Arnold, V., Sutton, S. G. (eds.):
Behavioral Accounting Research: Foundations and Frontiers
Sarasota, FL: American Accounting Association 1997, ISBN: 9999815995, $ 30,00

Lasting until the mid 1960s, research in accounting was implicitly determined by neoclassical assumptions of the functioning of capital markets and rational decision making of its actors. A big part of research nowadays run in accounting still sticks to these assumptions. However, a research field has developed steadily throughout the last three or four decades that is questioning these basic assumptions. This research centers the „real" human being with bounded rationality as both a decision-maker and an addressee of accounting decisions in organizations. Behavioral Accounting and Behavioral Accounting Research (BAR) have been established to make those behavioral effects transparent which relate to processes of information gathering, processing, and implementation in accounting systems. Thereby, it focuses on the relationship between accounting systems, human behavior, and organizational efficiency.

The book reviewed here represents the state-of-the-art research of the *Accounting, Behavior and Organizations Section* of the *American Accounting Association* until its date of publication in 1997 and is organized in eight chapters.

In chapter 1 Leslie Kren reviews and summarizes behavioral control system research in the accounting literature especially the role of accounting information for organizational control systems. Behavioral control systems research is mainly dominated by two conceptual frameworks: firstly, Behavioral Theory especially research on organizational behavior and Applied Psychology, and secondly, Agency Theory which takes a more economic perspective and is empirically mainly driven by laboratory experiments. Kren organizes the chapter into four subsections which discuss (1) antecedents (individual and organizational) and consequences of using accounting information to assess subordinates performance, (2) the impact of managers participation in budget setting processes on job satisfaction, motivation, and individual performance, (3) the consequences of several incentive compensation contracting systems on subordinates performance, and (4) the relation of how accounting and budgeting systems are modeled and the way managers do their job.

Chapters 2 to 5 are a sequence of writings on judgment and decision making related to accounting research – each with a certain perspective. In chapter 2 Arnold examines the impact of environmental factors on judgment and decision making. After the author traced the history of BAR two dominating discourses in this area are presented: (1) studies on information gathering and presentation including studies on functional fixedness, information framing and presentation, and (2) studies on the impact of environmental factors on judgment and decision making including time pressure, accountability and justification.

Bowman and Bradley review in chapter 3 the literature on expert decision making in accounting. By examining the expert decision-making process the nature of expertise and the identification of experts is investigated in the first section of the chapter. The second sections assess the quality of decisions made by experts. In section three Bowman and Bradley examine the difference between experts and novices and the role of knowledge in decision-making. After the review of studies on the search for information and ability as two basic aspects of the process of formulating a decision in the fourth section the authors move to the fifth section where the findings are summarized and opportunities for further research are identified. Chapter 4 in the series of writings on judgment and decision-making in this book deals with group decision processes. Literature on group decision in accounting research still remains a minority while most studies are done with an individual focus of interest. Sutton and Hayne state that because of an increasing importance of groups in managerial processes and the appreciable difference between individual and group decisions research of several aspects of group decision-making and its impact on accounting judgment needs to gain more importance. Topics examined here are basic aspects of small group research, technological impacts, methodological difficulties frequently faced by researchers, interfaces between accounting research and group research, and opportunities for further research on accounting group decision-making.

The final chapter in the sequence of judgment and decision making writings is on Information Technology and decision aids. Decision aids are supposed to assist managers and decision makers in general in a complex environment in gathering, processing and analyzing information for a decision. To give a broader view Brown and Eining have drawn from relating both accounting and information systems literature. Their main purpose is to identify decision aids, to analyze the relationship of IT to decision aids and to summarize related research findings. Research in this field is determined by a variety of disciplines such as cognitive psychology, operation research, and human decision making and still remains at an early stage of development.

Chapter 6 examines accountants' ethical behavior. Accountants and auditors are faced with dilemmas involving choices among conflicting values. Corporate accountants, for example, often must decide whether they use controlling methods that reflect the true economic nature of a transaction or methods that put the company in the most favorable light for any stakeholder. Louwers, Ponemon and Radtke present a range of models and studies of moral reasoning to explore the ethical dimensions of the accounting profession mostly drawn from psychology and sociology.

The *ex ante* role of Behavioral Research in setting financial accounting policy is examined in chapter 7. Hussein and Rosman explore how behavioral research influences decisions made by the American Financial Accounting Standards Board (FASB) or other standard-setting bodies before standards are issued. After identifying and analyzing policy-relevant *ex ante* research for FASB and financial accounting as a subfield of BAR the authors evaluate the impact of financial BAR and conclude that studies already run have not had much impact on standard settings. Nevertheless, Hussein and Rosman suggest to stimulate interest in applying BAR to research in setting financial accounting policy because of its methodological richness and opportunity to gain better practical insights as provided by computerized archival data studies that are usually run by the FASB.

Chapter 8 by Dillard and Becker concludes the book by taking a more paradigm orientated perspective. The authors use existing research to describe various views of accounting. Dillard and Becker present a relatively simplistic comparative classification scheme divided into four quadrants that is determined by two axes – a subjective-objective dichotomy and a radical change-status quo dimension. Each of the four quadrants represents a general paradigm class: functionalist, interpretivist, radical human and radical structuralist. By using these scheme the authors structure existing research within those paradigm classes and state that most research in accounting even in BAR could be classified as functionalist approaches. This scheme in mind the authors review literature of organizational sociology in accounting (OSA) and present theoretical arguments and empirical studies related to each class. Two approaches are seen herein to be somewhat problematic. Foucauldian Studies and Postmodernism cannot be structured in this scheme. The first is seen to build a bridge between Modernism (represented by the classification scheme) and Postmodernism a growing paradigm in OSA. The latter one is even questioning the whole classification scheme and builds a completely opposite to the social philosophical school of thought. Two closing remarks summarize and criticize the reviewed literature in this chapter: "First, the functionalist paradigm is dominant to the point of suffocation, retarding diversity and thus growth and insight. Second, alternative research perspectives can be useful in understanding accounting and its influence in and on individuals, organizations and society" (p. 264).

The book is lacking an introductory chapter and a conclusion chapter. From my point of view the conclusion is balanced out through the Dillard and Becker chapter. Their critique could also be considered to be addressed to most of the studies in BAR reviewed in the seven chapters before which also correspond with a more functionalist approach in behavioral research on accounting. An explanation for this deficiency (or lack of...) could be that most theories and methods used in existing BAR are "[…] borrowed from other disciplines and haven not been developed and designed with accounting setting in mind" (Hussein & Rosman, p. 241). Each chapter of the book closes with an overview of the empirical studies used to review the literature the authors are drawing on.

Despite its limitations, *Behavioral Accounting Research: Foundations and Frontiers* offers a comprehensive view on behavioral aspects in accounting. Tracing the history of this research area that is done in chapters 2 and 8 helps the reader to gain a better understanding of what the intentions and objectives of BAR are.

At present, Behavioral Accounting Research in Europe is mostly encouraged by U.S.-American research. Whereas its findings in the U.S. gain considerable interest in the accounting practice the influence of BAR in Europe is much more limited. This could be changed pretty soon. Beginning in 2005 the European Union adopts the IAS 38 "Intangible Assets" of the International Accounting Standard Board as an obligatory form for the balance sheet of all quoted corporations. That will not only cause remarkable effects for corporations' Financial Accounting but also for its activities in Management Accounting. Thus, BAR could likely experience a revival in Europe.

Chemnitz, December 2003 Tino Vordank*

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Tuomi, Ilkka:
Corporate Knowledge. Theory and Practice of Intelligent Organizations

Metaxis, Helsinki, 1999

Around ten years of research discussing resource knowledge and its management show us that we do not understand the process of knowledge creation in organisations sufficiently. Still after this intensive period, we find that knowledge management projects in companies often fail; even company consultants only claim to achieve 25 percent success in projects. Most misleading are knowledge management projects with a high orientation on IT. Even the new combination of knowledge instruments nor the introduction of incentive systems could help to overcome the disadvantageous effects of the first and second generation of knowledge management (distinction based on Tuomi 2002), which were AI-inspired or based on information systems using contextual information respectively.

From this viewpoint, Tuomi's theoretical ideas are still up to date. Published in 1999, Tuomi's dissertation starts with the question: 'What do we understand of the limitations and problems of common sense concepts of information and knowledge, and do these limitations have practical implications in everyday organizational life?'

Obviously, we do not understand enough. According to Tuomi, the following indications back up this assumption: *First*, knowledge management is often seen as a technological issue. Against this, Tuomi emphasises that technology is a relatively small part of any successful knowledge management program. It is still not unusual that 'information is often produced without any clear model of why someone would need it, and technology gets too much attention compared to organizational practice'. This leads to Tuomi's *second* indication, that tools and technologies cannot be utilised without a corresponding practice. In this view, it is not essential that single individuals know and act based on their knowledge. A conceptualisation of knowledge in organisations has to emphasise the link between knowledge and action as the basic constraint of social systems. Knowledge in organisations – corporate knowledge – is socially and culturally embedded, and it can only be generated through changes in organisational activities and practices. *Third*, Tuomi argues, 'that researchers often have been too quick in pointing out that organizations don't have real memory, sensemaking capability and intelligence, and that, of course, human beings are the unique hosts of these cognitive faculties.' The central idea of Tuomi's book the 5-A model of organisational knowledge generation deals with the concept that organisations are collective entities where it is possible to find similarities to intelligence as manifested in humans.

With *Corporate Knowledge – Theory and Practice of Intelligent Organizations*, Tuomi prepares the theoretical groundwork for the third generation of knowledge management (Tuomi 2002) that links knowledge and action/ practice to a more effective access to information. Consequently, Tuomi pursues questions concerning what role information systems play in knowledge management; how people create shared understandings about the world; what theoretical approaches enable us to understand how to connect information and communication into action; and how organisational knowledge actually emerges. It is interesting to read that these questions emerge from the knowledge management project 'Future Watch' at Nokia Research Center and Nokia Telecommunications that failed in the early 1990s.

To build up an alternative perspective, in part II Tuomi presents and compares current conceptualisations of knowledge and knowing in organizations: (1) the 'prominent empiristic and positivistic view' represented by Bertrand Russell and (2) the 'constructivistic and phenomenological view' represented by Henri Bergson (based on Vygotsky). With these authors he contrasted two opposite epistemologies: Russell understands the 'human mind as an invariant intelligent faculty' and investigates objects, representations and the logic of thought in a positivistic tradition. Compared with this, Bergson 'traces the emergence of perception and cognition both through the evolution of living beings'; in a constructivist tradition, Bergson's emphasis is on process, action and biological body. Tuomi points out that the traditional positivistic view works, 'but only after all the individual and cultural history is in place, giving the context against which conventional objects and distinctions make sense. More important, these conventions are not chosen by individuals (…), but they are results of collective social processes, where shared reality is constructed and communicated'. This leads Tuomi to another view of perception, knowledge and intelligence: in the first instance, he refers to approaches that deal with the role of cognition as the capability to creating distinctions, which are developed further by Merleau-Ponty, Maturana, Varela and Baetson.

Ideas of Vygotsky and Bergson have been elaborated using the theory of Autopoietic Systems (by Maturana/ Varela) and the theory of Social Systems (by Luhmann). With it Tuomi 'shows how advanced forms of thinking and knowing rest on communication, meaning processing, and the creation of collective meaning'. Maturana and Varela explain social phenomena as a consequence of structural couplings between two autopoietic units which they call *communication*. After Tuomi, Luhmann continues the research and changes the line of argumentation and describes social systems as meaning processing systems. Consequently, social systems are not groups of individuals or groups of human beings, which contrasts to Maturana's and Varela's understanding of communication as dependent on two specific interacting units. Social systems in Luhmann's perspective comprise of communicated meanings.

On this basis, Tuomi is able to discuss corporate knowledge as a social phenomenon. Organisations manage their knowledge at different levels (human-in-society, community of practice, community of communities); organisations can also be viewed as a social tool in which stocks of knowledge are embedded and in which actors can navigate in the same direction. In this view, knowledge is a word for a relatively stable accumulated meaning structure of an organisation.

In a developmental view, knowledge is not stable. Tuomi recognises the SECI model by Nonaka and Takeuchi as a major contribution in theory and praxis of knowledge management. With SECI, Nonaka and Takeuchi created a dynamic model of how knowledge emerges in organisations and how it can be transformed into concepts, artefacts etc. that change organisational behaviour. According to Tuomi, this model gives some interesting possibilities for re-interpretation and extension for different reasons: the underlying knowledge concept of SECI is individualistic; the development of advanced cognitive functions which are collective embedded are not discussed; the role of language and text on individual and social level is not examined; the analysis of development and dynamics of social and individual stocks of knowledge; and the role of collective memory and culture remain outside the model. Moreover, in Nonaka and Takeuchi's model there exists no explanation for new forms of meaning processing such as electronic collaboration tools.

With the 5-A model Tuomi tries to extend the SECI model and integrates both individual and social levels of knowledge generation. For that purpose, he distinguishes different modes of knowledge generation that lead to actions (production, communication, reflective thought) in organisations: articulation, anticipation, appropriation, and accumulation. The first two modes generate knowledge which is new for society, whereas appropriation produces knowledge which is only new for the individual learner. Accumulation underlies all meaning processing/ knowledge generation processes. Based on physiological change in the cognitive system and meaning relations, accumulation produces artefacts which become objects of organisational action. For all these modes of knowledge generation, Tuomi defines three levels of knowledge processes in organisations, namely human-in-society, community of practice, and community of communities, which he then integrates into the 5-A model. Finally, he is able to describe the various phases of the SECI model in more detail: without denying the links between the analysis levels, phases of internalisation and socialisation refer in this model to the analysis level 'human-in-society', whereas the phases of combination and externalisation refer to the 'community of practice'. At an organisational level Tuomi identifies three main knowledge processes as innovation, renewal, and growth, all of which can be said to be a 'generator and maintainer of structures that enable both organizational stability and its change'.

To summarise the book, Tuomi presents a considerable amount of work about the history of understandings of knowledge, knowledge creation and its vast theoretical background. With the 5-A model Tuomi gives organisational knowledge its own quality distinct from knowledge and in an exclusive reference to individual cognition he defines knowledge as a dynamic phenomenon of different analysis levels.

Above all I would stress the link between knowledge and action spotted by Tuomi, because these considerations are important for the discussion of information technologies. It highlights the fact that information technologies are only adopted when users integrate them in meaningful ways into existing social practices. This makes a long story short but it encourages us to reconsider a long tradition that lead us to believe that knowledge management is more or less a technological issue. With Tuomis work we have to put social practices and meaning processes alongside knowledge management. In this sense, we find a very practice-oriented aspect in Tuomis work.

The requirement to conceive a principle that enables managing and mobilizing knowledge in organisations is not easily fulfilled. Tuomis book finishes with two practical implications; one for measurement in intelligent organisations and another for organising strategic knowledge creation. For Melkas and Uotila who wrote a review about this book in 2003 this is not enough, because they argue the title of the book does not correspond very well to the contents – the theoretical part overshadows the practical part. From my point of view, on one hand I would emphasise that the practical implications are rarely compared to the model. On the other hand, we have to see that this theoretical groundwork is necessary for changes in managing and mobilizing knowledge in organisations, because it answers practical questions (for instance at Nokia). If we look to Tuomis later publications *Networks of Innovation* and *The Future of Knowledge Management*, we find further developed and more clearly formulated ideas for practical implications. In this wider view, I cannot support the review of Melkas and Uotila.

Nevertheless the book of Tuomi does not influence the knowledge management discussion strongly as might be expected. This might be due to the fact that the vast number of theories in the book leave, as Melkas and Uotila mention, the reader somewhat puzzled. Perhaps *Networks of Innovation* will attract more attention.

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Chemnitz, December 2003 Andrea Fried*

Neely, Andy (ed.):

Business Performance Measurement. Theory and Practice

Cambridge University Press, 2002, ISBN 052180342X, € 55,58

During the 1980s it became ever clearer that the leading industrial nations were developing towards service and information societies. Accordingly, new focal points in the economy and companies as well as in their scientific reflection and intervention have emerged. Among other things *performance* is no longer understood only in a narrow physical-technical or financial sense. A wider, multi-dimensional range of causes, aspects and consequences of business performance and its measurement were identified.

In recognition of this, *Andy Neely*, director of the Centre for Business Performance at Cranfield School of Management, has edited a book about *'business performance measurement'*. This anthology is intended to be a state-of-the-art book and comes in six chapters. In the first chapter some functional analysis of performance are provided. Contributions towards a theoretical foundation of performance measurement are offered in the second chapter. They are followed in the third chapter by papers which shall give an overview of different methodologies and operational frameworks of measurement systems. The fourth chapter is more about practical applications of performance measurement, the fifth chapter about specific measures of operational performance, and in the last chapter some possible trends are being described.

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Taken together, the papers are not only well elaborated but deliver interesting insights and they give the reader much food for thought. But this anthology additionally makes a high claim: Not only shall a comprehensive overview about the problem of operational performance measurement be provided but also a contribution to the methodological foundation of operational performance measurement as a profession. If one assesses the book with regard to these targets a more equivocal picture appears.

In the first chapter operational performance is considered with respect to the functional areas of accounting, marketing, operations and management. Although the latter contribution is laid out relatively broadly and an interesting suggestion for an 'activity-centric performance measurement' is provided it is hard to understand why such functional areas as Human Resource Management or organizational aspects are not also considered. Hence, individual and social dimensions of performance are not being taken into account sufficiently. This might reduce possible insights since it is widely known that especially operational performance and value added have their roots in people's skills and (social) action. Because of the restriction on the four functional areas, which are surely of considerable importance, the reasoning remains trapped in a relatively narrow understanding of operational value drivers and indicators.

The second chapter is about the theoretical foundation of performance measurement. In the first two papers by Lebas / Euske and Austin / Gitell, very structured and thoughtful ideas concerning performance and the design of performance measurement systems are provided (however, the empirical example of performance measurement in the airline industry in the second paper, although very interesting, might be in this chapter out of place). Against that, the papers by Osterloh / Frey concerning the impact of performance-related salary components on motivation and by Emmanuel about the tolerance of senior managers toward dysfunctional behaviour may not contribute much to a theoretical foundation of performance measurement. Here, it might be argued that the space could have been used better.

For example, the subjectivity and interest-orientation of all measurement and valuation (especially in economy and economics) are not sufficiently made a subject of discussion. Although it is "merely" about measurement and not about the management of performance; *who's* perceptions and objectives are being taken into account and being measured by *which* criteria and *how* they are linked to other measures (headwords: main targets of a company, stakeholders' interests, short-term and budget orientation versus long-term and sustainable value-driver orientation) are of principle relevance for *every* operational performance measurement (system) and an important part of their theoretical foundation.

And another paper (instead of the two criticized) might have been helpful in this theoretical part of the book; there is a general understanding in all papers of the book that the realization of strategy and operational daily business should not be (only) oriented on financial targets and measures. On that score it may have been more important to investigate systematically the causes and value-drivers of operational performance (*'intangible assets'*). For this, it would have been very helpful to discuss which criteria, indicators and measures for different types or categories of intangible assets (e.g. human, social, cultural and organizational capital) can be formulated – and to what extent this is possible.

The third chapter is about concepts and methodologies of performance measurement systems. Here, mainly new models are described which provide interesting as well as challenging ideas. In addition, one would have, perhaps, expected at least one paper which provided a systematic, comprehensive and critical overview of the (current) operational performance measurement systems and frameworks – or, at least, which investigated the relevant literature on this topic.

Whereas, hence, some gaps can be identified in the first three theory-oriented chapters (which could be easily closed in a future edition), the more practice-oriented chapters four and five are really state-of-the-art or even go beyond. The demonstration of practical applications in the fourth chapter (benchmarking, measurement of marketing performance, as well as three empirical studies of performance measurement systems in private and governmental organizations) provide many fruitful insights. In addition, the approaches of specific measures and indicators in the fifth chapter (especially concerning customer and employee satisfaction as well as innovation) are excellent and highly topically.

The sixth and final chapter about possible trends can, again, satisfy only partly; the chapter comprises two papers about the measurement of knowledge work and e-business. These two areas definitely will have great or even increasing meaning for performance measurement in the future. Again, like in the theory-oriented chapters it would have been also interesting to reflect more generally and systematically on the (coming) possibilities and sense of the measurement of performance in companies and their environment.

Summing up: Neely's book is based on an interdisciplinary approach and goes well beyond a previous understanding of performance in the narrow sense of controlling. But this book is also meant to work against a (much too large) expanse of the field of performance measurement as well as a lack of agreement about the main topics and their importance. This intended restriction (and attempted drawing of boundaries?) and concentration on a supposed "core" might be seen as too narrow and, hence, more likely counterproductive. The renunciation of a principle approach of individual and social aspects of business performance as well as some gaps in the investigation of methodological, theoretical and conceptual aspects can be regarded as weaknesses of the book. In this sense, the anthology does not meet fully the (ambitious) claim mentioned by the editor to portray the state-of-the-art of performance measurement. However, if one takes this claim aside, there is hardly a book at present, which offers such an amount of well-thought papers and different viewpoints concerning business performance measurement; it provides not only a good overview and offers a wide variety of interesting ideas and insights but it urges the reader to comment and to think further. *In this sense* it is, indeed, a contribution to the further development of performance measurement worth reading.

Chemnitz, December 2003 Thomas Diefenbach *

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Lesser, Eric L. (ed.)
Knowledge and Social Capital

Butterworth-Heinemann, Boston et al. 2000, € 25,89

Social and intellectual capital – at the beginning of the debate usually referred to as human capital – are popular concepts of organizational research both inside and outside of the discipline. The editor of the reviewed volume even sees them as resources of knowledge based economics. Indeed, economic change – and closely connected to it – organizational change are responsible for the growing interest in the concepts. But their conceptional status is weak. Additionally they are based on a wide variety of theoretical grounds and evoke many and different associations. Therefore it can be considered a question of time until social and intellectual capital become hollow formulas in the realm of organizational myths and fashions. The more it deserves attention, that the reviewed volume is edited by a practician of knowledge management thereby encompassing theoretical foundations, applications and empirical studies.

The volume contains the classic article "Social Capital in the Creation of Human Capital" by Coleman as well as Sandefur's und Laumann's "Paradigm for Social Capital". Less often citet but advisable as well are Portes' contribution on the origin and usage of the concept of social capital in modern sociology and Adler's and Kwon's essay "Social Capital: The Good, the Bad and the Ugly".

The gathered applications discuss social and intellectual capital in the sense of organizational or competitive advantages (Nahapiet/Ghosal), as virtual communities (Blanchard/Horan), relationships in Silicon Valley (Cohen/Fields) and self-control centered problems (Arnold/Kay).

Three empirical studies complete the volume. Burt ("Contingent Value of Social Capital") and Walker et al. ("Social Capital, Structural Holes and the Formation of an Industry Network") combine social capital and social network analysis. Mayerson, however, tries to evaluate the value of social captial by stduying its influence on management compensation.

The volume provides an extensive insight into the current anglo-saxon sociological debate on social capital. Unfortunately the volume does not contain original texts – except from the editor's introduction alone. On the contrary, the articles are entirely reprinted essays taken from sociological or management journals. The volume, however, may be recommended as an introduction into the topic of social capital and may be a good investment for those of us, who don't want to search for their tattered copies of the classical studies.

Flensburg, 15. December 2003 Wenzel Matiaske*

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