

Appendix 9

Report from the 1998 meeting of the DRUID International Advisery Borard

Report from the DRUID Advisory Board Meeting at Rønne, 11-12 June 1998

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Aalborg University 10 July 1998

Introduction

The first separate meeting of the International Advisory Board of DRUID was held under the chairmanship of Bo Carlsson to debate the general orientation of the research programme, its implementation and its potential outcome, at Rønne, Bornholm, 11-12 June with the following agenda:

1. *Welcome and presentation of the purpose of the meeting* by Bo Carlsson - Chairman of the Advisory Board

2. *Presentation of the general set-up of DRUID* - organisation, activities, outcomes and plans by Bengt-Åke Lundvall - research manager of DRUID.

3. *Research themes*

Theme A: The firm as a learning organisation

Plans by Theme Co-ordinator Jens Frøslev Christensen

Comments and Research Perspectives by Sidney Winter

Theme B: Competence building and inter-firm dynamics

Plans by Theme Co-ordinator Peter Maskell

Comments and Research Perspectives by Jacques de Bandt

Theme C: The learning economy and the competitiveness of systems of innovation (The 1998 Summer Conference on Innovation Systems and Industrial Dynamics)

Plans by Theme Co-ordinator Esben Sloth Andersen

Comments and Research Perspectives by Keith Pavitt

4. *The Year 2000 DRUID-conference* - some preliminary ideas Bo Carlsson, Bengt-Åke Lundvall, Paul Geroski and Giovanni Dosi.

As a preparation for the meeting up-dated descriptions of the three research themes, preliminary ideas for the 1999 Summer Conference on national systems of innovation and the Annual reports for respectively 1995/96 and 1996/97 had been sent to the Board members.

The following members of the Board and representatives for international research partner institutes attended the board meeting:

Bo Carlsson, Professor, Case Western Reserve University, USA

Jacques de Bandt, Professor, LATAPSES, France

Giovanni Dosi, Professor, University de Roma, Italy

Paul Geroski, Professor, London School of Business, UK

Brian Loasby, Professor, University of Stirling, Scotland

Richard N. Langlois, Professor, University of Connecticut, USA

Franco Malerba, Professor, Istituto Di Economica Politica, E. Bocconi, Italy

Stanley Metcalfe, Professor, University of Manchester, UK

G.B. Richardson, Oxford University, UK

Sidney Winter, Professor, University of Pennsylvania, USA

Patrick Llerena, Professor, BETA, Strasbourg

Massimo Colombo, Professor, Politecnico di Milano, Italy

Keith Pavitt, Professor, SPRU, UK

DRUIDs participating in the board meeting:

Esben Sloth Andersen, Associate Professor, Aalborg University
Jens Frøslev Christensen, Professor, Copenhagen Business School
Bent Dalum, Associate Professor, Aalborg University
Kirsten Foss (item 3B and onwards), Assistant Professor, Copenhagen Business School
Nicolai Juul Foss (item 3B and onwards), Professor Copenhagen Business School
Annelise Klüwer, Head of Section, Copenhagen Business School
Bengt-Åke Lundvall, Professor, Aalborg University
Peter Maskell, Professor, Copenhagen Business School

On the character of this report

Most of the substantial discussion took place under the heading of one of the three themes A, B and C. Some of this debate was of a more general character, however, and in this report these general points have been presented under item 2 in the agenda. At the end of the report, I will list some initiatives that have been taken on the basis of the advisory board meeting and relate these to the debate. The comments from Bo Carlsson have been added to the report.

Report

1. *Welcome and presentation of the purpose of the meeting* by Bo Carlsson - Chairman of the Advisory Board.

Bo Carlson pointed out that DRUID was at an important stage. The present period of grant was ending in the year 2000 and there is a possibility to get funding for another 5-year period. He outlined the general purpose of the meeting as being to give advice to the DRUID research manager and to the theme co-ordinators regarding the direction and organisation of the research programme.

2. *Presentation of the general set-up of DRUID - organisation, activities, outcomes and plans* by Bengt-Åke Lundvall - research manager of DRUID.

Bengt-Åke Lundvall presented the general principles for managing the research network. Basically the research programme reflects an attempt to synthesise the kind of issues that scholars connected to DRUID are interested in analysing. There are strict limits for how far the work of DRUID-scholars can be channeled in specific directions since the scholars normally have their salary from their ordinary posts.

Emphasis has been given to the building of a strong infrastructure in terms of databases, inter-net connections, seminars, working paper series, guest professors and the two annual DRUID-conferences. By selecting the themes for the conferences a certain effect on the direction of research can be realised. The infrastructure and the international network building are crucial also for attracting and stimulating the work of Ph.D.-students.

The funding authorities – as represented by the Danish Board for CIE and DRUID - have established three criteria for success as the basis for future evaluations:

- Scientific publication
- Ph.D.-training
- Communication of research to and interaction with users

The DRUID network has been doing quite well in relation to all these three criteria. The greatest success was perhaps in Ph.D.-training where there is now a stock of more than 15 Ph.D.-students connected to the programme. Many of those are doing work of very high quality and at least 5 will be finishing their thesis before Christmas this year. DRUID-scholars and DRUID-projects are involved in policy and practise related activities at the regional, national and international level and the main problem is to meet the demand from policy makers for further analyses. The frequency of publishing is quite satisfactory and growing but it was in this field that the research manager saw the greatest potential for further improvements.

Stan Metcalfe suggested that publication was not an issue to spend too much time on. From now on we should simply take for granted that DRUID researchers do their job with respect to the publishing of papers. Instead the advisory board should discuss what interesting new results the DRUID's have produced and will produce. Stan Metcalfe challenged the general way that the DRUID had been presented. It was too retrospective and too unfocussed. Based on his own experiences, Stan suggested an emphasis on highlights,

especially major empirical results, and an explanation why the empirical and theoretical results make a difference. Given such major results, publication would come by itself; a loose discussion of this issue was a sign of weakness.

Still Keith Pavitt thought it an important task of the board to promote the journal publication activity. Franco Malerba pointed out that journals are not the only way of exploiting the national innovation system concept which is a core asset of DRUID. Franco also discussed which journals DRUID should think of. Some DRUID work within the TSER-project that Franco is engaged in falls partially within political science and sociology, and a publication strategy should take that into account.

Several members of the board suggested more result-oriented and future-oriented ways of considering and presenting DRUID. For instance, Brian Loasby suggested that DRUID should answer questions about its major focus with a sentence that also could cover his own work: "What we are concerned with is how to organise the knowledge about the ways in which people in firms organise their knowledge". Paul Geroski suggested that the major answer to the "so what?"-test of financing agencies was to emphasise DRUIDs results in terms of network-building both internationally and within DRUID. This has created new opportunities for PhD-students as well as for other DRUID researchers. In this context several board members emphasised the strength of the Ph.D.-programme as reflected in the quality of the contributions of DRUID Ph.D.-students at the conference.

In relation to a possible DRUID II, Paul Geroski suggested that one should consider the further institutionalisation of the networking (an International Association for Industrial Dynamics and new journals were mentioned in the debate). Giovanni Dosi and others were sceptical to the specific propositions, given the existing tasks and influence of the group on several associations (Schumpeter Society, EAEPE) and journals. Another proposal by Paul Geroski was that DRUID should define itself in relation to major user groups rather than in relation to a one-sided publication strategy. Finally, Paul Geroski emphasised the possibility of DRUID and its collaborators to exploit, in co-operation, the unique databases that DRUIDs have created or have access to. Keith Pavitt warned, as did Bengt-Åke Lundvall, for de-emphasising the publication strategy of DRUID at the present stage. And Patrick Llerena suggested a combination of publication and networking by e.g. joint papers between DRUIDs and their international collaborators.

George Richardson emphasised the interaction with competent business managers. An important task is to engage the research-oriented managers in a clarification of the concepts. Sid Winter described a model of how to involve business people in research used at the Wharton School. And several other members gave examples on how the interaction with the business community could be organised (Stan Metcalfe and Patrick Llerena).

3. *Research themes*

Theme A: The Economic Organisation of the Firm as a Learning Organisation

Co-ordinator: *Jens Frøslev Christensen*

Commentator: *Sidney Winter*

Several members of the board found that the strong focus on theoretical synthesis and history of thought reflected a strong academic position that is likely to provide important contributions to the development of the theory of the firm (and its strategy). However, it was also noted that the research profile could be strengthened by putting somewhat more effort into original data-gathering (or exploitation of data developed elsewhere in DRUID), hypothesis-building and -testing, and modelling of firm-behaviour.

With respect to publication strategy, attention should be directed at managerial and strategy-oriented journals rather than only economic journals. The "synthesis-orientation" may eventually be well fit for creating a series of books rather than exclusively going for journal articles. In order to raise visibility of the research within theme A it was suggested that the publication strategy should also, to some extent, target semi-popular business journals (à la Harvard Business Review). In the same vein, consultation of business leadership communities could be a more integrated part of some of the research projects.

Finally, it was noted that the heading of the theme ("The Economic Organisation of the Firm as a Learning Organization") did not cover well all the projects within the theme – at least not as currently described.

Theme B: Competence Building and Inter-firm Dynamics.

Co-ordinator: *Peter Maskell*

Discussant: *Jacques De Bandt*

The invited discussant (Jacques De Bandt) opened the debate with comments on theory, methodology and policy prescriptions. He considered the ongoing projects rich and original, but was somewhat disappointed in not finding a more lucid vision of a theory of the role of learning processes in industrial dynamics nor finding a clear procedure for identifying the elements required for building such a theory. The often quite interesting case studies were disadvantaged by the lack of a common methodology emphasising the learning aspects of the inter-firm interaction. He thus favoured a return to the old heading of the theme: "Changes in Competence Patterns and Inter-firm Learning Processes". Finally, he questioned whether the desire to make policy prescriptions were integrated into the projects and procedures of the Theme in a fully sufficient and systematic manner.

In the discussion it was pointed out that Theme B seemed to be somewhat dispersed into a great number of small projects. On this basis the question was raised if it lacked the critical mass to obtain its objectives. Hence, bringing in researchers from outside DRUID into co-operative projects might be worth considering.

Several members of the board commented on the richness of the available data in DRUID. It was suggested that an effort should be made to encourage internal (DRUID) and external scholars to utilise some of these data together and to combine such efforts with formal modelling and comparative studies, in co-operation with some of DRUID's partner institutions. Some also expressed the hope that Theme B could contribute towards making underlying concepts (learning, routines, capabilities) more operational and usable for, for instance, statistical purposes.

Theme C: The learning economy and the competitiveness of systems of innovation.

Co-ordinator: *Esbén Sloth Andersen*

Commentator: *Keith Pavitt*

One issue, raised by Keith Pavitt, was the lack of an on-going scientific publication activity on national innovation systems by DRUID researchers. This is an area that has been pioneered by scholars belonging to DRUID and the researchers are missing great chances because of their emphasis on report-making, etc., with the exception of some of the younger researchers who go more systematically for publishing in journals. In areas like innovation systems it is recognised that books are very important, and a major impact of DRUID could come from 2-3 major, thematic books.

Keith Pavitt commented also on the DRUID Conference on national innovation systems, 6-9 June 1999. Users of the concept of innovation systems call for conceptual clarifications, heuristic models (a la Porter's diamond), taxonomies and checklists. Here new growth theory has not delivered and the DRUID researchers have important but difficult possibilities. Contributions within this realm are much wanted as topics for the DRUID Conference June 1999. Another issue was how to organise the conference. Here very different suggestions were made. Franco Malerba suggested a clear distinction between the different papers, like large state-of-the-art papers, PhD related presentations, and perspectives on future research. If the conference came up with 3-4 vision papers, these could be pretty important for DRUID II. Paul Geroski suggested more radically that 5 large commissioned papers could be enough - the rest could be comments on these papers (in sessions led by the authors), and there would be plenty of time for networking at the conference.

Another conference-related question was whom to invite to the conference. Should for instance researchers with a neoclassical methodology and little interest for innovation systems concepts like Paul Romer (listed in the description of the conference) be invited? Generally it was agreed that it was a good idea to invite open-minded critics of the concept of innovation systems independently of their paradigmatic background.

4. *The Year 2000 DRUID-conference* - some preliminary ideas, Bo Carlsson, Bengt-Åke Lundvall, Paul Geroski and Giovanni Dosi

The debate under this heading was rather brief and some of the specific preferences related to the 1999 conference were reiterated. A possible theme for the conference that would be a follow-up of the Rønne-conference would be to focus on the learning economy and to structure the conference along the three major themes of the research programme. It was agreed to keep the communication going with the advisory board on this point and that it might be a good idea to have a rather well defined concept for the conference already at the end of this year.

Initiatives taken on the basis of the Meeting

1. Regarding the need for a more clear mission statement: The executive committee of DRUID has had a first discussion on sharpening the mission statement of DRUID. This debate pointed toward a focus on the role of learning in the context of industrial dynamics at the level of firms, inter-firm relationships and innovation systems. One specific consequence is that the international network will be strengthened in this direction and that future conferences and publications will be more oriented in this direction in the future. Another part of the mission is to organise high quality Ph.D.-training and networking around this direction of research. This debate will be pursued and widened in the near future.
2. Regarding publication: DRUID will, in collaboration with the departments and faculties involved, offer Ph.D.-students who have finished their thesis an opportunity to apply for getting 3 months paid work to write an article for an international journal on the basis of their thesis. The opportunity will be realised after a procedure of application where support from the supervisor is needed. This proposal is under discussion in the faculties involved.
3. Regarding publication and exploitation of the DRUID data sets: Peter Maskell is co-ordinating the effort to document the most important data banks in English. On the basis of the resulting report a meeting will be called with international colleagues about collaboration in analysis and publications as well as about the exchange of data sets and comparative analysis. The meeting might take place in October in Strasbourg or in January in Denmark depending on when the material can be made ready.
4. Regarding the organisation of conferences: We are working with a concept for the 1999 summer conference that tries to balance some of the trade-offs formulated by the Advisory Board. The idea would be to have 3-4 parallel workshops with fixed composition for half of the time and to have a small number of major contribution in the plenary. This would leave ample room for plenary debates as well as for presentation of Ph.D.-contributions in the parallel sessions. Esben Sloth Andersen will send out the call for papers in August.
5. Regarding the interaction with business and other external users: We have decided to organise three workshops directly aiming at involving business, unions and policy makers. The first one will take place in December and link together the developments in Asian electronics industry with the new context for Danish Electronics industry and it will be organised by Dieter Ernst and Bent Dalum. The other two will take place in 1999 and they will be on respectively 'the interaction between research and development – a firm perspective' and respectively 'environmental policy and innovation'.

Comments from the chairman of the Advisory Board to the report

Now I have at last read the report from the Advisory Board meeting at Roenne. I have only a few minor comments. I think the report accurately reflects both the contents and the flavor of the discussion. Having read the report and compared it with my notes, I am impressed with job that you and your colleagues did in putting it together. It is quite a rich document which I think will prove useful in your continued thinking and planning for the future. So while there are a few minor things that could be tweaked and improved a bit, I think it is much more important to think about how to put it in perspective and what the implications are.

It is always difficult to strike a balance between accurately reporting that which was said and sifting through the material in order to highlight the most important things that were implied or intended, even if not clearly stated. Thus, in thinking about how the lessons from the meeting could be presented to an outside audience (e.g. the sponsoring agencies), I would emphasize that even with limited resources, DRUID has managed to create quite an extensive network of scholars in the field of industrial dynamics, probably the best such network in existence. The

conferences organized by DRUID have certainly served that function: the summer ones by bringing in a large number of leading scholars in the field, and the winter ones by giving Ph.D. students an opportunity to present their work and get feedback from leading researchers. I think these activities have served to put DRUID and Denmark on the map in a way that I am not aware of in any other field. I also think the benefits of getting the Ph.D. students plugged into the global network will show up more and more strongly over time.

Another theme mentioned in the report but which I think deserves emphasis is the potential for future research created by putting together the data bases that DRUID now has. Exploiting these in creative ways through collaboration with outside scholars is bound to yield continuing research streams with important, perhaps unique, results. But there are also risks involved, unless there is sufficient econometric capability and research experience on the part of the 'home team' to generate truly original empirical work.

Other ideas that I would highlight are the opportunities that DRUID research creates for interaction with business practitioners and public policy makers. I can't think of any research in other areas of economics or in other research units that opens up a similar range of opportunities for such interaction.

Thus, looking to the future, there is now even more reason than at the beginning of the venture to expect DRUID's work to be of great value in the future! A good foundation has been laid, and much has been learned already. I hope these comments are of value. More could be done along the lines I've suggested, but I think you know better than I how to take this further and do something really significant with it.

Bo Carlsson