

Between these extremes, the individual's dependency on his environment can be emphasised variously. Taylor's doers in the different information use environments are plainly called users without any closer motivation (cf., Taylor, 1991). These users are purposive actors who do not live in a vacuum but in the midst of social contexts (Taylor, 1986, 1991). Thus, praxis or actions (e.g., information seeking) taken by an actor are likely to be affected by the actor's information use environment. However, Taylor (1991) seems to concentrate on the information use environments whose effects are rather more concrete (e.g., nature of the work) than abstract (e.g., nature of beliefs and values) on an individual (cf., Rosenbaum, 1993). Thus, as Rosenbaum (1993) states, Taylor's actor is an autonomous agent.

Rosenbaum (1993) proposed a combination of Taylor and Giddens' views on the individual in order to reformulate a more holistic understanding of the subject in INSU research. On the one hand, individuals act in a social context under an *a priori* existing social order (Giddens 1979, 1984; cf., Salancik & Pfeffer, 1978). But, on the other hand, Giddens (1979) also argues that at any time the individual could have acted differently from how he actually did, whereas he by his actions either strengthens or incites to change the existing social order. Thus, Giddens considers his individual in connection to the abstract environment. By combining these images, a picture of a dialectical actor connected to both the concrete and the abstract aspects of environment is depicted. This individual is in the middle of the determinism (the Chessman) and freedom (the Platonian man) continuum, having a choice, but being pushed toward certain kinds of responses by the existing social order (cf., Rosenbaum, 1993).

Salancik and Pfeffer (1978) seem to share this view of a dialectical individual (the Debater). These authors stress that a need is a result processed by an individual rather than an inherent property. Their social information processing approach rests on a fundamental premise that individual's attitudes, needs, and behaviour are bound to both social and personal constructions of reality. They state that:

'The social context, through informational social influence processes, can affect beliefs about the nature of jobs and work, about what attitudes are appropriate, and, indeed, about what needs people ought to possess' (Salancik & Pfeffer, 1978, p. 233).

And further,

'These effects of context make behavior in work organizations different from individual behavior and individual cognitive processes considered in isolation' (Salancik & Pfeffer, 1978, p. 233).

This abstract level of the concept of the doer is seldom explicitly addressed in INSU studies. This dimension has been recognised rather recently within

INSU research and it has been mostly discussed at a metatheoretical level (e.g., Talja, 1997; see also Tuominen & Savolainen, 1997). However, this dimension has fundamental effects on information behaviour research. Two parallel statements explicate these effects (cf., Talja, 1997). First, the more an individual is seen as a Platonian man, the more his information behaviour is expected to depend on, and is explained by personal characteristics. Second, the more an individual is seen as a chessman, the more information behaviour is expected to depend on, and is explained by context. Between the two extremes an individual is seen as a debater, a dialectical actor whose information behaviour is expected to depend on, and is explained partly by an environment and partly by personal characteristics.

MEMBERSHIPS: AN INDIVIDUAL IN INTERACTION WITH HIS ENVIRONMENT

Whereas the dimension discussed above concerns the fundamental status of the doer, the two remaining dimensions illuminate the concept more concretely by linking it to particular contexts. First, the concept of doer is considered in relation to different reference groups (Figure 2). An individual may be a member of several groups, i.e., act in several group contexts. Some of these are work related (e.g., working place) and others leisure related groups (e.g., family, hobby circles). Besides these specific groups the individual belongs to groups of a more general nature, including occupational groups (e.g., as scientists: physicists, historians, linguists, archaeologists etc. or as medical professionals: doctors, veterinarians, nurses, dentists etc.), social reference or demographic groups (e.g., political or religious groups and economical status, sex and age groups) and cultural groups (e.g., Scandinavian, North-American, Mexican and Mediterranean life styles).

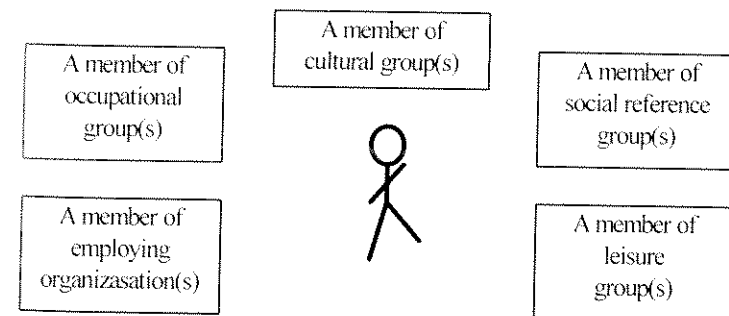


Figure 2: Some memberships of an individual

These reference groups form an individual's environment more or less independently of him. Some memberships are voluntary (e.g., work organisations and hobby circles) whereas others are given (e.g., family and cultural groups). Through different reference groups the everyday (i.e., both work and leisure) life of an individual is framed. For example, reference groups determine the appropriate actions and reactions (e.g., work tasks and their completion) as well as setting a number of restrictions (e.g., time limitations) and providing a number of resources for the individual (e.g., the Internet and intranets). Like other kinds of behaviours, information behaviour takes place under these circumstances.

ROLES: CONCENTRATION TO PARTICULAR ACTION

As the different memberships of an individual place him into different, generally determinable environments or contexts, he is able to adopt different roles depending on a particular situation (Figure 3). Thus, the dimension of roles concerns the specific aspects of the concept of the doer. It is within this dimension that the aspect of user becomes relevant.

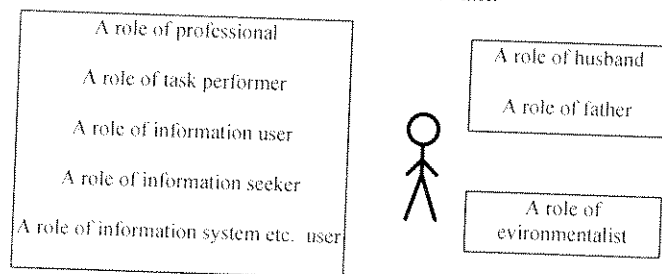


Figure 3: Some roles of an individual

As an example, the role of a worker is considered. Minzberg (1973; 1975) has developed a famous classification of managerial roles. According to him, managers have three general roles that all consist of several sub-roles. These are interpersonal roles (sub-roles: figurehead, leader, liaison), informational roles (sub-roles: monitor, disseminator, spokesman) and decisional roles (sub-roles: entrepreneur, disturbance handler, resource allocator, negotiator). Minzberg's role classification has been utilised in some INSU studies (e.g., Wilson, 1988). Recently, Leckie et al. (1996) proposed five sub-roles for an individual in the role of a professional. These were aimed to serve as a starting point for modelling information seeking of professionals. The roles are service provider, administrator or manager, researcher, educator, and student.

The division into different kinds of roles can be continued both in more specific and more general directions from the levels applied by Minzberg and Leckie with colleagues. For instance, a manager is an individual acting in the general role of a worker or professional. In another context he might adopt a role of a husband or a role of an environmentalist. Thus, a manager is one kind of work role. Within a work role there are several different sub-roles, like those of Minzberg (three layers) and Leckie with colleagues (one layer).

Within these specific layers of sub-roles, there emerges a set of roles that can be attached to all of the above types of work-related roles. There is for instance the role of a problem solver (or a task performer). Within it there are even more specific roles recognisable: there are the roles of information user, information seeker and, information service or system user. The role of problem solver (or task performer) is likely to be found within other roles than that of worker, but their identity is clearly questionable.

The above analysis concerns the roles of an individual, and while being far from complete, it shows the versatility of the dimension of roles (cf, Sonnenwald & Lievrouw, 1997). Different layers also seem to emerge, and they appear to be hierarchically related to each other. Sub-roles become meaningful in relation to more general roles. On the other hand, a general role may remain ambiguous without understanding of some sub-roles.

THE doers AS THE PLATONIAN MAN, THE DEBATER AND THE CHESSMAN

The three dimensions discussed above shape the concept of the doer in INSU studies, or rather, by uniting them the fragmented pieces are integrated (Figure 4). That is, if the three dimensions are considered together, three types of doers related to INSU becomes apparent. First, there is the Platonian type of doer, an autonomous actor, whose behaviour is a result of his free choices. Accordingly, his different memberships merely describe an environment within which he is acting. The Platonian man is clearly bound to the different roles, which he develops. The roles are seen as more or less separable parts of the individual. The Platonian man uses roles to cope rationally with different situations. Thus, his information behaviour is seen as a product of his rational and free choices, which reflect his personal characteristics and are only externally affected by his environment (e.g., information sources available).

The second type of doer is the Chessman: a completely socially determined anti-individual. This doers' thoughts and actions can all be reduced to collective unity. Accordingly, his different memberships do not simply provide an environment to act within, but are the very core of his being. He is a product of the context. Furthermore, the roles are not seen as particularly developed properties of an individual, but as discourses or rather repertoires embedded in

different social situations. In other words, since the individual does not exist as such on an intellectual level, the roles or discourses are directly connected to the different memberships or contexts. Thus, information behaviour is directly tractable to its context.

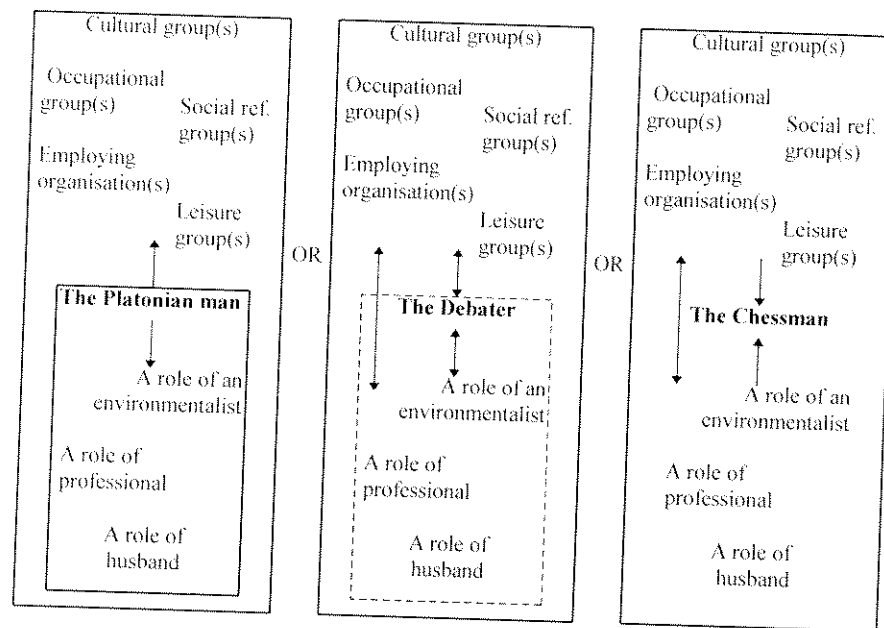


Figure 4: The three types of doers in relation to some memberships and roles

The third type of doer is a debater in the middle: he is a dialectical actor with his own will, but who at the same time is formed or moulded by his environment. The moulding happens continuously, and it happens both consciously and unconsciously. The individual can in many cases affect the direction of this moulding. Furthermore, it is understood to be interactive: simultaneously as the individual is affected by his environment, he affects it. Accordingly, different memberships provide him with an environment which consists of both abstract (context as a social and cultural structure) and concrete (context as related activities and resources) aspects. Similarly, roles are not seen as purely individual nor contextual properties, but as combinations of both individual efforts and socially accepted lines of behaviour. Thus, information behaviour is understood to be affected by both individual and contextual (abstract and concrete) characteristics.

THE THREE TYPES OF doers IN INSU STUDIES

Some INSU research papers were considered on the basis of the characterisations of the three types of doers. The doers in selected research papers from the ISIC'96 conference¹ were analysed by using Figure 4 above as a map and the positions were compared in the light of the three types of doers. Since explicit definitions of the doer were unusual in most of the papers, the analysis is mainly based on general implications and related statements of varying precision. This naturally makes the result merely indicative.

The dimension of individual's dependency on general context

The doers were understood as more or less dialectical in all the selected research papers. The doers, who seemed to be furthest away from each other, were still closer to each other than either of the extremes (i.e., the Platonian man or the Chessman) (Table 1). One possible exception was the clearly Platonian emphasised doer in the study of Harmon and Ballesteros. Overall, the Platonian direction seemed to be emphasised by more researchers compared with the Chessman direction. The most balanced in the middle image of the doer was held by four researchers (Table 1). Williamson made these authors stand point clear by quoting Kenyon (1988):

'... human beings, as persons, [should not be] conceptualised exclusively as either individual entities or socially constructed entities. Rather, they are self-creating, but within contexts that involve various kinds of biological and social constraints.' (Kenyon, 1988, 7; quoted as in Williamson, 1997, 337)

In three research papers the authors seemed to view their doers as more socially determined actors. Davenport with colleagues views households as 'an example of a managed group, whose concerns are as much collective as individual' (p. 390). It is their framework that implies a heavier emphasis on the Chessman direction:

'Most households most of the time develop highly complex sets of rules governing what is or is not acceptable behaviour by members...they reach understandings about membership and rights of membership. ...they develop working practices about the allocation of tasks: who, and on what terms, can use which facilities when...they

¹ The research papers selected were related to empirical study of information behaviour of people or work teams (not organisations). Thus, all conference papers were not included. The selected papers may be found in *Information Seeking in Context*, (eds) Vakkari & Savolainen & Dervin, London: Taylor Graham, 1997.

evolve mechanisms to order the time-sequencing of behavior, and they develop often very precise shared expectations over members' access to property and other rights within the household' (Anderson, 1994, 3; quoted as in Davenport et al., 1997, 392)

Clearly most INSU researchers seemed to have adopted a more individualistic emphasis. Some of them clearly argued for the cognitive viewpoint (e.g., Bruce, Todd, and Harmon & Ballesteros). For instance, Todd argues in terms of Brookes' fundamental equation of information science. Bruce develops a user oriented view of the Internet as an information infrastructure. Harmon and Ballesteros concentrate on information needs in terms of unconscious cognition. Many researchers seemed not to have made any conscious decision about the positioning of their doers (e.g., Algon, Kuhlthau, Limberg, Wang, and Schwabe). Common to all these research papers was that they did not consider their doers social contextuality. Thus, they neither recognised this aspect nor did they reject it.

The dimensions of group and situation/role contexts

In connection to group context, i.e., different memberships, the work-related memberships were somewhat more usual. It was either loosely a work organisation (e.g., Byström, Malmsjö, and Kuhlthau) or more exactly a work team (e.g. Algon, Sonnenwald, Solomon, and Wang). Some researchers connected their doers to different groups on the basis of age, sex, place of residence, education², family, and/or citizenship. Additionally, there were three research papers where the doers were not connected to any membership at all (Table 1).

The doers in the selected papers were viewed in a number of roles at different levels (Table 1). The doers considered in connection to work were seen either in a single role or in a set of roles. Recognised single roles were task performer (Byström, Limberg, and Solomon), information user generally (Malmsjö and Kuhlthau), and specifically either user of information technology (Barry) or of information system (Wang). Recognised sets of roles were group-managerial roles (Manning Barnes with colleagues), and somewhat more specific communication roles (Sonnenwald & Lievrouw) and information intermediary (Algon). The non-work related doers seemed all to be related to single roles. There were the roles of decision-maker (Julien), information user (Williamson, Todd, Erdelez, and Schwabe), and information system users (Bruce and Davenport with colleagues).

In sum, the INSU empirical research area does generally appear to share the rather united view of the doer as a more or less dialectical actor. But in addition

² Note, education may also provide a work related membership (e.g., Limberg).

to the various memberships the doers are connected to, there emerges a number of role levels where the doers in individual INSU studies are positioned. This diversity of the doers roles has thus far been an unrecognised source of confusion while comparing the INSU research results. Thus, there is INSU research on information behaviour in different contexts, and there is INSU research on specific kinds of information behaviour.

INSU STUDIES	View on INDIVIDUAL * P+++D+++C	Recognised MEMBERSHIPS **	The level of ROLES
Byström	D	WO local government	professional as task performer
Manning Barnes	D ++	WT US manuf comp	(team-)managerial roles
Sonnenwald	D ++	WT engineering design	team members' communication r
Algon	+ D	WT R&D project	professional as info intermediary
Malmsjö	D	WO government agency	information user
Barry	?	WO university	researcher as IT user
Kuhlthau	++ D	WO stock brokerage	(information?) user
Limberg	++ D	WO high school	student as task performer
Solomon	D	WT public agency	professional as team member
Wang	++ D	WO university	information system user
Bruce	++ D	non	information system user
Williamson	D	older adults	(information ?) user
Todd	++ D	high school girls	(information) user
Julien	++ D	high school students	adolescent as decision-maker
Davenport	D ++	household	family member as IS user
Erdelez	++ D	non	information user
Harmon	+++ D	non	non
Schwabe	+ D	citizenship	citizen as info seeker and user

* Legend: P stands for the pure Platonian man, D for the Debater, and C for the pure Chessman

** Legend: WO stands for work organization, and WT for work team

Table 1: The three dimensions as recognised in the selected INSU research papers

CONCLUSIONS

The three doer types proved useful in the consideration of the selected research papers. Most researchers within INSU studies seem to understand an individual as the Debater type of doer, who - in different roles - frequently and more or less consciously interacts with his concrete and abstract environment, or context. The analysis here indicates that the researchers have moved, and are moving, the emphasis towards a more contextualised picture of an individual. This may partly depend on the rather stereotypical characterisation of the different types of doers. But these kinds of stereotypes are referred to in metatheoretical discussions (e.g., Talja 1997; Dervin, 1997; Savolainen & Tuominen, 1997). In order to interrelate the metatheoretical discussions and research practice, it is important to remain at the same level of definition. Additional reason for the overall preference of the Debater may depend on the theme of the conference

(information seeking in context). Nevertheless, there were still differences of emphasis in the INSU research papers concerning the Debater type of doer. Despite the overall acceptance of the dialectical nature of an individual, most researchers tended to emphasise the Platonian direction whereas a few leaned more heavily towards the Chessman direction.

In the papers analysed, there were actually only a few papers that explicitly considered the doers whose information behaviour was studied. Most often doers were referred to simply as users. Although the research setting often implicitly revealed what kinds of users were referred to in the study, the negligent definition of the doer in INSU studies certainly does not raise the quality of the research area. It is one thing that explicit definitions are lacking in short research papers, but it is clearly a more serious issue if the researchers have not even explicated these definitions for themselves. However, this is a long recognised - and at times attended - problem, and it is also a problem common for other central concepts of our research area (e.g., information, knowledge, and more recently context) (e.g., Vakkari, 1997).

In the light of the above discussion the 'user' as such might be considered as a too ambiguous concept to refer to the doer of modern or post-modern INSU studies where the ambition is to consider even his information behaviour in clearly defined contexts. Thus, it is only logical to bring the doer to the level of his actions. It can be argued even though a 'user' might be a useful sub-concept for a doer in a specific role or in narrow contexts of particular actions, it is alone both too ambiguous and limited to refer to all doers in INSU research. Thus, this distinction and its implications are important to recognise even though the role of some kind of user would be considered relevant for an individual study. As Figure 4 implies, two kinds of users might differ enormously from each other (e.g., Example 1: a user of information versus a user of a library; Example 2: a user of information within the role of a worker in a context of western journalism versus a context of Asian local government; Example 3: a user of information within a role of father in the context of the Italian mafia versus Swedish farmer family).

The present analysis of the concept of the doer is based on INSU studies, and it remains still on a general level including some coarse simplifications. However, a number of aspects of the concept were recognised and organised in relation to each other. The result indicates that the doer is understood on various levels in different INSU studies. Thus, the result is rather a current description of aspects of the doer in INSU studies than an optimal or correct definition of the concept. As an implication from Figure 4 and the Debater, it might be argued that there does not exist one correct definition of the doer in INSU studies but different perceptions which are changeable from one research context to another and from one researcher to another. The same probably applies for other central concepts of the INSU research too (cf., Wilson, 1981, about information). If this

is true, then maps like Figure 4 are needed for comparing and accumulating research results of INSU studies.

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