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Innovation Journalism: Towards Research on the Interplay of Journalism in Innovation Ecosystems

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Innovation Journalism: Towards Research on the Interplay of Journalism in Innovation Ecosystems

This essay suggests 'Innovation Journalism' as a useful theme through which to explore the interplay of journalism in innovation ecosystems¹. This involves investigating how journalism plays a part in connecting innovation with public interests and how innovation processes and innovation ecosystems interact with public attention, with news media as an actor. It may also be of interest to study in which ways journalists cover innovation processes and innovation ecosystems, the incentives that drive innovation journalism and how news organizations may be organized to perform the task.

We outline examples of research project topics to illustrate how this approach can inform studies of innovation, studies of journalism as practice, and possible scopes for the research theme. Going forward, we propose to identify earlier relevant scholarly research and relevant researchers that can be attributed to this emerging research theme in Innovation Journalism.

¹ The paper is the outcome of a discussion at an April 20, 2006 workshop at Wallenberg Hall, Stanford University. Workshop Participants: David Nordfors, Program Leader Innovation Journalism, Stanford (workshop chair); Marc Ventresca, University Lecturer in Management Studies, Saeid Business School, Oxford University (co-chair); Antti Ainamo, Visiting Scholar, SCANCOR, Stanford; Docent, School of Economics, University of Helsinki; Stine Grodal, Doctoral Candidate, Management Science and Engineering, Stanford University; Andrew Hargadon, Associate Professor of Technology Management and Director of Technology Management Program, Graduate School of Management, UC Davis; Stefan Jonsson, Visiting Scholar SCANCOR, Stanford; Assistant Professor, Stockholm School of Economics; Turo Uskali, Visiting Scholar, Innovation Journalism / SCIL, Stanford; Senior Research Scholar, Dept of Communication, University of Jyväskylä; Alisa Weinstein, Associate Editor, Innovation Journalism Program, Stanford. Other participants included in the discussion (could not participate in workshop): Mark Kennedy, Assistant Professor of Strategy, Department of Management and Organizations, Marshall School of Business, USC; Peter Svensson, Visiting Researcher, Innovation Journalism/SCIL, Stanford; Ph.D. Candidate, University of Linköping; Director, Forum for Innovation Management, Karl-Adam Bonnier Foundation (Sweden); Fiona Reid, Director, Oxford Science Enterprise Centre, Saïd Business School, University of Oxford, UK

1 Introduction

The concept of 'innovation journalism' focuses us on a fresh set of issues that sit at the intersection of how innovation occurs and how the social organization of journalism has effects on what is 'news.'²

Research on innovation increasingly focuses on the interaction between sense-making³ and technical activities. Studies of innovation now emphasize the ecology of institutions and actors that shape any specific innovation. Their interactions bring complex dynamics to broader technology systems⁴ and innovation systems⁵ that are now being viewed as ecosystems. Journalists are intermediaries in these systems - actors who broker information and other forms of expertise and knowledge and who monitor and provide accounts of activity in industry and markets. They are a key component of the interaction dynamics of the ecosystems.

Attention is also being put on the micro processes underlying interpretation and sense-making that occur in the forwarding of novelty. Innovation often involves copying solutions from one context to another, applying them in new fields of activity, where they may change the order of things. The research looking at these issues considers especially the work of intermediaries and arbiters, such as journalists.

This is one part of the renewed research interest in how work and occupations influence organizations, innovation and entrepreneurship. Journalism and the media has a key role in processes of innovation and institutionalization. This, in turn, raises issues of both how entrepreneurs engage media attention and how media attention shapes emerging technologies, markets, and industries. The burgeoning areas of social and institutional entrepreneurship are also critically involved with media processes, and provide additional comparative perspectives on the links between innovation and media/journalism in the contexts of business and the economy.

Studies of journalism as an occupation and work alert us to how particular 'beats' or conventions of coverage have developed and stabilized over time. The recent flurry of work on changes in the social organization of newsrooms, the role of new

³ K. Weick, "The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster", *Administrative Science Quarterly*, Vol. 38 No. 4 (1993) 628-652; D. Obstfeld, "Social networks, the tertius iungens orientation", and involvement in innovation. *Administrative Science Ouarterly*, Vol. 50 No. 1 (2005) 100-130

² D. Nordfors. "The Concept of Innovation Journalism and a Programme for Developing it", *VINNOVA Information* VI 2003:5, Oct. 2003. Also published in *Innovation Journalism*, Vol. 1 No. 1, May 2004. http://www.innovationjournalism.org/archive/INJO-1-1.pdf

⁴ R. Nelson and S. Winter, Evolutionary Theory of Economic Change. London: Harvard University Press 1982.

⁵ T. Hughes, Networks of Power: Electrification in Western Society, 1880-1930. Baltimore: Johns Hopkins, 1983

media, and in particular the development of business journalism all highlight how underlying social arrangements shape what is 'news'. Recent work about the social location of journalism in different political eras and in different countries also underscores the linkages between media and society, providing insight about key notions like 'fairness', 'objectivity' and the 'embeddedness' of media.

Several researchers are beginning to study issues in the area of innovation journalism⁷. This term signifies issues relevant both to 'how innovation happens' and 'what journalists do'. The growing body of work around innovation journalism highlights key issues of the types:

- How does journalism cover innovation?
- What are the effects of innovation journalism?
- How can innovation policy and innovation journalism relate to each other?
- What is a productive research agenda for innovation journalism?

These key issues can be broken down into sets of issues, for example for how journalism covers innovation:

- ➤ How do current practices in journalism as a profession and occupation shape the coverage of innovation?
- ➤ What are the features of innovation that make it a distinct area of news media coverage?
- What are the issues around building a new innovation 'beat'?

The systematic study of innovation journalism promises to highlight issues of importance for both innovation researchers and journalism researchers. The current wisdom about innovation suggests it occurs is dispersed ways, often as 'traces' that accumulate over time. These 'traces' are weak signals, difficult for journalists to report on for a variety of reasons⁸.

⁶ A. Ainamo, J. Tienari and E. Vaara, "Between West and East: A Social History of Business Journalism and Management in Cold War Finland", *Human Relations*, Vol. 59 No. 5 (2006) 611-636

⁷ See for example work on Innovation Journalism by D. Nordfors (Stanford University), E. Kauhanen (University of Tampere, Finland), T. Uskali (University of Jyväskylä, Finland), K. Mast, A. Zerfass and S. Huck (University of Hohenheim, Germany)

⁸ T. Uskali, "Paying Attention to Weak Signals – the Key Concept for Innovation Journalism", Innovation Journalism Vol. 2 No. 11, August 2005. http://www.innovationjournalism.org/archive/INJO-2-11.pdf

Specifying research ideas in the two areas of journalism and innovation will add value to research in both research communities and has considerable implications for the training and support of journalists who 'cover' innovation.

The term 'Innovation Journalism' was coined in 2003⁹ in a VINNOVA¹⁰ program for developing the concept and community of journalism about innovation. The program, based at Stanford, follows an international fellowship network model¹¹ for co-developing a concept and an associated professional community. So far, Sweden and Finland have nominated innovation-journalism fellows to the international program at Stanford, and more countries are already creating congruent innovation-journalism initiatives¹².

The assumption driving the emergence of public innovation policy for independent innovation journalism is it plays a role in communicating ideas and focusing public attention on innovation ecosystems that may boost innovation-driven growth¹³.

Another aspect of this assumption is that innovation journalism may be for innovation ecosystems what political journalism is for democratic systems, reporting on the ongoing competition between ideas and participants, with similar effects on the system¹⁴.

Traditionally, research on innovation systems has been about national and regional policies, development and exploitation of local competences, and the analysis and improvement of local economic competitiveness¹⁵. Innovation journalism introduces a significant aspect of social construction, creation of shared knowledge

¹⁰ VINNOVA: the Swedish Governmental Agency for Innovation Systems, http://www.vinnova.se

⁹ D. Nordfors. "The Concept of Innovation Journalism..." Ref [1].

¹¹ D. Nordfors, M. Bajuk, L. Norberg, J. Brinkmann, D. Forbush. "Introducing a Country to Internet-Enabled Expert Networks". *Communications of the ACM*, /Vol. 43, No 11, p. 127-132, Nov 2003. Available on the ACM portal.

¹² Initiatives are presently being built up in Sweden, Finland, Germany and Pakistan. Spain and Slovenia are in the process of starting initiatives. Some Innovation Journalism News Flashes: "Finland Launches Innovation Journalism Program", 4 January 2005, http://www.innovationjournalism.org/archive/NF-010405.pdf; "Finland Launches National Innovation Journalism Fellowship Program", 28 October 2005, http://www.innovationjournalism.org/archive/NF-102805.pdf; "Pakistan Joins Innovation Journalism Program at Stanford", 11 November 2005.

¹³ D. Nordfors, "The Role of Journalism in Innovation Systems", *Innovation Journalism*, Vol 1. No. 7, December 2004. http://www.innovationjournalism.org/archive/INJO-1-7.pdf

¹⁴ D. Nordfors, D. Kreiss, Jan Sandred, "Introducing an Innovation Journalism Index: Benchmarking the Swedish Market", *Innovation Journalism*, Vol. 2 No. 5, May 2005. http://www.innovationjournalism.org/archive/INJO-2-5.pdf

¹⁵ C. Freeman, "The 'National System of Innovation' in Historical Perspective," Cambridge Journal of Economics, Oxford University Press, Vol. 19 No. 1 (1995) 5-24

and community building. Innovation systems have been targeted as readerships in at least one documented case¹⁶, which reports about success.

2 Some Research Theme Components

Technology, business and politics are interacting components of innovation stories. In order to connect the dots, innovation journalism should override boundaries created by traditional journalistic newsbeats, which appear 'arbitrary' from the perspective of innovation, and address the ways in which the various components of the innovation processes and systems interact and shape each other.¹⁷

Innovation is commonly misunderstood as 'invention.' In context, invention is creation; innovation also includes its implementation in practice and commercial use. For example, electric-light-bulb technology existed 40 years before Thomas Edison reduced it to commercial practice, but Edison was the first to describe a business model that attracted investors. Edison created not just a conceptual but also a physical metaphor for his light bulb. True success in innovation—as with Edison's bulb—result from naturalizing an innovation's novelty by creating an analogy/ metaphor/analog, thereby managing consumer expectation¹⁸. This requires broad understanding that leads to commonplace acceptance.

2.1 Cognitive Sensemaking & Innovation Journalism

Developing broad understanding is related to how processes of cognitive sensemaking and sharing of naturalized forms of understanding take place in the innovation system. A key question: How do journalists write about things that do not exist? In many new technologies, the *thing* does not exist at the invention stage, early in the eventual innovation process. How do innovators and inventors naturalize a thing that does not yet exist? One could argue that it is done via metaphors, in accessible language¹⁹. Both entrepreneurs and journalists use metaphors to make intangible technology or ideas tangible to public audiences.

We may also ask what cues or concrete details are used to create these metaphors. Some approaches may demand specific ways of thinking about a new technology.

J. Sandred, "A Business Model for Innovation Journalism: Biotech Sweden", *Innovation Journalism*, Vol. 2 No. 1, Jan. 2005. http://www.innovationjournalism.org/archive/INJO-2-1.pdf

¹⁷ A. Ainamo, "Innovation journalism: Bridging science-based innovations and their commercialization", Conference Papers, The Third Conference on Innovation Journalism, Stanford University, April, 2006; A. Ainamo, "Innovation journalism: Bridging science-based innovations and their commercialization", *Innovation Journalism*, (2006). (in process)

¹⁸ A. B. Hargadon – Y. Douglas. "When Innovations Meets Institutions: Edison and the Design of the Electric Light." *Administrative Science Quarterly*. Vol. 46, September 2001, p. 476-501. http://andrewhargadon.com/Release/Hargadon_ASQ_Edison.pdf;

¹⁹ K. Weick, "Designing for Thrownness", *Managing as Designing*. Stanford: Stanford University Press, 74-78.

Others offer access via metaphor or analogy without locking recipients to rigid behaviors based on established knowledge or expectations. What choices capture or exploit existing understandings and extend them to a novelty without binding the 'audience' to them or blocking audiences' acceptance of the new?

2.2 Journalism as an Actor in Innovation Ecosystems

Scholarly research can study innovation journalism and its role in innovation ecosystems. Such research can enable, for example, an understanding of how innovation journalism works as a powerful agent of societal change, the underlying mechanisms that define its roles, how it affects innovation processes and how it affects innovation-driven economic growth.

2.2.1 Business Model and Relations to Other Stakeholders

The revenues of news publishing do usually not come from selling news to readerships. For mass media, selling readerships (audiences) to advertisers is presently the dominating real business model permitting continued profitable publication. With that said, selling news to readers is in some cases a working business model. Newsletters, analyst reports or other minor media that aim at delivering unique information to an exclusive set of readers base revenues on the readers paying for the information, which is difficult for them to obtain through other channels. This business model will be challenged if the readership grows, as this will dilute the exclusivity and increase the diffusion of the information to non-paying readers. It is relevant to include all types of news media and business models in innovation journalism research.

Mass media publishers want to publish material that will attract readerships that can be sold to advertisers. At the same time, journalists want to advance their careers by breaking news, establishing credibility, becoming respected 'authorities' on important innovations across critical audiences. Entrepreneurs, investors and public policy makers want attention from journalists to help sell their ideas or products.²⁰ A delicate system of symbiotic relationships develops between the various stakeholders in innovation ecosystems, offering opportunities for scholarly research of strong cultural significance in various changing circumstances²¹.

An example of many issues that require examination is the entrepreneur's relation to journalists. The entrepreneur needs to balance the credibility boost news coverage may offer with the risks of increasing expectations or arousing competitors²². In any case, in innovation-driven economies, innovation journalism

²⁰ M. Lounsbury, P. Hirsch and M. Ventresca, "Social Movements, Field Frames and Industry Emergence: A Cultural-Political Perspective on US Recycling, *Socio-Economic Review*, Vol. 1, pp. 71-104, 2003

P. Svensson, D. Nordfors, "Media Communication as a Market Strategy for Startup Firms", Innovation Journalism, (The Third Conference on Innovation Journalism: Conference Papers). May 2006. (in process)

and communication play key roles in shaping corporate reputations in society²³ as well as public opinion about specific industries²⁴. The recently introduced concept of 'Innovation communication'²⁵ is strongly connected to innovation journalism.

2.2.2 Building and Maintaining Credibility With Readerships

We suggest that the question of objectivity in journalism is difficult to fit into this analysis. It will be more workable to look at how journalism builds and maintains attention and credibility with readerships, and how they combine maintaining credibility with the readership with gaining access to the sources needed for generating interesting and valuable news. The readership expects the journalism to represent their interests, while the sources will prefer to give access to journalists who can represent theirs.

Researchers can find out what is demanded of journalists in a professional role to maintain credibility and trust with innovation ecosystem audiences.

2.2.3 Journalism-Readership Attention Reinforcement Loop

Journalism produces many stories covering many issues in seeking readership attention. Some do not generate attention, others do. When an issue attracts readership attention it will be mined by journalists until the issue no longer attracts readers. In this way, journalism acts as a positive reinforcement feedback loop, gravitating collective attention around issues of collective interest, often pushing public agendas, further feeding public attention. Examples cover the entire spectrum of life and society.

Such a 'bandwagon' effect may change or set public opinion and awareness of a certain technology, product or field of study. In this way, journalism may further ideas or product penetration into the popular culture.

Many journalists focus on re-telling stories already in the public sphere. It seems easier to generate news about issues already popular with readers than to find new issues that will gain attention. This applies not only to news but also to news angles. Journalistic storytelling often prefers only one scenario per story; many

²³ T. Fujiwara-Greve, H. Greve and S. Jonsson, "The Downside of Reputation Mechanism: Umbrella Punishment in a Financial Market", work in progress; V. Rindova, T. Pollock and M. Hayward, "Celebrity Firms: The Social Construction of Market Popularity." Academy of Management Review, Vol. 31 No. 1 (2006) 50-71.

Review,

²⁴ S. Jonsson, H. Buhr, "Profit as a Social Problem: Media Reframing of the Product Evaluation Criteria in a Financial Market", work in progress.

²⁵ C. Mast, S. Huck and A. Zerfass, "Innovation Communication - Outline of the Concept and Empirical Findings from Germany", Innovation Journalism Vol. 2 No.7 (May 2005). http://www.innovationjournalism.org/archive/INJO-2-7.pdf and the book "Neue Ideen erfolgreich duschsetzen. Das Handbuch der Innovationskommunikation" edited by C. Mast and A Zerfass, published in 2005 by Frankfurter Allgemeiner Buch, ISBN 3-89981-052-X.

journalists choose the same angles as their peers, to be 'safe.' We argue that when writing about the future— which is at the core of innovation journalism and, largely, business journalism—reiterating the same angle may help to inflate economic bubbles. This has happened historically²⁶, for example in the case of the recent global 'Dot.com' phenomenon. From this perspective, journalism is often revolutionary in ambition but conservative in practice.²⁷ This presents another important issue for researchers to explore: What effect does journalism have on the acceptance and diffusion of innovations? It seems that journalism – not seldom perceived by members of the public as representing facts or public opinions - has the power to affect acceptance and rate of diffusion of innovations.

2.2.4 Forming the Public Perception of a New Industry

In the car industry's early days, cars could be built in many different ways. After a while nearly all cars had four wheels and a gasoline engine. At that point many people adopted this perception of the industry and the public began to pay attention. We may argue that new industries are defined as they go. Definitions can take various initial shapes before reaching a critical point when general perception of the innovation is established.²⁸

But defining innovation as starting when the public first becomes interested is not a natural innovation cycle. Retrospective bias applies when plotting the innovation curve—a 'hindsight prehistory.' It seems that journalism can play a considerable role in shaping the public perception of the industry by clarifying the issues.

2.2.5 Journalism vs. Asymmetric Knowledge

People follow the news not only because they find the information interesting. They follow the news also because they are interested in what news other people are following. People want to know what other people know. The news represents public knowledge. Publication in the news affirms the removal of asymmetrical knowledge²⁹.

Competitors react more strongly to news that appears in a newspaper or other medium—TV, the Internet, a magazine—than in a press release³⁰. This may be

²⁹ See about Information Economics Stiglitz 1969a, and Nobel prize lecture Information and the Change in the Paradigm in Economics http://nobelprize.org/economics/laureates/2001/stiglitz-lecture.pdf

²⁶ T. Uskali, "Paying Attention to Weak Signals – the Key Concept for Innovation Journalism", Innovation Journalism Vol. 2 No. 11, August 2005. http://www.innovationjournalism.org/archive/INJO-2-11.pdf

²⁷ See more Agenda-Setting Theory M.E. McCombs – D.L. Shaw 1972. The Agenda-Setting Function of Mass Media. *Public Opinion Quarterly*, Vol. 36 (Summer), 176–187.

²⁸ S. Grodal, dissertation in preparation, Stanford University, available Fall 2006.

³⁰ M. T. Kennedy, "Behind the one-way mirror: Refraction in the construction of product market categories", Poetics Vol. 33 (2005) 201–226. <u>Available on the Elsevier Sciencedirect web.</u>

because competitors react not only to information provided by a participant but also to the knowledge that this information has entered the public domain.

It is known that asymmetrical knowledge is important in markets. It would therefore be very interesting to see how journalism, with the incentive of removing asymmetric knowledge, enters the equation.

2.3 Innovations in Journalism

By adopting information technology and the Internet for news publishing, news publishing may become subject to Moore's law. It may be that news publishing is going from a business with little research and development (R&D) to being R&D-intensive. R&D can enter into all aspects of the news business, integrating new journalistic methods with new publishing methods, new distribution methods and new business models. This would suggest that the structures of news organizations, set by centuries-old traditions, are heading for a dramatic change.

Anybody can now publish anything from anywhere, any time, at negligible cost. The result is accessible to everyone, everywhere. Technology has removed the barriers to starting news services, introducing a zero-margin cost for distributing more stories or reaching more readers. This does not, however, destroy journalism but intensifies competition for global news markets by offering the power to address vast, worldwide readerships efficiently. Professional journalism organizations will continue to identify readerships, capture mass attention and build credibility, perhaps on an even larger scale than ever before.

Business models will change. In retrospect, before the Internet, publishers relied on probability models to gather information and pinpoint their publication's readership 'sweet spot.' Advertisers paid for the probability of gaining the attention of their desired reader segment. The Internet now offers the opportunity to make exact measurements of where and when a reader looks at any news story or ad published online, enabling 'pay per action.' So advertising's efficacy is no longer bound to probabilities. It is possible that advertisers can pay for direct access, get more information about readers and interact directly with target audiences through the advertisement

The Internet and its various measurement programs now provide publishers with growing opportunities to pinpoint information that resonates with readers, drives traffic to their publications, increases their credibility and thus attracts advertisers who want proof of reaching their targeted audience and generating behavior. In short, we predict that news publishers will invest more in researching and developing programs to gauge reader behavior and the popularity of content with a targeted audience, combined with entirely new services and new business models.

3 Tentative Research Topics of Interest

3.1 The Role of Journalism in Innovation Systems

- What evidence for journalists as stakeholders in innovation systems?
- How do current innovation diffusion models treat the role of journalism and, generally, media?
- What available models and evidence for the innovation communication system (interplay between journalists/ communicators/others)?
- Can Innovation Journalists spread 'gossip' (in social network conception 'gossip' as incomplete, partial information about innovations)? To what degree do standards like 'objectivity', 'balance' changed when reporting on distributed, long-term 'weak signal' processes like innovation?
- What lessons can derived from historical evidence about the role of journalism/media in innovation systems from investors such as Edison and case studies of their innovations?
- What roles does journalism play in the social construction of innovation?
- What measures and metrics to identify the influence of Innovation Journalism on innovation community identities, and vice versa?
- How do innovators use journalists to achieve their goals? How do journalists use innovators to achieve their goals?
- How does Journalism contribute to the formation of the public perception of an emerging industry?
- Will Innovation Journalism increase economic growth?
- What kinds of innovations lend themselves to Innovation Journalism coverage?

3.2 The Profession of Innovation Journalism

- What are the conflicts of interest in Innovation Journalism practice? How similar/dissimilar is it to other emerging areas of journalism coverage?
- What are effective strategies for innovation journalists in managing readership attention and credibility while gaining access to sources?
- Why have not journalists covered innovation more? What obstacles derive from the peculiarities of the language of 'innovation'? What obstacles derive from journalism as a profession (systems of jurisdiction, the role of the state, education, ideologies, etc.)?
- What are best ways to teach Innovation Journalism?

- How to alert, engage managing and departmental editors to consider Innovation Journalism?
- How do journalists currently think about innovations what tacit or explicit models, metaphors, etc.?
- What would be the key elements of a 'History of Innovations' seen thorough how journalism to date coverage innovation?
- Mental models of innovation: What makes innovation difficult for journalists to cover as 'news'?
- Where is innovation journalism currently practiced? What variation worldwide and across the full spectrum of media? Which institutions are more, less likely to cover innovation?
- What are the existing markets for innovation journalism? What business model(s)? How can advocates imagine alternative markets or business models?

3.3 Methods for Quantifying Innovation Journalism

- How to map current practices of innovation journalism?
- How to evaluate and rank innovation journalism quality, standards, effectiveness?
- How to measure the activity and impact of innovation journalism?
- How to establish and monitor innovation journalism credentials?
- How to compare media carrying Innovation Journalism volume, focus, specialties, and neglected areas?
- How to attribute (or introduce?) innovation journalism to specific media in countries worldwide?
- How to compare innovation journalism trends in all media?

4 Conclusion

Innovation Journalism and the Role of Journalism in Innovation Ecosystems are suitable as themes for scholarly research. An explicit research agenda can provide a better understanding of how journalists cover innovation processes and innovation ecosystems. Such research can extend current understanding of how innovation processes and innovation ecosystems interact with public attention.

Research can raise critical issues about the ethics, the practice, and the various types and forms that journalism can take. At the same time, research on innovation journalism can explore how news organizations may be organized to perform the task and how this specific kind of journalism can be a profitable business.

5 Proposal

As a first step in developing the research theme of Innovation Journalism and the Role of Journalism in Innovation Ecosystems, we propose to identify earlier relevant scholarly research and researchers through a focused literature review of existing work in strategy and organization studies, entrepreneurship and innovation, and the studies of journalism as a profession and the social organization of new media. This will provide a necessary base designing relevant research activities that will move the research theme forwards.

Bios

Antti Ainamo

Antti Ainamo is a Visiting Scholar at Stanford University working closely with Stanford Collaboratory for Research on Global Projects. His research interests, other than global projects, include new organizational forms, cultural industries and global business services (including production of business news). His publications include articles in Human Relations and Organization Science, as well as a book published by Kluwer. Currently based at the Scandinavian Center for Organizational Research (SCANCOR) at Stanford University, Ainamo is also Docent at the Helsinki School of Economics Department of Marketing and Management and at the University of Art and Design Helsinki Department of Industrial and Strategic Design.

Stine Grodal

Stine Grodal is a doctoral candidate in Management Science and Engineering at Stanford University. Her research interests include industry emergence, innovation and the role of technology in work processes. Grodal's dissertation is on the emergence of new industries, with a particular interest in how community rhetoric influences the contestation and negotiations around new industries. Her current work is focused on the nanotechnology field. Grodal's research has been published by Oxford University Press and in the *Journal of Economic Issues*. Prior to coming to Stanford, Grodal received a B.A. and a M.A. in psychology from the University of Copenhagen.

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Stefan Jonsson

Stefan Jonsson received his PhD in Competition and Strategy from the Stockholm School of Economics in 2003. After his dissertation work Stefan has been affiliated with Center for Innovation and Industrial Dynamics (CIND) at the University of Uppsala, working on the dynamics of industrial innovation systems. Stefan is currently working on two related projects on modeling the impact of media attention on organizational as well as industry level outcomes. At present, Stefan is a visiting Fulbright scholar to SCANCOR at Stanford and is otherwise affiliated to the Stockholm School of Economics and Uppsala University in Sweden.

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