

Can institutional theory contribute to our understanding of information seeking behaviour?

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INTRODUCTION: AN ILLUSTRATING EXAMPLE

The primary ambition with this paper is to discuss the fruitfulness of integrating institutional perspectives in a model aiming at explaining information seeking-behaviour. We will be particularly preoccupied with institutionalised norms of appropriate behaviour. One recent example from Norwegian mass media serves to illustrate the point:

What kinds of information is it appropriate for members of a jury to take into consideration?

During the spring of 1998, Norwegian mass media abounded with reports from a murder case. A young boy of 20 was charged with having murdered and sexually abused his younger female cousin. There was no technical evidence against the boy. After long police interrogations, however, the boy confessed to have committed the crime. Even the boy's lawyer accepted the result of the police investigation, and the case seemed to be solved. After a while, however, the counsel for the defence identified what he believed to be major flaws in the police's chain of evidence and in the police investigation as a whole. On his own initiative he withdrew his client's confession. The boy, on his part, maintained that he had been pressed to confess and to believe that he suffered from a loss of memory. In the court word stood against word, witness against witness and expert against expert. In the stipendiary magistrate's court, the boy was sentenced. One professor of law from the Oslo University heavily criticised the sentence, accusing the judges for basing their decision upon information that they cannot legally take into account. When the case came up before the crown court, the professor once again warned the jury against taking inappropriate information into account. The jury is supposed to evaluate the factual evidence.

It cannot legally take more or less tacit information affecting the credibility of the different participants or 'gut-feelings' into account, he maintained. The court acquitted the boy of the charges. On the next day, however, the court decided in a civil case brought against the boy by the murdered girl's parents. The court sentenced the boy to pay the parents a compensation for the murder. For many it was difficult to understand how the court could acquit the boy of the charges in one instance and sentence him to pay compensation for the crime in the next. The judges' answer is that in a civil case they can appropriately take other kinds of information into consideration than in a criminal case and they are operating under different norms of tolerable uncertainty

The example demonstrates the importance of norms when rejecting and accepting information. What degrees of intolerance can appropriately be accepted in the two decision-making situations? What types of information are appropriate and inappropriate in different decision-making situations?

GENERAL MODES OF EXPLANATION IN SOCIAL SCIENCE

Research on information seeking behavior belongs to the social sciences. Modes of explanation in the social sciences can be classified along several dimensions. Two important dimensions relate to the micro/macro dimension and the rational/limited rationality or non-rational dimension. This is illustrated in Table 1 below.

	Micro	Macro
Rational	Economic models of individual decision making	Theories presupposing social and historical efficiency, e.g. marxism, functional theories
Limited rationality or non-rationality	Garbage can model of decision making	Mechanisms of historicist or Institutional self replication

Table 1. Modes of explanation in social science

When models aiming at explaining behaviour focus upon the individual's preference function we are dealing with explanations at a micro level. Models viewing behaviour primarily as a function of social structure, e.g., Marxist explanations, or models focusing upon behaviour as functional or dysfunctional in relation to functions which need to be fulfilled if society is to survive, e.g., society's need for a legitimate decision making process, belong to the macro level. In rational models of behaviour actors are expected to choose between different lines of action based on knowledge of the consequences each line of

action will have in relation to the actors preferences. If preferences are unclear to a decision-maker, if he does not know possible alternatives of actions or the consequences these actions will lead to, he finds himself in an ASK-situation. (Belkin, 1980). An information need exists.

The rational decision-maker, however, with clarified preferences and complete information on possible courses of action as well as their consequences might be regarded as an unrealistic construct. Human beings have a limited capacity for retrieving and storing information. We do not have complete rationality and follow satisficing procedures instead of maximising procedures. (Simon, 1968; March, 1994). Information seeking is governed by awareness. We seek information about those problems that we become aware of. What comes to our awareness may be accidental and behaviour might be seen as resulting from other factors than even a limited rational calculus, e.g., affections. The garbage can model of decision-making regards decisions as dependent upon the temporal ordering of problems (looking for solutions), solutions (looking for problems), decision-making situations (for example the adoption of a budget) and participants with limited awareness. (March and Olsen, 1976).

Marxist and functional social theories are examples of macro-level theories that can be described as rational. A certain behaviour can be explained as rational given the structure of class interests in society or as efficient or dysfunctional in relation to some function in society, e.g., socialisation.

Differences in behaviour between southern and northern Europe can be ascribed to southern Europe being Catholic, whereas northern Europe is predominately Protestant. Weber's analysis of the Protestant ethic is probably the most famous piece of research within this tradition. In such a perspective, institutions and behaviour are shaped and replicated due to macro level variables that are non-rational.

Information seeking behaviour can be deduced from the different modes of explanation:

- In models based on individual rationality, individuals can be expected to seek information up to the point where expected marginal costs equals expected marginal returns. A rational student whose preference is in achieving a certain grade in an examination, will stop studying that particular subject and turn to other tasks when he has read enough to reach that goal.
- In rational models, presupposing actors pursuing their self-interests, sender and receiver of information more often than not will have different interests. Information, therefore, being one of the means at our disposal in our efforts to realise our interests, will tend to be misrepresented. Thus, it is important to establish procedures securing the validity of information. Legal regulations committing the seller of used cars to information he gives for a certain period of time or making a bid committing for the person putting it forward are examples in this respect.

- Information seeking procedures might be rational from a macro perspective even though they are not rational from an individual perspective. Political systems depend on legitimacy for having their decisions accepted and implemented. Information procedures might enhance legitimacy by creating the impression that decisions are well founded and based on firm knowledge. Information gathering that is not rational from a strictly individual perspective might, therefore, be rational from a macro perspective¹.
- If, when searching for information for this paper, I contact the professor at the university who tutored me during my Ph.D. research instead of using the library of my college, that might of course be a rational strategy. But I might just as well be using my information need to fulfill other needs, in this case for instance social needs or a need to inform my former teacher about my professional progress.

Institutionalist theorists often call for a meso perspective to supplement micro and macro explanations. (See, for example, March & Olsen, 1989).

EXPLANATIONS IN INFORMATION SEEKING BEHAVIOUR

The approaches dominating the field of user studies seem to fall into the two left cells in table one. Although we do find approaches integrating the meso-level into their explanatory mode, few if any macro-oriented approaches are represented. If we are to summarise the approaches dominating user studies and research on information seeking behaviour in relation to Table 1 above, I believe it is correct to do that in the following way:

1. Most information seeking research takes the individual seeker or problem solves as its point of departure. Few, if any, take a macro perspective. Meso elements are important in several explanatory and interpretative models.
2. Most information seeking research is based in a rationalist tradition (or maybe it is more correct to say an *instrumentalist* perspective). The most consistent contribution in this respect is probably van House (van House, 1983). The perspective is the individual with certain preferences encountering a hindrance in his efforts to realize his preferences (or a hindrance in his movement through time and space). The problematic situation might lead to the experience of an *ASK-situation* (Belkin, 1980), to the recognition of an *incongruency* between actual and desired state of affairs (Wersig and Windel, 1985) or the experience of a need to *construct meaning* to be able to move on (Dervin, 1977; Kuhlthau, 1991; Kuhlthau, 1993), to refer to concepts from a

¹ Rationality is a term which, like information, has several meanings and connotations. It is, to point at just two examples, used to describe decision making procedures fulfilling certain criteria and to describe a state of mental health (being sane) making a person's behaviour predictable.

few of the most well known models in information seeking research. Information is a means to realize an end or overcome a problem. Dervin's important work from 1977 indicated a revolt against narrow rationalism and positivism. Wilson defines his own and Dervin's contribution as belonging to a phenomenologist tradition (Wilson, 1994). Kuhlthau includes affective and emotional variables and models the information seeker as a constructor of meaning. (Kuhlthau, 1991; Kuhlthau, 1994). But the means-end thinking dominates. Also the phenomenologists and constructivists have, as I read them, an instrumental perspective. Their point of departure is that if only rational elements are allowed into our models, they will be too restricted to allow us to develop efficient and real problem-solving information systems. Given the close links between LIS as a scientific undertaking and the practical world of developing efficient libraries and information systems, this is natural. But an instrumental perspective makes it difficult to explain anomalies, where information use seems to have no instrumental use and value. It has, for instance, been observed that managers and other decision-makers frequently ask for information without using it, still they ask for more information. (March & Olsen, 1989). Such phenomena are difficult to grasp within an instrumental perspective.

3. In spite of what has been said above, what I define as meso perspectives have been important models of information seeking. The concept of the invisible college (Price, 1963) is important in this respect. A field of research can be seen as a communication system that structures the way researchers belonging to that field search for information. Research to identify the information seeking profiles of professional groups such as engineers, scientists, social scientists, physicians, and lawyers etc., has been important in LIS. This bulk of research must rest on a premise that not only characteristics of the individual and the problem in question play a role in deciding information behaviour. Membership in a professional group contributes in deciding and structuring which sources are chosen, which channels, the amount of time spent on information seeking and -consumption etc.

The model proposed by Wilson in his frequently cited article from 1981, revised in 1996, also integrates the meso level in the form of work role and characteristics of the organization of which the information seeker is a member. (Wilson, 1981; 1996). A work role is a system of norms and expectations structuring how a person occupying a given position in the organization is to behave. As such it belongs to the meso level. Wilson's model, however, is a comprehensive one. It is both possible and probably necessary to concretize it by going into its different elements, e.g., the work role, and specify the role of that element. I interpret the contribution of Leckie, Pettigrew and Sylvain and Leckie and Pettigrew as an effort in this direction. (Leckie, Pettigrew & Sylvain, 1996; Leckie & Pettigrew, 1997). In their model the professional role is decomposed into e.g., service provider; manager, researcher, counsellor, educator and student.

Likewise they introduce awareness and source as independent elements in the model. Leckie also demonstrates the fruitfulness of an institutionalist perspective in her analysis of gender as an institution in agriculture structuring what kind of information female farmers has access to. (Leckie, 1996).

THE NEED FOR A REVISED MODEL

In spite of critiques of positivism and the inclusion of phenomenological and affective variables in models of information seeking and use, information use as an instrument to solve a problem or make a decision is a dominating perspective in the dominating models and approaches. But when observing information seeking and use, one finds anomalies that cannot be explained within such models. According to Feldman and March, the main deviation from that which should be expected if information were used as a rational instrument when making choices, is a conspicuous overconsumption of information. Decision-makers ask for reports without ever reading them. Then they ask for new reports. Expensive cost benefit analyses are being performed without being used. Information is being gathered after the decision has been made, not before etc. (Feldman & March, 1981).

Institutional theory as a possible point of departure

Institutionalism is not a unified and coherent perspective. There are important differences between the institutionalist theory of Philip Selznick and the so-called 'new institutionalism' coming to the forefront by the end of the seventies. What all institutionalists have in common, however, is the importance attached to *meaning* or *value* and scepticism to rationality. According to Selznick to institutionalize is to 'infuse with value beyond the technical requirements of the task at hand' (Selznick, 1983: 135). A given practice of information gathering can be more than an instrumental means to solve a problem. It might be 'infused with value' and therefore meaningful in itself. Probably we do find such value-infused practices of information seeking within the scientific community. Researchers practice ways of extensive information gathering which are hardly used by any other groups. To outsiders our extensive use of references might easily stand forth as namedropping which does not contribute to increased meaning or improved problem-solving. To researchers, however, the practice is meaningful. It is a rule that we take for granted without questioning it. Traditional institutionalism focuses upon the uniqueness of organizations. To the extent different professions develop and practice different ways of information seeking and use, traditional institutionalism offers a promising interpretative tool.

The institutionalism of Selznick can be interpreted instrumentally; it is possible to read his contribution as an arsenal of methods, dimensions and variables which the wise leader ought to take into consideration in order to understand his role properly. The so-called new institutionalism seems to be less practical and more interpretative. (March & Olsen, 1983; 1989; 1994; Brunsson, 1989; 1990; Brunsson & Olsen, 1990; Olsen, 1991; 1992; Meyer & Rowan, 1977; DiMaggio & Powell, 1991a; 1991b; Scott & Meyer, 1994). Organizational action is to a large extent seen as *symbolic* and ceremonial. Instead of acting according to rational norms, i.e., choosing the alternative maximizing our preferences, we are acting according to codes of appropriateness. What does a librarian, a lawyer, a physician etc. do in a given situation. Through our actions we pay heed to a set of common norms, standards and values and confirm our belonging. The term 'myth' is often used to describe the socially constructed reality constituted by the norms, standards and values we are acting in accordance with (Meyer & Rowan, 1977).

Whereas traditional institutionalism stresses the uniqueness of organisations and systems, isomorphy is an important concept in new institutionalism, i.e., the tendency that organizations and actors imitate each other and become alike. In a social system, e.g. the community of scientists, some actors have a greater prestige and a more central place than the rest. The more peripheral imitate those regarded to be central and successful actors. One example is probably the practice of peer reviewing. It has been an established practice in the natural sciences for decades and is now usual also in the social sciences and the humanities. (Gleditsch, 1998). The result is the growth of similarities between disciplines and professions.

Feldman and March relate the seemingly irrational information use to the following causes:

- Rules of organizing, e.g., a traditional division of labour between someone responsible for gathering information which someone else is supposed to use, is an incentive to gather information above that which is rational.
- It seems as if information more often is gathered in a surveillance mode than in a decision mode.
- Information is subject to strategic misrepresentation.
- Through the gathering of extensive information we pay heed to important social and cultural norms, e.g., the norm of rationality. (Feldman & March, 1981: 182)

The first and last point above are clearly institutionalist, whereas the second questions the common assumption in LiS that a *problem* which the information seeker shall decide upon or make a choice in relation to is the point of departure of information seeking. In the next paragraph we will try to develop a model based on institutional thinking.

TOWARDS A GENERAL MODEL OF INFORMATION-SEEKING BEHAVIOUR

In Figure 1 below we have tried to illustrate a possible model integrating institutionalised, information-relevant norms.

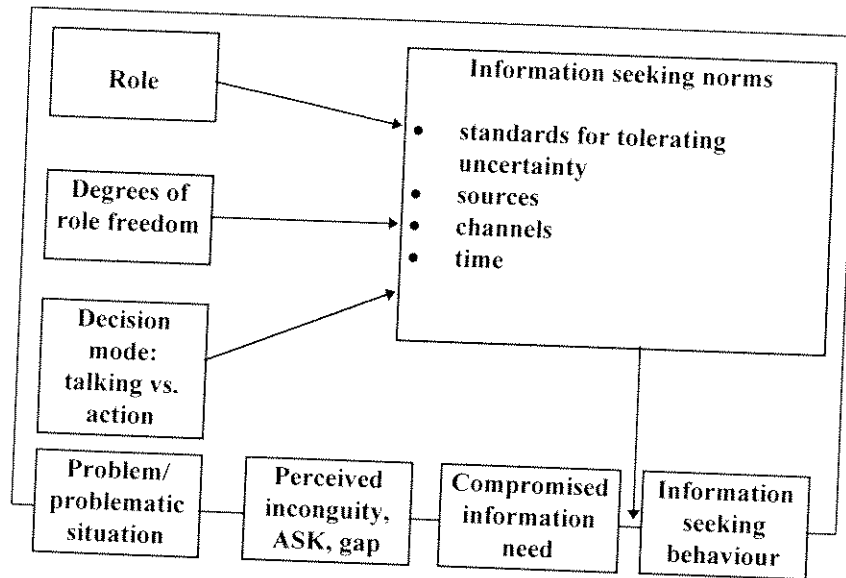


Figure 1. A general model of information seeking behaviour with information-relevant norms as an intermediate category of variables

The central line of the model is in harmony with that which can be described as the main logic in all models of information seeking behaviour developed hitherto: A potential user is confronting a problem, or a decision-making situation, or a gap needing to be bridged to move on. Confronting the problem, he seeks his own internal knowledge resources for ways and means to handle the problem, make a decision or bridge the gap. If his own mental resources and storage of knowledge are deemed to be relevant and satisfactory, everything is in order: he can happily handle the situation and move on. If not, he finds himself in a problematic situation, an ASK-situation (or an incongruity or a gap), thus an information need exists. The existence of an information need might or might not trigger information seeking depending upon the preference function of the individual in question. He might also decide a non-action strategy. The problem is not important enough to defend the investment of resources in information seeking and use, or he does not know how to go about finding relevant information. The individual might also decide to accept and act

under a high degree of uncertainty, a strategy which also will block further information seeking and use.

In this perspective the individual's information need can be described, revealed and identified. That is exactly what the librarian does in a reference interview. One might discuss how such interviews can be performed most efficiently, e.g., neutral questioning vs. other modes of interviewing, the importance of taking the stage in the problem-solving process into consideration and the modelling of the user as a decision maker vs. a constructor of meaning. Importance as these differences are, they do not affect the fact that in principle an information need can be identified.

Institutionalized norms of information seeking as an intermediate category of variables

That which is new in my model is the inclusion of norms. My perspective is that information seeking, like most if not all of human behaviour, to a large extent is norm driven. My introductory example illustrates that clearly. When deciding in the murder case and the compensation case respectively, the court was acting under two different norms as for the appropriateness of accepting uncertainty. In criminal cases, guilt has to be proven beyond reasonable doubt, i.e. it has to be proven with a probability exceeding 90% that the defendant is guilty. In a civil case it suffices that the probability is substantially more than 50% to pass a judgement that the victims are entitled to compensation.

In relation the information seeking, the following categories of institutionalized norms are relevant:

Norms of certainty. The role played by that norm is illustrated above. Such norms are relevant in several situations and they are often institutionalized. In research, slack is low: conclusions and references are supposed to be verified. In drawing conclusions from a statistical table, one is expected to calculate and present the probability. In some instances legal regulations make certain forms of information seeking compulsory in order to reduce uncertainty before particularly dramatic public decisions are made. The Norwegian law on planning contains such regulations..

Sources. Leckie, Pettigrew and Sylvain are preoccupied with the awareness of sources, an element that naturally is important. But there are also norms about the sources one can turn to and expect to receive credible information. Again, we can use our criminal case as an example. When the case was approaching its end, there were many reports in the newspapers on an alleged report from a female police officer pointing out another possible murderer. The report had been put away in a drawer without any investigative steps being taken on the basis of it. When the police commissioner in charge informed the public that the report was not written by an officer but by a female secretary at his office, the case died

away. In this respect, the secretary was irrelevant as a source and there was no need to go into the content of her report.

To lawyers, decisions in the Supreme Court have a particularly high status as an information source. Students will in some instances, due to institutional factors, rely upon and turn to their professors as sources. In other instances their fellow students are appropriate as source.

Channels. Probably there are also norms as for the selection of channels. Researchers go to the library or to conferences to establish contact with sources. Other people who might need information on exactly the same topic would regard it as a highly inappropriate use of resources to travel to conferences. They will use quite other channels to get in touch with sources that can inform them.

Time. Not all participants in an organization or another social collective can legitimately invest the same amount of time on information seeking. Probably there are also differing norms as to how much time can be used on which channel or source. Person A might use a lot of time seeking information via the telephone without anyone raising an eyebrow. Should he, on the contrary, spend a great part of his working hours reading in the library, people might start wondering. For person B it might be exactly the other way round.

Leckie, Pettigrew and Sylvain maintain that '...to understand the information seeking behavior of professionals, the broader working context in which professional practice is conducted must be closely examined and understood' (Leckie, Pettigrew & Sylvain, 1996: 179). Identifying and understanding information relevant norms in which their practice is embedded is an important task in this respect.

Role, role freedom and decision making mode as role determinants

Norms, however, have an origin. The next level in our model deals with the elements that are assumed to affect the shaping of information relevant norms. Three categories of variables are important here: Role, degrees of role freedom and decision mode.

Role. Role is a sociological key concept. Role makes it possible to predict the way a person occupying a certain social position is going to behave. We are able to make such predictions not because of our thorough knowledge of the person in question, but because of the predefined system of behavioural norms that make up and define the role.

Wilson was among the first to include the role concept both theoretically and empirically in studies of information use. (Wilson & Streatfield, 1977; 1979; Wilson, 1981). In the study on the information needs of local government social services departments, role was a category of variables. Partly Wilson and colleagues observed and identified roles in the Mintzbergian sense (leader, entrepreneur, spokesman, negotiator etc), partly they operationalized role as

formal position, e.g., specialist, line-manager, social worker. It can, however, be maintained that Wilson and colleagues moved directly from role defined as occupying a certain position or role, to observed behaviour. They did not identify the information-relevant norms attached to the different roles. In 1988 Audunson *et al.* in a Norwegian project analysed the information needs of local government politicians in a Norwegian county. They were occupied with the structuring power of role dimensions such as defining yourself as a general politician vs. a sector politician, defining yourself a representative of a constituency or a specific organisation, e.g., a trade union, vs. defining yourself as a general politician representing the interests of the whole. This study was an effort to go beyond position and identify some of the often conflicting expectations and norms that make up a role and see if they are relevant as far as information seeking is concerned. One of the main findings of that study was that being a socialist or a non-socialist dominated over other possible roles also as far as information norms are concerned, a finding which this writer found somewhat illogical if information seeking is related to instrumental problem solving. (Audunson *et al.*, 1988). Leckie, Pettigrew and Sylvain, when decomposing the professional role into that of a service provider, a manager, a researcher an educator and a student they also go beyond position or formal role into the real flesh and blood-norms and expectations making a role.

Roles represent powerful institutions when it comes to structuring our behaviour. This is most probably so also when it comes to the shaping of the norms structuring our information seeking behaviour. The author of this paper lectures in planning and management and frequently runs into problems which are very similar to those the head of our department struggles with in practice. But I very seldom run into her or other representatives from the management when I try to solve my information problems in the library. We are under different normative regimes as far as the use of sources, channels, time, etc., is concerned.

Degrees of role freedom. As shown in the example from the Norwegian study on the information needs of local government politicians and Leckie, Pettigrew and Sylvain's decomposition of the role concept, roles are not unidimensional. Merton has introduced the concept *role set* to catch the set of expectations, norms and duties attached to a role. Take a young person moving from secondary school to university or college. That movement means simultaneously a change of role from that of a pupil to that of a student. A university student is expected to be more independent as far as information seeking is concerned than a secondary school student is. But the role of a student is not always clear and well defined. It contains contradictory elements, e.g. pupil-like elements. The fresh student can choose to aggrandise those elements of the student role and, at least for a while, continue his usual information seeking

habits. A degree of freedom in role shaping exists which has consequences for information seeking.

The extent to which differences in information seeking between individuals occupying identical roles and dealing with similar problems can be interpreted as resulting from differences in the shaping of the role, is underutilised in LIS.

A crucial factor here is the degrees of freedom, which the occupant of a role has in shaping that role. To what extent can a given professional and educational background survive in a bureaucratic context and still structure information seeking? A study was undertaken in the Norwegian Ministry of the Environment where that was one of the questions. The ministry is a bureaucratic organization with its own culture, which also contains information-seeking norms. The bureaucracy is made up of bureaucrats with different professional and educational backgrounds: political scientists, lawyers, biologists, architects etc. We know from several studies that these groups have their distinct information seeking profiles. To what extent can the role as a bureaucrat be defined in ways making it possible to survive as architects, political scientists, lawyers, biologists etc also with respect to information seeking? (Audunson & Westerheim, 1989). The general conclusion of the study was that the bureaucratic culture and norms dominated. The architects, however, seemed to have a need to survive as a professional group, and that need was to a large extent fulfilled through profession-specific information seeking. Information seeking was a way of keeping in touch with practising and creative architecture.

Strength of rules and the cohesion and degree of social control from a centre will probably decide the extent to which one can choose information-seeking norms at one's own discretion. Egeberg *et al.* found that 31 per cent of the bureaucrats in Norwegian ministries experienced rules and established practice as defining and structuring their daily work in a definite way, whereas 35 per cent experienced considerable discretion. (Egeberg *et al.*, 1989, 64). It is reasonable to hypothesise that such differences in rule structuring vs. discretion also will affect the bureaucrat's role as information seekers.

Decision mode: Action vs. talking. The Swedish researcher Nils Brunsson has been preoccupied with the dimension acting vs. talking in organisational decision making and behaviour. (Brunsson, 1989; 1990). Some organizations are action oriented. In such organisations members are recruited on the basis of support for and agreement with that which the organisation stands for. Since the primary goal is to act and produce, one cannot scrutinise every alternative. In an organisation oriented towards talking, tolerance for disagreement is higher. In the pure case, e.g., a political body or a university, disagreement and pluralism is the basis for being recruited. Socialists, conservatives and liberals are supposed to disagree. If not, they are not doing their job. But all organisations have forums and staff members taking care of the talking, while other organs take care of the acting. The balance between talking and acting might shift from situation to

situation and from phase to phase. Within a talking mode of decision-making and behaviour, one can scrutinise every alternative and perform more extensive information seeking than within an action mode of behaviour. 'From deciding to reporting'. Such was the illustrating title of a recent thesis in political science analysing the political process on the building of a tunnel under one of the less affluent parts of Oslo which will be especially hard hit by the railway transport to the new Oslo Airport. (Fosseng, 1998). One is moving through endless circles of information seeking and talking. Feldman and March show how a seemingly irrational over-consumption of information can be understood as resulting from a surveillance mode of behaviour instead of a decision-making mode. And to quote March and Olsen: 'The gathering of information seems to be less driven by uncertainty about the consequences of specific action alternatives than by lack of clarity about how to talk about the world' (March & Olsen, 1989: 48).

CONCLUSION

Real-world information seeking exhibit traits that cannot be understood if information seeking is seen as an instrument to solve problems or build bridges over gaps. A model has been elaborated which includes institutionalised, information relevant norms as an intermediate category of variables. At the theoretical level the model seems to have some potential of guiding research in fruitful directions. Empirical testing of the model waits to be undertaken.

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