrated analysis, synthesis, and design from a wide range of knowledge.

• Development of unified transdisciplinary modeling framework—developing computer based modeling systems that permit cooperation and collaboration among diverse groups that are globally dispersed in order to drive complex research efforts to an innovative solution.

• Designing and development of communication infrastructure and shared resources to facilitate computational and transdisciplinary thinking within existing organizations.

• Transdisciplinary education.

All technical papers will be reviewed by the Program Technical Committee. Competitively selected papers will be first published in the Transdisciplinary Journal of Engineering & Science by ISSN number: 1949-0569, then every year will be included as a book chapter published by TheATLAS with an ISBN number. For more information see www.theatlas.org

CONFERENCE TOUR

The Most Beautiful Tour of ATLAS-ROMANIA CONFERENCE

8:45 Departure from the Hotel Universitas, entrance Plopilor Street
9:45 Turda Salt Mine: Turda: The Turda Salt Mine, a museum of salt mining, one of the most beautiful underground place in the world (whenonearth.net) - guided tour in English, 1 hour. 11:00 Departure for Sibiel (Lunch on board the coach)
13:30 Sibiel: The “Zosim Oancea” Museum of Icons on Glass. The “Zosim Oancea” Museum of Icons on Glass, the largest existing exposition of icons on glass in Transylvania, a miracle of artistic creativity and religious inspiration born of the riches of the Orthodox Christian tradition and the imagination of Romanian peasant painters, 1 hour. 14:30 Departure for Dumbrava Sibiului.
15:00 Dumbrava Sibiului: Dumbrava Sibiului, The Museum Of Traditional Folk Civilization, the most important ethnomuseum institution in Romania - the most important ethnomuseum institution in Romania - guided tour in English, 1.5 hours. 16:30 Departure for Sibiu.
17:00 Sibiu: Sibiu is one of the most important cultural centres of Romania and was designated the European Capital of Culture for the year 2007, along with the city of Luxembourg. Formerly the centre of the Transylvanian Saxons, the old city of Sibiu was ranked as “Europe's 8th-most idyllic place to live” by Forbes in 2008. We visit the Large Square (142 meters long and 93 meters wide, it is one of the largest ones in Transylvania), Small Square, Huet Square - guided tour in English, 1 hour. 18:00 Free time in Large Square, 30 minutes. 18:30 Departure for Cluj-Napoca. (arrive around 21:00 at Hotel Universitas; dinner on board of the coach)
ATLAS GOLD MEDAL OF HONOR AWARD RECIPIENTS AND
ATLAS HONORARY MEMBERS RECOGNIZED SINCE 2000

Dr. Herbert A. Simon
Nobel Laureate
Carnegie Mellon University
Date of ATLAS Board decision for the Honor : January, 2001

Dr. George Kozmetsky
IC² Institute, University of Texas at Austin
Date of ATLAS Board decision for the Honor : January, 2001

Dr. Steadman Upham
President, Claremont Graduate University, CA
Date of ATLAS Board decision for the Honor : January, 2001

Honorable K. T. Li
Changing Taiwan from an economy reliant on light industry to high technology
Date of ATLAS Board decision for the Honor : January, 2001

Dr. Michael Anthony Arbib
Fletcher Jones Professor of Computer Science
University of Southern California
Date of ATLAS Board decision for the Honor : May, 2002

Dr. C.V. Ramamoorthy
Emeritus Professor
University of California, Berkeley
Date of ATLAS Board decision for the Honor : May, 2002

Dr. Raymond T. Yeh
IC² Institute Senior Research Fellow, University of Texas at Austin
Date of ATLAS Board decision for the Honor : November, 2003

Dr. Lu Yong Xiang
Prof. Dr.-Ing. Mult.hon.Dr. Eng.
President, Chinese Academy of Sciences
Vice-Chairman of the Standing Committee, NPC
Date of ATLAS Board decision for the Honor : June 2005

Professor Nam P. Suh
The Ralph E. & Eloise F. Cross Professor
Director, The Park Center for Complex Systems
MIT, Cambridge, MA
Date of ATLAS Board decision for the Honor : June 2006

Dr. Herbert Weber
Director of the Fraunhofer Institute for Software and Systems Engineering
Technical University of Berlin, Germany
Date of ATLAS Board decision for the Honor : June 2006

Dr. Chun-Yen Chang
1999 Science & Engineering Award Laureate
Founding Director of National Nano-Device Labs in Taiwan
Date of ATLAS Board decision for the Honor : April, 2007

Dr. Yuan T. Lee
Nobel Laureate
Date of ATLAS Board decision for the Honor : October, 2007

Dr. Edgar Mitchell
Sixth man walked on the Moon
Founder of the Institute of Noetic Sciences
Date of ATLAS Board decision for the Honor : April, 2007

Dr. Ali Nayfeh
Distinguished Professor, Virginia Tech
Date of ATLAS Board decision for the Honor : April, 2007

Dr. Muhammad Yunus
Nobel Laureate
Date of ATLAS Board decision for the Honor : October, 2008

Professor Carl Adam Petri
Honorary Professor, Department of Informatics, Hamburg University
Date of ATLAS Board decision for the Honor : April, 2007

Professor Dr. Oktay Sinanoglu
Nominated twice for Nobel Prize
Date of ATLAS Board decision for the Honor : April, 2007

Dr. Edun Yee
founder, Artists without Borders
Date of ATLAS Board decision for the Honor : October, 2008

Red McCombs
McCombs Enterprises
Chairman & COO
Date of ATLAS Board decision for the Honor : March, 2010
ATLAS GOLD MEDAL OF HONOR AWARD RECIPIENTS AND
ATLAS HONORARY MEMBERS RECOGNIZED SINCE 2000 (continued)

Prof. O. J. L. Tzeng
Former Minister of Education in Taiwan and Former Vice President of Academia Sinica, the National Research Academy of Taiwan
Date of ATLAS Board decision for the Honor: February, 2012

Dr. Chang-Hai Tsai
Chairman of the Board
China Medical University
Taichung, Taiwan
Date of ATLAS Board decision for the Honor: February, 2012

Dr. Atila Ertas
Professor and Director of Academy of Transdisciplinary Studies, Mechanical Engineering Department, Texas Tech University
Date of ATLAS Board decision for the Honor: August, 2012

Barry Lam
Chairman & CEO
Quanta Computer Inc.
Date of ATLAS Board decision for the Honor: February, 2014

Dr. Basarab Nicolescu
Member of the Romanian Academy
President (CIRET), France
Date of ATLAS Board decision for the Honor: February, 2014

Dr. M. Katherine Banks
Dean of Engineering
Texas A&M University
Member of the National Academy of Engineering
Date of ATLAS Board decision for the Honor: March, 2016

Dr. Juan M. Sanchez
Temple Foundation Endowed Professor
The University of Texas at Austin, TX
Date of ATLAS Board decision for the Honor: March, 2016

2018 ATLAS AWARDS
ATLAS awards will be presented during the ATLAS Reception on Tuesday, June 5, 2018

2018 ACADEMY GOLD MEDAL OF HONOR AWARD RECIPIENT

Dr. Magda Stavinschi
Institute for Transdisciplinary Studies in Science, Spirituality, Society (IT4S), Bucharest and CIRET, Paris

BASARAB NICOLESCU
TRANSDISCIPLINARY SCIENCE & ENGINEERING AWARD RECIPIENT

Prof. Dr. Domingo Adame
Director of the Magazine Theatrical Research of the Veracruzana University, Mexico

Dr. Sacha Kagan
Research Associate
Institute of Sociology and Cultural Organization (ISKO) Germany
Being Transdisciplinary

The art of making meaningful connections (Keynote Address)
Dr. Raymond T. Yeh

Being transdisciplinary means to hold space among boundaries of different disciplines in order to discover meaningful connections. When such connections are made, new insights usually emerge, as a result of convergence, which often times leads to disruptive innovations.

This talk will share a few stories made by people in humanitarian actions, nation building, business/technology development, etc. to explore the art of making meaningful connection. We conclude this talk with a personal experience of rescuing a rundown vocational high school in China.

Being transdisciplinary, as keystone of facing the challenges of the 21st century (opening talk)
Prof. Dr. Basarab Nicolescu
Faculty of European Studies, University Babes-Bolyai, Cluj-Napoca, Romania
International Center for Transdisciplinary Research and Studies (CIRET)
Paris, France

"Being Transdisciplinary" is like a Zen koan: it has multiple meanings, depending on the level of understanding of the reader.

The first meaning of “Being Transdisciplinary” is the Being of Transdisciplinarity, i.e. the Being of the unity of knowledge. It is a philosophical meaning, independent of any dogmatic religious interpretation.

The second meaning of “Being Transdisciplinary” is Being of the transdisciplinary researcher. It involves necessarily a spiritual evolution of the researcher, enabling him or her to embody the unification of the Subject and of the Object through the action of the Hidden Third.

The third meaning of “Being Transdisciplinary” is to face the challenges of the present world in all their complexity.

It is only through the unification of these three meanings that methodology of transdisciplinarity will be the keystone of facing the challenges of the 21st century: transhumanism, anthropocene and panterrorism, the roots of a new barbarism.

The quantic brain or how transdisciplinarity can open a new neurosciences era
Prof. Dafin F. Muresanu
Chairman Department of Neurosciences
University of Medicine and Pharmacy ‘Iuliu Hatieganu’, Cluj-Napoca, Romania

Physics and neurosciences had somehow a common destiny but neurosciences were always running behind. Classic physics held that physical world is constituted of infinitesimal particles in a sea of space.

Einstein, building on the ideas of Maxwell, made classic physics into what is called a local theory: there is not action at a distance, all influences are transmitted by contact interaction between tiny neighboring mathematically described “entities” and no influence propagates faster than the speed of light.

This mechanistic view – stimulus in, behavior out – evolved into contemporary neurobiological models of how the brain works: neurotransmitters in, behavior, thoughts or emotions out.

These models are useful to a certain point. This presentation aims to highlight the limitations of classic models of neurobiological action and to draw attention that new principles of quantum physics contradict the older ideas that local mechanical processes alone can account for the complex categories as: feeling, knowing, effort, moral judgment.

This new paradigm is able to cover the core phenomena of self-directed neuroplasticity. No other approach can better act as a bridge between quantum physics and new concepts of brain function than transdisciplinarity. This particular field can generate by itself a breakthrough opening on the realm of brain and the mind.

Transdisciplinarity and the realisation of personal potentiality
Prof. Paul Gibbs
Director of Education Research
University of Middlesex, London, UK

A way of realizing the potential that resides within us, as a capability to be, is to realize the potential in action within a transdisciplinary reality. This potential capability is an ontological driver of the actuality of becoming what we desire to be. It is made manifest by questioning the reality, our everyday experience with the knowledge that we have, and with a preparedness to create new knowledge from the engagement. Research, in the sense of creating practical knowledge testable in the world of practice, is the fusion of practice and theory in transdisciplinary praxis. It creates an understanding of how the potentiality of being can be made manifest, as poetic performance.

Exploration of our being provides the potential for us to understand our life project and to seek it. It is not deterministic, but neither is unencumbered; it requires a blending of knowledge and realities in order that we might have the power with which to reflect and deliberate about the good to be achieved by our actions. The argument is that, in order to question the observed situation effectively, basic capabilities need to be present. Reflections about snow, for instance, differ with one’s historical perspective. If you are an Eskimo the range of your potential actions differs from that of a nomad from the Sahara Desert. This is a question of practice in relation to snow.

Artful sustainability in transdisciplinary spaces of possibility
Dr. Sacha Kagan
Research Associate Institute of Sociology and Cultural Organization (ISKO)
Germany

Artistic and arts-based research, and artful learning more generally, hold specific qualities that can contribute to the development of transdisciplinary hermeneutics,
The dominant scientific transdisciplinary view of cognition and communication is a development from cybernetics, cognitive science and the info-computational paradigm, all of which rely on a statistical objective concept of information in combination with a very general idea of the computational process: an approach originally based on Turing, including the basic ontological ideas. This view is physicalistic and technology-based, leaving out important aspects of the lived reality of human embodied conscious experience and meaning.

However, as just this experience provides the foundation for the production of culture and science as well as for embodied communication in natural language, the framework is not internally consistent. General system theory has attempted to become a transdisciplinary framework on a more organicist basis, but it still lacks a phenomenological and hermeneutical framework in order to deal with the experience of experience and meaning. By contrast, the framework of Peircean triadic pragmaticist process-philosophical semiotics can encompass all of these aspects as a result of its phenomenological foundation. Peirce’s semiotics, on the other hand, is lacking a theory of the individual embodied mind. Such an approach can be found in Maturana and Varela’s bio-cybernetic autoepoiesis theory.

Niklas Luhmann has generalized this approach with regard to psychology and sociology and built a theory of social communication through that move. Thus, we seem to have two major candidates for an alternative transdisciplinary theory to the info-computational philosophy that each has its theoretical limits.

Cybersemiotics is an attempt to integrate those two major approaches in order to arrive at a true transdisciplinarity as inspired by Nicolescu’s work. Peirce, in order that his process of semiosis may be able to produce signification, draws his inspiration from Schelling’s objective idealistic philosophy as well as from modern science’s dynamic theories such as thermodynamics. In order to make this integration possible, he develops a process philosophy based on synechistic non-dualism, where mind and matter are but two ends of the same continuum and the ontological foundation is emittance. This opens up possibilities for a logical connection between science and spirituality, if both are open for a falsificationist philosophy of knowledge, which Peirce shares with Popper.

Peirce also brings in ethics, aesthetics and logics as three parts of normative sciences to be integrated with the special empirical ones on a foundation of qualitative mathematics. He thereby creates a transdisciplinary framework, which when combined with systems science’s theory of levels is close to Nicolescu’s theory of interdependent levels, where none is more fundamental than any other. In Peirce’s process philosophy, the immanent aspect of his panentheist concept of God, the cosmos as well as the subject – all of these are conceived by Peirce as symbolic semiotic processes.

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**Urban alchemy, transforming devastation to hope and revitalization through art and creativity**

Prof. Lily Yeh
Co-Founder, Executive Director, and Lead Artist of The Village of Arts and Humanities

Lily Yeh shares stories and images from her internationally celebrated community art projects. From the inner city of Philadelphia to the genocide-ravaged countryside of Rwanda, she shows how she creates art that’s rooted in communities and honors local talent and cultural tradition. Using art to ignite people’s imagination, she empowers people by bringing them together to create beauty that transforms their own environment. Collaborating with experts in various fields of disciplines, she launches entrepreneurial and social programs such as micro-lending, husbandry, food pro-
In the global public debate about cultures and civilizations, we are witnessing nowadays two main groups, which I named “the collisionists” and “the collusionists”. The former favor the irreconcilable conflict, the latter the impossible conciliation.

From this two basic exclusive lines of evolution and debate we notice a multitude of theories within the realm of international relations, from „the culture as a factor of “Realpolitik” (Constantin von Barloewen, 2018) to the necessity of “mapping a new world order, with a Rest beyond the West” (Vladimir Popov and Piotr Dutkiewicz, 2017), as means and ways to overcome the dangers of a final Armageddon. Unfortunately enough, too few, among the theorists and practitioners of the international relations know and understand the virtues of Transdisciplinarity (Basarab Nicolescu, 1996, 2014).

According to the transdisciplinarity theory there is not such like a “fault line” between science and religion, science and culture, and hence, the West and the Rest. In its holistic expression, the human being “remains the placeless place which crosses and overcomes the cultures”.

Constantin von Barloewen, one of the most outstanding theorists of the “intracultural dialogue”, believes that “the history of human evolution allows us to look forward to a viable future, because behind all religions and cultures lies a human unity”. He thinks that this is the only way to overcome the dichotomy between globalization in the domain of digital communication, media technologies and finance, on one hand and, on the other hand, “like in an anthropological thermostat”, the fragmentation and Balkanization in the political domain due to ethnic and religious conflicts the world over, secular and religious nationalisms and religious fundamentalist movements.

Basarab Nicolescu, in his classical worldwide praised “Manifesto of Transdisciplinarity” (1996) and “From Modernity to Cosmodernity” (2014), had since years glossed over the necessity of a “spiritual dimension of democracy”.

The basic question asked by the author of this paper is to what extent the conflict between the civilizations, cultures and religions might be cured through the transdisciplinary hermeneutics.

The conflict of civilizations - transdisciplinary aspects
HE DrHC Emil Hurezeanu
Romanian’s Ambassador in Germany

The theory of civilizations includes, in principle, two main opposing schools of thought. In the last post-II World War decades we had experienced the multilateralism as a possible harmonization of various, mostly conflicting, cultures, religions and civilizations. In the globalization era there are still proponents of the plausible conciliation between Christianity and Islam.

The clash of civilizations, as the opposite theory of multiculturalism, has a long and impressive background, from Oswald Spengler (1926) to Samuel Huntington (1996).

Here the assumption is that we have a basic and unavoidable conflict between Christianity and Islam. In this perspective the fight is going on, the liberalism does not suspend the underlying blood-imbu ed human evolution. Unlike the period of the Cold War, when the major fighters were the political ideologies, after 1990, the civilizations and the religions become the major agonal actors.

In the presentation we will give an overview of Dr. George Kozmetsky’s multiple contributions to the creation and advancement of academic disciplines. His early contributions in the field of management were enlightened, transformative and of long lasting impact. His involvement in the formation of the Institute of Management Science in 1953 set the stage for a life-long involvement in addressing complex and unstructured problems that, of necessity, required a transdisciplinary approach and the active involvement of academics, business and government leaders, and entrepreneurs. Examples of his influential involvement in developing areas of transdisciplinary studies, beyond management science, include his involvement and promotion of “design and process science” and the development of systematic approaches to “large-scale projects” such as those encountered by NASA and the Department of Defense in the United States.

Dr. Kozmetsky’s and his distinguished collaborators at the University of Texas at Austin developed and implemented a unique style of “creative” and “innovative” management mindset that materialized in entities such as the IC2 Institute at the University. As pointed out in a forthcoming biography commissioned by IC2, “For Kozmetsky and his colleagues, “creative” and “innovative” had distinct meanings, the first involving the invention of ideas, methods, and processes, and the second involving the application of those inventions to the solving of problems – particularly the interdisciplinary “unstructured problems” that resulted from rapid technological change.” In the presentation, we will also highlight his role as an active researcher, teacher, mentor, organizer and, occasionally, financial backer of the numerous projects and initiatives he undertook through his career.
Transforming graduate STEAM-H education for the 21st Century: transdisciplinary integrated graduate training program (TD-IGTP) in science, engineering, and business
A. Ertas, U. Gulbuluk, D. Moran, S. Denard, S. Foreman
Department of Mechanical Engineering, Texas Tech University
L. Golden
Business School, University of Texas at Austin

Twenty-first century scientists, engineers and business leaders should possess Transdisciplinary (TD) skills that enable them to reach across disciplines and into communities to identify major challenges and complex issues to develop solutions that maintain sustainability and increase resilience.

Business is inherently transdisciplinary. The practices and policies that rule business are based on social science, and the goods and services that businesses create are themselves the results of science, engineering, arts, and humanities. Business also plays an important role in transforming advances in the arts and sciences into public benefits and affecting humanity's impact on our planet (Colby et al. 2011; Shulman 2011).

The creation of the TD Integrated Graduate Training Program (TD-IGTP) in science, engineering and business will bring many students from diverse disciplines to work in research groups on collaborative and convergent projects. TD-IGTP is a holistic training program which integrates research, teaching, learning, outreach and community engagement. This proposed TD training program fosters convergence of Science, Technology, Engineering, Art, Mathematics, and Humanities (STEAM-H) -- teaches students new skills aimed at creativity, innovation, and working across knowledge fields to achieve measurable effects on major social complex issues; offers an approach that synthesizes methodologies from multiple fields; teaches the ability to collaborate across multiple spheres of knowledge and practice; prepares students to design, develop, and deliver a system that qualifies a student to be workforce ready: head start on careers in science, engineering and technology research.

This panel discussion will share past and current transdisciplinary graduate program experiences at Texas Tech University, and will also discuss possible integrated future graduate training program in science, engineering and business.

Reinventing education counselling by using psychometric technologies
D. Grigore, M. F. Talpoș, L. A. Kovács

The technologies are changing so rapidly that it is very difficult to any educational system to keep abreast of the discoveries and to fully benefit from their use. However, when it comes to creating the chance of using, in a much better proportion, the human potential, any civilized educational system should be concerned about the implementation of such new technologies. Immediate access to ground-breaking ideas and technologies could represent the real chance to move quickly from the intriguing "what if" questions to concrete results that will affect the future of world's education.

Helping the new generations to discover their vocations or passions, and thus to foster their creativity and conceptual flexibility, should be a constant concern for any modern educational system. Hesitations, a vague sense of purpose or a nonexistent vision of the future, can transform a young person into an underperforming student, may prolong the study period to much longer stages of time than the traditional four to five years to complete a degree, and may drain financial resources of the supporting families and thus create more and more frustrated parents.

Counselling young people to precociously define their areas of interest becomes increasingly important (and definitely becomes an economic issue) as the transition of a young person from school to becoming a productive member of the society has become in the last years an increasingly time-consuming process.

In such a context, MindMi™, the latest psychometric technology invented by a Romanian researcher (phd Dumitru Grigore) can become a very useful tool in educational, occupational or career counselling, by giving the users the possibility to rapidly get professional insight of their psychological profile, and thus know their vocations and potential.

Moving transdisciplinary to the forefront in business and marketing
Linda Golden
Joseph Blades Memorial Professor in Business at The University of Texas at Austin McCombs School of Business, The University of Texas at Austin

Transdisciplinary approaches and perspectives need to be an element in every basic business discipline. No matter how much depth of specialization is required for a task, in today's and tomorrow's world practitioners and academics will need to be able to talk to and work with colleagues across disciplines with basic multidisciplinary fluency. There are many opportunities emerging with the dynamic advances in telecommunications, technology, methodology, and computer science that facilitate appropriate transdisciplinary integration. This discussion will focus on enhanced transdisciplinary opportunities across business disciplines as well as emerging marketing applications.

The transcultural perspective and the smart education
I. Vlașin, V. Mătieș
Technical University of Cluj-Napoca, Romania

Undoubtedly, cultures have a very important role. They provide the “software” with which people operate in their own life and in the community. They are specific to certain geographical areas, to certain nations or communities.

Men usually have real problems when integrating in different cultures, especially when they belong to some very distant geographical areas or very different organizations. Their interactions with others, including a partner grown into another culture is difficult. This is their main problem in the contemporary society, which is more open to people and goods circulation. The second problem is that men become a cultural product who cannot detach and free themselves from the limits developed by the culture they were raised up in. Their growth into autonomous and individual persons can only be achieved after the process of getting aware of the maternal culture’s influence and also of detaching from this.

The identified solution is the result of an extensive process of transdisciplinary integration. To solve these problems, it is proposed to use a transcultural perspective which allows us to have a pragmatic and detached reporting on cultures, no matter of their nature or expansion. The transcultural perspective is based on the recognition of the cultures as sources of instruments that satisfy people’s needs or group’s needs. It’s easier to understand this nature if we see
A practical transdisciplinary approach to product and service innovation

Dr. Robert A. Peterson
John T. Stuart Chair in Business Administration
The University of Texas at Austin

Creating new products and services that are both profitable and result in satisfied customers requires a structured transdisciplinary approach. The three disciplines that have traditionally served as separate approaches to creating new products and services—engineering design, marketing, and design thinking—must be integrated for companies to successfully compete in a hypercompetitive environment. This presentation suggests a conceptual paradigm to guide innovation that is transdisciplinary-based. The paradigm is presented visually below and the interactions incorporated therein discussed.

Transdisciplinarity, mechatronics and organizational learning

V. Mățieș, O. Hancu, I. Vlasin, C. Lapusan, C. Rad
Technical University of Cluj-Napoca, Romania

The paper presents the scientific fundamentals regarding the innovative potential of mechatronics as environment for transdisciplinarity learning and integral education. It was proved the transthematic identity of mechatronics based on complexity concept. Details related on mechatronics as environment for intelligent education competence based and organizational learning are outlined too. Mechatronics is the technology of the XXIst century. The word itself was patented by Yaskawa Electric Cp. in Japan, in the beginning of the eight decade of the last century and was used to describe technological fusion of the three main fields of engineering: mechanical engineering-electrical, electronic engineering and automation, information technology. The content of the word improved continuously as a result of the technology development. So that, today mechatronics is: technology, integration philosophy, science of intelligent machines and environment for intelligent education competence based and organizational learning. The concept of “organizational learning” was launched in 1990 by prof. Peter Senge from MIT. Inside of MIT was founded the structure “Society of the Learning Organizations”. In the context of the dynamics and increasing dependences in all the field, the evolution of the organizations (companies, schools, universities etc.) to get status of “learning organizations” is a major need. In his book “The fifth discipline. The art and practice of the learning organizations” prof. Senge propose a framework of five key discipline that can provide a foundation for building such an organization. They are: Systems Thinking, Personal Mastery, Team Learning, Mental Models and Shared Vision about organization (school). Mechatronics is the main scientific and technical support for the five disciplines. Mechatronics platforms, including elements of the three main fields of engineering are the basic infrastructure of the environments for intelligent education competence based and organizational learning. Mechatronics principles in education are based on systems thinking development and to get abilities for team learning. For engineering practice, based on mechatronic philosophy the concept of integrated design was developed. The paper also includes details related on the Romanian National Mechatronic Platform. The platform is a national mechanism of a network structure integrating the main seven technological universities in Romania. The structure is the foundation of the future National Platform for Intelligent Education Competence Based and Organizational Learning. The approaches are of great importance for transdisciplinarity learning and complexity understanding on all the levels of the educational process. As we know, effective research is not disciplinary, interdisciplinary, or multidisciplinary: it is transdisciplinary (Russell Ackoff).

21st Century entrepreneur’s tool box

Robert S. Block
Founder and the First Chairman of the United States Sports Academy and Founder and Managing Partner of LitTricity, California, USA.

The confluence of many revolutionary technologies will mature in the first half of the 21st Century. For the purposes of this session, I’ll use just 7 known technologies to illustrate the point: (1) Supercomputing, (2) Biotechnology, (3) Nanotechnology, (4) Robotics, (5) Communications, (6) Manufacturing on Demand, (7) Ubiquitous and Inexpensive Energy.

Objectives are subjective

Cantemir, Mambet
Assail Drilling Company, Triq il Barjola, Gudja, Malta

Besides being very actual and controversial, the problematic of risk management and decision-making raises again questions about human capabilities of planning and achieving planned goals. This paper is intended to indicate some possibilities to approach risk assessment and risk management according to the transdisciplinary (TD) methodology, in a more accurate and at the same time, more consistent and more effective way.
The transdisciplinary library
Raphaël Juan-Bouysset
Curator of Library, Amiens, France

There is no link done between transdisciplinarity and libraries yet. Nevertheless, library is one of the places where transdisciplinarity can be created, in the most natural way. Showing why they should meet will be the biggest aim of this interview, especially with the new social issues: emergence of the included third, enhancement of the spirit of curiosity and new learning method, an open-minded attitude about world and other knowledge. After a brief history of libraries intertwined with the history of ideas that will reveal the possible identities of a library today we will show how a commitment to a general and active transdisciplinarity can become a model for the libraries of the future, as well in their relation to the collections, to the users who attend them only in the internal modalities of the organizations.

Transdisciplinarity and health communication: ‘Dr. Google’
Dnd. Mihaela CABA-MADRASI (Romania)
Università Pontificia Salesiana di Roma

The person, as a superior being of Creation is today subjected to a new anthropological model specific of the contemporary age, demonstrating that is increasingly a structurally ill-being: we tend not to be any more subjects of the reality, but objects in a global system. The sense of incapacity in which the man of our time is more and more emerged has no precedent in the sense of collective impotence in which confusion is attributed to the difficulty of giving meaning to the personal experiences. Communities that haven’t a robust system of significance cannot deal with the inconspicuous disasters of everyday life.

This is also the case of the virtual communities on Internet where the gathering information replace the inter-human relationships such as doctor-patient or the sincere friendships between ‘friends of suffering’ who are sharing the complex experience of a therapy. Starting from the belief that we are all “patients” of the same actual conformity that reduces a person as subject of history to an object and transform the human communication to an information exchange, the study ‘Transdisciplinarity and health communication in breast cancer news on Google’ aims to analyze a particular situation of Homo Patiens using for interpretation the scientific key-method of transdisciplinarity. How can we build a useful and fruitful health communication today? With the conviction that unity of knowledge is the basis of a unitary ternary interaction.

The Transdisciplinary researcher seeks objective understanding; the quality of objective understanding requires the conscious effort of living the ternary structure of Reality. While the ternary structure of Reality is objective and it does not depend on the Subject, the degree of quality of the participation to Reality is precisely the subjectivity opposed to this objective law.

As one of the postulates of Transdisciplinarity states that the transition between the levels of the Reality is performed under the logic of the included middle, becoming Transdisciplinary in being requires the conscious effort of living the ternary structure of Reality. While the ternary structure of Reality is objective and it does not depend on the Subject, the degree of quality of the participation to Reality is precisely the subjectivity opposed to this objective law.

This participation, being spiritual in nature as it involves at once the intellectual, emotional and physical components of the living organism and not just one or two of them sequentially, does not happen by itself on a regular basis, but by specific work and practice.

This specific ternary subjective participation to the objective Reality is what creates the Transdisciplinary experience. Its methodology is rigorous and it involves the exploration of the relation between the included third and the Hidden Third by the “inner witness” generated by the ternary interaction.

The Transdisciplinary researcher seeks objective understanding; the quality of objective understanding, reconciling information and experience, depends on the quality of the act of observation, hidden in plain sight within the process.

Project “Ballet. Education.Transdisciplinarity”
Corina Dindelegan
Cultural Foundation “Simona Noja”, Cluj-Napoca Romania

Project “Ballet. Education.Transdisciplinarity” started in 2015 and its specific goal was to change mentalities about the classical ballet dancers and to make the public taking part in a performance aware of the fact that they are engaged both in an act of culture and in an act of knowledge. Our team has designed activities involving cultural connections, capitalizing...
information from ballet – music – art – theater - literature – medicine – sciences, namely physics and biology. To implement our ideas we have invited scientists, artists from various fields, teachers and students, initiated more than 20 related events and discussed the impact of the project on the BET blog.

The outcome of our research was an outline of the specific knowledge required of a dancer. The ballet represents an act of elitist culture. The concept of ballet completes the other arts: the topic of a ballet is a narration supported by music and by the movement of the human body. Ballet is undoubtedly associated with spatial arts. Its scene unfolds a form of architecture; ballet uses a nonverbal language with a status of its own. This versatility creates prerequisites for a particular confluence and interconnection with other arts and disciplines, through which ballet interpenetrates new fields of knowledge and acquires new means of artistic expression, as well as new forms of emotional persuasion.

Renewal in the school garden. a transdisciplinary educational experience
Ana Maria Fomin
“Petru Rares” National College, Suceava, Romania
Being a teacher means, above all, experiencing a profound connection with one’s students, which implies humility and greatness in the same time. This way of being also involves understanding young people’s wonder, the vision of their potential so as to create through every thought, word and gesture our inner and outer garden.

The purpose of my presentation is, therefore, to explore the highest meaning of a transdisciplinary educational journey which a team of teachers from “Petru Rares” National College, Suceava, Romania, have embarked on over a period of approximately 2 years. I will make reference to the need that motivated them to take action, and the complex strategies they used to achieve the expected results. Gradually, interconnecting their ideas into the architecture of transdisciplinary lessons on the four elements – fire, water, air, earth, they have increased students awareness of the interconnectedness of nature.

Considering the overall picture of this transformative learning process, one can observe significant improvement in students and teachers’ level of perception, revealing that the majority of the participants in this project have enhanced their ability to be in harmony with themselves and the others. They have gained knowledge not only about the outer world, but also about how to “arrest” the mind so as to be in a moment of discontinuity, enjoying the tremendous sense of being together and making the most of their creative potential.

Magnetic resonance imaging based biomarkers of cognitive decline in parkinson’s disease
Esin Ozturk-Isik
Biomedical Engineering Institute, Bogazici University, Istanbul, Turkey
Neurodegenerative diseases result in progressive degeneration and death of nerve cells, and their incidence rate is increasing with the aging population of our world. Parkinson’s disease is a neurodegenerative disease that has affected more than 4 million people over 50 years old within the last two decades. It has been recognized that, non-motor symptoms also appear at the early stages, and accompany motor symptoms that are at the forefront of Parkinson’s disease. Amongst the non-motor symptoms, the cognitive impairment results in the highest loss of function. Magnetic resonance imaging (MRI) is a non-invasive method that has enabled structural, metabolic and functional imaging of the brain. As a result of the widespread availability of MRI, diagnostic and follow-up studies of neurodegenerative diseases have gained momentum. The availability of MRI based biomarkers that would track structural, metabolic and functional changes, which underlie the ongoing cognitive decline in Parkinson’s disease, would allow for detection of dementia progression based on objective measures at the early stages. In this talk, our ongoing transdisciplinary efforts for developing biomarkers that would indicate the presence of cognitive decline in patients diagnosed with Parkinson’s disease by evaluating the findings from multimodality structural, metabolic, and functional MR imaging using machine learning algorithms will be summarized.

The problem of consciousness in the 21st century
Dumitru Constantin Dulcan
“Titu Maiorescu” University, Bucuresti, Romania
The latest advances in the field of scientific knowledge, particularly in the quantum physics and neuroscience, have led to new discussions about the origin and nature of consciousness. Despite numerous scientific meetings on this issue, there has not yet been a coherent theory on consciousness.

Essentially, there are two ways to approach the consciousness phenomenon. The most accepted is that of neurophysiological origin, consciousness being explained as a result of neurochemical and neuroelectric processes in the brain. The alternative to this view is the one supported especially by John Eccles (Nobel Prize, 1963). In his opinion, the brain is only seen as a receiver of consciousness.

There are also certain arguments that plead for the manifestation of consciousness beyond the human brain. The arguments are being discussed both in favor and against the opinions expressed on consciousness.

According to the latest researches in the field of neurocognitive sciences, the author issues the hypothesis of the existence of a Brain’s Ethical Code.

Becoming transdisciplinary in the human sciences: designing an intergenerational course to the future
Peter J. Whitehouse
Medicine University of Toronto, and President of Intergenerational Schools International
Why is transdisciplinarity gaining power as a concept and practice in the world? How can we develop pedagogical processes to reflect the commitment to understanding complexity and taking action? The ecological and cultural challenges we face as a species demand and inspire different ways of thinking through time about humanity and its relationships to the rest of life and the geology of the planet. Our current mode of operating in the world is not sustainable with our enormous material wealth-seeking human population. The label Anthropocene, the next geological epoch after the Holocene, is being employed because of the visible and huge impact of our species in geological time and space. Yet more importantly, the term invites a focus on anthropomorphism, our intergenerational relationships and common responsibilities to the future. Modern rationality organized into discrete categories that are separated from each other have led us into a dangerous evolutionary crossroads, perhaps even a dead-end. The separation of the objective and subjective and the creativity limiting divisions between science and art/ humanities are signs of these cultural rifts and need for new ecosocial reconstructions.

Our human race, or at least much of our current civilizations, may join the sixth extinction, which we have created, as victims of evolutionarily wiring and cultural behaviors that emerged to promote survival in earlier and very different times. As we enter the Anthropocene with seven plus billion people on the planet, we need to tap into our greatest human strengths - deep learning, collective wisdom, narrative imagination, responsible technological innovation, and recognition of strong interdependencies
with each other and nature. Most urgently, we need novel motivating rhetorical devices such as new words, metaphors (like trees and forests that are great transdisciplinary connectors), and stories to help us imagine the increasingly difficult-to-perceive sustainable future supportive of human flourishing. Transdisciplinary is one such word because it blurs, blends, and bridges existing knowledge structures. It does do so not to play serious academic intra- and inter-university games (alone) but to address wicked complex social challenges. It encourages, no demands, interaction between university and community. Coordinated interdisciplinary approaches alone are inadequate to address the related problems of market fundamentalism (neoliberalism), climate change, and social/income inequity. It is time to be intergenerative — to go “between” organizational and intellectual boundaries to go “beyond” in service of a more viable future. The strength of recognizing levels of reality and the emergent “hidden third” are essential components of this new knowledge and values that will help a collective wisdom to emerge that appreciates physical and cognitive limits and deeply embraces humility.

This paper will outline the framework and some of the processes involving in designing a literal and figurative course for the future. Situated at the boundary of academia and community and starting in Cleveland Ohio, USA and the University of Toronto, Canada, the course will be offered with undergraduates and elders from the community (including Emeritus Faculty). We will also involve children and youth in intergenerational public schools. Rather than focus on individual wisdoms built on appreciation for diversity. Topics will include cognitive/brain health, systems thinking, narrative approaches, positive aging, intergenerational learning, eco-literacy, the arts in culture change, and deep bioethics. Processes will include journaling, experiential learning in museums, social networking, and service learning. The design will be participatory. The evaluation will focus on both assessing thinking and valuing in service of enhancing quality of life and human flourishing.

Transdisciplinary constructions in the sciences of the language
Julieta Haidar
National School of Anthropology and History – MEXICO

In this paper, we have a nuclear objective to present the transdisciplinary constructions that we have realized inside the field of the Language Sciences. First of all, we consider the necessary ruptures of the existing borders between the Natural sciences, the Human Sciences the Quantitative Sciences, the Artistic Sciences. The foregoing, to propose the founding rupture between the four scientific fields that should lead us to the paths of complexity and transdisciplinarity, to convergences, to recursivity. Secondly, we propose the transdisciplinary construction of the semiotic-discursive materialities, which constitute an architecture of the senses. On having analyzed these materialities, there are articulated the linguistic, the semiotics, the discourse, the communication, the ideology, the power, the culture, between many others. In summary, in this brief exhibition we consider the problems derived from the epistemological ruptures between the mentioned fields, as well as the transdisciplinary constructions that allow us the emergence of new cognitive viewpoints.

Nature as discourse
Susannah Hays
University of California Berkeley, CA, USA

Co-evolutionary phylogenetic principles of human-brain and autonomic nervous system functioning are essential for individuals and cultural institutions to experientially evolve in order to raise higher normative levels of Being. Only if transdisciplinarity’s triad model synthesizes autonomic/cognitive forces within Homo sapiens’ biological organization can it raise the levels of reality « Being Transdisciplinary » entails.

A trajectory not yet explored in other literature on transdisciplinarity is an emphasis on cross-cultural research in human-brain and autonomic nervous system dynamics. Three key understandings that effectively recalibrate human biological evolutionary processes toward higher levels of consciousness are Paul MacLean’s triune-brain neuroethology, Stephen Porges’ Polyvagal Theory of emotions, and G. I. Gurdjieff’s three-centered self-study practice. An actual, “true to life,” transdisciplinary education would teach isomorphic qualities intrinsic to perception, pattern mapping, language, and aesthetic (non-directive) skills. Curricula utilizing these educational tools can result in indispensable, creative learning environments.

Transdisciplinary model for the recovery of the identity of Mexican foods
Graciela Sánchez Guevara
Universidad Autónoma de la Ciudad de México
José Cortés Zorrilla
Universidad Autónoma Metropolitana

This article proposes a semiotic-discursive macro-model we have called the Great Semiotic System: the semiosphere of Mexican agriculture. Using the analytical categories of the semiotics of culture (Lotman), we explain the complexity of the participatory communication of development and technological innovation in the cases of the conservation of ancestral cultural memory, related to the cultivation of the milpa that contains heterogeneous elements such as corn, beans, chili, squash and other food items, which constitute a heterogeneous-homogeneous system. We also explore the production of plants and cacti such as: magueyes and nopales, characterized by homogeneous monocultures. This great agricultural system developed in the villages of Xochimilco, Milpa Alta and San Gregorio in the south of Mexico City. These towns preserve their social and religious customs and traditions related to their agricultural activities. The study is conducted on the basis of three areas: ancestral, scientific-academic and technical knowledge, comprising three semiospheres. Thanks to bilingual filter translators (Lotman) and intersemiotic translations (Torop), these peoples have been able to survive in a world collapsed by transgenics and imported food.

This model is transdisciplinary by virtue of its dialogue with several types of knowledge: ancestral, scientific and technical. The point is to respect communities as regards their knowledge and contribute to the improvement of their products. The purpose of the macro-model is to show how communities eco-organize so that their ancestral knowledge, agricultural productions, traditions and customs, all of which constitute their cultural context, do not die. Participatory communication for development and technological innovation will allow these and other communities to preserve their food, educational, socio-cultural and religious identity, create forms of government on the basis of their idiocrasies, reflect on agricultural development and its relationship with communication, semiotics and discourse and eventually ask what kind of development is involved and for whom it is intended.

A transcultural approach to substance abuse in adolescence
Mihai Copaceanu
Francis Rainer Institute of Anthropology, Romanian Academy

In Romania, according to a recent study (2018), the age at which most adolescents start consuming psychoactive substances is 14 years. Unfortunately, in some cases this age has fallen to 11 years. In a qualitative research over 95% of respondents said that alcohol can be easily bought from any store of young people under 18. The same applies to clubs and bars. Verbal and physical aggression is one of the most common short-term consequences of abuse. The permissiveness of some parents is another risk factor identified in the same research. Moreover, under 10% of respondents said that if they had a problem, they would contact a specialist. In this situation, Romania needs to learn from the other states. In this paper, I will discuss a cross-cultural approach of the problem. This will include legislative changes, parenting and adolescent education starting with the youngest age.
The need for a transdisciplinary approach in comparative literature
Bénédicte Letellier
University of La Réunion, La Réunion, France

The need for a transdisciplinary approach in comparative literature has become essential in my research activities within DIRE (a research laboratory at the university of La Réunion). I will therefore show the need for a transdisciplinary approach in the specific research context of the University of La Réunion (an island context), but also the relevance of being transdisciplinary in comparative literature. I will discuss and question this approach with the case of poetry.

In the 21st century, we can see that transdisciplinarity is increasingly present in various fields of research. Crossing disciplines is not only strongly encouraged, but in the context of La Réunion, where the university is very far from metropolitan universities, it is above all very suitable for several budgetary restrictions as well as a political will to articulate as much as possible the research fields. As for the comparatist team, it consists of two researchers, both members of the DIRE laboratory, which itself brings together researchers from several disciplines and gives priority to transdisciplinary issues (see the last conference projects like "ecotonnes 3"). That's why my research works show an opening towards scientific knowledge as it is formulated in other disciplines. In 2009, a year after my arrival on this island, I got a funding for a research on "fuzzy borders in literature". And today, I am involved in an international project on "Oceanic Humanities". So from 2009 to 2018, the transdisciplinary approach nourished my reflection on literature.

As an approach integrated into the theories of comparative literature, transdisciplinarity is particularly interesting in the interpretation of poetry. By relying on my research as much as on the courses and the seminars that I made, I will present some new ideas that renew literary thought and open poetic practice to a more general scientific use. Indeed, transdisciplinarity as a non-compartmentalized reading spontaneously opens the interpretive perspectives of a poetic text and most certainly its understanding. It thus allows, by rebound, to broaden our vision of reality.

The usefulness of integrative medicine in contemporary society
Paulo Nuno Martins
New University of Lisbon, Portugal

Conventional medicine argues that the cause of most diseases is caused by external agents (such as bacteria) or due to a malfunction of an organ. Thus, healing is carried out exclusively externally through allopathic medication, surgery or radiation (in the case of cancer) until the disease disappears. However, Ayurveda and mind-body medicine argues that the cause of some diseases, such as those in the psychiatric area (for example, a depression), is due to an imbalance between the mind (our thoughts, feelings) and the body, and so healing should also be done by the mind itself, through an inner process of self-healing (meditation, etc.) in order to change the pattern of behavior that led to the disease (which is not usually done by conventional medicine). This "communication" is a contribution about the theme of conventional medicine versus Ayurveda and mind-body medicine so that we can find a model of integrative and transdisciplinary medicine that might contribute to a more effective way to prevent and cure certain diseases.

Ageing and old age, a jeopardized topic? From the monologues of disciplines to fragile interdisciplinarity
Adriana Teodorescu
Babeș-Bolyai University, Romania

In a world where despite the increase in life expectancy ageism is still manifest, it is not a truism to emphasise that ageing and old age regards us all and that any form of discrimination against the elders is already an internalised, self-inflicted wound. Nevertheless, opposing discrimination – in this case, the will to accept and to study ageing – is not deprived of dangers, as ageing is a complex process, comprising multiple layers, biological social, economic, psychological, political and cultural ones. Without denying the assets of each discipline, the present paper is interested in exploring the limitations of humanities and various social science disciplines that address the topic of ageing and old age, identifying the sources of these limitations – methodological patterns, academic biases, theoretical knowledge assumptions, competitive tendencies, lack of discipline empathy – and also in discussing their possible impact on the elderly and on the way Western societies put into circulation images, often conflictual, of old age and ageing. We will see how social sciences approaches and theories/paradigms (successful ageing, medicalisation of old age, transhumanism etc.) risk to produce a sociologization of old age to the detriment of ontological/phenomenological perceptions of ageing (prevalent in literature and philosophy) and, thus, to impose over-pacified (if not ideological) feelings concerning ageing. We will also explain why certain social science scholars judge literary representations of old age as stereotypical based on a politically correct social message and explore what would be the consequences. On the other hand, we will examine how focusing entirely on literary and artistic representations in establishing the ‘right’ portrait of old age incurs the risk of ignoring social and political interventions needed in order to stimulate the social inclusion of those who over a certain age become invisible and thus extremely vulnerable. What means, after all, to accept and improve ageing, the two-headed idol of nowadays gerontological preoccupations? Is there always a universal way of coping with ageing? Not being afraid of old age and death is really the landmark of successful ageing? Some current attempts to evade the confinement of only one discipline, such as, for example, the studying of life narratives (initiated, among others, by William Randall in the 90s), which encompasses methods from both social sciences and humanities, will be investigated, insisting as well on their insufficiencies and dangers (e.g.: the overload of narrative perspective which conceals specific medical problems and issues of agency related to old age).

Caveats for innovation in sustainable societal transition processes: the (dis)enabling roles of technology for social solidarity
Verena van Zyl-Bulitta
Universität Leipzig, Germany

Sustainability transitions aim to (re-)design structures and possible pathways towards scenarios that are more inclusive and responsible with respect to surrounding ecosystems. Environmental and human systems are to co-exist in balance from a global perspective as well as over time considering future generations. We provide caveats for guidance at the interface of social-ecological and socio-technical systems by investigating the roles of innovation. This we frame by differentiating social innovations on the one hand and technological innovations on the other; their mutual intersections as well as their possible (in)direct interactions with and ramifications onto ecological systems.

System complexity increases with more players and interaction options in the re-design of those systems. Some visions and implementations on how to shape greener futures could be characterised as utopian. Hereby, a utopia is not an impossible mental construct but rather something out of the ordinary, elsewhere, or in the future – a vision on the possible range of how societies should be de- and reconstructed, structured and operated and how resources are to be employed and distributed. Solidarity as a concept is perceivable more indirectly and intangibly. To assess its presence, it might be helpful to deliberate on options for reciprocal and non-monetary and material exchange systems. Our investigation asks how to conceptualise the contributions of factors that can be steered behaviourally across the individual and collective realm. What are the consequences and effects of different system framings and how are they affected by the different levels of understanding and perspectives that come together in more diverse and aiming-to-be equitable and just system designs?
Based on historical insights and views about the interaction of society with technology, we conjecture how to frame lessons onto current debates about the involvement of cyber-physical systems into everyday life (distributed view) and onto their governance (aggregate view). We connect with the historical types of technology involvement in human affairs and then proceed with a present-day lens and its multiple virtual interrelations. To find reasonable, dignified, and integral ways for the weaving of technology tools into more sustainably-designed societies, starting from simple and reaching to sophisticated we compare governance, reflexive governance and adaptive co-management from a theoretical perspective. How formalised rule systems emerged and could be shaped is one focus of institutional analysis and can be assisted with political economy. We investigate what system representations with their underlying assumptions on power structures exist and which questions should be posed about the design of social interactions and how to link them with technologies.

Transdisciplinary and Environmental Education: a dialogue between Eastern and Western philosophies to think about the relation of human being and nature
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Humberto Calloni²
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²FURG (Federal University of Rio Grande), PHD in Education, Rio Grande, Brazil

This present work aims to present a transdisciplinary dissertation done by the first author in a Post-Graduation Program in Environmental Education. The focus was the concept of “Silence” and “Being” in Vedanta (an Indian philosophy) perspective to elaborate the foundations of Environmental Education. The study begins by reflecting on Western ways of being and the evidence of a Western paradigm that signals innumerable crises, such as the crisis of meaning. From this emerges the dialogue of knowledges and the encounter with Eastern philosophies, reflecting epistemological and ontological research in the field of Environmental Education. The reflection passes through a hermeneutics of silence, assuming practices of silence and meditation as a search for a sense of being that strengthens aspects such as Learning to Be and Learning to Live. From the interaction of knowledge between East and West, it announces an Integral Environmental Education as necessary in the socio-environmental action, which corresponds in a non-dualistic way of integrating aspects of life.

The geometric composition for visual arts and its transdisciplinary valences
Cristian Ungureanu
George Enescu National University of Art, Romania

As it is one of the prerogatives of the cultural navigator, the artist and researcher who buys and consumes those books which irrigate concepts and form opinions, I affirm that it is incorrect, inopportune and even risky, especially now in the era of digital communication, not to open up to a transdisciplinary vision on the problem of knowledge, in the way enunciated by French physicist and philosopher, of Romanian origin, Basarab Nicolescu. The exhaustive fixation on the data of a single specialization can only lead to chopped statements regarding certain truths, even some of the most evident ones. Just as it is affirmed in the Manifesto of Transdisciplinarity by Basarab Nicolescu, the break through the isolation imposed by the monochromatic knowledge of the fundamental problems proves to be the only solution for overcoming the cultural identity crisis of the current era and for averting the imminent collapse of our postindustrial civilization.

To help the systematic rediscovery of traditional practices of compositional organization of the space in a work of art, we made a classification of the main geometrical and symbolic models that have been used as a base model for European painting, with numerous case studies. and the results of this process of reconstruction of visual geometric tradition have been structured and presented in different publications and academic events, revealing a real transdisciplinary quality of these types of information.

Transdiscipline and life: new roads of knowledge
Ignacio Ramos Beltrán
National Autonomous University of Mexico

The need for a basic theoretical and methodological framework or foundation in the task of science has led to the need to think about disciplinary approaches of a new cut. Transdisciplinarity has emerged as a seed and response to the need for systematic work but with different foundations. The work universes expand in the same way as the subjects. The challenge posed by this perspective is taken up in two particular areas: culture and consciousness. Under the assumption that human beings are historical beings and think about their future, and that societies are an expression of a constant change in the way in which human beings build their world. we consider of fundamental relevance the work with the cultures that lodge in their traditions different types of knowledge: life, world, conscience, customs, rites, myths, etc.

Effective humanitarian responses to homelessness
Pamela Heckel
American Red Cross, Cincinnati, USA

Wars, religious persecution, drought, and genocide contribute to current patterns of human migration. The debate regarding humanitarian assistance focuses on two options: here or there. It is much cheaper for the United States to offer humanitarian assistance in the country of origin. Displaced persons who are temporarily relocated within their country experience less homelessness. Bringing people to the United States for resettlement removes them from immediate danger but leads to greater homelessness. This presentation raises compelling arguments for both approaches.

The authority spheres model: a semiophysical approach
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The paper presents an original model concerning the authority spheres in the transdisciplinary knowledge achievement, through what is known as leadership (L), equipmentship (E) and relationship (R) paradigm. Every sphere is structured as a monodisciplinary approach, with specific power levels of the reality, but working, as well in a synergistic integrative process, in a transdisciplinary manner. The model is applied to the transitional processes from two different levels of reality. The most important transition, in the biblical context is the metanoia process, as a transitional change from the old standards of the wickedness to the new standards of the life with Jesus, applied in the context of the Philenim epistle, where all the author spheres are working together in a transdisciplinary way. Is underlined here a very specific connection between the synergistic communication and the model involving the three presented spheres. In this way is ensured the isomorphism of the two communication fields, PATHOS, and ETHOS, through LOGOS in
order to realize the 3R objective (common repertoire, avoiding the failure of meaning, and the possible communication remanence). It is easily identified the deep transdisciplinary educational character of the epistle, with a very strong synergistic significance, in a warm language, full of sacrificial overflow, forgiving and ministering love, the author of this short epistle being identified not only the theologian, but especially a wise old man, able to solve a very complex conflict, to rehabilitate the free slave Onesimus. The transdisciplinary included middle explains here the complementarity of the universal reconciliation between the Divine, as top-down perspective, and the human, as bottom-up perspective. Transdisciplinary is putting together in a superior balance by a specific transdialog, how to learn the things by doing (creativity in action) as the active extrinsic window of the knowledge, and how to understand the world (authenticity through participation), as intrinsic window of the reactive process of knowledge, by being.

**RT-10**

**Virtue ethics as reflected in Romanian church mural painting**  
Fr. Toderița Rusu  
Faculty of Philosophy, University of Bucharest.

There is a unitary meaning of the philosophical moral pre-Christian ideas represented in the outer mural painting of the Bucovina monasteries and churches belonging to 15th and 16th centuries, which by means of its message and chromatics has fascinated numerous people looking for truth, well making and beauty. This research is a significant step forward on the dialogue between Theology and Philosophy, Church and Culture, divine and natural Revelation, between theonomic and autonomic thinking, thus creating logical and rational pathways toward a work together having as final goal achieving happiness by means of thinking and life in virtue. Such an approach supposes to selectively and comparably assume thinking similarities of old wise before and after Christ but also efforts to acquire virtue as a way of human fulfillment. It is laudable the concern of ancient philosophers for a beautifully lived life, and also that of Christian painter masters for a clean life need to support an exceptional iconographic canon according to Church order. Actually, the paper aims at facilitating the access towards ancient philosophy ideas, while they are perfected at Saint John of the Ladder who inspired the iconographers to reproduce the virtue stauro from Rășca and Sucevița monasteries. By painting famous philosophers and their prophecies, the icon masters have managed sometimes to play lust for virtue and happiness of the antiquity, really fulfilled by divine Revelation and exemplary lived by John of the Ladder during 7th century as evidence that happiness is accessible for those who are searching into the right direction. The theonomic thinking of the iconographers strengthens the conviction in the rationality limits, that being, illuminated by Christian belief, is able to direct the soul towards the true beauty and happiness. On the other side, the autonomic thinking as an expression of human iconic freedom, still has a positive feature – that as an imperfect experience in looking for the happiness. In a hedonist world, running blindly after pleasure and going away from pain, this topic invites to meditation and temperament, looking for the ultimate sense of the existence, as a powerful wellspring for acquiring virtue, possibly by continuous pursuit of moral facts.

**Transdisciplinarity and consciousness: toward an integrated model of the humanities and sciences**  
Arthur Versluis  
Michigan State University, East Lansing, USA

The past century has seen dramatic discoveries in the realm of physics, and with the development of quantum mechanics, entirely new cosmological perspectives. However, for the most part those of us in the humanities still see largely through dualistic Cartesian lenses fashioned in the seventeenth or eighteenth century. There are numerous examples of this disconnection between the humanities (often also the sciences too) and the broader implications of quantum physics. Here I am thinking in particular of those who seek to apply dualistic and materialistic models to the study of religion, literature, and the arts. Even though a simplistic materialism is long dead, it lives on. Here, based on my recent book Platonic Mysticism: Contemplative Science, Philosophy, Literature, and Art (2017), I will briefly explore how transdisciplinarity allows us to move toward a more integrated understanding of the humanities and the sciences in the larger context of a unified model centered on consciousness.

**Forms of the reality and knowledge in Pavel A. Florenskij transdisciplinary approach**  
Diana Del Mastro  
Faculty of Theology, University of Szczecin, Poland

Scientific knowledge is crossing a period of complex and delicate development and changes that leads it to deal with events and processes that occur within those border areas where forms and structures arise and dissolve. This represents a challenge, to re-thinking jointly to forms and phenomena usually considered as separate and opposed and to re-seeking a prosessional definition of the forms. We are persuaded that only by working on the concept of borders we could achieve this result and try to develop an epistemology based on this thought. This problem of the relationship between reality and its representation, between the world and the languages with which human beings express it and describe it had a relevant place in Pavel Florenskij philosophical itinerary. The eclectic philosopher, adversary of every form of nominalism and positivism, as well as of scientist specialism, in which he grasps the signs of a true deadly disease of the twentieth century, he seems to anticipate almost a century ago the most widespread perspectives of research in epistemology based on the transdisciplinary method and on the integration of divergent points of view on reality.

**The excluded-included third and the hidden-apparent third**  
In theory and practice, in science and psychoanalysis  
Cristian Andrei Tătaru  
Lacanian International Association, Paris, France

Romanian Philanalysis Society, Cluj-Napoca, Romania

The “reversibility” in the axiomatic basis of mathematics and languages as commune ground for the „real” and the „subject” of science and psychoanalysis. The “excluded”, the “included” and the “excluded-included” Third as number, letter, and surface in science, and as pulsion, object and subject in psychoanalysis. The “hidden”, the “apparent” and the “hidden-apparent” Third as function, field and information in science, and as speech, language and unconscious in psychoanalysis. The Third as experience, existence and ecstasy in the practice of scientific and psychoanalytic research. The scientific spirituality and the spiritual science as “Thirds” of science and psychoanalysis.

**The role of spirituality contributes to the success of being transdisciplinary:**  
in the case of mindfulness-based stress reduction program and social engagement  
Ven. Zizhuo Shi  
Director of Luminary Research Institute, Gaya Foundation

In recent years Mindfulness-Based Stress Reduction Program (MBSR), a transdisciplinary educational program of medical theory, mindfulness meditation, and Yoga practice, has successfully accepted by American main stream society, such as psychology, education, medical school, social workers, and high tech society. The successful outcome derives not only from the trans-disciplinary knowledge and skills of all the subjects involved, but also from the spiritual practice embedded in the program. Similarly, in our trans-disciplinary collaboration project—Empowering the Rural and Poor Community, the result of transforming a rural school, Meihua Elementary School, and a rural bakery shop, is not merely because of the artist project and art class carried out by us, but also thanks to a small but significant spiritual practice involved.
I will share two relevant cases to show the key role of spirituality which contributing to the success of these two programs.

The fear and the sacred: the theology and the phenomenology of theoophobia
Dr. Vasile Chira
President of the Institute of Plury-, Inter-, and Transdisciplinary Studies (IPITS) and Faculty of Theology "Andrei Şaguna", "Lucian Blaga" University, Sibiu, Romania

The present study aims to analyze the relationship between fear and sacred, but also the theophobic forms from a pluri-, inter- and transdisciplinary perspective.

We analyze the nature of fear, the distinction between fear and anxiety, metaphysical anguish, the range of manifestations related to God, sacred, religion, saints, places of worship, religious rituals, prayers, etc.; Fear as a defense mechanism; The physiological mechanisms of fear; Phenomenology of Fear; Religion and fear; Fear and Christianity; The concept of fear and anxiety at Kierkegaard; Fear at Sigmund Freud; Fear of the sacred at Rudolf Otto; The Theology of Fear at Hans Urs von Balthasar; The Existential Analysis of Fear at Martin Heidegger; Fear in Biblical Literature; Theophobia; The symptomatic picture of theophobia; The causes of theophobia; Metaphysical etiology of phobic behavior; Social-professional impact of theophobia; Theophobia therapy.

In conclusion, the objective, major cause of theophobia is religious doctrines, according to which the origin of the universe is a punitive, avenging creator, etc.

Strong knowledge of the ancient mythology, the history of religions, archaic theogonies, religious phenomenology, archetypal psychology, cultural anthropology, philosophy and science shelters not only the idea of a "celestial ontological dictatorship", but also the fear inspired by such a divine spectrum, anthropomorphized.

Challenges of transdisciplinary knowledge production at universities: a three level analysis
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As a response to the ever-increasing complexity of our society, transdisciplinarity (TD) has emerged as an alternative to solve the challenges resulting from this complexity. Universities, as one of the main institutions where knowledge is produced, have been somehow reluctant to respond to these changes. Previous and current studies have called for the transformation and restructure of higher education and argued that universities’ potential to solve societal problems has not been fully reached. Consolidating TD at universities therefore requires, for instance, the creation of strong institutional frameworks or the so-called “secondary structures”.

My research integrates three core concepts and levels of analysis to analyze TD: institutions, cultures and communities- with two crosscutting axes: (i) epistemic living spaces and (ii) interculturality, which serve as main frameworks for the empirical analysis at universities. Four universities in four different countries, which have tackled the challenge of incorporating TD in their institutional structure and study programs, serve as case studies.

This paper main aim is to address the challenges of transdisciplinary knowledge creation and its institutionalization to foster campus cultures at four universities; namely: (i) Leuphana University of Lüneburg (Germany); and (ii) the Babes – Bolyai University, Cluj (Romania), (iii) Universidad de la República (Uruguay); and (iv) Universidad Nacional Autónoma de México (México). In these case studies, the current state of transdisciplinary knowledge production is analyzed together with the cultures and communities that are being promoted and fostered.

The paper details a general model created to obtain a comprehensive analysis of the modali-
ties of TD knowledge production in university contexts. This model integrates the fostering and hindering factors for moving towards a transformative science through TD and systematize a series of recommendations and best practices for creating TD campus cultures. I also present some preliminary results and innovative experiences from the four universities under study.

Educatin for misbehaviour in a well-behaved world
Reflective dialogue on two years’ experience of the Transdisciplinary Doctoral School
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PhD schools around the world have three problems: (1) the decreasing interest in academic careers, (2) the supply in the publication market is many times smaller than the demand for it (3) the ubiquity of positivism. Based on four years of experience with a transdisciplinary doctoral school, two years of experience in curriculum development and another two years in implementation, disregarding the three problems that affect any form of doctoral education, we can say that specific problem of the transdisciplinary doctoral school concerns the teachers. There is no established way for teachers to learn how to assess the progress of transdisciplinary doctoral students. If the teachers use their experience from interdisciplinary doctoral education then that creates problems, if they don’t, they will suffer from the “The Emperor’s New Clothes” effect. It would be a mistake to develop an algorithm now. It is the smaller problem of algorithms that we don’t know enough yet; the bigger problem is that, nurturing the doctoral students should be non-algorithmic. We should not fall in the trap of the industrial culture, trying to make everything algorithmic. We argue that only those can fly out from the cages of their disciplines, who were ever inside one. Those who were never had their native discipline cannot become transdisciplinary. There is only one way of being in a disciplinary cage: one needs to know the fundamental concepts and the relationships between them. In contrast, there are many different ways of leaving the disciplinary cages: everyone creates metaphors from their own meta-knowledge. This leads to the source of the only specific problem of transdisciplinary doctoral schools: the doctoral students may and often will use different metaphors than their teachers. If they simply reiterated the metaphors of their teachers, that would be detrimental to the originality of the final report (e.g. dissertation). We cannot say that any and all metaphors by the doctoral students are suitable, but it would be equally wrong to say that each of them is wrong.

“To be or not to be transdisciplinary, is that the new question ?”
Dr. Florent Pasquier
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When. Centuries ago Hamlet, the famous character, asked himself a similar question. We now have to deal with the actualization of this ontological and fundamental issue: “how to be” (or not).

Why. The difference is that in those ancient times, humanity could have a long-term vision of its development (the planet earth was mostly unknown by Europeans). A vision we don’t have anymore, as the anthropocentric period will collapse soon if humanity doesn’t change its beliefs and way of live.

Where. Since Shakespeare, the world became a small village through globalization and the increase of all kinds of networks. So the question still remains valid anywhere on our planet, and even in outer space, where some futurologists plan a possible (and non-sense) human extension.

Propositions to discuss. We should try to answer this question by beginning here (and now), as sciences and world’s traditional wisdoms agree that all issues start from the inner self of each human being. So we have to increase knowledge by conducting research both in human
How. For sure, each man tries to be a good human being… but we mustn’t also forget that we are not alone, that means we also have to learn how to live better all together (the buen vivir). This brings us to translate the question from just a personal position (point of view) to its collective and social dimension.

It means the whole thing might become a question of education: we probably have to (re)invent a new pedagogy. It should include: transdisciplinary approach, complex thinking process, transpersonal psychology, soft skills, spirituality (as not to be confused with religion) etc.

The use of (always) new technologies as to be part of this investigation, as they can increase our feeling of our awareness and consciousness, creating a new field called techno-ontologies (ie. technics + ontology).

Then, we will approach a transdisciplinary paradigm for our personal and collective lives, for a future of hope and fair sharing of the only planet we collectively need to take care of. Therefore we need to find all together the answer to this question: « how being transdisciplinary » ?

Art and Transdisciplinarity in Latin America
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Transdisciplinary methodology emerges as alternative to the methodology of the modern science, which has dominated in West in any process of knowledge legitimized by the academy. In the field of the artistic education, particularly in Latin America, also the same thing has happened and is alone in the recent years that perceive changes due to the offers of the artists from different disciplines (scenic, visual, musical, etc.) those who have been opened to the multi, inter and transdisciplinariedad propitiating new looks and, in consequence, new ways of conceiving the art. In this communication I will present proposals for the Higher education of the arts, based on the Transdisciplinary methodology that can offer to the students of art in the higher level the possibility of generating projects that come out his own discipline and that could be inserted in the complexity of the contemporary world.

Being transdisciplinary – an essential approach to create sustainable physical infrastructure for humanity
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Physical infrastructure provides the underlying foundation for the economic vitality of societies. The approaches taken to develop such infrastructure have evolved and driven according to the following sequence: essential human need, a personal utility for mobility, community productivity, system efficiency and environmental sustainability. The disciplinary, interdisciplinary and multidisciplinary approaches have placed much of their focus on efficiency, productivity, and economic growth, and have not given due consideration to the long-term impacts on humanity from the infrastructure solutions developed. The contemporary challenge for humanity is to take an existential approach to develop physical infrastructure for the future.

Being transdisciplinary is the right approach to sustain human existence through environmental and resource sustainability while making humanism the key element in the planning and design processes. The ever-growing influence of technology in physical infrastructure solutions, combined with the rapidly shortening technology cycles are forcing the society to rely more and more on technologies founded on advanced approaches such as artificial intelligence. Being Transdisciplinary allows society to take a rational look at the evolving physical infrastructure landscape. Furthermore, this calls for a more nimble architecture for future activities in infrastructure development. Being Transdisciplinary can facilitate this process by guiding the thought process that includes the evolving nature of disciplines themselves and creating higher forms of knowledge through the fusion of contemporary disciplines that focus on both objective and subjective thinking.

Transdisciplinary approach in validation of relevant knowledge
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Research process begins with problems and ends with problems, which means that it is an endless process. Based on my experiences as PhD students’ supervisor when students are in a problem situation, they choose a problem that they hope to solve. All solutions can be improved with additional tentative solutions. During the clean-up of the overall picture, we criticize these tentative solutions to find their range of validity. Concepts from other disciplines can sometimes be helpful in making useful analogies in research so the transdisciplinary approach is highly recommended for PhD students.

The main goal of my subject “Validation” in Doctoral Program at Obuda University is to acquire the rapid validation of the knowledge that is falling on us. To understand this semi-structured process the simple rules and the cramped attachment to the status quo must be abandoned. Freedom of validation is difficult to handle. When PhD students encounter new knowledge, they relate it to their previous knowledge. Knowledge is constructed and not merely reproduced. This construction is personal and individualistic. The other goal of my subject is to understand the visualisation of knowledge using concept maps and to learn how to paste together the seemingly incongruous elements to sense the proportions. As knowledge is continually developing, a concept map should often be considered as a work in progress. Processing of recommended readings can be used to create a new conceptual framework that is essential to the validation.

Restorology, the Being Transdisciplinary of cultural transmission
Alfredo Vega-Cárdenas
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This communication describes my work on transdisciplinarity for the master’s degree in conservation and restoration of cultural heritage in University Paris1 Panthéon-Sorbonne. It offers a review of historical and theoretical conservation paths by clearly establishing the scientific and the axiological horizons. Understanding our past allows a new look at our present and opens up possibilities of transdisciplinarity reconfiguration. Facing the past, current research gives clues to the emergence of Restorology as a new field transdisciplinary. The Restorology brings us to master otherwise the past and to act in the present. It allows conservation to:

- Reconcile and integrate science and philosophy.
- Clarify and establish conservation as a place of knowledge.
- Understand the object, the subject and the restorative act through the vision of cosmodernity.
- Rethink the nature of conservation as transdisciplinary.
- Think the being transdisciplinary as verb and substantive.

The Restorology gives a new presence transdisciplinary for the higher education of the cultural transmission by including the contributions of philosophy from ontology, hermeneutics, and their epistemological and ethical frameworks.
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