The Role of Trust in Accounting Research

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Abstract

The purpose of this paper is to present a review of the knowledge about the trust concept and its application within the accounting research context. This is done by examining the different ontological and epistemological assumptions that accounting research are based on, by relating these assumptions to various conceptions of trust used in accounting research, and by revealing the explicit and implicit role that is given to trust in accounting research. The review is based on articles published between 1995 and 2002 in eleven influential accounting iournals.

The results show that few accounting articles are explicitly related to trust. Our review supports observations regarding the absence of empirical research made in previous research. Our classification of epistemological and ontological assumptions resulted in an even distribution between the mainstream and alternative approaches. The use of trust in the selected articles showed four different types reflecting an increasing role of trust in explaining accounting phenomena. To summarise, our review produces a dissociated impression of the role of trust in accounting research.

Introduction

Company annual reports have become the target of heavy criticism during the last few years. The trust in accounting and auditing – both crucial social institutions – has been seriously damaged because of revelations in cases like e.g. Enron and WorldCom. Although the importance of trust is generally acknowledged, the effects of accounting on the trusting party are still to be explored, together with the producers considerations whether to disclose information or not. Against this background, empirical research of trust and its role in communicating accounting information is urgent. A major step in this direction could be to develop measures of trust – a real challenge since there is little consensus of what trust actually entails.

Claims for research to develop measures of trust in order to empirically investigate how trust relationships affects accounting practice have been raised since the beginning of the 1990s (e.g. Neu, 1991a, 1991b). Since mid-90s, a number of attemptions have been made to establish some consensus around the concept of trust by the use of contributions made within other disciplines, to design empirical research within the accounting area (e.g. Davis, 2000; Ross 1994, 1995). However, there is need to make a review of the attempts made and reflect upon what has been gained.

The purpose of the paper

The purpose of this paper is therefore to present a review of the knowledge about the trust concept and its application within the accounting context. This is done by looking into the different ontological and epistemological assumptions that accounting/trust research is based on, by relating these assumptions to various conceptions of trust used in accounting research, and by revealing the explicit and implicit role that is given to trust in accounting research.

The selection of articles

The journals covered in this literature review include eleven influential accounting journals and journals important to the accounting field. The journals are: Accounting, Auditing & Accountability Journal, Accounting, Organizations and Society, Accounting Review, Contemporary Accounting Research, Journal of Accounting and Economics, Journal of Accounting Literature, Journal of Accounting Research, Journal of Finance, Journal of Management Accounting Research, Journal of Accounting and Public Policy, and Management Accounting Research.

The review covers articles published between 1995 and 2002. It is during this period research to empirically investigate the role of trust within the accounting context has been initiated, thus motivating the time perspective. The first step in the search procedure was to investigate how many articles were published within each journal each year. All abstracts (or the introduction when abstracts are not used in the journals) have been copied and organised into 11 files. Table 1 summarises the number of article abstracts in each of the 11 journals.

The second step in the selection procedure was to search through the journals to sort out the articles where the word "trust" appeared somewhere in the full text¹. The search for other concepts closely related to trust, such as confidence, contract and opportunism were

¹ Results referring to AAAJ contain only articles with "trust" in the abstract since we got 72 hits on "trust" when searching through the full text and only two when searching through the abstracts. This decision was made due to time limitations.

considered, but it was decided to exclude them from this version of the paper². Also, articles where "trust" is used to signify an organisation or a group of people have been excluded from this review.

	1995	1996	1997	1998	1999	2000	2001	2002	Total
Accounting, Auditing & Accountability Journal	20	30	28	24	33	28	24	26	213
Accounting Organizations and Society	33	37	40	40	34	37	32	32	285
Accounting Review	29	28	27	24	22	19	29	40	218
Contemporary Accounting Research	*	*	30	23	32	28	28	26	167
Journal of Accounting and Economics	27	30	36	18	47	40	24	22	244
Journal of Accounting Literature	5	4	4	6	4	8	3	**	34
Journal of Accounting and Public Policy	10	14	15	18	19	19	18	10	123
Journal of Accounting Research	20	28	30	30	35	25	35	45	248
Journal of Management Accounting Research	7	9	9	13	5	5	6	10	64
The Journal of Finance	65	70	83	94	100	119	96	103	730
Management Accounting Research	22	20	23	22	19	24	21	22	163
Total	238	270	325	302	350	352	316	336	2489

^{*} The issues from 1995-1996 are missing.

Table 1. Number of article abstracts in each journal, 1995-2002.

The review results – a quantitative analysis

As it turned out, 11 articles were found that made use of the trust concept. The distribution between the journals and over the years 1995-2002, is shown below in Table 2.

	1995	1996	1997	1998	1999	2000	2001	2002	Total
Accounting, Auditing & Accountability Journal	-	_	1	-	_	-	-	1	2
Accounting Organizations and Society	-	_	1	1	1	1	1	-	5
Accounting Review	-	_	_	-	-	-	-	1	1
Contemporary Accounting Research	*	*	_	-	_	-	-	-	-
Journal of Accounting and Economics	-	-	_	-	-	-	-	-	-
Journal of Accounting Literature	-	-	1	-	-	-	-	**	1
Journal of Accounting and Public Policy	-	_	_	ı	-	-	-	-	-
Journal of Accounting Research	-	_	_	-	-	-	-	-	-
Journal of Management Accounting Research	-	-	1	-	-	-	-	-	1
The Journal of Finance	-	-	-	-	-	-	-	-	-
Management Accounting Research	-	_	_	-	1	-	-	-	1
Total	-	-	4	1	2	1	1	2	11
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^{*} The issues from 1995-1996 are missing.

Table 2. Number of articles using trust according to the selection procedure.

What can be seen in Table 2 is that the numbers of articles referring to trust are extremely few in relation to the total number of articles published (see Table 1). However, the interest in the area has been unchanged during the years 1995-2002. Another thing worth noticing is that

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^{**} The issues from 2002 are missing.

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² Due to time limitations.

trust more frequently appears in non-American journals, especially in journals that allow alternative research approaches. The articles, shown in Table 3 below, support this observation.

DeZoort, F.T. and Lord, A.T., (1997), A review and synthesis of pressure effects research in accounting, *Journal of Accounting Literature*, vol. 16, (pp. 28-85).

Fligstein, N., (1998), The Politics of Quantification, *Accounting, Organizations and Society*, Vol. 23, No 3, pp. 325-331.

Jacobs, K., and Kemp, J., (2002), Exploring accounting presence and absence: case studies from Bangladesh, *Accounting, Auditing & Accountability Journal*, Vol. 15, No 2, pp. 143-161.

Jönsson, S., Macintosh, N., B. (1997), CATS, RATS, and EARS: Making the Case for Ethnographic Accounting Research, *Accounting, Organizations and Society*, Vol. 22, No. ³/₄, pp. 367-386

King, R. R., (2002), An Experimental Investigation of Self-Serving Biases in an Auditing Trust Game: The Effect of Group Affiliation, *The Accounting Review*, Vol. 77, No. 2, pp. 265-284.

Luft, J. L., (1997), Fairness, ethics and the effect of management accounting on transaction costs, *Journal of Management Accounting Research*, Vol. 9, pp. 199-216.

van der Meer-Koistra, J., Vosselman, E.G.J., (2000), Mangement control of interfirm transactional relationships: the case of industrial renovation and maintenance. *Accounting Organizations and Society*, Vol. 25, pp. 51-77.

Seal, W. and Vincent-Jones, P., (1997), Accounting and trust in the enabling of long-term relations, *Accounting, Auditing & Accountability Journal*, Vol. 10, No 3, pp. 406-431.

Seal, W., Cullen, J., Dunlop, A., Berry, T., Ahmed, M., (1999), Enacting a European supply chain: a case study on the role of management accounting, *Management Accounting Research*, Vol. 10, pp. 303-322.

Tomkins, C., (2001), Interdependencies, trust and information in relationships, *Accounting, Organizations and Society*, Vol. 26, pp. 161 – 191.

Whitley, R. (1999), "Firms, institutions and management control: the comparative analysis of coordination and control systems." *Accounting, Organizations and Society*, Vol. 24, pp. 507-524.

Table 3. Titles of the articles using trust according to the selection procedure.

The review results – a qualitative analysis

The qualitative analysis of the 11 selected articles started by reading the text and summarising the content. Thereafter the basic epistemological and ontological assumptions were identified. According to Chua³ (1986) accounting research can be classified into three distinct categories, the mainstream accounting thought that dominates accounting research and two alternative categories of thought, i.e. the interpretative and critical perspectives. Each perspective is imprinted by assumptions about 1) how knowledge is produced, 2) the object of the study and 3) the link between knowledge and the empirical world (see Table A).

CLASSIFICATION OF ASSUMPTIONS

- A. Beliefs About Knowledge
 - Epistemological
 - Methodological
- B. Beliefs About Physical and Social reality
 - Ontological
 - Human Intention and Rationality
 - Societal Order/Conflict
- C. Relationship Between Theory and Practice

Table A: Chua, 1986, page 605

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These different assumptions were chosen since they brought to the foreground the essential philosophical differences between the three categories of thought. Based on Chua's frame of reference, the selected articles have been categorised into the three given alternatives, i.e. the mainstream, interpretative and critical perspective. In table B below, the assumptions of each perspective are summarised. In some articles the underlying assumptions have been more easily detected than in others. We have tried to find distinctive features of the perspective embossing each article.

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³ Chua, Wai Fong, Radical Developments in Accounting Though, The Accounting Review, Vol. LXI, No 4 October 1986.

MAINSTREAM	INTERPRETATIVE	CRITICAL
Beliefs About Knowledge Theory is separate from observations that may be used to verify or falsify a theory. Hypothetico-deductive account of scientific explanation accepted.	Beliefs About Knowledge Scientific explanations of human intention sought. Their adequacy is assessed via the criteria of logical consistency, subjective interpretation, and agreement with actors' common-sense interpretation.	Beliefs About Knowledge Criteria for judging theories are temporal and context-bound.
Quantitative methods of data analysis and collection which allow generalization favoured.	Ethnographic work, case studies, and participant observation encouraged. Actors studied in their everyday world.	Historical, ethnographic research and case studies more commonly used.
Beliefs About Physical and Social reality Empirical reality is objective and external to the subject. Human beings are also characterized as passive objects; not seen as makers of social reality.	Beliefs About Physical and Social reality Social reality is emergent, subjectively created, and objectified through human interactions.	Beliefs About Physical and Social reality Human beings have inner potentialities which are alienated (prevented from full emergence) through restrictive mechanism. Objects can only be understood through a study of their historical development and change within the totality of relations.
Single goal of utility-maximization assumed for individuals and firms. Means-end rationality assumed.	All actors have meaning and intention that are retrospectively endowed and that are grounded in social and historical practises.	Empirical reality is characterized by objective, real relations which are transformed and reproduced through subjective interpretation.
Societies and organizations are essentially stable; "dysfunctional" conflict may be managed through the design of appropriate accounting control.	Social order assumed. Conflict mediated through common schemes of social meaning.	Human intention, rationality and agency are accepted, but this is critically analysed given a belief in false consciousness and ideology. Fundamental conflict is endemic to society. Conflict arises because of injustice and ideology in the social, economic, and political domains which obscure the creative dimension in people.
Relationship Between Theory and Practice Accounting specifies means, not ends. Acceptance of extant institutional structures.	Relationship Between Theory and Practice Theory seeks only to explain action and to understand how social order is produced and reproduced.	Relationship Between Theory and Practice Theory has a critical imperative: the identification and removal of domination and ideological practices.

Table B: Chua, 1986, pages 611, 615, 622

In the following we will present the beliefs concerning knowledge and physical and social reality together with the definition and the use of trust in each of the 11 articles. The presentation follows the chronological order for the publication of the articles.

DeZoort and Lord, 1997

Beliefs about knowledge

This article covers literature and articles concerning the different types of pressure that creates occupational stress of accounting professionals, primarily within the auditing profession. Most of the literature presented involves empirical studies, which seems to make use of quantitative methods to verify or falsify theories. The authors also present a model consisting of x-y-z, where x is pressure, y is stress and z the strain outcomes, e.g. dysfunctional behaviour. Therefore, the authors seem to adopt the mainstream perspective in this aspect. Furthermore the theories about pressure, and the different forms of pressure constructs presented by the authors, are all separated from the empirical studies and observations by which they could be verified or falsified.

Beliefs about physical and social reality

The research presented by the authors assumes the individual to be goal-rational. Pressure can make individuals act irrationally and in dysfunctional ways. Knowledge about different types of pressure and their effects on individuals can be used to minimize the cost of dysfunctional behaviour as it relates to performance. Performance is defined as carrying out tasks in a situation that allows optimal outcome. An example of this is that professionals are expected to act in ways they believe minimize the risk of loss due to litigation.

The research the authors present assumes the individual to be goal-rational as stated above, thus the article could be characterized as mostly adopting the mainstream perspective. But there is an exception concerning the general accountability and justification pressure literature. This literature is described as being "developed primarily in an auditing context as a response to criticism of unrealistic experimental studies that assumed auditors work in a social vacuum." The authors continue to state, "Researchers have argued that accountability and justification are important parts of accounting professionals' real world judgements and decision environments." If the authors of the article agree or not in this respect, is not explained further.

The definition and use of trust

Trust is not the primary focus of this article. The authors states that acting in a dysfunctional way because of pressure, will lead to poor quality in the work of the accountants. And poor quality performance will diminish faith in a profession dependent on public trust. The definition of trust is not further explained nor discussed in the article, but the assumption is that poor quality of work of accounting professionals will decrease public trust.

This article is hard to classify using Chua's (1986) three categories of classification of accounting research, since it is a review article. However, the authors assume e.g. the individual to be goal-rational, optimal outcome of performance is possible etc. thus indicating a mainstream perspective taken by the authors.

Luft, 1997

Beliefs About Knowledge

This article is purely theoretical and no empirical evidences are given to support the theoretical reasoning. There is however, a broad literature review in the article, and the author uses other researchers' empirical findings to support her theoretical discussion. The article gives the impression of taking the mainstream view of knowledge, with theory separate from observation. The study is not done as a hypothetico—deductive study but the author calls for empirical studies to be carried out to test the additional exogenous factors she is putting forward to mainstream agency models.

Beliefs about physical and social reality

This article fits well into Chuas category of mainstream accounting research. Social reality is viewed as fairly objective and external to the individuals acting in reality. Some objections can be raised toward this classification since the author questions utility maximization as the sole preference for individual actions. Without rejecting the utility maximization the author calls for additional representations of preferences in order to gain better descriptions of cause-effect relationships⁴

The definition and use of trust

Trust is not the focus of this article, but is used as one amongst many others exogenous variables to explain additional representations of preferences concerning human actions and intentions (fairness, trust, accountability, integrity, conscience). By this, the author challenges the simple self-interest model to predict behavior in empirical research. Fairness is put forward as an alternative explanation, and the author calls for a more balanced view of human behavior than the antithesis of altruistic and self-interest influenced research assumes.

Seal and Vincent-Jones, 1997

Beliefs about knowledge

The authors use two different cases to specify the empirical conditions under which formal accounting and contracting processes are supportive of, or inimical to, the development of trusting and co-operative long-term relations. They do not inform the reader how they have gained knowledge about these cases, but it is evident that the authors have carried out empirical work involving the two cases. The article takes a critical view of knowledge since the analysis is grounded in the social and historical practices of the cases. The analysis combines detailed historical explanations of organisational structures and processes which show their societal linkages.

Beliefs about physical and social reality

The two cases are used to illustrate, each of their own, but also when compared, different ideologies and changes in ideology. The focus on social reality is evident in the critical approach, as is the opinion that a distinction between societal and organisational levels of analysis are without meaning since the two levels reflect one another. The material world, e.g. physical objects, may involve forms of domination that are of interest to the critical researcher, but are not paid very much attention to in the article.

⁴ This is very similar to the Whitley article, presented below.

The definition and use of trust

The article contains an elaborated discussion on the concept of trust. From this can be learnt that "trust is a solution for specific problems of risk. [...] trust implies going beyond basic activities and presupposes a situation of risk, choice and social engagement [...] a lack of trust results in an unwillingness to take risks in areas like saving and investment. [...] (p.408). In the analysis, the authors differentiate between systemic trust (society based) that does not derive from emotion, but rather has a "presentational" base which is activated by the appearance that "everything seem in proper order" and a localized (organization based). Trust is seen as a quality of social relationships that may affect and may be affected by accounting-contracting practices. As such it is a concept with explanatory power as well as a concept that is in need of exploration and a phenomenon in need of explanation.

To summarise, the article is very little informative concerning the empirical base for the theoretical reasoning. On the other hand, it is the more informative about the theoretical works of others that are used.

Jönsson and Macintosh, 1997

Beliefs About Knowledge

The authors argue that researchers "must look closely at the relationship between the communicative practices of a particular social system and its power relationships with the wider world". They also claim that the production of narratives of meaning systems never can be just an act of translation and interpretations of the actors' beliefs, actions and communication habits but is first and foremost a political act.

Beliefs About Physical and Social reality

The authors indicate an interpretive perspective when they state that "The main concern is to understand how the actors construct meaning and interpret their social world." They claim that through research, a less distinct world can be brought into some kind of textual order. This can be done by, e.g., storytelling, narrating lives, context providing and symbol interpreting.

Another focus is how meaning is played out in the context of unequal power relations. It is claimed that actors or various interest groups play the game in order to shape organizational reality in their own favour. It is not enough telling a good and believable story, relations that underlie and shape cultural elements (creates meaning) must be taken in consideration. This indicates a critical perspective.

The definition and use of trust

"Trust has to do with rules of the game. A person feels obligated to follow the rules and expects others to do the same while they, in turn, reciprocate." The authors say that trust is something that can not be defined in few short sentences but can only be described in terms of examples with reference made to certain contexts. Trust relates closely to a number of concepts such as responsibility, competence, interaction, roles, expectations, sincerity, etc. Therefore, Jönsson says, "it becomes reasonable to try to record interaction and analyze, together with the participants, how actions and responses affect trust in order to get a first approximation of the phenomenon."

This article is a debate between the two authors. This makes it possible to categorize it into both the interpretive and the critical perspective.

Fligstein, 1998

Beliefs About Knowledge

The article gives an alternative interpretation of the cases in Ted Porter's *Trust in numbers*. Fliegstein argues that Porter's work is important and presents insights about quantification being a force for modernity, but he also argues that quantification is a language for negotiating the public sphere. Quantification is also deeply embedded in political and economic arrangements, not only historical but also in current arrangements. Quantification that dictates how and under what conditions these arrangements is used.

Fliegstein says that "Science is about intersubjectivity, and the fact that an individual's construction of facts and data has to be, in the end, reproductible", and this is hard to do in reality. One way to overcome this problem is quantification. Science tends to move towards quantification because of two important factors. First science rest on evidence and second science needs to have ways to control people. Control, in order to avoid, that people do not fudge evidence either intentionally or unintentionally.

The author points out the problems of production of evidence in science. He says that most of the disputes in social science journals are about the interpretation of evidence. Most of the work in social science is nonexperimental and this generates problems with interpretation and collecting of evidence. This leads to the existence of intentional or unintentional misinterpretation.

Beliefs About Physical and Social reality

Depending on the alignment of elites and their capabilities to act, accounting as a solution to problems will develop in very different ways. Differences between actors and audiences will also be a part of how the problem of control develops. The author says that social relationships that develops between groups, for example between audiences interested in accounting problems, has a huge effect on how the problem of control develops, in whose interest it is and hence the development of tools for control. This indicates that the author has a critical perspective. Other statements that the author do, that indicates the critical perspective, is that relationships between economic and political elites, and the scholars or professions are factors that determine how the professions evolved and what they are used for. The professions are embedded into existing institutions, which also made the practices more general across settings. This article fits into Chua's critical category.

The definition and use of trust

Quantification is about trust, but it is also about reproducibility and control. If one follows and analyzes someone else's dataset in the same way, the very least one could expect is to come to the same numbers. Perhaps trust is even more about power and control of political and economic elite than trust in numbers. Not just power as the ability to make someone do something they normally would not do, but the ability to make actors take a given system of power and authority for granted as well as support it.

Seal et al, 1999

Beliefs about knowledge

The article is based on a case study that was carried through over an 18-month period. The research was accomplished by observation of meetings, interviews and participating observation in two companies involved in a planned strategic alliance. The authors aim at explaining how management accounting may contribute to the development of dyadic business relations. An interpretative approach is taken in the article and reasons of human intentions are sought after. Previous research is used to build up the theoretical frame of reference, and empirical research within the area is referred to. Theory is used to interpret and explain the case study, meaning that theory and observations are intertwined. This clearly indicates an interpretative research approach.

Beliefs about social reality

This article fits quite well into Chua's interpretative category. The authors view social reality as subjectively formed and re-formed by interacting individuals. Consensus is desirable and is gained through negotiations of common ideas.

The definition and use of trust

This article deals with the role of accounting for improving transaction atmosphere in business relations. The authors use trust to explain organisational actions and the creation of trust is one of the main focuses of this article. They describe three types of trust; contractual, competence, and goodwill trust and argue that the involved parties in their study have attained the first two levels and are into the process of gaining the third level, goodwill trust. Openbook accounting is proposed to be means to gain this higher level of trust. Trust is discussed on individual basis, but it is argued that changes in personnel can affect the level of trust between organisations, i.e. good personal relations at the individual level facilitate sustainable trust levels between organisations.

Although this study can quite easily be seen as an interpretative research there are some signs that indicate that the authors have mixed different ontological standpoints (whether this is consciously done or not, is hard to say) e.g. the involved parties are referred to as "players", and the authors claim that trust can be used intentionally to reduce transaction costs.

Whitley, 1999

Beliefs about knowledge

Whitley does not conduct an empirical study in the article. Instead, he makes an attempt at outlining a framework for cause-effect relationships between exogenous factors and the design of management control systems. The article seems to take the mainstream view of knowledge, in that theory is separate from observations. However, there is no hypothetico-deductive study done and no quantitative methods of data collection and analysis are used (on the other hand, this is not an empirical article). Whitley uses previous research and his own knowledge about exogenous factors as statements about the real world, which indicates a mostly mainstream research approach. An additional indication of this is the evident acceptance of extant institutional structures.

Beliefs about physical and social reality

This article is not easily classified into either of Chua's categories. Whitley appears to view social reality as largely objective and external to the subjects that act in this reality. The subjects do not, however, focus on utility maximization as the one and only objective. Rather, within an objective social framework, Whitley is attempting to create more detailed and richer cause-effect relationships than are usually found within mainstream research.

The definition and use of trust

Trust has a relatively minor role in the article, as it is used as one of many exogenous variables used to explain control system arrangements. Whitley uses the concept of systemic trust, i.e. he is interested in people's trust in the functioning of the economic system rather than trust in specific individuals or organizations. More specifically, the focus is on actors' trust in the economic and legal system as an effective control mechanism. When this trust is high, formal rules can be used in management control systems. When this trust is low, management control systems are more based on personal control and supervision.

As mentioned, trust is used by Whitley as an exogenous variable, and it is seen as given in each national setting. Thus, he does not focus on the formation of trust in the process of providing accounting information.

van der Meer-Koistra and Vosselman, 2000

Beliefs about knowledge

The article is based on two case studies concerning the structuring of management control of interfirm relationship with regard to outsourcing certain activities. The authors start with a theoretical review of transaction cost theory and from this trust based approaches are made. The case research starts from a complex real-life context and then the cases are related to the theoretical framework.

Beliefs about physical and social reality

Social reality is viewed as objective and external to the individuals acting in reality. Human beings are bounded by opportunism and rationality. Utility-maximation is assumed for both individuals and firms, and rationality is of great importance. The article fits well into the mainstream category.

The definition and use of trust

In the article the authors use transaction cost theory and trust based theory when they refer to factors relevant for decision making. It is claimed that "trust is a variable which can be brought into action in a transactional relation and which can be strengthened by the parties by taking the right actions".

The role of trust is seen as an important factor for decision. The presence of trust between cooperating parties is especially important in situations characterised by uncertainty and strong dependencies. According to the authors, trust arises through learning and adapting processes. Such processes are necessary since they strengthen the relation between the parties, they make the relation more durable, they indicate that there is some room for change in the relation and they activate interaction between the parties.

Tomkins, 2001

Beliefs about knowledge

The author does not perform an empirical study. Tomkins discusses the relation between intensity of trust and the need for information to compensate for lack of trust. The author claims that this can be observed in relations between organizations, so there is a distinct difference between theory and practice. An underlying assumption in the article is that both intensity of trust and the need for information can be operationalised. This operationalisation gives the researcher variables to use in an equation to test the association between trust and information.

Beliefs about physical and social reality

The author uses the understanding of association between trust and information needs e.g. to construct accounting systems and dealing with the design of information in interorganizational relationships. Thus, accounting is considered as means.

The definition and use of trust

The author examines and explores the relationship between the intensity of trust and information needs in inter-dependent inter-organizational relationships. Trust is defined as "the belief by one party in a relationship that the other party will not act against his or her interests, where this belief is held without undue doubt and suspicion and in the absence of detailed information about the actions of that other party." Thus, the need of information is defined as a means for dealing with, and reducing, uncertainty when there is a lack of trust.

Using personal relationships as a model for the interaction between trust and information in relationships between organizations, such as corporate alliances and business networks, the author states that the association between trust and information is similar in both relations.

A superficial categorisation, leads us to the mainstream perspective (e.g. fictional case, deductive reasoning). However, the definition of trust diverges strongly from definitions conventionally made within mainstream research.

King, 2002

Beliefs about knowledge

This article can be used as an example of a study that fits Chua's mainstream category perfectly. The author does carry through an empirical study of an audit-trust "game". This is done by 2x2 full factorial experimental design. The study is also hypothetico-deductive and cause-effects of levels of trust and tendencies of fraud are investigated. Data collection and analysis are made with quantitative methods. The author does only to a small extent rely on previous research, but uses his own knowledge about exogenous factors to form statements about the world.

Beliefs about physical and social reality

Reality is external and objective and the author accepts fully the single goal of utility-maximization for the individuals and organizations. He assumes that individuals chose to cheat when they gain financially from it and when they can get away with it. This type of "dysfunctional" (from the principal's perspective) behavior is managed through various types of control; in this case the author puts forward auditor-group affiliation as a mean to

neutralize self-serving biases. Theory is detached from the observations and the "experimental parameters, such as the probabilities of fraud and probabilities of detecting fraud, do not necessarily represent real-world levels".

The definition and use of trust

Trust plays the main role in this article. Trust is not defined, but it is referred to as a form of reciprocal trust. The focus is on trust between individual managers and auditors, and trust is used to use the propensity of fraud from each party. The author suggests that "puffery" may contribute to the formation of reciprocal trust (i.e. the expectation of trust being repaid). The group participating in this experiment is divided into two groups, and given different information (to construct information asymmetry) and then one of the groups (managers) is told how they can use puffery to create trust and then act opportunistically. The study aims at showing how trust can be used opportunistically and it puts forward evidence that both auditors and managers do exhibit self-serving biases but that non-economical forces such as group affiliation can reduce such biases.

The author does not explicitly discuss ontological and epistemological topics, but this article typifies the ideas of conventional North-American mainstream research.

Jacobs and Kemp, 2002

Beliefs about knowledge

The research question in the article is whether the presence or absence of institutions (particularly institutions of the state) and/or literacy/illiteracy explains the presence or absence of accounting. The study is based on anthropological fieldwork, with one of the researchers interacting with and systematically observing the daily life of the actors keeping detailed analytical field notes, recording experiences and observations.

The author's interest in the actors and in the actor's subjective world is illustrated very clearly by the way the empirical data are presented. The use of the birth names of the actors tell the reader their life-story. The article is easily classified as belonging to the interpretative perspective. The awareness of the need to establish trust in order be able to discuss "accounting and profits" with the actors is expressing the need for agreement with actor's common sense interpretation.

Beliefs about physical and social reality

What is of interest to the authors of this article is the experiences and actions of the individual, how the actors interpret their environment and try to act in way that will promote their interests. Also in this respect the article is easily classified as an interpretative one, inscribing meaning and intention into actions, as well as assuming social order and individual action as producing and reproducing social order.

The definition and use trust

Trust is introduced as an explanation to the observations. It is "defined" by referring to social capital that is defined as "norms of reciprocity and trust, seemed to reduce the need for accounting". In this case, trust as such is not defined and does not play an important role in the article. Rather, it is made clear that there is a need of further research of the phenomena, particularly of the relationship between accounting and trust.

The epistemological and ontological and assumptions

Our classification based on Chua's categories resulted in an even distribution between the mainstream approach and the alternatives to the mainstream approach, i.e. the interpretative and critical approaches (see Table 4)

MAINSTREAM	INTERPRETATIVE	CRITICAL
DeZoort and Lord, 1997	Jönsson and Macintosh, 1997	Seal and Vincent-Jones, 1997
Luft, 1997	Seal et al, 1999	Jönsson and Macintosh, 1997
Whitley, 1999	Jacobs and Kemp, 2002	Fligstein, 1998
van der Meer-Koistra and Vosselman, 2000		
Tomkins, 2001		
King, 2002		

Table 4. The classification of the eleven articles based on Chua's (1986) categories.

It is important to point out the difficulties to identify the ontological and epistemological assumptions behind the research presented in the articles, since the authors rarely make explicit statements about their position. Generally, there is a lack of information in this matter and in some cases the given information points in different directions. The most extreme example of an article of this kind is the one of Jönsson and Macintosh, 1997, that clearly fits into both the interpretative (Jönsson's part of the dialogue) and the critical category (Macintosh' part of the dialogue).

All of the selected articles contain information about whether the research is based on deductive or inductive reasoning. As a rule, the authors describe the research design, give information about experimental conditions, data-collection etc. The epistemological assumptions are therefore more easily detected. However, the ontological assumptions are more difficult to reveal and also to make clear-cut decisions about. This means that our categorisation, as does every categorisation, involves some uncertainty.

Another reflection is that the articles categorised as belonging to the mainstream category are much more similar in their style of presentation of the research, than the articles within the alternative approaches. Moreover, they share the frameworks of economic theory such as transaction cost theory, agency theory etc. The articles within the interpretative and critical categories differ to a great extent from each other concerning e.g. the research design, the use of theory and the way the results are presented. However, apart from these differences the articles have in common the use of sociological theory in order to underpin their research.

Our review supports observations regarding the absence of empirical research about trust in relation to accounting made in previous research. Only three (one belonging to the mainstream category and two belonging to the non-mainstream categories) out of the 11 articles in our review, are based on empirical work solely designed to serve the purpose of investigating the role of trust in relation to accounting.

The use of trust

From the epistemological and ontological assumptions described, the use of trust was extracted and interpreted. The analysis resulted in four different types of use of trust reflecting an increasing role of trust in explaining accounting phenomena. Thereby it was possible to distinguish between four categories of the trust concept, i.e. the concept of trust was used either as a concept of everyday life, as a phenomenon to be explained, as a concept to be explored concept, or as attributed explanatory power, (see Table 5). Moving from left to right in table 5 we see that trust is used on a scale ranging from an everyday life concept, to a concept given explanatory power.

EVERYDAY LIFE CONCEPT	A PHENOMENA TO BE EXPLAINED	A CONCEPT TO BE EXPLORED	CONCEPT GIVEN EXPLANATORY POWER
DeZoort and Lord, 1997	Seal and Vincent-Jones, 1997 Fligstein, 1998	Jönsson and Macintosh, 1997	Luft, 1997 Seal et al, 1999 Whitley, 1999 van der Meer-Koistra, J. and Vosselman, 2000 Tomkins, 2001 King, 2002 Jacobs and Kemp, 2002

Table 5. The interpretation of the use of trust in the eleven articles.

What can be seen in Table 5 is that the trust-concept most often is used as a concept given explanatory power, which means that it is used to explain various accounting phenomena. However, out of seven articles in this category, only four contain explicit definitions of the concept. Tomkins (2001) is one of those who present an stipulative definition, while e.g. King (2002) only make a reference to trust as a form of "reciprocal trust", despite the fact that trust plays the main role in the article. Accordingly, the diversity in the ways used to grasp the meaning of the concept spans from no attemptions to define the concept (e.g. King, 2002), over to the ones who stress the need to grasp it contextually (Jönsson and Macintosh, 1997), on to those who make stipulative definitions (e.g. Tomkins, 2001).

Another reflection concerns the level of analysis of the concept of trust. While some authors discuss trust between individuals, others focus on trust between organisations or trust in systems. The clarity about how to grasp the meaning of the concept however is independent of the level of analysis.

Our observations indicate certain contradictions in the use of the concept of trust, which can be understood by using the generic categories of trust introduced by Rousseau et al⁵ (1998). They differentiate between

- *deterrence-based trust,* which is based on threats of punishment if consistent behaviour is not uphold;
- *calculus-based trust*, that is based on rational choice where willingness to trust is limited to specific financial exchange and where trust is present because the alternative is more costly,
- *relational trust* which results from continual interaction over time between trustor and trustee, and
- *institution-based trust*, founded on institutional factors such as legal regulations, social networks and shared norms that can facilitate in establishing both calculus-based and relational trust

The number of typologies is almost infinite and can be questioned. For example, deterrence-based trust seems to be a contradiction in terms and also, it is doubtful whether calculus-based trust, can be said to constitute a type of trust.

Concluding remarks

To summarise, our review produce a dissociated impression of the role of trust in accounting research. The many observations of the lacking empirical research therefore seems reasonable.

One important reason for this situation is the infrequent examination of epistemological and ontological assumptions connected with trust. If done, it may be found a certain disharmony between the assumptions that would - if solved, make empirical research more valid and easier to carry out.

There is a growing interest in the area which calls for a closer investigation of the role of trust in accounting. Today's research is lacking rigorous theoretical foundations. The implications for further research are to more systematically compare the results produced within different fields.

⁵ Not so different after all: A cross-discipline view of trust. *The Academy of Management Review*, 3/23, 393-404.

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