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In This Issue:

- Letter from the Editor p. 1
- Reports from Conferences p. 3
- Book Reviews p. 5



Courtesy of D. Günther

The Society

The Integrated Assessment Society is a not-for-profit entity created to promote the community of inter-disciplinary and disciplinary scientists, analysts and practitioners who develop and use integrated assessment. The goals of the society are to nurture this community, to promote the development of IA and to encourage its wise application.

Integrated Assessment Defined

Integrated Assessment (IA) can be defined as the interdisciplinary process of integrating knowledge from various disciplines and stakeholder groups in order to evaluate a problem situation from a variety of perspectives and provide support for its solution. IA supports learning and decision processes and helps to identify desirable and possible options for addressing the problem. It therefore builds on two major methodological pillars: approaches to integrating knowledge about a problem domain, and understanding policy and decision making processes. IA has been developed to address issues of acid rain, climate change, land degradation, water and air quality management, forest and fisheries management and public health.

Letter from the Editor

by Dirk Günther, *TIAS Secretariat*

In the past TIAS provided information on the society, integrated assessment themes, conferences, job openings and many other issues mainly via its website, members mailing list and in particular this newsletter. You may have noticed, at least from the length and format of this issue, this is now changing. In this editorial I would like to introduce to you the new TIAS concept for Information and Publication. Through member discussions and user surveys in the last two years, the TIAS Secretariat received feedback that the information channels are very useful and of high value for TIAS members and other academics and professionals who have an active interest in IA. However, there was also some criticism. For example, whereas the feature articles were for the most part, highly appreciated by newsletter readers, the announcements were often outdated. Furthermore there was the need to structure the information provided a bit more among the different themes.

New Concept for Information and Publication

Taking this feedback into consideration, the 2010 Annual General Meeting participants have agreed to a restructuring of TIAS dissemination activities. The TIAS Secretariat, has hence developed a new concept for information provision and publications which is already partially implemented. The full implementation is expected by end of this year.

The newsletter and the website will continue, but TIAS outreach will include some new features, like book reviews in the newsletter, a TIAS blog and a peer-reviewed TIAS working paper series.

The underlying principle of using different publication forms is the range of member needs and the various time horizons for the information provided, (i.e., short-term versus longer-term information).

Hence, the TIAS Secretariat now has four levels of information and publication channels: the TIAS website and mailing list, the new TIAS blog (which will present current news items (events, job postings, etc), the TIAS Quarterly Newsletter, and the new peer-reviewed TIAS working paper series

TIAS website and mailing list

The basis of the new information and publication media/formats is still the TIAS website and the TIAS mailing list for members. The website provides information on the society for the general public, who we are, what we do and how to join. It also provides announcements and presentations and reports from TIAS activities/events, and a resource basis for IA-related data, models, literature, and links. The website will be relaunched in the second half of 2011 and will be updated several times a year. However, it will not contain current information anymore. This is reserved for the blog (see below for details).

Members will receive occasional announcements on relevant events and activities, as usual. This ranges from TIAS sponsored training and workshops, annual general meetings and developments within the society, but also general short-term information including job openings and calls for papers.

TIAS Blog on Wordpress

A new information channel which has already been implemented is the TIAS Blog on Wordpress (tiasonline.wordpress.com). It will constitute the main instrument for news and information of relevance to TIAS members. Recent information formerly provided in the newsletter such as conferences, job openings, calls for papers, courses, new publication or other news will now be provided on the new TIAS blog. Furthermore general, non-internal updates on society activities will also be published on the blog. Information is tagged according several IA and sustainability-related keywords. The blog will be updated on a daily basis. It can already be subscribed to as RSS feed with all common Internet browsers and news readers.

TIAS members can obtain rights to post news on the blog by contacting the TIAS Secretariat (info@tias-web.info). However the blog is open for all registered users to post comments on news items. By using the blog, TIAS intends to reach a broader audience as was possible with the TIAS Quarterly Newsletter. Interested readers do not need to regularly check for new news items on the website or wait for the new newsletter issue. Rather, they will receive news automatically if they have subscribed to the RSS feed of the blog.

TIAS Quarterly Newsletter

The TIAS Quarterly has been the flagship of TIAS members' information and also for our outreach. We wish to strengthen this role by providing more content-related information on IA concepts, methods and practices. In future the TIAS Quarterly will be shorter and include only articles by members or others, as well as news on developments in the IA realm. This may include scientific results, reports from conferences and workshops, book reviews and feature articles on projects or approaches. With this more focused TIAS Quarterly we can provide leading edge information on IA related (applied) research and practice. As the TIAS Quarterly already has an ISSN number it is also possible to cite the newsletter. This may also be attractive to authors who wish to publish a summary of (or announce) their most recent research results quickly to a specific but nonetheless broad audience. They may then receive feedback through a new "Comments and Letters to the editor" section in the TIAS Quarterly.

The TIAS Secretariat invites interested individuals or research groups to contribute to the content of the newsletter by sending in book reviews, conference

and workshop reports or short summaries of results from research projects. TIAS is also interested in executive summaries of Masters and PhD theses.

TIAS Working Paper Series

The second new medium in the TIAS outreach and dissemination program is the TIAS Working Paper Series. The format is intended to provide a low-threshold but peer-reviewed possibility to publish articles and reports on IA related issues in a format with an ISBN number.

The working paper series is currently under development, with publication of the first issue in the second half of 2011. The TIAS Secretariat encourages contributions and in particular for young scientists to send in proposals for publication.

We hope that the new approach and its various formats and media for information dissemination and publication will satisfy the information needs of our society members and provide an interesting forum for publication and exchange within and outside TIAS. However, to fulfil all the intentions of this new approach we depend on the active involvement and contributions of society members. Hence, we encourage all readers to send news items, announcements, book reviews, conference reports, and project results. And we encourage submission ideas for feature articles or any interesting IA-related information to TIAS Associate Editor: di.guenther@googlemail.com.

In this first issue of the new newsletter approach we begin with a report by Caroline van Bers on the TIAS Backcasting Workshop in Budapest earlier this year. Dale Rothman then presents a review of the book, "The Planet in 2050: The Lund Discourse of the Future", edited by Jill Jäger and Sarah Cornell.

I wish all readers an enjoyable summer in the northern hemisphere and winter in the southern hemisphere. The next newsletter issue is planned to be released at beginning of October.

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TIAS Workshop evaluating approaches for Visioning and Backcasting, Budapest, March 21-22, 2011

by Caroline van Bers, seeconsult GmbH

On the first spring days of 2011, the Integrated Assessment Society held its workshop on visioning and backcasting in Budapest, Hungary. The aim was to further the TIAS study comparing visioning/scenario exercises and projects that have been or are using backcasting. The results of the workshop will be used to learn more about the effectiveness of various approaches from those who are using or have used backcasting extensively to support environmental management and sustainable development.

Entitled, “Building Bridges from the Present to Desired Futures: Evaluating Approaches for Visioning and Backcasting”, the workshop brought together 23 experts and six graduate students representing experiences from 14 countries and four continents. The event was hosted by the Central European University, and received financial support from the Netherlands Environmental Assessment Agency and from the Central European University.

The workshop began with a presentation by Tom van der Voorn (TIAS) on the TIAS backcasting study as envisioned by the Backcasting Steering Group of this activity. To prepare the participants for their contribution to this meeting, they were asked to provide an abstract of their work as it relates to this theme, and in particular the challenges they have faced and what has worked well. This was circulated to all participants in advance of the workshop. These abstracts themselves provide a rich array of experiences and will be published as part of the workshop summary in the course of the summer.

To set the stage, five participants were asked to give short keynote presentations selected to represent the diversity of backcasting experiences.

Professor John Robinson of the Centre for Interactive Research on Sustainability, University of British Columbia, presented current participatory backcasting projects, the role of the participatory process in this, and methodological approaches used. These experiences suggest that there is tremendous interest in exploring desired futures and point to the power of interactivity and visualization that lead to an increase in engagement and knowledge.

Ms. Melanie Sporer of the Austrian Environment Agency presented a project she is coordinating for the development of a national-level long-term emission pathways, which is a comprehensive framework

to link current climate change mitigation policies and measures with a vision of a low-carbon society in 2050. Currently, the project is developing storylines, not only from the natural sciences and technology perspective, but also incorporating trends from the social sciences.

Dr. Weishuang Qu, Senior Director of Modeling and Analysis at the Millennium Institute, presented Threshold 21 Model (T21) which is a long term national integrated planning model of the key long term challenges faced by a country. The model can be adapted to focus on particular issues of interest ranging from carbon emissions to crime. The success of the model lies in its regular updating and in the commitment and technical capability of each of the national leading agencies involved in the T21 project.

Dr. Jill Jäger, a senior researcher in the Sustainable Europe Research Institute, presented three examples of backcasting experiences with which she has been involved: a policy exercise focusing on climate change and sustainable development in Austria, regional scenarios for the Asia-Pacific as part of UNEP's Global Environment Outlook 4 (GEO-4), and *Planet in 2050: The Lund Discourse of the Future* (resulting from a workshop in Lund in October 2008). A number of enabling factors contributed to the success of these projects that were mainly process-related including especially the dedication of the people participating, excellent facilitation, and having sufficient time and space for discussion.

Dr. Gilberto Gallopín, now an independent scholar, presented “The Latin American World Model” which analyzed the material feasibility of fulfilling the basic human needs in the world in a 60-100 years time horizon. To date this is the only global model coming from the developing world. Results indicate that the main constraint for meeting these needs as being socio-political.

These presentations helped to set the stage for the subsequent group discussions, but not before the participants redefined the discussion questions for the groups. After some debate, the participants agreed to the following straightforward questions:

1.) What is our definition of backcasting?; 2.) What is its purpose of backcasting/Why do we use it?; and 3.) Who are the audience and what are the uses of backcasting?

In this summary, a synthesis of the conclusions concerning question 1 is presented followed by the recommendations of the participants at the conclusion of the workshop. More detailed results of these sessions will be provided in a workshop report to be released later in the summer of 2011.

What do we mean by backcasting?

When defining a vision of the future, whether desirable or not, the process of backcasting helps us to identify ways of connecting this vision with the present or reaching that future from the present (Fig. 1). Back-casting differs from planning which is a narrower activity, with a specific goal and typically involves a significantly shorter time frame.

Forecasting Scenarios Backcasting

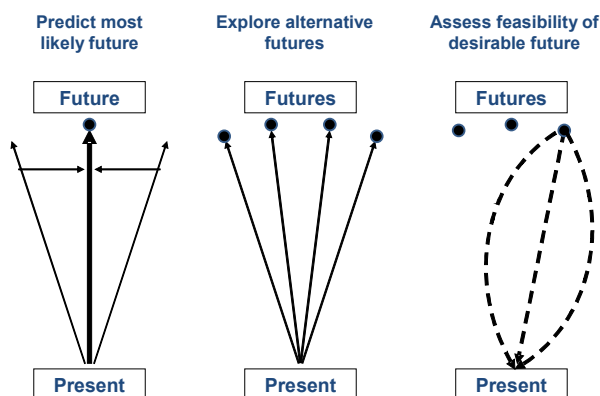


Figure 1: a starting point for illustrating backcasting
(Source: group discussions)

The methodology involved in backcasting is depends on the context. Normally, in defining a desirable future, we begin with a problem and a set of targets. In doing so, it is important to keep in mind that scenarios are based on the value judgements and reflect the current reality of the developers. In backcasting, we then develop pathways towards this normative future in the form of operational goals, steps and milestones. Constraints resulting from biophysical, socio-cultural, political and economic contexts are taken into account. However, a particular challenge that is inherent in any backcasting exercise is that some targets will change over time.

Recommendations for follow up

A principle outcome of the TIAS study is to be a guidance document or handbook supporting efforts to undertake backcasting studies. In addition, the workshop participants had a number of recommendations for follow up focusing mainly on research required and a webinar series.

Research could begin with a comprehensive review of the 30 years of literature on backcasting, that goes further back than the current TIAS review.

Some key areas that require additional research are :

- identifying new ways of engaging the public through social media, workshops, games, etc.,
- validating our work and our knowledge (if this is possible, especially when definitions change)
- rigorous methodologies for combining different types of knowledge.

- models that allow for structural changes (so that backcasting can be undertaken)
- comprehensive, rigorous handling of qualitative variables
- indicators for measuring progress beginning with a framework for assessing progress and success

In order to carry out this research, the participants and other backcasters who did not participate, could engage in new kinds of long-term research projects on the these themes.

A TIAS webinar series on backcasting was recommended with the following themes: comparing frameworks, comparing methods (e.g. critical path analysis) and tools (e.g. modelling), and on identifying long-term (10-year) research projects.

In addition, the idea of mainstreaming backcasting was mentioned as a means of gaining wider acceptance and (long-term) funding. A journal and a wiki on backcasting could help to serve such a purpose.

Several workshop participants have now started a backcasting forum on Linked In. Those interested in joining can contact Caroline van Bers [cvanbers\[at\]seeconsult.org](mailto:cvanbers[at]seeconsult.org).

The full workshop report will be announced on the TIAS website in the course of the summer.

More information:

www.tias.uni-osnabrueck.de/backcasting/

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Book Reviews

The Planet in 2050: The Lund Discourse of the Future. Edited by Jill Jäger and Sarah Cornell
2011, London and New York: Routledge, 105 pp.
Routledge Studies in Ecological Economics
ISBN: 978-0-415-59000-6, \$125, £75, €91

Review by Dale Rothman, University of Denver

The slender volume summarizes the results of a workshop held in Lund/Malmö, Sweden (see www.theplanet2050.org). It brought together around 50 people from around the world with a range of academic backgrounds, all of whom have worked on issues related to sustainability and global environmental change. While the range of expertise was great, it was not comprehensive. Specifically, I wonder if it might not have been useful to have also invited more persons with backgrounds in human and social psychology, political science and international relations, and evolutionary thinking for reasons I detail below.

For those of us with experience in scenario development and integrated assessment, the organization of this volume could well serve as a textbook application of a (narrative) backcasting study. After basic background information on the workshop and its purposes, it begins with “The starting point: planet 2010.” It then moves on to lay out “The vision of 2050”, reviews “Pathways between 2010 and 2050”, and brings us “Back to the reality of 2010 and the challenges ahead.” The editors note that this was not necessarily the structure of the actual workshop, so their efforts must be commended here.

Turning to the substance presented, the volume provides a useful overview of the range of and interconnections between the many aspects of the sustainability challenge. Given its length and focus, the volume can only provide an entry point to the depth and complexity of the present day issues and what a more desirable world would look like in 2050. Much of what is presented clearly draws upon the experience and other work of the participants and many others. Still, even well informed readers will likely find something new here and those less familiar with the issues should find this a nice jumping off point for further exploration of the literature.

Rather, it is in the description of the pathways to their vision and the challenges that stand in the way that the volume makes its largest contribution. The editors use the image of a wheel connecting Ecosystem health at the center to Human and Societal health at the edge. These are connected by five “spokes” or pathways – Governance, Beliefs, Economy, Education, and Creativity. Underpinning all of these is a “directional culture shift”, driven by change in

values. Not surprisingly, at the root of this is “the way we think, feel and act towards each other and the planet.” Without change at this level, the other changes are unlikely to occur. The editors fully recognize this and the difficulty it presents when they describe the overriding challenge, which “is to engage the very cognitive process that have got us to where we are today.”

This takes me back to the point I left at the end of my first paragraph. What would experts with backgrounds in human and social psychology contribute to discussions about how such a fundamental value shift could occur, and possibly even be guided? What could experts with backgrounds in political science and international relations contribute to discussions about how institutions might play a role in the resulting structural changes? And finally, what might evolutionary theorists tell us about the evolutionary stability of such a shift in values?

All in all, I very much enjoyed this volume and would highly recommend it to others, with one caveat. Borrow it from a friend or check it out of a library. Routledge’s pricing strategy will certainly make you think twice about buying a copy.

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Call for Submissions

TIAS Members are encouraged to submit articles and/or reports on projects and/or conferences and workshops for future issues of TIAS Quarterly.

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