

## **WELCOME**

Welcome to the first I2S News for 2017, which features new additions to the resources on the I2S website (<http://i2s.anu.edu.au>).

We're also pleased to announce that at the close of 2016 the Integration and Implementation Insights blog at <http://i2insights.org> published its 100<sup>th</sup> blog post. For a review of the blog's achievements see <https://i2insights.org/2016/12/28/who-is-this-blog-for/>.

We hope 2017 is off to a good start for all of you.

Gabriele Bammer and Peter Deane

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## **FEATURED TOOL**

### **Values: Schwartz theory of basic values**

Six main features of values are described:

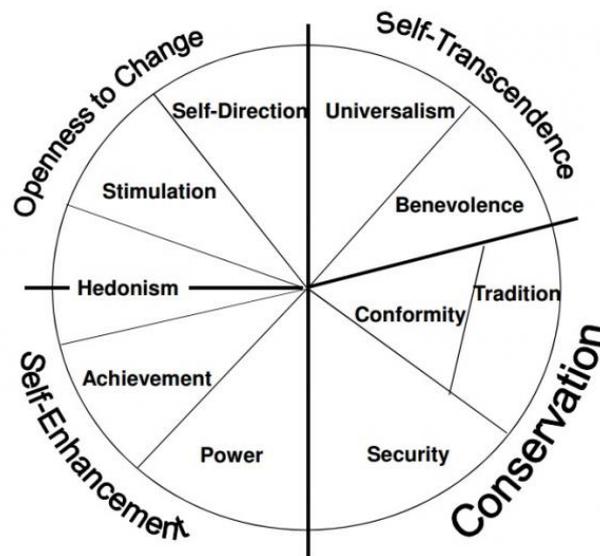
1. "Values are beliefs linked inextricably to affect. When values are activated, they become infused with feeling".
2. "Values refer to desirable goals that motivate action."

3. "Values transcend specific actions and situations. ... This feature distinguishes values from norms and attitudes that usually refer to specific actions, objects, or situations."
4. "Values serve as standards or criteria. Values guide the selection or evaluation of actions, policies, people, and events. People decide what is good or bad, justified or illegitimate, worth doing or avoiding, based on possible consequences for their cherished values. But the impact of values in everyday decisions is rarely conscious. Values enter awareness when the actions or judgments one is considering have conflicting implications for different values one cherishes."
5. "Values are ordered by importance relative to one another. People's values form an ordered system of priorities that characterize them as individuals."
6. "The relative importance of multiple values guides action. Any attitude or behaviour typically has implications for more than one value. ... The tradeoff among relevant, competing values guides attitudes and behaviors... Values influence action when they are relevant in the context (hence likely to be activated) and important to the actor."

The Schwartz theory of basic values identifies "ten basic personal values that are recognized across cultures and explains where they come from." They are:

1. "*Self-Direction* - Defining goal: independent thought and action--choosing, creating, exploring."
2. "*Stimulation* - Defining goal: excitement, novelty, and challenge in life."
3. "*Hedonism* - Defining goal: pleasure or sensuous gratification for oneself."
4. "*Achievement* - Defining goal: personal success through demonstrating competence according to social standards."
5. "*Power* - Defining goal: social status and prestige, control or dominance over people and resources."
6. "*Security* - Defining goal: safety, harmony, and stability of society, of relationships, and of self."
7. "*Conformity* - Defining goal: restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms."
8. "*Tradition* - Defining goal: respect, commitment, and acceptance of the customs and ideas that one's culture or religion provides."
9. "*Benevolence* - Defining goal: preserving and enhancing the welfare of those with whom one is in frequent personal contact (the 'in-group')."
10. "*Universalism* - Defining goal: understanding, appreciation, tolerance, and protection for the welfare of all people and for nature."

The values are organized along two "bipolar dimensions" to "summarize the oppositions between competing values". As the figure on the next page shows, "one dimension contrasts 'openness to change' and 'conservation' values. This dimension captures the conflict between values that emphasize independence of thought, action, and feelings and readiness for change (self-direction, stimulation) and values that emphasize order, selfrestriction, preservation of the past, and resistance to change (security, conformity, tradition). The second dimension contrasts 'self-enhancement' and 'self-transcendence' values. This dimension captures the conflict between values that emphasize concern for the welfare and interests of others (universalism, benevolence) and values that emphasize pursuit of one's own interests and relative success and dominance over others (power, achievement). Hedonism shares elements of both openness to change and self-enhancement."



“Although the theory discriminates ten values, it postulates that, at a more basic level, values form a continuum of related motivations. This continuum gives rise to the circular structure.”

There are two major methods for measuring the basic values: the Schwartz Value Survey and the Portrait Values Questionnaire.

- **Reference:**

- Schwartz, S. H. (2012). An Overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture*, 2, 1. Online: <http://dx.doi.org/10.9707/2307-0919.1116>.

**Additional tools can be found at:** <http://i2s.anu.edu.au/resources/tools>

## FEATURED VIDEOS

### Disciplinary perspectives on unknowns

These six videos provide perspectives from, respectively, the disciplines of clinical psychology, history, law, philosophy, physics and statistics on how each discipline deals with the unknown.

Understanding and responding to unknowns does not fall neatly within a single discipline. Instead, different disciplines have different ways of thinking about and dealing with unknowns and there is no core literature that brings these understandings together. These videos illustrate some of that diversity of perspectives of unknowns.

Appreciating different disciplinary perspectives on the unknown is important for starting to understand the diversity of unknowns inherent in complex problems, along with the need for a corresponding array of methods for responding to them.

These videos were recorded in the first half of 2015 for an edX Massive Open Online Course (MOOC) on Ignorance!, but ended up not being used in the course.

1. "Clinical psychology and unknowns" by Associate Professor Bruce Christensen, interviewed by Professor Michael Smithson and Professor Gabriele Bammer.
  - Online: [https://youtu.be/-u\\_2lIF8vuo](https://youtu.be/-u_2lIF8vuo)
2. "History and unknowns" by Professor Ann Curthoys, interviewed by Professor Michael Smithson.
  - Online: [https://youtu.be/iusEIDqqX\\_4](https://youtu.be/iusEIDqqX_4)
3. "Law and unknowns" by Associate Professor Mark Nolan, interviewed by Professor Michael Smithson and Professor Gabriele Bammer.
  - Online: <https://youtu.be/tPe-XOF8-hw>
4. "Philosophy and unknowns" by Professor Alan Hájek, interviewed by Professor Michael Smithson and Professor Gabriele Bammer.
  - Online: <https://youtu.be/OSXmxd7kg4>
5. "Physics and unknowns" by Professor Christine Charles, interviewed by Professor Michael Smithson and Professor Gabriele Bammer.
  - Online: <https://youtu.be/OfhzGidgGHE>
6. "Statistics and unknowns" by Professor Michael Smithson, interviewed by Professor Gabriele Bammer.
  - Online: <https://youtu.be/VayrMoyA5Tw>

## LATEST I2INSIGHTS BLOG POSTS

The [I2Insights blog](#) has recently featured posts on:

1. **Whose side are we on and for whom do we write?** by *Jon Warren and Kayleigh Garthwaite* <https://i2insights.org/2017/02/14/academic-integrity/>
2. **Critical Back-Casting** by *Gerald Midgley* <https://i2insights.org/2017/02/09/critical-back-casting/>
3. **Building a better bridge: the role of research mediators** by *Jessica Shaw* <https://i2insights.org/2017/02/07/research-mediators/>
4. **Citizen science and participatory modeling** by *Rebecca Jordan and Steven Gray* <https://i2insights.org/2017/02/02/citizen-science-and-participatory-modeling/>
5. **Six actions to mobilise knowledge in complex systems** by *Bev Holmes and Allan Best* <https://i2insights.org/2017/01/31/six-actions-to-mobilise-knowledge/>
6. **Unintended consequences of honouring what communities value and aspire to** by *Melissa Robson* <https://i2insights.org/2017/01/26/honouring-community-values/>
7. **Models as 'interested amateurs'** by *Pete Barbrook-Johnson* <https://i2insights.org/2017/01/24/models-as-interested-amateurs/>
8. **Enabling co-creation: From learning cycles to aligning values, rules and knowledge** by *Lorrae van Kerkhoff* <https://i2insights.org/2017/01/19/operationalizing-co-creation/>

9. **Research team performance** *by Jennifer E. Cross and Hannah Love* <https://i2insights.org/2017/01/17/research-team-performance/>
10. **Getting to a shared definition of a "good" solution in collaborative problem-solving** *by Doug Easterling* <https://i2insights.org/2017/01/12/good-solutions-in-problem-solving/>
11. **Taboo triangles** *by Charles Lines* <https://i2insights.org/2017/01/10/taboo-triangles/>
12. **Dealing with deep uncertainty: Scenarios** *by Laura Schmitt Olabisi* <https://i2insights.org/2017/01/05/deep-uncertainty-and-scenarios/>
13. **Pro-active learning to improve interdisciplinary processes** *by Laura R. Meagher* <https://i2insights.org/2017/01/03/pro-active-learning-and-interdisciplinarity/>
14. **Complexity, diversity, modelling, power, trust, unknowns... Who is this blog for?** *by Gabriele Bammer* <https://i2insights.org/2016/12/28/who-is-this-blog-for/>
15. **Two barriers to interdisciplinary thinking in the public sector and how time graphs can help** *by Jane MacMaster* <https://i2insights.org/2016/12/21/barriers-to-interdisciplinary-thinking-and-time-graphs/>
16. **Cross-cultural collaborative research: A reflection from New Zealand** *by Jeff Foote* <https://i2insights.org/2016/12/15/cross-cultural-collaborative-research/>
17. **Material resources for transdisciplinary research** *by Chris Riedy* <https://i2insights.org/2016/12/13/resources-for-transdisciplinarity/>
18. **Powhiri: An indigenous example of collaboration from New Zealand** *by Rawiri Smith* <https://i2insights.org/2016/12/08/indigenous-example-of-collaboration/>
19. **Four simple questions for navigating the knowledge mobilisation swamp** *by Vicky Ward* <https://i2insights.org/2016/12/06/knowledge-mobilisation-swamp/>
20. **The strength of failing (or how I learned to love ugly babies)** *by Randall J. Hunt* <https://i2insights.org/2016/12/01/strength-of-failing/>

## FEATURED JOURNAL AND JOURNAL NEWS

### Impact Assessment and Project Appraisal

*Impact Assessment and Project Appraisal* (IAPA) publishes "a diverse range of papers, including multi-author and interdisciplinary papers, that focus on the environmental, social, health, sustainability, and/or other assessments of projects, programmes, plans and policies. IAPA is aimed at readers in universities, government and public agencies, consultancies, NGOs and community groups."

With regard to relevance to I2S, some papers include methods for impact assessment and related topics, such as stakeholder engagement, usually in the context of a specific case.

IAPA is the official publication of the International Association for Impact Assessment.

- Website: <http://www.tandfonline.com/loi/tiap20>

## **GAIA column on 'Toolkits for Transdisciplinarity'**

The journal GAIA has recently published:

Bammer, G. (2016) Toolkits for transdisciplinarity - Toolkit #6: Research integration and implementation. *GAIA*, 25, 4: 229. Online: <https://doi.org/10.14512/gaia.25.4.2>

**Additional journals can be found at:** <http://i2s.anu.edu.au/resources/journals>

## **FEATURED ASSOCIATION**

### **International Environmental Modelling & Software Society**

The *International Environmental Modelling & Software Society* (iEMSS) deals with "environmental modelling, software and related topics".

"The aims of the iEMSS are to:

- develop and use environmental modelling and software tools to advance the science and improve decision making with respect to resource and environmental issues. This places an emphasis on interdisciplinarity and the development of generic frameworks and methodologies which integrate models and software tools across issues, scales, disciplines and stakeholders with respect to resource and environmental issues;
- promote contacts among physical, social and natural scientists, economists and software developers from different countries and coordinate their activities;
- improve the cooperation between the sciences and decision makers/advisors on environmental matters;
- exchange information in the field of environmental modelling and software among scientific and educational organizations and private enterprises, as well as non-governmental organizations and governmental bodies."

The date of founding is not given, but is likely to be around 2000.

- **Website:** <http://www.iemss.org/society/>

**Additional professional associations and networks can be found at:**

[http://i2s.anu.edu.au/resources/associations\\_networks](http://i2s.anu.edu.au/resources/associations_networks)

## FEATURED CONFERENCE

### **International Transdisciplinarity Conference 2017: Transdisciplinary Research and Education – Intercultural Endeavours**

“The overall objective of the conference is to strengthen communities of transdisciplinary research and education, and to create visibility for theoretical, empirical and transformative advances/results. The focus of the conference is on interculturality. Participants will explore transdisciplinary research and education as intercultural endeavours concerning epistemologies, world-views, practices, and place-based differences.”

The conference will “bring together representatives of different world regions, institutions, cultures, and communities. We envisage a space for taking a culturally sensitive look at transdisciplinarity. By doing so, we will also explore interfaces and foster the potential of transdisciplinarity to deal with heterogeneity and difference.”

Abstract submission deadline is March 10, 2017.

The conference will be held at Leuphana University Lüneburg, Germany from September 11-15, 2017.

- For further details see:
  - <http://www.transdisciplinarity.ch/td-net/Konferenzen/ITD-2017.html>

### **Other Upcoming Conferences**

Conferences which have not been listed in previous newsletters are marked [**NEW**].

#### **Interdisciplinarity, Transdisciplinarity and Action Research Methods**

- 12-16 June 2017, Action Research Network of the Americas 2017 Conference, Cartagena, Colombia (<http://www.arnaconnect.org/conferences/2017-arna-conference>)
- 11-15 September 2017, International Transdisciplinarity Conference 2017: Transdisciplinary Research and Teaching - Intercultural Endeavours, Lüneburg, Germany (<http://www.transdisciplinarity.ch/en/td-net/Konferenzen/ITD-2017.html>)
- [**NEW**] 19-21 October 2017, 39<sup>th</sup> Association for Interdisciplinary Studies (AIS) Conference, Baltimore, Maryland, United States of America (<http://wwwwp.oakland.edu/ais/conferences/annualconference/>)
- 3-7 June 2018, The Academy of Transdisciplinary Learning and Advanced Studies (ATLAS): Being Transdisciplinary, Cluj-Napoca, Romania (<http://www.atlas-conference.org/>)

#### **Systems, Modelling and Simulation**

- 19-22 February 2017, 2<sup>nd</sup> Asia-Pacific Region System Dynamics Conference: Charting a Path to a Humane and Sustainable Future - Asia's Leadership Role, Singapore (<http://apconference.systemdynamics.org/>)
- 6-7 April 2017, Young to OR (Operational Research) 20 Biennial Conference, London, United Kingdom (<http://www.theorsociety.com/Pages/Conferences/YOR20/YOR20.aspx>)
- 23-26 April 2017, Symposium on Theory of Modeling and Simulation, Virginia Beach, Virginia, United States of America (<http://tms-devs.org/>)
- 11-12 May 2017, 22<sup>nd</sup> Coalition Theory Network Workshop, Glasgow, United Kingdom ([www.coalitiontheory.net/content/22nd-coalition-theory-network-workshop](http://www.coalitiontheory.net/content/22nd-coalition-theory-network-workshop))

- 23-26 May 2017, 31<sup>st</sup> European Conference on Modelling and Simulation (ECMS 2016), Budapest, Hungary (<http://www.scs-europe.net/conf/ecms2017/>)
- 30 May - 2 June 2017, 10<sup>th</sup> Chaotic Modeling and Simulation International Conference (CHAOS), Barcelona, Spain (<http://www.cmsim.org/chaos2017.html>)
- 18-21 June 2017, 12<sup>th</sup> International Conference on Systems of Systems Engineering (SoSE): Internet of Things as System of System, Waikoloa, Hawaii (<http://2017.sosengineering.org/>)
- 20-24 June 2017, 14<sup>th</sup> International Conference of Sociocybernetics: Sociocybernetics, innovation and social conflicts, Medellin, Columbia ([https://sociocybernetics.wordpress.com/icsc2017\\_cfp\\_v1/](https://sociocybernetics.wordpress.com/icsc2017_cfp_v1/))
- 9-12 July 2017, 25<sup>th</sup> Conference on User Modeling, Adaptation and Personalization, Bratislava, Slovakia (<http://www.um.org/umap2017/>)
- [NEW] 9-14 July 2017, 61<sup>st</sup> Meeting of the International Society for the Systems Sciences: From Science to Systemic Solutions - System Thinking for Everyone, Vienna, Austria (<https://www.iss2017vienna.com/>)
- 15-20 July 2017, 27<sup>th</sup> Annual International Council on Systems Engineering (INCOSE) Symposium: Unlocking Innovation through Systems Engineering, Adelaide, Australia (<http://www.incose.org/symp2017/home/when-where>)
- 16-20 July 2017, 35<sup>th</sup> International Conference of the System Dynamics Society: 60<sup>th</sup> Anniversary Celebration, Cambridge, Massachusetts, United States of America (<http://conference.systemdynamics.org/>)
- 17-21 July 2017, 21<sup>st</sup> Conference of the International Federation of Operational Research Societies, Quebec City, Canada (<http://ifors2017.ca/>)
- 7-10 August 2017, Conference of the American Society for Cybernetics: Resilience and Ethics - Implications, Salem, Massachusetts, United States of America (<http://asc-cybernetics.org/2017-2/>)
- 12-14 September 2017, Operational Research (OR) 59 Annual Conference, Loughborough, United Kingdom (<http://www.theorsociety.com/Pages/Conferences/OR59/OR59.aspx>)
- 17-22 September 2017, Conference on Complex Systems, Cancun, Mexico (<http://ccs17.unam.mx/>)
- 3-8 December 2017, 22<sup>nd</sup> Modelling and Simulation Society of Australia and New Zealand Congress: Managing Cumulative Risks through Model-based Processes, Tasmania, Australia, (<http://www.mssanz.org.au/modsim2017/index.html>)

## Team Science and Project Management

- [NEW] 1-3 May 2017, Project Management Institute (PMI) Global Congress 2017, Rome, Italy (<http://congresses.pmi.org/emea2017>)
- 12-14 June 2017, Science of Team Science 2017 Conference, Clearwater Beach, Florida, United States of America (<http://www.scienceofteamspace.org/>)
- 20-22 July 2017, 11<sup>th</sup> Annual INGRoup Conference, Saint Louis, Missouri, United States of America (<http://www.ingroup.net/conference.html>)

## Uncertainty, Risk and Decision Making

- 20-23 June 2017, Bi-annual International Conference on Naturalistic Decision Making (NDM13), Bath, United Kingdom ([http://www.bath.ac.uk/management/news\\_events/events/naturalistic-decision-making/index.html](http://www.bath.ac.uk/management/news_events/events/naturalistic-decision-making/index.html))

- 8-10 November 2017, 2<sup>nd</sup> International Conference on Anticipation, London, United Kingdom ([http://www.projectanticipation.org/index.php?option=com\\_content&view=article&id=97&Itemid=612](http://www.projectanticipation.org/index.php?option=com_content&view=article&id=97&Itemid=612))
- [NEW] 10-14 December 2017, Society for Risk Analysis (SRA) Annual Meeting, Arlington, Virginia, United States of America (<http://www.sra.org/events/sra-2017-annual-meeting>)

## **Bridging the Gap from Research to Policy and Practice**

- 17-18 May 2017, Canadian Knowledge Mobilization Forum, Ottawa/Gatineau Canada (<http://www.knowledgemobilization.net/forum/>)
- 20-21 June 2017, Global Implementation Conference: Expanding Implementation Perspectives - Engaging Systems, Toronto, Canada (<http://gic.globalimplementation.org/>)

## **Other (including Sustainability Science)**

- 8-10 May 2017, 8<sup>th</sup> Annual National Organization of Research Development Professionals (NORDP) Research Development Conference, Orlando, USA (<http://www.nordp.org/annual-conference>)
- [NEW] 20-21 July 2017, 14<sup>th</sup> International Conference of Engaged Scholars and Practitioners: Creating Culture Entrepreneurship and Knowledge through Engagement, Adelaide, Australia (<http://www.engagementaustralia.org.au/conference>)
- [NEW] 2-4 November 2017, 9<sup>th</sup> International Conference for the Humanities, Arts, Science, and Technology Alliance and Collaboratory (HASTAC): The possible Worlds of Digital Humanities, Orlando, Florida (<http://hastac2017.org/>)
- 27 November - 1 December 2017, XXII International Conference of the Society for Human Ecology: Envisioning pathways to just and sustainable futures - Celebrating diversity, pursuing integration, and developing liveable communities, Los Baños, Philippines (<http://societyforhumanecology.org/>)

## **ABOUT I2S NEWS**

The aim of this newsletter is to provide regular (bi-monthly) updates about new resources added to the Integration and Implementation Sciences website (<http://i2s.anu.edu.au/resources>). These resources are useful for researchers interested in Integration and Implementation Sciences (I2S), which underpins the investigation and tackling of complex real world problems, by:

- Synthesizing knowledge from different disciplines and stakeholders,
- Understanding and managing diverse unknowns, and
- Providing integrated research support for policy and practice change.

In general, each issue features tools (concepts and methods), case studies and/or approaches relevant to I2S - either a useful compilation or one or more examples of note. We also provide information about journals, professional associations & networks and conferences where researchers can learn from others, report their findings and interact with like-minded peers. The newsletter also reports on discussions in the LinkedIn group "Global Network for Research Integration and Implementation":

<http://www.linkedin.com/groups/Global-Network-Research-Integration-Implementation-4888295> and new entries on the Integration and Implementation Insights blog: <http://I2Insights.org>.

I2S News is archived at: <http://i2s.anu.edu.au/what-i2s/i2s-publications/i2s-news>.

Useful links:

- I2S website: <http://i2s.anu.edu.au>
- I2S on YouTube: <https://www.youtube.com/user/i2sTalks>

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- LinkedIn group "Global Network for Research Integration and Implementation":  
<http://www.linkedin.com/groups/Global-Network-Research-Integration-Implementation-4888295>
  - I2Insights blog: <http://I2Insights.org>

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