



**Student Chapter
of the System Dynamics Society**

**Snowball No 7, April 2008
Newsletter of the Student
Chapter**

Dear Members of the Student Chapter of the System Dynamics Society,

Welcome to the 7th Snowball, your quarterly update from the Student Chapter, in which we bring you updates on Chapter activities and points of interest.

With the PhD Colloquium in Athens fast approaching we highlight the details of how and when to submit (see point 1) but should also remind you that many helpful details, such as how to put together a good presentation and participant comments can be found in past Snowball issues. All past Snowballs can be downloaded from the [Chapter Website](#) and we hope you are making full use of this resource. Section 4 of this Snowball discusses the website in greater detail.

As Snowball's have in the past, we congratulate recent PhD successes, welcome new students to the chapter (see point 2) and find interesting SD examples in the news (see point 3). It is through our work getting published that this and other Chapters remain healthy, growing and useful for its members.

Hope to hear from you all soon,

The Policy Council of the Student Chapter

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1. 9th PhD Colloquium at the ISDC 2008: Call for Papers

The PhD Colloquium is a whole day event where PhD students can present their current research and hold discussions on the subject of foundations, techniques, and applications in the area of system dynamics. Junior and senior system dynamics practitioners and academics meet here every year to exchange ideas about projects of students in an inspiring, international and open-minded atmosphere.

PhD-students, we warmly invite you to present your research at the colloquium, regardless of the stage you are at. You will receive valuable feedback from experienced researchers as well as from fellow students. Of course, you are more than welcome to join the PhD Colloquium even if you are not presenting.

Date: 20th July, 2008

Submission Deadline: April 22th, 2008

Acceptance Notification: June 6th 2008

Organizers: Nicole Zimmermann and Cécile Emery

Contact Address: phdcolloquium@systemdynamics.org

Website: <http://www.systemdynamics.org/chapters/student>

Process: Please complete the application form and submit it together with an extended abstract (minimum of five pages) or preferably a full paper (maximum of 20 pages).

Useful Help: Have a look at the 6th Snowball from December 2007. Chapter 2 gives you a summary on how to prepare a paper for the PhD Colloquium.

Further details: about the submission are available at the Chapter's website <http://www.systemdynamics.org/chapters/student/colloq.htm>.

Social Event: To conclude the day, all attendants will be invited to join for an informal and relaxed social event. The Athenaeum InterContinental Hotel is situated near Plaka which is an area that has a whole bunch of nice restaurants (some of them with live Greek music) and lots of bars. It is definitely worth to visit this area as it is an amazing area to walk around and you can do some sightseeing as well: Acropolis is on top of Plaka for example. So reserve your evening for this social gathering.

Chapter Meeting: In the past few years we also choose to have an annual meeting of chapter members at the end of the colloquium (see picture below). In this meeting we discuss a *hot topic*, how the Chapter is

progressing and selects the next policy council members. We are currently in the process of deciding the topic, but if there is something you would like to discuss please forward your questions/topics to any current member of the council. Even if you are not able to attend we would like to hear relevant discussion points.



Figure 1: Pictures of the PhD Colloquium at the ISDC, 2007

2. Inflow and outflow: Giuseppe Pagani

This section is a communication platform for introducing incoming members and hearing from recently graduated students about their experience. Brief descriptions of newly started projects and recently completed ones can be posted here.

This month, we congratulate Giuseppe Pagani, who recently obtained his PhD from the University of Lugano, Switzerland. Giuseppe reports on his dissertation below. Thank you for your contribution.

Giuseppe Pagani – *"Organisational Antecedents of Population-Level Organizational Diversity. Exploring the Micro-Foundations of Resource Partitioning theory. A Simulation Approach"*

Extensive empirical evidence has provided strong support to resource partitioning theory in explaining the emergence of organizational diversity in given industries. This theory moves from the observation of an intriguing pattern of market structure and organizational diversity: a number of small, specialist organizations manage to profitably coexist alongside a handful of large generalists, controlling a substantial share of

competitive resources. This industrial structure appears to be particularly surprising, since market concentration has often been regarded as an important barrier for potential new entrants. Resource partitioning theory represents the most complete theoretical framework on the dynamics of organizational diversity, since it takes into account both forces of organizational convergence (among generalists) and divergence (i.e. specialist proliferation). Nevertheless, by taking the population as a level of analysis, this theory leaves open many important questions: How does an organization become specialist or generalist? Why would or could a specialist not become a generalist or vice versa?

My dissertation's main objectives are therefore: 1) expand and complement the insights resource partitioning theory has provided about the emergence of population-level organizational diversity, by taking into account the internal mechanisms shaping the evolution and the operation of the generalist and the specialist organizational forms, with specific concern to professional service industries, and 2) identify which mechanisms allow specialist PSFs to foster their profitability, which is an issue that managerial and organizational theory applied to these firms has not taken into account. To attain this task, I rely upon the development of a dynamic simulation model. In the main, simulations can be used both to develop theory and as a form of empirical data analysis. In the first case, the modeler is interested in discovering the dynamics implied in sets of theoretical propositions about the relationship among constructs. In the second, the main objective is to explain which structures give rise to empirically observed behaviors. The rationale that makes simulation the most suitable tool to employ in this kind of research is the following. This dissertation's main objective is understanding why organizational diversity emerges, by complementing the suggestions provided by resource partitioning theory about the industrial dynamics fostering the emergence of such diversity, with an analysis of the internal processes featuring the operations of the generalist and specialist organizational forms in the professional services industrial context. The empirical evidence about the internal organizational processes that foster PSFs' profitability is, however, limited to the study of large and successful organizations. In order to catch the operations of these mechanisms in specialized firms, one can only refer to fragmented theoretical propositions. The use of simulation is therefore attractive in this case because it allows, on the one side, to subject the theoretical propositions concerning the operations of specialist PSFs to the test of logical consistency. On the other hand, through simulation it is possible to compare the results the model produces about generalist behavior with empirical observations. Finally, it will be possible to assess whether the results, which the model produces, are consistent with the industrial patterns outlined in resource partitioning theory."

Giuseppe Pagani

We would also like to welcome the following new members to the Chapter:

New Members Fall 2007 – Spring 2008

Ozgur Araz	Arizona State University, USA
Karen Cannell	System Dynamics Society
Salah Elmoselhy	University of Cambridge, UK
Scott Knutti	University of Utah, USA
Maximilian Mrotzek	University of Klagenfurt, Austria
Jorge Andrick Parra Valencia	Universidad Nacional de Colombia
Karthik Sankaranarayanan	University of Lugano, Switzerland

3. System Dynamics in the News

Andrew P. Jones recently shared with the SD Community the following information:

Vermont Public Radio recently played a short podcast by Diana Wright of Sustainability Institute on system dynamicist and writer Dana Meadows. You can hear it or read it at the link below

<http://www.vpr.net/episode/43233/>

The Wall Street Journal published an article on the new limits to global growth. The article “New limits to global growth revive Malthusian worries” (Wednesday, March 26, 2008) is a nice illustration of the concept of the limits of growth. Check it out.

4. Student Chapter Website

Apart from the four Snowball’s sent out each year the Student Chapter maintains both a list-server and chapter website at:

<http://www.systemdynamics.org/chapters/student>

The website has all the contact details for the policy council, details of coming events and any documents relevant to them and PDFs of past Snowballs. We also maintain a list-server for anybody wishing to post items (e.g. questionnaires) out to the chapter members.

On the “members” section of the website you can also see the topics and email address of chapter members.

For chapter members not fortunate enough to make it to colloquium there are proceedings and pictures of the event to download so that you can see what happened and add to the discussions that arise.

Of course I could go on, as the website holds even more information, but I think it would be best for you to take a look yourself. If you have any ideas or suggestions of how we can improve this important resource we would love to hear from you, just don't forget to add it to your *favourites!*

5. Contacting the Student Chapter

Contact us, we would love to hear more from you! Depending on what you wish to tell us, we propose to use any of the following two email-addresses:

For general questions, general comments or in order to contact the president of the chapter, please use:

student@chapters.systemdynamics.org

For anything relating to the PhD Colloquium, please use:

phdcolloquium@systemdynamics.org

The individual email addresses of Policy Council members are available on the website. A big thank-you to all of you who have contacted us in the past with helpful comments and suggestions!

6. Best Wishes

The Student Chapter Policy Council produces these Snowballs to benefit both the Chapter and wider society. People volunteer their time and we would like to thank the people who have sent emails of encouragement - we really do appreciate them.

Best wishes

The Policy Council of the Student Chapter