The founding of modern simulation/gaming: S&G and ISAGA four decades on

David Crookall

Abstract

This editorial first touches on the early days of simulation/gaming. It then traces the links between International Simulation and Gaming Association (ISAGA) and Simulation & Gaming (S&G) up until the 2009 ISAGA conference in Singapore. The links are, of course, provided through people, who were active in both the organization and the journal. The joint contributions were of several kinds, including conference organization, conference presentations, journal articles, and journal symposia. A list of previous ISAGA conferences is provided. This article thus contributes some elements toward a more complete portrait of the development of the discipline.

Keywords

articles, conferences, contributions, development of the discipline, early gamers, early scholars, founders, ISAGA, links, modern simulation/gaming, proceedings, publication, simulation/gaming, S&G, Simulation & Gaming, thanks

It is convenient to consider that the appearance of modern simulation/gaming for learning was discernable early last century (see, for example, Feldt, 1966; Institute of Play, 2011; Shubik, 2009; Smith, 2010). Some pioneering work was done in Russia in the 1930s (for an account, see Dzhukov, Mikhaylushkin, Gagnon, Wolfe, & Crookall, 1993; Gagnon, 1987) and in Japan in the 1940s (see Ichikawa, 2008). The main development of modern simulation/gaming probably got under way in the 1950s, especially with the publication of Home Ludens (Huizinga, 1944). It is probably no coincidence that Huizinga was Dutch and that ISAGA was “born” in the Netherlands, which is now

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the legal headquarters of ISAGA. Moreover, several ISAGA conferences have been held there, and the Netherlands is now awash with simulation/gaming activity. Probably the earliest work published by an ISAGA member was Duke (1964), well before ISAGA and this journal came into being.

Modern simulation/gaming reaches back to the 1950s and 1960s, and took off in the late 1960s and blossomed in the 1970s, with the work and enthusiasm and creativity of scholars, such as

- Al Feldt
- Barbara Steinwachs
- Barry Hughes
- Bernie Keys
- Bill Biggs
- Bill Gamson
- Bob Armstrong
- Bob Horn
- Bob Noel
- Brent Ruben
- Cathy Greenblat
- Charles Petranek
- Clarice Stoll
- Clark Abt
- Cleo Cherryholmes
- Dan Druckman
- David Walker
- David Zuckerman
- Dennis Meadows
- Derek Unwin
- Dick Brody
- Dick Chadwick
- Dick Duke
- Dick Meier
- Don Thatcher
- Elliott Carlson
- Erling Schild
- Fred Goodman
- Garry Shirts
- Gary Brewer
- Gerald Shure
- Hans Becker
- Hans Thorelli
- Harold Guetzkow
- Henry Ellington
- Hiroharu Seki
- James Coleman
- James McKenney
- Jetta Magarry
- Joe Wolfe
- John Raser
- John Taylor
- Jon Wilkenfeld
- June Robinson
- Kalman Cohen
- Ken Goosen
- Ken Jones
- Layman Allen
- Leonard Suransky
- Linda Lederman
- Martin Shubik
- Mary Birshstein
- Mary Bredermeier
- Michael Inbar
- Morry van Ments
- Myron Uretsky
- Pat Tansey
- Paul Greenlaw
- Paul Meerts
- Paul Smoker
- Paul Twelker
- Pierre Corbeil
- Ray Glazier
- Rex Walford
- Richard Meier
- Richard Powers
- Robert Armstrong
- Ron Stadsklev
- Samuel Livingston
- Sandy Fowler
- Sarane Boocock
- Tony Faria
- Thiagi
- William Dill
- William Pfeiffer

This list of early names is fairly representative of the early days, but it is certainly incomplete. Thus, I offer my apologies for missing names. Also my apologies to more recent people, who have also contributed greatly to the discipline.

I have had the pleasure to have met some of the above colleagues. Some have published in S&G or served as S&G Ed Board members. Several have been S&G editors or section editors, such as Biggs, Coleman, Faria, Inbar, Greenblat, and Wolfe. We owe them a debt for laying the foundations of what has become a worldwide endeavor and an essential and still growing part of much education, training and research, as well as of a myriad endeavors that aim to better life on this planet—or even escape from it.
To be complete, I should really add people who joined the simulation/gaming community more recently, from the 1980s onwards, and more recently still, people in the serious games arena, but numbers here get large. Also, to make it truly complete, I should add those who have worked and who work in industry (e.g., chemical, nuclear power, oil), health care, sciences (e.g., physics, climate, geomorphology), aviation and shipping (either to build and test machines, or to train people to use them), and the armed forces (e.g., the National Defense University, Washington, DC, USA), service industries (e.g., hotel management), and government. However, numbers here become massive. For example, it is now well nigh impossible to run a management or marketing program without some courses using simulation/gaming methods. A more recent example: In the last decade, the use of simulation/gaming in medicine and health care training has become unavoidable, thanks partly to Dave Gaba and colleagues, and to the association and journal that he founded. Indeed, one can hardly imagine an area that does not now increasingly rely on some form of gaming or simulation to progress.

ISAGA and S&G

In 1970, two important simulation/gaming events happened, independently of each other, that were to transform the “face of the field.” The first issue of S&G was published in March, followed closely, in June, by an invitation from Dick Duke that generated the first meeting of gamers that gave rise to ISAGA.

To celebrate 40 years of S&G, in 2009 and 2010, I edited a symposium of 33 review articles, spread over seven issues. In 2009, ISAGA also celebrated four decades at its 40th annual international conference in Singapore. Of course, many other associations for simulation and gaming exist, and some of them are affiliated with ISAGA and with S&G. However, not many associations that have at their heart simulation/gaming and learning (taken in its broadest sense) can boast such a long life. Nor can many journals. Only two other associations, as far as I am aware, came into existence at about the same time as ISAGA—they are Association for Business Simulation and Experiential Learning (ABSEL) and North American Simulation and Gaming Association (NASAGA), both still vibrant today. NASAGA started life as the National Gaming Council and was founded several years before ISAGA. Shortly after, ABSEL was founded, and has been the strongest and steadiest contributor to S&G. As this symposium is an ISAGA proceedings, the rest of this article will focus on the links between this organization and this journal. At some later date, no doubt an opportunity will arise to go into detail about the historic links between S&G and one or both of ABSEL and NASAGA.

Over the last four decades, ISAGA and S&G have shared much. It is worth tracing some of those interweaving threads. Both came into existence at the same time, both are multidisciplinary and international, and both have gained from each other’s existence. ISAGA and S&G have benefited from contributions made by people who have been active in both ISAGA and S&G. These people include presenters at or
organizers of ISAGA conferences who have also been authors in or Ed Board members for S&G. ISAGA and S&G have jointly benefited from some extraordinary individuals. They cannot all be named here, but up until the anniversaries of ISAGA 2009 in Singapore and Volume 40 of S&G, they would include

- Alan Coote
- Amparo García Carbonell
- Arnaldo Cecchini
- Beverly Rising
- Bob Armstrong
- Cai Yiyu
- Cathy Greenblat
- Cisca Joldersma
- Dan Druckman
- Danny Saunders
- Dennis Meadows
- Dick Duke
- Dick Teach
- Elyssebeth Leigh
- Fran Watts
- Gert Jan Hofstede
- Hans Gernert
- Henk Becker
- Hubert Law-Yone
- Igor Mayer
- Ivo Wenzler
- Jac Geurts
- Jan Klabbers
- Joe Wolfe
- Kiyoshi Arai
- Klaas Bruin
- Markus Ulrich
- Marleen van de Westelaken
- Mieko Nakamura
- Paola Rizzi
- Pieter Bots
- Pieter van der Hijden
- Precha Thavikulwat
- Shigehisa Tsuchiya
- Thomas Eberle
- Toshiko Kikkawa
- Vincent Peters
- Willy Kriz
- Yeo Gee Kin

Indeed, ISAGAns provided much central support for S&G, and S&G has been an outlet for much ISAGA scholarship. This has continued since the 2009 ISAGA conference. However, this is the first time (I believe) that S&G has been host to an ISAGA conference proceedings. It is fitting that this happened for the 40th anniversary of both entities. Just a few examples will show how people have contributed to both. The initial founder of ISAGA, Dick Duke, is also closely associated with the early days of S&G. His first S&G article (Duke, 1974) appeared in the early days of modern gaming, and he has continued to contribute to both ISAGA and S&G since. Longtime General Secretary of ISAGA, Jan Klabbers, has guest edited several symposia of S&G and contributed several articles; his work both in S&G and in ISAGA has been influential (see articles in S&G, and Klabbers, 2009). Current (2009) General Secretary, Vincent Peters, published several articles in S&G, including one of the most cited (1998).

Dan Druckman (1971) was one of the first ISAGA conference goers to publish in S&G, and over the years, he has contributed several important articles. Recently Dan guest edited a symposium celebrating Harold Guetzkow, who at the last minute was unable to attend the 1991 ISAGA conference, but who sent a message of encouragement, reproduced in an ISAGA proceedings. I was pleased that Dan was able to give...
a keynote at the 40th anniversary conference (drawn from his S&G article, Druckman & Ebner, 2008).

Cathy Greenblat, one of ISAGA’s strongest supporters, was for several years Editor of S&G. Her earliest article for S&G was a well-cited guide to the literature at the time (1972), and over the next 30 years, she authored 13 influential articles for S&G, in addition to her nongame articles, books on games, and some major games. Dick Duke and Cathy Greenblat both also published, together and separately, some influential simulation/gaming books with the same publisher as S&G.

It was a pity that neither Dick Duke (original founder), nor Jan Klabbers (longtime General Secretary), nor Vincent Peters (then General Secretary, and current Chair) were able to attend the 2009 meeting. No doubt other ties could be mentioned, such as the affiliation of several gaming organizations to both ISAGA and S&G. However, the above motley of connections is largely sufficient to illustrate the strong ties that have developed between ISAGA and S&G over 40 years.

As the 40th ISAGA conference is also being celebrated in the pages of S&G, it is important for readers to be able to know the previous conferences. A reasonably accurate list, drawn from the ISAGA website, is in Table 1. My thanks go to Jan Klabbers for updates and corrections.

Table 1. ISAGA Conferences, up Until the 40th

<table>
<thead>
<tr>
<th>Year</th>
<th>Place</th>
<th>Conference N°; Theme; Organizer; URL</th>
<th>Proceedings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Saint Petersburg, Russian Federation</td>
<td>37th: Global Interdependence of the Uniform Education Space; Yuli Porkhovnik; website no longer available at <a href="http://www.isaga2006.com">www.isaga2006.com</a>, for partial copy see <a href="http://www.webarchive.org">www.webarchive.org</a></td>
<td>ISAGA: Abstracts and papers of the 37th Annual Conference of the International Simulation and Gaming Association (ISAGA); St. Petersburg State University of Engineering and Economics (Engecon), St. Petersburg, Russia.</td>
</tr>
</tbody>
</table>

(continued)
### Table 1. (continued)

<table>
<thead>
<tr>
<th>Year</th>
<th>Place</th>
<th>Conference N°, Theme; Organizer; URL</th>
<th>Proceedings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Atlanta, GA, USA</td>
<td>36th; Serious Play; Richard Teach; website <a href="http://www.isaga05.gatech.edu">www.isaga05.gatech.edu</a></td>
<td>Sriram Narasimhan &amp; Richard Teach; 2006; The Proceedings of the 36th International Simulation and Gaming Association; June 28-July 2, 2005. ISAGA05, Atlanta, GA, USA.</td>
</tr>
<tr>
<td>2004</td>
<td>Munich, Germany</td>
<td>35th; Willy Kriz; website <a href="http://www.sagsaga.org/isaga2004">www.sagsaga.org/isaga2004</a></td>
<td>Willy Kriz &amp; Thomas Eberle (Eds.): Bridging the Gap: Transforming Knowledge Into Action Through Gaming and Simulation; Proceedings of the 35th Conference of the International Simulation and Gaming Association (ISAGA), Munich, Germany.</td>
</tr>
<tr>
<td>2003</td>
<td>Kisarazu, Japan</td>
<td>34th; Rei Shiratori; website no longer available at <a href="http://www.isaga2003.org">www.isaga2003.org</a>, for partial copy see <a href="http://www.webarchive.org">www.webarchive.org</a></td>
<td>Kiyoshi Arai (Ed.); 2003; Social Contributions and Responsibilities of Simulation &amp; Gaming; Kazusa Akademia Park, Chiba, Japan.</td>
</tr>
<tr>
<td>2002</td>
<td>Edinburgh, Scotland</td>
<td>33rd; Fred Percival; website <a href="http://www.eds.napier.ac.uk/isaga_sagset">www.eds.napier.ac.uk/isaga_sagset</a></td>
<td>Fred Percival, Helen Godfrey, Phyllis Laybourn, &amp; Sarah Murray (Eds.); 2003; Interactive Learning Through Gaming and Simulation; The International Simulation and Gaming Yearbook; Volume 11.</td>
</tr>
<tr>
<td>2001</td>
<td>Bari, Italy</td>
<td>32nd; Paolo Rizzi and Antonio Brusa; <a href="http://www.sdvb9.net/isaga2001">www.sdvb9.net/isaga2001</a></td>
<td>Elena Musci (Ed.); 2001; On the Edge of the Millennium: A New Foundation for Gaming Simulation; Edizioni B.A. Graphis, Bari, Italy.</td>
</tr>
<tr>
<td>2000</td>
<td>Tartu, Estonia</td>
<td>31st; Anne Villems.</td>
<td>Leen Rahn (Ed.); 2001; Bridging the Information and Knowledge Societies; Tartu, Estonia.</td>
</tr>
<tr>
<td>1998</td>
<td>Saint Petersburg, Russia</td>
<td>29th; Youlou Porkhovik and Fedotov</td>
<td>Pockhovnik, Y. M., &amp; Novik, M. M.; Simulation and gaming in professional education and management; St. Petersburg: Engecon.</td>
</tr>
<tr>
<td>1996</td>
<td>Riga, Latvia</td>
<td>27th; Valdis Bisters</td>
<td>Bisters, V. (1997); Simulation and gaming for sustainable development; Riga, Latvia: Environmental Publishers “Vide.”</td>
</tr>
<tr>
<td>1993</td>
<td>Bucharest, Romania</td>
<td>24th; Eduard Rădăceanu</td>
<td>Rădăceanu, E. (1994); Reform and progress helped by simulation and gaming; Bucharest, Romania: IROMA.</td>
</tr>
<tr>
<td>Year</td>
<td>Place</td>
<td>Conference N°; Theme; Organizer; URL</td>
<td>Conference Proceedings</td>
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<tr>
<td>1990</td>
<td>Durham, NH, USA</td>
<td>21st; Dennis Meadows</td>
<td>No Proceedings.</td>
</tr>
<tr>
<td>1985</td>
<td>Alma Ata, USSR</td>
<td>16th; Vladimir Burkov</td>
<td>No proceedings.</td>
</tr>
<tr>
<td>1984</td>
<td>Elsinore, Denmark</td>
<td>15th; Eric Petterson</td>
<td>No proceedings.</td>
</tr>
<tr>
<td>1983</td>
<td>Sophia, Bulgaria</td>
<td>14th; Ognyan Panov and Isak Assa</td>
<td>No proceedings.</td>
</tr>
<tr>
<td>1982</td>
<td>Sterling, Scotland</td>
<td>13th; Drew Mackie</td>
<td>No proceedings.</td>
</tr>
<tr>
<td>1981</td>
<td>Haifa, Israel</td>
<td>12th; Hubert Law-Yone</td>
<td>No proceedings.</td>
</tr>
<tr>
<td>1979</td>
<td>Leeuwarden, Netherlands</td>
<td>10th; Klaas Bruin</td>
<td>Bruin, K., de Haan, J., Teijken, C., &amp; Veeman, W. (1979); How to Build a Simulation/Game; Groningen: Centrale Reproductiedienst der Rijksuniversiteit.</td>
</tr>
<tr>
<td>1978</td>
<td>Lund, Sweden</td>
<td>9th; Mats Lörstad</td>
<td>No proceedings.</td>
</tr>
<tr>
<td>1977</td>
<td>Birmingham, UK</td>
<td>8th; Margaret Hobson and Robert Armstrong</td>
<td>No proceedings.</td>
</tr>
<tr>
<td>1976</td>
<td>Caracas, Venezuela</td>
<td>7th; Estelio Breto-Flores</td>
<td>Breto-Flores, Emilio. (1976); De Modelos de Simulacion de Decisiones; Caracas, Venezuela.</td>
</tr>
<tr>
<td>1975</td>
<td>Milan, Italy</td>
<td>6th; Gianluigi Sartorio</td>
<td>No proceedings.</td>
</tr>
<tr>
<td>1974</td>
<td>Berlin, Germany</td>
<td>5th; Declan Kennedy</td>
<td>No proceedings.</td>
</tr>
<tr>
<td>1973</td>
<td>Gaithersburg MD, USA</td>
<td>4th; Cathy Greenblat and Peter House</td>
<td>No proceedings.</td>
</tr>
<tr>
<td>1970</td>
<td>Bad, Godesburg, Germany</td>
<td>1st; Richard Duke, Allan Feldt, and Hans Hansen</td>
<td>No proceedings.</td>
</tr>
</tbody>
</table>

Note: Not all conferences had a theme. Not all web links here will work, but they are provided in case they become active again.
One further interconnection between ISAGA and S&G is ISAGA’s constitution (ISAGA, 2011). One reason for quoting it here is that this will allow a wider audience to read it. Another reason is that it could easily be regarded, mutatis mutandis, as the mission for S&G. One might say that this is unsurprising given that some of the constitutional writers have been involved with S&G. (I have made small stylistic amendments to the text.)

Article 2

1. The aim of the Association is: to unite professionals from across the world and from diverse disciplines who engage in the research, design and application of gaming and simulation and related methods, and to further do everything that is directly or indirectly related or that may be conducive to these areas, in the broadest sense of the word. As a catalyst, the Association attempts to stimulate the design, application and research of gaming and simulation methods in a variety of domains across the world. The mentioned methods include a broad collection of research, consultancy, teaching and learning methods and techniques, such as game simulation, management games, policy exercises, computer simulations, computer assisted simulations, role-plays, scenarios, dynamic case studies, activities in the field of experiential learning, etcetera. All these methods simulate processes, such as economic, technical or social processes, and by applying gaming techniques contribute to the growth of knowledge about the simulated domain.

2. The Association strives to realise its objectives by:
   a. closely following and distributing new developments in the field of gaming and simulation;
   b. stimulating researchers and students to conduct systematic research into gaming and simulation;
   c. stimulating practitioners to use gaming and simulation to their full potential;
   d. stimulating scientists and practitioners to present and publish their findings and to share their experiences;
   e. enhancing the proper use of gaming and simulation, including its ethical aspects;
   f. supporting scientists and practitioners to expand their knowledge and skills in the field of gaming and simulation;
   g. enhancing cross-disciplinary and cross-cultural collaboration between scientists and practitioners, . . . .

No doubt other overlaps between the two exist, but the ones mentioned here serve to illustrate the strong ties between ISAGA and S&G. A happy interdependence exists, and I hope will exist for another 40 years. Certainly, in ISAGA conferences, we have seen the wisdom of Plato’s words: “You can discover more about a person in an hour of play than in a year of conversation.”

When these two influential and mutually supportive entities come together, such as in the ISAGA 2009 conference, with proceedings in this issue of S&G, it gives a clear message that those who ignore simulation/gaming do so at their peril—and miss out.
on a powerful technology and methodology. The message from these proceedings is that simulation/gaming is vibrant, it is powerful, and it is increasing in importance.

We should thus all be extremely grateful to Jonnie Hill and Ma. Mercedes (Didith) Rodrigo for undertaking the mammoth task of editing these proceedings. They have done a wonderful job, subjecting each article to a thorough review, coaching authors through several revisions, and not flinching, even when they had to reject articles by influential people. Many people contributed to the conference and to the proceedings, and they are recognized in the conference website and in Jonnie and Didith’s Guest Editorial. Dick Duke’s idea for a tree to be planted at all subsequent venues seems to have taken root (unintended pun) in subsequent conferences. These ISAGA trees symbolize both increasing simulation/gaming knowledge and the branching out of simulation/gaming into ever more areas. Two lovely people above all need to be recognized in these proceedings: the two Conference Organizers, Yeo Gee Kin and Cai Yiyu, who also made the first ISAGA tree possible.

Acknowledgments

My thanks go to the following for their helpful comments on this editorial: Dan Druckman, Didith Rodrigo, Dick Duke, Jan Klabbers, Joe Wolfe, Jonnie Hill, Precha Thavikulwat, and Vincent Peters.

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Notes

1. Most references to Huizinga’s book give 1944, but one indicates 1938—Anchor, 1978. For the 1944 reference in keeping with Huizinga’s preference, I have used his subtitle with the word “of,” often incorrectly corrected to “in.”

2. In my draft, I did not put my name in this list. However, one of my reviewers kindly suggested that I add my name to the list, but that did not seem to me to be wholly appropriate as I am author of this article. Hence, this footnote compromise, and a brief summary. I organized the 17th ISAGA conference in France, edited several proceedings volumes (including the first one by a mainstream publisher, see list in this article), was advisor for several ISAGA conferences (Japan, Spain, Singapore, etc.), created the first ISAGA website, edited the ISAGA Newsletter for several years, attended and/or presented in several conferences, and served as President, President Elect and Steering Committee member. I also (co)authored articles for S&G, as well as being Editor.

3. Also published to coincide with the conference was Crookall and Saunders (1988).

References


Bio

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